

**CAUSAL RELATIONSHIP MODEL OF FACTORS AFFECTING
COLLABORATION BETWEEN LOCAL ADMINISTRATIVE
ORGANIZATIONS IN EARLY CHILDHOOD EDUCATIONAL
MANAGEMENT OF CHILD DEVELOPMENT CENTERS**



KHEMAPAT YENPIAM

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OF THE REQUIREMENTS FOR THE DEGREE OF
DOCTOR OF PUBLIC ADMINISTRATION
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Khemapat Yenpiam

Mr. Khemapat Yenpiam
Candidate

S. Sirisunhirun

Assoc. Prof. Somboon Sirisunhirun,
Ph.D. (Educational Administration)
Major advisor

W. I.

Asst. Prof. Wisut Vichitputchraporn,
Ph.D. (Educational Administration)
Co-advisor

Siriporn Yamnill

Assoc. Prof. Siriporn Yamnill,
Ph.D. (Human Resource Development)
Co-advisor

Gamolporn Sonsri

Asst. Prof. Gamolporn Sonsri, D.P.A.
(Doctor of Public Administration)
Co-advisor

Nopraenue Sajjarax

Asst. Prof. Nopraenue Sajjarax
Dhirathiti,
Ph.D. (Politics and International Studies)
Co-advisor

B. Mahaisavariya

Prof. Banchong Mahaisavariya,
M.D., Dip Thai Board of Orthopedics
Dean
Faculty of Graduate Studies
Mahidol University

S. Choonhaklai

Assoc. Prof. Sirirat Choonhaklai,
Ph.D. (Public Administration)
Program Director
Doctor of Public Administration
Program in Public Policy
and Public Management
Faculty of Social Sciences and
Humanities
Mahidol University

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for the degree of Doctor of Public Administration
(Public Policy and Public Management)

on
February 2, 2015

Khemapat Yenpiam

Mr. Khemapat Yenpiam
Candidate

Nopraenue Sajjarax

Asst. Prof. Nopraenue Sajjarax
Dhirathiti,
Ph.D. (Politics and International Studies)
Member

Achara Niyamabha

Lect. Achara Niyamabha,
Ph.D. (Educational Administration)
Chair

Wisut Vichitputchraporn

Asst. Prof. Wisut Vichitputchraporn,
Ph.D. (Educational Administration)
Member

S. Sirisunhirun

Assoc. Prof. Somboon Sirisunhirun,
Ph.D. (Educational Administration)
Member

Gamolporn Sonsri

Asst. Prof. Gamolporn Sonsri, D.P.A.
(Doctor of Public Administration)
Member

Siriporn Yamnill

Assoc. Prof. Siriporn Yamnill,
Ph.D. (Human Resource Development)
Member

Banchong Mahaisavariya

Prof. Banchong Mahaisavariya,
M.D., Dip Thai Board of Orthopedics
Dean
Faculty of Graduate Studies
Mahidol University

Wariya Chinwanno

Assoc. Prof. Wariya Chinwanno,
Ph.D. (American Studies)
Dean
Faculty of Social Sciences and
Humanities
Mahidol University

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CAUSAL RELATIONSHIP MODEL OF FACTORS AFFECTING COLLABORATION BETWEEN LOCAL ADMINISTRATIVE ORGANIZATIONS IN EARLY CHILDHOOD EDUCATIONAL MANAGEMENT OF CHILD DEVELOPMENT CENTERS

KHEMAPAT YENPIAM 5338480 SHPP / D

D.P.A. (PUBLIC POLICY AND PUBLIC MANAGEMENT)

THESIS ADVISORY COMMITTEE : SOMBOON SIRISUNHIRUN, Ph.D., SIRIPORN YAMNILL, Ph.D., WISUT WICHITPUTCHRAPORN, Ph.D., GAMOLPORN SONSRI, D.P.A., NOPRAENUE SAJJARAX DHIRATHITI, Ph.D.

ABSTRACT

This research was the quantitative research conducted with the purposes of: 1) studying the collaboration between local administrative organizations in early childhood educational management at child development centers; 2) studying the consistency between the causal relationships of factors affecting the collaboration between local administrative organizations in early childhood educational management at child development centers and the empirical data; and 3) studying the causal relationship of factors directly affecting and indirect affecting the collaboration between local administrative organizations in early childhood educational management at child development centers. The research involved 62 child development centers with 372 subjects.

The results showed that: 1) the sample group strongly agreed that there was a collaboration between local administrative organizations in early childhood educational management of child development centers (mean = 3.50, Standard Deviation = .77); 2) the causal relationships of factors affecting the collaboration between local administrative organizations in early childhood educational management at child development centers was consistent with the empirical data; and 3) the factors having a direct affect on the collaboration between local administrative organizations in early childhood educational management at child development centers were the law (.58) and the limitations of finance and budget (.18) at the .05 level of significance. However, the factors of law, insufficiency of management resources, political interests, transaction cost, administrators of local administrative organizations, and social network did not take any indirect affect on the collaboration between local administrative organizations in early childhood educational management at child development centers.

KEY WORDS: CAUSAL RELATIONSHIP MODEL / COLLABORATION BETWEEN LOCAL ADMINISTRATIVE ORGANIZATIONS / EARLY CHILDHOOD EDUCATIONAL MANAGEMENT / CHILD DEVELOPMENT CENTERS

272 pages

รูปแบบความสัมพันธ์เชิงสาเหตุของปัจจัยที่มีอิทธิพลต่อความร่วมมือระหว่างองค์กรปกครองส่วนท้องถิ่นในการจัดการศึกษาระดับปฐมวัยของศูนย์พัฒนาเด็กเล็ก

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เชมภัทท์ เข็นเปี่ยม 5338480 SHPP/D

รป.ด. (นโยบายสาธารณะและการจัดการภาครัฐ)

คณะกรรมการที่ปรึกษาวิทยานิพนธ์: สมบูรณ์ ศิริสรศรี, Ph.D., ศิริพร แฉ่มนิล, Ph.D., วิทูรย์ วิจิตรพัชรภรณ์, Ph.D., กมลพร สอนศรี, D.P.A., นภเรณู สัจจรักษ์ ชีระจิตติ, Ph.D.

บทคัดย่อ

การวิจัยเรื่องนี้เป็นวิจัยเชิงปริมาณ (Quantitative Research) มีวัตถุประสงค์การศึกษา 1) ศึกษาความร่วมมือระหว่างองค์กรปกครองส่วนท้องถิ่นในการจัดการศึกษาระดับปฐมวัยของศูนย์พัฒนาเด็กเล็ก 2) ศึกษาความสอดคล้องของรูปแบบความสัมพันธ์เชิงสาเหตุของปัจจัยที่มีอิทธิพลต่อความร่วมมือระหว่างองค์กรปกครองส่วนท้องถิ่นในการจัดการศึกษาระดับปฐมวัยของศูนย์พัฒนาเด็กเล็กกับข้อมูลเชิงประจักษ์ 3) ศึกษาความสัมพันธ์เชิงสาเหตุของปัจจัยที่มีอิทธิพลทั้งทางตรง (Direct Effect) และทางอ้อม (Indirect Effect) ต่อความร่วมมือระหว่างองค์กรปกครองส่วนท้องถิ่นในการจัดการศึกษาระดับปฐมวัยของศูนย์พัฒนาเด็กเล็ก โดยเก็บข้อมูลกับองค์กรปกครองส่วนท้องถิ่นที่มีศูนย์พัฒนาเด็กเล็ก จำนวน 62 แห่ง กลุ่มตัวอย่างจำนวนทั้งสิ้น 372 คน

ผลการวิจัยพบว่า 1) กลุ่มตัวอย่างเห็นด้วยกับความร่วมมือระหว่างองค์กรปกครองส่วนท้องถิ่นในการจัดการศึกษาระดับปฐมวัยของศูนย์พัฒนาเด็กเล็กอยู่ในระดับมาก (ค่าเฉลี่ย 3.50 ส่วนเบี่ยงเบนมาตรฐาน .77) 2) รูปแบบความสัมพันธ์เชิงสาเหตุของปัจจัยที่มีอิทธิพลต่อความร่วมมือระหว่างองค์กรปกครองส่วนท้องถิ่นในการจัดการศึกษาระดับปฐมวัยของศูนย์พัฒนาเด็กเล็กมีความสอดคล้องกับข้อมูลเชิงประจักษ์ และ 3) ปัจจัยที่มีอิทธิพลทางตรงต่อความร่วมมือระหว่างองค์กรปกครองส่วนท้องถิ่นในการจัดการศึกษาระดับปฐมวัยของศูนย์พัฒนาเด็กเล็ก ได้แก่ ปัจจัยด้านกฎหมาย และปัจจัยด้านข้อจำกัดการคลังและงบประมาณ มีค่าสัมประสิทธิ์อิทธิพล เท่ากับ .58 และ .18 อย่างมีนัยสำคัญทางสถิติที่ระดับ .05 โดยปัจจัยด้านกฎหมาย ปัจจัยด้านทรัพยากรการบริหารที่ไม่เพียงพอ ปัจจัยด้านผลประโยชน์ทางการเมือง ปัจจัยด้านต้นทุนแฝง ปัจจัยด้านผู้บริหารองค์กรปกครองส่วนท้องถิ่น และปัจจัยด้านเครือข่ายทางสังคม ไม่ได้มีอิทธิพลทางอ้อมต่อความร่วมมือระหว่างองค์กรปกครองส่วนท้องถิ่นต่อการจัดการศึกษาระดับปฐมวัยของศูนย์พัฒนาเด็กเล็ก

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CHAPTER I

INTRODUCTION

1.1 Background and rationale of the research

The Constitution of the Kingdom of Thailand B.E. 2540 prescribes the local administration, which reflects the government's intent on decentralization. This leads to the establishment of local organizations, either in general form, e.g. provincial administrative organization, municipality and Tambon administrative organization, or special local government, e.g. Bangkok and City of Pattaya. In this regard, the local people have rights in the election of the city council and local administrator. A local administrative organization shall be a juristic person with administration independence and flexibility.

The central government not only decentralizes the political and administrative power to the local administrative organizations, it also transfers its mission in providing public services to these local organizations. The Determining Plans and Process of Decentralization to Local Government Organization Act B.E. 2542 (1999) was enacted to provide the transfer of powers in the provision of public services to local administrative organizations such as infrastructure development, educational promotion, public health, disaster prevention and mitigation, environmental management, etc.

By the above reasons, it has been likely that the local administrative organizations have tasks of providing public services to local people, but these local administrative organizations, conversely, have encountered certain problems about income and budget allocation from the Central Government (NoranitSetabutr et al., 2002: 3-2), which took effect to provide public services to those local people in several domains.

In particular, in the area of education, the local administrative organizations have taken an important role in the provision of education from past to present, and it is expected that this role would be more important in the future due to a

government policy on the educational decentralization to local administrative organizations, which is defined in Section 80(4) of the Constitution, B.E. 2550 that the Government shall promote and support the decentralization by allowing the local administrative organizations to be involved in the provision of education.

The National Education Act, B.E. 2542 as amended (No. 2) in B.E. 2545 prescribes the decentralization to local educational areas whereas the local administrative organizations shall hold the right to provide education at one level or every level, depending on their readiness, appropriateness and local demands. The local administrative organizations shall also have the right to mobilize local resources for education whereas they are the organizations that provide or take part in providing education.

In addition, the Determining Plans and Process of Decentralization to Local Government Organization Act, B.E. 2542 prescribes that every form of local administrative organizations shall have duties of providing education, and of receiving the transfer of public service businesses, which includes the transfer of educational business.

According to the provisions mentioned above, the local administrative organizations shall have roles in the provision of formal, non-formal and informal education. According to the research report on the evaluation of education provided by local administrative organizations as conducted by the Office of the Education Council in 2011, from the provision of education by local administrative organizations in 2007, 290 of 7,853 organizations provided the formal education, and most of them (1,413 organizations) provided the basic education. The problems of teaching and learning quality included the quality of learners, analytical and synthesis thinking, essential knowledge and skills, quality of teachers, abilities in the effective provision of education, and learner-centered education, and insufficient provision of early childhood and high-school education as needed by guardians and communities. Therefore, the provision of education transferred has been changing negatively and positively. For example, regarding academic matters, they have been improved, but some educational institutes had low learning achievements. Regarding the budget, the educational institutes got more budgets quickly and relevantly to their needs, but some local administrative organizations bear a lot of transferred educational institutes; so the

budget becomes insufficient. Regarding the personnel, the educational institutes are allocated for more teachers as they actually need and these teachers have been developed by various methods. Conversely, some educational institutes after the transfer have not been changed as the number of teachers remains unchanged and they must be responsible for teaching several learning groups. (Office of Education Council, 2011).

The non-formal education obviously seen is the provision of early childhood education (children at ages of 2-5 years) in the form of child development center. Previously, the local administrative organizations provided the education for 5,201 child development centers. At present, after the transfer of power from various government bodies, 7,520 child development centers were transferred by the Community Development Department, Ministry of Interior; 4,110 transferred from the Office of Religious Affairs, Ministry of Education, and 2,560 transferred by the Office of the Office of The Basic Education Commission, or total 19,481 child development centers were transferred. This provision of education is cared by every local level. Each local area wants to carry out it up to the community need and it has sufficient potential to provide this level of education.

However, the management structure of this level of education varies, e.g. personnel, management, academic and curriculum-based activities, facilities, environment, safety, participation and community support, and quality improvement. A local administrative organization must provide the quality and standardized education to enable the child development centers under the management of local administrative organizations to serve the community needs universally and equitably by prescribed by laws and government's policy (Bureau of Local Educational Development and Coordination, Department of Local Administration, 2010: 1-2).

The above information indicates the problem of educational provision by local administrative organizations in terms of efficiency and proficiency because most of local administrative organizations in Thailand have adhered to the use of their limited resources for various activities without cooperating such activities with other local administrative organizations (NoranitSetabutr et al., 2002: 3-1). Similarly, the mission on the educational provision presently undertaken by local administrative organizations usually relies on their limited resources, either budget or personnel, to

provide education. These local administrative organizations ignore the cooperation with each other to improve the quality and standard of educational provision. In fact, the Determining Plans and Process of Decentralization to Local Government Organization Act, B.E. 2542 specifies that every type of local administrative organizations could build the cooperation. However, the previous cooperation between local administrative organizations was informal and depended on the personal relationship between the administrators of those local administrative organizations. As a result, their cooperation was short of a systematic setting, management and institutional mechanism to propel it. This event continued until the research project, which studied the capabilities of local administrative organizations by building the cooperation of local administrative organizations from Year 2005 – 2008, occurred. Under this project, the Department of Local Administration as supported by Japan International Cooperation Agency (JICA) and a group of researchers from the Faculty of Political Science, Thammasat University, has conducted a study at 3 pilot areas; namely, Waste Coordination and Management Center at KohKa District of Lampang, Infrastructure Joint Coordination and Management Center at Rayong, and Disaster Prevention and Mitigation Center at MuangKanchanaburi Municipality-Tambon Pak Preak Municipality-Koh Sam RongTambon Administrative Organization-Ta MakamTambon Administrative Organization at Kanchanaburi. This project established a formal cooperation between local administrative organizations through the execution of Memorandum of Understanding (MOU), and established a local administrative organization cooperation center. The success of this project would be a model for other local administrative organizations in building their cooperation (NakarinMektrairat et al., 2010: 16).

According to the condition and problems of educational provision by such local administrative organizations, the Researcher was interested in studying the provision of pre-school education by local administrative organizations because, at present, Thai local communities increasingly require that the local administrative organizations provide the pre-school education. In particular, more parents take emphasis on the development of pre-school children, aged 3-5 years, when they must be nurtured and cared rightly and properly. The parents require that the local administrative organizations provide the pre-school education because the parents

would not bear any expenses, and would be convenient to deliver and pick up their children. Therefore, the local administrative organizations have been challenged in handling this difference in order to enhance the quality of educational provision for pre-school children, and to serve the community requirement.

From the above reasons, the Researcher focused on an issue how Thai local administrative organizations would build cooperation in the provision of early childhood education; which causal factors affecting the collaboration between local administrative organizations in the provision of early childhood education of child development centers, which would lead to further studies on causal factors affecting the collaboration between local administrative organizations in the provision of early childhood education of child development centers.

1.2 Research questions

1.2.1 How could the local administrative organizations cooperate in the provision of early childhood education of child development centers? In what extent?

1.2.2 Which factors were the causal factors influencing the collaboration between local administrative organizations in the provision of early childhood education of child development centers?

1.2.3 How did the causal factors influencing the collaboration between local administrative organizations in the provision of early childhood education of child development centers take the direct effect, indirect effect and total effect to the collaboration between local administrative organizations in the provision of early childhood education of child development centers?

1.2.4 Was the causal relationship influencing the collaboration between local administrative organizations in the provision of early childhood education of child development centers consistent with the empirical data?

1.3 Objectives of the research

1.3.1 To study the collaboration between local administrative organizations in the provision of early childhood education of child development centers.

1.3.2 To study the causal factors affecting the collaboration between local administrative organizations in the provision of early childhood education of child development centers.

1.3.3 To study the causal relationship affecting the collaboration between local administrative organizations in the provision of early childhood education of child development centers.

1.3.4 To study the consistence between the causal relationship affecting the collaboration between local administrative organizations in the provision of early childhood education of child development centers and the empirical data.

1.4 Scope of the research

For the causal relationship model of factors affecting the collaboration between local administrative organizations in early childhood educational management of child development centers, the scope of the research was as follows:

1.4.1 Scope of research content

1.4.1.1 The factors influencing the collaboration between local administrative organizations in the provision of early childhood education of child development centers were studied from the concepts regarding the factors influencing the collaboration between local administrative organizations in the provision of public services as proposed by Hulst, R., Van Monfort A., Haveri, A., Airaksinen, J. & Kelley, J. (2009: 266-268), Burns (1994), Miller (1981), Mandell (1984), Williams (2002), Feiock (2004, 2007), Lackey Freshwater, and Rupasingha (2002), Frederickson & Smith (2003), Potoski (2003), Morgan & Hirlinger (1991), and Holzer & Isaacs (2002), Post (2002), Kruger & McQuire (2005), Carr, Gerberry & Lupher (2009), Bartle & Swayze (1997), Feiock, Stein, Zhang & Feiock

(2007, 1990, 2010), Bricker, Stein & Post (2010), LeRoux, Brandenburger, and Pendey (2010), North (1990), Shrestha & Fieock (2009).

1.4.1.2 The collaboration between local administrative organizations in the provision of early childhood education of child development centers was studied from the concepts regarding the collaboration between local administrative organizations in the provision of public services proposed by Agranoff (2003), Mandell & Steelman (2003), Beverly Cigler (1999), Agranoff & Pattakos (1979), Martin et al. (1983) and Kagan (1993), Kagan (1991) and Mattessich & Monsey (1992), Hondale (1982), Marc Holzer & Hedy Issacs (2002), Noranit Setabutr et al. (2002), Department of Local Administration and Thammasat University, Hulst & Van Montfort (2007: 216), Hulst, R., Van Monfort A., Haveri, A., A., Airaksinen, J. & Kelley, J. (2009), Samuel Nunn & Mark S. Rosentraub (1997), Jennings and Ewalt (1998).

1.4.2 Scope of studied populations

The unit of analysis of this research included the local administrative organizations holding child development centers. The Researcher selected only local administrative organizations participating in the project on Competency Development for Child Development Centers under Local Administrative Organizations to develop the quality of local preschool children as held by the Department of Local Administration and Thai Health Promotion Foundation (ThaiHealth) because the Researcher saw some collaboration traces in the provision of early childhood education. Therefore, it was appropriate to be the subjects of this research. There were 12 child development model centers mutually selected by ThaiHealth and the Department of Local Administration and another 57 child development network centers or there were 69 centers in total. Each child development center consists of 6 responsible persons; namely, Chief Executive of Local Administrative Organization, Chief Administrator of Local Administrative Organization, Director of Office/Bureau of Education, academic officer, head of child development center and child teacher. Therefore, the child development model centers of local administrative organizations involved 72 subjects, and the child development network centers of local

administrative organizations involved 342 subjects. Thus, there were total 414 subjects in this research.

1.4.3 Scope of time

The research took 18 months (starting from the literature review, data collection, data analysis, and preparation of complete study report).

1.5 Operational definitions

Local Administrative Organization means Provincial Administrative Organization, Municipality, Tambon (sub-district) Administrative Organization, Bangkok Metropolitan Administration, and City of Pattaya established by the Local Administrative Acts in accordance with the intent of decentralization prescribed in the Constitution.

Provision of education means the provision of education of a child development center under a local administrative organization, which must be in line with the standards of operating the child development center of local administrative organizations B.E. 2547 required by the Department of Local Administration. There are 6 standards, e.g. standard for the management of child development center, standard for personnel, standard for facilities, environment and safety, standard for academic matters and curriculum-based activities, standard for participation and support from all related sectors, and standard for the promotion of early childhood network and development.

Child development center means an educational institute with non-formal education provided by a local administrative organization according to the powers of providing education given by the Constitution of the Kingdom of Thailand B.E. 2550, the Determining Plans and Process of Decentralization to Local Government Organization Act B.E. 2542, the National Education Act B.E. 2542 (as amended in B.E. 2545) as well as other Local Administrative Acts. A child development center must be established in conjunction with the standards on operating the child development center B.E. 2547. The Center shall nurture, give experience, and promote

development and learning to young children aged between 2-5 years so that they have the physical, emotional-psychological, social and intellectual readiness.

Early childhood level means young children aged between 2-5 years who are nurtured and developed pursuant to the philosophy and principle of providing the education for preschool children.

Collaboration between local administrative organizations in the provision of early childhood education means the horizontal arrangement between two local administrative organizations or more whose areas may be close or not. These local administrative organizations have formal negotiations and agreements for the collaboration. The regulations and laws applied by these local administrative organizations shall be applied to provide the early childhood education. The resources shall be shared together, e.g. information, human resources, materials, tools, budget as well as powers and duties. These local administrative organizations also set up the rules and regulations, management mechanism in the form of committee, planning and budget for the provision of early childhood education of child development centers together.

Factors affecting the collaboration between local administrative organizations in the provision of early childhood education means the direct effect and indirect effect to the collaboration between local administrative organizations in the provision of early childhood education of childhood development centers, which involve the laws, social network, transaction cost, political interests, limitation of finance and budget, insufficiency of management resources, and local administrative organizations administrators.

Laws mean laws promoting and supporting all types of local administrative organizations to cooperate with other local administrative organizations in the provision of early childhood education of child development centers. These laws include the Determining Plans and Process of Decentralization to Local Government Organization Act B.E. 2542, the Provincial Administrative Organization Act B.E. 2540 and its amendments (No. 4) B.E. 2552 whereby the Provincial Administrative Organization shall have powers and duties in supporting the collaboration between local administrative organizations and in take actions with other local administrative organizations, the Determining Plans and Process of Decentralization to Local

Government Organization Act B.E. 2542 whereby the Provincial Administrative Organization may subsidize the budget to local administrative organizations, the Municipal Act B.E. 2496 and its amendments (No. 13) B.E. 2552 that permits a municipality to cooperate with another municipality and perform some activities outside the municipal area, and Tambon Council and Tambon Authority Act B.E. 2537 and its amendments (No. 6) B.E. 2552 that permits a Tambon Administrative Organization to perform activities outside its border, or to cooperate with the Tambon Council, Provincial Administrative Organization or other local administrative bodies.

Except those laws, there are certain regulations currently complied by the local administrative organizations in managing the collaboration between local administrative organizations in the provision of early childhood education; namely, 1) Letter of the Ministry of Interior, No. MorTor 0810.4/ Wor 4524 dated 27 December 2006 regarding Guidelines for the Provision of Public Services between Local Administrative Organizations; 2) Regulation of the Ministry of Interior on Preparation of Development Plans of Local Administrative Organizations B.E. 2548; 3) Regulation of the Ministry of Interior on Budgetary Procedure of Local Administrative Organizations B.E. 2541 and its amendment B.E. 2543; 4) Regulation of the Ministry of Interior on Financial Acceptance, Withdrawal, Deposit, Treasure and Auditing of Local Administrative Organizations B.E. 2547; 5) Regulation of the Ministry of Interior on Supply of Local Administrative Units B.E. 2535; 6) Regulation of the Ministry of Interior on Supply of Local Administrative Organizations B.E. 2538; 7) Letter of the Department of Provincial Administration, Most Urgent, No. MorTor 0313.4/Wor 2787 dated 18 November 1999 regarding Consideration of Budgetary System for Local Administrative Organizations; 8) Letter of the Department of Provincial Administration, No. MorTor 0313.4/Wor 72 dated 18 May 2000 regarding Accounting Record and Preparation of Records and Financial Statements of Local Administrative Organizations B.E. 2543; and 9) Letter of the Department of Local Administration, most urgent, No. MorTor 0808.3/Wor 819 dated 2 February 2004 regarding Revision of Recording the Accounting System for Tambon Administrative Organizations before Entering into the Accounting System Recorded by the Computer System, etc.

Social network means the associations of local administrative organizations such as Provincial Administrative Organization Council of Thailand, Subdistrict Administration Organization Association of Thailand, and National Municipal League of Thailand. These bodies help coordinate to enhance the collaboration between local administrative organizations in the provision of early childhood education. These associations not only share the value and attributes of management professionalism to members, they also disseminate the information to the members, which will lead to the collaboration with other local administrative organizations in the provision of early childhood education.

There are also other government bodies with duties in promoting and supporting the local administrative organizations such as The Department of Local Administration and Provincial Offices for Local Administration that are the core mechanism in building the collaboration between local administrative organizations in the provision of early childhood education.

Transaction cost means the cost incurred in the step of building collaboration between local administrative organizations in the provision of early childhood education. The latent costs include:

Agency cost – It is resulted by the different thought between administrators of local administrative organizations and city council members, and different favor of administrators of local administrative organizations, city council members and people regarding the outcome, length of outcome and risks in building collaboration in the provision of early childhood education with other local administrative organizations.

Information cost – It is resulted by the information to be shared between local administrative organizations, as well as the right protection, control and execution to be line with their agreement. Moreover, the incomplete information may obstruct the negotiations to build collaboration in the provision of early childhood education with other local administrative organizations. The duration of negotiations to build collaboration in the provision of early childhood education with other local administrative organizations, as well as monitoring and execution to be in line with the mutual agreement are also counted as latent costs.

Political interests means the response to local people who require that the local administrative organization provides the quality early childhood education without any additional expenses.

Limitation of finance and budget means higher budget for education, higher budget deficit, higher public debt per capita, higher debt ratio per expenses, and lower percentage of income. These factors force a local administrative organization to seek for collaboration with other local administrative organizations for better effectiveness in the provision of early childhood education.

Insufficiency of management resources means the insufficient management resources, e.g. materials, tools and facilities, which cause a local administrative organization to seek for collaboration with other local administrative organizations for better effectiveness in the provision of early childhood education.

Local administrative organization administrators means the necessary abilities and skills of administrators such as communications, negotiation, building of understanding, conflict tackling, creative thinking, network formation, and trust building. The administrators must have knowledge, understanding and interest in education to make the collaboration and management of collaboration in the provision of early childhood education of child development centers successful.

1.6 Expected benefits

1.6.1 To obtain some information to be used by the Government and any related agencies to define their policies, or to improve certain laws, rules, and regulations to encourage local administrative organizations to build their collaboration in the provision of early childhood education of child development centers.

1.6.2 To obtain a guideline to be applied by local administrative organizations to build their collaboration in the provision of early childhood education of child development centers.

1.6.3 To be widely used by scholars and general people in the literature review for their research studies or theses in relation to the collaboration in the provision of early childhood education at other levels, or in the provision of other public services.

1.7 Assumptions

For the research on Causal Relationship of Factors Influencing the Collaboration between Local Administrative Organizations in the Provision of Early Childhood Education of Child Development Centers, some assumptions were set up to answer the second and third objectives of the research. The assumptions were as follows:

1.7.1 Causal relationship of factors Influencing, both directly and indirectly, the collaboration between local administrative organizations in the provision of early childhood education of child development centers included:

1.7.1.1 Laws put direct influence on collaboration between local administrative organizations on the provision of early childhood education of child development centers, and it put indirect influence on collaboration between local administrative organizations in the provision of early childhood education of child development centers

1.7.1.2 Local administrative organization administrators put direct influence on collaboration between local administrative organizations on the provision of early childhood education of child development centers, and it put indirect influence through relationships between the local administrative organization administrators who were influential to the collaboration between local administrative organizations on the provision of early childhood education of child development centers.

1.7.1.3 Limitation of finance and budget put indirect influence through relationships between the local administrative organization administrators who were influential to the collaboration between local administrative organizations on the provision of early childhood education of child development centers.

1.7.1.4 Insufficiency of management resources put indirect influence through relationships between the local administrative organization administrators who were influential to the collaboration between local administrative organizations on the provision of early childhood education of child development centers.

1.7.1.5 Political interests put indirect influence through relationships between the local administrative organization administrators who were

influential to the collaboration between local administrative organizations on the provision of early childhood education of child development centers.

1.7.1.6 Transaction cost put direct influence on collaboration between local administrative organizations on the provision of early childhood education of child development centers.

1.7.2 Causal relationship of factors influencing collaboration between local administrative organizations on the provision of early childhood education of child development centers was consistent with the empirical data.

1.8 Conceptual Framework

The conceptual framework for the research on Causal Relationship of Factors Influencing the Collaboration between Local Administrative Organizations in the Provision of Early Childhood Education of Child Development Centers was formulated based on the related concepts, theories, research and documents. The details were as follows:

1.8.1 Factors influencing collaboration between local administrative organizations on the provision of early childhood education of child development centers.

The variables influencing collaboration between local administrative organizations on the provision of early childhood education of child development centers were synthesized from the following concepts, theories, research and documents:

1.8.1.1 Laws

The Researcher reviewed the related concepts and theories from Hulst, Van Monfort, Haveri, Airaksinen and Kelley (Hulst, R., Van Monfort A., Haveri, A., Airaksinen, J., & Kelley, J., 2009: 266-268) and Burns (Burns, 1994), and found that various constitutions provide the decentralization, promotes collaboration between local organizations, and empowers the local organizations to build the collaboration. These are relevant to laws of Thailand, which empower the local organizations to build the collaboration with each other or with other organizations,

either government bodies or private agencies, to provide public services, either in a formal form by establishing a juristic-person organization or in a non-formal form by making the agreement. As cited in NoranitSetabutr et al. (2002: 3-10) that the Determining Plans and Process of Decentralization to Local Government Organization Act B.E. 2542 deals with the promotion and support to local administrative organizations to provide public services to local people. The study conducted by the Department of Local Administration in collaboration with Thammasat University showed that the collaboration between local administrative organizations might be in the formal form by establishing the juristic-person in type of syndicate or it might be the non-formal form, that is, the local administrative organizations mutually provided the public services under regulations or laws applied by those local administrative organizations.

In addition, Burns (Burns, 1994) and Miller (Miller, 1981) mentioned about the legitimacy of council members and administrators of local administrative organizations, who were selected by election took an important role in making the collaboration agreement in the provision of public services with other local administrative organizations because they were empowered by laws.

According to the scholars' works mentioned above, it may be analyzed that laws is one factor putting direct influence on collaboration between local administrative organizations in the provision of early childhood education. This factor also depends on the administrators of local administrative organizations selected by election as they are lawfully entitled to make decision on giving collaboration in the provision of early childhood education.

1.8.1.2 Local administrative organization administrators

The Researcher reviewed the related concepts and theories presented by Mandell (Mandell, 1984), Williams (Williams, 2002), and found that the leaders must have abilities and skills in communications, negotiation, building of understanding, conflict tackling, creative thinking, network formation, and trust building. In addition, SurapeeAkomkong (2007) found that the administrators of local administrative organizations must have knowledge, understanding and interest in education to initiate the collaboration between local administrative organizations in the provision of early childhood education.

From the scholars' works mentioned above, it may be analyzed that the collaboration between local administrative organizations in the provision of early childhood education depends on the administrators of local administrative organizations, who must engage such skills and abilities as well as knowledge, understanding and interest in education. Therefore, it is analyzed that the local administrative organization leaders put direct influence on collaboration between local administrative organizations in the provision of early childhood education.

1.8.1.3 Social network

The Researcher reviewed the related concepts and theories presented by Feiock (Feiock, 2004, 2007) and found that the collaboration between local administrative organizations through some social networks would lead to the collaboration. According to Lackey, Freshwater, and Rupasingha (Lackey Freshwater, and Rupasingha, 2002), the middle facilitators, e.g. district or regional organizations are the mechanism in building the social network and collaboration between local administrative organizations. According to Frederickson and Smith (Frederickson and Smith, 2003), the social network built up by professional members would lead to the sharing of value and management professionalism. Such network not only provokes the collaboration, but also maintains the value and standard of professionalism. According to Potoski (Potoski, 2003), the professional associations were the middle mechanism in disseminating the information to members. Isaacs (Isaacs, 2001) found that the transparency by sharing the information among alliances helped retain their alliance.

From the scholars' works mentioned above, it may be analyzed that the social networks built up by the administrators of local administrative organizations and council members were the mechanisms allowing these people to have interactions and trust, which leads to the coordination or collaboration in the provision of early childhood education. Moreover, the social network creates the value and professional management for the administrators of local administrative organizations, who will give collaboration in the provision of early childhood education in order to retain their alliance and professional value. Therefore, it is analyzed that the administrators of local administrative organizations put indirect

influence through the relationship between social networks that influence the collaboration between local administrative organizations in the provision of education.

1.8.1.4 Limitation of finance and budget

The Researcher reviewed the related concepts and theories presented by Morgan and Hirlinger (Morgan and Hirlinger, 1991) and Marc Holzer and Hedy Isaacs (Holzer and Isaacs, 2002) who found that higher budget and expenditure for public services forced the administrators of local administrative organizations to manage the budget effectively by cooperating with other local administrative organizations in providing public services. Ferris (Ferris, 1986) and Post (Post, 2002) found that the administrators had to concern about the financial health, e.g. scope of deficit budget and surplus deficit, debt per capita, debt to expenses and percentage of income ownership, etc.

From the scholars' works mentioned above, it may be analyzed that the administrators of local administrative organizations must concern about the limitation of finance and budget and financial health before seeking for the effective management methods, especially for the provision of early childhood education carried out by most local administrative organizations. Therefore, it is analyzed that this factor depends on the administrators of local administrative organizations who must have collaboration in the provision of early childhood education.

1.8.1.5 Insufficiency of management resources

The Researcher reviewed the related concepts and theories presented by Kruger &McQuire (Kruger &McQuire, 2005), Feiock (Feiock, 2007), Carr, Gerberry&Lupher (Carr, Gerberry&Lupher, 2009) and found that the shortage of management resources caused the local administrative organizations to seek for the collaboration to acquire the effectiveness.

From the scholars' works mentioned above, it may be analyzed that, due to the limitation of budget, the management resources to be used by local administrative organizations in the provision of early childhood education may be insufficient. Therefore, the administrators of local administrative organizations must cooperate with other local administrative organizations in order to exchange or mobilize necessary resources for this level of education. Therefore, it is analyzed that the insufficiency of management resources is a factor depending on the administrators

of local administrative organizations who must build the collaboration in the provision of early childhood education.

1.8.1.6 Political interests

The Researcher reviewed the related concepts and theories presented by Bartle and Swayze (Bartle and Swayze, 1997) and found that the local administrators took an important role in building the collaboration. These local administrators aim at building the collaboration because they will receive some political interests. When the local people want more public services, the local administrators or city council members must share the existing resources with other government bodies to provide the public services requested by local people. Except tax increase, the budget saving by way of collaboration is a way of boosting the political popularity so that these administrators will be re-elected in the next election.

From the scholars' works mentioned above, it may be analyzed that if the administrators of local administrative organizations cooperate with other local administrative organizations in the provision of early childhood education, the local people will recognize the benefits to their children, that is, the quality and standard of providing this level of education will be improved, which will lead to the effectiveness and budget saving of local administrative organizations. Therefore, it is analyzed that the political interests is a factor depending on the administrators of local administrative organizations who will build the collaboration between local administrative organizations in the provision of early childhood education.

1.8.1.7 Transaction cost

The Researcher reviewed the related concepts and theories presented by Feiock, Stein, Zhang & Feiock (Feiock, 2007; Stein, 1990; Zhang & Feiock, 2010), Bricker, Stein, & Post (Bricker, Stein & Post, 2010), LeRoux, Brandenburger, and Pendey (LeRoux, Brandenburger, and Pendey, 2010) and found that the local administrative organizations that build the collaboration in the provision of public services may encounter the transaction cost, which may be called the agency cost, due to different problem-solutions between officers and different favor between government officials and people such as outcome, length of outcome, and attitude toward risks, etc. North (North, 1990), Shrestha & Feiock (Shrestha & Feiock, 2009) found that the information cost, e.g. objects to be shared, right protection, control and

execution to be in conjunction with the agreement as well as incomplete information, may obstruct the negotiations for such collaboration. Williamson (Williamson, 1975) found that the time spent for negotiations, monitoring and execution of the agreement was a kind of transaction cost in building the collaboration.

From the scholars' works mentioned above, it is analyzed that when the local administrative organization wants to build the collaboration in the provision of early child education, it may encounter the transaction cost. This may obstruct the collaboration between local administrative organizations in the provision of early childhood education. Therefore, it is analyzed that the transaction cost is a factor putting direct influence on collaboration between local administrative organizations in the provision of early childhood education.

1.8.2 Collaboration between local administrative organizations on the provision of early childhood education

The Researcher reviewed the concepts and theories relating to the collaboration between local administrative organizations in the provision of public services. These include:

Concepts about classification of collaboration presented by Agranoff (Agranoff, 2003), Mandell&Steelman (Mandell&Steelman, 2003).

Concepts about levels of collaboration presented by Beverly Cigler (Beverly Cigler, 1999), Agranoff&Pattakos (Agranoff&Pattakos, 1979), Martin et al. (Martin et al., 1983), and Kagan (Kagan, 1993), Kagan (Kagan, 1991) and Mattessich& Monsey (Mattessich& Monsey, 1992), Hondale (Hondale, 1982), Marc Holzer and Hedy Isaacs (Marc Holzer&Hedy Isaacs, 2002).

Concepts about types of collaboration between local administrative organizations in the provision of public services presented by NoranitSethabutr et al. (2002), the Department of Local Administration and Thammasat University, Hulst& Van Monfort (Hulst& Van Monfort, 2007: 216), Hulst, Van Monfort, Haveri, Airaksinen and Kelley (Hulst, R., Van Monfort A., Haveri, A., Airaksinen, J. & Kelley, J., 2009) and Samuel Nunn & Mark S. Rosentraub (Samuel Nunn & Mark S. Rosentraub, 1997), Jennings and Ewalt (1998), and AmornratPinyoanantapong (2003).

The above concepts were synthesized to determine the variables on collaboration between local administrative organizations in the provision of early childhood education. The determined variables were the horizontal arrangement between 2 local administrative organizations and up, which formed the group. Their administrative area may be close or not. They had the formal negotiations for their collaboration and they had the formal agreement. They applied their existing regulations or laws in the provision of early childhood education. Certain resources were also shared, e.g. information, personnel, materials, tools, budget as well as powers and duties. These local administrative organizations also prescribed rules and regulations, and built the management mechanism in the form of committee. They jointly had the planning and budget spending in the provision of early childhood education of child development centers.

From the synthesis of all variables, the conceptual framework of this research was illustrated in Figure 1:

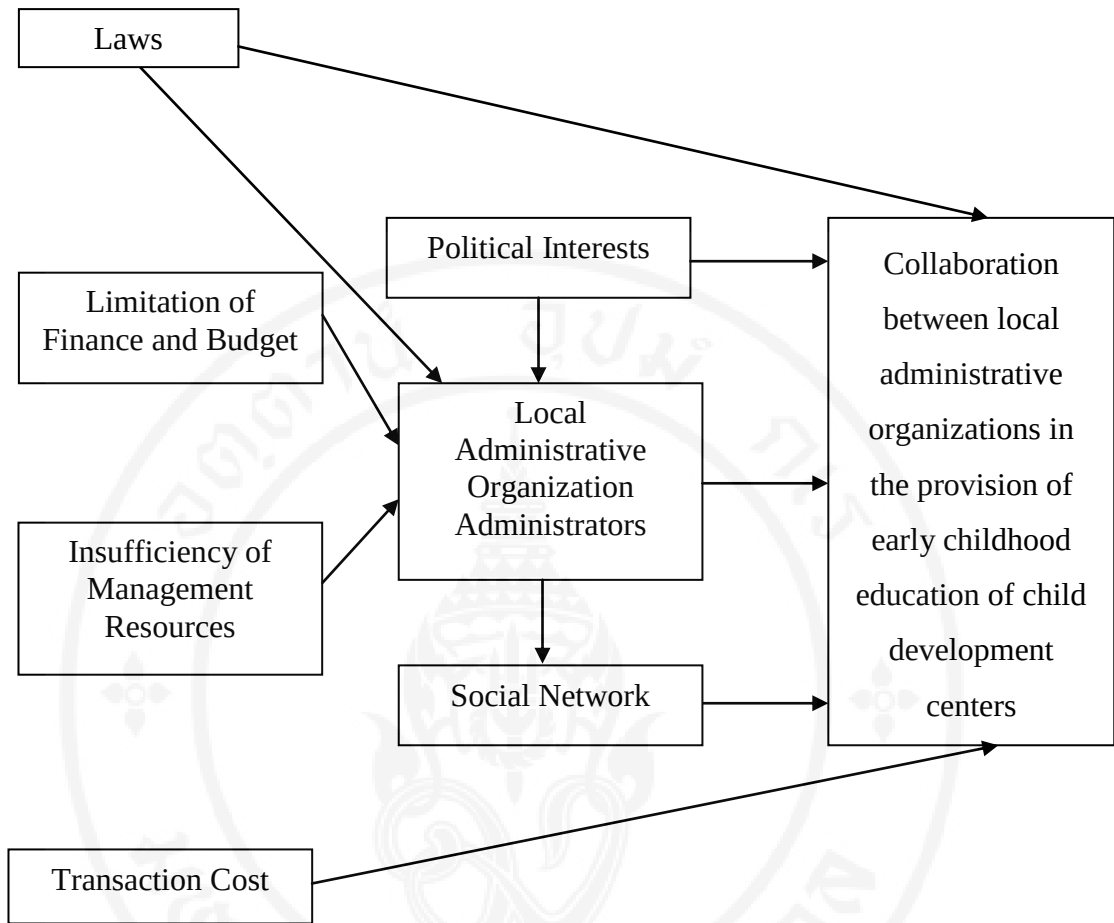


Figure 1.1 Conceptual framework

Note: The above symbols mean as follows (Nongluck Virachchai, 1994):

→ represents the causal relationship between variables. The arrow tail is the cause variable and the arrow head is the effect variable; and

□ represents the observed variable.

CHAPTER II

LITERATURE REVIEW

For the research on Causal Relationship of Factors Affecting the Collaboration between Local Administrative Organizations in the Provision of Early Childhood Education of Child Development Centers, the literature review was in line with the following topics:

- 2.1 Concepts about decentralization
- 2.2 Concepts about educational decentralization
- 2.3 Concepts and theories relating to local collaboration in the provision of public services
- 2.4 Administration of early childhood education in child development centers by local administrative organizations
- 2.5 Factors influencing the local collaboration in the provision of public services
- 2.6 Project on Competency Development for Child Development Centers under Local Administrative Organizations
- 2.7 Related research
- 2.8 Conceptual framework

2.1 Concepts about decentralization

2.1.1 Meaning, types and importance of decentralization

Decentralization means the transfer of authority and responsibilities in public duties from the central government to the intermediate and local government or to the quasi-autonomy state under the central government's power as well as the transfer to the private sector. The decentralization may be classified into the following (Prudhisan Junbala et al., 2007: 86-93).

2.1.1.1 Political Decentralization

The political decentralization aims at giving more power to citizens or citizens' representatives in the public decision making process. The political decentralization usually comes along with the pluralistic politics and representative government. The decentralization can support the democratization by empowering citizens or citizens' representatives to take part in imposing policies and implementing them. The basic belief supporting the political decentralization is that the more the people take part in the decision-making process, the better the decision outcome serves various needs and interests. The participation is better than permitting the central government to make all decisions. This thought implies that the election of representatives in a particular area causes the voters to know their representatives better while the representatives absorb the demands and expectation of people in their local area better. The political decentralization is usually done under various political changes such as reform of the Constitution or provisions, party pluralism development, strengthening the legislative branch, formation of political organization, and efficient stimulation of forming political groups and interest groups.

2.1.1.2 Administrative Decentralization

The administrative decentralization is to distribute the authority, responsibility and financial resources to provide public services at various levels in the state's structure. The administrative decentralization is to transfer the responsibilities in imposing policies, finance and management in any of public functions from the central government or any agency under the central government to another agency that is the representative of the central government, any agency under the central government or a local agency of the central government, any regional agency or any quasi-autonomy agency. There are 3 types of administrative decentralization as described below.

1) Deconcentration

This deems the mildest decentralization. It is usually used in the service provided by the unitary state. "Deconcentration" means the decentralization of decision-making and management responsibilities to the offices of the central government. This deconcentration is to move the responsibility borne by the state officers in the capital to other state officers outside the capital (at the regional,

provincial and district levels) or it is to arouse the management abilities at the low level under the supervision of ministries of the central government.

2) Delegation

This means that the central government transfers its responsibilities in the decision-making process and public functions in respect with management to another quasi-autonomy agency. The quasi-autonomy agency is not absolutely controlled by the central government, but it must be responsible for the central government (or the decision must be ended by the central government). The central government delegates when it establishes a state enterprise or public corporation or quasi-autonomy school or company responsible for the regional development or agency specifically established to be responsible for general development projects. These agencies have autonomy to make decisions. They may be exempted for general obligations, and they may have the power to collect services fees from the public.

3) Devolution

This type is the strongest administrative decentralization. The central government transfers the authority along with assigning functions in making decision, setting up the budget and management to any quasi-autonomy agency of local government. The central government is in the status of cooperation (not control). Devolution means the transfer of responsibilities in providing public services to the municipality or local administrative organization by which its administrators are elected by the public. This organization carries out the income collection, and has the autonomy in its budget management and investment. In this system, the local government has precise and formal powers and duties. It performs the public functions in its boundary. This administrative decentralization is the ideal model which encourages the political decentralization.

3.1) Fiscal decentralization - The financial responsibility deems a key component of decentralization because a local administrative organization or private organization shall perform duties under their powers efficiently when it owns the income (either from the collection in that local area or from the budget offered by the central government. But, this organization must have the power in allocating its budget).

There are several types of fiscal decentralization:

1) a local administrative organization or private organization performs the public functions with its own budget (not subsidized by the central government) or it collects the public service fee from the service users; 2) participatory finance and management, that is, the service users take part in providing the services or managing the infrastructure by funding or being the service labor; 3) increasing local revenues by collecting the property tax, land tax, and business tax or indirect collection of service fee; 4) transfer of tax collection power from the central government to the local government for certain objectives or for general management; and 5) loan guarantee by which the local government has powers to take out loans from local and foreign financial sources.

3.2) Economic or market decentralization - The perfect type of decentralization, in the government's view, is the privatization and deregulation because this is to move the responsibilities for duties from the state sector to the private sector by way of privatization and deregulation. This process usually comes along with the economic liberalization and market development policies. This type of decentralization transfers some functions previously monopolized by the state to be operated by the business sector, community, cooperative, volunteers and NGOs. The privatization is the process covering several forms. It may be the management of goods and services by the market mechanism or it may be the joint investment between the state and private sector. That is, the state and private sector cooperate to provide the service or infrastructure. The privatization involves the following process: 1) granting a private cooperation to perform some duties previously monopolized by the government such as communication business; 2) concession agreement allowing a business company to provide a public services, especially infrastructure, which may be done in several forms such as concession to the private company to collect the garbage, concession the private company to generate the electricity for some communities or concession for operating some rail routes; 3) the government subsidizes the private sector's projects through the capital market (this needs sufficient regulations and protection measures to minimize risks to the government) and the private sector shall be involved in those projects; and 4) transfer of service

responsibilities in the provision of service from the government sector to the private sector by privatizing a state-owned enterprise to a public company.

The deregulation is to reduce the regulations enabling the private sector to take part in the provision of service, and permitting the competition between service providers. Previously, such service may be monopolized by the state such as management of broadcasting frequencies, etc. At present, the privatization and deregulation have been used in several developing countries. Not only the central government, the local government also carries out the privatization by making agreements with the private sector to provide the services on the case-by-case basis.

For the importance of decentralization, most decentralization during the previous decade was resulted by the political necessities. For example, in Latin America, the decentralization is the necessary process for democracy as it reduces the power of dictatorial government and adds the power of elected government under the constitution newly prescribed in Africa. The expansion of multi-party system causes more local demand for political involvement like Ethiopia. The decentralization is to respond to the pressure that various regions and tribes want to take part in the decision-making process. The decentralization is also an important tool to maintain the national integrity like a country having encountered the civil war so long and its better solution is to give independence and permit the separation of some regions. Some groups of people in some areas are involved in the decision-making process to maintain the nation. The decentralization is an essential process during the economic transition in the socialist state has no mechanism for the provision of local services. In some cases, the decentralization is the process of service improvement to cover more people because some countries recognize the central government's performance limitations like East-Asia countries. By these political reasons, the decentralization is inevitable in the sense of effective tool for state administration and of political development based on the principle of democracy (through election and local participation) apart from the political reasons.

The decentralization by economic views, especially according to the Public Choice Theory is the best way leading to individuals' welfare. The economic principle views that the rational individual decides to do anything based

on his/her own demand for his/her best benefit. The civil officers and politicians also work for the public as resulted by their own demands. The citizens or service recipients will select their residence by considering the worthiness of tax, which is compared with the public services provided. Meanwhile, the government or service providers will consider the worthiness of things the government gives to the people if compared with the invested cost. In respect with the demand side, the individuals' demands are numerous; so they want the government that is able to serve their demands as much as possible. In respect with the supply side, the government must provide the services at least as possible with cost-effectiveness and most satisfaction of service recipients. Certainly, this mechanism wants the decentralization to make the government most fit or the small-size government so that the numerous demands of service users reduce while the service users' demands are most fragmented. When various demands are not served, the individuals will change to stay in the other local area where serves their demands most. Finally, the small-sized government with powers and duties relevant to the citizens who live under their scope of duties and powers, these good citizens will be pleased to pay tax whereas the government is able to provide the services to meet the tax payers' demands. The consequent outcome is the efficient government that provides the highest benefits. This is the idealism of decentralization. The Public Choice Theory becomes an alternative for some developed countries like English and America to solve the problems encountered by local governments of big cities, which are large organizations with all-purpose authorities, but they fail to serve the people's demands adequately. In this regard, the decentralization is not the process occurred in the developing countries, but this process can arouse the efficiency in other developed countries.

2.1.2 Decentralization in Thailand

The decentralization in Thailand became clearer in the Constitution B.E. 2540, Section 78 which prescribes that the State shall decentralize powers to localities for the purpose of independence and self-determination of local affairs, develop local economics, public utilities and facilities systems and information infrastructure in the locality thoroughly and equally throughout the country as well as develop into a large-sized local government organization a province ready for such purpose, having regard

to the will of the people in that province. In addition, Chapter 9 provides the local government as follows:

Section 282. The State shall give autonomy to the locality in accordance with the principle of self-government according to the will of the people in the locality.

Section 283. Any locality which meets the conditions of self- government shall have the right to be formed as a local government organization as provided by law.

The supervision of a local government organization must be exercised in so far as it is necessary as provided by law but must be for protecting local interests or the interests of the country as a whole; provided, however, that it shall not substantially affect the principle of self-government according to the will of the people in the locality otherwise than as provided by law.

Section 284. All local government organizations shall enjoy autonomy in laying down policies for their governance, administration, personnel administration, finance and shall have powers and duties particularly on their own part. The delineation of powers and duties between the State and a local government organization and among local government organizations themselves shall be in accordance with the provisions of the law, having particular regard to the promotion of decentralization.

Section 285. A local government organization shall have a local assembly and local administrative committee or local administrators. Members of a local assembly shall be elected.

A local administrative committee or local administrators shall be directly elected by the people or shall be from the approval of a local assembly. An election of members of a local assembly and local administrative committee or local administrators who must be directly elected by the people shall be made by direct suffrage and secret ballot.

Section 286. If persons, having the right to vote in an election in any local government organization, of not less than three-fourths of the number of the voters who are present to cast ballot consider that any member of the local assembly or any administrator of that local government organization is not suitable to remain in office,

such member or administrator shall vacate the office, as provided by law. The voting under paragraph one shall be made by not less than one-half of the total number of the persons having the right to vote.

Section 287. Persons, having the right to vote in any local government organization, of not less than one-half of the total number of the persons having the right to vote in that local government organization shall have the right to lodge with the President of the local assembly a request for the issuance by the local assembly of local ordinances. The request under paragraph one shall be accompanied by the draft local ordinances.

The rules and procedure for the lodge of request and the examination thereof shall be as provided by law.

Section 288. The appointment and removal of officials and employees of a local government organization shall be in accordance with the need of and suitability to each locality and shall obtain prior approval from the Local Officials Committee, as provided by law.

Section 289. A local government organization has the duty to conserve local arts, custom, knowledge or good culture. A local government organization has the right to provide education and professional training in accordance with the suitability to and the need of that locality and participate in the provision of education and training by the State; provided that it shall not be contrary to section 43 and section 81, as provided by law. In providing education and training in the locality under paragraph two, the local government organization shall also have regard to the conservation of local arts, custom, knowledge and good culture.

Section 290. For the purpose of promoting and maintaining the quality of the environment, a local government organization has powers and duties as provided by law.

The participation in the preservation of natural resources and environment outside the area of the locality only in the case where the living of the inhabitants in the area may be affected.

Later, the Constitution B.E. 2550 was enacted with focus on decentralization. It provides the decentralization of power to local government for the purpose of independence and self-determination for local affairs in Section 78(3), and

directive principles of public participation policies in Section 87. In Chapter XIV on Local Government, from Section 281-290, they provide the autonomy to the localities in the administration and management.

There is another important law on decentralization to localities, that is, the Determining Plans and Process of Decentralization to Local Government Organization Act B.E. 2542, which is the organic law determining the decentralization to the localities. The essences of this law are to: 1) impose powers and duties in the provision of public services between the State and local administrative organizations and between local administrative organizations; 2) allocate taxes and duties between the State and local administrative organizations with main concerns about duties between the State and local administrative organizations, and between local administrative organizations; 3) set up a committee composing of representatives from related government bodies, representatives of local administrative organizations, and experts with qualifications as provided by law. The commissioners shall perform duties as specified in Clause 1) and 2). In case of delineating powers and duties as well as allocating taxes and duties to any local administrative organization, the Committee according to 3) must review such matters periodically within 5 years upon the date of delineating such powers and duties or the date of allocating taxes and duties as the case may be in order to consider the appropriateness of the delineation of powers and duties, and the allocation of taxes and duties done earlier with concern about the decentralization to localities. However, such decentralization will be applicable after approval by the cabinet and report to the parliament.

Therefore, it is evident that the provisions of laws support the decentralization to localities for autonomy in the administration and management as well as provision of public services while the State only governs these localities to comply with laws and to actually concern with the public benefits as provided by law.

2.2 Concepts about educational decentralization

For Thailand, the educational decentralization to local administrative organizations so that they involve in the provision of education is provided in certain laws as follows (SanitJornanan, 2008: 6-35).

2.2.1 The Constitution of the Kingdom of Thailand B.E. 2550

The Constitution of the Kingdom of Thailand provides the significant principle in respect with the provision of education and participation of local administrative organizations in the provision of education as described below.

2.2.1.1 Rights and liberties in education

Section 49 provides that a person shall enjoy an equal right to receive education for the duration of not less than twelve years which shall be provided by the state thoroughly, up to the quality, and without charge. The provision of training and education by professional or private organizations, educational alternatives, self-education and lifelong education shall be protected and properly promoted by the State.

Section 80. The State shall implement social, public health, education, and cultural policies as follows:

(1) To protect and develop children and youths, to support their bringing-up them and provide basic education, to promote equality between men and women, to enhance and develop integrity of families and communities, including to provide assistance and welfare to the elderly, indigent, disabled or handicapped, and those in difficulties to ensure better quality of life, and ability to depend on themselves.

(2) To develop the quality and standard of all levels of education and all forms of education in conformity with social and economic changes, to provide a national educational plan, and a law for the national education development, to provide the development of quality of career teachers and personnel in education to be able to follow the global changes.

(3) To encourage and support decentralization of power to local administrative bodies, communities, religious organizations, and private sector to enable them to participate in provision of education to develop the quality of education to allow equality and to conform with the directive principles of fundamental State policies.

The essences of both sections are that every citizen is entitled for the 12-year basic education and the State has missions to provide the education

with free of charge, and to encourage local administrative organizations to provide and participate in the provision of education.

2.2.1.2 Decentralization to local administrative organizations for the right in the provision of education

As provided in Section 289, a local government organization has a duty to conserve local arts, custom, knowledge and good culture. The local government organization has the right to provide education and professional training in accordance with the suitability and the need of that locality and participate in the provision of education and training by the State; with due regard to the standard and educational system of the country. In providing education and training in the locality under paragraph two, the local government organization shall also have regard to the conservation of local arts, custom, knowledge and good culture.

2.2.1.3 The National Education Act B.E. 2542 (amended in B.E. 2545)

The Constitution of the Kingdom of Thailand B.E. 2540 provides the provision of basic education for not less than twelve years, and the national education law. Later, the National Education Act B.E. 2542 was enacted. The essences of the Act (amended on 2002) composes of the principles of providing education that must be the lifelong education, communities' participation in the provision of education, and constant development of learning contents and process. The organization of structure and process in education is the duty and power of the Ministry of Education by adhering to the policy unity and variety of practice. The power is decentralized to educational areas, local educational institutes and local administrative organizations. The educational standard is determined. The system guaranteeing the quality of education at all levels and types of education is formulated under public participation. The State shall have a duty of providing the 12-year basic education to general and handicapped children with free of charge. The parents and guardians have a duty to provide the 9-year compulsory education to their children. There are 3 educational systems: formal education, which composes of 2 levels, that is, basic education and tertiary education, and non-formal education, and informal education. For the administration and provision of education by the State, the Ministry of Education has powers and duties in promoting and regulating the education at all

levels and all matters. These powers and duties are performed by 4 main pillars of the Ministry of Education, established in the form of groups of individuals called a council or a commission; namely, Education Council, Basic Education Commission, Vocational Education Commission, and Commission on Higher Education. In each commission, the representative(s) of local government organization shall be the commissioner (Somkid Bangmo, 2006: 17-34).

The management of basic education shall be based on the educational area. In each educational service area, the Commission and the Office of Educational Service Area have powers and duties in regulating the establishment, merger or dissolution any basic educational institute in that educational service area, in coordinating and promote the local administrative organizations to enable to provide education in conformity with the educational policies and standard. For the composition of the Educational Service Area Commission, and Basic Education Commission, the representative(s) of local administrative organizations shall be the commissioner(s) as well.

For the administration and provision of education by local administrative organizations, they have rights in providing education for any level or all levels depending on local readiness, appropriateness and needs. The Ministry of Education shall impose the evaluation criteria and methods for readiness of local administrative organizations in the provision of education. The Ministry of Education also has duties in coordinating and promoting local administrative organizations to enable to provide education in conformity with educational policies and standard, and in suggesting local administrative organizations about the allocation of budget for the provision of education.

2.2.2 The determining plans and process of decentralization to local government organization act B.E. 2542

To enable local administrative organizations to participate in the provision of basic education or the administration and provision of education, the Constitution of the Kingdom of Thailand B.E. 2540, and other acts enacted in conjunction with the provisions set forth therein, including the National Educational Act B.E. 2542 and the Determining Plans and Process of Decentralization to Local Government Organization

Act B.E. 2542, all contain the provisions to support the participation of local administrative organizations in the provision of education or the administration and provision of education as described below.

2.2.2.1 The National Education Act B.E. 2542 provides that the representatives of local administrative organizations shall be the members in four main pillars of the Ministry of Education in the form of groups of individuals called a council or a commission as the case may be. These are the National Council for Education, Commission for Basic Education; Commission for Vocational Education, and Commission for Higher Education. Regarding the Commission for Basic Education at the educational service area and educational institutes, it is also required that the representatives of local administrative organizations shall be the commissioners. Section 41 of this Act also provides the right of local administrative organizations in the provision of education at any or all levels of education in accord with readiness, suitability and requirements of the local areas. Section 42 provides that the Ministry shall prescribe the criteria and procedure for assessing the readiness of the local administration organizations to provide education. The Ministry shall be responsible for co-ordination and promotion of the local administration organizations' capability to provide education in line with the policies and standards required. It shall also advise on the budgetary allocations for education provided by local administration organizations.

2.2.2.2 The Determining Plans and Process of Decentralization to Local Government Organization Act B.E. 2542 provides that there must be the mechanism for decentralization to local administrative organizations. Such mechanism or commission shall establish decentralization plan to local administrative organizations and implementation plan to be approved by the Council of Ministers and notify to the National Assembly as required by this Act. The Commission for the decentralization to local administrative organizations as established by the provisions set forth therein shall appoint the committee, sub-committee and working groups to proceed the transfer of educational institutes, civil servants and educational personnel to the local administrative organizations, to cause the local administrative organizations to have readiness in the provision of education. The commission, sub-committee and working groups shall prepare the projects and implementation plans

such as Plan for Understanding about Assessing Readiness in the Provision of Basic Education by Local Administrative Organizations, Plan for Promoting the Readiness of Local Administrative Organization for the Efficient Provision of Education, and Plan for Monitoring and Developing Local Educational System, etc.

As stated above, it is evident that the Government has recognized at least 3 important roles and legitimacy that the local administrative organizations must take part in the provision of education:

1) Role of local government or intermediate agent – This is the decentralization from the central government or the functions done by the central agencies to the regional agencies. The provision of formal education, especially basic education, deems the public service required by law that it must be thoroughly provided by the State, up to the quality and without charge, at least twelve years. In other words, the provision of basic education must not be less than twelve years for Thai people. It must contain the quality without charge and include the participation of local administrative organizations, communities and public.

2) Role of representative of local people. The administrative panel or local administrative organization administrators and members of local administrative organization council are elected by local people, and they are bound to the policies declared during the campaign for votes. Therefore, the local people determine the local administration policy.

3) Role of administrators in the administrative areas governed by that local administrative organization, that is, the local administrative organization is the owner of the administrative area. Any actions there must be approved by the administrative panel or administrators and members of local administrative organization. In the past, the central government or central government agencies and regional agencies took such role. When various forms of local administrative organizations are established, the central government decentralize the provision of public services previously provided by the central government or the central government empowered the regional agencies to delegate the local administrative organizations to take actions in the administrative service areas of that local administrative organization. The local administrative organization has powers and

duties or takes part in any activities held in its administrative service areas. This organization is the administrative unit closest to the people.

The local administrative organization participates in the provision of education in the status of local government, representative of local people, and administrator of the administrative service areas in that local administrative organization.

2.3 Concepts and theories relating to local collaboration in the provision of public services

2.3.1 Definitions of local collaboration

O'Leary, Gerard & Bingham (O'Leary, Gerard & Bingham, 2006) defined the collaboration as the facilitating process and action prepared by agencies to solve problems that cannot be tackled by a single organization.

LeRoux & Carr (LeRoux & Carr, 2007) defined the collaboration between localities that it is the willing preparation to be jointly responsible for the delivery of public services. This kind of mechanism becomes more popular at present in response to current changing environment and budgetary limitations.

Kwon & Feiock (Kwon & Feiock, 2010) defined the local collaboration as the preparation to be jointly and willingly responsible for the provision of services between local administrative organization. This may be the collaboration between local administrative organizations that jointly provide the public services or carry out either long-term or short-term projects. The collaboration may be in the kind of alliance, partnership or group formation. The collaboration between localities must include the following elements: general objectives, coordination structure, joint agreement and joint service.

Post (Post, 2002) mentioned about the local collaboration that it derived from the agreement made between 2 localities or more. Generally, the collaboration may include the small groups or cities with connected borders or cities with a large number of population where the local administrative organizations will provide

services together. This collaboration shall cover all administrative activities and process. The collaboration starts from the policy level under formal or informal agreement. The income may or may not be shared between them.

Thomas & Perry (Thomas & Perry, 2001) defined the collaboration as the process in which the actors have autonomy or have quasi-autonomy interactions through formal or informal negotiations. They mutually formulate rules, regulations, management structure and guiding practice to operate or make decision in various issues together. This is the process showing the shared norm and interactions for joint interests.

Thurmaier& Wood (Thurmaier& Wood, 2004) explained the difference between service consolidation and collaboration that the collaboration occurs frequently in the informal form. Several government agencies may collaborate to shift the level of communications or services in any related services. This kind of collaboration may be done in the form of volunteering up to making the formal agreement. However, the service consolidation, which is the gathering of agencies to provide the same services, and eradicates at least one of existing structures.

According to the local collaboration compiled by scholars, it could be summarized that the local collaboration is the willing collaboration to be responsible for the provision of services between local administrative organizations. Such collaboration may be done between the local administrative organizations whose borders are connected and they mutually provide the public services or conduct either long-term or short-term projects. The collaboration may be in the form of alliance, partnership or group formation through formal or informal negotiation or formal or informal agreements. These organizations also jointly set up the rules, regulations, management structure and guiding practice for the operation and decision-making in various issues. Under the collaboration, the income may be shared or not.

2.3.2 Types of collaboration

Agranoff (Agranoff, 2003) classified total 12 educational networks into 4 types Type 1 is the informational networks dealing with a number of stakeholders who share the information and survey problem-solutions and these activities take place in the member-centered organization. Type 2 is the developmental networks dealing with

the information sharing which includes the education. This shifts the members' abilities in problem-solving. This emphasizes on the organizational level rather than network level. Type 3 is the outreach networks that not only deal with the informational sharing and developmental networks, but the project strategy for service users must be determined and it may be used by other alliance organizations. Type 4 is the action networks dealing with the group operations by accepting the network-level practice and the service delivery.

Mandell&Steelman (Mandell&Steelman, 2003) classified the coordination networks as follows. 1) intermittent coordination that takes place when two organizations or more jointly revise their policies and management process in order to attain the objectives. The interactions occur at the bottom level, and the obligations shall be jointly retained for a while. For example, when the disaster occurs at any place, the coordination appears immediately. 2) Temporary task force is set up for the particular work under limited purposes, and this task force will be terminated when those purposes are attained. 3) Permanent or regular coordination that will take place when several organizations agree to be involved in certain activities to attain any specific purposes under the formal structure. The resources will be shared between these organizations more than the first two types of coordination such as regional planning group for social services.

2.3.3 Level of collaboration

Beverly Cigler (Beverly Cigler, 1999) determined the level of partnership. The primary level of collaboration is the network initially established for information sharing. The second level is the cooperative partnership, which deals with the agreement for cost reduction and linkage, from informal to formal linkage. The next level is the coordinating that needs some obligations for tighter and more formal linkage. The last level is the collaboration, which is the strongest form. This is the strong, solid and long-term collaboration under formal connection and obligations on resources.

Agranoff&Pattakos (Agranoff&Pattakos, 1979), Martin et al. (1983) and Kagan (1993) divided the collaboration into 4 levels:

1) Policy-centered integration under the policy advisory council, block grant, information sharing and joint project development and flowing income according to the project scope.

2) Organization-centered integration – An organization may be reformed or newly established that will be defined as the umbrella organization. It may be the national, state or local organization with duties of improving the information sharing and of managing the existing projects.

3) Program-centered integration – This strategy includes the area integration, data linkage, integration of human resources, and integration of planning or budget. This integration focuses on the change of project scope and operations.

4) Client-centered integration – This integration model focuses on a particular service provided at the individual or family level, etc.

Kagan (Kagan, 1991) and Mattessich& Monsey (Mattessich& Monsey, 1992) divided the integration levels from informal to formal as follows:

Cooperation is informally supported and the interpersonal relationship comes from personnel from different organizations.

Coordination is a joint working between two organizations to provide a new form of public service for the public benefit.

Collaboration is to jointly share existing resources as well as power, duties and rewards by several organizations through various mechanisms, e.g. personnel integration, joint planning and budget expenditure.

Hondale (Hondale, 1982) stated that the organizational cooperation includes: 1) information exchange; 2) mutual aid agreement; 3) informal supply and receipt of services; 4) contractual supply and receipt of services; and 5) service agreement for the contractual supply and receipt of services or service agreement and service agreements or joint action. Normally, a government who receives the services shall pay for the cooperation services to the government who is the service provider rather than the service support given, and it deals with the exchange of budget and operating cost.

Marc Holzer&HedyIssacs (Marc Holzer&HedyIssacs, 2002) divided the service sharing as following: 1) informal sharing without any agreement; 2) inter local service agreement by which several municipalities mutually make an agreement while

one party is the service provider and the other party is the customer; 3) joint meeting where the structure or organization is separated and its structure comprises the representatives of participating municipalities; and 4) consolidation service.

2.3.4 Forms of collaboration

NoranitSetabutr et al. (2002, 3-3-3-15) mentioned about the cooperation models between local administrative organizations as follows:

Model 1: Syndicate

Syndicate is a cooperation model of at least 2 local administrative organizations. Normally, the activities operated under this model deal with the local issues and they need high expenditures, e.g. garbage eradication, wastewater treatment, etc. The syndicate is a legal status with autonomy for business operations because its management is done by a committee comprising a group of persons appointed by all related local administrative organizations. The syndicate is able to take any juristic acts with the third party, that is, it can possess properties, can be the plaintiff to take legal actions or may be sued as the defendant. In addition, the syndicate may issue general rules and regulations for its personnel or any persons using its services. The syndicate also has the power to expropriate the immovable properties. However, the syndicate must be controlled and checked by local administrative organizations because it is not independent completely.

There are two kinds of cooperation: special and mixed. The special cooperation is the cooperation of local administrative organizations, which are in the same kind of organization; for example, Municipality A cooperates with Municipality B, etc. The mixed cooperation is the cooperation of different local administrative organizations; for example, a municipality cooperates with a provincial administrative organization like the case of Japan and France. The syndicate's key characteristics are as follows:

1. The syndicate is a juristic organization established to provide a public service or more.
2. The syndicate is resulted by cooperation from at least 2 local administrative organizations or between a local administrative organization with the private sector or any lawful person.

3. The syndicate must provide a public service or more.

4. The syndicate can seek for revenues from other sources for its operations.

5. The syndicate is controlled and examined by the local administrative organization responsible for setting up such syndicate.

The syndicate is a solution for a small-sized local administrative organization with some limited budgets, but the local people need certain necessary services. This model will be so successful if it is the cooperation of the local administrative organizations located closely.

Model 2: Entrustment

If a local administrative organization is unable to perform its duties as required by law, it may temporarily authorize its duties as required by law to another local administrative organization (normally, it should be the local administrative organization or authority located nearby). This authorization must be in writing under the agreement of both parties. This authorization must be returned to the owner on request.

Model 3: Agreement

The local administrative organizations located closely may make the agreement to do some activities together. For example, 2 or 3 local administrative organizations may sign the agreement to support and carry out the conservative tourism in areas of related local administrative organizations. If any entity does not want to continue such agreement, it may be terminated. One advantage of this model is that the local administrative organizations receiving benefits together can make the agreement between them with no concerns about law.

Model 4: Partnership

Two or more local administrative organizations can have the partnership operations, which shall be deemed the informal agreement to give assistance to each other. For instance, a local administrative organization lends some working tools from another local administrative organization. But, the lender must be responsible for any expenses incurred by the use of those tools, e.g. fuel or wage. This cooperation depends on the good relationship between local leaders of the related entities. One

advantage of this model is that the working is easier as it does not involve any legal process. The cooperation is informal.

Hulst & Van Monfort (Hulst & Van Monfort, 2007: 216) mentioned about the scope of cooperation mission and activities, which may be divided into 2 types: single-purpose cooperation; and multi-purpose cooperation. The former is usually the public or social service under the local power as permitted by law. The latter is the cooperation with wider scope or the large public service as well as planning activities.

At present, the favorite cooperation for public services in European and western countries is the inter-municipality cooperation. This not only involves the planning cooperation and social services, but also the economic development (Stoner 1964; ACIR, 1985; Dafflon & Perritaz 2000; CDLR 2001; Agranoff & McGuire 2003; Warner 2006).

This is called the horizontal agreement. However, the local administrative organization may extend the cooperation with the government, which is called the vertical arrangement. It may also extend the cooperation with other state agencies, private organizations and foundations (Hulst & Van Monfort, 2007: 212). The vertical arrangement may be classified into 2 types: standing organization; and agreement that integrates less cooperation than the first type (Hulst & Van Monfort, 2007: 219). The standing organization is less favored than the agreement. One advantage of the agreement is that it needs no personnel and minimizes the formal decision-making. But, this cooperation agreement must contain certain rules and regulations for the provision of public services between service providing partners.

In the paper of Hulst, R., Van Monfort A., Haveri, A., Airaksinen, J. & Kelley, J., (2009), it was presented that, for cooperation in the provision of public services, the cooperation organization must be established and there must be some joint management rules and regulations, scope of decision-making, management structure and budget. The establishment of this cooperation organization must be approved by superior governments such as federal government or state government. The management structure must involve some representatives from city councils, and administrators of local administrative organizations that decide to make the agreement together. The decision-making beyond the structure of these local cooperation

organizations deals with the advice or suggestions, performance reports to city councils, and cooperation activities.

From studying the research of Samuel Nunn & Mark S. Rosentraub (Samuel Nunn & Mark Rosentraub, 1997) who studied the dimensions of interjurisdictional cooperation in 5 organizations, the types of inter-organization cooperation management are as follows:

1. Metro Denver Network (MDN)

The Metro Denver Network is the cooperation between the government sector and 6 private counties in Denver with an aim at the economic development based on the principles of free trade and information sharing network. The MDN consists of 53 organization members: 34 economic development organizations, 9 real estate organizations and 10 government agencies. The MDN is managed in the form of committee who holds the meeting twice a month. The MDN shall have the chairman and vice chairman, and 4 sub-committees.

2. Allegheny Conference for Community Development (ACCD)

The ACCD is located at Pittsburg, Pennsylvania. It is a non-profit organization using a number of strategies to enhance the cooperation at Pittsburg. Its duty is the planning before seeking for a particular agency with best techniques and tools to implement such plan. Sometimes, the ACCD may operate some projects rather than only using the ideas for the project development or it may seek for financial sources, and utilizes the partnership model for the cooperation between the government and the private sector. The ACCD focuses on establishing some new agencies to be responsible for the designed plans. Under the organizational structure, there are 154 members who are the representatives from 6 counties in Pittsburg. For these representatives, 34 of them are the officers from the city town, township, state-owned schools, universities, etc. Another 120 members are the executives of various organizations. The executive board is elected by members. There are 160-20 board members whose office term is 4 years. The main missions are to improve the quality of life of people living at the southern part of Pennsylvania, and to promote and support the leadership of the private sector in the civil service in 1993. The important development issues include the educational development, labor, regional development,

etc. The operating success is measured by putting the problems and requirements in the plans, arrangement of regional conferences.

3. Toledo Metropolitan Area Council of Government (TMACO)

This organization has a duty of planning for cooperation in Toronto and Ohio under an objective of receiving the joint benefit and infrastructure. Under the organization structure, it consists of 22 council members, divided into 6 sectors: telecommunication, environment, administration and accounting, public relations and printed-matter distribution, regional planning, and information service. The administration is in the form of general assembly whose members are elected with duties of approving the budget and membership fee, improving rules and regulations, approving the education, and solving the members' problems. Under this assembly, the executive board consists of the representatives from counties, cities, villages, township, schools and special zones. The executive board has duties of proposing the budget and membership fee, revising the employees' salary, considering the working plans and research results, controlling finance and funds received, and approving the agreements to be made between TMACOG and other agencies.

4. Portland Metropolitan Service District (Oregon)

This organization is the government agency. It is a formal model for cooperation management. Its establishment was permitted by the state law in 1977. This government agency consists of the representatives elected from 7 districts. One member is elected by the eligible voters in each district. The executive officers are the top management who must submit the report to the Metro Council. The Council and executive officers have the duties of controlling the Metro ER Commission, being the general advisors, and controlling the public relation department. The important duties of Metro are to provide basic services, managing the physical environment, and managing the social and political changes with focus on the development and maintenance of properties and regional projects, cooperation building, management of natural resources, environment, zoo, park and other utilities such as stadium, conference center, etc.

5. Louisville-Jefferson County Compact (Kentucky)

This compact was established to solve the conflict between Louisville and other cities surrounding the county, and to facilitate the regional economic

development. The problems are settled by the process aiming at the fair allocation of resources, and at the issuance of law to form the group and to prepare the exact scope of responsibility at the regional level. The establishment of this compact came from passing the bill by the State Council in 1985. The executive board and directors are appointed to be responsible for the regional affairs. The duties on air pollution, health, crime and planning are assigned to Jefferson County while the duties on disaster, emergencies, human relation, zoo and museum are assigned to the city.

From the analysis, the organization structure and management models of these 5 networks are different, depending on the background and objectives of establishing each. These networks may be established by law enabling the formal cooperation or some are established when they foresee the joint benefits resulted by any development between the state and private sector, by the establishment of non-profit organization to seek for cooperation from other organizations, or some may be the cooperation to wipe out local conflicts. The local administrative organizations build the cooperation and allocate the duties and responsibilities, etc. The cooperation management model is in the form of executive board comprising the elected organization members to jointly manage and handle the benefits. The power, duties and responsibilities of this executive board are determined by rules and regulations newly and particularly set up for this cooperation management.

The Researcher conducted an additional study on collaboration between local administrative organizations in the provision of early-childhood education. It was found that Denver Early Childhood Council (2014) mentioned about the collaboration between Colorado State, Denver City, Denver County, which were some agencies responsible for children and family, schools and communities, and they joined hands to improve their child and family services. Various projects were merged for a joint management, and the Management Council was established. Its main strategies were to develop the personnel in charge of childcare, and support the budget and resources in the provision of early childhood education.

In Thailand, the cooperation models between local administrative organizations are as follows (King Prajadhipok's Institute: 2007: 35-40):

1. Formal cooperation of local administrative organizations

The cooperation between local administrative organizations in Thailand in the form of “syndicate” is mentioned in the provisions of 3 local laws; namely, The Municipal Act, B.E. 2496 (as amended on B.E. 2546), Bangkok Metropolitan Administration Act, B.E. 2528, and Pattaya City Administration Act, B.E. 2542 as detailed below.

Section 58 of the Municipal Act, B.E. 2496 has a provision regarding the establishment of syndicate that “If any business under the power and duties of two or more municipalities, which may be jointly operated for benefits, an organization may be established and called the syndicate. Its status shall be a political bureau to be led by a board of trustees who are the representatives of Bangkok Metropolis and the relevant government agency, state agency, state enterprise or local government agency. The establishment of a syndicate shall be effected by a royal decree which shall also contain the name, authority and operating procedure of the syndicate. The dissolution of a syndicate shall be effected by a royal decree which shall also contain the procedure for administration of property.”

The Bangkok Metropolitan Administration Act, B.E. 2528 provides the power of establishing the syndicate in Section 95 that 12 “Bangkok Metropolis may carry out any activity which is subject to its authority with another government agency, state agency, state enterprise or local government agency by forming an organization called syndicate. The syndicate shall enjoy legal personality and shall be led by a board of trustees who are the representatives of Bangkok Metropolis and the relevant government agency, state agency, state enterprise or local government agency, as the case may be. The establishment of a syndicate shall be effected by a royal decree which shall also contain the name, authority and operating procedure of the syndicate. The dissolution of a syndicate shall be effected by a royal decree which shall also contain the procedure for administration of property.”

Pattaya City Administration Act, B.E. 2542 contains a provision regarding the establishment of syndicate in Section 69 that 13 “Pattaya City and other government agency, state agency, state enterprise or local government may mutually establish an organization called syndicate. The syndicate shall enjoy legal personality and perform any business under the power and duties of the Pattaya City. The

establishment of a syndicate shall be effected by a royal decree which shall also contain the name, authority and operating procedure of the syndicate. The dissolution of a syndicate shall be effected by a royal decree which shall also contain the procedure for administration of property.”

As mentioned above, the laws permit the local administrative organizations or municipalities, Bangkok Metropolitan Administration and Pattaya City to cooperate with other local administrative organizations to provide public services by forming an organization called “syndicate”. A municipality must carry out such activity with other municipalities only whereas Bangkok Metropolis and Pattaya City may cooperate with other government agency, state agency, state enterprise or local government to provide public services by forming an organization called “syndicate”. Therefore, the meaning of “syndicate” in Thailand covers the “local cooperation for the provision of public services and it also means the local cooperation with the government agency and state enterprise for the provision of public services.”

From such meaning, it may be concluded that there are 2 types of syndicate in Thailand. The first type is the municipal syndicate. This syndicate is resulted by the Municipal Act, B.E. 2496, which is jointly established between local administrative units in the form of municipality only. The cooperation between municipalities may be in any forms; for example, cooperation between one city municipality and the other city municipality or between one city municipality and town municipality or between one municipality and one district municipality or between district municipalities, etc.

The second type of syndicate is the mixed syndicate resulted by the Bangkok Metropolitan Administration Act, B.E. 2528, and Pattaya City Administration Act, B.E. 2542. These two laws do not fix that it must be the cooperation between local administrative units in the same form like the municipal syndicate. In this regard, Bangkok Metropolitan Administration and Pattaya City may cooperate with other local government or agency to establish the local cooperation for the provision of public services. However, although the law permits the establishment of “syndicate”, which is a formal cooperation organization between local administrative organizations, at present, no group has been formed for the establishment of “syndicate” in Thailand because the local administrative organizations in Thailand have been familiar in

providing public services by themselves. If a syndicate is established, the local administrative organizations must empower some partial power to it; so that local administrative organization shall hold fewer power and authorities, which is not desired by these local administrative organizations.

The syndicate as described above is considered in part of law, not the real syndicate in Thailand because, up to now, no syndicate in the form of organization as provided by law has been established. However, although other local administrative organization laws provide that a local administrative organization may have cooperation with other local administrative organization, such business must deal with the business under its power and duties. For example, a provincial administrative organization shall have the following power and duties:

1. to support the cooperation organization between local administrative organizations according to the Provincial Administrative Organization Act, B.E. 2540 and its amendments (No. 4), B.E. 2552, Section 45 in (3), (4) and (8) as well as the Ministerial Regulation (B.E. 2541) and in the Act Prescribing Plan and Process for Decentralization, B.E. 2542, Section 17(2), (3), (24), (25), (26) and (29);

2. to coordinate and cooperate in performing duties by the Tambon Council and other local governments according to the Provincial Administrative Organization Act, B.E. 2540 and its amendments (No. 4), B.E. 2552, Section 45 in (4) and in the Act Prescribing Plan and Process for Decentralization, B.E. 2542, Section 17(3);

3. to carry out any activities in lieu of local administrative organizations in lower level according to the Provincial Administrative Organization Act, B.E. 2540 and its amendments (No. 4), B.E. 2552, Section 45 in (3), (4), (7) and (8) and Section 45/1 as well as the Ministerial Regulation (B.E. 2541) (1), (4) and (7), and in the Act Prescribing Plan and Process for Decentralization, B.E. 2542, Section 17(2), (3), (5), (10), (12), (16), (24), (25), and (29);

4. to carry out the activity with other local administrative organization, government agency and other agency whose businesses are located at its area according to the Provincial Administrative Organization Act, B.E. 2540 and its amendments (No. 4), B.E. 2552, Section 45 in (3), (4) and (8) as well as the Act Prescribing Plan and Process for Decentralization, B.E. 2542, Section 16(2), (3), (8),

(24), (25), and (26) that empower the provincial Administrative Organization to provide some public service systems for its local people; and

5. to subsidize as specified in Section 17 of the Act Prescribing Plan and Process for Decentralization, B.E. 2542 that authorizes the Provincial Administrative Organization to the local administrative organization at lower level. Such subsidies must be in line with the Notification of the Decentralization to Local Government Organization Committee regarding “Criteria on the Budget Support of Provincial Administrative Organization, Municipal and Tambon Administrative Organization in the Provision of Public Services in part of Education or Public Health”

A municipal may join hands with other municipals and its business operation may be outside the municipal area by virtue of power and duties specified in the Municipal Act, B.E. 2496 and its amendment (No. 13), B.E. 2552. A Tambon Administrative Organization may operate its business outside its area or it may join hands with the Tambon Council, Provincial Administrative Organization or other local administrative agencies to do certain activities together. But, such business must be agreed by all related local administrative agencies. Such business must be necessary and deals with the business under the power and duties according to the Tambon Council and Tambon Administrative Organization, B.E. 2537 and its amendments (No. 6), B.E. 2552.

In addition, the promotion of local cooperation in the provision of public services is mentioned in Section 21, paragraph 2 of the Act Prescribing Plan and Process for Decentralization that “in proceeding according to the powers and duties indicated in Section 16, Section 17, Section 18 and Section 19, local government organization may coordinate to proceed or ask the state or other local government organizations to proceed, depending on the case. It is obvious that provision fills the gap of laws and compromise them. It allows the local administrative organizations to provide public services, and to perform activities as required by law.

Moreover, the Provincial Local Administration Office is deemed a provincial administration government office under the Department of Local Administration. The Office shall have the power and duties in work facilitation and coordination, and supporting the governors and district chief officers in governing and supporting the operations of local administrative organizations for better and efficient

working according to the Ministerial Regulation on Structure of the Department of Local Administration, Ministry of Interior (B.E. 2551). This Office also has the power and duties in coordinating and giving advice on local development, local development plans, budget, regulations, law and general administration, and coordinating with other government agencies whose power and duties deal with the local administrative organizations so that these local administrative organizations can carry out the development, and provide public services efficiently subject to the Order of the Department of Local Administration No. 176/2547 dated 26 April 2004.

2. Informal cooperation of local administrative organizations

At present, in Thailand, there are several informal cooperation organizations that join hands with local administrative organizations as described below.

2.1 Provincial Administration Organization Council of Thailand (PAOC) The Provincial Administration Organization Council of Thailand (PAOC) is derived from the SAO network meeting on 7 November 2000. In this meeting, the SAO representatives passed the resolution assigning a group of representatives to set up the Provincial Administration Organization Council of Thailand to have 6 key duties:

- To promote cooperation and good relationship between sub-district administrative organizations that are members of the PAOC.
- To promote cooperation and good relationship between sub-district administrative organizations and other types of local administrative organizations, community organizations, organizations, state enterprises, and government organizations.
- To promote cooperation and good relationship between sub-district administrative organizations in Thailand and other local administrative organizations and local administrative organization associations in other countries.
- To promote the development of local political system in sub-district administrative organizations.
- To promote the improvement of quality, management and provision of public services by sub-district administrative organizations.
- To act as representatives of the SAO around the country in doing political activities with the government, parliament and other national political

organizations in relation to the policy setting, issuance of laws, regulations, etc. regarding the decentralization and relationship between the government and local administrative organizations.

2.2 The National Municipal League of Thailand

The National Municipal League of Thailand is another informal cooperation between local administrative organizations. It has been developed so long, first established on 1959. The objectives of establishing the National Municipal League of Thailand are to:

- Study and disseminate technical knowledge and laws useful for municipalities or promoting harmony and assistance between members.
- Allow the members to share opinions and experience.
- Promote the welfare and performance of municipal officers.

2.3 The Municipal Officer Association of Thailand

The Municipal Officer Association of Thailand was established with objectives in promoting harmony in municipal officers around the country to enhance love and cooperation in improving the municipal officers and their career, and in encouraging all members to share knowledge, opinions and experience with each other.

2.4 Commune Administration Organization Personnel Website that is derived from the desire of a group of commune administration organization personnel at Chiang Mai in receiving information about personnel management for commune administration organization personnel as resulted by any resolution passed by the Central Committee on Municipal Personnel and the Committee on Commune Administration Organization Personnel as well as other related agencies in charge of caring for the personnel management system for commune administration organization personnel across the country that must correspond to any changing circumstances. The main objectives of this group are:

- To disseminate the information, changes and movement about personnel management for commune administration organization personnel.
- To encourage commune administration organization personnel to recognize their eligible rights according to the democracy under the Constitution.

- To be the forum of independent opinion exchange between commune administration organization personnel and general people regarding the working of each SAO.

All mentioned above are the examples of informal cooperation between local administrative organizations. Most cooperation is the group formed by the same kind of organizations. However, such group forming is not to provide public services or based on law.

Table 2.1 Laws relating to cooperation between local administrative organizations

Laws	Syndicate	Company Establishment	Outsource Service Agreements	Other cooperation forms
Provincial Administrative Organization Act, B.E. 2540	-	-	-	X
Municipal Act, B.E. 2496	X	x	-	-
Tambon Council and Tambon Authority Act, B.E. 2537	X	-	-	X
Bangkok Metropolitan Administration Act, B.E. 2528	-	x	X	X
Pattaya City Administration Act, B.E. 2543				
Plans and Process of Decentralization Act, B.E. 2542	X (PAO)	-	-	X (all forms of local administrative organizations)

Source: Noranit Setabutr et al. "Promoting Potential for Local Administrative Organizations", 2002: 3-10.

In addition, the Department of Local Administration previously studied the working cooperation of local administrative organizations in the form of “syndicate” and found that if the local administrative organizations in Thailand carried out the cooperation in the form of syndicate as the successful cases in Japan and France, the possibility would be so little although this form is provided in the Municipal Act because there is no ancillary law to support it. Therefore, in 2006, the Department of Local Administration studied the guideline and probability of cooperation between local administrative organizations to find out which working model, guideline and procedure the local administrative organizations should have. This project was supported by Japan International Cooperation Agency (JICA) under the name of “Project of Promoting Competence of Local Administrative Organizations under Local Cooperation Standard”. This project was academically supported by Thammasat University. It was conducted to study the public service models jointly provided by local administrative organizations in 3 projects: 1) Cooperation Project for the Establishment of Disaster Mitigation under cooperation of Kanchanaburi City Municipality, Pak Prek SAO, Koh Samrong SAO and Ta Makam SAO; 2) Cooperation Project for the Establishment of Coordination and Management Center for Infrastructure at Amphoe Pluak Daeng, Rayong; and 3) Cooperation Project for the Establishment of Coordination and Manager Center in order to wipe out the waste at Lampang Province under cooperation between municipalities at Tambon KohKa, Ta Pha SAO, Sala SAO and Koh Ka SAO. These projects took 3 years. The result showed that the cooperation models of these local administrative organizations may be divided into 2 models (Prajadhipok’s Institute, 2007: 51-55):

1) Informal cooperation – The local administrative organizations jointly provided the public services. The established cooperation center was not the juristic person. It was operated under the existing laws to be complied with by these local administrative organizations.

2) Formal cooperation – The local administrative organizations mutually provided the public services by establishing the “syndicate”, which was the juristic person with independent management. If this type of cooperation was established, the related regulations and laws must be revised to avoid some operating problems. Both cooperation models have some differences in making the memorandum of understanding as listed below.

Table 2.2 Comparison of types of cooperation between local administrative organizations

Differences	Memorandum of Understanding	
	Type 1: Informal	Type 2: Formal
1. General characteristics	Local administrative organizations can carry out the operations together under existing regulations and laws. No amendment of regulations or laws is needed for such joint operation. The Center Committee only has the power of integrating the operation plans and implement them based on existing regulations.	This cooperation model is more advanced than the first model, that is, the Cooperation Center between local administrative organizations is a juristic person with the power of several management affairs such as budget management, administration of parcels and durable articles.
2. Budget management	2.1 Local administrative organizations set up the budget for the local administrative organization that is the center leader in order to spend the budget for the Center's activities. 2.2 For the local administrative organizations where the Center is located, some budget are added for the Center's operating expenses as the central budget in type of committed expenditure. 2.3 In case that any activity earns some operating income, the Center Committee shall pass the resolution to spend such income for other operations.	2.1 Local administrative organizations must allocate some budgets to the Center at every fiscal year pursuant to the minimum financial base at the progressive rate. The Center shall be responsible for withdrawing the budget to carry out the Center's activities. 2.2 The budget expenditure by the Center shall be in line with the budget allocated for a particular matter.

Table 2.2 Comparison of types of cooperation between local administrative organizations (cont.)

Differences	Memorandum of Understanding	
	Type 1: Informal	Type 2: Formal
3. Procurement	3.1 Each local administrative organization shall carry out its procurement pursuant to the existing regulations. Each procurement shall be integrated for joint use. 3.2 If the procurement is done by cash payment subject to Clause 2.1 (Model 1), the local administrative organization where the Center is located must register to control all procurement, and also list the assets jointly used by the local administrative organizations.	Carried out by the Center Committee.
4. Ownership in properties (parcel, durable articles, personnel and other assets)	4.1 Any local administrative organization that procures the assets, those assets must belong to it. 4.2 The procurement from the procurement under Clause 3.2 (Model 1) must belong to the local administrative organization where the Center is located. 4.3 Any local administrative organization uses any assets, they must be maintained pursuant to the cooperation agreement.	All assets occurred shall belong to the Center. Any damages to the assets must be repaired by the Center.

For the regulations relating to the operation of local administrative organization cooperation center are as follows:

1. Letter of the Ministry of Interior No. MorThor 0810.4 Wor 4524 dated 27 December 2006 regarding Guidelines for Providing Public Services between Local Administrative Organizations.
2. Regulation of the Ministry of Interior regarding Preparation of Development Plan of Local Administrative Organizations, B.E. 2548.
3. Regulation of the Ministry of Interior regarding Local Government Budgetary Procedure, B.E. 2541 and as amended in B.E. 2543.
4. Regulation of the Ministry of Interior regarding Financial Acceptance, Withdrawal, Deposit, Treasury and Audit of Local Administrative Organization, B.E. 2547.
5. Regulation of the Ministry of Interior regarding Procurement of Local Administrative Agency, B.E. 2535.
6. Regulation of the Ministry of Interior regarding Procurement of Sub-district Administrative Organization, B.E. 2538.
7. Letter of the Department of Provincial Administration, very urgent, No. MorThor 0313./Wor 2787 dated 18 November 2009 regarding Consideration of Budget System of Local Administrative Organization.
8. Letter of the Department of Provincial Administration No. MorThor 0313.4/Wor 72 dated 18 May 2000 regarding Bookkeeping, Preparation of Registration and Financial Statements of Local Administrative Organization, B.E. 2543.
9. Letter of the Department of Local Administration, very urgent, No. MorThor 0808.3/Wor 819 dated 2 February 2004 regarding Revision of Bookkeeping System of Sub-district Administrative Organizations before Entering into the Computer-based Bookkeeping System.

From reviewing all related concepts and theories in connection with cooperation of local administrative organizations in the provision of public services, they were synthesized to study the cooperation between local administrative organizations in the provision of early childhood education as described below.

Table 2.3 Synthesis of local administrative organization cooperation in the provision of early childhood education

Issues	Scholars	Concepts on LAO cooperation in the provision of public services	Synthesis of LAO cooperation in the provision of early childhood education
Definition of cooperation	LeRoux& Carr (2007) Post (2002) Thomas & Perry (2001)	Jointly preparing the responsibilities for the willing service provision between local administrative organizations whose areas are close or they may carry out any short-term or long-term project together in the form of alliance, partner or group. They jointly create some rules and regulations, and management structure to carry out or make decision on various issues together.	Local administrative organizations are jointly responsible for providing the early childhood education willingly. The areas of these local administrative organizations may be close or they contact or carry out either short-term or long-term projects together. They jointly create some rules and regulations, and management structure to carry out or make decision on various issues together.
Types of cooperation	Agranoff (2003)	Cooperation networks are divided into 4 types: 1) information networks; 2) developmental networks; 3) outreach networks; and 4) action networks.	Cooperation for the provision of early childhood education is in the form of network to develop the provision of early childhood education, and it is the permanent or regular coordination.

Table 2.3 Synthesis of local administrative organization cooperation in the provision of early childhood education (cont.)

Issues	Scholars	Concepts on LAO cooperation in the provision of public services	Synthesis of LAO cooperation in the provision of early childhood education
Types of cooperation	Mandell & Steelman (2003)	Cooperation networks are divided into 3 types: 1) intermittent coordination; 2) temporary task force; and 3) permanent or regular coordination.	
Levels of cooperation	Beverly Cigler (1999)	Levels of partnership are: network, cooperative, coordinating and collaboration.	Local cooperation in the provision of early childhood education is the collaboration under the long-term agreement. The local administrative organizations have the information connection for planning, budget expenditure and human resource management together.
Levels of cooperation	Agranoff & Pattakos (1979) Martin et al. (1983) and Kagan (1993)	Levels of cooperation are: 1) policy-centered integration; 2) organization- centered integration; 3) program-centered integration; and 4) client-centered integration.	

Table 2.3 Synthesis of local administrative organization cooperation in the provision of early childhood education (cont.)

Issues	Scholars	Concepts on LAO cooperation in the provision of public services	Synthesis of LAO cooperation in the provision of early childhood education
Levels of cooperation	Kagan (1991) and Mattessich & Monsey (1992) Marc Holzer & Hedy Issacs (2002)	Levels of cooperation: cooperation, coordination and collaboration. Levels of service sharing are: 1) informal sharing; 2) inter local service agreement; 3) joint meeting; and 4) consolidation.	Cooperation between local administrative organizations in the provision of early childhood education is the horizontal arrangement, resulted by the agreement. The management structure is set up as well as powers and duties and budget to manage the cooperation in the provision of early childhood education. The existing regulations and laws to be complied with by these local administrative organizations shall be also used in their joint management.
Forms of cooperation	Noranit Setabutr et al. (2002)	- Syndicate - Entrustment - Agreement - Partnership	

Table 2.3 Synthesis of local administrative organization cooperation in the provision of early childhood education (cont.)

Issues	Scholars	Concepts on LAO cooperation in the provision of public services	Synthesis of LAO cooperation in the provision of early childhood education
Forms of cooperation	Department of Provincial Administration, and Thammasat University (2010)	1) Informal – Local administrative organizations jointly provide the public services under the existing regulations and laws to be complied with by these local administrative organizations. 2) Formal - Local administrative organizations jointly provide the public services by establishing a juristic organization called “syndicate”.	
	Hulst& Van Montfront (2007: 216)	Cooperation may be classified into 2 types: single-purpose cooperation; and multi-purpose cooperation. Cooperation may be classified into the vertical arrangement and horizontal arrangement.	

Table 2.3 Synthesis of local administrative organization cooperation in the provision of early childhood education (cont.)

Issues	Scholars	Concepts on LAO cooperation in the provision of public services	Synthesis of LAO cooperation in the provision of early childhood education
Forms of cooperation	Hulst, R., Van Monfort A., Haveri, A., Airaksinen, J. & Kelley, J. (2009) and Samuel Nunn & Mark S. Rosentraub (1997), Jennings and Ewalt (1998), and AmornratPinyo-anuntapong (2003)	Cooperation for the provision of public services needs certain cooperation mechanisms or committees under mutual rules and regulations, management structure, power and duties, and budget.	

From synthesizing the concepts in the table above, it may be concluded that the cooperation of local administrative organizations in the provision of early childhood education by the child development centers is the horizontal arrangement between at least 2 local administrative organizations whose areas may be close or not, but they have the formal negotiation for their cooperation, and prepare the formal agreement together. The existing regulations and laws complied with by these local administrative organizations are used in their provision of early childhood education. These organizations also share their existing resources, e.g. data, human resources, materials, tools, and budget. They also have the power and duties in setting up certain regulations, creating the management mechanism in the form of committee, planning,

and using the budget for the provision of early childhood education of child development centers.

2.4 Administration of early childhood education in child development centers by local administrative organizations

As provided by law, a local administrative organization holds the right to provide education for all levels, especially early childhood education that is the non-formal education, which must contain certain standards so that the management of child development centers by each local administrative organization is under standards and relevant to the principle of early childhood education determined by the Ministry of Education. Therefore, the Department of Local Administration, Ministry of Interior sets up the standard of education provision of child development center. The essence regarding the scope of providing the early childhood education of child development centers has been studied and summarized below (Bureau of Local Educational Development and Coordination, Department of Local Administration, 2010).

Standard 1: Management of child development center

A local administrative organization shall have the duties and responsibilities in managing the child development center so that it attains the standard and quality as determined by academic principles, laws, regulations and related orders. This management must be supported by people in that local community. The management shall consist of 3 aspects: work management, budget management and personnel management.

1. Work management

1.1 Establishment of child development center

Any local administrative organization that desires to establish the child development center must be ready for the budget and facilities. Also, it must set up the government structure and responsible personnel such as Sector/Division/Bureau of Education. The establishment process is as follows:

1.1.1 Establish the people forum to survey the community needs in establishing the child development center. A center must contain at least 20 young children at ages of 2-5 years.

1.1.2 Prepare the project and plan for the establishment of child development center, which shall be submitted for the City Council's approval before preparing the announcement for the establishment of such.

1.1.3 Prepare the operation plan, e.g. population census for young people aged 2-5 years, plan for student enrollment, personnel, class arrangement and budget, etc.

1.1.4 Prepare the regulations of the local administrative organization regarding the operation of child development center.

1.1.5 Report the establishment of child development center to the Department of Local Administration.

1.1.6 In case that the local administrative organization does not own any plot of land for such child development center, the construction must be permitted by the owner of that construction site. The local administrative organization must be authorized for the center management as well.

1.2 Relocation/merger of child development centers

1.2.1 Arrange the public forum to survey the community's needs.

1.2.2 The Executive Board of the child development center must propose this matter to its supervising agency so that the executives of that local administrative organization consider and propose for the City Council's approval.

1.2.3 Prepare the plan for relocation or merger of child development centers.

1.2.4 Prepare the announcement on the relocation or merger of child development centers.

1.2.5 Report the relocation or merger of child development centers to the Department of Local Administration.

1.3 Dissolution of child development center

1.3.1 The Executive Board of child development center must study and analyze the causes and necessities in dissolving the child development center before proposing such dissolution to the supervising local administrative organization for its further actions as described below.

1.3.2 Arrange the public forum to survey the community's needs. The public forum results shall be proposed to the executives of that local administrative organization before asking approval from the City Council.

1.3.3 Prepare the announcement on the dissolution of child development center, which shall be effective at the end of that semester.

1.3.4 Report the dissolution of child development center to the Department of Local Administration.

1.4 Service provision, rearing, provision of experience, and promotion of learning development.

The child development center is an educational institute providing care and experience, and promote learning development for young children so that they have the suitable physical, emotional-psychological, social and intellectual development based on age and potential of each child. Therefore, the length and guideline of learning provision of the child development center must be carried out regularly and appropriately so that young children obtain the education and development up to their range of ages and relevantly to the society, culture, local wisdom and curriculum of early childhood education before these young children are ready for higher education.

1.4.1 Learning period in an educational year – The educational year starts on 16 May and ends on 15 May of the following year. The child development center must open at least 230 days a year. The semesters will end as follows:

- 1) First semester – open on 16 May and end on 11 October
- 2) Second semester – open on 1 November and end on 1 April of the following year.

Note:

- If the first day of any semester falls into the holiday, the first day of that semester will be postponed to be the following working day.

- In case that any local administrative organization wants to open or close the semester differently from that determined in Clause 1.4.1, this may be done up to the community's need and preparedness of that local administrative organization.

- Learning period and semester start and end will be notified by the local administrative organization.

1.4.2 There must be other supplementary services for young children, e.g. lunch, snack, bedding, supplements (milk), materials, media, educational tools and hardware materials, annual physical check-up by medical and public health personnel, and other services that the local administrative organization is ready to provide such as being the 3-generation center, and/or community learning center, etc.

1.4.3 The care and experience, and promotion of learning development for young children aged 2-5 years whose domiciles are in that local administrative organization or nearby must be provided subject to the potential of that local administrative organization.

1.4.4 Provide the experience, and promote the learning development so that young children have all 4 development aspects (physical, emotional-psychological, social and intellectual) suitable for their age and potential. The child development center's operations by the local administrative organization must be subject to the technical standard and curriculum activities..

1.4.5 In case that the child development center must be used for the public, seminar, training, extra-curricular activity or other activities useful for the local government and community or any other necessary reasons that the child development center cannot be opened regularly, the executives of the local administrative organization may order such center to be closed not more than 15 days. In case of public disaster, the executives of the child development center

may close the center not more than 30 days. The order for such closing must be done in writing, and the studying days must be provided to compensate such closing dates.

1.4.6 When the semester is closed or the child development center is closed subject to Clause 1.4.56, the executives of the local administrative organization may instruct the chief, childcare teacher, assistant teacher, child caregiver or other employees of that child development center to work on the preparation of academic matters, curriculum, provision of learning for young children, media, innovation, tools and materials, environmental arrangement or other development in the center or other affairs regarding early childhood education.

1.5 Child Development Center Committee

The Committee consists of the persons who are selected and appointed by the local administrative organization. The committee members shall be determined up to the suitability of each committee and title holders as follows:

- 1) Educational experts
- 2) Religious leaders
- 3) Representatives of local administrative organization
- 4) Community representatives
- 5) Representatives of guardians
- 6) Representatives of child caregivers/ assistant teachers

The committee members shall select one member as the chairman. The chief of child development center shall be the committee member and secretary of the Committee by virtue of the office. The executives of local administrative organization or any persons assigned by the executives of local administrative organization shall act as advisors of the Committee. The number of advisors shall be considered as it deems appropriate. The Child Development Center Committee shall have the following power and duties:

1) To determine the guideline of promoting and supporting the operations of child development center in various matters so that the operations of child development center achieve the quality and standard pursuant to the policy and development plan of such local administrative organization.

2) To give comments on operations and quality improvement of the child development center to the executives of local administrative organization.

3) To give comments on establishment, dissolution or relocation of the child development center.

4) To consider and propose the personnel management in the child development center to the executives of local administrative organization.

5) To consider and propose the working plan/project and budget to promote and improve the center pursuant to the academic principles and development plan for the child development center.

6) To promote and encourage the guardians, community and all sectors in the society to be involved in the provision of education, and in the development of child development center.

7) To support and promote the personnel in the child development center and between child development centers of local administrative organizations to cooperate in perform duties as required by laws, regulations or letters of the Ministry of Interior, Department of Local Administration, and Provinces.

2. Budget Management

Each local administrative organization shall manage the budget of child development center as subsidized by the Department of Local Administration and from the income of the local administrative organization and from the income of the child development center.

2.1 Budget subsidized by the Department of Local Administration

The Department of Local Administration offers some budget to the local administrative organization for the supplement (milk), lunch, compensation and cost of living, social security contribution for personnel, cost of educational materials, transportation cost to take children to any nursing home, and scholarship for graduates in education (early childhood education) under the cooperation project between SuanDusitRajabhat University and the Department of Local Administration. The withdrawal shall be subject to the allocation principle.

2.2 Budget from the income of the local administrative organization

2.2.1 Budgeting procedure for the child development center by the local administrative organization

1) Prepare the 3-year development plan for the child development center, which shall be included to the educational development plan and development plan of the local administrative organization.

2) Propose the plans for the City Council's approval.

3) Prepare the action plan for that fiscal year.

4) Prepare the annual procurement plan.

5) Prepare the procurement plan.

2.2.2 The procurement shall be carried out pursuant to the regulations of the Ministry of Interior regarding Improvement of Budget Control Book in the Sector of Expenses for Reporting and Auditing the Budget Spending.

2.3 Budget from the income of the child development center
This budget spending must be in accordance with the Regulation of the Ministry of Interior regarding Criteria and Procedure in Spending the Income of an Educational Institute in the Provision of Education in the Educational Institute under the Local Administrative Organization, B.E. 2551 and other related orders.

2.4 Provision of media, books, materials and tools and other related objects Working process

1) Appoint a committee for considering and selecting the media, books, materials, teaching and learning tools, child development materials. The committee shall consist of the Director of the Educational Division/Bureau, Chief of the Educational Division or representatives of the Chairman, Chief of Child Development Center, educational supervisors, educational scholars, educational experts, public health experts and representatives of child guardians, as it deems appropriate, to be the committee members.

2) Inform the Chief of Child Development Center, childcare teachers/assistant teachers to survey the needs for the media, books, materials, teaching and learning materials and other related objects by considering the safety, benefits, and effectiveness, and being relevant to the learning psychology of young children at each age.

3) Ask approval for procurement according to the Regulation of the Ministry of Interior regarding Procurement of Local Government.

4) Prepare the registration to control the materials and hardware.

5) Withdraw the media, books, materials, teaching and learning tools and distribute them to the Chief of Child Development Center, childcare teachers/ assistant teachers.

2.5 Budget withdrawal

The local administrative organization/ child development center must comply with the following regulations:

1) Regulation of the Ministry of Interior regarding Local Government Budgetary Procedure, B.E. 2541 and its amendments (No. 2 and No. 3), B.E. 2543.

2) Regulation of the Ministry of Interior regarding Financial Acceptance, Withdrawal, Deposit, Treasury and Audit of Local Administrative Organization, B.E. 2547 and its amendment (No. 2), B.E. 2548.

3) Regulation of the Ministry of Interior regarding Criteria and Procedure in Spending the Income of an Educational Institute in the Provision of Education in the Educational Institute under the Local Administrative Organization, B.E. 2551.

4) Other related regulations and orders of the Ministry of Interior and the Department of Local Administrative Organization, and other related orders.

3. Personnel Management

In case of employees:

3.1 Recruitment/selection and status revision

3.1.1 A local administrative organization must recruit and select persons to be employees under standards and general principles determined by the Local Employee Committee. The recruitment and selection must be mainly based on the competence, fairness in chance, and government benefits. The selection process must be under standards, fairness and transparency so that it supports

the checking according to the guideline of good governance guideline. The Recruitment/Selection and Status Revision Committee consists of:

1) Chief Administrator of the Local Administrative Organization or any assigned person shall be the Chairman.

2) Director of the Educational Division/Bureau shall be the committee member.

3) Chief of the Chief Administrator Office or any assigned person shall be the committee member and Secretary.

4) Chief Executive of the Local Administrative Organization shall consider and appoint some educational experts who are members of the Child Development Center Management Committee to be the committee members as it deems appropriate. The related orders include:

- Letter of the Department of Local Administration, No. MorThor. 0809.2/10297 dated 10 November 2004

- Letter of the Department of Local Administration, No. MorThor. 0809.5/Wor 85 dated 21 June 2007

- Letter of the Department of Local Administration, No. MorThor. 0809.4/Wor 1469 dated 8 July 2008

3.1.2 Setting of manpower in the child development center

1) In a child development center, there shall be a chief of child development center. The ratio of childcare teachers (teacher: student) is 1:20. If the fraction of students is more than 10, one more child child-giving teacher must be added. One classroom shall contain 20 children.

2) For the number of childcare teachers and other positions, the local administrative organization shall consider and set up as it deems appropriate and relevant to the financial status of that local administrative organization.

3.1.3 The status revision for general employees in positions of childcare teacher and assistant teacher who are the employees hired by mission shall be in compliance with the Letter of the Department of Local Administration, Most Urgent, No. MorThor 0893.4/Wor 80 dated 10 January 2007,

and the Letter of the Department of Local Administration, No. MorThor 0893.4/Wor 846 dated 22 April 2008.

3.2 Selection of the Chief of Child Development Center

The selection shall be in accordance with the Letter of the Department of Local Administration, No. MorThor 0893.4/Wor 61 dated 10 January 2008, the Letter of the Department of Local Administration, No. MorThor 0893.4/Wor 476 dated 3 March 2008, and the Letter of the Department of Local Administration, No. MorThor 0893.4/1612 dated 18 August 2009, and other related orders.

3.3 Setting of compensation, rights and welfare

The local administrative organization must determine the compensation, rights and welfare for the chief of child development center, childcare teachers and assistant teachers to be in compliance with the notifications of the Local Official and Employee Central Committee, letters of the Ministry of Interior, the Department of Local Administration, and other related orders.

3.4 Work performance evaluation

The work performance evaluation results of the chief of child development center, childcare teachers and assistant teachers shall be considered for the revision of their compensation, employment renewal and others, which shall be in compliance with the Notification of the Local Employee and Official Central Committee regarding General Standards on Hired Employees, letters of the Ministry of Interior, the Department of Local Administration, and other related orders.

In case of renewing the employment agreement with the chief of child development center, childcare teachers and assistant teachers, the local administrative organization must first consider those holding such positions at that time. To elaborate, when the employment term is going to end, the local administrative organization must inform the child development center executive committee to arrange a meeting in order to consider the work performance of those who are the employees. If the child development center executive committee has a resolution that the work performance of such employee is not lower than the good level, the local administrative organization may consider renewing the employment agreement so that the management in that child development center is constant and good for that center.

3.5 Personnel development

The local administrative organization must provide the orientation for the chief of child development center, childcare teachers and assistant teachers who are newly appointed. These newly appointed employees must also obtain the training, activity inspection, supervision, monitoring of operations in the child development center. The local administrative organization must support some scholarships to the chief of child development center, childcare teachers, assistant teachers and employees in that child development center in line with the principles and financial status of that local administrative organization. The knowledge and working skills of these employees must be developed regularly in order to upgrade the quality of education and efficient working.

4. Administration of child development center

4.1 There are 2 types of child development center as follows:

1) Child development center solely established by the local administrative organization

2) Child development center transferred to the local administrative organization by virtue of Determining Plans and Process of Decentralization to Local Government Organization Act B.E. 2542 (1999) from various government entities such as the Department of Community Development, Office of the National Primary Education, and the Department of Religious Affairs.

4.2 Management

1) The child development center established by the local administrative organization or that transferred from the Department of Community Development, and the Office of the National Primary Education must comply with the operation standards of the child development center of the local administrative organization.

2) The child development center transferred from the Department of Religious Affairs must comply with the practice guideline for the management of pre-primary education center in the religious place according to the Letter of the Decentralization to Local Government Organization Committee, No. NorRor 0107/Wor 20522 dated 4 December 2008.

2.1) In case that the child development center decides to select Model 1, which empowers the local administrative organization for all management in the center, the local administrative organization must comply with the standards for operating the child development center of the local administrative organization.

2.2) In case that the child development center decides to select Model 2 and 3, it will be in line with the requirements set by the Office of the Decentralization to Local Government Organization Committee, and the Department of Local Administration regarding work management, personnel, budget and technical matter.

Standard 2: Personnel

The personnel involving in the child development center include the chief of child development center, childcare teachers, assistant teachers, cooks, janitors and employees performing other duties. These persons must hold qualifications, roles and duties, and responsibilities in performing their duties to enable the child development center of the local administrative organization to have potential in providing the education, bringing up, rearing and promoting the young children's development in line with technical principles, appropriateness and quality.

Since the Department of Local Administration has a policy of promoting and encouraging child caregivers in any child development center to have the professional progress and stability, it has informed any local administrative organizations operating the child development center to select and appoint the child caregivers with appropriate qualifications to be the chief of child development center, whose status is the employee hired by mission since 2008. Therefore, in Standard 2 regarding personnel, the Department of Local Administration determine that the qualifications, status, roles, duties and responsibilities as the chief of child development center and childcare teachers must be in compliance with the Notification of the Central Committee on Municipal Personnel regarding Title and Academic Standing of Municipal Teachers and Educational Personnel (Additional).

This Notification provides that the chief of child development center and childcare teachers of the local administrative organizations must be the civil

servants/local teachers. Any local administration organization may select and appoint these persons according to the Notification of the Central Committee on Municipal Personnel in case that its manpower is allocated by the Department of Local Administration only. While no present employees are selected and appointed as the chief of child development center and childcare teachers, their status will be the employees of that local administrative organization, who perform duties as the chief of child development center and childcare teachers. The nomination for such positions must be subject to the qualifications determined by the Department of Local Administration.

In addition, it shall be deemed that the executives of local administrative organization and section chiefs of the local administrative organization play important roles in managing the child development center of the local administrative organization under quality and standard. Therefore, the executives of local administrative organization and section chiefs of the local administrative organization should have the following roles:

1. The executives of local administrative organization are the Chief Executive and the Deputy Chief Executive of the Local Administrative Organization who are assigned to supervise the child development center. Their duties include:

- Formulate the policy, strategy and direction for sustainable development of the child development center.
- Support some budget for personnel, media, books, materials and tools, hardware materials, personnel development and management in order to enhance the potential, childhood development, quality of childcare teachers, environment, academic matters, and learning activities based on the principles of early childhood education.
- Promote the emergence of learning sources for children, parents, guardians and youths, and local wisdom by arranging some activities to tighten the family love and intimacy.
- Promote and support the cooperation of staff in the Center and early childhood development network.
- Mobilize resources to manage and develop the child development center with a focus on the involvement of all sectors.

- Supervise the operations of child development center in order to enhance the quality and operation standards of the child development center of the local administrative organization.

2. Section chiefs of the local administrative organization include the Chief Administrator of the Local Administrative Organization, Educational Administrator, and responsible officers of the local administrative organization, who shall have the following duties:

- Implement the development policy and strategy.
- Survey the community's needs in establishing, relocating/merging, dissolving and operating under the operation standard of child development center.
- Design the operation structure of child development center, personnel and place up the financial status of each local administrative organization.
- Control and supervise the operations of the child development center to meet the quality and standard of the child development center.
- Prepare the project plan and budget to establish and support the operation of child development center.
- Prepare the notification on the establishment of child development center to be proposed for approval by the executives of the local administrative organization.
- Appoint the Child Development Center Management Committee.
- Prepare the regulation on the operation of child development center to be proposed for approval by the executives of the local administrative organization.
- Supervise, monitor and evaluate the child development center's education provision to be in line with the operation standard of child development center, and report the results and suggestions to the executives of local administrative organization.

Standard 3: Facility, environment and safety of child development center

A child development center is a place for rearing, providing experience, and promote learning for young children. Therefore, the construction or renovation of building and site, and the arrangement of interior and exterior environment must

concern the strength, hygiene, appropriateness and safety for young children. They must also promote the child health and development. The safety of child development center partially promotes and develop young children, that is, the sanitary environment directly affects health as it prevents the epidemic of communicable diseases, reduces the accident risks, promotes safety for children, and roots the sanitary health in children.

3.1 Facilities

3.1.1 Location

1) The Center should be located in the suitable area side, and not in certain risk zones, e.g. areas for gas, fuel, chemical or toxin loading, crematorium, air pollution, light pollution, noise pollution. The Center should not be so close to the road or railway, especially to the traffic congestion. If necessary, the Center must be far from the road not less than 20 meters, and it must be fenced to prevent some danger. The construction site should load the building weight safely and it must not be flooded.

2) The building of child development center should be a one-storey building. If it is the 2-storey building, there must be the measures preventing possible accidents or fire. The classroom height from floor to ceiling must not be less than 2.00 meters.

3) The building entrance and exit should be wide enough to evacuate the children from the building in case of any accident or emergency.

4) Doors-windows must be strong and durable. The number of doors and windows must be suitable for the classroom side. The windows should be high from the floor not less than 80.00 centimeters. The height and width of windows should not be less than 1 meter to allow the children to observe the environment widely and clearly. The airflow and light should not be blocked.

5) The stairs should not be too steep. The width of stairs should not be less than 1 meter. The raiser of the stairs must not be higher than 17.5 cm. while the tread should not be less than 20 cm. Each step of stairs must have the ladder bars and handrail, which are suitable for the children's hands. The distance of each ladder bar should not be more than 17 cm. The safety must be first concerned, e.g. closing the stair case and stair bars, stairs (the dangerous gap is between 9-23 cm.)

6) The building space must be clean, safe, sufficient and suitable for children's activities, e.g. playing, learning, having meals and sleeping. These spaces should be separated from the kitchen, toilet and nursing area for sick children. The average space per child should be 2.00 sq.m. If each room cannot be separated, the space may be arranged as the multi-purpose common room, but it is used in different periods, and changed as appropriate and up to the space limitations. The space arrangement is under the following guideline:

6.1) sleeping space should be clean with good ventilation and suitable tools and devices for children. The average area should be approximately 2.00 square meters per child;

6.2) playing and child development space should not be slippery or steep. The floor should be wooden or any materials that are safe from accidents, can be cleaned easily and always clean. The objects and furniture, e.g. cupboard, table, etc. should be placed nicely. Any furniture that may collapse easily may be fixed with the wall or floor. The furniture or objects whose corners are sharp should be wrapped with soft materials to avoid any attack;

6.3) food area must be clean with good ventilation, proper lighting, and sufficient tools. The space must be appropriate for all children.

6.4) cooking area or kitchen must be separated and far from the child space. This area must contain necessary wares, as well as sink and cabinet to keep all kitchenware hygienically by focusing on hygiene and safety.

6.5) first aid room must be separated, and equipped by first aid tools, medicine cupboard and essential medicine. While staying in the first aid room, the children must be always watched by the childcare teacher or assistant teacher. In case that the first aid room cannot be provided, the first aid space must be arranged.

6.6) space for child cleansing – There must be some space for cleansing children with some necessary tools such as washbasin and toothbrush in the size and height suitable for children. In the bathing room, there must be enough lighting, good ventilation, no slippery floor, and there must be bathrooms for girls and boys.

6.7) There must be some toilets for children, approximately 1 toilet per 10-12 children. The lavatory size must be suitable for the children's height. The lavatory base allows the child to step up and down easily. The toilet has enough lighting, good ventilation, and no slippery floor. The doors should not have any locks or keys. The toilet wall should be too high so that the teacher can see the child from outside. If the toilet is located outside the building, it must not be located in any out-of-sight area. In case that it is impossible to construct the child toilet, the existing toilet may be adapted so that it is safe and appropriate for children. There must be the toilets for boys and girls.

6.8) common room for child development activities, having meals or sleeping must be clean. The space must be arranged appropriately for each activity. If it is a one-storey building, there must be the ceiling boards. If the building has several storeys, the top storey must have the ceiling board. The room height from floor to ceiling should not be less than 2.00 meters. In case that the room is higher than 2.00 meters, the ceiling board may not be needed; and

6.9) any sewage should be kept in the closed container and dropped outside the building every day.

3.2 Environment

3.2.1 Indoor

1) The lighting should be the natural lighting and consistent around the room. The lighting should support the arrangement of child development activities, e.g. sufficient lighting for reading with visual comfort. The children should not stay in the room where the electric lighting is turned on more than 2-3 hours as it may arouse tension in children, and affect their growth hormone.

2) Sound must not be too loud. The building should be located in a place where the degree of noise is suitable.

3) The building should have good ventilation. The total areas of windows, doors and ventilators should not be less than 20% of total room space. In case of glass room or the child center is located in the polluted factory, there must be some appropriate air purifiers and air-conditioners. In the child development center, it is no-smoking area as required by law.

3.2.2 Outdoor

1) The center should be fenced for children's safety. There should be at least 2 entrances and exits. In case that there is only one entrance/exit, the gate must be not less than 2.00 meters in width.

2) Environment and pollution – The building should have the safe and hygiene. It should be located far from any vice sources, dust, odor or nuisance noise. There should be the sanitation system, water drainage, air ventilation, and appropriate sewage system so that it will not become the infection sources or epidemic sources. The sewage must be wiped out every day.

3) There must be some outdoor areas not less than 2.00 square meters per child. There must be safe and sufficient outdoor playground equipments for children. In case that the outdoor playground cannot be specifically provided or in other places, the playground may be provided in the building according to the space criteria or there may be some outdoor activities in other appropriate areas, e.g. temple court or park. In case of taking children to play outside the center, the children's safety must be concerned and they must be cared closely. The children should have the outdoor activity at least 1 hour a day.

4) The balcony must be at least 1.50 meters in width. If some benches are also equipped, the balcony must be at least 1.75 meters in width. The edge of the balcony must be high from the floor not less than 70.00 cm. In case that the building has 2 storeys or more, the balustrade should be fixed for children's safety. The strength, durability and condition of this balustrade should be regularly checked.

3.3 Safety

3.3.1 Safety measures

1) Some safety system and devices or circuit breaker should be equipped in the building.

2) At least one fire extinguisher should be equipped per an area of 150 square meters. Each fire extinguisher should be high from the floor not more than 1.50 cm.

3) All plugs should be high from the floor not less than 1.50 meters. If installed lower, they must have some covers to prevent the children. The extension power strip should be avoided.

4) Any electrical appliances or devices made from breakable materials or sharp should be avoided. For any wooden objects, there must not have any splinters of wood or sharp corners.

5) The first aid or medicine cupboard must be provided and installed quite high but convenient for use, and out of reach by children.

6) There must be some anti-slippery plates in any slippery toilets or restrooms. All chemicals and cleansers must be away from children's reach. The anti-slippery plates in toilets or restrooms must be regularly cleansed.

7) There must not be any holes or ponds, which possibly harm children, around the building. Any trees with prickles should not be grown.

8) There are some door locking systems at the building gates to be closed or opened by the officer. There should be some bells at the doors. The kitchen and cooking area should have the safe doors to prevent the children.

9) The devices preventing some diseases carriers such as mosquito wire screen, etc. should be fixed. There should be other health prevention measures as well.

10) There must be some cabinets or shelves to store the learning tools and materials. They must be strong and high enough for young children. Any tools or materials that may be dangerous for children should be kept separately.

3.4 Measures corresponding to emergencies

3.4.1 There should be at least 1 accident prevention drill per year.

3.4.2 The personnel should be trained for the first aid, accident prevention and urgent sickness in children.

3.4.3 The telephones and hot lines of related government entities, e.g. police station, disaster prevention and mitigation division, hospital, etc. should be listed for the emergency call in case of serious or necessary crisis. The necessary first aid tools should be provided at all time.

3.4.4 There must be child health record and development books.

3.4.5 There should be some measures for children delivery nicely and orderly.

3.4.6 There should be some action plans and guideline in case that some children may need the urgent assistance.

Standard 4: Academic and curriculum-based activities

Child development center is an educational institute for development of young children. The Early Childhood Curriculum, B.E. 2546 has been the guideline of providing the learning experience under effectiveness and similar standards. This guideline adheres to the early childhood philosophy focusing on the development of newborn to children aged 5 years based on rearing, promoting the learning process corresponding to the nature and development of each child, and their potential under social and cultural contexts. A child who has grown up with love, sympathy and understanding of people around him will be rooted the quality of life, which develops him to be the perfect human, and enhance value for himself and the society. However, this must be in line with the principle that every child is entitled to be reared and promoted for development. Each child should obtain the appropriate learning, and have good interactions between his parents and himself, caregiver and himself or personnel skillful in rearing and educating the young child so that the child has chance for the balanced and complete self-development based on all steps of development. The Early Childhood Curriculum, B.E. 2546 must integrated to be relevant to the society, culture and local wisdom. The scope of technical and curriculum-based activities is as follows:

4.1 Curriculum

The early childhood curriculum designed by the Department of Local Administration may be divided into 2 levels: children aged 2 years; and children aged 3-5 years. The early childhood curriculum must correspond to the social and economic changes, and it must be revised to be in line with the nature and learning experience provided for young children.

4.2 Arrangement of experience/daily activities

The daily activities for children aged 2-5 years are variable. The activity arrangement helps the teachers and children know what activities should be done, when and how.

4.3 Drafting the experience provision plan

The experience provided for young children is not separated into specific subjects, but integrated so that the children have learning by playing. The provided experience to enable the children to enhance all aspects of development, and to attain the curriculum objectives, the teacher must plan for providing the experience, and must know how to draft the experience provision plan to be implemented effectively.

4.4 Media and innovation for the provision of learning experience

Media is the mediator in transferring contents from the sender to the receiver. In teaching and learning, media is the mediator conveying knowledge from the teacher to the children until they achieve learning pursuant to the preset objectives, and have direct experience. The media make the difficult abstract to be the concrete easily understood by children. The children will have the quick and pleasant learning and self-discovery.

4.5 Measurement and evaluation

For children aged 2-5 years, the evaluation of their physical, emotional-psychological, social and intellectual development deems the continual process, and a part of daily activities provided for children. The evaluation results must be considered for further improvement and planning to promote each child's development. The suitable evaluation methods for children aged 2-5 years include the observation, behavioral records, discussion, interview, and data analysis from children's work kept systematically.

4.6 Educational supervision

Educational supervision covers help and advice on technical issues so that the operations of child development center is consistent with the curriculum. The supervision methods are various, but it should be done regularly and systematically.

4.7 Classroom research

The classroom research is done to improve the process of arranging learning activities or of improving learners' behavior to meet the quality as determined in the curriculum or society. The research may be conducted by childcare teachers or jointly conducted with the chief of child development center and learners. A teacher is usually encouraged to conduct at least one classroom research per semester.

4.8 Nutrition

Nutrition shall be in line with the nutrition guideline in the child development center formulated by the Department of Health. The nutrition works comprises two main parts: provision of food for young children; and monitoring children's growth so that they receive some food suitably and sufficiently. Food results to children's growth, and it is the foundation of good health and appropriate development. The children should receive all 5 different food groups as well as clean water and necessary substances.

4.9 Learner development activities

The activities on important days/ learner-promoted projects are:

- 1) Activities on important days, e.g. Father's Day, Mother's Day, Children's Day, New Year Eve, Religious Days, etc.
- 2) Any projects stated in the child development center development plan

4.10 Evaluation of the child development center quality

The quality of the child development center is evaluated by using the child development center standards determined by the Department of Local Administration so that it attains the quality and standards accepted by the community.

Standard 5: Participation and support of all sectors

Section 29 of the National Education Act, B.E. 2542 and its amendment on B.E. 2545 prescribes that the educational institutions in co-operation with individuals, families, communities, community organizations, local administration organizations, private persons, private organizations, professional bodies, religious institutions, enterprises, and other social institutions shall contribute to strengthening the communities by encouraging learning in the communities themselves. Thus, the communities will be capable of providing education and training; searching for knowledge, data, and information; and be able to benefit from local wisdom and other sources of learning for community development in keeping with their requirements and needs; and identification of ways of promoting exchanges of development experience among communities.

Therefore, for the improvement of child development center, the local administrative organizations must concern about the involvement of all social sectors as required by law. In addition, the social capital in that local administrative organization must give the best benefit for the improvement of child development center. Providing the education in the child development center paves the educational base for young children. Their further studies will be efficient and can serve the society's need until the local administrative organization's potential in the educational management will be accepted. The participatory management process, therefore, is so essential for the improvement of child development center because it could drive the child development center to meet the participatory management standard. This process shall mobilize the power of all social sectors under the efficient management skills of the executives of local administrative organization, chief of the child development center, childcare teachers and related persons in order to drive the education provision in the child development center forward.

The individuals, families, communities, community organizations, local administration organizations, private persons, private organizations, professional bodies, and religious institutions can be involved in the operation of child development center as follows:

5.1 Technical information

- 1) To provide some advice on preparing the curriculum and development plans according to the child development center development plan.
- 2) To provide some advice, and offer resources for some activities; for example, studying external learning sources, local wisdom, as well as promote the understanding about child development among guardians and teachers.
- 3) To provide some advice or take part in evaluating the quality of providing learning experience in the child development center.
- 4) To publicize the operation of child development center to the communities and local area.

5.2 Facilities

- 1) To take part in improving the place and environment, indoor and outdoor.

2) To take part in monitoring the safety and assets in the child development center.

5.3 Budget

Some resources must be mobilized to support the improvement of building, personnel, media, materials, hardware, external activities, supplement, snack, sporting goods and others for the operation of child development center.

5.4 Personnel

1) To provide some advice, support and promote the operation and personnel development in the child development center.

2) To take part in rearing and providing some learning experience, caring for safety in the child development center.

5.5 Relationship with the community

1) The child development center may arrange the following community relationship activities:

- Arrange the home visit
- Arrange communication books between the Center and guardians
- Prepare some supervising boards to give some knowledge to guardians
- Provide some learning corners for guardians
- Arrange shows by children in special occasions
- Arrange the exhibitions presenting the academic work, innovation, learning materials and children's work
- Participate in activities on religious days and local tradition
- Take part in public service activities, e.g. market, temple, park, etc.
- Use the child development center to serve the community regarding building and facilities, tools and devices, personnel and others.

2) The child development center not only rear young children, provide them some learning experience, and promote the early childhood development, it may be a learning source and provides other services to the community as follows:

- Building and facilities: The child development center may allow the community or local people to use the Center's building during important days or for holding community activities.

- Materials and hardware: The child development center may allow the community to use some materials and hardware for the community's benefits.

5.6 Academic or information services and learning sources

The child development center may provide some academic or information services or it may be a learning center for the parents, guardians, youths and community to seek for knowledge and information.

5.7 Knowledge dissemination to the community

The child development center may provide the service to the local people or community. The chief of child development center or childcare teachers may become the lecturers in disseminating some knowledge about child rearing and early childhood development so that the children have the appropriate growth.

5.8 Public services

The child development center partially helps provide the public services to the community or general people according to the local contexts or culture.

5.8.1 Promotion and support to the child development center

1) The community can support the child development center in part of learning tools and materials to benefit the development of local young children.

2) The community can contribute some money to support any activities of the child development center, and purchase the teaching and learning tools and materials for the development of young children.

3) The community may support the child development center by having the local philosophers transfer their local wisdom to the child development center. The knowledgeable persons from various agencies may be requested to pass their knowledge on the early childhood development.

4) The community can support the provision of learning experience for young children in the child development center by allowing the young children to learn from real learning sources.

5) The community can provide some information useful for the development of young children in the child development center.

Standard 6: Promotion of early childhood development network

To make the child development center of the local administrative organization be the quality and standardized early childhood development center for rearing and promoting the learning development for young children thoroughly and widely, and be the educational foundation for the quality human development, the child development center, local administrative organization, as well as chief of child development center, childcare teachers, assistant teachers, executives and related persons in the local administrative organization must promote the formation of early childhood development network at the local, district, provincial and regional levels under the working guideline as described below.

1) The local administrative organization should promote and support the meetings between the chief of child development center, childcare teachers and assistant teachers, and the local administrative organization in order to set up the cooperation plan of the child development center.

2) Prepare the working plan, work schedule, and practice guideline as scheduled.

3) Submit the working plan and work schedule to the local administrative organization's executives for consideration.

4) Appoint the Committee for the Operation of Child Development Center Network.

5) Implement pursuant to the determined working plan and schedule.

6) Summarize and report the operating results to the local administrative organization.

Note: The local administrative organization may adjust some cooperation forms and activities under contexts of each local area.

After synthesizing the cooperation between local administrative organizations in the provision of early childhood education of the child development center, and presenting the information about the provision of early childhood education of the child development center, the indicators for the cooperation between

local administrative organizations in the provision of early childhood education of the child development center were also synthesized as illustrated in Table 2.4

Table 2.4 Synthesis of indicators for cooperation between local administrative organizations in the provision of early childhood education of the child development center

Variables	Indicators
Cooperation between local administrative organizations in the provision of early childhood education of the child development center	- Negotiations for cooperation in the provision of early childhood education - Making the Memorandum of Understanding on cooperation in the provision of early childhood education. - Jointly creating a mechanism in the form of committee to manage the cooperation in the provision of early childhood education. - Providing rules and regulations to manage the cooperation in the provision of early childhood education. - Sharing necessary information with each other for planning and developing the provision of early childhood education. - Jointly planning to develop the provision of early childhood education. - Setting up the budget to be spent in jointly developing the provision of early childhood education.

Table 2.4 Synthesis of indicators for cooperation between local administrative organizations in the provision of early childhood education of the child development center (cont.)

Variables	Indicators
Cooperation between local administrative organizations in the provision of early childhood education of the child development center	- Sharing the materials and tools used in the provision of early childhood education together. - Exchanging the personnel of the child development center, e.g. childcare teacher, assistant teacher. - Jointly developing the personnel of the child development center, e.g. chief of the child development center, childcare teachers, assistant teachers, and other officers. - Having the academic development together, e.g. curriculum development, drafting the experience provision plan, media, evaluation, educational supervision, classroom research, nutrition learner development activity. - Sharing the building and facilities together. - Improving the building and environment to be safe, clean and hygienic according to the standard of providing the education of the child development center of the Department of Local Administration.

Table 2.4 Synthesis of indicators for cooperation between local administrative organizations in the provision of early childhood education of the child development center (cont.)

Variables	Indicators
Cooperation between local administrative organizations in the provision of early childhood education of the child development center	- Promoting and supporting the guardians, communities, private organizations, government organizations to be involved in the provision of early childhood education of the child development center, e.g. academic matter, building and facility, budget, personnel development and community relationship. - Jointly developing the child development center to be a learning source and to provide other services to the communities. - Jointly creating the cooperation network in developing the provision of early childhood education of the child development center.

2.5 Factors influencing the local cooperation in the provision of public services

From reviewing all related concepts and theories regarding factors influencing the inter-local service delivery, from which may be used in this research, any factors influencing the inter-local service delivery were compiled and analyzed as detailed below.

2.5.1 Law and inter-local service delivery

In Hulst, R., Van Monfort A., Haveri, A., Airaksinen, J. & Kelley, J. (Hulst, R., Van Monfort A., Haveri, A., Airaksinen, J. & Kelley, J., 2009: 266-268) proposed that the constitution determines the hierarchy, decentralization and responsibilities in the hierarchy, scope and autonomy of local administrative organizations, and municipal number and size, which encourage the local cooperation as permitted by law. The central government may promote the local community to set up the single purpose organization and create some limitations in setting up the multi-purpose organization. In contrast, the central government may promote the local community to set up the multi-purpose organization and prevent the establishment of single-purpose organization or the local administrative organization may make decision on which type of cooperation organization should be set up.

Burns (Burns, 1994) stated that the local administrative organizations that possess the power shall be determined by the state law. The state law may determine the local administrative organizations to build the local cooperation or not. For example, Morgan &Hirlinger (Morgan &Hirlinger, 1992) found some prohibitions in the state law, which were important factors blocking the local cooperation.

In addition, the legitimacy of the elected parliament members and executives of local administrative organization was an important factor in making the cooperation agreement to provide public services with other local administrative organization as permitted by law. Normally, the state government shall empower the city governments and counties to initiate and approve the formation of cooperation (Burns, 1994; Miller, 1981).

It is evident that the constitution, which is the supreme law of the land, promotes and encourages the local cooperation by establishing the cooperation organization. It also permits that a local administrative organization may build the local cooperation or not. The law also provides that the local leaders with lawful power and duties in forming the cooperation with other local administrative organizations.

2.5.2 Social networks and inter-local service delivery

Thurmier&Woord (Thurmier& Wood, 2002) stated that the interpersonal and social networks take the important role in creating the cooperation between local officers, which shall provoke the inter-local service delivery agreement, and sustain such agreement. The social network frequently mentioned as the cooperation stimulant was the local council.

Meanwhile, several scholars proposed that the institution, including professionalism and sharing of qualifications deriving from values was important to build the cooperation in public service delivery. For example, Frederickson's theory on Metropolitan Governance advised that most fragmentations were in many forms, e.g. voluntary cooperation, network, and institution. This concept was contrary to traditional tools focusing on power, control and integrity. Frederickson argued by proposing the Theory of Administrative Conjunction. This theory talks about the strong linkages between public service professionals engaging in inter-jurisdictional conjunction. The strong linkages of local administrator professionals are the value sharing system and professional norm.

Frederickson further said that the firmness of formation and power maintenance of local civil servants made the local professional administrators become the actors leading to the building and maintenance of such cooperation. He also argued that the local professional administrators tended to build the cooperation more than the elected local civil servants did. Therefore, Frederickson's theory is like the Social Network Theory (Frederickson & Smith, 2003) as proposed in the concept of Brown &Potoski (Brown &Potoski, 2003) that the professional associations are central mechanisms of disseminating the information. For the acceptance of general rules and practice by members of professional management, the city administrators and heads of various sectors, which were members of these professional associations, tended to use the inter-local cooperation agreement, and seek for building the opportunities with other communities.

In addition, the Institutional Collective Action, as said in Feiock (Feiock, 2004, 2007) who mentioned about the cooperation of local governments through some social networks, e.g. regional planning organization, tended to build the cooperation in the inter-local service delivery. Feiock also said that the Institutional Collective Action

was to maintain the firmness of community separation that is grouped by the local governments. The collective action could build up the civil society, which integrates various scopes of powers and duties to be the region through the association networks or volunteer agreement. The association mentioned above was the Regional Association, which allows local civil servants to have interactions, trust and coordination in their public service delivery. For example, Thurmier & Wood (Thurmier & Wood, 2002) studied the scope of powers and duties in 6 local areas in Kansas City, and found that the City Planning Organization acted as the agent to facilitate inter-city public services by arranging the forums to urge the interactions between city administrators, assistant city administrators and department heads. Thurmier and Wood analyzed the Administrative Conjunction Theory proposed by Frederickson, and concluded that the emphasis on the social network structure between city administrators, executives and experts of each department could build and maintain the inter-local cooperation network in providing public services.

Similarly, Lackey Freshwater, and Rupasingha (Lackey Freshwater, and Rupasingha, 2009) studied the inter-local cooperation in rural areas of Tennessee, and found that when there are central facilitators relating to acting as the cooperation agents (e.g. City Council or District or Regional Organization); this would increase the volume of local cooperation. The study by LeRoux (LeRoux, 2008) in 134 municipalities in the city of Detroit found that several cities formed the cooperation with each other in providing public services when they were the community conference members. This was a small-sized cooperation of the district/regional council. This small-sized regional association allowed local civil servants to have more interactions, and it paved the trust with each other until it led to the cooperation among members. For example, Lubelle et al. (Lubelle et al., 2002) proposed that the volunteer partners for the management of water sources occurred because of trust. This partnership helped expand the number and scope of activities when there was sufficient social capital. It was unnecessary to concern about the operating cost hindering the collective action. This trust may be called the social capital. Coleman (Coleman, 1990) and Putnam (Putnam, 1993) showed that the social networks built up the social capital. Coleman defined the social capital was the intangible resources such as social norm, commitment or trust leading to the collective action. For this social

capital, Wehlage as cited in Lockwood (1996) stated that the social capital occurred between neighbors, communities, schools was important for the success of cooperation building. This social capital was derived from the relationship between general people, and such relationship is the expanded outcome coming from the expectation, mutual social value and trust among people. In addition, the transparency and information sharing between alliances helped maintain such alliance (Isaacs, 2001).

Social capital is the linkage of interpersonal benefits in the individual level and general level. The social capital is an accumulated asset deriving from trust and collective favor. Coleman (Coleman, 1990) stated that the social capital was the outcome entailing the success, and it was impossible to miss this. In some cases, the inspiration that the local administrative organizations turned to have the inter-cooperation may be explained by Tocqueville's statement that "self-interest rightly understood". Lubell et al. (Lubell et al., 2002) presented his viewpoint that the voluntary cooperation partnership came from the trust. This partnership increased in part of the amount and scope of cooperation activities when the social capital is above the operating cost, which hindered the cooperation. This is the same to Feiock et al. (Feiock et al., 2004) that cooperation created sufficient social capital to influence more cooperation in the form of regional economic development.

This may be concluded that the social networks are the mechanisms allowing interactions between the executives of local administrative organizations, members of city council and officers, which led to the coordination and cooperation. Moreover, the social networks provoked the values and characteristics of professional management for the executives of local administrative organizations who would build their inter-cooperation to maintain their alliance and professional values.

2.5.3 Transaction cost and inter-local service delivery

One reason resulting to the decision of executives of local administrative organizations in forming the cooperation for public services is the transaction cost, comprising 1) agency cost due to officials' different concepts on problem-solving because the expanded cooperation in problem-solving definitely affects their future career. For example, the local professional administrators feel ambitious for the management progress in higher levels or management titles in any bigger communities

(Feiock, 2007; Stein, 1990; Zhang & Feiock, 2010); this motivates such persons to have cooperation. However, the general officers want to maintain their own duties and responsibilities; so they usually protest the making of cooperation agreement (Bricker, Stein & Post, 2010); LeRoux, Brandenburger, and Pendey, 2010).

In addition, the different favor between state officers and people makes the agency cost higher. The differences include the outcome, duration of outcome, and attitude on risks, etc. (Feiock, 2002). 2) information cost, that is, the incomplete information may obstruct the negotiations for cooperation. The indicators of information cost are what to be exchanged, protection of rights, control and enforcement to be in compliance with the agreement (North, 1990: 27). The institutional complications become higher because the jurisdictions nearby increase. As a result, there is more information, but it is hard to compile all reliable information, to get the required information and other resources (Shrestha & Feiock, 2009). Due to incomplete information and limited resources, the cooperation building is ineffective. Williamson (Williamson, 1975) said that the duration of negotiations, monitoring and enforcement to comply with the agreement shall be deemed the operating cost, which resulted to the decision on building the cooperation.

It is evident that the officers' different concepts on problem-solving, different favor between state officers and people, incomplete information, duration of negotiations, monitoring and enforcement to comply with the agreement all are the transaction costs resulting to the cooperation of local administrative organizations in the provision of public services. These must be concerned by the executives of local administrative organizations and city council members.

2.5.4 Political interests and inter-local service delivery

Bartle & Swayze (Bartle & Swayze, 1997) found that the local administrators took an important role in determining the cooperation. However, the local administrators focus on the cooperation due to political interests they will receive. When the local people want more public services, the local administrators or local council members will share the resources with other government agencies to provide the public services as requested by local people without rising taxes or saving

some budget by the way of cooperation. These are to gain the votes so that they will be re-elected.

In addition, Morgan &Hirlinger (Morgan &Hirlinger, 1991) said that some risks might make the local administrators and local members hesitate to build the cooperation because they were worried about the loss of quality control in providing public services, as well as service quality. But, such risks might be reduced if they had frequent communications until they had trust.

2.5.5 Local administration structure and inter-local service delivery

There are some studies regarding local administration structure. For example, Zimmerman (Zimmerman, 1973) found that the cities with council-manager management model would cooperate with other local areas in providing public services more than the cities with mayor-council management model. Similarly, Henderson (Henderson, 1985) found that the city professional managers or city administrators were likely to build the cooperation more than other cities not using the city-manager model or city committee model, etc. Morgan &Hirlinger (Morgan &Hirlinger, 1991) found that the local administration in the form of city-manager model was more likely to build more cooperation. In addition, Stein (Stein, 1990) stated that the professional administrators would be persuaded to make the cooperation agreement to boost their effectiveness in providing public services. This is consistent with Schneider, Teske&Mintrom (Schneider, Teske&Mintrom, 1995) that the creative innovations were resulted by the policy of being local entrepreneurs. The professional administrators would show their capacities as local entrepreneurs by cooperating with neighboring areas to provide public services.

Therefore, it is evident that the local administration structure in the form of council-manager by which the city manager is appointed by the local council is more likely to build the cooperation with other local areas in providing public services than the cities having the mayor-council model. If analyzing this difference, it may be said that the professional city managers want to achieve some work performance so that they will be further engaged while the elected local politicians deal with the political interest groups more.

2.5.6 Finance and budget and inter-local service delivery

One reason driving local areas to provide public services together is the increasing financial pressure. The intolerance of higher costs in the provision of public services urges various local areas to consider other new choices in providing public services. Morgan & Hirlinger (Morgan & Hirlinger, 1991) found that the budget saving was the most predictor in making the cooperation agreement.

Mark Holzer & Heidi Isaacs (Holzer & Isaacs, 2002) identified that the cooperation helped save the cost, and retain and improve the services while many local areas must confront the increasing expenses, anti tax-rising, economic slowdown and increasing financial limitations, etc. Moreover, the cooperation in service provision would provoke the large economic scale under lower cost. The service quality improvement made the provision of public services continue. The people living in small communities without sufficient resources or specialized experts would get good services. Smaller or bigger communities all received the management interests and lessened the service cost.

Ferris (Ferris, 1986) and Post (Post, 2002) found that the financial health influenced the degree of local cooperation. The financial health might be measured from the scale of deficit budget and surplus subject, debt per capita, ratio of debt per expenditure, and percentage of income ownership, etc.

The study of Post (Post, 2002) showed that if the areas of any local administrative organization were crowded, the inter-local cooperation in producing general public products would occur, e.g. highway, housing, park, pipe water, etc. as well as high-concentration labor service, e.g. prison, school, fire prevention, police work, health, human security, etc. Therefore, it may be said that the cooperation is related to public products and services that bear the high operating cost. This is relevant to Thurmaier & Wood (Thurmaier & Wood, 2002) who studied the cooperation in 8 services in Kansas City; namely, planning, law enforcement, repair & maintenance, fire prevention, recreation, supporting service, health and bonds. In addition, Hulst et al. (Hulst et al., 2009: 278) said that the selection of cooperation methods in providing public services had to concern about higher management costs. If establishing a new cooperation organization, the management cost would be higher.

But, the cooperation is made by the agreement, the initial cost and cost management for establishing a new organization would be lower.

Therefore, the limitations of finance and budget forced the local administrative organizations to build the cooperation for the effectiveness in providing public services.

2.5.7 Capabilities and skills of local administrators and inter-local service delivery

The success or failure of cooperation networks depends on the executive's capabilities and skills in negotiations (Mandell, 1984). Williams (Williams, 2002) talked about the skills that the cooperation executives should have; they were the skills of communications, making the understanding, sympathy, conflict coping, creativity, network building, empowerment, and trust building. Trust building deems an important role of managers with a duty of managing the public cooperation. Some studies advised that the cooperation managers had to be trusted by other organizations (Zaheer, McEvily and Perrone, 1998). Trust was derived from interactions and communications (Goldsmith & Eggers, 2004). Gulati (Gulati, 1995) has studied alliance companies in American, Europe and Japan in a period of 20 years and found that these companies have tried to develop their loose interactions and neglected some too strict cases. They realized the informal connection more, and created the harmony before trusting each other. Therefore, the interaction led to the trust in further cooperation.

This could be concluded that the inter-local public service delivery depends on the capabilities and skills of local administrators, especially skills of communications, negotiations and conflict coping, which greatly affect the cooperation building and maintenance.

2.5.8 Externalities and inter-local service delivery

The externalities are one factor encouraging the cooperation. The policy-related economic or environmental problems affecting other local communities or the public cause more cost and interests of public goods. The scholars argued that, in the local separation, there would be some problems about residence, environment, and

communication resulted by the urban expansion. The merger of local governments would help develop their economy, and wipe out their local competition, which would shift the district/regional development (Rusk, 1993; Downs, 1994; Savitch & Vogel, 2000).

Similarly, Ostrom (Ostrom, 1990) said that the local administrative organizations have confronted the policy-related problems causing positive and negative effects to their local areas and others. The policy-related problems included the flood, air pollution, water management, traffic, and forest intrusion, which could be handled difficultly due to the limitations of local resources and power and duties. Therefore, the decentralization and local separation were the starting points of building the cooperation resulted by such limitations (Shrestha, 2012).

2.5.9 Competition and inter-local service delivery

Tiebout (Tiebout, 1956) argued that the competition of cities was based on the market-like way in order to enhance the highest efficiency in products and services while the overall tax was at the lowest level. These cities had to compete in providing services to the public because the competition stimulated various cities to reduce the cost and provide more services or reduce taxes. One method to be possibly attained was the cooperation with other cities in providing services in order to attract the habitants and entrepreneurs from one area to the other.

Park (Park, 1997) studied the competition between local administrative organizations in various areas in connection with the allocation of resources, public safety, and education. Park found the correlation between counties and cities that had some adaptation by building the cooperation in terms of public safety and education. From this research, it was found that those cities have revised their services by fulfilling the existing services already provided by the counties and by compensating other services not yet provided by the counties.

Therefore, the competition motivates various cities to reduce their cost, and provide more services or reduce taxes by building more cooperation.

2.5.10 Management resources and inter-local service delivery

Kruger & McGuire (Kruger & McGuire, 2005) stated that when a city had no sufficient resources to implement its plans; so it tried to seek for some partners to share the cost. The cost sharing included the differences between the management with plans and without plans. The effort to increase the resources might make the different plans more successful.

This is the same to Feiock (Feiock, 2007) who said that the cooperation building was resulted by searching for effectiveness and cost reduction due to the shortage of resources.

Carr, Gerberry&Lupher (Carr, Gerberry&Lupher, 2009) said that any cities or municipalities with no resources for the implementation of their local projects had to seek for some partners to share their cost.

Therefore, as the local administrative organizations are short of management resources, they must seek for the cooperation with other local administrative organizations to provide public services to enhance the effectiveness and cost saving.

From compiling all concepts, theories and research relating to the factors influencing the local cooperation in the provision of public services, the variables and indicators were synthesized to be further used in this research. The synthesis results are illustrated in Table 2.5

Table 2.5 Variables influencing the collaboration of local administrative organizations in the provision of public services and indicators

Variables	Scholars	Indicators
Law	Hulst, R. Van Monfort A., Haveri, A., Airaksinen, J. &Keley, J., 2009: 266-268 and Burns, 1994)	The Constitution promotes and encourages the building of inter-local cooperation. It also empowers local administrative organizations to build the cooperation in providing public services together.

Table 2.5 Variables influencing the collaboration of local administrative organizations in the provision of public services and indicators (cont.)

Variables	Scholars	Indicators
Law	Burns, 1994; Miller, 1981)	Legitimacy of elected council members and executives of local administrative organizations plays an important role in making the cooperation agreement for the provision of public services in collaboration with other local administrative organizations as they are empowered by such law.
Social network	LeRoux, 2008; Lubell et al., 2002; Coleman, 1990, and Putnam, 1993	Social network deems the social capital, which provokes the trust among members. Trust will lead to cooperation.
	Feiock, 2004, 2007	Social network organization coordinates the local organizations to build the cooperation.
Social Network	Lackey Freshwater, and Rupasingha, 2002	Central facilitators, e.g. district or regional organizations are mechanism in building the social network and cooperation of local administrative organizations.

Table 2.5 Variables influencing the collaboration of local administrative organizations in the provision of public services and indicators (cont.)

Variables	Scholars	Indicators
Social network	Frederickson & Smith, 2003	Building the social network of party members that are the professional managers leads to the sharing of values and characteristics of management professionalism. This network not only leads to the cooperation, it also retains the values and standard of management professionalism.
	Potoski, 2003	The professional associations are the central mechanisms in disseminating the information to their party members for their decision-making in the cooperation building.
Social network	Isaacs, 2001	Transparency in information sharing between alliances helps maintain their alliances.
Transaction cost	Feiock, Stein, 1990; Zhang & Feiock, 2010; Bricker, Stein, & Post, 2010; LeRoux, Brandenburger, and Pendey, 2010	Agency cost is resulted by the different concepts between state officers, different favor between state officers and general people in terms of outcome, duration of outcome, and attitude towards risks, etc.

Table 2.5 Variables influencing the collaboration of local administrative organizations in the provision of public services and indicators (cont.)

Variables	Scholars	Indicators
Transaction cost	North, 1990, Shrestha&Fieock, 2009 Williamson, 1975	Information cost is what to be exchanged, protection of rights, control and enforcement to be in compliance with the agreement as well as incomplete information, which may hinder the negotiations for cooperation. Length in negotiations, monitoring and enforcement to comply with the agreement may be the transaction cost.
Political interests	Bartle & Swayze, 1997	Responses to local people who want more public services without tax-rising and under budget saving.
Local government structure	Henderson, 1985; Morgan &Hirlinger, 1991; Schneider, Teske&Mintrom, 1995; Jung & Kim, 2009	Cities whose management structure is the council-manager and the city managers are the professional management tend to cooperate with other cities in providing public services more than the cities with mayor-council structure where the administrator are elected.
Limitations of finance and budget	Morgan &Hirlinger, 1991 Mark Holzer& Heidi Isaacs, 2002	Higher budget in providing public services Economic slowdown, budget cost, provision of more public services, financial limitations

Table 2.5 Variables influencing the collaboration of local administrative organizations in the provision of public services and indicators (cont.)

Variables	Scholars	Indicators
Limitations of finance and budget	Ferris, 1986; and Post, 2002	Financial health, e.g. scope of deficit and surplus budget, debt per capita, ratio of debt to expenditure, and percentage of income ownership, etc.
Leader	Mandell, 1984; Williams, 2002	Capabilities and skills in communications, negotiations, making of understanding, conflict coping, creativity, creation of network, trust building
Leader	SurapeeAdomkong, 2007	Having knowledge, understanding and interest in education
Shortage of management resources	Kruger & McGuire, 2005	Insufficient management resources for the plan implementation
	Feiock, 2007; Carr, Gerberry&Lupher, 2009	Shortage of resources causes the local administrative organizations to seek for cooperation for better effectiveness.
Insufficiency of management resources	Kruger & McGuire, 2005	Insufficient management resources for the plan implementation
	Feiock, 2007; Carr, Gerberry&Lupher, 2009	Shortage of resources causes the local administrative organizations to seek for cooperation for better effectiveness.

Table 2.5 Variables influencing the collaboration of local administrative organizations in the provision of public services and indicators (cont.)

Variables	Scholars	Indicators
Externalities	Rusk, 1993; Downs, 1994; Savitch& Vogel, 2000; Ostrom, 1990	Increasing the costs and interests of public products to other local governments due to the policy-related economic and social problems.
Competition	Tiebout, 1956; Park, 1997	Needs for the highest effectiveness in products and services while the taxes are at minimum.

2.6 Project on Competency Development for Child Development Centers under Local Administrative Organizations

This part presented the efforts of promoting and encouraging the child development center under the supervision of local administrative organizations to build the cooperation network for the development of early childhood education provision, which would be further useful for studying this matter, especially the scope of cooperation. In particular, the child development centers of local administrative organizations participating in this project would be used as the subjects and samples for data collection with related persons because of their trace of cooperation. The project details are as follows:

2.6.1 Background, principle and rationale

The Ministry of Interior, by the Department of Local Administration as the agency promoting and supporting various affairs of local administrative organizations, has valued the operations of child development centers of these local administrative organizations, which are deemed the early childhood development place as the

important foundation for human development. The child development center reinforces the desired qualifications, and it is the starting point of humans' educational process important for the national development. At present, the child development centers of local administrative organizations and sub-district administrative organizations may be classified into 2 types: child development centers established by local administrative organizations; and child development centers having been transferred to local administrative organizations by any government agencies such as the Department of Community Development, the Department of Religious Affairs, and the Office of the National Primary Education by virtue of the Determining Plans and Process of Decentralization to Local Government Organization Act, B.E. 2542 since 2003 as detailed in Table 6. The child development centers established by local administrative organizations or those transferred from government agencies have some management differences as described below.

2.6.1.1 Facilities

Since several child development centers transferred from government agencies were located in temples/mosques or schools under the supervision of the Office of the National Primary Education, but those facilities have never been transferred to the local administrative organizations; so these local administrative organizations were unable to set up some budgets for repairs or constructing new buildings. These led to some problems about the education provision and early childhood development such as small, old and unsafe classroom or environment inappropriate for providing the learning experience for children, etc.

2.6.1.2 Education provision

Since the child development center is the non-formal education. The curriculum of early childhood education may be different, but relevant to the contexts or culture of particular areas. Therefore, this causes some curriculum problems in providing the educational experience for young children because each center has different standards and quality in the education provision; so the young children received the different development.

Table 2.6 Number of child development centers transferred to local administrative organizations

	Child Development Center (center)	Child caregivers (person)	Young children (person)
1. Child development centers established by local administrative organizations	5,201	10,852	223,766
2. Child development centers transferred from government agencies:			
2.1 Department of Community Development	7,520	20,121	324,403
2.2 Department of Religious Affairs	4,110	13,493	229,772
2.3 Office of National Primary Education	2,650	5,121	95,710
Total	19,481	49,587	891,651

Source: Bureau of Local Educational Development and Coordination, Department of Local Administration, 2010: 1)

2.6.1.3 Child development center management is different in respect with personnel management and budget as described below.

Child development center management – Since both types of child development centers or those established by local administrative organizations and those transferred from government agencies would have the Child Development Center Executive Committee with duties in operating that child development center to meet standards and quality. The committee members would be different in each center. For example, the child development centers transferred from the Department of Religious Affairs would be chaired by the abbot or imam. But, the child development centers established by the local administrative organizations and transferred from the Department of Community Development would be chaired by the executives of local administrative organizations, etc.

Personal management – In the child development centers where the local administrative organizations have engaged the childcare teachers, they would use the regulations on local personnel management to recruit and appoint, evaluate, promote and revise the compensation. But, the child development centers were transferred from the Department of Religious Affairs and the religious places selected the executives for those centers, the childcare teachers would make the service agreement under the regulations of these religious places.

Budget – If the child development center was established by the local administrative organization, the budget could be fully allocated to support it. However, if the child development center was transferred from any government agency, it will receive fewer budgets.

2.6.1.4 Personnel – Since most child caregivers of child development centers were transferred from and few of them completed the bachelor degree in the field of early childhood education, these child development centers have been short of personnel with technical knowledge and skills in early childhood development, health or nutrition for young children. This certainly affected the quality and standards in the education provision of these child development centers.

2.6.1.5 Budget – Some local administrative organizations gained insufficient income to support the operations of child development centers like providing teaching and learning materials.

The aforesaid problems caused the education provision and early childhood development in each child development center to have different standards and quality, depending on the potential of each local administrative organization. Thus, to encourage all child development centers of local administrative organizations to improve their quality of education provision to meet the criteria determined by the Department of Local Administration, and to be the pilot centers for other child development centers nearby, the Department of Local Administration initiated several projects to shift the operating standards and quality of child development centers as follows:

1) Child Development Center Model Project of the Department of Local Administration – One standardized child development center of every province was selected; so the total centers selected were 75, starting from the fiscal

year of 2004 – 2006 or 3 years in total. So, there were 225 child development model centers.

2) Child Development Center Contest Project of local administrative organizations in the fiscal year of 2008. There were 579 child development centers meeting the standards and quality as determined by the Department of Local Administration.

The child development centers selected as child development model centers and best child development centers in each province have achieved some standards and quality as well as quality in giving helps to other child development in their local areas so that the standards and quality of these centers were improved to be same to the child development model centers. The improvement methods included the training, skill practice, audio-visual media making, and arranging the activities encouraging the communities to be involved with the child development centers so that the young children achieved the appropriate development.

Therefore, to promote and encourage the child development centers of local administrative organizations to improve their capabilities in the education provision for early childhood development, the Department of Local Administration considered and selected some child development centers of local administrative organizations to be the child development model centers and best child development centers to be the models of other networking centers so that all young children received the full development. The operations of these projects were funded by the Thai Health Promotion Foundation (ThaiHealth).

2.6.2 Objectives

2.6.2.1 To develop the potential of child development model centers and child development networking in respect with personnel, knowledge base, skills and communities, which would upgrade the quality and standards of child development model centers and child development networking centers as per social and cultural contexts of each area.

2.6.2.2 To support the formation of cooperation network, and expansion of areas for child development centers; to upgrade standards in providing learning experience in child development centers of local administrative organizations.

All child development model and networking centers, communities and related personnel jointly analyzed the situations, current circumstances, potential, strength, and matters to be improved before summarizing the operating guideline in the steps of preparation, objective setting, and activities for skill/potential development. The analysis results of situations, current circumstances, potential, strength, and matters to be improved before summarizing the operating guideline in the steps of preparation, objective setting, and activities for skill/potential development would be submitted to those child development model centers and child development networking centers so that the young children had the complete development in all 4 aspects: physical, emotional, social and intellectual.

2.6.3 Targeted groups and areas

The Department of Local Administration considered and selected 13 child development model centers and best child development centers to be the child development center models covering all regions of the country. The local administrative organizations, which have operated the child development model centers, had to select some child development centers to be the networking centers: 5 centers per a child development model center. The criteria of selecting child development networking centers are as follows:

2.6.3.1 They were child development centers of local administrative organizations, whose standards were fewer than those of child development model centers while the executive of those local administrative organizations were ready and willing to participate in the project.

2.6.3.2 Local administrative organizations and child development centers had to be ready for the project operations. There were the child development center development models, and other child development centers of local administrative organizations selected as networking centers in the total of 78 as divided into (Please see Appendix A: List of Child Development Centers):

2.6.3.3 There were 12 child development centers development models, including

- Northern region – 3 centers
- Southern region – 4 centers

- Central region – 1 center
- Eastern region – 2 centers
- Northeastern region – 3 centers

2.6.3.4 Child development networking centers – 65 centers

2.6.4 Project duration

18 months (June 2010 – November 2011).

2.6.5 List of child development model centers and child development networking centers

Under the cooperation project between the Department of Local Administration and ThaiHealth. The list of child development model centers and child development networking centers under the cooperation project between the Department of Local Administration and ThaiHealth was illustrated in the following table.

Table 2.7 List of child development model centers and child development networking centers

Region	Province	District	Supervised by LAO	Child Development Center	Number of Caregivers	Number of children	Type
North	Tak	Muang	MuangTak Municipal	Petchvit	11	150	Model center
	Tak	Muang	Pa Ma Muang LAO	Pa Ma Muang	4	50	Net working center
	Tak	Muang	TalunkKlang Tung LAO	TalunkKlang Tung	5	70	Net working center
	Tak	Muang	Mae Tor LAO	Ban HuayNueng	2	30	Net working center

Table 2.7 List of child development model centers and child development networking centers (cont.)

Region	Province	District	Supervised by LAO	Child Development Center	Number of Caregivers	Number of children	Type
	Tak	Muang	NongBua Tai LAO	NongBua Tai	1	25	Net working center
	Prae	Muang	MuangPrae Municipal	MuangPrae Municipal	4	75	Model center
	Prae	Muang	Muang Mae KamMee Municipal	Sriphum	2	28	Net working center
	Prae	Muang	ChorHae Municipal	ChorHae Municipal	3	63	Net working center
	Prae	Muang	Ta Kam LAO	Ban Ta Kwan	2	45	Net working center
	Prae	Muang	Mae Yom LAO	Nantaram	2	27	Net working center
	Prae	Muang	Kanchana LAO	Ban Don Dee	1	20	Net working center
	Chiang Rai	Mae FaLuang	Mae FaLuang LAO	Ban Huay Nam Koon	7	97	Model center
	Chiang Rai	Mae FaLuang	Mae FaLuang LAO	Ban Aka Pa Kluay	3	32	Net working center
	Chiang Rai	Mae FaLuang	Mae FaLuang LAO	Ban Suan Pa	2	27	Net working center
	Chiang Rai	Mae FaLuang	Terd Thai LAO	Ban Pa Jee	2	58	Net working center

Table 2.7 List of child development model centers and child development networking centers (cont.)

Region	Province	District	Supervised by LAO	Child Development Center	Number of Caregivers	Number of children	Type
South	Chiang Rai	Mae Chan	Mae Rai LAO	Ban Pa SakKwang	4	66	Net working center
	Yala	Muang	NakhonYala Municipal	Thanavithee	5	130	Model center
	Pattani	Thung Yang Daeng	Talone Mae Na LAO	Ban Look Mai Pai	2	50	Net working center
	Yala	KrongPee nang	KrongPeenan g LAO	Ban Yayueri	2	40	Net working center
	Yala	Muang	Lampaya LAO	Lampaya	4	54	Net working center
	Yala	Muang	TambonSaten gNok Municipal	Pobulo	3	73	Net working center
	Phattha lung	Muang	Tambon Kao Jiak	Ban Kao Jiak	2	50	Net working center
	Phattha lung	Srinakarin	TambonLams in Municipal	Ban Lamsin	4	79	Model center
	Phattha lung	Muang	TambonPraek Ha Municipal	Ban Praek Ha	3	50	Net working center
	Phattha lung	Kuan	PanomKano n LAO	Ban ThungKueng	3	69	Net working center
	Phattha lung	Pa Payom	Koh Tao LAO	Ban KlongYai	5	109	Net working center

Table 2.7 List of child development model centers and child development networking centers (cont.)

Region	Province	District	Supervised by LAO	Child Development Center	Number of Caregivers	Number of children	Type
	Phatthalung	Srinakarin	Tambon Ban Na Municipal	Ban Na	3	65	Net working center
	Phuket	Katoo	MuangKatoo Municipal	Ban Get Ho	10	151	Net working center
	Phuket	Muang Pa Tong	Muang Pa Thong Municipal	Muang Pa Thong Municipal (Center 2)	5	75	Model center
	Phuket	Talang	TambonThep Kasattri Municipal	TambonThepKasattri Municipal	3	66	Net working center
	Phuket	Muang	TambonRasada Municipal	TambonRasada Municipal	5	89	Net working center
	Phuket	Talang	TambonChoenngTalay	TambonChoeng Talay	11	175	Net working center
	Pattani	Muang	TanyongLulo LAO	Ban Yong Lulo	8	148	Model center
	Pattani	Muang	Pakaharang LAO	Ban Yumo	4	85	Net working center
	Pattani	Yaring	Rata Panyang LAO	Ban Yao	2	31	Net working center
	Pattani	Mayo	Sakam LAO	Sakam Mosque	11	215	Net working center

Table 2.7 List of child development model centers and child development networking centers (cont.)

Region	Province	District	Supervised by LAO	Child Development Center	Number of Caregivers	Number of children	Type
Central	Pattani	Muang	Barahome LAO	Ban Parae	-	-	Net working center
	Pattani	Yarang	Kao Toom LAO	Jarobongo	3	69	Net working center
	Nonthaburi	Muang	NakhonNonth aburi Municipal	Nakhonnonvitta ya 5 Tansamrit School	8	170	Model center
	Nonthaburi	Bang Bua Thong	Muang Bang Bua Thong Municipal	Muang Bang Bua Thong Municipal	9	116	Net working center
	Nonthaburi	Muang	Sai Ma LAO	Sai Ma LAO	8	90	Net working center
	Nonthaburi	Bang Kruai	Muang Bang Kruai Municipal	WatSanamNok	3	33	Net working center
East	Rayong	NikomPatt ana	NikomPattana LAO	NikomPattana	8	130	Model center
	Rayong	Wang Chan	Pa YubNai LAO	Ban Pa YubNai	8	106	Net working center
	Rayong	NikomPatt ana	Tambon Map Kha Municipal	Map Phai	-	-	Net working center
	Rayong	Ban Kai	Chak Bok LAO	Ban Huang Hin	15	355	Net working center
	Rayong	Ban Kai	Ta Khan LAO	Ta Khan	-	-	Net working center

Table 2.7 List of child development model centers and child development networking centers (cont.)

Region	Province	District	Supervised by LAO	Child Development Center	Number of Caregivers	Number of children	Type
	Rayong	NikomPattana	TorMor. Map KaPattana	Map KaPattana	-	-	Net working center
	Chonburi	Ban Bueng	TorMor. Ban Bueng	Ban Bueng	9	150	Model center
	Chonburi	Ban Bueng	Khlong Kio LAO	Khlong Kio LAO	4	70	Net working center
	Chonburi	Ban Bueng	Ban Bueng LAO	Ban Bueng LAO	5	52	Net working center
	Chonburi	Ban Bueng	TorTor. NongPhaiKae w	TambonNongP haiKaewMunic pal	4	68	Net working center
	Chonburi	Ban Bueng	Map Phai LAO	Map Phai LAO	2	24	Net working center
	Chonburi	Ban Bueng	NongIroon LAO	NongIroon LAO	2	45	Net working center
North east	Roi Et	Muang	MuangRoi Et Municipal	MuangRoi Et Municipal	14	150	Model center
	Roi Et	Muang	Dong Lan LAO	Ban Dong Lan	2	30	Net working center
	Roi Et	MuangSua ng	TambonSuan g Municipal	Ban Pum	2	64	Net working center

Table 2.7 List of child development model centers and child development networking centers (cont.)

Region	Province	District	Supervised by LAO	Child Development Center	Number of Caregivers	Number of children	Type
	Roi Et	NongPok	TambonNong Pok Municipal	TambonNongP ok Municipal	8	160	Net working center
	Roi Et	Sela phum	TambonKaow Municipal	Ban Kaow	2	43	Net working center
	NongBua Lam Phu	Si Bun Rueang	Tambon Yang Lo Municipal	Ban Don Kred	5	60	Net working center
	SakonNakh on	Muang	MuangSakon Nakhon Municipal	Na Ooy-Kam Sa-ad	12	254	Model center
	SakonNakh on	Tao Ngoi	Tao Ngoi LAO	Ban Tao Ngoi Tai	2	30	Net working center
	SakonNakh on	Muang	Pang Kwang LAO	Ban Dong Khum Kao Tai	3	52	Net working center
	SakonNakh on	Muang	Tambon Ta Rae Municipal	Tambon Ta Rae Municipal	3	60	Net working center
	SakonNakh on	Pon Na Kaew	Na Kaew LAO	Ban Klang	2	35	Net working center
	SakonNakh on	Kok Sri Suphan	Dan MuangKam LAO	Ban Nong Nang Kom	2	30	Net working center
	Buri Ram	Krasang	TambonNong Teng Municipal	Kon Ken Wat Ban Wa	3	47	Model center

Table 2.7 List of child development model centers and child development networking centers (cont.)

Region	Province	District	Supervised by LAO	Child Development Center	Number of Caregivers	Number of children	Type
	Buri Ram	Non Suwan	Tambon Non Suwan Municipal	Tambon Non Suwan Municipal	3	85	Net working center
	NakhonRat chasima	Klang Dong	TambonKlang Dong Municipal	TambonKlang Dong Municipal	2	33	Net working center
	UbonRatch athani	Na Yia	Tambon Na Yia Municipal	Tambon Na Yia Municipal	12	231	Net working center
	Buri Ram	Krasang	HuaySamran LAO	WatHuaySamra n	2	108	Net working center

Source: Bureau of Local Educational Development and Coordination, Department of Local Administration, 2010: 11

2.6.6 Project management

The Department of Local Administration appointed the Project Management Committee, and determined the project management structure of all local administrative organizations and child development centers. The Project Management Committee shall have the following duties:

- 1) To determine the operation policy, plans and budget to be allocated.
- 2) To provide some advice to the Operation Committee.

The operation committee shall have the following duties:

- 1) To implement the plans and budget to be allocated.
- 2) To consider and screen various projects of child development model centers before approving the projects that would be subsidized by the Thai Health Promotion Foundation (ThaiHealth).

3) To supervise and monitor the work performance of child development centers participating in the project.

4) To provide some advice to local administrative organizations participating in the project.

5) To prepare the summary report at the end of each project to be proposed to the Project Management Committee.

**Department of Local Administration
Project Management Committee**

- Deputy Permanent Secretary of the Ministry of Interior (Mr. SompornChaibangyang), Project Advisor
- Director-General, Department of Local Administration (Chairman of the Committee)
- Deputy Director-General, Department of Local Administration (Mr. WasanWanwarothorn)
- Specialists in the provision of public services and local education
- Director, Bureau of Local Educational Development and Coordination
- Director, Division of Non-formal education Promotion and Youth Activity Development
- Experts in early childhood education
- Head of Non-formal Education Development Group and Child Development Center
- Representatives of ThaiHealth
- 3 Representatives from local administrative organizations participating in the project



**Department of Local Administration
Project Management Committee**

- Deputy Director-General, Department of Local Administration (Mr. WasanWanwarothorn), advisor
- Director, Bureau of Local Educational Development and Coordination (Chairman of the Committee)
- 2 representatives from ThaiHealth
- 1 representative of the local administrative organization participating in the project
- 1 representative from the Office of Educational Council
- 2 officers from the Division of Non-formal education Promotion and Youth Activity Development
- Director, Division of Non-formal education Promotion and Youth Activity Development (Secretary to the Committee)

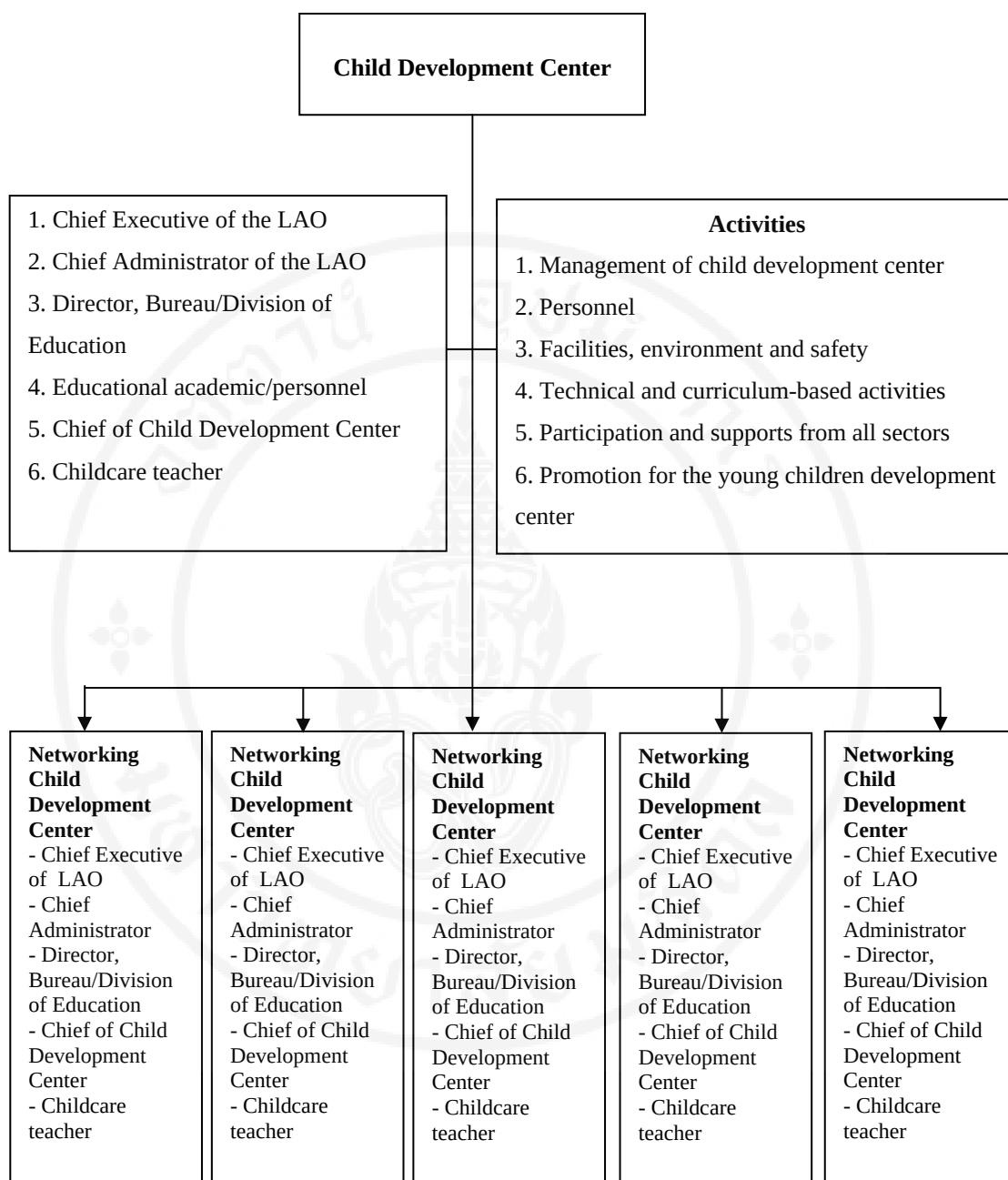


Figure 2.1 Bureau of Local Educational Development and Coordination, Department of Local Administration, 2010

The project monitoring may be divided into 2 sets:

1. Project set level to be monitored - The Department of Local Administration by the Project Management Committee

2. Project level – The child development model centers would monitor the preset plans/ projects/ activities.

Expected results

Output

1. There would be the quality and standard manual for the provision of learning process and network management of child development center.
2. There would be the cooperation network in developing child development centers while the standard of providing the learning experience in the child development centers of local administrative organizations would be upgraded.
3. Child development centers participating in the projects would meet the standard and quality required by the child development model centers.
4. Local administrative organizations would synthesize the knowledge base, and arrange the activities of child development networking centers until they become the good models to be presented to other local areas.

Outcome

1. Local administrative organizations could improve their local potential while the child development centers would be able to analyze the circumstances (strength, matters to be improved either potential of these centers and other networking centers), to set up operation plans, to implement as per the preset activities/projects, and to monitor and evaluate the work performance.
2. The operating networks of child development centers under the supervision of the Department of Local Administration would be expanded in the regional level.
3. All related persons such as executives of local administrative organizations, personnel of child development centers, community people, and related community and central authorities would value and support the project implementation.
4. Local administrative organizations would promote and support the network working model to improve the child development centers by putting this matter in the operation plan of local administrative organizations.

2.7 Related research

2.7.1 Local research

PisitThepkraiwal (2011) studied the development of cooperation networks for the quality of education provision in small-sized primary schools, and he found that the cooperation networks for the quality of education provision in small-sized primary schools came from 6-step network formation process: 1) recognition for the necessity of network building; 2) coordination with agencies/network organizations; 3) alliance building; 4) network management; 5) relationship development; and 6) continual relationship retention. The components of cooperation networks for the quality of education provision in small-sized primary schools included: 1) important characteristics or activities boosting the operation effectiveness of networks; 2) scope and mission in managing educational institutes; 3) techniques/methods of developing network members; 4) empowerment process of networks; 5) good characteristics of network leaders; and 6) operations of networks and outcome reflection.

The research results from using the cooperation networks for the quality of education provision in small-sized primary schools showed that the groups of people and agencies/organizations willing to set up the cooperation networks were the student guardians, community leaders, religious institutions, universities, alumni group, local wisdom group, community hospitals, National Institute of Skill Development, and local administrative organizations. These groups followed the network operating process, starting from the context analysis to be aware of the strength and operating weakness to be improved in terms of technical matter, budget, personnel and general administration. All strength and weakness were summarized in order to determine the working targets, vision, mission and objectives before preparing the development plan together. Several projects were initiated in both schools. When the projects were completed within 1 educational year, the project evaluation results showed that there were some changes in the management of academic matter, budget, personnel and general administration. These took effect to the students higher than the expected scope.

Surapee Akomkong (2007) studied the cooperation models of sub-district administrative organizations at lower northern region in the provision of basic

education. The result showed that the overall cooperation models of sub-district administrative organizations at lower northern region in the provision of basic education was at the moderate level. The cooperation in supporting educational resources was higher than the cooperation in educational planning. In evaluating the factors affecting the cooperation of sub-district administrative organizations at lower northern region in the provision of basic education, there were 3 factors, which included the ability in managing the sub-district administrative organizations, attention in educational affairs, and knowledge and understanding.

SuvimolBhoklin (2006) studied the development of academic cooperation network models to improve the educational quality of small-sized basic educational institutes. The result showed that the academic cooperation network models to improve the educational quality of small-sized basic educational institutes comprised 5 main components and 33 minor components.

The first main component was the essential part of cooperation networks, comprising leaders/network leaders, network members, roles and duties, members' participation, mutual vision, and monitoring and evaluation of work performance.

The second main component was the scope and academic mission, comprising the curriculum development in basic educational institutes and development of learning process, evaluation and transfer of academic results, development of learning sources, development of quality guarantee systems in educational institutes, coordination for the cooperation in the academic development with other educational institutes, media provision and development, educational innovation and technologies, educational supervision, and research for the development of educational quality.

The third main component was the network operating process, comprising the analysis of environment and problems, goal or target identification, preparation of strategic plans, evaluation, and outcome report.

The fourth main component was the good characteristics of leaders, comprising personalities, enthusiasm in working, creativity, good emotional control, responsibility and work determination.

The fifth main component was the techniques and methods of network member development, comprising lecture, discussion, brainstorming, seminar, workshop and real practice.

From evaluating the academic cooperation network models to improve the educational quality of small-sized basic educational institutes, it was at the high level for all 5 main components and 33 minor components. The possibility in applying such models in real situations was at the high level; it was so useful for the academic affairs of educational institutes, and so suitable for further implementations.

AmornratPinyoanantapong (2003) conducted the research on the development of academic cooperation in teaching and learning between state-owned higher educational institutes. She found that the appropriate academic cooperation model in teaching and learning had 4 components: 1) principle of academic cooperation in teaching and learning; 2) structure and mechanism of academic cooperation in teaching and learning; 3) types of academic cooperation activity in teaching and learning; 4) arranging and carrying out cooperation activities, which consisted of the methods of cooperation building, capital sources for cooperation, coordination, preparation and development of cooperation projects, and cooperation monitoring and evaluation.

2.7.2 Foreign research

Kwon & Fieock, 2010) studied the local decision in making the joint service agreement. They studied the factors affecting the decision-making, which might be divided into 2 stages. The first stage focused on the inner demands, cooperation efficiency, problems of agencies and information, etc. The decision-making in this first stage was based on necessities and favor. The second stage focused on agencies, negotiations, enforcement and network relationship. The decision-making at this stage dealt with the transaction cost in the negotiation and enforcement process. After studying those variables, the important findings were that the local government' decision-making at the first stage was most influential, that is, needs for services. The consideration for cooperation building was correlated with the quantity of local population. For example, if the number of population decreased or it became more crowded, it was more likely to decide on building the cooperation. In addition, the

reduction of externalities, economic of scale, and scope of service provided by cities were more likely to enhance more cooperation building.

For the second stage relating to the transaction cost, it was found that the institutional cost influenced the cooperation building. Similarly, the information cost became the limitation in cooperation building resulted by the number of local governments involved while the information exchange was the important predictor. For the institutions providing the services, the stable political institution not only reduced the motivation in allocating benefits, it also caused the social capital through inter-local relationship. Moreover, the budget problem was another factor inspiring the local governments to build the cooperation. Meanwhile, the negotiation and enforcement costs did not influence the decision-making.

Jung & Kim (2009) studied the patterns and factors formulating inter-local cooperation in cities and counties of the United States of America. They found that the urban cities able to reach major public services provided by the counties were likely to build the cooperation. In case of urban cities as governed by counties, it was found that the professional executives were more likely to build the cooperation than the outer cities as governed by the counties that were not managed by professional executives. In addition, the financial health affected the local cooperation building. The small cities (population less than 100,000) were more likely to build the cooperation with other cities nearby in order to save their costs in providing public services than the cities with good financial health or they were capable of generating their own revenues.

Janet Weiss (1987) studied the cooperation in schools by examining the factors influencing behavioral changes in government entities. The results showed that these factors could be found and took effects to each other. These factors were: 1) mutual problem recognition by government entities; 2) existing resources used to solve the problems by way of cooperation building; and 3) ability degree of each institution in boosting the cooperation building.

Sally Selden, Jessica Sowa & Jodi Sandfort (2006: 415-416) studied the effects caused by the cooperation of non-profit organizations in the provision of early childhood education in term of planning and management. The results showed that: 1) cooperation outcome made the teachers and official feel more pleasant with the salary

and benefits they received; 2) two-way cooperation caused more relation than the three-way cooperation; 3) the classroom quality increased from the three-way cooperation; 4) cooperation extremely influenced the decoration, activities and planning structure; 5) cooperation resulted to the students' preparedness, except persons moving their residences frequently would not result to the students' preparedness; and 6) recognition about school preparedness in New York was lower than that in Virginia.

Kenneth Meier & Laurence Toole (Meier & Toole: 2003) studied Management of the Government Sector and Work Performance in Education: Effect from Network-based Management whereas the executives agreed to support the resources and jointly provoked the work outcome. The result showed that the network-based management took effect to the policy implementation, but the effect might be non-linear. Only way the government administrators could cause the differentiation was to join hands to increase their resources, and to wipe out the problems in working plans together.

Milward & Povan (1995, 1998) studied the structure of service networks for community psychological health and how it affected clients. The results showed that: 1) effectiveness of networks would be shifted when various agencies were integrated through the decision made by the central government; 2) networks' budget had to be controlled by a single agency; 3) effectiveness of networks would be more shifted by a stable system; and 4) shortage of resources affected the effectiveness of networks.

Jennings & Ewalt (1998) created a model from studying the management coordination at the government level. The coordination at the planning level was correlated with working abilities under the law on partnership and the state's work training. The coordination variable was a variety of strategies, e.g. information sharing, budget aggregation, establishment of working groups in the form of committee, marketing and mutual planning. This multi-relation model in the management coordination showed that some positive impacts occurred and they affected most people while the coordination at the planning level had more limitations.

Wong, Press, Sumsion & Hard (2012) studied the collaboration of early childhood education in Victoria, Australia by examining 10 projects involved by several agencies in the project management. The important factors provoking the

collaboration were: 1) response to necessities; 2) leadership and communications; 3) reasonable agencies; and 4) structure and process.

After synthesizing the factors influencing the coordination between local administrative organizations in the provision of public services as well as other indicators of these variables, such information was synthesized with other related documents and research in order to determine the variables, and to create the indicating factors influencing the coordination between local administrative organizations in the provision of early childhood education of child development centers. The synthesized details were illustrated in Table 2.8 below.

Table 2.8 Variables and indicators influencing the collaboration of local administrative organizations in the management of early childhood education in child development centers

Variables	Indicators
1) Law	All types of local administrative organizations could build the cooperation in providing public services in accordance with the Determining Plans and Process of Decentralization to Local Government Organization Act B.E. 2542 (1999). Provincial Administration Organization (PAO) have the power and duties in encouraging the cooperation between local administrative organizations, and the joint operations with other local administrative organizations according to the Provincial Administrative Organization Act B.E. 2540 and its amendments (No. 4) B.E. 2552, and the Determining Plans and Process of Decentralization to Local Government Organization Act B.E. 2542 (1999). Provincial Administration Organizations (PAO) subsidized lower local administrative agencies in accordance with the Determining Plans and Process of Decentralization to Local Government Organization Act B.E. 2542 (1999).

Table 2.8 Variables and indicators influencing the collaboration of local administrative organizations in the management of early childhood education in child development centers (cont.)

Variables	Indicators
	A municipality might cooperate with other municipalities, and perform some businesses outside its municipal area pursuant to the power and duties as stipulated in the Municipal Act B.E. 2496 and its amendments (No. 13) B.E. 2552. Provincial Administration Organizations (PAO) have the power and duties in encouraging the cooperation between local administrative organizations, and had the joint operations with other local administrative organizations according to the Provincial Administrative Organization Act B.E. 2540 and its amendments (No. 4) B.E. 2552, and the Determining Plans and Process of Decentralization to Local Government Organization Act B.E. 2542 (1999). Local administrative organizations might apply the regulation on Preparation of Development Plan, Budgeting, Finance, Procurement and Letters regarding Guideline on the Provision of Public Services between Local Administrative Organizations as issued by the Department of Local Administration to provide the early childhood education together. Legitimacy of council members and administrators of local administrative organizations, who were selected by election took an important role in making the collaboration agreement in the provision of public services with other local administrative organizations because they were empowered by laws.

Table 2.8 Variables and indicators influencing the collaboration of local administrative organizations in the management of early childhood education in child development centers (cont.)

Variables	Indicators
2) Administrators of Local Administrative Organizations	Abilities and skills of administrators of local administrative organizations in respect with communications, negotiation, building of understanding, conflict tackling, creative thinking, network formation, and trust building. Administrators of local administrative organizations had knowledge, understanding and interest in education.
3) Social Network	Associations of local administrative organizations such as Provincial Administrative Organization Council of Thailand, Subdistrict Administration Organization Association of Thailand, and National Municipal League of Thailand. These bodies help coordinate to enhance the collaboration between local administrative organizations in the provision of early childhood education. Authorities in charge of promoting and supporting local administrative organizations included the Department of Local Administration, Provincial Local Administration Office, were main mechanism in building the cooperation between local administrative organizations in providing the early childhood education. Building the social networks by members of local administrative organization associations led to the sharing of value and attributes of management professionalism, and to the collaboration with other local administrative organizations in the provision of early childhood education.

Table 2.8 Variables and indicators influencing the collaboration of local administrative organizations in the management of early childhood education in child development centers (cont.)

Variables	Indicators
	Associations of local administrative organizations would help disseminate the information to their members, which led to the consideration for building the cooperation with other local administrative organizations in providing the early childhood education
	Transparent information disclosure between associate members led to the formation and retention of cooperation between local administrative organizations in providing the early childhood education.
4) Limitations of Finance and Budget	Rising expenses in education. Due to higher budget for education, higher budget deficit, higher public debt per capita, higher debt ratio per expenses, and lower percentage of income, these factors force a local administrative organization to seek for collaboration with other local administrative organizations for better effectiveness in the provision of early childhood education.
5) Insufficiency of Management Resources	Insufficient management resources, e.g. materials, tools and facilities, cause a local administrative organization to seek for collaboration with other local administrative organizations for better effectiveness in the provision of early childhood education.
6) Political Interests	Response to local people who require that the local administrative organization provides the quality early childhood education without any additional expenses.

Table 2.8 Variables and indicators influencing the collaboration of local administrative organizations in the management of early childhood education in child development centers (cont.)

Variables	Indicators
7) Transaction Cost	Different concepts between administrators of local administrative organizations and local council members, as well as different favor of administrators of local administrative organizations, local council members, and local people in respect with outcome, duration of outcome and risks in building the cooperation in providing the early childhood education with other local administrative organizations deemed the agency cost. Information to be shared between local administrative organizations, as well as the right protection, control and execution to be line with their agreement Incomplete information may obstruct the negotiations to build collaboration in the provision of early childhood education with other local administrative organizations. This might become the latent cost. Time spent for negotiations, monitoring and execution of the agreement was a kind of transaction cost in building the collaboration in the provision of early childhood education.

2.8 Conceptual framework

The conceptual framework on the causal relationship influencing the collaboration between local administrative organizations in the provision of early childhood education of child development centers, all related concepts theories, research and documents were used to construct the conceptual framework that were detailed below.

2.8.1 Factors influencing the collaboration between local administrative organizations in the provision of early childhood education of child development centers

The factors influencing the collaboration between local administrative organizations in the provision of early childhood education of child development centers from the related concepts theories, research and documents were synthesized as follows:

2.8.1.1 Law

The related concepts and theories from Hulst, R., Van Monfort A., Haveri, A., Airaksinen, J. & Kelley, J. (2009: 266-268) and Burns (1994) showed that the constitutions prescribed the decentralization to local governments, and it promoted and supported the inter-local cooperation, and also empowered local governments to have cooperation. This is relevant to laws of Thailand, which have empowered the local governments to tie the cooperation with each other or with other organizations, either government or private organizations in providing public services in the formal form like the establishment of juristic organization, or in the informal form or making the agreement.

As mentioned about NoranitSetabutr et al. (2002: 3-10) that the Determining Plans and Process of Decentralization to Local Government Organization Act B.E. 2542 (1999) was the law promoting and encouraging all Thai local administrative organizations to mutually provide public services for their local people. The study conducted by the Department of Local Administration and Thammasat University showed that the cooperation between local administrative organizations might be in the formal model, that is, a juristic organization in the form of syndicate might be established. The cooperation might be in the informal model, that is, multiple local administrative organizations provided public services under the existing rules and laws to which they have conformed.

Burns (1994) and Miller (1981) talked about the legitimacy of parliament members and elected administrators of a local administrative organization were the important actors in making the agreements in providing public services with other local administrative organization as permitted by law.

All academics' research mentioned above led to the Researcher's analysis that law is a factor directly influencing the inter-local cooperation in the provision of early childhood education. This factor also depends on the elected administrators of local administrative organizations, who have legitimacy in deciding on building the cooperation in the provision of early childhood education.

2.8.1.2 Local administrative organization leaders

The related concepts and theories proposed by Mandell (1984) and Williams (2002) were reviewed. It was found that the leaders must have abilities and skills in communications, negotiation, building of understanding, conflict tackling, creative thinking, network formation, and trust building. In addition, SurapeeAkomkong (2007) found that the administrators of local administrative organizations must have knowledge, understanding and interest in education to initiate the collaboration between local administrative organizations in the provision of early childhood education.

The scholars' works as mentioned above led to the analysis that the cooperation between local administrative organizations in the provision of early childhood education depends on the administrators of these local administrative organizations, who must have knowledge, understanding and interest in education. Therefore, it was analyzed that the administrators of local administrative organizations is a factor directly influencing the inter-local cooperation in the provision of early childhood education.

2.8.1.3 Social networks

All related concepts and theories in Feiock (2004, 2007) were reviewed and it was found that the cooperation of local administrative organizations through social network organizations would lead to their collaboration. According to Lackey Freshwater, and Rupasingha (2002), the central facilitators like district or regional organizations were the mechanisms in building the social networks and cooperation of local administrative organizations.

Frederickson & Smith (2003) found that the social network built up by professional members would lead to the sharing of value and management professionalism. Such network not only provokes the collaboration, but also maintains the value and standard of professionalism.

According to Potoski (2003), the professional associations were the middle mechanism in disseminating the information to members. Isaacs (2001) found that the transparency by sharing the information among alliances helped retain their alliance.

The scholars' works mentioned above led to the Researcher's analysis that the social networks built up by the administrators of local administrative organizations and members of local councils were the mechanisms allowing the administrators of local administrative organizations, members of local council and officers to have interactions and trust, which led to the coordination or collaboration in the provision of early childhood education.

Moreover, the social networks created the value and professional management for the administrators of local administrative organizations, who would give collaboration in the provision of early childhood education in order to retain their alliance and professional value. Therefore, it is analyzed that the administrators of local administrative organizations put indirect influence through the relationship between social networks that influence the collaboration between local administrative organizations in the provision of education.

2.8.1.4 Limitation of finance and budget

The Researcher reviewed the related concepts and theories presented by Morgan and Hirlinger (1991), Marc Holzer and Hedy Isaacs (2002) who found that higher budget and expenditure for public services forced the administrators of local administrative organizations to manage the budget effectively by cooperating with other local administrative organizations in providing public services.

Ferris (1986) and Post (2002) found that the administrators had to concern about the financial health, e.g. scope of deficit budget and surplus deficit, debt per capita, debt to expenses and percentage of income ownership, etc.

From the scholars' works mentioned above, it may be analyzed that the administrators of local administrative organizations must concern about the limitation of finance and budget and financial health before seeking for the effective management methods, especially for the provision of early childhood education carried out by most local administrative organizations. Therefore, it is analyzed that

this factor depends on the administrators of local administrative organizations who must have collaboration in the provision of early childhood education.

2.8.1.5 Insufficiency of management resources

The Researcher reviewed the related concepts and theories presented by Kruger & McQuire (2005), Feiock (2007), Carr, Gerberry & Lupher (2009) and found that the shortage of management resources caused the local administrative organizations to seek for the collaboration to acquire the effectiveness.

From the scholars' works mentioned above, it may be analyzed that, due to the limitation of budget, the management resources to be used by local administrative organizations in the provision of early childhood education may be insufficient. Therefore, the administrators of local administrative organizations must cooperate with other local administrative organizations in order to exchange or mobilize necessary resources for this level of education. Therefore, it is analyzed that the insufficiency of management resources is a factor depending on the administrators of local administrative organizations who must build the collaboration in the provision of early childhood education.

2.8.1.6 Political interests

The Researcher reviewed the related concepts and theories presented by Bartle and Swayze (1997) and found that the local administrators took an important role in building the collaboration. These local administrators aim at building the collaboration because they will receive some political interests. When the local people want more public services, the local administrators or city council members must share the existing resources with other government bodies to provide the public services requested by local people. Except tax increase, the budget saving by way of collaboration is a way of boosting the political popularity so that these administrators will be re-elected in the next election.

From the scholars' works mentioned above, it may be analyzed that if the administrators of local administrative organizations cooperate with other local administrative organizations in the provision of early childhood education, the local people will recognize the benefits to their children, that is, the quality and standard of providing this level of education will be improved, which will lead to the effectiveness and budget saving of local administrative organizations. Therefore, it is

analyzed that the political interests is a factor depending on the administrators of local administrative organizations who will build the collaboration between local administrative organizations in the provision of early childhood education.

2.8.1.7 Transaction cost

The Researcher reviewed the related concepts and theories presented by Feiock, Stein, Zhang & Feiock (2007, 1990, 2010), Bricker, Stein, & Post (2010), LeRoux, Brandenburger, and Pendey (2010) found that the local administrative organizations that build the collaboration in the provision of public services may encounter the transaction cost, which may be called the agency cost, due to different problem-solutions between officers and different favor between government officials and people such as outcome, length of outcome, and attitude toward risks, etc.

North (1990), Shrestha & Fieock (2009) found that the information cost, e.g. objects to be shared, right protection, control and execution to be in conjunction with the agreement as well as incomplete information, may obstruct the negotiations for such collaboration. Williamson (1975) found that the time spent for negotiations, monitoring and execution of the agreement was a kind of transaction cost in building the collaboration.

From the scholars' works mentioned above, it is analyzed that when the local administrative organization wants to build the collaboration in the provision of early child education, it may encounter the transaction cost. This may obstruct the collaboration between local administrative organizations in the provision of early childhood education. Therefore, it is analyzed that the transaction cost is a factor putting direct influence on collaboration between local administrative organizations in the provision of early childhood education.

2.8.2 Cooperation of local administrative organizations in the provision of early childhood education

All concepts and theories relating to the cooperation between local administrative organizations in the provision of public services are as follows:

The concept about the classification of cooperation as proposed by Agranoff (2003) and Mandell & Steelman (2003).

The concept about the classification of cooperation as proposed by Beverly Cigler (1999), Agranoff&Pattakos (1979), Martin et al. (1983) and Kagan (1993), Kagan (1991) and Mattessich& Monsey (1992), Hondale (1982), Marc Holzer&HedyIssacs (2002)

The concept about the classification of cooperation as proposed by NoranitSetabutr et al. (2002), Department of Local Administration and Thammasat University, Hulst& Van Montfort (2007: 216), Hulst, R., Van Monfort A., Haveri, A., A., Airaksinen, J. & Kelley, J. (2009), Samuel Nunn & Mark S. Rosentraub (1997), Jennings and Ewalt (1998), and AmornratPinyoanantapong (2003).

The above concepts were synthesized to determine the variables on collaboration between local administrative organizations in the provision of early childhood education. The cooperation was the horizontal arrangement between 2 local administrative organizations and up, which formed the group. Their administrative area may be close or not. They had the formal negotiations for their collaboration and they had the formal agreement. They applied their existing regulations or laws in the provision of early childhood education. Certain resources were also shared, e.g. information, personnel, materials, tools, budget as well as powers and duties. These local administrative organizations also prescribed rules and regulations, and built the management mechanism in the form of committee. They jointly had the planning and budget spending in the provision of early childhood education of child development centers. From the synthesis of all variables, the conceptual framework of this research was illustrated in Figure 2.2:

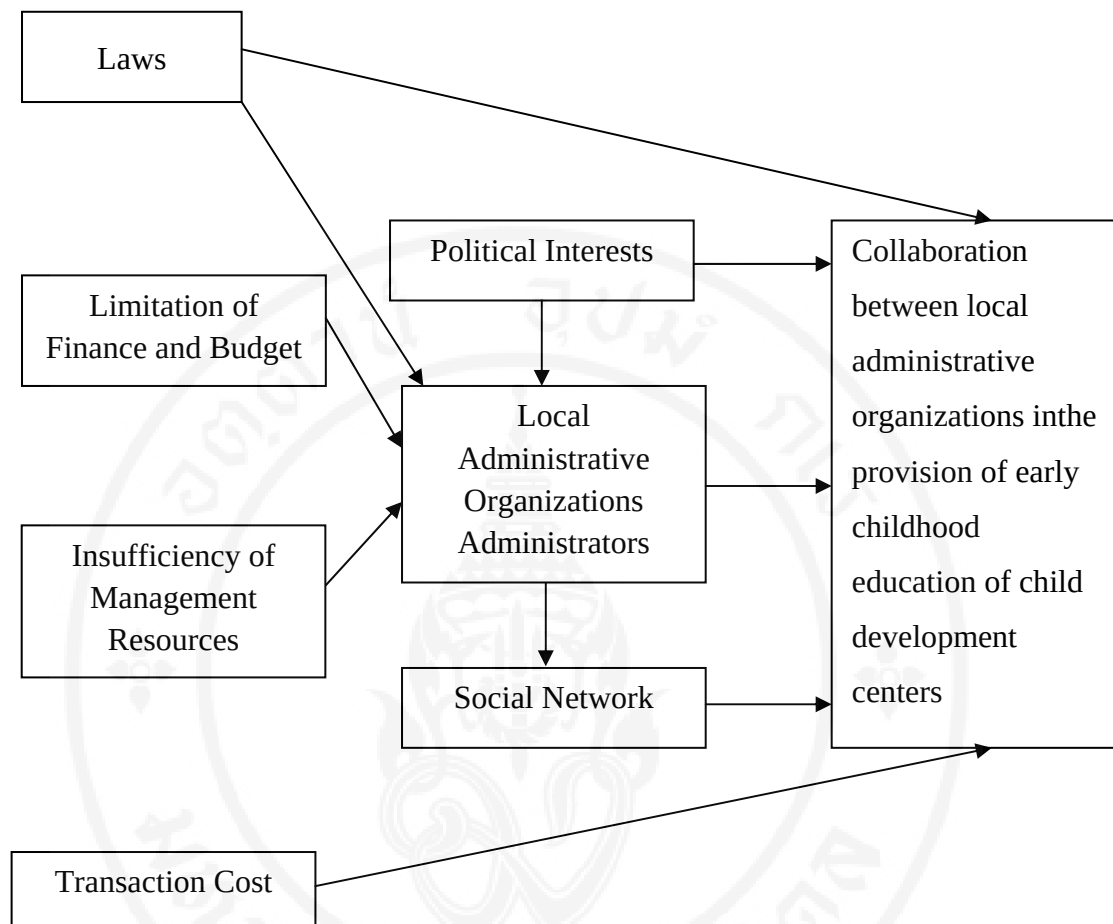


Figure 2.2 Conceptual Framework

Note: The above symbols mean as follows (Nongluck Virachchai, 1994)

—► represents the causal relationship between variables. The arrow tail is the cause variable and the arrow head is the effect variable; and

□ represents the observed variable.

CHAPTER III

RESEARCH METHODOLOGY

The research on causal relationship model of factors affecting the collaboration between local administrative organizations in early childhood educational management of child development centers was conducted by the quantitative method. The questionnaire was the data collection tool to obtain some information about the targeted population and sample group. The details about data collection tools, data collection methods and data analysis were presented below.

3.1 Population and sample group

3.1.1 Population and sample Group

The Unit of Analysis of this research included the local administrative organizations holding child development centers. The Researcher selected only local administrative organizations participating in the project on Competency Development for Child Development Centers under Local Administrative Organizations to develop the quality of local preschool children as held by the Department of Local Administration and Thai Health Promotion Foundation (ThaiHealth) because the Researcher saw some collaboration traces in early childhood educational management. Therefore, it was appropriate to be the populations of this research. There were 12 child development model centers mutually selected by Thai Health and the Department of Local Administration and another 57 child development network centers or there were 69 centers in total. Each child development center consisted of 6 responsible persons; namely, Chief Executive of Local Administrative Organization, Chief Administrator of Local Administrative Organization, Director of Office/Bureau of Education, academic officer, head of child development center and child teacher.

Therefore, the child development model centers of local administrative organizations involved 72 subjects, and the child development network centers of local administrative organizations involved 342 subjects. Thus, there were total 414 subjects in this research.

For the sample, due to a small number of populations in such 12 child development model centers of the local administrative organizations, all populations were selected for this research or the sample size involved 72 subjects. Meanwhile, there were 57 child development network centers, Yamane's formula was used to calculate the sample size with 5 percent or 0.05 acceptable sampling error. The calculation formula was as follows:

$$n = \frac{N}{1+Ne^2}$$

whereas n = Number of sample size
 N = Total populations in the study
 e = Acceptable sampling error

when representing n = Number of sample size

$$n = \frac{57}{1+(57+0.05^2)}$$

$$n = 50$$

Therefore, the sample group of this research involved 50 child development network centers and each center included 6 related persons. As a result, the sample size covered 300 subjects. When including the sample size of the child development model centers with such child development network centers, the sample size of this research involved 372 subjects.

3.1.2 Sampling

The sampling method was based on the probability sampling by way of simple random sampling. The samples that were the child development network centers of the Local Administrative Organizations were selected by drawing lots to get

50 centers involving 300 subjects while all 12 child development model centers involving 72 subjects were selected for data collection.

3.2 Research tools

In this research, the questionnaire was used as the research tool. It was constructed by the synthesis of all related concepts, theories and documents. The questionnaire consisted of the following parts:

Part 1: Questions about questionnaire respondents' personal information, e.g. gender, age, level of education, title and supervision.

Part 2: Questions about collaboration between local administrative organizations in early childhood educational management by child development centers. The scoring criteria were set up in 5 levels as follows:

5 means totally agree with the collaboration between local administrative organizations in early childhood educational management by child development centers.

4 means strongly agree with the collaboration between local administrative organizations in early childhood educational management by child development centers.

3 means moderately agree with the collaboration between local administrative organizations in early childhood educational management by child development centers.

2 means slightly agree with the collaboration between local administrative organizations in early childhood educational management by child development centers.

1 means least agree with the collaboration between local administrative organizations in early childhood educational management by child development centers.

For the score interpretation, the highest scores minus lowest scores before being divided by the number of groups or measurement levels. Each level shall have the class interval as follows:

$$\frac{\text{Highest Scores} - \text{Lowest Scores}}{\text{Range of Scores}} = \text{Score interval}$$

$$\text{Representing } \frac{5-1}{5} = 0.8$$

When the score interval was 0.8, the average scores could be interpreted as follows:

Average scores in the range of 4.21-5.00 = totally agree with the collaboration between local administrative organizations in early childhood educational management by child development centers.

Average scores in the range of 3.41-4.20 = strongly agree with the collaboration between local administrative organizations in early childhood educational management by child development centers.

Average scores in the range of 2.61-3.40 = moderately agree with the collaboration between local administrative organizations in early childhood educational management by child development centers.

Average scores in the range of 1.81-2.60 = slightly agree with the collaboration between local administrative organizations in early childhood educational management by child development centers.

Average scores in the range of 1.00-1.80 = least agree with the collaboration between local administrative organizations in early childhood educational management by child development centers.

Part 3: Questions about factors affecting the collaboration between local administrative organizations in early childhood educational management by child development centers, which included: 1) law; 2) social network; 3) local administrative organizations administrators; 4) limitations of finance and budget; 5) insufficiency of management resources; 6) political interests; and 7) transaction cost. Scoring consisted of 5 following levels:

5 means opinions, at the highest degree, toward factors of: 1) law; 2) social network; 3) administrators of local administrative organizations; 4) limitations of finance and budget; 5) insufficiency of management resources; 6) political interests; and 7) transaction cost, which affected the collaboration between local administrative

organizations in early childhood educational management by child development centers.

4 means opinions, at the high degree, toward factors of: 1) law; 2) social network; 3) local administrative organizations administrators; 4) limitations of finance and budget; 5) insufficiency of management resources; 6) political interests; and 7) transaction cost, which affected the collaboration between local administrative organizations in early childhood educational management by child development centers.

3 means opinions, at the moderate degree, toward factors of: 1) law; 2) social network; 3) local administrative organizations administrators; 4) limitations of finance and budget; 5) insufficiency of management resources; 6) political interests; and 7) transaction cost, which affected the collaboration between local administrative organizations in early childhood educational management by child development centers.

2 means opinions, at the low degree, toward factors of: 1) law; 2) social network; 3) local administrative organizations administrators; 4) limitations of finance and budget; 5) insufficiency of management resources; 6) political interests; and 7) transaction cost, which affected the collaboration between local administrative organizations in early childhood educational management by child development centers.

1 means opinions, at the lowest degree, toward factors of: 1) law; 2) social network; 3) local administrative organizations administrators; 4) limitations of finance and budget; 5) insufficiency of management resources; 6) political interests; and 7) transaction cost, which affected the collaboration between local administrative organizations in early childhood educational management by child development centers.

For the score interpretation, the highest scores minus lowest scores before being divided by the number of groups or measurement levels. Each level shall have the class interval as follows:

$$\frac{\text{Highest Scores} - \text{Lowest Scores}}{\text{Range of Scores}} = \text{Score interval}$$

$$\text{Representing } \frac{5-1}{5} = 0.8$$

When the score interval was 0.8, the average scores could be interpreted as follows:

Average scores in the range of 4.21-5.00 = factors of: 1) law; 2) social network; 3) local administrative organizations administrators; 4) limitations of finance and budget; 5) insufficiency of management resources; 6) political interests; and 7) transaction cost, which affected the collaboration between local administrative organizations in early childhood educational management by child development centers, were at the highest degree.

Average scores in the range of 3.41-4.20 = factors of: 1) law; 2) social network; 3) local administrative organizations administrators; 4) limitations of finance and budget; 5) insufficiency of management resources; 6) political interests; and 7) transaction cost, which affected the collaboration between local administrative organizations in early childhood educational management by child development centers, were at the high degree.

Average scores in the range of 2.61-3.40 = factors of: 1) law; 2) social network; 3) local administrative organizations administrators; 4) limitations of finance and budget; 5) insufficiency of management resources; 6) political interests; and 7) transaction cost, which affected the collaboration between local administrative organizations in early childhood educational management by child development centers, were at the moderate degree.

Average scores in the range of 1.81-2.60 = factors of: 1) law; 2) social network; 3) local administrative organizations administrators; 4) limitations of finance and budget; 5) insufficiency of management resources; 6) political interests; and 7) transaction cost, which affected the collaboration between local administrative organizations in early childhood educational management by child development centers, were at the low degree.

Average scores in the range of 1.00-1.80 = factors of: 1) law; 2) social network; 3) local administrative organizations administrators; 4) limitations of finance and budget; 5) insufficiency of management resources; 6) political interests; and 7) transaction cost, which affected the collaboration between local administrative organizations in early childhood educational management by child development centers, were at the lowest degree.

3.3 Examination of research tool quality

In this research, the quality of the questionnaire, which was a tool used for data collection, was examined for its validity and reliability as follows:

3.3.1 The questionnaire validity

Regarding questionnaire validity, the constructed questionnaire was checked by 3 experts to ensure its content validity before calculating its item-objective congruence index (IOC). From examining the content validity by 3 experts and calculating Item-Objective Congruence Index, the examination results were presented in Table 3.1 below.

Table 3.1 Conclusion of checking the content validity (IOC)

List of Factors	Number of Questions		Validity	
	0	0.33	0.67	1
Collaboration between local administrative organizations in the management of early childhood education of child development centers	-	-	3	26
Law	-	-	1	11
Local Administrative Organizations Administrators	-	-	-	8
Social network	-	-	-	7

Table 3.1 Conclusion of checking the content validity (IOC) (cont.)

List of Factors	Number of Questions		Validity	
	0	0.33	0.67	1
Limitations of finance and budget	-	-	4	1
Insufficiency of management resources	-	-	2	-
Political Interest	-	-	-	1
Transaction cost	-	-	8	-
Total	-	-	18	54

Table 3.1 showed that, from checking content validity (IOC) of 73 open-ended questions, all 72 questions gained the content validity more than 0.5. However, those questions were improved according to all 3 experts so that the questions were precise and appropriate. Finally, there were 73 questions in the improved questionnaire.

After that, the improved questionnaire containing 73 questions was proposed to the thesis committee. It was tested for data collection before being used in the real sample group, and further calculating the reliability.

3.3.2 The questionnaire reliability and discrimination power

questionnaire with a group of population whose qualifications were similar to the sample group. The pre-test involving 30 questionnaire was to check whether all those questions could communicate the meanings relevantly or not; or whether they were appropriate; or how difficult there were. After that, the overall reliability of the questionnaire was computerized by Cronbach's AlphaCoefficient. The pre-test results with a group of population with qualifications similar to the sample group via 30 questionnaires, the examination results were presented in Table 3.2 as follows:

Table 3.2 Reliability results

List of Factors	Validity	Number of Questions
Collaboration between local administrative organizations in the management of early childhood education of child development centers	0.96	29
Law	0.88	12
Local Administrative Organizations Administrators	0.96	8
Social network	0.93	7
Limitations of finance and budget	0.95	5
Insufficiency of management resources	0.98	2
Political Interest	0.94	1
Transaction cost	0.94	9
Total	0.94	73

Table 3.2 summarized the reliability of the questionnaire containing 73 questions (formerly 72 questions). After pre-testing 30 sets of questionnaire with a group of population whose qualifications were similar to the sample group, each question obtained Cronbach's AlphaCoefficient (α) higher than 0.7. This meant that the questions from such questionnaire had the constant value when being measured by the same set of questionnaire at the different time.

3.3.3 Construct validity

Construct validity of each question was examined by Confirm Factor Analysis via LISREL to analyze the questionnaires returned from 298 samples of this research. The factor loading was checked, that is, the questions with the factor loading value more than .30 would be retained while those lower than such value would be deleted out.

3.4 Data collection methods

1) The drafts of research work and questionnaire were submitted to the Office of The Committee for Research Ethics (Social Sciences), Faculty of Social Sciences and Humanities, Mahidol University, for approval.

2) To ask for an official letter regarding data collection, which would be issued in the name of the Faculty of Social Sciences and Humanities, Mahidol University, which would be submitted to the mayors of 62 local administrative organizations selected as the samples.

3) To coordinate with the presidents of those 62 local administrative organizations selected as the samples to ask approval for data collection from related persons, e.g. Chief Executive of Local Administrative Organization, Chief Administrator of Local Administrative Organization, Director of Office/Bureau of Education, academic officer, head of child development center and child teacher.

4) To collect data by using the questionnaire. All questionnaire sets were sent via post. The envelopes identifying the returned address with stamp affixed were provided as well.

5) To check the questionnaires returned via post, to construct the coding manual, to arrange the serial number, and to encode the data before analyzing the data obtained from the questionnaires by the package program.

3.5 Data Analysis

The data analysis was based on the package program under the following statistics:

3.5.1 Descriptive statistics, including:

3.5.1.1 Percentage – used to explain general information about informants.

3.5.1.2 Mean – used to analyze and explain the collaboration between local administrative organizations in early childhood educational management by child development centers, and factors influencing the collaboration

between local administrative organizations in early childhood educational management by child development centers.

3.5.1.3 Standard Deviation – used to analyze and explain the data distribution.

3.5.2 Inferential statistics

Goodness-for-Fit between the Casual Relationship Model of Factors Effect Collaboration between Local Administration Organizations in Early Childhood Educational Management and the empirical data was measured by LISREL under the following methods:

3.5.2.1 Specification of the Model in order to examine which factors took direct and indirect effect to the collaboration between local administration organizations in early childhood educational management of child development centers.

The analysis of linear model involved all observed variables under an initial agreement of the Model that all relationship of the Model was linear and additive, and it was the single relationship between external variables and internal variables.

3.5.2.2 Identification of the Model by using T-Rule condition, that is, unknown parameters had to be less than or equal to the number of members in the variance matrix – covariance of the samples. T-Rule says that the identification of the Model would be fit when T is less than or equal to $(1/2)(p+q+1)$ and the Recursive Rule.

3.5.2.3 Parameter estimation from the Model by way of Maximum Likelihood.

3.5.2.4 Goodness-for-Fit measures to examine to what extent the model perspective was fit to the empirical data by mutually using the following Goodness-for-Fit indices (Diamantopoulos; & Judy, 2000; Joreskog; & Sorborn, 1993; Kelloway, 1998).

1) Goodness-for-Fit indices were:

1.1) Chi-square – It is used to test the hypothesis for Goodness of Fit between hypothesized model and empirical data. For the use of Chi-Square Goodness of Fit Index, if the Chi-square is not statistically significant or

the probability (p) is higher than 0.05, it means the goodness of fit between hypothesized model and empirical data. But, if the Chi-Square is statistically significant or the probability (p) is less than 0.05, it means no goodness of fit between hypothesized model and empirical data. However, the Chi-Square test may be too strict because the Chi-Square test will not be significant when such model has the perfect goodness of fit (after deduction, the difference is 0). However, in fact, it is difficult to obtain the model with the perfect goodness of fit. In addition, the Chi-square may be affected by the complexity of the model, that is, if the model contains many influence lines or parameters, it is likely to be statistically significant. Or, regarding the factors from the sample size, if the tested model comes from the big sample size, it is likely that the Chi-Square would be significant or the effect may come from the Chi-Square value that is sensitive to violate the initial agreement regarding multivariate normality.

1.2) Relative Chi-Square Ratio – It is the ratio between the Chi-Square and degree of freedom (df), which should be in the range of 2-5. Mueller (SareeChudcham, 2004: 29; cited from Mueller, 1996) proposed that the Relative Chi-Square Ratio should be less than 2.

1.3) Goodness of Fit Index (GFI) developed by Joreskog (Joreskog; & Sorbom, 1998: 121-122). This index indicates the percentage of Observed Covariance Matrix (S) that may be explained by Implied Covariance Matrix ($\Sigma(\Lambda, \theta)$). Therefore, the interpretation is similar to the interpretation of R^2 in the regression analysis. Therefore, there may be some confusion and error in interpreting GFI as the percentage of variables' variance that can be explained by the model. GFI would be in the range of 0-1. The closer to 1, the more the model has the goodness of fit. The goodness of fit value used by most researchers is <0.90 .

1.4) Adjusted Goodness of Fit Index (AGFI) – It is the GFI that is adjusted by the degree of freedom (df) because the more the model has influence lines or parameters, the more it tends to be fit to the data because such model is approaching to be the just-identified model. AGFI is an index considering the number of influence lines in the model. The range of value is between 0-1. The higher value, the more the model fits to the data. The model's goodness of fit must be higher than 0.90 because AGFI value is lower than GFI value. Therefore, 0.80 or 0.85 is

recommended. If the GFI value and AGFI value of any model are so different, it means that such model has so few influence lines or parameters important to the model.

1.5) Root Mean Squared Residuals (RMR) – It is an index used to compare the goodness of fit between two models and empirical data in the case of comparison under the same data set. RMR index shall indicate the residuals from comparing the goodness of fit of two models and the empirical data. This index will be practical when the external variables and observable variables are the standardized RMR. RMR value should be less than 0.05, which means that the model has the goodness of fit to the empirical data (NongluckViratchai, 1994: 46).

1.6) Standardized Root Mean Squared Residual (SRMR) – It is an index indicating the error from comparing the goodness of fit between the hypothesized model and the empirical data. SRMR Index shall be in the range of 0-1. If the index value is less than 0.05, it means that the hypothesized model has the goodness of fit to the empirical data.

1.7) Root Mean Squared Error of Approximation (RMSEA) – This index is similar to RMR or SRMR as it is calculated from error. But, RMSEA is calculated to estimate the population error, not sample error. Thus, it is referred back to the population, and it adjusts the degree of freedom as well. RMSEA is not affected in case that the model has many parameters. Brown; &Cudeck (Brown; &Cudeck, 1993: 136-162) advised the criteria of judging the model's goodness of it by using RMSEA that if the index value is less than 0.05, it means that the model has the high goodness of it. If the value is in the range of 0.05-0.08, it means that the model has the good goodness of fit. The value between 0.08-0.10 means the bad goodness of fit of such model. The value over 0.10 shows the low goodness of fit of the model.

Table 3.3 Criteria for Goodness-for-Fit index of the model and empirical data

List of Criteria	Determined Criteria (Joreskog&Sorbom, 1996: 121-122)
Likelihood Ratio Chi-Square Statistic (χ^2)	P-value > .05
Relative χ^2 (χ^2/df)	<2.00
Goodness of Fit Index (GFI)	>.9
Adjusted Goodness of Fit Index (AGFI)	>.9
Root Mean Squared Residuals (RMR)	<.05
Standardized Root Mean Squared Residual (SRMR)	<.05
Root Mean Squared Error of Approximation (RMSEA)	< .05
P-Value for Test of Close Fit	> .05
Normed Fit Index (NFI)	> .9
Incremental Fit Index (IFI)	> .9
Comparative Fit Index (CFI)	>.9
Critical N (CN)	> 200

CHAPTER IV

RESULTS

This research was conducted with aims at: 1) studying the collaboration between local administrative organizations in early childhood educational management of child development centers; 2) studying the consistence between the causal relationship influencing the collaboration between local administrative organizations in early childhood educational management of child development centers and the empirical data; and 3) studying the causal factors causing both direct effect and indirect effect to the collaboration between local administrative organizations in early childhood educational management of child development centers. The results of data analysis were presented as follows:

4.1 Results of initial data analysis on the sample group

4.2 Results of studying the collaboration between local administrative organizations in early childhood educational management

4.3 Results of examining the consistence of the Path Analysis for the causal relationship influencing the collaboration between local administrative organizations in early childhood educational management of child development centers and the empirical data.

4.3.1 Mean ($\bar{x}$), Standard Deviation (S.D.), Skewness, Kurtosis, Chi-square (χ^2) were used to test the normal distribution of variables observed in studying the Path Analysis.

4.3.2 Results of Coefficient Correlation Analysis on variables observed in studying the Path Analysis.

4.3.3 Results of testing the construct validity of the Measurement Model of variables observed in studying the Path Analysis.

4.3.4 Results of testing the consistence of Path Analysis and the empirical data based on the research hypotheses.

Symbols and abbreviations used in the data analysis

To enhance the consistent understanding in the presentation of data analysis results in this research, some symbols and abbreviations used in the result interpretation are as follows:

n	refers to	Number of persons
M	refers to	Mean
S.D.	refers to	Standard Deviation
%CV	refers to	Coefficient of Variation
Min	refers to	Minimum
Max	refers to	Maximum
Sk	refers to	Skewness
Ku	refers to	Kurtosis
SE	refers to	Standard Error
TE	refers to	Total Effect
IE	refers to	Indirect Effect
DE	refers to	Direct Effect
χ^2	refers to	Chi-square
$\Delta\chi^2$	refers to	Differences of Chi-square
λ	refers to	Standardized factor loading
θ	refers to	Variance of standard error
p	refers to	Probability
df	refers to	Degree of Freedom
Δdf	refers to	Difference of the Degree of Freedom
GFI	refers to	Goodness of Fit Index
AGFI	refers to	Adjusted Goodness of Fit Index
RMSEA	refers to	Root Mean Square Error of Approximation
SRMR	refers to	Standardized Root Mean Square Residual
CN	refers to	Critical Number
CFI	refers to	Comparative Fit Index
*	refers to	The .05 level of significance

colla refers to Observed variable regarding the collaboration between local administrative organizations in early childhood educational management of child development centers

law refers to Observed variable regarding laws

local refers to Observed variable regarding the local administrative organization administrators

sonet refers to Observed variable regarding the social network

fina refers to Observed variable regarding the limitations of financial and budget

insuf refers to Observed variable regarding insufficiency of management resources

polint refers to Observed variable regarding political interests

tran refers to Observed variable regarding transaction cost.

4.1 Results of initial data analysis on the sample group

The frequency distribution and percentage of initial data of the sample group, which was collected and completed, were the data from child development centers of 62 local administrative organizations, which included 298 samples. After the initial data analysis regarding the personal background of the sample group, the results were presented below.

Table 4.1 Number and percentage of initial information about the personal background of the sample group (n = 298)

Personal Information	Number (person)	Percentage
Gender		
Male	91	30.50
Female	207	69.50
Total	298	100.00

Table 4.1 Number and percentage of initial information about the personal background of the sample group (cont.)

Personal Information	Number (person)	Percentage
Age		
20-30 years old	33	11.10
31-40 years old	116	38.90
41-50 years old	107	36.00
51-60 years old	35	11.70
Over 60 years old	7	2.30
Total	298	100.00
Level of Education		
Senior secondary level or equivalent	9	3.02
Diploma or equivalent	15	5.03
Graduate	153	51.34
Post-graduate	121	40.61
Total	298	100.00
Present title		
Chief Executive of Local Administrative Organization	46	15.40
Chief Administrator of Local Administrative Organization	47	15.80
Director of Office/Bureau of Education	48	16.10
Academic officer	50	16.80
Head of child development center	42	14.10
Child teacher	65	21.80
Total	298	100.00

Table 4.1 showed that most subjects or 207 subjects were female, representing 69.50%. Most subjects or 116 subjects were in the range of 31-40 years old, representing 38.90%. Most subjects or 153 subjects, representing 51.34%, completed the bachelor degree. Most subjects or 65 subjects, representing 21.80%, were the child teachers.

4.2 Results of examining the collaboration between local administrative organizations in early childhood educational management

In this research, a 5-rating scale questionnaire was used to examine the collaboration between local administrative organizations in early childhood educational management of child development centers. The questionnaire contained 29 questions. The data analysis results were presented in the form of descriptive statistics, e.g. mean, Standard Deviation and interpretation. The range of score interpretation was as follows:

1.00 – 1.80	=	Strongly disagree
1.81 – 2.60	=	Disagree
2.61 – 3.40	=	Neutral
3.41 – 4.20	=	Agree
4.21 – 5.00	=	Strongly agree

Table 4.2 Results of mean, standard deviation and interpretation for the collaboration between local administrative organizations in early childhood educational management of child development centers (n = 298)

Issues	$\bar{x}$	S.D.	Interpretation
1. Administrators/representatives of the Local Administrative Organization negotiate with other local administrative organizations to enhance the collaboration in early childhood educational management.	3.51	.92	Strongly agree
2. Administrators/representatives of the Local Administrative Organization negotiate with other local administrative organizations to determine the scope of collaboration in early childhood educational management.	3.46	.95	Strongly agree
3. Administrators/representatives of the Local Administrative Organization negotiate with other local administrative organizations to determine the guideline of managing the collaboration in early childhood educational management.	3.46	.95	Strongly agree

Table 4.2 Results of mean, standard deviation and interpretation for the collaboration between local administrative organizations in early childhood educational management of child development centers (cont.)

Issues	$\bar{x}$	S.D.	Interpretation
4. Administrators/representatives of the Local Administrative Organization negotiate with other local administrative organizations about the interests to be received from the collaboration in early childhood educational management.	3.46	.96	Strongly agree
5. Administrators/representatives of the Local Administrative Organization make the Memorandum of Understanding (MOU) with other local administrative organizations in early childhood educational management by setting up the official collaboration framework for mutual implementation.	3.49	.98	Strongly agree
6. Administrators/representatives of the Local Administrative Organization join hands with other local administrative organizations to formulate rules and regulations to govern the collaboration in early childhood educational management.	3.52	.93	Strongly agree
7. Local administrative organizations who are members share the information about child development centers with each others in order to benefit the planning and development of early childhood educational management.	3.60	.90	Strongly agree
8. Local administrative organizations who are members jointly set up the 3-5 year development plan in early childhood educational management.	3.57	.89	Strongly agree
9. Local administrative organizations who are members jointly set up the Annual Plan in early childhood educational management.	3.48	.94	Strongly agree
10. Local administrative organizations who are members jointly set up the budget to be spent for the development and provision of early childhood education.	3.54	.92	Strongly agree

Table 4.2 Results of mean, standard deviation and interpretation for the collaboration between local administrative organizations in early childhood educational management of child development centers (cont.)

Issues	$\bar{x}$	S.D.	Interpretation
11. Local administrative organizations who are members share materials and tools used in early childhood educational management.	3.43	.94	Strongly agree
12. Local administrative organizations who are members exchange the child teachers and assistant child teachers with each other.	3.25	1.10	Neutral
13. Local administrative organizations who are members jointly plan and develop the personnel of child development centers, e.g. Chief of Child Development Center, Child Teacher, Assistant Child Teacher, and other officers.	3.58	1.00	Strongly agree
14. Local administrative organizations who are members jointly improve the curriculum in early childhood educational management of child development centers.	3.52	.97	Strongly agree
15. Local administrative organizations who are members jointly improve and develop the experience provision plan.	3.56	.93	Strongly agree
16. Local administrative organizations who are members jointly develop the evaluation methods in early childhood educational management of child development centers.	3.50	.91	Strongly agree
17. Local administrative organizations who are members exchange with each other the supervision in early childhood educational management of child development centers.	3.39	1.00	Neutral
18. Local administrative organizations who are members promote and solve the child nutrition problems together.	3.56	.93	Strongly agree
19. Local administrative organizations who are members jointly develop the activities for the early childhood development of child development centers.	3.55	.94	Strongly agree

Table 4.2 Results of mean, standard deviation and interpretation for the collaboration between local administrative organizations in early childhood educational management of child development centers (cont.)

Issues	$\bar{x}$	S.D.	Interpretation
20. Local administrative organizations who are members promote and share the class research together.	3.28	.99	Neutral
21. Local administrative organizations jointly develop and share the media used in the experience provision.	3.48	.95	Strongly agree
22. Local administrative organizations who are members share the buildings used to arrange some activities of child development centers.	3.32	1.01	Neutral
23. Local administrative organizations who are members jointly inspect the members' buildings for safety and security.	3.42	1.00	Strongly agree
24. Local administrative organizations who are members jointly improve/develop the sites and environments of such members to be healthy and clean.	3.55	.98	Strongly agree
25. Local administrative organizations who are members jointly promote and encourage the guardians, communities, private sector and government entities to be involved in providing the learning experience to child development centers of such members.	3.60	.96	Strongly agree
26. Local administrative organizations who are members jointly promote and encourage the guardians, communities, private sector and government entities to be involved in developing the personnel of child development centers of such members.	3.65	.87	Strongly agree
27. Local administrative organizations who are members jointly promote and encourage the guardians, communities, private sector and government entities to be involved in creating the relationship with the communities where the child development centers of such members are located.	3.65	.88	Strongly agree

Table 4.2 Results of mean, standard deviation and interpretation for the collaboration between local administrative organizations in early childhood educational management of child development centers (cont.)

Issues	$\bar{x}$	S.D.	Interpretation
28. Local administrative organizations who are members jointly develop child develop centers of such members to be the learning sources and service centers for the communities.	3.61	.91	Strongly agree
29. Local administrative organizations who are members jointly created the collaboration network with the guardians, communities, private sector and government entities in early childhood educational management of child development centers of such members.	3.60	.86	Strongly agree

Table 4.2 showed that the sample subjects strongly agreed with the collaboration with local administrative organizations in early childhood educational management of child development centers of such members (mean = 3.50, Standard Deviation = .77). When considering first 5 issues strongly agreed, Item 26. Local administrative organizations who are members jointly promote and encourage the guardians, communities, private sector and government entities to be involved in developing the personnel of child development centers of such members, was most agreed (mean = 3.65, Standard Deviation = .87), followed by Item 27. Local administrative organizations who are members jointly promote and encourage the guardians, communities, private sector and government entities to be involved in creating the relationship with the communities where the child development centers of such members are located, (mean = 3.65, Standard Deviation = .88); Item 28. Local administrative organizations who are members jointly develop child develop centers of such members to be the learning sources and service centers for the communities (mean = 3.61, Standard Deviation = .91); Item 29. Local administrative organizations who are members jointly created the collaboration network with the guardians, communities, private sector and government entities in early childhood educational

management of child development centers of such members (mean = 3.60, Standard Deviation = .86); and Item 25. Local administrative organizations who are members jointly promote and encourage the guardians, communities, private sector and government entities to be involved in providing the learning experience to child development centers of such members (mean = 3.60, Standard Deviation = .96).

When considering the items with moderate means, they included Item 17. Local administrative organizations who are members exchange with each other the supervision in early childhood educational management of child development centers (mean = 3.39, Standard Deviation = 1.00); Item 22. Local administrative organizations who are members share the buildings used to arrange some activities of child development centers (mean = 3.32, Standard Deviation = 1.01); Item 20. Local administrative organizations who are members promote and share the class research together (mean = 3.28, Standard Deviation = .99); and Item 12. Local administrative organizations who are members exchange the child teachers and assistant child teachers with each other (mean = 3.25, Standard Deviation = 1.10).

4.3 Results of examining the consistence of the Path Analysis for the causal relationship influencing the collaboration between local administrative organizations in early childhood educational management of child development centers and the empirical data

The Researcher developed the Path Analysis model for the causal relationship influencing the collaboration between local administrative organizations in early childhood educational management of child development centers by reviewing all related documents and literature before collecting the data by mean of questionnaire distributed to the sample group as pre-designed in order to check whether or not the Path Analysis Model was consistent with the empirical data, and whether or not the parameter in the model was consistent with the preset hypotheses by using LISREL. The details of examining the basic assumption of data analysis by Path Analysis technique, and the data analysis results of Path Analysis Model are as follows:

4.3.1 Mean ($\bar{x}$), Standard Deviation (S.D.), Skewness, Kurtosis, Chi-square (χ^2) were used to test the normal distribution of variables observed in studying the Path Analysis

The distribution of observed variables was tested by Chi-square (χ^2) by considering the level of significance. If any observed variable was significant at .05 (p-value <.50), this meant that such observed variable had the abnormal distribution. In contrast, if any observed variable was tested and found that its Chi-square (χ^2) was not significant at .05 (p-value >.50), such variable had the normal distribution.

According to the initial inspection on the data distribution of observed variables, the raw data was tested by Chi-square (χ^2), it was found that several observed variables were significant at .05 (p-value <.50). This meant that such raw data analyzed had the abnormal distribution. Thus, such raw data had to be interpreted into the normal score. Then, the data distribution of such observed variables was re-tested by Chi-square (χ^2) as detailed in Table 4.3.

Table 4.3 Inspection on data distribution of observed variables as interpreted into the normal score by Chi-square (χ^2) (n = 298)

Variables observed	$\bar{x}$	S.D.	Skewness	Kurtosis	Chi-square	p-value
1. Collaboration between local administrative organizations in early childhood educational management of child development centers	3.50	.77	-.085	-.210	.051	.975
2. Laws	3.64	.70	-.171	-.488	.267	.875
3. local administrative organization administrators	3.73	.75	-.305	-.834	.788	.674
4. Social network	3.58	.73	-.191	-.406	.202	.904

Table 4.3 Inspection on data distribution of observed variables as interpreted into the normal score by Chi-square (cont.)

Variables observed	$\bar{x}$	S.D.	Skewness	Kurtosis	Chi-square	p-value
5. Limitations of finance and budget	3.28	.82	-.071	-.304	.098	.952
6. Insufficiency of management resources	3.46	.89	-.470	-.934	1.094	.579
7. Political interests	3.64	.79	-.913	.024	.834	.659
8. Transaction cost	3.47	.62	-.059	-.178	.035	.983

Note: Chi-square (χ^2) at the level of significance (p-value<.05) shows the abnormal distribution.

Table 4.3 showed the inspection on data distribution of observed variables as interpreted into the normal score by Chi-square (χ^2) at the .05 level of significance (p-value <.05). It was found that every observed variable was not statistically significant. This meant that most observed variables as studied in the Path Analysis Model had the normal distribution. This was consistent with the initial agreement regarding the normal distribution, which was suitable for the Path Analysis technique by LISREL program

4.3.2 Results of Coefficient Correlation Analysis on variables observed in studying the Path Analysis

According to the Path Analysis, the relationships between observed variables in the model would be tested. If it was found that any pair of observed variables was too related, there might be a problem that such pair of variables was the same variable or the overlap variable. To examine the relationship between observed variables in this Model, Pearson Product Moment Correlation was used to analyze the relationship of every pair of observed variables studied in the Model. If the Correlation Coefficient of any pair of observed variables was <.80, it meant that such pair of variables was the same or overlap variable, which would cause the multicollinearity (r in Correlation Matrix was <.80).

Apart from examining the pair relationship, the overall relationship of observed variables in the model was examined as well by considering whether the Correlation Matrix was different from the Identity Matrix or not. If not, it meant that the observed variables had no joint relationship for further advanced statistic analysis. Such joint relationship could be considered by KMO and Bartlett's Test of Sphericity. NongluckWiratchai (1995) proposed that if the value was $<.80$, it fell in the good criteria. If the value was $>.50$, it meant that the Correlation Matrix was not different from the Identity Matrix or such observed variables had no joint relationship for further advanced statistic analysis. The results of initial examination about the relationship of observed variables in the Path Analysis Model were presented in Table 4.4

Table 4.4 Correlation Coefficient analysis of observed variables in the path analysis model (n = 298)

Observed Variables	2.law	3.local	4.sonet	5.fina	6.insuf	7.polint	8.tran
1.colla	.749**	.625**	.638**	.564**	.496**	.458**	.513**
2.law	1.00	.781**	.794**	.582**	.512**	.549**	.554**
3.local		1.00	.788**	.492**	.484**	.582**	.574**
4.sonet			1.00	.565**	.505**	.529**	.551**
5.fina				1.00	.674**	.571**	.558**
6.insuf					1.00	.649**	.503**
7.polint						1.00	.582**
8.tran							1.00

****Significance at .01**

Kaiser-Meyer-Olkin = .898; Bartlett's Test of Sphericity = 1636.52 (df = 28, p-value = $<.01$)

Table 4.4 showed the correlation Coefficient Analysis of observed variables in the Path Analysis Model. It was found that each pair of observed variables was positively correlated in the range of .458 - .788 at the .01 level of significance. The pair of observed variables most correlated was sonnet and local at .788. No pair of observed variables was correlated $<.80$. This meant that the data was suitable for the Path Analysis. Apart from examining the pair relationship, the overall relationship of observed variables in the Model was examined as well by considering whether the Correlation Matrix was different from the Identity Matrix or not. Such joint relationship could be considered by Kaiser-Meyer-Olkin with the value at .898, and Bartlett's Test of Sphericity with the value at 1636.52 ($df = 28$, $p\text{-value} = .000$), which were $<.50$. This meant that the Correlation Matrix was different from the Identity Matrix or such observed variables had the appropriate relationship for joint analysis in the Path Analysis.

4.3.3 Results of testing the Construct Validity of the Measurement Model of variables observed in studying the Path Analysis

Before carrying out and check whether the Path Analysis by LISREL program, as developed from the related concepts and theories, was consistent with the empirical data or not, the quality of the Measurement Model for all observed variables in the Model was examined. The Construct Validity was the technique used to check whether each question in the Measurement Model was the good structure of variables or not by using the Confirm Factor Analysis by LISREL program. In reading the Confirm Factor Analysis results of each variable, 4 main statistics were considered: 1) R^2 means the capability of using the latent variable to explain the variance of observed variable that is the indicator/component of such latent variable; 2) λ (Standard Solution) is the parameter estimation of being the component/relationship between the observed variable and the latent variable; 3) Standard Error is the variation of measurement error of the observed variable; and 4) t-test is used to analyze the reliability at the level of significance by determining that if t-test was <1.96 , it was statistically significant at .05. But, if t-test was in the range of -1.96 - 1.96 , it was not statistically significant.

Table 4.5 Results of confirmatory factory analysis of the measurement model for variables for the collaboration between local administrative organizations in early childhood educational management of child development centers

Observed Variables (Questions)	Standardized Factor Loading (λ)	Variance of Standard Error (θ)	t	R ²
colla_1	.80	.37	16.49	.63
colla_2	.79	.37	16.39	.63
colla_3	.82	.34	17.07	.66
colla_4	.76	.42	15.40	.58
colla_5	.76	.42	15.47	.58
colla_6	.80	.35	16.67	.65
colla_7	.76	.42	15.53	.58
colla_8	.81	.35	16.76	.65
colla_9	.82	.33	17.20	.67
colla_10	.73	.46	14.66	.54
colla_11	.77	.41	15.66	.59
colla_12	.67	.55	12.96	.45
colla_13	.83	.31	17.48	.69
colla_14	.85	.28	18.10	.72
colla_15	.87	.24	18.88	.76
colla_16	.85	.27	18.33	.73
colla_17	.86	.26	18.54	.74
colla_18	.85	.28	18.11	.72
colla_19	.86	.26	18.54	.74
colla_20	.80	.36	16.52	.64
colla_21	.85	.28	18.06	.72
colla_22	.75	.44	15.11	.56
colla_23	.76	.43	15.28	.57
colla_22	.75	.44	15.11	.56

Table 4.5 Results of confirmatory factory analysis of the measurement model for variables for the collaboration between local administrative organizations in early childhood educational management of child development centers (cont.)

Observed Variables (Questions)	Standardized Factor Loading (λ)	Variance of Standard Error (θ)	t	R ²
colla_23	.76	.43	15.28	.57
colla_24	.77	.41	15.59	.59
colla_25	.81	.34	17.01	.66
colla_26	.77	.41	15.63	.59
colla_27	.76	.42	15.45	.58
colla_28	.78	.40	15.85	.60
colla_29	.81	.35	16.81	.65
$\chi^2=506.84$, df= 312, p-value = <.01; Relative $\chi^2 = 1.62$; GFI = .89 ; AGFI =.85; RMR = .027; SRMR= .030; RMSEA = .046; P-Value for Test of Close Fit = .82; NFI = .99; IFI= .99; CFI = 1.00; CN = 211.98 Composite reliability, $\rho_v = .63$ Variance Extracted, $\rho_c = .98$				

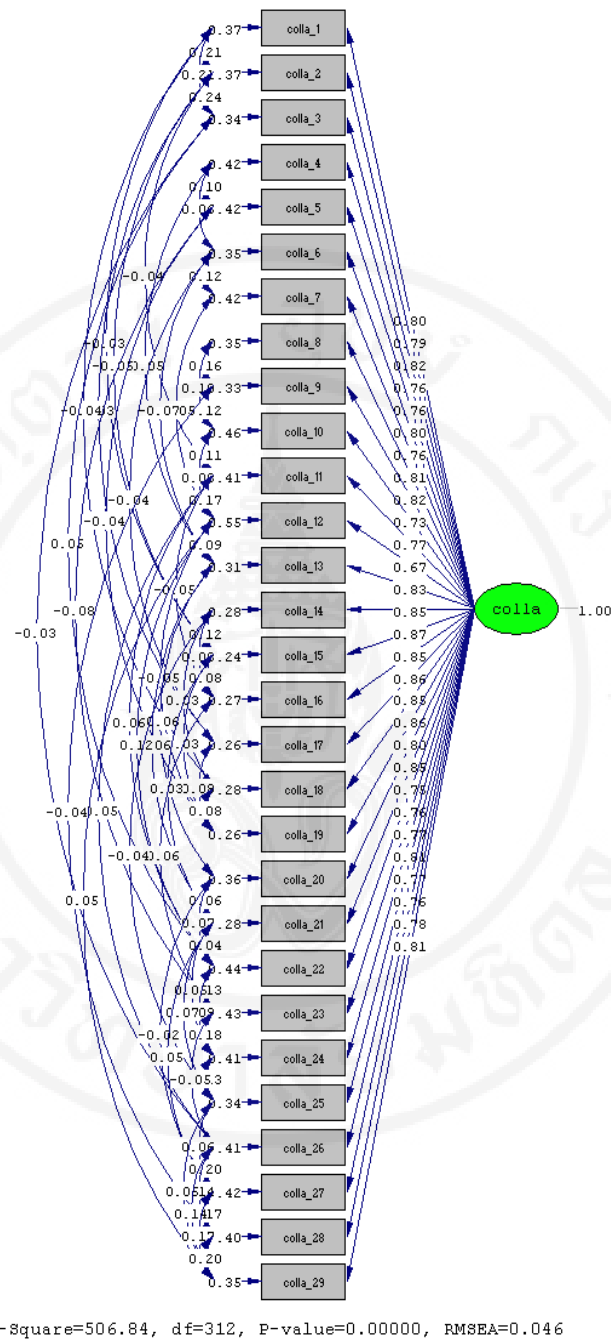


Figure 4.1 Confirm factor analysis results for the measurement scales of variables for the collaboration between local administrative organizations in early childhood educational management in child development centers

Table 4.5 and Figure 4.1 showed the Standardized Factor Loading of all 29 indicators for the measurement scales of collaboration between local administrative organizations in early childhood educational management of child development

centers (colla). It was found that the Standardized Solution (λ) of every indicator was in the range of .73-.87 at the .05 level of significance. It was found that Indicator 15. Local administrative organizations who are members jointly improve and develop the experience provision plan (colla 15) acquired the highest Standardized Factor Loading value (λ) (t-test was in the range of 12.96-18.88), which was at the acceptable level. The Variance of Standard Error of each variable was in the range of .24 - .55. Every question was able to explain the variance of measurement scales of the collaboration between local administrative organizations in early childhood educational management of child development centers (colla) or it contained the reliability when considering R^2 at 56-74 percent, which was at the acceptable level. When considering the Composite Reliability, the Variance Extracted, $\rho_c = .98$ and Composite reliability, $\rho_v = .63$ (determined criteria were $\rho_c > .70$, $\rho_v > .50$). The data analysis results above showed that the measurement scales of the collaboration between local administrative organizations in early childhood educational management of child development centers (colla) had the Construct Validity at the good level.

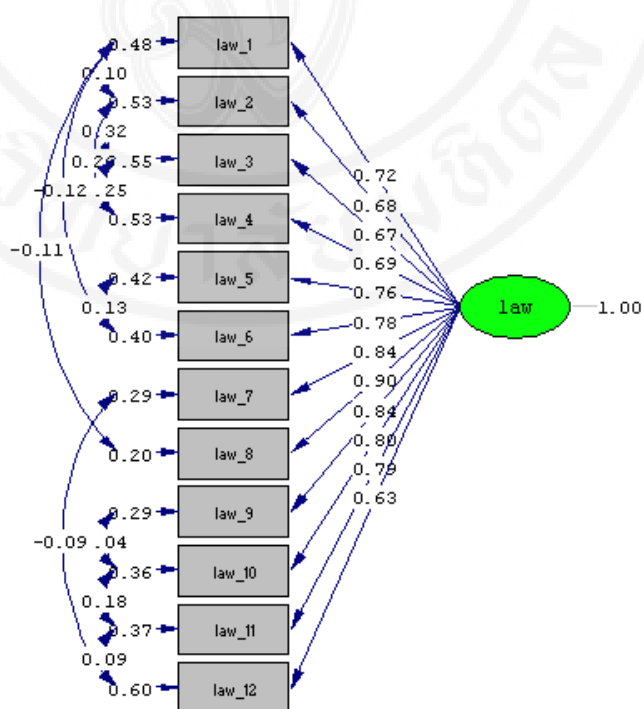
Table 4.6 Results of confirmatory factory analysis of the measurement model for the variable regarding law

Observed Variables (Questions)	Standardized Factor Loading (λ)	Variance of Standard Error (θ)	t	R^2
law_1	.72	.48	13.80	.52
law_2	.68	.53	12.91	.47
law_3	.67	.55	12.66	.45
law_4	.69	.53	13.05	.47
law_5	.76	.42	14.99	.58
law_6	.78	.40	15.33	.60
law_7	.84	.29	17.49	.71
law_8	.90	.20	19.28	.80
law_9	.84	.29	17.40	.71

Table 4.6 Results of confirmatory factory analysis of the measurement model for the variable regarding law (cont.)

ObservedVariables (Questions)	Standardized Factor Loading (λ)	Variance of Standard Error (θ)	t	R ²
law_10	.80	.36	16.13	.64
law_11	.79	.37	15.95	.63
law_12	.63	.60	11.63	.40

$\chi^2=60.21$, df= 43, p-value = .04243; Relative $\chi^2 = 1.40$; GFI = .97 ; AGFI = .94;
 RMR = .018; SRMR= .022; RMSEA = .037; P-Value for Test of Close Fit = .82;
 NFI = .989; IFI= 1.00; CFI = 1.00; CN = 315.09
 Composite reliability, $\rho_v = .58$



Chi-Square=60.21, df=43, P-value=0.04243, RMSEA=0.037

Figure 4.2 Results of confirmatory factory analysis of the measurement model for the variable regarding law

Table 4.6 and Figure 4.2 showed the Standardized Factor Loading of all 12 indicators for the measurement scales of law (law). It was found that the Standardized Solution (λ) of every indicator was in the range of .63-.90 at the .05 level of significance. It was found that Indicator 8. Local administrative organizations who are members jointly set up the development plan in early childhood educational management (law_8) acquired the highest Standardized Factor Loading value (λ) (t-test was in the range of 11.63-19.28), which was at the acceptable level. The Variance of Standard Error (θ) of each variable was in the range of .20 - .60. Every question was able to explain the variance of measurement scales of the law (law) or it contained the reliability when considering R^2 at 40 - 80 percent, which was at the acceptable level. When considering the Composite Reliability, the Variance Extracted, $\rho_c = .92$ and Composite reliability, $\rho_v = .58$ (determined criteria were $\rho_c > .70$, $\rho_v > .50$). The data analysis results above showed that the measurement scales of the law (law) had the Construct Validity at the good level.

Table 4.7 Results of confirmatory factory analysis of the measurement model for the variable regarding local administrative organization administrators (n = 298)

Observed Variables (Questions)	Standardized Factor Loading (λ)	Variance of Standard Error (θ)	t	R^2
local_1	.78	.39	15.58	.61
local_2	.84	.30	17.28	.70
local_3	.89	.21	18.97	.79
local_4	.92	.16	20.15	.84
local_5	.93	.14	20.62	.86
local_6	.85	.28	17.59	.72
local_7	.81	.34	16.46	.66
local_8	.80	.37	15.99	.63
$\chi^2=17.51$, df= 14, p-value = .22989; Relative $\chi^2 = 1.25$; GFI = .98 ; AGFI = .96; RMR = .008; SRMR= .010; RMSEA = .030; P-Value for Test of Close Fit = .77; NFI = 1.00; IFI= 1.00; CFI = 1.00; CN = 468.39 Composite reliability, $\rho_v = .72$; Variance Extracted, $\rho_c = .95$				

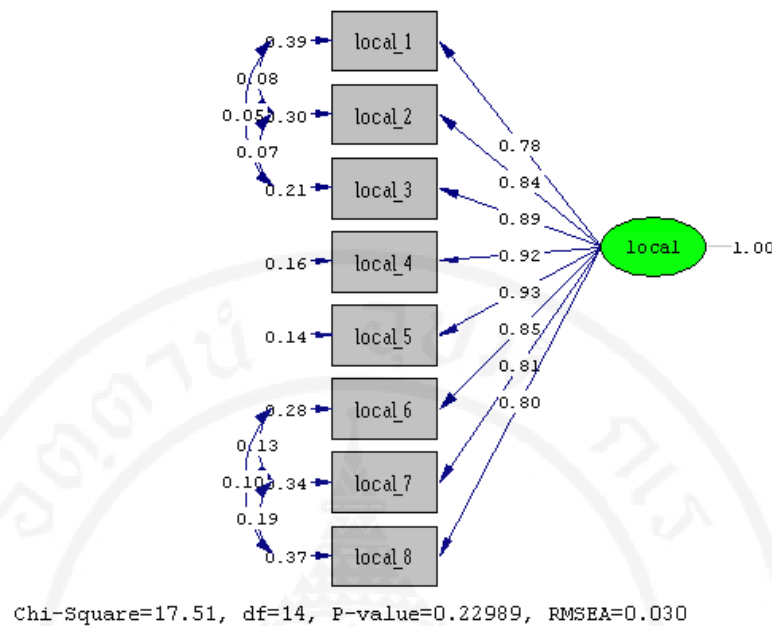


Figure 4.3 Results of confirmatory factory analysis of the measurement model for the variable regarding local administrative organization administrators

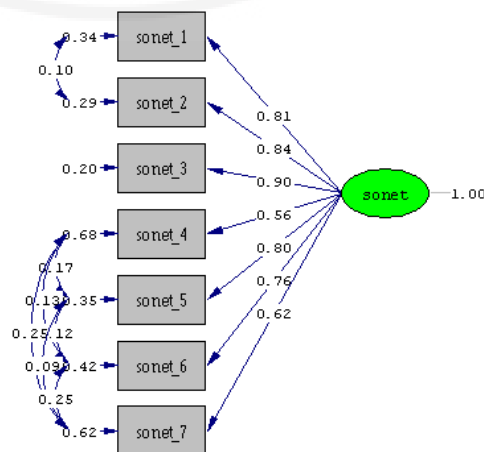
Table 4.7 and Figure 4.3 showed the Standardized Factor Loading of all 8 indicators for the measurement scales of local administrative organization administrators (local). It was found that the Standardized Solution (λ) of every indicator was in the range of .78 - .92 at the .05 level of significance. It was found that Indicator 4. Administrators/representatives of the Local Administrative Organization have skills and abilities in handling conflicts from the collaboration with other local administrative organizations about the interests to be received from the collaboration in early childhood educational management (local_4) acquired the highest Standardized Factor Loading value (λ) (t-test was in the range of 15.58 – 20.62), which was at the acceptable level. The Variance of Standard Error (θ) of each variable was in the range of .14 - .39. Every question was able to explain the variance of measurement scales of local administrative organization administrators (local) or it contained the reliability when considering R^2 at 61 - 84 percent, which was at the acceptable level. When considering the Composite Reliability, the Variance Extracted, $\rho_c = .95$ and Composite reliability, $\rho_v = .72$ (determined criteria were $\rho_c > .70$, $\rho_v > .50$). The data analysis results above showed that the measurement scales of the local

administrative organizations administrators (local) had the Construct Validity at the good level.

Table 4.8 Results of confirmatory factory analysis of the measurement model for the variable regarding social network (n = 298)

ObservedVariables (Questions)	Standardized Factor Loading (λ)	Variance of Standard Error (θ)	t	R ²
sonet_1	.81	.34	16.00	.66
sonet_2	.84	.29	16.85	.71
sonet_3	.90	.20	18.67	.80
sonet_4	.56	.68	9.83	.32
sonet_5	.80	.35	15.84	.65
sonet_6	.76	.42	14.63	.58
sonet_7	.62	.62	11.07	.38

$\chi^2=7.56$, df= 7, p-value = .37301; Relative $\chi^2 = 1.08$; GFI = .99 ; AGFI = .97;
 RMR = .009; SRMR= .012; RMSEA = .017; P-Value for Test of Close Fit = .76;
 NFI = 1.00; IFI= 1.00; CFI = 1.00; CN = 687.59
 Composite reliability, $\rho_v = .58$; Variance Extracted, $\rho_c = .90$



Chi-Square=7.56, df=7, P-value=0.37301, RMSEA=0.017

Figure 4.4 Results of confirmatory factory analysis of the measurement model for the variable regarding social network

Table 4.8 and Figure 4.4 showed the Standardized Factor Loading of all 7 indicators for the measurement scales of the social network (sonet). It was found that the Standardized Solution (λ) of every indicator was in the range of .62 - .90 at the .05 level of significance. It was found that Indicator 3. The National Municipal League of Thailand is a channel allowing its members' talks that provoke the negotiations for the collaboration between local administrative organizations in early childhood educational management (sonet_3) acquired the highest Standardized Factor Loading value (λ) (t-test was in the range of 9.83 – 18.67), which was at the acceptable level. The Variance of Standard Error (θ) of each variable was in the range of .20 - .68. Every question was able to explain the variance of measurement scales of the social network (sonet) or it contained the reliability when considering R^2 at 32 - 80 percent, which was at the acceptable level. When considering the Composite Reliability, the Variance Extracted, $\rho_c = .90$ and Composite reliability, $\rho_v = .58$ (determined criteria were $\rho_c > .70$, $\rho_v > .50$). The data analysis results above showed that the measurement scales of the local administrative organization administrators (local) had the Construct Validity at the good level.

Table 4.9 Results of confirmatory factory analysis of the measurement model for the variable regarding limitations of finance and budget (n = 298)

Observed Variables (Questions)	Standardized Factor Loading (λ)	Variance of Standard Error (θ)	t	R^2
fina_1	.77	.41	15.01	.59
fina_2	.89	.21	18.63	.79
fina_3	.92	.16	19.66	.84
fina_4	.85	.28	17.03	.72
fina_5	.77	.40	15.13	.60
$\chi^2=2.18$, df= 2, p-value = .33603 ; Relative $\chi^2 = 1.09$; GFI = 1.00 ; AGFI = .98; RMR = .005; SRMR= .006; RMSEA = .018; P-Value for Test of Close Fit = .56; NFI = 1.00; IFI= 1.00; CFI = 1.00; CN = 1181.56 Composite reliability, $\rho_v = .70$ Variance Extracted, $\rho_c = .92$				

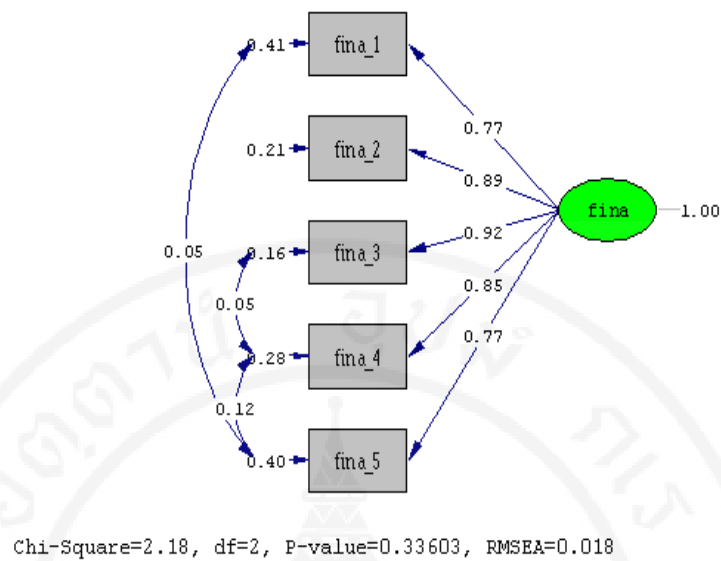


Figure 4.5 Results of confirmatory factory analysis of the measurement model for the variable regarding limitations of finance and budget

Table 4.9 and Figure 4.5 showed the Standardized Factor Loading of all 5 indicators for the measurement scales of limitations of finance and budget (fina). It was found that the Standardized Solution (λ) of every indicator was in the range of .85 - .92 at the .05 level of significance. It was found that Indicator 3. The collaboration with other local administrative organizations in early childhood educational management helps reduce the public debts (fina_3) acquired the highest Standardized Factor Loading value (λ) (t-test was in the range of 15.01 – 19.66), which was at the acceptable level. The Variance of Standard Error (θ) of each variable was in the range of .16 - .41. Every question was able to explain the variance of measurement scales of limitations of finance and budget (fina) or it contained the reliability when considering R^2 at 59 - 84 percent, which was at the acceptable level. When considering the Composite Reliability, the Variance Extracted, $\rho_c = .92$ and Composite reliability, $\rho_v = .70$ (determined criteria were $\rho_c > .70$, $\rho_v > .50$). The data analysis results above showed that the measurement scales of the administrators of local administrative organizations (local) had the Construct Validity at the good level.

Table 4.10 Results of confirmatory factory analysis of the measurement model for the variable regarding insufficiency of management resources (n = 298)

Observed Variables (Questions)	Standardized Factor Loading (λ)	Variance of Standard Error (θ)	t	R ²
Insuf_1	1.00	.00	23.92	1.00
Insuf_2	.81	.34	16.76	.66

$\chi^2 = .00$, df = 0, p-value = 1.00 ; Relative $\chi^2 = .00$; RMSEA = .00
 (Just Identification Model)
 Composite reliability, $\rho_v = .82$
 Variance Extracted, $\rho_c = .90$

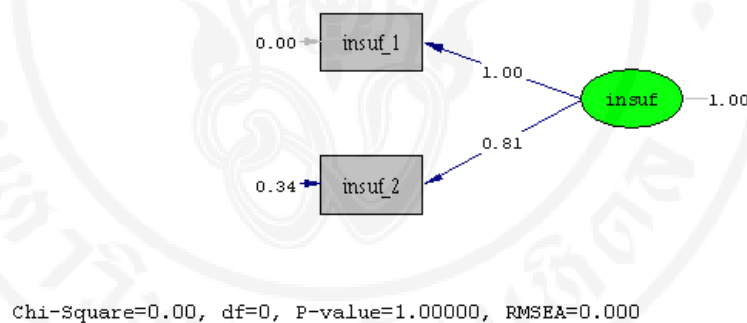


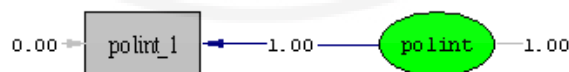
Figure 4.6 results of confirmatory factory analysis of the measurement model for the variable regarding insufficiency of management resources

Table 4.10 and Figure 4.6 showed the Standardized Factor Loading of all 2 indicators for the measurement scales of the insufficiency of management resources (insuf). It was found that the Standardized Solution (λ) of every indicator was in the range of .81 – 1.00 at the .05 level of significance. It was found that Indicator 1. The Local Administrative Organization must seek for the collaboration with other local administrative organizations to provide the materials sufficiently (insuf_1) acquired the highest Standardized Factor Loading value (λ) (t-test was in the range of 16.76 – 23.92, which was at the acceptable level. The Variance of Standard Error (θ) of each variable was in the range of .00 - .34. Every question was able to explain the variance

of measurement scales of the insufficiency of management resources (insuf) or it contained the reliability when considering R^2 at 66 – 100 percent, which was at the acceptable level. When considering the Composite Reliability, the Variance Extracted, $\rho_c = .90$ and Composite reliability, $\rho_v = .82$ (determined criteria were $\rho_c > .70$, $\rho_v > .50$). The data analysis results above showed that the measurement scales of the insufficiency of management resources (insuf) had the Construct Validity at the good level.

Table 4.11 Results of confirmatory factory analysis of the measurement model for the variable regarding political interests (n = 298)

Observed Variables (Questions)	Standardized Factor Loading (λ)	Variance of Standard Error (θ)	t	R^2
	1.00	..00	23.92	1.00
$\chi^2 = .00$, df = 0, p-value = 1.00 ; Relative $\chi^2 = .00$; RMSEA = .00 (Just Identification Model) Composite reliability, $\rho_v = 1.00$ Variance Extracted, $\rho_c = 1.00$				



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

Figure 4.7 Results of confirmatory factory analysis of the measurement model for the variable regarding political interests

Table 4.11 and Figure 4.7 showed the Standardized Factor Loading of 1 indicator for the measurement scales of political interests (polint). It was found that the Standardized Solution (λ) of every indicator was equal to 1.00 at the .05 level of

significance (t-test was equal to 23.92. The Variance of Standard Error (θ) of each variable was at .00. The question was able to explain the variance of measurement scales of political interests (polint) or it contained the reliability when considering R^2 at 100 percent. When considering the Composite Reliability, the Variance Extracted, $\rho_c = 1.00$ and Composite reliability, $\rho_v = 1.00$ (determined criteria were $\rho_c > .70$, $\rho_v > .50$). The data analysis results above showed that the measurement scales of political interests (polint) had the Construct Validity at the good level.

Table 4.12 Results of confirmatory factory analysis of the measurement model for the variable regarding political interests (n = 298)

Observed Variables (Questions)	Standardized Factor Loading (λ)	Variance of Standard Error (θ)	t	R^2
tran_1	.77	.41	15.09	.59
tran_2	.78	.40	14.57	.60
tran_3	.74	.45	14.29	.55
tran_4	.76	.43	13.86	.57
tran_5	.74	.45	14.15	.55
tran_6	.71	.49	12.96	.51
tran_7	.52	.73	8.96	.27
tran_8	.54	.71	9.47	.29
tran_9	.52	.73	9.25	.27

$\chi^2=22.25$, df= 14, p-value = .07358; Relative $\chi^2 = 1.58$; GFI = .98 ; AGFI = .95;
 RMR = .028; SRMR= .039; RMSEA = .045; P-Value for Test of Close Fit = .56;
 NFI = .99; IFI= .99; CFI = 1.00; CN = 388.50
 Composite reliability, $\rho_v = .46$
 Variance Extracted, $\rho_c = .88$

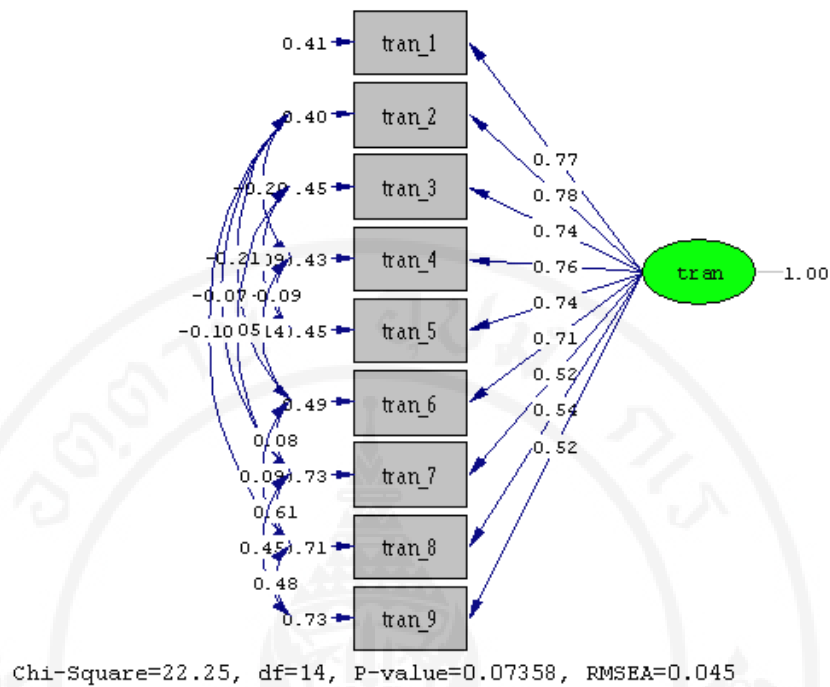


Figure 4.8: Results of confirmatory factory analysis of the measurement model for the variable regarding transaction cost

Table 4.12 and Figure 4.6 showed the Standardized Factor Loading of all 9 indicators for the measurement scales of the transaction cost (tran). It was found that the Standardized Solution (λ) of every indicator was in the range of .52 – .78 at the .05 level of significance. It was found that Indicator 2. The collaboration with other local administrative organizations in early childhood educational management takes effect to duties and responsibilities of the officers (tran_2) acquired the highest Standardized Factor Loading value (λ) (t-test was in the range of 8.96 – 15.09, which was at the acceptable level. The Variance of Standard Error (θ) of each variable was in the range of .40 - .73. Every question was able to explain the variance of measurement scales of the transaction cost (tran) or it contained the reliability when considering R^2 at 27 - 60 percent, which was at the acceptable level. When considering the Composite Reliability, the Variance Extracted, $\rho_c = .88$ and Composite reliability, $\rho_v = .46$ (determined criteria were $\rho_c > .70$, $\rho_v > .50$). The data analysis results above showed that the measurement scales of the transaction cost (tran) had the Construct Validity at the good level.

4.3.4 Results of testing the consistence of Path Analysis and the empirical data based on the research hypotheses

LISREL program was used for data analysis. After testing the consistency of the Hypothesis Model with the empirical data by comparing the statistic results of the Path Analysis based on the Hypothesis Model with the standard criteria as advised by Joreskog and Sorbom (1996: 121-122), it was found that some statistics of the Model have not yet met the standard criteria determined, that is, Relative χ^2 (χ^2/df) was equal to 4.55, which was over 2.00, so it deemed that it did not meet the determined criteria; Goodness of Fit Index (GFI) was equal to .93; it was over .90 so it deemed it met the determined criteria; and Adjusted Goodness of Fit Index (AGFI) was equal to .70. Because it was less than .90, it deemed that it did not meet the determined criteria. Root Mean Squared Residuals (RMR) was equal to .038, which was less than .05 so it deemed that it met the determined criteria. Standardized Root Mean Squared Residual (SRMR) was equal to .068, which was higher than .05 so it deemed that it did not meet the determined criteria. Root Mean Squared Error of Approximation (RMSEA) was equal to .182, which was higher than .05 so it deemed that it did not meet the determined criteria. P-Value for Test of Close Fit was equal to .00, which was less than .05 so it deemed that it did not meet the determined criteria. Normed Fit Index (NFI) was equal to .96, which was higher than .90 so it deemed that it met the determined criteria. Incremental Fit Index (IFI) was equal to .89, which was less than .90 so it deemed that it did not meet the determined criteria. Comparative Fit Index (CFI) was equal to .97, which was higher than .90 so it deemed that it met the determined criteria. Critical N (CN) was equal to 532.19, which was higher than 200.00.

When the statistic test of the Path Analysis according to the Hypothesis Model was not relevant to the empirical data, the estimation of Effect Coefficient in the Model was unacceptable, the Hypothesis Model was revised by changing the relationship path of variables in the Model and by considering the theoretical probability. Such revision was as follows:

To delete the relationship path of variables between

1. Delete the factor regarding the limitations of finance and budget affecting the factor regarding the administrators of local administrative organizations.
2. Delete the factor regarding the transaction cost affecting the collaboration between local administrative organizations in early childhood educational management of child development centers.

To add the relationship path of variables between

1. Add the factor regarding law to affect the factor regarding the local administrative organization administrators.
2. Add the factor regarding transaction cost to affect the factor regarding the local administrative organization administrators.
3. Add the factor regarding the limitations of finance and budget to affect the factor regarding the collaboration between local administrative organizations in early childhood educational management of child development centers.

The Researcher decided to delete the factor regarding the limitations of finance and budget affecting the factor regarding the local administrative organization administrators, and to add the relationship path by allowing the factor regarding the limitations of finance and budget to affect the factor regarding the collaboration between local administrative organizations in early childhood educational management of child development centers because the Researcher found the research conducted by Morgan &Hirlinger (1991) that the limitations of finance did not take any effect to the decision on the formation of collaboration. In addition, Blomquist& Parks, Grant (1964), Gustely (1977), Miller et al. (1995), and Roger &Ripsey (1974) found that the collaboration between local administrative organizations did not heighten the efficiency.

However, the studies conducted by Morgan &Hirlinger (1991), and Marc Holzer&Hedy Isaacs (2002) supported that the limitations of finance and budget affected the collaboration between local administrative organizations because it helped save the budget, reduce the cost, and increase the level of public service (Economy of Scale).

Moreover, the Researcher decided to delete the factor the transaction cost affecting the collaboration between local administrative organizations in early

childhood educational management of child development centers, and to add the relationship path by allowing the factor regarding transaction cost to affect the factor regarding the local administrative organization administrators because, according to the Researcher's analysis, the effect of the transaction cost to the collaboration between local administrative organizations depended on the administrators' decision.

Like Feiock (2007, 2010) and Zhang (2010) who found that the Public Manager in the council-manager form decided to form the collaboration with other local administrative organizations because they had concerns about the management efficiency and economy, which may be against the attitude of local employees who rejected such collaboration because they wanted to keep their positions and duties only. Similarly, Ian Jayson R. Hecita (2012) found that the transaction cost occurred when the administrators of local administrative organizations decided to form the collaboration with other local administrative organizations, but such collaboration was contrary to the local people's opinion.

In addition, the Researcher decided to add the relationship path by allowing the factor regarding law to affecting the social network factor because laws enable various organizations to build their network for any joint undertaking. Like a concept of Hjern& Porter, 1981) and Austrom (1990) who said that, frequently, the player in the network still existed in the government structure that had to undertake according to the power and duties prescribed by law. For a formal undertaking by connecting with other external organizations, preparing such organizations to work with other organizations needed certain powerful policy makers in enact the law to serve the network-based co-working.

After revising such relationship path, it was found that the Adjusted Model was consistent with the empirical data. All statistics of the Model met the determined criteria, that is, Relative $\chi^2(\chi^2/df)$ was equal to 2.64, which was less than 5 so it deemed that it met the determined criteria; Goodness of Fit Index(GFI) was equal to .98, which was higher than .90 so it deemed that it met the determined criteria; Adjusted Goodness of Fit Index (AGFI) was equal to .92, which was higher than .90 so it deemed that it met the determined criteria; Root Mean Squared Residuals (RMR) was equal to .014, which was less than .05 so it deemed that it met the determined criteria; Standardized Root Mean Squared Residual(SRMR) was equal to .023, which was less

than .05 so it deemed that it met the determined criteria; Root Mean Squared Error of Approximation (RMSEA) was equal to .075, which was less than .05 so it deemed that it met the determined criteria; P-Value for Test of Close Fit was equal to .13, which was higher than .05 so it deemed that it met the determined criteria; Normed Fit Index (NFI) was equal to .99, which was higher than .90 so it deemed that it met the determined criteria; Incremental Fit Index (IFI) was equal to 1.00, which was higher than .90 so it deemed that it met the determined criteria; Comparative Fit Index (CFI) was equal to 1.00, which was higher than .90 so it deemed that it met the determined criteria; and Critical N (CN) was equal to 279.64, which was higher than 200.00 so it deemed that it met the determined criteria.

From the above statistical index, it could be concluded that such adjusted relationship path was more consistent with the empirical data than the Hypothesis Model. As a result, the Researcher felt confident in the estimation of Effect Coefficient in the adjusted Model in order to examine the direct effect, indirect effect and total effect of variables affecting the collaboration between local administrative organizations in early childhood educational management of child development centers as shown in Figure 4.9 and Table 4.13.

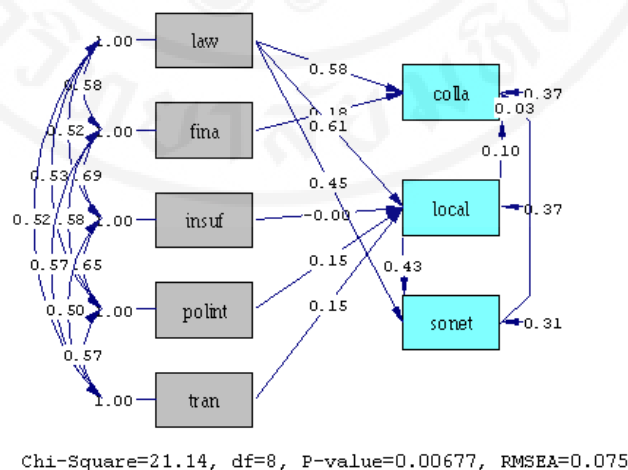


Figure 4.9 Hypothesized path analysis model as revised and consistent with the empirical data

Table 4.13 Standard scores of analysis results regarding direct effect, indirect effect and total effect of the hypothesis model as revised and consistent with the empirical data (n = 298)

Variable	R ²	Causal Factors							
	According to	Relation	Law	fina	insuf	Polint	tran	local	Sonet
	Structural	ships							
Equation									
colla	.63	Direct	.58*	.18*				.10	.03
		Indirect	.08		.00	.02	.02	.01	
		Total	.66*	.18*	.00	.02	.02	.11*	.03
		Direct	.61*		.00	.15*	.15*		
local	.63	Indirect							
		Total	.61*		.00	.15*	.15*		
		Direct	.45*					.43*	
		Indirect	.26*		.00	.07*	.06*		
sonet	.69	Total	.71*		.00	.07*	.06*	.43*	
$\chi^2=21.14$, df= 8, p-value = .00667; Relative χ^2 = 2.64; GFI = .98 ; AGFI = .92; RMR = .014; SRMR= .0123; RMSEA = .075; P-Value for Test of Close Fit = .13; NFI = .99; IFI= 1.00; CFI = 1.00; CN = 279.64									

***Significant at .05 and t-test was not in the range of -1.96 – 1.96. This meant that the Effect Coefficient was significant at .05.**

Table 4.13 showed that the Adjusted Model was consistent with the empirical data by considering the following statistical index: $\chi^2=21.14$, df= 8, p-value = .00667; Relative χ^2 = 2.64; GFI = .98; AGFI = .92; RMR = .014; SRMR= .0123; RMSEA = .075; P-Value for Test of Close Fit = .13; NFI = .99; IFI= 1.00; CFI = 1.00; CN = 279.64. From the parameter estimation in the Model, it was found that:

1. The factors with direct effect to the collaboration between local administrative organizations in early childhood educational management of child development centers included law (.58) and limitations of finance and budget (.15) at the .05 level of significance. However, the factors regarding administrators of local

administrative organizations, and social network did not take the direct effect to the collaboration between local administrative organizations in early childhood educational management of child development centers.

2. The factors regarding law, insufficiency of management resources, political interests, transaction cost, administrators of local administrative organizations, and social network did not take direct effect to the collaboration between local administrative organizations in early childhood educational management of child development centers.

3. The factors taking total effect to the collaboration between local administrative organizations in early childhood educational management of child development centers included law (.66), limitations of finance and budget (.18), and administrators of local administrative organizations (.11) at the 0.05 level of significance. However, the variables regarding the insufficiency of management resources, political interests, and transaction cost did not take any total effect.

4. The factors regarding law, limitations of finance and budget, insufficiency of management resources, political interests, transaction cost, administrators of local administrative organizations, and social network could mutually predict the collaboration between local administrative organizations in early childhood educational management of child development centers at 63%.

5. The factors taking direct effect to the factor regarding administrators of local administrative organizations were law (.61), political interests (.15), and transaction cost (.15) at the .05 level of significance. However, the factor regarding the insufficiency of management resources did not take direct effect to the collaboration between local administrative organizations in early childhood educational management of child development centers.

6. The factor taking total effect to the factor regarding administrators of local administrative organizations were law (.61), political interests (.15), and transaction cost (.15) at the .05 level of significance. However, the factor regarding the insufficiency of management resources did not take direct effect to the collaboration between local administrative organizations in early childhood educational management of child development centers.

7. The factors regarding law, insufficiency of management resources, political interests, and transaction cost could mutually predict the factor regarding administrators of local administrative organizations at 63%.

8. The factors taking direct effect to the factor regarding the social network were law (.45) and administrators of local administrative organizations (.13) at the .05 level of significance.

9. The factors taking indirect effect to the factor regarding the social network were law (.26), political interests (.07), and transaction cost (.16) at the .05 level of significance. However, the factor regarding the insufficiency of management resources did not take any indirect effect.

10. The factors taking total effect to the factor regarding the social network were law (.71), political interests (.07), transaction cost (.06), and administrators of local administrative organizations (.43) at the .05 level of significance. However, the factor regarding the insufficiency of management resources did not take any total effect.

11. The factors regarding law, political interests, transaction cost, and administrators of local administrative organizations could predict the factor regarding the social network at 69%.

The Adjusted Model, which was consistent with the empirical data was presented in the simple model as follows:

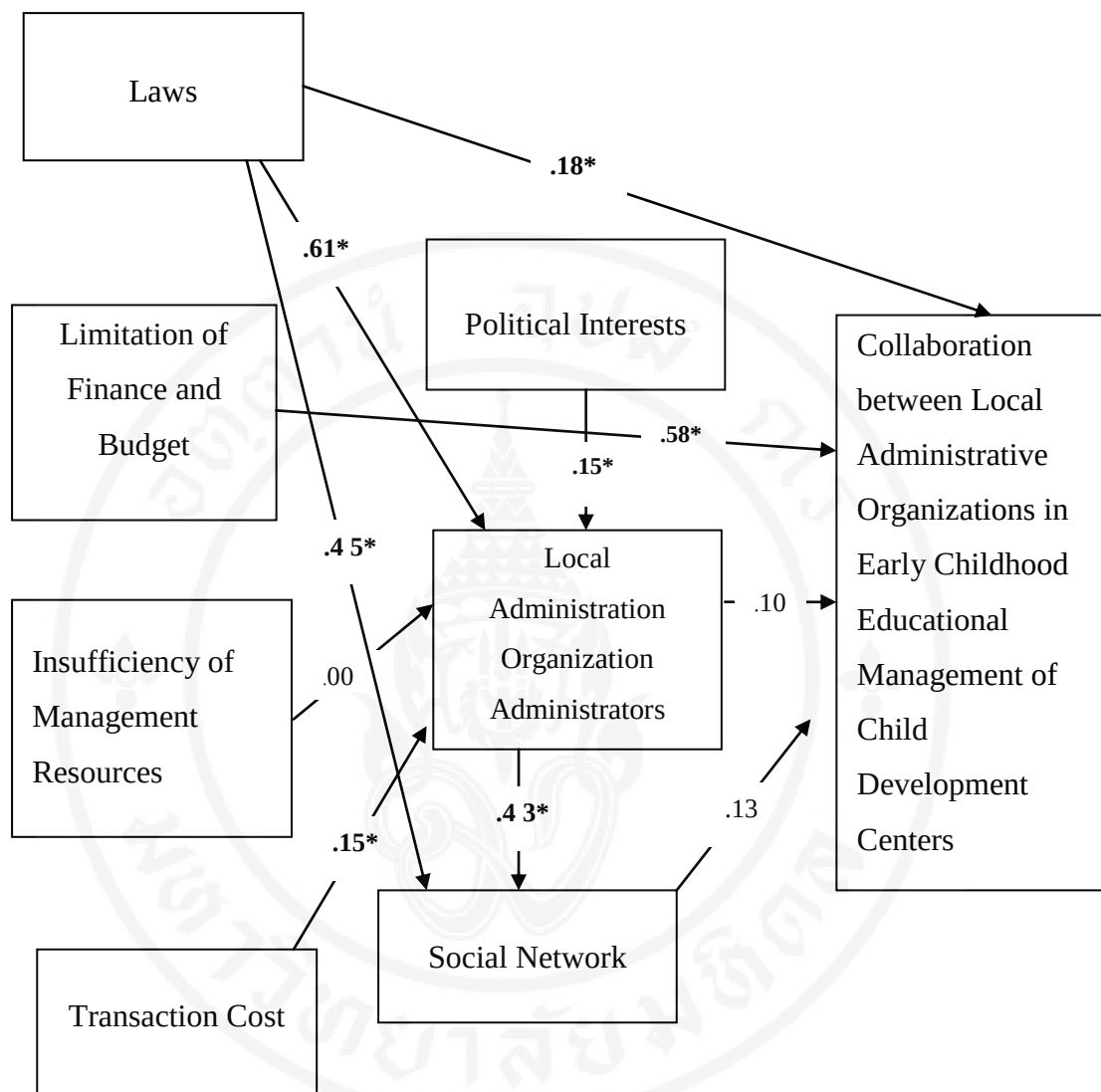


Figure 4.10 Hypothesized path analysis model as revised and consistent with the empirical data

CHAPTER V

DISCUSSION

This research was conducted to: 1) study the collaboration between local administrative organizations in the early childhood educational management of child development centers; 2) to study the consistency between the causal relationships of factors affecting the collaboration between local administrative organizations in the early childhood educational management of child development centers and the empirical data; and 3) study the causal relationships of factors taking direct and indirect effect to the collaboration between local administrative organizations in the early childhood educational management of child development centers. The data analysis results were discussed pursuant to the research objectives as follows:

5.1 Collaboration between local administrative organizations in early childhood educational management of child development centers

The sample subjects strongly agreed with the collaboration with local administrative organizations in early childhood educational management of child development centers (mean = 3.50, Standard Deviation = .77). This meant that the sample group viewed that the steps and scope of building the collaboration between local administrative organizations in the early childhood educational management of child development centers were appropriate and possible in practice. The sample group also viewed that the collaboration between local administrative organizations in the early childhood educational management of child development centers could enhance the efficient management of early childhood education because it could solve the limitations of finance, resources and personnel in the early childhood educational management of those local administrative organizations, and it could improve the quality of the early childhood educational management of child development centers provided by those local administrative organizations so the parents received the good

public service in respect with the early childhood education from those local administrative organizations. This result was consistent with the research mutually conducted by Thailand and Japan regarding the Competency Development of Local Administrative Organizations (Noranit Sethabutr et al. and Michio Muramatsu et al. (2002), which mentioned about the benefits of the collaboration between local administrative organizations in the provision of public services that:

- 1) Collaboration between local administrative organizations in the provision of public services made the problem solutions more efficient.
- 2) Provision of public services would be more efficient because the collaboration enabled the local organizations to have more autonomy and efficiency to manage and carry out various local activities, and to respond to local people's demands wider.
- 3) Collaboration in the local administration caused more saving because, under such collaboration, those local organizations would share the expenses and investment sum. As a result, the service fees collected from the public would be cheaper than the service provided by a local administrative organization.

When considering first 5 issues strongly agreed, Item 26. Local administrative organizations who are members jointly promote and encourage the guardians, communities, private sector and government entities to be involved in developing the personnel of child development centers of such members, was most agreed (mean = 3.65, Standard Deviation = .87), followed by Item 27. Local administrative organizations who are members jointly promote and encourage the guardians, communities, private sector and government entities to be involved in creating the relationship with the communities where the child development centers of such members are located, (mean = 3.65, Standard Deviation = .88); Item 28. Local administrative organizations who are members jointly develop child develop centers of such members to be the learning sources and service centers for the communities (mean = 3.61, Standard Deviation = .91); Item 29. Local administrative organizations who are members jointly created the collaboration network with the guardians, communities, private sector and government entities in early childhood educational management of child development centers of such members (mean = 3.60, Standard Deviation = .86); and Item 25. Local administrative organizations who are members

jointly promote and encourage the guardians, communities, private sector and government entities to be involved in providing the learning experience to child development centers of such members (mean = 3.60, Standard Deviation = .96).

From the sample group's opinions stated above, they agreed that the collaboration between local administrative organizations should be most undertaken. Such joint undertaking should be relevant to the standards of providing education for child development centers by Bureau of Local Educational Development and Coordination, Department of Local Administration (2010) in Standard 5 regarding the involvement and supports by every sector, which determines that the development of child development centers by local administrative organizations must concern about the involvement of all sectors in the society to be in compliance with Section 29 of the National Education Act, B.E. 2542 and its Amendment, B.E. 2545 prescribes that the educational institutions in co-operation with individuals, families, communities, community organizations, local administration organizations, private persons, private organizations, professional bodies, religious institutions, enterprises, and other social institutions shall contribute to strengthening the communities by encouraging learning in the communities themselves. Thus, the communities will be capable of providing education and training; searching for knowledge, data, and information; and be able to benefit from local wisdom and other sources of learning for community development in keeping with their requirements and needs; and identification of ways of promoting exchanges of development experience among communities. This is to use the social capital in the local administrative organizations for the best benefit for the development of child development centers whereas individuals, families, communities, local administration organizations, private persons, private organizations, educational institutes and religious institutions could be involved in the operations of child development centers by giving advice and academic supports in part of building, budget and personnel development, etc.

When considering the items with moderate means, they included Item 17. Local administrative organizations who are members exchange with each other the supervision in early childhood educational management of child development centers (mean = 3.39, Standard Deviation = 1.00); Item 22. Local administrative organizations who are members share the buildings used to arrange some activities of child

development centers (mean = 3.32, Standard Deviation = 1.01); Item 20. Local administrative organizations who are members promote and share the class research together (mean = 3.28, Standard Deviation = .99); and Item 12. Local administrative organizations who are members exchange the child teachers and assistant child teachers with each other (mean = 3.25, Standard Deviation = 1.10).

From the sample group's opinions mentioned above, the occurrence of such collaboration was more difficult than the building of network cooperation between a local administrative organization with parents, communities, private sector and government entities in the provision of early childhood education of child development centers, which is more appropriate and possible, because it deems an important mission to be completed by any local administrative organization as prescribed by the National Education Act, B.E. 2542, and standards of the educational provision by child development centers determined by the Bureau of Local Educational Development and Coordination, Department of Local Administration under the supervision of the Department of Local Administration pursuant to the reasons stated above.

5.2 Consistency of the path analysis for the causal relationship affecting the collaboration between local administrative organizations in early childhood educational management of child development centers and the empirical data

The LISREL program was used for data analysis. After testing the consistency of the Hypothesis Model with the empirical data, it was found that some statistics of the Model have not yet met the standard criteria determined. When the statistic test of the Path Analysis according to the Hypothesis Model was not relevant to the empirical data, the estimation of Effect Coefficient in the Model was unacceptable, the Hypothesis Model was revised by changing the relationship path of variables in the Model and by considering the theoretical probability as mentioned in Chapter 4. Such revision was as follows:

To delete the relationship path of variables between

1. Delete the factor of the limitations of finance and budget affecting the factor regarding the administrators of local administrative organizations.
2. Delete the factor of the transaction cost affecting the collaboration between local administrative organizations in early childhood educational management of child development centers.

To add the relationship path of variables between

1. Add the factor regarding law to affect the factor regarding the administrators of local administrative organizations.
2. Add the factor regarding transaction cost to affect the factor regarding the administrators of local administrative organizations.
3. Add the factor regarding the limitations of finance and budget to affect the factor regarding the collaboration between local administrative organizations in early childhood educational management of child development centers.

After revising such relationship path, it was found that the relationship of the Adjust Model was consistent with the empirical data. The Adjust Model taking the direct effect to the collaboration included the legal factor and the limitation of finance and budget factor only. The local administrative organization administrator factor and the social network factor did not take the direct effect to the collaboration between local administrative organizations in the provision of early childhood education of child development centers. Moreover, the legal factor, insufficiency of resource management factor, political interest factor, latent cost factor, local administrative organization administrator factor, and social network factor did not take the indirect effect to the collaboration between local administrative organizations in the provision of early childhood education of child development centers.

The above result was different from the research conducted by Wong, Press, Sumsion & Hard (2012) regarding the collaboration in the provision of early childhood education in Victoria, Australia by examining 10 projects involved by several agencies in the provision of early childhood education. The result showed the following important factors provoking the collaboration: 1) response to necessities; 2) leadership and communications; 3) reasonable agencies; and 4) structure and process.

The above research also presented the management model leading to the efficiency and proficiency of public services, which were different from those in Thailand. The foreign management models as mentioned in Chapter 2 stepped over the management model under the scope of power and duty of a single organization to the network-based management model. For example, Denver Early Childhood Council (2014) was the collaboration between Colorado State, Denver City, Denver County, which were some agencies responsible for children and family, schools and communities, and they joined hands to improve their child and family services. Various projects were merged for a joint management, and the Management Council was established. Its main strategies were to develop the personnel in charge of childcare, and support the budget and resources in the provision of early childhood education. In contrast, Thailand's local administrative organizations continued using the management model mainly based on their power and duties.

This may be the different contexts between foreign countries and Thailand, which took effect to the building of collaboration between such local administrative organizations in the provision of any particular service, especially in the provision of local education as mentioned in Agranof&Mcquire (2003). The Researcher had a viewpoint that the different contexts between Thailand and foreign countries resulted to the building of collaboration between local administrative organizations in the provision of public services, especially the provision of local education. According to Agranof&Mcquire (2003), they explained that the administrative structure of the country was an important factor provoking the collaboration. Herein, the administrative structure consisted of the administration levels, empowerment of duties and responsibilities for each administration level, scope and autonomy of a local administrative organization as well as number and size of municipalities. Next was the administration culture, which consisted of social value, norm, unofficial rules and tradition. These components not only reflected the administrative structure of that country, but indicated the relationship between the government and private sector as well as the relationship between government authorities (Loughlin& Peters, 1997; Hulst, 2000: 34-35; Loughlin, 2001; Visser, 2002).

In addition, the new public management was a concept favored by the western and northern Europe, which has been used as the strategy for the public

service management until it became the governments' management culture (Hood, 1995; Pollitt & Bouckaert, 2000) such as outsourcing, public-private network, and collaboration between local administrative organizations, etc. (Rodes, 1996; Stoker, 1998; Agranoff, 1998). The financial incentive also induced the collaboration between these local administrative organizations (Parrado, Diez, 2006: 8-13; UNDP 2006; 26-27, 29-32; Osterrieder et al., 2006: 31-32). For example, the central governments of France and the United Kingdom provided the financial support to the local governments by mean of the engagement agreement, etc.

For Thailand, although the Constitution of the Kingdom of Thailand prescribes the decentralization and autonomy of local administrative organizations whereas the laws prescribing the establishment of local administrative organizations in various forms prescribe the power and duties of these local administrative organizations, the Government, under the policy of decentralizing the power, duties and responsibilities to the localities, should promote and encourage them to be strong and to have the actual administration independence. However, up to now, Thailand's local organizations have not yet been able to manage their local activities completely because they relied on the finance and budget from the central government. Although the localities collected some taxes themselves, they were not sufficient to cover all expenses for the local management. The use of special budget for the local administrative organizations should be promoted so that they could join the activities together (Noranit Sethabutr et al. (2002).

Apart from relying on the finance allocated by the central government, the administration of local administrative organizations was traditional, which focused on power, control and unity. The local administrative organizations in Thailand are governed by the central and provincial authorities. Although the laws prescribe the decentralization and autonomy of management to these local administrative organizations, the central and provincial authorities continued exercising their power and influence to instruct and control the administration of these local administrative organizations. As a result, the decision on any local policies had to be approved or agreed by the central and provincial authorities until these local organizations had no autonomy. As mentioned in the study by Thanet Charoenmuang (2008) about one problem of Thailand's decentralization to local organizations that Thai local

organization had no autonomy because the central and provincial authorities preferred controlling to monitoring; thus, the local organizations encountered certain limitations on rules and regulations. For example, laws prescribed exactly the duties to be performed by a local organization and any actions beyond such duties would be prohibited. However, each local area had the different identity. To make decision on local projects had to be agreed or approved by the central or provincial authorities. Therefore, it was difficult for these local organizations to make decision on building any collaboration.

For the next issue is the different administration structure of local administrative organizations in Thailand and other countries. The administration structure of other countries is different and diverse. One favorite administration pattern is the city council-manager structure. By this structure, a local council engaged some professional managers for city management. Therefore, these professional managers had to prove themselves for further engagement by presenting good performance pursuant to the policy of that local council. These professional managers also had change of being engaged as managers by other larger local administrative organizations. Jung & Kim (Jung & Kim, 2009) studied the patterns and factors formulating inter-local cooperation in cities and counties of the United States of America. They found that the professional executives were more likely to build the cooperation than the outer cities as governed by the counties that were not managed by professional executives. Zimmerman (Zimmerman, 1973) found that the cities with council-manager management model would cooperate with other local areas in providing public services more than the cities with mayor-council management model. Morgan & Hirlinger (Morgan & Hirlinger, 1991) found that the local administration in the form of city-manager model was more likely to build more cooperation between local organizations.

At present, the local administrative organizations of Thailand are under the single structure or the council-mayor form. Under this administration structure the council members are directly elected by general people, which is the same to the election of the mayor. In any area where there is the severe political conflict or competition between local interest groups in order to control the management of that local agency or even the conflict of interest between the administration politicians and

opposition in the local council, these may make the collaboration between local administrative organizations difficult (Nornit Sethabutr et al. (2002).

The last issue is that other foreign countries usually used the network to build the mutual management of public services, which meant that they foresaw the benefits received in the form of network. Thurmier & Woord (Thurmier & Wood, 2002) stated that the interpersonal and social networks took the important role in creating the cooperation between local officers, which shall provoke the inter-local service delivery agreement, and sustain such cooperation. Feiock (Feiock, 2004) mentioned about the cooperation of local governments through some social networks, e.g. regional planning organization, which tended to build the cooperation in the inter-local service delivery because the administrators and officials would have interactions until they had trust and coordinated for providing public services.

However, the local administrative organizations of Thailand have not yet recognized the importance and benefits of creating the network, which shall lead to other collaboration for the development of public services. Most local administrative organizations formed the group to request for or negotiate with the government rather than to cooperate for the joint benefits. According to Thaitas Mala (2002) who stated that the Sub-district Administration Organization Association of Thailand (SAOA), the Provincial Administration Organization Council of Thailand (PAOC) and the National Municipal League of Thailand (NMT) usually formed the group to request for some political interests and budget allocation from the government. In addition, the social value of building the collaboration with other local organizations between Thai politicians and foreign ones is different. The foreign politicians thought that collaboration between local organizations could enhance the management improvement and local development while the local people obtained better public services. When the local people felt satisfied with the services, the popularity of these local politicians would be increasing, so they had chance to be re-elected as the administrators of these local administrative organizations. As stated in Bartle & Swayze (Bartle & Swayze, 1997) found that the local administrators focused on the cooperation due to political interests they would receive. When the local people wanted more public services, the local administrators or local council members would share the resources with other government agencies to provide the public services as

requested by local people without rising taxes or saving some budget by the way of cooperation. These are to gain the votes so that they will be re-elected. This is contrary to Thai local politicians who did not foresee the benefit of collaboration; they wanted to develop the local areas by themselves. As stated in NoranitSethabutr et al. (2002) that the acceptance of local politicians was an important factor because if the local politicians foresaw the benefit of collaboration between local administrative organizations and accepted it, the collaboration in the local management might occur.

According to the different contexts between Thailand and foreign countries, it may be concluded that the different administrative structure, collaboration promotion policy, organization management structure, New Public Management (NPM) and local politicians' social value to the political interests took effect to the causal factors of the collaboration between local administrative organizations in the management of any public service like this research in which the collaboration model between local administrative organizations in the early childhood educational management had to be adjusted to be consistent with the empirical data so that it was relevant to the Thai context.

5.3 Causal relationship of factors taking the direct effect and indirect effect to the collaboration between local administrative organizations in the early childhood educational management of child development centers

The Hypothesis Model as adjusted (Adjust Model) was consistent with the empirical data, and answered the research hypotheses as discussed below.

1) Law factor took the direct effect to the collaboration between local administrative organizations in early childhood educational management of child development centers with .58 at the .05 level of significance.

But, this factor did not take the indirect effect to the collaboration between local administrative organizations in early childhood educational management of child development centers.

The result of testing Hypothesis 1 could be explained that laws had to prescribe apparently that the administrators of local administrative organizations were

able to build the collaboration with other local administrative organizations in the provision of all educational levels. By relying on the decision of local administrative organizations' administrators without any clear legal details, these administrators of local administrative organizations might decide to or not to build the collaboration with other local administrative organizations. This result was consistent with Hulst, Van Monfort, Haveri, Airaksinen and Kelley (Hulst, R., Van Monfort A., Haveri, A., Airaksinen, J. & Kelley, J., 2009: 266-268) and Burns (Burns, 1994) who found that various constitutions prescribe the decentralization to local organizations, and promotes and empower collaboration between local organizations.

2) Local administrative organization administrator factor did not take the direct effect to the collaboration between local administrative organizations in early childhood educational management of child development centers.

The result of testing Hypothesis 2 could be explained that the occurrence of collaboration depended on the administrators of local administrative organizations, who had to gain knowledge and understanding about the collaboration and management of early childhood education. If the administrators of local administrative organizations had good knowledge and understanding about the collaboration in the provision of education, the tangible collaboration could occur. The above result was consistent with Surapee Akomkong (2007) who found that the administrators of local administrative organizations with knowledge, understanding and interest in education would provoke the collaboration between local administrative organizations in the provision of education while there should be other supporting factors, e.g. promotion and incentive policy about finance and budget.

3) Local administrative organization administrator factor did not take the indirect effect to the collaboration between local administrative organizations in early childhood educational management of child development centers through the social network factor.

The result of testing Hypothesis 3 could be explained that the social network could not induce the administrators of local administrative organizations to build their collaboration in early childhood educational management. This result was consistent with LeRoux, Brandenburger & Pandey (LeRoux, Brandenburger & Pandey, 2010: 274) who found that the membership in professional associations of

local administrative organizations did not result to the mutual collaboration in the provision of public services.

4) Limitations of finance and budget factor did not take the indirect effect to the collaboration between local administrative organizations in early childhood educational management of child development centers through local administrative organization administrator factor, but it took the direct effect to the collaboration between local administrative organizations in early childhood educational management with the Effect Coefficient at .15 at the .05 level of significance.

The result of testing Hypothesis 4 could be explained that the limitations of finance and budget led to the building of collaboration between local administrative organizations in early childhood educational management. This result was consistent with Morgan & Hirlinger (Morgan & Hirlinger, 1991) and Marc Holzer & Hedy (Holzer & Isaacs, 2002) who supported that the limitations of finance and budget took effect to the building of collaboration between local administrative organizations as it resulted to the budget saving, cost reduction and increased economy of scale.

For another hypothesis testing result that the limitations of finance and budget did not take the indirect effect to the collaboration between local administrative organizations in early childhood educational management of child development centers through local administrative organization administrator factor, it was consistent with Morgan & Hirlinger (Morgan & Hirlinger, 1991) that the limitations of finance and budget did not result to the decision-making to build the collaboration.

5) Insufficiency of management resource factor did not take the indirect effect to the collaboration between local administrative organizations in early childhood educational management through local administrative organization administrator factor.

The result of testing Hypothesis 5 could be explained that the collaboration between local administrative organizations in early childhood educational management did not add so many management resources that the early childhood educational management of child development centers became efficient. This result was consistent with Blomquist & Parks (Blomquist & Parks), Grant (Grant, 1964), Gustely (Gustely, 1977), Miller et al. (Miller et al., 1995), Roger & Ripsey (Roger &

Ripsey, 1974) who found that the collaboration between local administrative organizations did not boost any efficiency.

6) Political interest factor did not take the indirect effect to the collaboration between local administrative organizations in early childhood educational management through local administrative organization administrator factor.

The result of testing Hypothesis 6 could be explained that building the collaboration between local administrative organizations in early childhood educational management might result to less political votes than the provision of this educational level by themselves. By providing this service to the parents in a particular community, the local people would feel satisfied and the consequent outcome was the political popularity. This result was consistent with Noranit Sethabutr et al. (2002) who said that the local politicians did not pay much attention to the collaboration with other local administrative organizations. The local politicians in several local areas wanted to manage this service by themselves. Moreover, some politicians and civil servants did not have good understanding why the collaboration between local organizations were needed and how it would be carried out.

7) Transaction cost factor did not take the direct effect to the collaboration between local administrative organizations in early childhood educational management.

The result of testing Hypothesis 7 could be explained that various transaction costs, e.g. agency cost and information cost, did not hinder the collaboration between local administrative organizations in early childhood educational management. By low transaction cost, the collaboration agreement might be made. This result was consistent with Kruger & McGuire (Kruger & McGuire, 2005) who found that the low transaction cost could provoke the collaboration agreement easier.

CHAPTER VI

CONCLUSION

This research was conducted to: 1) study the collaboration between local administrative organizations in the early childhood educational management of child development centers; 2) to study the consistency between the causal relationships of factors affecting the collaboration between local administrative organizations in the early childhood educational management of child development centers and the empirical data; and 3) study the causal relationships of factors taking direct and indirect effect to the collaboration between local administrative organizations in the early childhood educational management of child development centers. The results of this research were summarized pursuant to the research objectives as follows:

6.1 Conclusion of research results

6.1.1 Collaboration between local administrative organizations in early childhood educational management of child development centers

The sample group involved 298 subjects. Most subjects (207 persons or 69.50%) were female. Most subjects (116 persons or 38.90%) were aged between 31-40 years. Most subjects (153 persons or 51.34%) completed the bachelor degree. There were 65 child teachers (21.80%). The sample subjects strongly agreed with the collaboration with local administrative organizations in early childhood educational management of child development centers of such members (mean = 3.50, Standard Deviation = .77). When considering first 5 issues strongly agreed, Item 26. Local administrative organizations who are members jointly promote and encourage the guardians, communities, private sector and government entities to be involved in developing the personnel of child development centers of such members, was most agreed (mean = 3.65, Standard Deviation = .87), followed by Item 27. Local

administrative organizations who are members jointly promote and encourage the guardians, communities, private sector and government entities to be involved in creating the relationship with the communities where the child development centers of such members are located, (mean = 3.65, Standard Deviation = .88); Item 28. Local administrative organizations who are members jointly develop child development centers of such members to be the learning sources and service centers for the communities (mean = 3.61, Standard Deviation = .91); Item 29. Local administrative organizations who are members jointly created the collaboration network with the guardians, communities, private sector and government entities in early childhood educational management of child development centers of such members (mean = 3.60, Standard Deviation = .86); and Item 25. Local administrative organizations who are members jointly promote and encourage the guardians, communities, private sector and government entities to be involved in providing the learning experience to child development centers of such members (mean = 3.60, Standard Deviation = .96).

When considering the items with moderate means, they included Item 17. Local administrative organizations who are members exchange with each other the supervision in early childhood educational management of child development centers (mean = 3.39, Standard Deviation = 1.00); Item 22. Local administrative organizations who are members share the buildings used to arrange some activities of child development centers (mean = 3.32, Standard Deviation = 1.01); Item 20. Local administrative organizations who are members promote and share the class research together (mean = 3.28, Standard Deviation = .99); and Item 12. Local administrative organizations who are members exchange the child teachers and assistant child teachers with each other (mean = 3.25, Standard Deviation = 1.10).

6.1.2 Consistency of the Path Analysis for the causal relationship affecting the collaboration between local administrative organizations in early childhood educational management of child development centers and the empirical data

The LISREL program was used for data analysis. After testing the consistency of the Hypothesis Model with the empirical data by comparing the statistic results of the Path Analysis based on the Hypothesis Model with the standard

criteria as advised by Joreskog and Sorbom (1996: 121-122), it was found that some statistics of the Model have not yet met the standard criteria determined, that is, Relative $\chi^2(\chi^2/df)$ was equal to 4.55, which was <2.00 , so it deemed that it did not meet the determined criteria; Goodness of Fit Index (GFI) was equal to .93; it was $<.90$ so it deemed it met the determined criteria; Adjusted Goodness of Fit Index (AGFI) was equal to .70. Because it was $>.90$, it deemed that it did not meet the determined criteria. Root Mean Squared Residuals (RMR) was equal to .038, which was $>.05$ so it deemed that it met the determined criteria. Standardized Root Mean Squared Residual (SRMR) was equal to .068, which was $<.05$ so it deemed that it did not meet the determined criteria. Root Mean Squared Error of Approximation (RMSEA) was equal to .182, which was $<.05$ so it deemed that it did not meet the determined criteria. P-Value for Test of Close Fit was equal to .00, which was $>.05$ so it deemed that it did not meet the determined criteria. Normed Fit Index (NFI) was equal to .96, which was $<.90$ so it deemed that it met the determined criteria. Incremental Fit Index (IFI) was equal to .89, which was $>.90$ so it deemed that it did not meet the determined criteria. Comparative Fit Index (CFI) was equal to .97, which was $<.90$ so it deemed that it met the determined criteria. Critical N (CN) was equal to 532.19, which was <200.00 .

When the statistic test of the Path Analysis according to the Hypothesis Model was not relevant to the empirical data, the estimation of Effect Coefficient in the Model was unacceptable, the Hypothesis Model was revised by changing the relationship path of variables in the Model and by considering the theoretical probability. Such revision was as follows:

To delete the relationship path of variables between

1. Delete the factor regarding the limitations of finance and budget affecting the factor regarding the administrators of local administrative organizations.
2. Delete the factor regarding the transaction cost affecting the collaboration between local administrative organizations in early childhood educational management of child development centers.

To add the relationship path of variables between

1. Add the factor regarding law to affect the factor regarding the administrators of local administrative organizations.

2. Add the factor regarding transaction cost to affect the factor regarding the administrators of local administrative organizations.

3. Add the factor regarding the limitations of finance and budget to affect the factor regarding the collaboration between local administrative organizations in early childhood educational management of child development centers.

After revising such relationship path, it was found that the Adjusted Model was consistent with the empirical data. All statistics of the Model met the determined criteria, that is, Relative χ^2 (χ^2/df) was equal to 2.64, which was >5 so it deemed that it met the determined criteria; Goodness of Fit Index (GFI) was equal to .98, which was $<.90$ so it deemed that it met the determined criteria; Adjusted Goodness of Fit Index (AGFI) was equal to .92, which was $<.90$ so it deemed that it met the determined criteria; Root Mean Squared Residuals (RMR) was equal to .014, which was $>.05$ so it deemed that it met the determined criteria; Standardized Root Mean Squared Residual (SRMR) was equal to .023, which was $>.05$ so it deemed that it met the determined criteria; Root Mean Squared Error of Approximation (RMSEA) was equal to .075, which was $>.05$ so it deemed that it met the determined criteria; P-Value for Test of Close Fit was equal to .13, which was $<.05$ so it deemed that it met the determined criteria; Normed Fit Index (NFI) was equal to .99, which was $<.90$ so it deemed that it met the determined criteria; Incremental Fit Index (IFI) was equal to 1.00, which was $<.90$ so it deemed that it met the determined criteria; Comparative Fit Index (CFI) was equal to 1.00, which was $<.90$ so it deemed that it met the determined criteria; and Critical N (CN) was equal to 279.64, which was <200.00 so it deemed that it met the determined criteria.

6.1.3 Causal relationship of factors taking the direct effect and indirect effect to the collaboration between local administrative organizations in the early childhood educational management of child development centers

The Hypothesis Model as adjusted (Adjust Model) was consistent with the empirical data, and answered the research hypotheses as discussed below.

6.1.3.1 Law factor took the direct effect to the collaboration between local administrative organizations in early childhood educational management of child development centers with the Effect Coefficient at .58 at the .05

level of significance. But, this factor did not take the indirect effect to the collaboration between local administrative organizations in early childhood educational management of child development centers.

6.1.3.2 Local administrative organization administrator factor did not take the direct effect to the collaboration between local administrative organizations in early childhood educational management of child development centers.

6.1.3.3 Local administrative organization administrator factor did not take the indirect effect to the collaboration between local administrative organizations in early childhood educational management of child development centers through the social network factor.

6.1.3.4 Limitations of finance and budget factor did not take the indirect effect to the collaboration between local administrative organizations in early childhood educational management of child development centers through local administrative organization administrator factor, but it took the direct effect to the collaboration between local administrative organizations in early childhood educational management with .15 at the .05 level of significance.

6.1.3.5 Insufficiency of management resource factor did not take the indirect effect to the collaboration between local administrative organizations in early childhood educational management through local administrative organization administrator factor.

6.1.3.6 Political interest factor did not take the indirect effect to the collaboration between local administrative organizations in early childhood educational management through local administrative organization administrator factor.

6.1.3.7 Transaction cost factor did not take the direct effect to the collaboration between local administrative organizations in early childhood educational management.

6.2 Suggestions from research results

6.2.1 Policy Suggestions

6.2.1.1 Every local administrative organization must inevitably comply with law; therefore, the Government should improve or define rules, regulations, obligations, and measures encouraging the collaboration between local administrative organizations in the provision of early childhood education.

6.2.1.2 Regarding the limitation of finance and budget as well as resources to be used for the provision of education, the Government should allocate some special budget to persuade the local administrative organizations to build their collaboration in the provision of early childhood education. This helps solve the limitation of finance and budget, and increase the efficiency of educational management at this level.

6.2.2 Operating Suggestions

6.2.2.1 Any related government agencies, e.g. Department of Local Administration, or provincial agencies should provide some training sessions for the administrators of local administrative organizations, local personnel or officials, and educational personnel including scholars and childcare teachers about the building of network or collaboration between local administrative organizations in the provision of early childhood education of child development centers.

6.2.2.2 Any related government agencies, e.g. Department of Local Administration, or provincial agencies should arrange some workshop seminars on the building of network or collaboration between local administrative organizations in the provision of early childhood education of child development centers for any local administrative organizations that are interested in the the building of collaboration between local administrative organizations in the provision of early childhood education of child development centers.

6.2.2.3 The related government agencies should promote the creation of model collaboration between local administrative organizations in early childhood educational management of child development centers.

6.2.2.4 The local administrative organizations should arrange the site visits to the locality providing the public services together in order to get some ideas of building the collaboration with the locality in the early childhood educational management.

6.3 Recommendations for further study

6.3.1 A qualitative research should be conducted in order to obtain certain variables and indicators relevant to Thai contexts that would be further used in the quantitative research.

6.3.2 The guideline of the building of collaboration between local administrative organizations in the provision of early childhood education of child development centers should be experimented in several local administrative organizations.

6.3.3 The collaboration between local administrative organizations in the provision of education at other levels should be studied.

6.3.4 The results of this research should be applied to study the collaboration in the provision of other public services between local administrative organizations.

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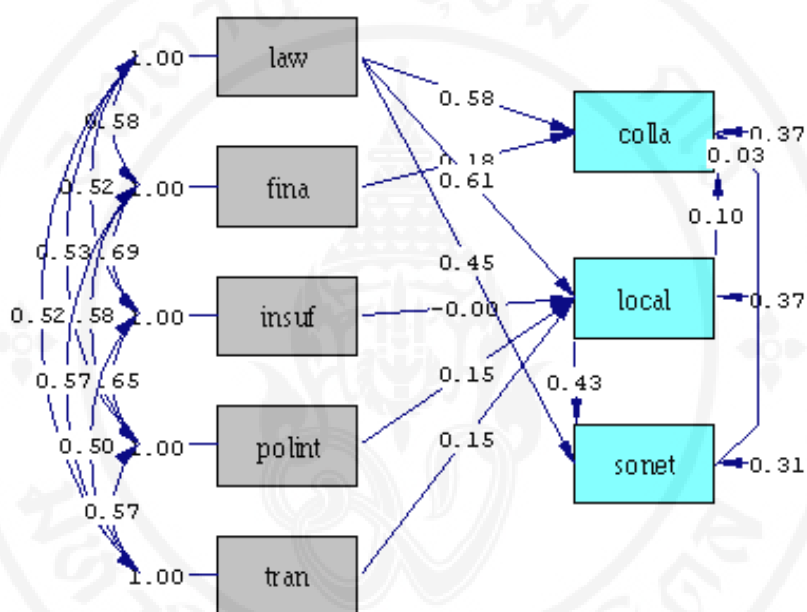
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APPENDIX A

DATA ANALYSIS



Chi-Square=21.14, df=8, P-value=0.00677, RMSEA=0.075

DATE: 6/20/2014

TIME: 10:16

L I S R E L 8.72

BY

Karl G. Jöreskog & Dag Sörbom

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The following lines were read from file C:\Documents and Settings\Administrator\Desktop\child Dev Cen\path model_tru by kim.SPJ:

model of child development hypothesis

Observed Variables

colla law local sonetfinainsufpolinttran

Covariance Matrix from file 'C:\Documents and Settings\Administrator\Desktop\child Dev Cen\runmodel.cov'

Sample Size = 298

Relationships

colla = law

colla = local

colla = sonet

!colla = tran

sonet = local

local = law

local = polint

!local = fina

local = insuf

sonet = law

local = tran

colla = fina

!sonet = fina

Path Diagram

LISREL OUTPUT: ME=ML MI EF SC RS SS

End of Problem

model of child development hypothesis

Covariance Matrix

	Colla	local	sonnet	law	fina	insuf
colla	0.60					
local	0.38	0.58				
sonnet	0.37	0.43	0.54			
law	0.42	0.41	0.41	0.49		
fina	0.36	0.31	0.34	0.33	0.67	
insuf	0.36	0.33	0.33	0.33	0.51	0.81
polint	0.29	0.34	0.30	0.30	0.38	0.47
tran	0.25	0.26	0.25	0.23	0.29	0.28

Covariance Matrix

polinttran

	polint	tran
polint	0.64	
tran	0.28	0.39

model of child development hypothesis

Parameter Specifications

BETA

	colla	local	sonet
	-----	-----	-----
colla	0	1	2
local	0	0	0
sonet	0	3	0

GAMMA

	Law	fina	insuf	polint	tran
	-----	-----	-----	-----	-----
colla	4	5	0	0	0
local	6	0	7	8	9
sonet	10	0	0	0	0

PHI

	Law	fina	insuf	polint	tran
	-----	-----	-----	-----	-----
law	11				
fina	12	13			
insuf	14	15	16		
polint	17	18	19	20	
tran	21	22	23	24	25

PSI

colla	local	sonet
-----	-----	-----
26	27	28

model of child development hypothesis

Number of Iterations = 5

LISREL Estimates (Maximum Likelihood)

BETA

	colla	local	sonet
	-----	-----	-----
colla	- -	0.10 (0.06) 1.57	0.03 (0.07) 0.45
local	- -	- -	- -
sonet	- -	0.42 (0.05) 8.50	- -

GAMMA

	Law	fina	insuf	polint	tran
	-----	-----	-----	-----	-----
colla	0.63 (0.07) 8.86	0.17 (0.04) 4.01	- -	- -	- -

local	0.66 (0.05) 13.50	- -	0.00 (0.04) -0.06	0.15 (0.05) 3.01	0.18 (0.06) 3.21
sonet	0.47 (0.05) 8.90	- -	- -	- -	- -

Covariance Matrix of Y and X

	colla	local	sonet	law	fina	insuf
colla	0.60					
local	0.38	0.58				
sonet	0.37	0.43	0.54			
law	0.42	0.41	0.41	0.49		
fina	0.36	0.32	0.29	0.33	0.67	
insuf	0.33	0.33	0.29	0.33	0.51	0.81
polint	0.30	0.34	0.29	0.30	0.38	0.47
tran	0.22	0.26	0.22	0.23	0.29	0.28

Covariance Matrix of Y and X

	Polint	tran
polint	0.64	
tran	0.28	0.39

	Law	fina	insuf	polint	tran
law	0.49 (0.04) 12.08				
fina	0.33 (0.04) 8.52	0.67 (0.06) 12.08			
insuf	0.33 (0.04) 7.83	0.51 (0.05) 9.68	0.81 (0.07) 12.08		
polint	0.30 (0.04) 8.06	0.38 (0.04) 8.54	0.47 (0.05) 9.33	0.64 (0.05) 12.08	
tran	0.23 (0.03) 7.87	0.29 (0.03) 8.41	0.28 (0.04) 7.69	0.28 (0.03) 8.48	0.39 (0.03) 12.08

PSI

Note: This matrix is diagonal.

colla	local	sonet
-----	-----	-----
0.22	0.21	0.17
(0.02)	(0.02)	(0.01)
12.08	12.08	12.08

Squared Multiple Correlations for Structural Equations

colla	local	sonet
-----	-----	-----
0.63	0.63	0.69

Squared Multiple Correlations for Reduced Form

colla	local	sonet
-----	-----	-----
0.63	0.63	0.62

Reduced Form

	Law	fina	insuf	polint	tran
	-----	-----	-----	-----	-----
colla	0.72 (0.05) 14.92	0.17 (0.04) 4.01	0.00 (0.00) -0.06	0.02 (0.01) 1.65	0.02 (0.01) 1.68
local	0.66 (0.05) 13.50	- -	0.00 (0.04) -0.06	0.15 (0.05) 3.01	0.18 (0.06) 3.21
sonet	0.75 (0.04) 18.41	- -	0.00 (0.02) -0.06	0.06 (0.02) 2.84	0.08 (0.03) 3.00

Goodness of Fit Statistics

Degrees of Freedom = 8

Minimum Fit Function Chi-Square = 21.42 (P = 0.0061)

Normal Theory Weighted Least Squares Chi-Square = 21.14 (P = 0.0068)

Estimated Non-centrality Parameter (NCP) = 13.14

90 Percent Confidence Interval for NCP = (3.17 ; 30.76)

Minimum Fit Function Value = 0.072

Population Discrepancy Function Value (F0) = 0.045

90 Percent Confidence Interval for F0 = (0.011 ; 0.11)

Root Mean Square Error of Approximation (RMSEA) = 0.075

90 Percent Confidence Interval for RMSEA = (0.037 ; 0.11)

P-Value for Test of Close Fit (RMSEA < 0.05) = 0.13

Expected Cross-Validation Index (ECVI) = 0.26

90 Percent Confidence Interval for ECVI = (0.23 ; 0.32)

ECVI for Saturated Model = 0.25

ECVI for Independence Model = 10.07

Chi-Square for Independence Model with 28 Degrees of Freedom = 2924.31

Independence AIC = 2940.31
 Model AIC = 77.14
 Saturated AIC = 72.00
 Independence CAIC = 2977.89
 Model CAIC = 208.66
 Saturated CAIC = 241.10

Normed Fit Index (NFI) = 0.99
 Non-Normed Fit Index (NNFI) = 0.98
 Parsimony Normed Fit Index (PNFI) = 0.28
 Comparative Fit Index (CFI) = 1.00
 Incremental Fit Index (IFI) = 1.00
 Relative Fit Index (RFI) = 0.97

Critical N (CN) = 279.64

Root Mean Square Residual (RMR) = 0.014
 Standardized RMR = 0.023
 Goodness of Fit Index (GFI) = 0.98
 Adjusted Goodness of Fit Index (AGFI) = 0.92
 Parsimony Goodness of Fit Index (PGFI) = 0.22

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Fitted Covariance Matrix

	Colla	local	sonet	law	fina	insuf
colla	0.60					
local	0.38	0.58				
sonet	0.37	0.43	0.54			
law	0.42	0.41	0.41	0.49		
fina	0.36	0.32	0.29	0.33	0.67	
insuf	0.33	0.33	0.29	0.33	0.51	0.81
polint	0.30	0.34	0.29	0.30	0.38	0.47
tran	0.22	0.26	0.22	0.23	0.29	0.28

Fitted Covariance Matrix

	Polint	tran
polint	0.64	
tran	0.28	0.39

Fitted Residuals

	colla	local	sonet	law	fina	insuf
colla	0.00					
local	0.00	-				
sonet	0.01	0.00	0.00			
law	0.00	-	-	-		
fina	0.00	-0.02	0.04	0.00	0.00	
insuf	0.03	0.00	0.04	0.00	0.00	0.00
polint	0.00	0.00	0.02	0.00	0.00	0.00
tran	0.02	0.00	0.03	0.00	0.00	0.00

	Polint	tran
polint	- -	
tran	0.00	0.00

```
Smallest Fitted Residual = -0.02
Median Fitted Residual = 0.00
Largest Fitted Residual = 0.04
```

[illegible]

	colla	local	sonet	law	fina	insuf
colla	-0.31					
local	-1.27	- -				
sonet	2.57	- -	- -			
law	- -	- -	- -	- -		
fina	-0.31	-1.27	2.57	- -	- -	
insuf	1.65	- -	2.27	- -	- -	- -
polint	-0.12	- -	1.21	- -	- -	- -
tran	1.83	- -	2.38	- -	- -	- -

	Polint	tran
polint	- -	
tran	- -	- -

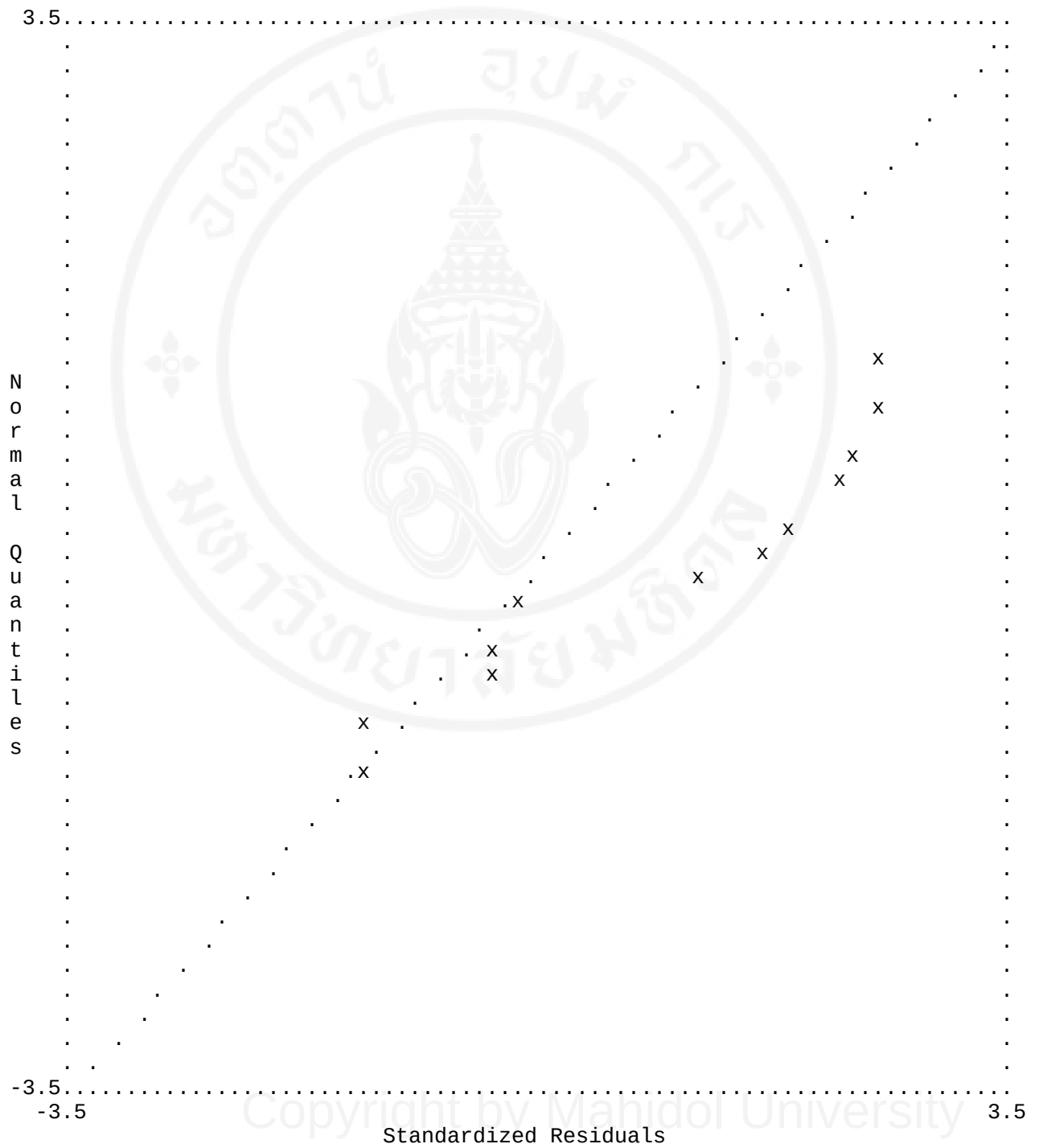
Smallest	Standardized Residual =	-1.27
Median	Standardized Residual =	0.00
Largest	Standardized Residual =	2.57

[illegible]

2|34
2|66

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Qplot of Standardized Residuals



model of child development hypothesis

Modification Indices and Expected Change

Modification Indices for BETA

	colla	local	sonet
colla	- -	- -	- -
local	2.43	- -	4.62
sonet	10.43	- -	- -

Expected Change for BETA

	colla	local	sonet
colla	- -	- -	- -
local	-0.25	- -	-0.42
sonet	0.70	- -	- -

Standardized Expected Change for BETA

	colla	local	sonet
colla	- -	- -	- -
local	-0.43	- -	-0.76
sonet	1.23	- -	- -

Modification Indices for GAMMA

	law	fina	insuf	pol	int	tran
colla	- -	- -	2.51	0.02	3.12	- -
local	- -	1.62	- -	- -	- -	- -
sonet	- -	10.43	5.14	1.45	5.68	- -

Expected Change for GAMMA

	law	fina	insuf	pol	int	tran
colla	- -	- -	0.07	-0.01	0.10	- -
local	- -	-0.06	- -	- -	- -	- -
sonet	- -	0.12	0.07	0.04	0.11	- -

Standardized Expected Change for GAMMA

	Law	fina	insuf	polint	tran
colla	- -	- -	0.08	-0.01	0.08
local	- -	-0.07	- -	- -	- -
sonet	- -	0.13	0.09	0.05	0.09

No Non-Zero Modification Indices for PHI

Modification Indices for PSI

	colla	local	sonet
colla	- -	- -	- -
local	0.96	- -	- -
sonet	- -	4.62	- -

Expected Change for PSI

	colla -----	local -----	sonet -----
colla	- -		
local	-0.04	- -	
sonet	- -	-0.07	- -

Standardized Expected Change for PSI

	colla -----	local -----	sonet -----
colla	- -		
local	-0.07	- -	
sonet	- -	-0.13	- -

Modification Indices for THETA-EPS

	colla -----	local -----	sonet -----
colla	- -		
local	0.96	5.26	
sonet	- -	4.52	- -

Expected Change for THETA-EPS

	colla -----	local -----	sonet -----
colla	- -		
local	-0.04	0.18	
sonet	- -	-0.07	- -

Modification Indices for THETA-DELTA-EPS

	colla -----	local -----	sonet -----
law	2.83	11.13	11.19
fina	3.78	3.43	4.23
insuf	3.00	0.02	0.32
polint	1.52	0.89	0.25
tran	3.34	0.97	1.66

Expected Change for THETA-DELTA-EPS

	colla -----	local -----	sonet -----
law	-0.18	0.10	-0.10
fina	-0.05	-0.02	0.03
insuf	0.03	0.00	0.01
polint	-0.02	0.03	-0.01
tran	0.02	-0.02	0.01

Maximum Modification Index is 11.19 for Element (1, 3) of THETA
DELTA-EPSILON

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Standardized Solution

BETA

	colla	local	sonet
colla	- -	0.10	0.03
local	- -	- -	- -
sonet	- -	0.43	- -

GAMMA

	Law	fina	insuf	polint	tran
colla	0.58	0.18	- -	- -	- -
local	0.61	- -	0.00	0.15	0.15
sonet	0.45	- -	- -	- -	- -

Correlation Matrix of Y and X

	colla	local	sonet	law	fina	insuf
colla	1.00					
local	0.65	1.00				
sonet	0.64	0.78	1.00			
law	0.78	0.77	0.78	1.00		
fina	0.57	0.52	0.48	0.58	1.00	
insuf	0.48	0.49	0.44	0.52	0.69	1.00
polint	0.48	0.56	0.48	0.53	0.58	0.65
tran	0.47	0.55	0.47	0.52	0.57	0.50

Correlation Matrix of Y and X

polinttran		
polint	1.00	
tran	0.57	1.00

PSI

Note: This matrix is diagonal.

colla	local	sonet
0.37	0.37	0.31

Regression Matrix Y on X (Standardized)

	Law	fina	insuf	polint	tran
colla	0.66	0.18	0.00	0.02	0.02
local	0.61	- -	0.00	0.15	0.15
sonet	0.71	- -	0.00	0.07	0.06

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Total and Indirect Effects

Total Effects of X on Y

	Law	fina	insuf	polint	tran
	-----	-----	-----	-----	-----
colla	0.72 (0.05) 14.92	0.17 (0.04) 4.01	0.00 (0.00) -0.06	0.02 (0.01) 1.65	0.02 (0.01) 1.68
local	0.66 (0.05) 13.50	- -	0.00 (0.04) -0.06	0.15 (0.05) 3.01	0.18 (0.06) 3.21
sonet	0.75 (0.04) 18.41	- -	0.00 (0.02) -0.06	0.06 (0.02) 2.84	0.08 (0.03) 3.00

Indirect Effects of X on Y

	Law	fina	insuf	polint	tran
	-----	-----	-----	-----	-----
colla	0.09 (0.05) 1.78	- -	0.00 (0.00) -0.06	0.02 (0.01) 1.65	0.02 (0.01) 1.68
local	- -	- -	- -	- -	- -
sonet	0.28 (0.04) 7.19	- -	0.00 (0.02) -0.06	0.06 (0.02) 2.84	0.08 (0.03) 3.00

Total Effects of Y on Y

	colla	local	sonet
	-----	-----	-----
colla	- -	0.11 (0.06) 1.97	0.03 (0.07) 0.45
local	- -	- -	- -
sonet	- -	0.42 (0.05) 8.50	- -

Largest Eigenvalue of $B \cdot B'$ (Stability Index) is 0.186

Indirect Effects of Y on Y

	colla	local	sonet
	-----	-----	-----
colla	- -	0.01 (0.03) 0.45	- -
local	- -	- -	- -
sonet	- -	- -	- -

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Standardized Total and Indirect Effects

Standardized Total Effects of X on Y

	Law	fina	insuf	polint	tran
-----	-----	-----	-----	-----	-----
colla	0.66	0.18	0.00	0.02	0.02
local	0.61	- -	0.00	0.15	0.15
sonet	0.71	- -	0.00	0.07	0.06

Standardized Indirect Effects of X on Y

	Law	fina	insuf	polint	tran
-----	-----	-----	-----	-----	-----
colla	0.08	- -	0.00	0.02	0.02
local	- -	- -	- -	- -	- -
sonet	0.26	- -	0.00	0.07	0.06

Standardized Total Effects of Y on Y

	colla	local	sonet
-----	-----	-----	-----
colla	- -	0.11	0.03
local	- -	- -	- -
sonet	- -	0.43	- -

Standardized Indirect Effects of Y on Y

	colla	local	sonet
-----	-----	-----	-----
colla	- -	0.01	- -
local	- -	- -	- -
sonet	- -	- -	- -

Time used: 0.047 Seconds

APPENDIX B

QUESTIONNAIRE

The research on “Causal Relationship Model of Factors Effect Collaboration between Local Administration Organization in Early Childhood Educational Management of Child Development Centers”

Instruction

1. This questionnaire was constructed to study “Causal Relationship Model of Factors Effect Collaboration between Local Administration Organization in Early Childhood Educational Management of Child Development Centers”.

2. All answers to this questionnaire would be kept confidential. Please answer each question most relevant to your facts. The data would be analyzed and presented in general without any effect to you.

3. This questionnaire consists of 4 sections as follows:

Section 1: General information about questionnaire respondents

Section 2: Questions about the collaboration between local administrative organizations in the early childhood educational management of child development centers

Section 3: Questions about factors affecting the collaboration between local administrative organizations in the early childhood educational management of child development centers

Section 4: other comments

4. For the completeness of the questionnaire, please answer all questions, which are most relevant to your facts. I highly appreciate your cooperation.

Mr. Khemapat Yenpiam

Doctorate Student

Public Policy and Public Management

Faculty of Social Science and Humanities

Mahidol University

Section 1: General information about questionnaire respondents

Instruction: Please mark ✓ in () in front of the statements most relevant to your facts.

For Researcher**1. Gender**

() Male

() Female

A1☐**2. Age**

() 20 – 30 years

() 31 – 40 years

A2☐

() 41 – 50 years

() 51 – 60 years

() Older than 60 years

3. Level of education

() Junior secondary level

() Senior secondary level or equivalent **A3**☐

() Vocational certificate

() Diploma or equivalent

(PorWorChor.)

() Graduate or equivalent

() Post-graduate

() others, please specify

4. Current position

() Chief Executive of Local Administrative Organization

A4☐

() Chief Administrator of Local Administrative Organization

() Director of Office/Bureau of Education

() Academic officer

() Head of child development center

() Child teacher

Section 2: Questions about the collaboration between local administrative organizations in the early childhood educational management of child development centers

Instruction: Please read each question about the collaboration between local administrative organizations in the early childhood educational management of child development centers carefully, and mark ✓ for the degree of agreement you have on each question.

Collaboration between local administrative organizations	Degree of Agreement					For Researcher
	Absolutely agree	Strongly agree	Fairly agree	Slightly agree	Least agree	
1. Administrators/ representatives of the Local Administrative Organization negotiate with other local administrative organizations to enhance the collaboration in early childhood educational management.						B1 ☐

Collaboration between local administrative organizations	Degree of Agreement					For Researcher
	Absolutely agree	Strongly agree	Fairly agree	Slightly agree	Least agree	
2. Administrators/ representatives of the Local Administrative Organization negotiate with other local administrative organizations to determine the scope of collaboration in early childhood educational management.						B2 ☐
3. Administrators/ representatives of the Local Administrative Organization negotiate with other local administrative organizations to determine the guideline of managing the collaboration in early childhood educational management.						B3 ☐

Collaboration between local administrative organizations	Degree of Agreement					For Researcher
	Absolutely agree	Strongly agree	Fairly agree	Slightly agree	Least agree	
4. Administrators/ representatives of the Local Administrative Organization negotiate with other local administrative organizations about the interests to be received from the collaboration in early childhood educational management.						B4 ☐
5. Administrators/ representatives of the Local Administrative Organization make the Memorandum of Understanding (MOU) with other local administrative organizations in early childhood educational management by setting up the official collaboration framework for mutual implementation.						B5 ☐

Collaboration between local administrative organizations	Degree of Agreement					For Researcher
	Absolutely agree	Strongly agree	Fairly agree	Slightly agree	Least agree	
6. Administrators/ representatives of the Local Administrative Organization join hands with other local administrative organizations to formulate rules and regulations to govern the collaboration in early childhood educational management.						B6 ☐
7. Local administrative organizations who are members share the information about child development centers with each others in order to benefit the planning and development of early childhood educational management.						B7 ☐

Collaboration between local administrative organizations	Degree of Agreement					For Researcher
	Absolutely agree	Strongly agree	Fairly agree	Slightly agree	Least agree	
8. Local administrative organizations who are members jointly set up the 3-5 year development plan in early childhood educational management.						B8 ☐
9. Local administrative organizations who are members jointly set up the Annual Plan in early childhood educational management.						B9 ☐
10. Local administrative organizations who are members jointly set up the budget to be spent for the development and provision of early childhood education.						B10 ☐

Collaboration between local administrative organizations	Degree of Agreement					For Researcher
	Absolutely agree	Strongly agree	Fairly agree	Slightly agree	Least agree	
11. Local administrative organizations who are members share materials and tools used in early childhood educational management.						B11 ☐
12. Local administrative organizations who are members exchange the child teachers and assistant child teachers with each other.						B12 ☐
13. Local administrative organizations who are members jointly plan and develop the personnel of child development centers, e.g. Chief of Child Development Center, Child Teacher, Assistant Child Teacher, and other officers.						B13 ☐

Collaboration between local administrative organizations	Degree of Agreement					For Researcher
	Absolutely agree	Strongly agree	Fairly agree	Slightly agree	Least agree	
14. Local administrative organizations who are members jointly improve the curriculum in early childhood educational management of child development centers.						B14 ☐
15. Local administrative organizations who are members jointly improve and develop the experience provision plan.						B15 ☐
16. Local administrative organizations who are members jointly develop the evaluation methods in early childhood educational management of child development centers.						B16 ☐

Collaboration between local administrative organizations	Degree of Agreement					For Researcher
	Absolutely agree	Strongly agree	Fairly agree	Slightly agree	Least agree	
17. Local administrative organizations who are members exchange with each other the supervision in early childhood educational management of child development centers.						B17 ☐
18. Local administrative organizations who are members promote and solve the child nutrition problems together.						B18 ☐
19. Local administrative organizations who are members jointly develop the activities for the early childhood development of child development centers.						B19 ☐
20. Local administrative organizations who are members promote and share the class research together.						B20 ☐

Collaboration between local administrative organizations	Degree of Agreement					For Researcher
	Absolutely agree	Strongly agree	Fairly agree	Slightly agree	Least agree	
21. Local administrative organizations jointly develop and share the media used in the experience provision.						B21 ☐
22. Local administrative organizations who are members share the buildings used to arrange some activities of child development centers.						B22 ☐
23. Local administrative organizations who are members jointly inspect the members' buildings for safety and security.						B23 ☐

Collaboration between local administrative organizations	Degree of Agreement					For Researcher
	Absolutely agree	Strongly agree	Fairly agree	Slightly agree	Least agree	
24. Local administrative organizations who are members jointly improve/develop the sites and environments of such members to be healthy and clean.						B24 ☐
25. Local administrative organizations who are members jointly promote and encourage the guardians, communities, private sector and government entities to be involved in providing the learning experience to child development centers of such members.						B25 ☐

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Collaboration between local administrative organizations	Degree of Agreement					For Researcher
	Absolutely agree	Strongly agree	Fairly agree	Slightly agree	Least agree	
26. Local administrative organizations who are members jointly promote and encourage the guardians, communities, private sector and government entities to be involved in developing the personnel of child development centers of such members.						B26 ☐
27. Local administrative organizations who are members jointly promote and encourage the guardians, communities, private sector and government entities to be involved in creating the relationship with the communities where the child development centers of such members are located.						B27 ☐

Collaboration between local administrative organizations	Degree of Agreement					For Researcher
	Absolutely agree	Strongly agree	Fairly agree	Slightly agree	Least agree	
28. Local administrative organizations who are members jointly develop child development centers of such members to be the learning sources and service centers for the communities.						B28 ☐
29. Local administrative organizations who are members jointly created the collaboration network with the guardians, communities, private sector and government entities in early childhood educational management of child development centers of such members.						B29 ☐

Section 3 : Questions about factors affecting the collaboration between local administrative organizations in the early childhood educational management of child development centers

Instruction: Please read each question about the factors affecting the collaboration between local administrative organizations in the early childhood educational management of child development centers carefully, and mark ✓ for the degree of agreement you have on each question.

Laws	Degree of Agreement					For Researcher
	Absolutely agree	Strongly agree	Fairly agree	Slightly agree	Least agree	
1. The Determining Plans and Process of Decentralization to Local Government Organization Act B.E. 2542 (1999) empowers the local administrative organizations to enhance the collaboration in early childhood educational management.						C1 ☐

Laws	Degree of Agreement					For Researcher
	Absolutely agree	Strongly agree	Fairly agree	Slightly agree	Least agree	
2. The provincial administrative organizations (PAO) have duties of giving supports for the collaboration between local administrative organizations in the early childhood educational management of child development centers.						C2 ☐
3. The provincial administrative organizations (PAO) can join hands with other local administrative organizations in the early childhood educational management of child development centers.						C3 ☐

Laws	Degree of Agreement					For Researcher
	Absolutely agree	Strongly agree	Fairly agree	Slightly agree	Least agree	
4. The provincial administrative organizations (PAO) can give the financial support to other local administrative organizations in the early childhood educational management of child development centers.						C4 ☐
5. A municipality can join hands with other municipalities, either inside or outside its area, in the early childhood educational management of child development centers.						C5 ☐

Laws	Degree of Agreement					For Researcher
	Absolutely agree	Strongly agree	Fairly agree	Slightly agree	Least agree	
6. A local administrative organization (LAO) can provide the early childhood education with other PAOs, LAOs and municipalities, either inside or outside its area.						C6 ☐
7. A local administrative organization (LAO) who is the party member can apply the Letter of the Ministry of Interior regarding Guideline of Joint Provision of Public Services between LAOs as the guideline of collaboration management for the provision of early childhood education.						C7 ☐

Laws	Degree of Agreement					For Researcher
	Absolutely agree	Strongly agree	Fairly agree	Slightly agree	Least agree	
8. A local administrative organization (LAO) who is the party member can apply the regulation on the Preparation of Development Plan as the guideline of planning for the collaboration between LAOs in the early childhood educational management.						C8 ☐
9. A local administrative organization (LAO) who is the party member can apply the regulation on the Budget as the guideline of budget preparation in the early childhood educational management.						C9 ☐

Laws	Degree of Agreement					For Researcher
	Absolutely agree	Strongly agree	Fairly agree	Slightly agree	Least agree	
10. A local administrative organization (LAO) who is the party member can apply the regulation on the Expenditure as the guideline of expenditure management in the early childhood educational management.						C10 ☐
11. A local administrative organization (LAO) who is the party member can apply the regulation on the Procurement as the guideline of procurement management in the early childhood educational management.						C11 ☐

Laws	Degree of Agreement					For Researcher
	Absolutely agree	Strongly agree	Fairly agree	Slightly agree	Least agree	
12. Administrators of the Local Administrative Organizations and members of the Local Council have the power of making decision on building the collaboration and on determining the scope of the collaboration between local administrative organizations in the early childhood educational management.						C12 ☐

Local Administrative Organization Administrators	Degree of Agreement					For Researcher
	Absolutely agree	Strongly agree	Fairly agree	Slightly agree	Least agree	
1. Administrators of the Local Administrative Organizations must have skills and abilities in communications to enhance and manage the collaboration in early childhood educational management.						D1 ☐
2. Administrators of the Local Administrative Organizations must have skills and abilities in negotiations to enhance and manage the collaboration in early childhood educational management.						D2 ☐

Local Administrative Organization Administrators	Degree of Agreement					For Researcher
	Absolutely agree	Strongly agree	Fairly agree	Slightly agree	Least agree	
3. Administrators of the Local Administrative Organizations must have skills and abilities in making good understanding to enhance and manage the collaboration in early childhood educational management.						D3 ☐
4. Administrators of the Local Administrative Organizations must have skills and abilities in conflict handling to enhance and manage the collaboration in early childhood educational management.						D4 ☐

Local Administrative Organization Administrators	Degree of Agreement					For Researcher
	Absolutely agree	Strongly agree	Fairly agree	Slightly agree	Least agree	
5. Administrators of the Local Administrative Organizations must have creativity used to enhance and manage the collaboration in early childhood educational management.						D5 ☐
6. Administrators of the Local Administrative Organizations must have skills and abilities in creating the network to enhance and manage the collaboration in early childhood educational management.						D6 ☐

Local Administrative Organization Administrators	Degree of Agreement					For Researcher
	Absolutely agree	Strongly agree	Fairly agree	Slightly agree	Least agree	
7. Administrators of the Local Administrative Organizations must have knowledge and understanding in education to enhance and manage the collaboration in early childhood educational management.						D7 ☐
8. Administrators of the Local Administrative Organizations must have interest in education to enhance and manage the collaboration in early childhood educational management.						D8 ☐

Social Network	Degree of Agreement					For Researcher
	Absolutely agree	Strongly agree	Fairly agree	Slightly agree	Least agree	
1. The Provincial Administration Organization Council of Thailand is a channel allowing its members to have talks, which trigger the negotiations between local administrative organizations in the early childhood educational management.						E1 ☐
2. The Subdistrict Administration Organization Association of Thailand is a channel allowing its members to have talks, which trigger the negotiations between local administrative organizations in the early childhood educational management.						E2 ☐

Social Network	Degree of Agreement					For Researcher
	Absolutely agree	Strongly agree	Fairly agree	Slightly agree	Least agree	
3. The National Municipal League of Thailand is a channel allowing its members to have talks, which trigger the negotiations between local administrative organizations in the early childhood educational management.						E3 ☐
4. The Department of Local Administration and the Provincial Local Administration Office are the channels promoting and coordinating various local administrative organizations to build the collaboration in the early childhood educational management.						E4 ☐

Social Network	Degree of Agreement					For Researcher
	Absolutely agree	Strongly agree	Fairly agree	Slightly agree	Least agree	
5. Members of various local administrative organization associations have meetings to share their social value and concept of professional management, which focuses on the efficient management by way of collaboration. This sparks the members' interest to build the collaboration with other local administrative organizations in the early childhood educational management.						E5 ☐

Social Network	Degree of Agreement					For Researcher
	Absolutely agree	Strongly agree	Fairly agree	Slightly agree	Least agree	
6. Many associations of local administrative organizations have a duty of disseminating the information for their members' consideration to build the collaboration with other local administrative organizations in the early childhood educational management.						E6 ☐
7. The transparent information disclosure between local administrative organizations leads to the building and retention of the collaboration in the early childhood educational management.						E7 ☐

Limitations of Finance and Budget	Degree of Agreement					For Researcher
	Absolutely agree	Strongly agree	Fairly agree	Slightly agree	Least agree	
1. Building of the collaboration with other local administrative organizations in the early childhood educational management helps reduce the expenses on education.						F1 ☐
2. Building of the collaboration with other local administrative organizations in the early childhood educational management helps reduce the budget deficit.						F2 ☐
3. Building of the collaboration with other local administrative organizations in the early childhood educational management helps reduce the public debt.						F3 ☐

Limitations of Finance and Budget	Degree of Agreement					For Researcher
	Absolutely agree	Strongly agree	Fairly agree	Slightly agree	Least agree	
4. Building of the collaboration with other local administrative organizations in the early childhood educational management helps reduce the ratio of public debt to budget expenditure.						F4 ☐
5. Building of the collaboration with other local administrative organizations in the early childhood educational management helps increase the revenue.						F5 ☐

Insufficiency of Management Resources	Degree of Agreement					For Researcher
	Absolutely agree	Strongly agree	Fairly agree	Slightly agree	Least agree	
1. A local administrative organization must seek for the collaboration with other local administrative organizations in providing the tools and materials sufficiently.						G1 ☐
2. A local administrative organization must seek for the collaboration with other local administrative organizations in using the buildings for activities.						G2 ☐

Political Interests	Degree of Agreement					For Researcher
	Absolutely agree	Strongly agree	Fairly agree	Slightly agree	Least agree	
1. Building of the collaboration with other local administrative organizations in the early childhood educational management helps the local administrative organization administrators get more popularity from local people.						H1 ☐
Transaction Cost	Degree of Agreement					For Researcher
	Absolutely agree	Strongly agree	Fairly agree	Slightly agree	Least agree	
1. Building of the collaboration with other local administrative organizations in the early childhood educational management causes the Organization to have more tasks						I1 ☐

Transaction Cost	Degree of Agreement					For Researcher
	Absolutely agree	Strongly agree	Fairly agree	Slightly agree	Least agree	
2. Building of the collaboration with other local administrative organizations in the early childhood educational management takes effect to the position, duty and responsibility of operating officers.						I2 ☐
3. The outcome deriving from building the collaboration with other local administrative organizations in the early childhood educational management may be out of expectation.						I3 ☐
4. The outcome deriving from building the collaboration with other local administrative organizations in the early childhood educational management may be out of expectation.						I4 ☐

Transaction Cost	Degree of Agreement					For Researcher
	Absolutely agree	Strongly agree	Fairly agree	Slightly agree	Least agree	
5. Building of the collaboration with other local administrative organizations in the early childhood educational management may have some risks.						I5 ☐
6. Building of the collaboration with other local administrative organizations in the early childhood educational management needs time to prepare some information for planning and determining the working scope together.						I6 ☐
7. Negotiations to build the collaboration with other local administrative organizations in the early childhood educational management take time						I7 ☐

Transaction Cost	Degree of Agreement					For Researcher
	Absolutely agree	Strongly agree	Fairly agree	Slightly agree	Least agree	
8. The collaboration with other local administrative organizations in the early childhood educational management takes time to monitor to be in line with the joint agreement.						18 ☐
9. The collaboration with other local administrative organizations in the early childhood educational management takes time to force the party members to comply with the agreement determined together.						19 ☐

Section 4: other comments

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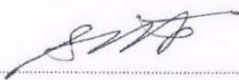
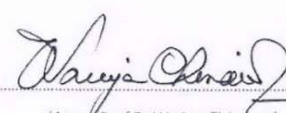
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APPENDIX C

			
	<table border="1" style="display: inline-table;"> <tr> <td style="width: 20%;">COA.No.</td> <td>2013/234.1908</td> </tr> </table>	COA.No.	2013/234.1908
COA.No.	2013/234.1908		
Documentary Proof of The Committee for Research Ethics (Social Sciences)			
Title of Project:	Casual Relationship Model of Factors Effects Collaboration Between Local Administration Organizations in Early Childhood Educational Management		
Principal Investigator:	Mr.Khemapat Yenpiam		
Name of Institution:	Faculty of Social Sciences & Humanities, Mahidol University		
Approval includes:	1) MU-SSIRB Submission form version received date 15 August 2013 2) Participant Information sheet version date 15 August 2013 3) Informed Consent form version date 15 August 2013 4) Questionnaire Guideline version received date 15 August 2013		
The Committee for Research Ethics (Social Sciences) is in full compliance with International Guidelines of Human Research Protection such as Declaration of Helsinki, The Belmont Report, CIOMS Guidelines and the International Conference on Harmonization in Good Clinical Practice (ICH-GCP)			
Date of Approval:	19 August 2013		
Date of Expiration:	18 August 2014		
Signature of Chairman:..... Signature of Head of the Institute:.....  (Emeritus Professor Santhat Sermsri)  (Assoc.Prof.Dr.Wariya Chinvarnho) Dean of Faculty of Social Sciences and Humanities			
Office of The Committee for Research Ethics (Social Sciences), Faculty of Social Sciences and Humanities, Mahidol University Phuttamonthon 4 Rd., Salaya, Phuttamonthon District, Nakhon Pathom 73170. Tel.(662) 441 9180 Fax.(662) 441 9181			

BIOGRAPHY

NAME	Khemapat Yenpiam
DATE OF BIRTH	4 November 1977
PLACE OF BIRTH	Bangkok, Thailand
INSTITUTIONS ATTENDED	Suan Dusit Rajabhat Institute, 1996-2000) Bachelor of Arts (Business English) Siam University, 2000-2002 Master of Public Administration Mahidol University, 2010-2014 Doctor of Public Administration (Public Policy and Public Management)
RESEARCH GRANTS	Research Assistantship, Faculty of Graduate Studies, Mahidol University King Prajadhipok's Institute
HOME ADDRESS	120 Moo 2 Bangmuang, Bangyai, Nonthaburi Tel. 02-924-8045 E-mail : Dr.khim_4@hotmail.com
EMPLOYMENT ADDRESS	295 Suan Dusit Rajabhat University, Dusit Bangkok. Tel. 02-244-5816 Position : Lecturer E-mail : Khemapat_yen@dusit.ac.th