บทคัดย่อ

การวิจัยครั้งนี้มีวัตถุประสงค์เพื่อพัฒนารูปแบบการบริหารเครือข่ายมหาวิทยาลัยราชภัฏกลุ่มภาคกลางการดำาเนินการวิจัยมี 2 ขั้นตอนคือ 1) การวิเคราะห์เอกสารเกี่ยวกับแนวทางการบริหารเครือข่ายของสถาบันอุดมศึกษาของประเทศไทยและต่างประเทศ 2) การพัฒนารูปแบบการบริหารเครือข่ายมหาวิทยาลัยราชภัฏกลุ่มภาคกลางโดยใช้เครื่องมือในรวบรวมข้อมูลคือ แบบสอบถามความคิดเห็นต่อการบริหารเครือข่ายมหาวิทยาลัยราชภัฏกลุ่มภาคกลางที่มีองค์ประกอบในการบริหาร ซึ่งมีค่าความเชื่อมันเท่ากับ .۹۴ การเก็บรวบรวมข้อมูลใช้แบบสอบถามความคิดเห็นต่อการบริหารเครือข่ายมหาวิทยาลัยราชภัฏกลุ่มภาคกลางกับกลุ่มตัวอย่าง คือ บุคลากรจากมหาวิทยาลัยราชภัฏกลุ่มภาคกลางตอนบน จำนวน ۳۷۶ คนจำานวนเป็น บุคลากรสายบริหาร ۱۵۲ คน บุคลากรสายสอน ۲۲۴ คน และเก็บแบบสอบถามกลับมาเป็นบุคลากรสายบริหาร ๒๒๙ คน บุคลากรสายสอน ๑๙๐ คน รวมทั้งหมด ๓๑๙ คน คิดเป็นร้อยละ ۸۵ การวิเคราะห์ข้อมูล ค่าเฉลี่ย ส่วนเบี่ยงเบนมาตรฐาน ระดับความคิดเห็นใช้เทคนิคการสนทนากลุ่มเพื่อสังเคราะห์รูปแบบการบริหารเครือข่ายมหาวิทยาลัยราชภัฏกลุ่มภาคกลางที่มี 7 องค์ประกอบที่สำคัญในการดำาเนินงานการบริหารงานแบบเครือข่ายมหาวิทยาลัยราชภัฏกลุ่มภาคกลาง คือ 1) กำหนดวัตถุประสงค์ที่ต้องตั้งไว้ 2) มีความมาดุ๊สนพานภายในกลุ่มลักษณะเป็นพัฒนิตร่วมกัน 3) กำหนดการบริหารและมีความที่จะทำการร่วมกัน 4) กำหนดการบริหารและมีความที่จะอยู่ภายใต้หลักธรรมภูมิศาสตร์ 5) ความมั่นใจและความมั่นคงในการดำาเนินงาน 6) ความมั่นใจในข้อตกลงและมีความมั่นใจในการดำเนินงาน 7) ต้องมีการพัฒนาและการมีความร่วมกันในกลุ่มผลการประเมินรูปแบบการบริหารงานเครือข่ายมหาวิทยาลัยราชภัฏกลุ่มภาคกลาง มีความเป็นไปได้ ความมั่นคง ความเหมาะสม และความถูกต้องของรูปแบบในระดับมาก
Abstract

The objective of this research is to develop a network administration model for the Central region Rajabhat university group. The research was conducted in two phases: 1) Analysis of documents on approaches to the administration of higher education institute networks in Thailand and overseas; 2) Development of a network administration model for the Central region Rajabhat university group based on the collected questionnaire data on attitudes toward network administration of the Central region Rajabhat university group with a confidence level of .94 for their administrative elements. The principal method of data collection was the questionnaire asking for opinions on network administration of the Central region Rajabhat university group collected from selected sample groups. A total of 376 questionnaires were sent to 152 people in administrative positions and 224 people in teaching positions. The questionnaire return rate was 129 and 190 respectively. Overall, 319 questionnaires or 85% of the distributed questionnaires were returned. The questionnaire data were subsequently analyzed to determine the means and standard deviation values of the opinions given in the questionnaires. Focus group techniques were also employed and data from both methods were synthesized to develop an administrative model for the Central region Rajabhat university group. The proposed model comprises seven major administrative elements: 1) Measurable objectives; 2) Partnership commitments; 3) Shared missions and goals; 4) Joint working committees; 5) Communication channels and operational outcome reporting based on the principle of good governance; 6) Trust and respect of partner’s decisions; 7) Resource sharing and mutual assistance. Subsequent evaluation of the proposed model for network administration of the Central region Rajabhat university group found it to be highly feasible, useful, appropriate and accurate.

Keywords: NETWORK ADMINISTRATION / ELEMENTS
Introduction

It is the policy of the Office of the Higher Education Commission (OHEC), under the Ministry of Education, to develop higher education networks in Thailand as effective means to solve academic problems currently faced by the Thai higher education institutes. These problems include a shortage of teaching personnel, appropriate incentives to attract Ph.D. holders to a teaching career in higher education, and development of appropriate higher education information systems. Suitable format for higher education institute network administration will have the following benefits: 1. Facilitate the sharing of information, news, skills, knowledge and experiences among network members; 2. Encourage the sharing of information, news and collaboration to minimize overlapping operations and resource utilization; 3. Effectively connect people at different levels of responsibilities with different backgrounds, work/organizational management styles together; 4. Bring people and organizations interested in similar goals and faced similar problems to work together; 5. Effectively pressure the government to respond to people’s needs; 6. Match relevant academic units and sources of funding to those who need their assistance; 7. Create mutual assistance from alliance institutes. The operations of higher education networks are generally determined by the following missions required of higher education institutes: 1. Instruction; 2. Academic and research works; 3. Academic and technological services; 4. Services to local communities; 5. Network publicity. Previous operations of higher education institute networks were faced with the following problems: 1. Absence of some institutes in network meetings; 2. Change of high-rank administrators with decision making power (such as university president); 3. Large number of responsible officers or liaison persons; 4. Frequent change of institute representatives at network meetings; 6. No concrete cooperation as required by network missions; 7. Inadequate interaction; 8. Limited and ill-defined budget allocation. Most budgets are urgently allocated at the initial stage of an operation only; 9. Network operations are usually not on the top of an institute’s priority list. As a result, network members have not been able to efficiently fulfill their missions in producing quality graduates as expected by the public. These problems are present among the Central region Rajabhat university group which comprises of Phranakhon Rajabhat University, Chandrakasem Rajabhat University, Thepsatri Rajabhat University, Phranakhon Si Ayutthaya Rajabhat University, Valaya Alongkorn
Rajabhat University, Suan Sunadha Rajabhat University, and Suan Dusit Rajabhat University. To improve the network administration efficiency of the Central region Rajabhat university group, suitable administrative approaches need to be identified. Documentary research on higher education networks in Thailand and overseas was conducted in order to identify appropriate model for more effective and efficient network administration. The following procedures were implemented to develop an appropriate network administration model for the Central region Rajabhat university group: 1. Interviewing network administration specialists, administrators of higher education institutes, and external members of the university executive boards; 2. Collecting their opinions on network administration of the Central region Rajabhat university group; 3. Preparing a draft of a network administration model for the Central region Rajabhat university group; 4. Examining and evaluating the drafted network administration model for the Central region Rajabhat university group; 5. Revising and submitting of the proposed network administration model for the Central region Rajabhat university group. It is expected that this network administration model will produce graduates with international standard quality and result in the empowerment of communities and the Thai society. It will also generate sustainable development and more effective administration of Thai higher education institutes.

Research Objectives

1. To study network administration approaches for higher education institutes in Thailand and overseas.

2. To develop a suitable network administration model for the Central region Rajabhat university group.

Research Framework

Conceptual frameworks for the development of a network administration model for the Central region Rajabhat university group are illustrated in Figure 1.
In this research Andrew’s higher institute network administration approach (2003:1-11) was adopted. The elements of this approach are:
1. Organizational structure
2. Organizational management
3. Strategic administration
4. Efficient and effective operation
5. Available organizational budget administration and allocation
6. Knowledge and innovation management on the basis of intelligence property registration
7. Activities implemented to forge cooperation and joint ownership of the organization

Consortium style of network administration consists of the following educational management elements:
1. Joint determination of policies, missions and visions
2. Establishment of a committee for joint administration
3. Establishment of information system based on a shared database

Concepts and factors contributing to the efficiency of network administration of the Central region Rajabhat university group:
1. Leadership
2. Policy and Strategy
3. People
4. Partnerships and Resources

Principal missions of the network administration model for the Central region Rajabhat university group are as follows:
1. Instruction
2. Academic and research work
3. Academic and technological services
4. Services to local communities
5. Production and development of instructors and educational personnel
6. Dissemination and publicity of the network’s operation under the Rajabhat University Act B.E. 2547 (2547:1)

Major elements in the network administration of the Central region Rajabhat university group in the synthesized model:
1. Measureable objectives
2. Partnership commitments
3. Shared missions and goals
4. Joint working committees
5. Communication channels and operational outcome reporting based on the principle of good governance
6. Trust and respect of partner’s decision
7. Resources sharing and mutual assistance

Guideline for network administration of the Central region Rajabhat university group

Network administration model of the Central region Rajabhat university group

**Figure 1:** Conceptual frameworks for the development of a network administration model for the Central region Rajabhat university group
Research Methods

The research was conducted in two phases:

**Phase 1** – The following procedures were implemented to examine various approaches to the administration of higher education network in Thailand and overseas:

1. Data sources – Documents, articles and researches on the administration of higher education network in Thailand and overseas.

2. Data collection tools – Questionnaires on opinions on current network administration of the Central region Rajabhat university group

3. Data collection method – Distribution of questionnaires on opinions on current network administration of the Central region Rajabhat university group to selected subjects, which consisted of 376 personnel of the upper Central region Rajabhat university group -- 152 questionnaires for personnel in administrative positions and 224 questionnaires for personnel in teaching positions. A total of 319 questionnaires or 85% of the questionnaire distributed were returned: 129 from personnel in the administrative positions and 190 from the teaching positions respectively.

4. Data analysis and Statistics Devices to determine the means, standard deviation, and opinion levels of the collected data

4.1 CVR (Lawshe, CH 1975: 563-575) was used to analyzed the content concerning the opinions on current network administration of the Central region Rajabhat university group

4.2 The data from the questionnaire, opinions on current network administration of the Central region Rajabhat university group was analyzed using Best’s mean ( ), and standard deviation.

4.3 The data from the questionnaire, opinions on current network administration of the Central region Rajabhat university group was analyzed using Best’s mean ( ), and standard deviation, as shown below:

4.50 – 5.00 = agree at the highest level
3.50 – 4.49 = agree at a high level
2.50 – 3.49 = agree at a medium level
1.50 – 2.49 = agree at a less level
1.00 – 1.49 = agree at the least level

**Phase 2** – Development of a network administration model for the Central region Rajabhat university group

1. Interviews of specialists on their opinions on the elements of the Central region Rajabhat university group network administration. The interviewed subjects in this category were three university presidents or vice-presidents, six specialists in network
administration, four members of the university network administrative committee. All 13 interview subjects were selected by purposive sampling technique.

2. Drafting of a network administration model for the Central region Rajabhat university group. The drafting procedures included:

1. Synthesized the research findings in Phase 1 and used them as the basic data for the drafting of the model.

2. Drafted the network administration model for the Central region Rajabhat university group.

3. Submitted the network administration model for the Central region Rajabhat university group draft to the thesis advisor and co-advisor for consideration.

4. Revised the network administration model for the Central region Rajabhat university group draft based on suggestions from the thesis advisor and co-advisor.

3. Organized focus group session(s) to examine the network administration model for the Central region Rajabhat university group draft. The Informant group:

   Purposive sampling technique was used to select 11 authorities to examine the network administration model for the Central region Rajabhat university group draft.

Research Results

Research findings:

1. Direction for the administration of the Central region Rajabhat university group network


   Research findings on opinions of personnel in administrative and teaching positions on the network administration
Table 1: Research findings, means, standard deviation and opinion levels of personnel in administrative and teaching positions on network administration.

<table>
<thead>
<tr>
<th>Principal elements in the network administration</th>
<th>n = 319</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>X</td>
</tr>
<tr>
<td>1. Measurable objectives such as academic objectives</td>
<td>4.23</td>
</tr>
<tr>
<td>2. Partnership commitments</td>
<td>4.13</td>
</tr>
<tr>
<td>3. Shared missions and goals</td>
<td>4.22</td>
</tr>
<tr>
<td>4. A joint working committee</td>
<td>4.17</td>
</tr>
<tr>
<td>5. Communication channels and operational outcome reporting based on the principle of good governance</td>
<td>4.24</td>
</tr>
<tr>
<td>6. Trust and respect for partner’s decision</td>
<td>4.07</td>
</tr>
<tr>
<td>7. Resource sharing and mutual assistance</td>
<td>4.30</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>4.19</strong></td>
</tr>
</tbody>
</table>

Table 1 indicates that the overall opinions of university personnel on the network operation is quite high ($\bar{X} = 4.19$). When considered individually, the means for each element range from 4.07 to 4.30 with the highest means in Element 7 – Resource sharing and mutual assistance (4.30). This is followed by Element 5 – Communication channels and operational outcome reporting based on the principle of good governance ($\bar{X} = 4.24$). Element 1 – Measurable objectives ($\bar{X} = 4.23$) while Element 6 – Trust and respect of partner’s decision has the lowest means ($\bar{X} = 4.07$).

1.2 Factors contributing to efficient administration are: leadership, policy and strategy, people, partnership and resources. Implementation of the model must include the P-D-C-A cycle for quality control. The outcome of the proposed network administration model is an efficient higher education network administration.

Research findings on opinions toward the network administration

Table 2: Means, Standard deviation and opinion levels on factors contributing to the success of network administration

<table>
<thead>
<tr>
<th>Principal elements in the network administration</th>
<th>n = 319</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>X</td>
</tr>
<tr>
<td>1. Leadership</td>
<td>4.33</td>
</tr>
<tr>
<td>2. Policy and Strategy</td>
<td>4.33</td>
</tr>
<tr>
<td>3. People</td>
<td>4.14</td>
</tr>
<tr>
<td>4. Partnerships and Resources</td>
<td>4.17</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>4.24</strong></td>
</tr>
</tbody>
</table>
Table 2 indicates that the overall opinions of Rajabhat university personnel toward the administration of the Central region Rajabhat university group network is quite high ($\bar{X} = 4.24$). When considered individually, the means for each factor range from 4.14 to 4.33 with the highest means in Factor 1 - Leadership ($\bar{X} = 4.33$), followed by Factor 2 - Policy and strategy ($\bar{X} = 4.33$) while Factor 3 – People has the lowest means ($\bar{X} = 4.14$). Implementation of the model must adopt the P-D-C-A cycle for quality control. The outcome of the proposed network administration model is an efficient higher education network administration.

2. Network administration model of the Central region Rajabhat university group

In Figure 2, the network administration model of the Central region Rajabhat university group can be described as follows:

Network administration of the Central region Rajabhat university group This network is an alliance of a group of Rajabhat universities for the purposes of academic development, educational management resource sharing, and cooperation in the development of research personnel in community development researches. The network consists of Phranakhon Rajabhat University, Chandrakasem Rajabhat University, Thepsatri Rajabhat University, Phranakhon Si Ayutthaya Rajabhat University,
Valaya Alongkorn Rajabhat University, Suan Sunadha Rajabhat University, and Suan Dusit Rajabhat University. It was established under the Thai higher education network development policy to solve current academic problems in Thai higher educational institutes regarding a shortage of teaching personnel, appropriate incentives to attract Ph.D. holders to a teaching career in higher education, and development of appropriate higher education information systems.

Administration of the Central region Rajabhat university group network must rely on the following major elements:

1. **Measurable objectives based on the operational concept** of setting up measurable academic and research objectives for instructional management. They include management processes for the improvement and promotion of instructor’s teaching activities and student’s learning activities.

2. **Partnership commitments based on the operational concept** of organizing bonding activities among network members to create a sense of partnership that will lead to mutual assistance and resource sharing.

3. **Shared missions and goals based** on the operational concept of setting up mutual network administrative missions and goals in order to achieve the objectives of resource sharing for academic development. 4. A **joint working committee based** on the operational concept of efficient administrative and academic quality control through the setting up of a joint working committee.

5. **Establishing communication channels and operational outcome reporting based** on the operational concept of good governance network to achieve efficient and quality performance. 6. **Establishing trust and respect of partner’s decisions based** on the operational concept that such trust and respect will lead to effective academic development through resource sharing. 7. **Resource sharing and mutual assistance based** on the operational concept that sharing and mutual assistance will minimize personnel, durable assets, and information system development budget.

For more efficient network administration and academic quality control. Implementation of all of these elements must take into consideration the contributing factors to efficient network administration such as leadership, policy and strategy, people, partnership and resources. Implementation of this administration model must adopt the P-D-C-A cycle for quality control. The outcome of the proposed network administration model is an efficient higher education network administration.
Research Recommendations

In order to achieve efficient administration of higher educational institutes, further studies should be conducted on the following aspects:

1. Evaluation and monitoring processes of the projects implemented by the Central region Rajabhat university group network regarding 1. Instruction; 2. Academic and research works; 3. Academic and technological services; 4. Services to local communities; 5. Network publicity. Operational evaluation and monitoring are essential tasks that need to be carried out to ensure the efficiency and effectiveness of educational management in higher education institutes.

2. Personnel training processes and techniques related to the Central region Rajabhat university group network administration. Studies on such issues will create a better understanding of the organizational goals and uniform attitudes toward the network’s operations. They should include the network’s performance in 1. Instruction; 2. Academic and research works; 3. Academic and technological services; 4. Services to local communities; and 5. Network publicity.

3. Knowledge management models and processes of the Central region Rajabhat university group network regarding 1. Instruction; 2. Academic and research works; 3. Academic and technological services; 4. Services to local communities; 5. Network publicity. Available performance reports of completed projects should be compiled by their categories and input into database systems so that such body of knowledge can be used for more efficient administration of the Central region Rajabhat university group network.

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ผู้เขียน

ผู้ช่วยศาสตราจารย์ ดร. วิวัฒน์ คลังวิจิตร ประธานในคณะกรรมการ มหาวิทยาลัยราชภัฏวไลอลงกรณ์