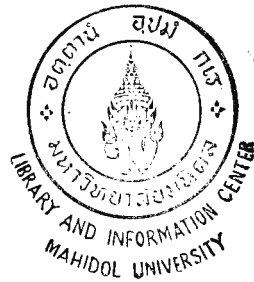


26 JUN 2003



**SELF LEARNING FOR EDUCATIONAL ENRICHMENT  
OF THE FOURTH REGION PUBLIC HEALTH PERSONNEL**

**LUMNUPORN SIWAPINYO**

With commitments

of

บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล

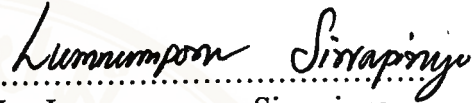
**A THESIS SUBMITTED IN PARTIAL FULFILLMENT  
OF THE REQUIREMENTS FOR  
THE DEGREE OF MASTER OF EDUCATION  
(ADULT AND CONTINUING EDUCATION)  
FACULTY OF GRADUATE STUDIES  
MAHIDOL UNIVERSITY  
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Thesis  
entitled

**SELF LEARNING FOR EDUCATIONAL ENRICHMENT  
OF THE FOURTH REGION PUBLIC HEALTH PERSONNEL**



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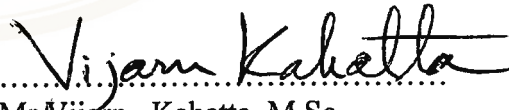
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This thesis is a partial requirements of master program in Adult and Continuing Education. The researcher studied the styles and various factors related to self learning for educational enrichment of the fourth region public health personnel. The research results indicated that pattern of self learning is varied. Hopefully, this research will be found valuable for anyone interested in self learning topic.

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**SELF LEARNING FOR EDUCATIONAL ENRICHMENT OF THE FOURTH  
REGION PUBLIC HEALTH PERSONNEL**

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**ABSTRACT**

The purposes of this research were to study the styles of self learning for educational enrichment of the fourth region public health personnel; the association between the styles of self learning for educational enrichment and gender, age, working position, educational level and field of study, working-experience, organization and working location; and the barriers to self learning for educational enrichment. The sample group was 237 public health personnel. The research instruments comprised of Peter Honey and Alan Mumford's learning style questionnaire (1986), and two questionnaires which were developed by the researcher about personal data and barriers to self learning for educational enrichment. The data were analyzed by frequency, arithmetic mean, standard deviation, and Chi-square test.

The study results showed that among the public health personnel the most commonly practiced self learning styles for educational enrichment were the reflectors, then the activists, then the pragmatists and then the theorists. The association between self learning styles and educational level had a statistical significance at 0.05. More than 50 percent of the public health personnel encountered major barriers related to work load and lack of a library.

The suggestions from this research were that the public health personnel should be encouraged to undertake self learning for educational enrichment and pursue higher education. Unnecessary work loads should be minimized. The director should provide more learning materials in the library and be supportive of the personnel's self learning for educational enrichment.

**KEY WORDS : SELF LEARNING/ EDUCATIONAL ENRICHMENT /  
PUBLIC HEALTH PERSONNEL / THE FOURTH REGION**

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รูปแบบการเพิ่มพูนความรู้ทางวิชาการด้วยตนเองของบุคลากรสาธารณสุข เขต 4 (SELF LEARNING FOR EDUCATIONAL ENRICHMENT OF THE FOURTH REGION PUBLIC HEALTH PERSONNEL)

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ศษ.ม. (การศึกษาผู้ใหญ่และการศึกษาต่อเนื่อง)

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บทคัดย่อ

การวิจัยครั้งนี้ เพื่อศึกษารูปแบบการเพิ่มพูนความรู้ทางวิชาการด้วยตนเองของบุคลากรสาธารณสุข เขต 4 ศึกษาความสัมพันธ์ระหว่างรูปแบบการเพิ่มพูนความรู้กับตัวแปร เพศ อายุ ตำแหน่ง สาขางาน การศึกษาและสาขาวิชาที่จบ ประสบการณ์ในการทำงาน สถานที่และจังหวัดที่ปฏิบัติงาน และปัญหาอุปสรรคในการเพิ่มพูนความรู้ทางวิชาการด้วยตนเอง กลุ่มตัวอย่างเป็นบุคลากรสาธารณสุข จำนวน 237 คน เครื่องมือที่ใช้ในการวิจัยเป็นแบบสอบถามเพื่อสำรวจรูปแบบการเพิ่มพูนความรู้ทางวิชาการด้วยตนเองตามทฤษฎีของ Peter Honey and Alan Mumford (1986) และแบบสอบถามที่ผู้วิจัยสร้างขึ้นเพื่อสำรวจสถานะส่วนบุคคลและปัญหาอุปสรรคในการเพิ่มพูนความรู้ วิเคราะห์ข้อมูลด้วยการแจกแจงความถี่ ค่ามัชฌิมเลขคณิต ค่าเบี่ยงเบนมาตรฐาน และ ไคสแควร์

ผลการวิจัย พบว่า บุคลากรสาธารณสุขส่วนใหญ่มีรูปแบบการเพิ่มพูนความรู้ทางวิชาการด้วยตนเองแบบนักไตร่ตรองมากที่สุด รองลงมา แบบนักกิจกรรม นักปฏิบัติ และ นักทฤษฎี ตามลำดับ นอกจากนี้ พบว่า การศึกษามีความสัมพันธ์กับรูปแบบการเพิ่มพูนความรู้ทางวิชาการด้วยตนเองอย่างมีนัยสำคัญทางสถิติที่ 0.05 ส่วนปัญหาอุปสรรคในการเพิ่มพูนความรู้ พบว่า บุคลากรสาธารณสุขมากกว่าร้อยละ 50 มีปัญหาอุปสรรคมากในการเพิ่มพูนความรู้ทางวิชาการด้วยตนเองในเรื่องภาระหน้าที่ การงานประจำและห้องสมุดในหน่วยงาน

ข้อเสนอแนะจากการวิจัยครั้งนี้ คือ ควรมีการสนับสนุนและส่งเสริมให้บุคลากรสาธารณสุข มีการเพิ่มพูนความรู้ทางวิชาการและมีการศึกษาต่อเพิ่มมากขึ้น ควรลดปริมาณงานที่ไม่เกี่ยวข้องกับบทบาทหน้าที่ ผู้บริหารควรให้ความสำคัญกับการมีห้องสมุดในหน่วยงานและสนับสนุนปัจจัยที่เอื้อต่อการเพิ่มพูนความรู้ เพื่อเป็นสร้างแรงจูงใจและส่งเสริมให้บุคลากรสาธารณสุขมีการเพิ่มพูนความรู้ทางวิชาการด้วยตนเองมากยิ่งขึ้น

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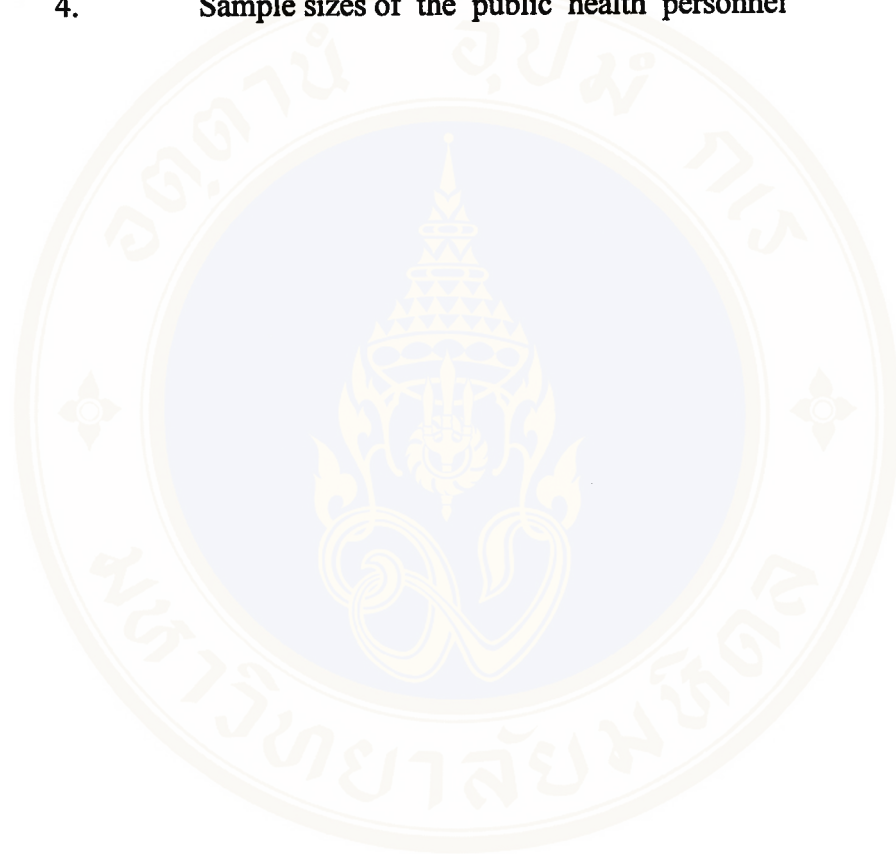
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## **CHAPTER I**

### **INTRODUCTION**

#### **Background and Significance of the Problem**

Education is an importance foundation for work for human livelihood (Office of the National Education Commission, 2000: 3). But presently, human must face rapidly social changes that affect their everyday-life. This rapidly changing events could not be solved by accumulative knowledge from the school. Knowledge is a basic instrument and a guideline for new things, particularly, in the current age when economic, social and political changes, living conditions, population structure and technological development are taking place very rapidly. All of these have both direct and indirect effects on human ways of life. So education is an only instrument to prepare human for these rapid changes. It helps them to appropriately adjust and find methods to learn and develop themselves all the times.

The Ministry of Public Health is a state agency responsible for providing public health and medical services. Its health personnel consist of doctors, nurses, pharmacists, dentists, specialists, and general administrative officers. They are responsibility for medical, public health, health promotion and health care development, food and drug controlling including other poisons hazardous to health, supporting and control the performances of the Red Cross Society to achieve the goals of the ninth National Economic and Social Development Plan B.E. 2002 - 2006 (The Public Health Association of Thailand, 2002: 33). However, the Ministry of Public Health is currently undertaking reforms of its many tasks. There are

many projects to solve many emerging problems, such as, The 30 Bath Universal Medical Coverage Scheme, The Health Care Reform Project and The Manpower Development Project in the future. According to the changing, it affects the role of the personnel that changes by this events. One of many results is that somebody has a duty along with the project and others have more work to do or change their work line accordingly. So the health personnel must develop themselves by learning with the new knowledge and technology. These things will back up them basic works including public information about the public health sciences for the public. The educational officers have role to publicize the knowledge and provide public health service. They have to make attempts to work efficiently so that they could develop quality public health researches at the provincial level (Ministry of Public Health, 1999: 11-12 ). Consequently, the educational officers are important for the public health development and doing quality works.

Although the Ministry of Public Health emphasizes human resource development with the continual personnel development plan. Nevertheless, there is a limit from the budget and the enforcement of bureaucratic regulations. The main problems of the public health personnel also include lack of analytic skills, critical thinking ability and the academic methodology by themselves (Office of the Permanent Secretary Praboromahajchanok Institute, 1999: 236). Because of the working system underneath the commander system, public health personnel consequently lose the attitude in work and the self-effort in the self-directed learning. All existing knowledge is an ordinary one that they derived from the institute. The information and technology supporting is less. The allocation of budget in the province is getting less, about 30,000 bath/year. Specifically remotely-

stationed personnel will get development less than those who work in a big organization or in the city. In some cases, they have never been trained since they graduated. Some get promote because of their seniority but they do not have the administrative skills. The training curriculums emphasize listening to lectures and receiving pattern and holding on to organized knowledge from the classrooms. (Wongkongkathep, S. 1999: 237). In addition to the statement of these problems, the Ministry of Public Health makes the future personnel development plan to develop lines of work and encourage self-directed development as follows: (Office of the Permanent secretary Praboromarajchanok Institute, 1998: 9)

1. Decreasing in classroom based training.
2. Emphasizing the environment conducive to self and continuous learning.
3. Encouraging self learning along with working or on the job training.

Accordingly, the way to human development of the Ministry of Public Health emphasizes self learning. The public health personnel need to develop themselves by using methods which help them to increase the knowledge. This process brings to develop the public health works efficiently. In addition, the benefits of self leaning could be useful to learners. It can help them make decision to choose the methods, times, places, expenses and the subjects by their needs (Benson, P. 2002: 7), like learning from internet, computer programs and another media.

From the conceptual and rationale, the researcher is interested in studying the styles of self leaning for educational enrichment of the public health personnel. This research will tell how much the public health personnel could enrich their educational

knowledge by themselves, what the characteristic of styles in self learning is and what the barriers to enrich their knowledge are.

This data will be beneficial to make the motivation for the public health personnel enrich their knowledge. The limitation of this investigation is the selection of the sample who work in the Fourth Region Public Health Office because there is no difference in work line in each province in the region. Their responsibilities are the same. The findings could be used as a database for administrators to make decisions on planning for public health personnel development in the future.

### **Purposes of the Research**

1. To study the self learning for educational enrichment of the fourth region public health personnel.
2. To study the association between self learning styles for educational enrichment and group of variables i.e.
  - 2.1 gender
  - 2.2 age
  - 2.3 working position
  - 2.4 educational level and field of study
  - 2.5 working- experience
  - 2.6 organization
  - 2.7 working location
3. To study the barriers to self learning for educational enrichment.

## Research Hypotheses

There was the association between the styles of self learning for educational enrichment and gender, age, working position, educational level, field of study ,working- experience, organization, working location.

## Scope of the Research and Conceptual Framework

This research was descriptive studies with cross sectional studies. There were public health personnel who working at the fourth region public health office i.e. Samutsakhon, Samutsongkhram, Ratchaburi, Petchaburi, Kanchanaburi, Nakhonpathom and Prachuapkirikhan. province , and at Provincial Public Health Office, Subdivision of Provincial Public Health Office, Health Centre , Regional Hospital, General Hospital , and Community Hospital. The population is specialists who working for more than 1 year in the office. There were independent and dependent variables and conceptual framework. as follows:

### independent variables

- |  |   |  |
|--|---|--|
| <ol style="list-style-type: none"> <li>1. gender</li> <li>2. age</li> <li>3. working position</li> <li>4. educational level and field of study</li> <li>5. working - experience</li> <li>6. organization</li> <li>7. working location</li> </ol> | ⇒ | <p>The self- learning for education enrichment had 4 styles as follows :</p> <ol style="list-style-type: none"> <li>1. Activist</li> <li>2. Reflector</li> <li>3. Pragmatist</li> <li>4. Theorist</li> </ol> <p>( Peter Honey and Alan Mumford theory in 1986)</p> |
|--|---|--|

### dependent variables

## **Definition of Terms**

1. **Self learning style** referred to 4 styles of methods for study, researching or self learning to increase knowledge according to the theory of Peter Honey and Alan Mumford (1986). They were:

**1.1 Activists** referred to the self learner who involve themselves fully and without bias in new experiences. They enjoy the here and now and are happy to be dominated by immediate experiences, They are open – minded, not skeptical, and this tends to make them enthusiastic about anything new. Their philosophy is: "I'll try anything once". They tend to act first and consider the consequences afterwards. Their days are filled with activity. They tackle problems by brainstorming. As soon as the excitement from one activity has died down they are busy looking for the next. They tend to thrive on the challenge of new experiences but are bored with implementation and longer term consolidation. They are gregarious people constantly involving themselves with other but, in doing so, they seek to center all activities around themselves. Those preferable learning activities for activists are role-playing brainstorming, simulated situation, small seminar and buzz group.

**1.2 Reflectors** referred to the self learner who like to stand back to ponder experiences and observe them from many different perspectives. They collect data, both first hand and from others, and prefer to think about it thoroughly before coming to any conclusion. The thorough collection and analysis of data about experiences and events is what counts so they tend to postpone reaching definitive conclusions for as long as possible. Their philosophy is to be cautious. They are thoughtful people who like to consider all possible angles and implications before

making a move. They prefer to take a back seat in meetings and discussions. They enjoy observing other people in action. They listen to others and get the drift of the discussion before making their own points. They tend to adopt a low profile and have a slightly distant, tolerant unruffled air about them. When they act it is part of a wide picture which includes the past as well as the present and others' observations as well as their own. Those preferable learning activities for reflectors are independent study and tutoring, panel discussion, lecture, field trip.

**1.3 Theorists** referred to the self learner who adapt and integrate observations into complex but logically sound theories. They think problems through in a vertical, step by step logical way. They assimilate disparate facts into coherent theories. They tend to be perfectionists who won't rest easy until things are tidy and fit into a rational scheme. They like to analyze and synthesis. They are keen on basic assumptions, principles, theories models and systems thinking. Their philosophy prizes rationality and logic "It it's logical it's good". Questions they frequently ask are: "Does it make sense?" "How does this fit with that?" "What are the basic assumptions?" They tend to be detached, analytical and dedicated to rational objectivity rather than anything subjective or ambiguous. Their approach to problems is consistently logical. This is their "mental set" and they rigidly reject anything that doesn't fit with it. They prefer to maximize certainty and feel uncomfortable with subjective judgements, lateral thinking and anything flippant. Those preferable learning activities for theorists are reasoning method, inquiry method activity, case study.

**1.4 Pragmatists** referred to the self learner who are keen on trying out ideas, theories and techniques to see if they work in practice. They positively search

out new ideas and take the first opportunity to experiment with applications. They are the sort of people who return from management courses brimming with new ideas that they want to try out in practice. They like to get on with things and act quickly and confidently on ideas that attract them. They tend to be impatient with ruminating and open – ended discussions. They are essential practical, down to earth people who like making practical decisions and solving problems. They respond to problems and opportunities “as a challenge”. Their philosophy is: “ There is always a better way” and “It is works it’s good”. Those preferable learning activities for pragmatists are laboratory method activity, demonstration and practice activity, live project activity.

**2. Educational enrichment** referred to study researching or self learning to increase understanding and skill in public health knowledge.

**3. Public health knowledge** referred to knowledge implement of health contained topic health education and behavioral science, primary health care, public dental, health and nursing promotion, control for communicable disease, control for AIDS and venereal disease, environmental sanitation, consumer and public pharmacy control, management, planing and evaluation, human resources development.

**4. Public health personnel** referred to health personnel that were specialists of start level 3 working at the fourth region public health office, in management line unit i.e. Provincial Public Health Office, Subdivision of Provincial Public Health Office, Health Centre , and in service line unit i.e. Regional Hospital , General Hospital , Community Hospital, and position i.e. health academicians, health- promotion academicians, disease-control

academicians, hygiene academicians, sanitation academicians and health-promotion develop academicians.

**5. Public health office region 4** referred to public health administrative zone covering 7 provinces : Samutsakhon, Samutsongkhram, Ratchaburi, Petchaburi, Kanchanaburi, Nakhonpathom and Prachuapkirikhan.

**6. The barriers** referred to factors or something affecting the process of self learning for educational enrichment.

### **Expected Outcomes**

1. To know the self learning for educational enrichment of the fourth region public health personnel.
2. To know the association between self learning styles for educational enrichment and group of variables i.e. gender, age, working position, educational level, field of study, working-experience, organization and working location.
3. To know the barriers to self learning for educational enrichment which can be used as a guideline for providing knowledge sources according to the needs of public health personnel.
4. To be used as a guideline for the public health office in managing training programs for health personnel to meet their particular needs effectively.
5. To set up fundamental data for the health personnel development planning.

## **CHAPTER II**

### **LITERATURE REVIEW**

In the study of “self learning for educational enrichment of the fourth region public health personnel” the researcher studied related various theories on the topic and applied as guidelines for the research. as follows:

1. Theory of Self Learning.
2. Self Learning Styles.
3. The Role and Duty of Public Health Personnel.
4. Related Research.

#### **Theory of Self Learning**

**1. Meaning of self learning** Self learning had a general meaning and it could replace words as autonomous learning, self - directed learning, learning independence. According to choose this word, it could considerate by the behavioral expose and the process.

Malcolm, S. Knowles (1975: 18) described self-directed learning as a process in which individuals take the initiative with or without the help of others, in diagnosing their learning needs, formulating learning goals, identifying human and other resources for learning, choosing and implementing learning strategies, and evaluating learning outcomes.

Chene/ (1983: 18 cited by Jarvis, P. 1992: 120) suggested that autonomous learning involved three elements: independence in the learner, the learner's creation of norms, and the learning's ability to foresee and choose.

Somkit Isarawat (1995: 6) defined that self learning was the process of which the learners taking responsibilities for learning by themselves. The learners were actuated to exploring interesting topic, and then the study process was designed and implemented through out by themselves.

Krirtkiat Srisempoke (2001: 18) suggested that: learners could learn at home or at work or even sitting on a plane, in their own time or the company time.

Robyn Hauck (2002: 3) defined that people learn by inner motivation and drive.

It could be concluded that self learning as people learn by inner motivation and freedom. The processes of how to learn, how to diagnose administrative situations, how to processes information. People could really learn what they want.

**2. The importance and advantage of self learning** Self learning was a main characteristic human learning in only educational institute of informal educational system was not enough. Human needs to learn enrichment to walk along with the globalization. There were many thing that human couldn't learn when they educate in the classroom or your graduation. Summon Amornwiwat (1998, cited by Sroinum, C. 1999 : 19) decried the educational reform that "everyone don't only to the teaching from the learning there was to learn, search and create the knowledge by self. The teaching from the teacher with the subjects and curriculum was not enough to learn because no curriculums were always up to date, no books were cover in every information for learning and no teachers were told you in every time , everywhere

and everybody.” In addition, to the passage the learner had to responsibility with self learning to choose the data for decision making and survive yourself in learning.

Johnmarshall Reeve (1996, cited by Sroinum, C. 1999 : 21) described the importance of self leaning that it was a positively results by supporting the learner’s behavior. There was a creative thinking to present the positively result in educational development as a high achievement in education, high perception to learn and social, high the self–esteem and self–respect, highly creative and talent thinking and positively emotion development.

Phil Benson ( 2002: 7) described the advantage of self learning that the learners free to learn and aware to self responsibility. This was to support both the motivation and learning quality.

So the self learning was needs for people because it helps highly to develop the thinking, the educational ability and social. There were a growth of intelligence, knowledge, the new creative, self–confident and could solve any problems. The learners could be learn all of life and continuity.

**3. Characteristic of self learning** Skager Rodney ( 1978: 116-117) made discussion of characteristic of self learning as follows:

3.1 Self acceptance referred to positive views about the self as a learner. It was grounded in extensive and successful prior experience.

3.2 Planfulness referred to planful learners were able to diagnose their own learning needs, set appropriate personal goals in the light of those needs, and devise effective strategies for accomplishing the learning goals.

3.3 Intrinsic motivation referred to learners who were intrinsically motivated persist in learning activity in the absence of external controls in the

form of rewards or sanctions. They were likely to continue learning outside of formal learning situations and delay or even forego various kinds of competing gratification in order to proceed with learning.

3.4 Internalized evaluation referred to learners who were able to act as their own evaluation agents. They could give accurate estimates of the quality of their own performance based on evidence they collect themselves. Learners who had internalized the evaluation process may solicit feedback on their own performance from knowledgeable others, but they would accept external evaluation as valid only when the qualification of the judge were established independently of social role and when the evaluation agrees with their own evidence.

3.5 Openness to experience referred to learners who were open to experience engage in new kinds of activities that may result in learning or goal setting. However, consciousness that either of the latter may occur was not necessarily the reason for entering into new kinds of activity. Curiosity, tolerance for ambiguity, preference for complexity, and even playfulness represent motives for entering into new activities and imply openness to experience. Further delineation of this construct may reveal that it comprises several component constructs.

3.6 Flexibility referred to flexibility in learning implied a willingness to change goal or learning mode and to use exploratory, trial and error approaches to problems. It did not imply a lack or persistence in learning itself. Failure was countered with adaptive behavior rather than by withdrawal.

3.7 Autonomy referred to autonomous learners choose to engage in types of learning that might not be seen as important within a particular cultural context. Such individual was able to question the normative standards of a given time and place as to what kinds of learning were valuable and permissible. However, autonomy was exercised by the learner in the service of a wider perception of personal and social utility.

Somkit Isarawat (1995: 9) described the self learning characteristics as follows:

1. Voluntarily to learn didn't compel but it was effort to learn because of the interesting in learning.
2. Self resourceful was that the learners could tell anything what they wanted to know of the necessary skill that they had to use for learning could predict the goal, the method to collect data and the learning assessment. The learners could be a manager of change that aware in the decision-making ability and responsibility to the role for the good learners.
3. Know how to learn was mean that the learner should know the process of self learning to bring themselves in the directly point to learning.

According to above statement, the persons who were a self learner had an effort to learn more than the persons who had any this manners. Unless the persons could be a good learner not only the intelligence or abilities but also the other component that had effect to the learning as mature, motivate, learning skills and the method to find the knowledge, The successful learning, the learners had to be a self-disciplinary, self-esteem, responsibility.

**4. Condition of self learning** There were many the learners who rely on the condition of self learning to support the learning and learners development.

Malcolm S. Knowles (1984: 1) concluded that factors in condition of self learning were as follows:

1. Adults need to know why they need to learn something
2. Adults need to learn experientially ,
3. Adults approach learning as problem – solving , and
4. Adults learn best when the topic was of immediate value.

Cantor (1992: 36–37) and Cranton (1992: 13–14) (cited by Blackmore J., 1996: 1) discussion of conditions of self learning as follows:

1. Adults were autonomous and self – directed.
2. Adults were goal oriented.
3. Adults were relevancy oriented (problem centered) they need to know why they were learning something.
4. Adults were practical and problem–solvers.
5. Adults had accumulated life – experience.

Garison (1997 cited by Ratana-Ubol A. 2001: 21) described the understanding for the process of self learning that came from the external and internal factors integration of the learners. This was a worth decision for learning, The learners had to push the motive to construct the creative thinking that brings to the learning responsibility underneath the external control both the resources design and the learning support. There were 3 integration both external and internal factors as follows:

1. The motivation. This was importance for the creative thinking and the continuous for the learning target. The motive was began from the learning survey to join. It came from the target needs that constructs between the personnel and organization. The learners would assess and predict the self-ability with the contents. If it was possible, the learners would be get the motivation. If they received the advantage knowledge, it was to be continuous. Cantor (1992: 37-38 cited by Blackmore J., 1996: 2) described the motivation of self learning as adult typically , had different motivations for learning than children such as those pointed out :

- 1.1 To made or maintained social relationships
- 1.2 To met external expectations
- 1.3 To learned to better serve others
- 1.4 To professional advanced
- 1.5 To escaped or stimulation
- 1.6 To pure interest

2. The self responsibility checking. It was a plan and change for the learning target. The learners were responsibility themselves to develop the re-check instrument and the method to find the new knowledge.

3. The self learning management was awareness from the external activities that concerns with the process of learning by instrument construction and the method to find the self learning.

According to the self learning , it had an different behavior by individual characteristics. Adult learners were the variety persons. There were different thing such as the marital status, social, experience, intelligent quotient, think, the target to learn and the skillful learning. The method to find the knowledge, learners would be

limit by themselves. When they wanted to know anything, they might participate to it. The characteristics of the self learning persons would be always to create the new things including find the appropriate method to learn with themselves. This persons might know their needs and know the best method that appropriate with themselves and bring to highly advantages.

**5. The barriers to self learning** Cantor (1992: 39 cited by Blackmore J., 1996: 2) pointed out, the adult had different barriers than children on their way to learning. Some of these potential barriers might include :

- 5.1 Many other responsibilities(families , carriers , social commitment)
- 5.2 Lack of time
- 5.3 Lack of money
- 5.4 Lack of child care
- 5.5 Scheduling problems
- 5.6 Transportation problems
- 5.7 Insufficient confidence
- 5.8 Having to learn (if told by boss, but not interested or ready)

## **Self Learning Styles**

**1. Meaning of styles of learning** Peter Honey (1986: 123) described as “the process of how to learn, how to diagnose administrative situations, how to learn from experience.”

Litzinger and Osif (1992: 73 cited by Blackmore J., 1996: 1) described learning styles as “the different ways in which adults think and learn” they saw that each of us developed a preferred and consistent set of behaviors or approaches to learning , In order to better understand the learning process.

Joy M. Reid (1998: 1) described as “a process defined it, a collection of skills and preferences that affect how one perceives, gathers, and processes information”.

Kenneth Fee (2001: 19) described as “people learn best by experiencing things and then studying what they had experienced.

Archanya Ratana-Ubol (1997: 34) described as “the learning model which were the generals of intelligence, mind and behavior of the trainee to choose for doing and to find the self learning.

Ancharee Chayanuwat (1998: 104) described that the learners would be the skillful to learn more than the others. It held on the different and variety process in learning.

In addition to above statement, the learning model was the general of method that persons used to find the skillful. It might be one of many way.

## **2. Theory of self learning styles**

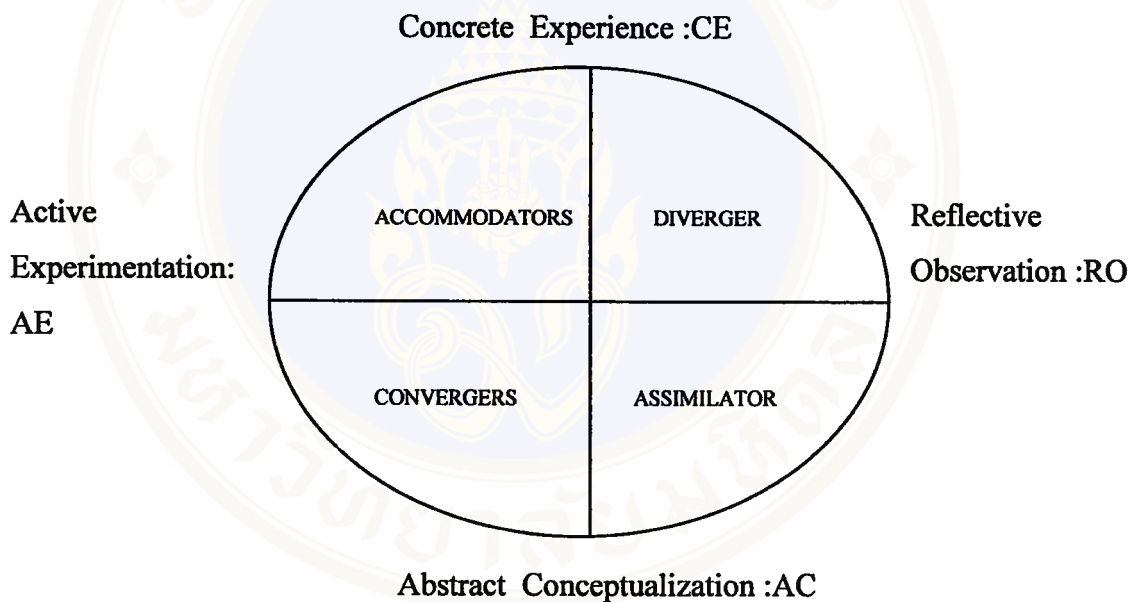
**2.1 Theory of David A. Kolb., et al. (1984 :71)** described as “Think about what people do when you had to learn something new. People probably approach the task in a similar fasion each time. That was, overtime people had developed a pattern of behavior that people use for new learning. This pattern was called a learning style.” Kolb showed that learning styles could be seen on a continuum running from:

**2.1.1 Concrete experience:** learning from specific experiences, relating to people, and sensitivity to feelings and people.

2.1.2 Reflective observation: careful observation before making a judgement, viewing things from different perspectives, and looking for the meaning of things.

2.1.3 Abstract Conceptualization: Logical analysis of ideas, systematic planning, acting on intellectual understanding of a situation.

2.1.4 Active experimentation: ability to get things done, risk taking, influence people and events through action in the diagram 1:



**Diagram 1: Kolb s' Learning Style**

**Source : Kolb, Rubin and McIntyre, 1971: 23–40**

The following was a description of the characteristic of the 4 basic learning styles. (Kolb, 1984 :77)

1. **The Diverger** This learning style had the opposite learning strengths form convergence, emphasizing concrete experience and reflective observation. The greatest strength of this orientation lies in imaginative ability and awareness of meaning and values. The primary adaptive ability of

divergence was to view concrete situations from many perspectives and to organize many relationships into a meaningful “gestalt”. The emphasis in this orientation was on adaptation by observation rather than action. This style was called diverger because a person of this type performs better in situations that called for generation of alternative ideas and implications, such as a “brainstorming” idea session. Those oriented toward divergent were interested in people and tended to be imaginative and feeling-oriented.

**2. In Assimilator** The dominant learning abilities were abstract conceptualization and reflective observation. The greatest strength of this orientation lies in inductive reasoning and the ability to create theoretical models, in assimilating disparate observations into an integrated explanation. As in convergence, this orientation was less focused on people and more concerned with ideas and abstract concepts. Ideas, however, were judged less in this orientation by their practical value. Here, it was more important that the theory be logically sound and precise.

**3. The Converger** This learning style relies primarily on the dominant learning abilities of abstract conceptualization and active experimentation. The greatest strength of this approach lies in problem solving, decision making, and the practical application of ideas. This learning style called the converger because a person with this style seems to do best in situations like conventional intelligence test, where there was a single correct answer or solution to a question or problem. In this learning style, knowledge was organized in such a way through hypothetical-deductive reasoning, it could be focused on specific problems. The convergent people were controlled

in their expression of emotion. They preferred dealing with technical tasks and problems rather than social and interpersonal issues.

**4. The Accommodator** This learning style had the opposite strengths from assimilation, emphasizing concrete experience and active experimentation. The greatest strengths of this orientation lies in doing things, in carrying out plans and tasks and getting involved in new experiences. The adaptive emphasis of this orientation was on opportunity seeking, risk taking, and action. This style was called accommodation because it was best suited for those situations where one might adapt oneself to changing immediate circumstances. In situations where the theory or plans did not fit the facts, those with an accommodative style would most likely discard the plan or theory. People with an accommodative orientation tended to solve problems in an intuitive trial-and-error manner, relying heavily on other people but were sometimes seen as impatient and “pushy”

## **2.2 Theory of Grasha, Anthony and Reichman , Sheryl (1975:87 – 88)**

They categorized 6 learning style preference :

**2.2.1. Independent** The students who choose this learning style like to think and work with self – esteem. They listened the other opinion from another friends. They learned the classical canteens which they thought its importance.

**2.2.2 Avoidance** The students who chose this learning style didn't interest the contexts in the classroom. They didn't participate both friends and teacher. They ignore everything that happen it the classroom.

**2.2.3 Participant** The students who chose this learning style like to

learn in the classroom. They felt that they had to highly participate in learning. They had a less participation with the activities out of class.

**2.2.4 Dependent** The students who chose this learning style were less effort to learn. They would only learn in the classroom. Sees that both the teacher and friends were the source of knowledge to support him for learning would found the advice persons and wanted to receive the order to command him.

**2.2.5 Competitive** The students who chose this learning style like to over activity more than another peoples in the classroom. They always felt to competitive among their friends to fight for rewards as the high score or the admire from the teachers. They would be always win.

**2.2.6 Collaborative** The students who chose this learning style like to learn with collaboration to share ideas and share their gift that they had. They tried to join with teacher and friend in teaching. They the classroom was appropriate to contract by social reaction and learn another subjects.

**2.3 Theory of Richard Mann, et al. cited by Robert B. Kozma (1975: 81 – 85)** categorized 8 learning style preference :

**2.3.1. Compliant** The learners who learned in this style as a good students because they been a hero among their friends and teachers. This group held on the work and only interest in the specific work, the teacher or parent just order to do because the teachers had to sign the score or grade. They had a trend to do work appropriately. They didn't like the disorder and uncontrolled in the class. The important characteristic of this learning style was that they need to understand in the subjects.

**2.3.2 Anxious Dependent** There were many learners in this style. About this group, the teacher must to specially interest. They also felt anxious and always need to help from the teachers. They had a serious feeling about the test and learning assessment. On the other hands, they felt anxious with the work which made them disability to do it. If the anxious felt adds with the external pressure as the parent, it was highly effect to the anxious feel about grade.

**2.3.3 Discouraged** The learners in this style didn't also self-satisfaction. When the something mistake, they felt ashamed and punish themselves. The other person didn't companions groups. They were negative attitude all of themselves and separated out of groups.

**2.3.4 Independent.** The learners in this style like to adulthood more than another groups clearly. They were a good intelligence. Responsibility and highly in self-confident. They could integrated both the learning objective and worked with creative thinking. If they had join with both the lecture and their friends to do work. They need to know about individual role clearly.

**2.3.5 Heroic.** The learners in this style had a good grade. There were also be a man. Their work had both creative and anti – social work. It was bring to violent unsatisfied. They satisfied the power. It made them to show off the symbol of groups.

**2.3.6 Spinner.** The learners in this style were the had social view. They had a low level of the pound. They ignored other advantage that concern with people. They also separated and not to face with their teacher. It was brought the trend to anti the teachers.

**2.3.7 Attentive.** The learners in this style had good a social – role more than intelligence. They also construct the relation between teachers and friend with another methods as talking about the joke for self – actualization from their groups. They felt unhappy if they had to work by self–ability.

**2.3.8 The silent student.** The learners in this style rarely participate in the learning activities. They also calmly and silent. There was a little relation with teachers and low participation in learning activities.

**2.4 Theory of Canfield (1988: 5 )** categorized 4 learning style preference:

**2.4.1 Content** This was learning with number, quality, symbol and human contents.

**2.4.2 Mode.** This was concerning with listening, read the picture and direct experiment.

**2.4.3 Condition.** This was learning under the condition belong to friends, organizations, the goals, competitions, the instructors, details, independent and powerful.

**2.4.4 Expectation.** This was learning under the successful expectation of learners. There were 3 level of expectation as excellence, medium and less than standard criteria.

**2.5 Theory of Joy M. Reid (1984: 1-3)** described as “people learn in many different mays. Reid categoriezed 6 learning style preference :

**2.5.1 Visual learning** People learned well from seeing words in books , on the chalkboard , and in work books. They remembered and understood information and instructions better if they read them. They didn’t need as much oral explanation

as an auditory learner , and they could often learn alone , with a book , they should take notes of lectures and oral directions if they wanted to remember the information.

**2.5.2 Auditory learning** People learned from hearing words spoken and from oral explanations. People might remember information by reading aloud or moving their lips as they read , especially when they were learning new material. They benefited from hearing audio tapes , lectures , and class discussions . They benefited from making tapes to listen to , by teaching other students , and by conversing with their teacher.

**2.5.3 Kinesthetic learning** People learned best by experience , by being involved physically in classroom experience. They remembered information well when they actively participate in activities , field trips , and role – playing in classroom. A combination of stimuli – for example , an audio-tape combined with an activity – would help you understand new material.

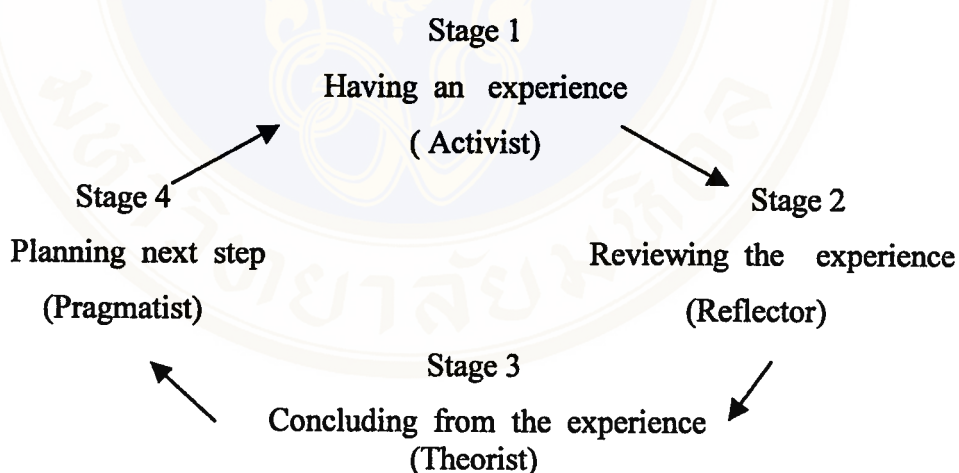
**2.5.4 Tactile learning** People learned best when you had the opportunity to do “hands – on” experiences with materials . That was , working on experiences in a laboratory , handling and building models , and touching and working with materials provide them with the most successful learning situation. Writing notes or instructions could help you remember information , and physical involvement in class related activities might help you understand new information.

**2.5.5 Group learning** People learned more easily when they studied with at least one other student , and they would be more successful completing work well when they worked others. People value group interaction and class work with other students , and they remembered information better when people worked with

two or that classmates. The stimulation people received from group work helps them learned and understood new information.

**2.5.6 Individual learning** People learned best when they worked alone. They thought better when they studied alone, and they remembered information they learned by themselves. People understood new material best when they learned it alone , and they made better progress in learning when they worked by themselves.

**2.6 Theory of Peter Honey and Alan Mumford** (1991: 124) had developed a simplified version of Kolb 's model , It was rare to find people who concisely discipline themselves to do all four stages. Depending on their learning style preferences people were likely to had a preference for which kind of learning activity within the learning cycle as follows:



**Diagram 2: Honey and Mumford s' Learning Cycle**  
Source : Alan Mumford, 1989: 29

All people learning involved all stages of the cycle; the emphasis would differ for particular kinds of learning process could be explained in terms of their relative preference for, or rejection of, a particular stage on learning cycle as follows:

2.6.1 Indulging at stage 1 : Such people equate having lots of experiences with learning and conveniently assumed that if they had experienced something they had automatically learned from it.

2.6.2 Limiting stage 1 , by repeating familiar experiences over and over again and never going out on a limb and trying something new or different.

2.6.3 Avoiding stage 1, by being a “voyeur” and learning from other people’ s experiences rather than their own . This reduced the risks of making mistakes or making fools of themselves.

2.6.4 Avoiding stage 2 , by having a stock of conclusions and forcing experiences to fit the conclusions rather than the other way round. This was closely akin to the well-know process of jumping to conclusions; the attraction was that it avoided the uncertainty of viewing an experience and the hard work of reaching conclusions.

2.6.5 Limiting stage 2 and 3, by collecting ready made ploys and techniques of the “ how to do it ” variety. This avoided the hard work of discovering and creating practical ways of doing things via reviewing and concluding experiences.

The learning styles tie in with the four stages of learning from experience as follows:

A preference for the activist style equipped them for stage 1

A preference for the reflector style equipped them for stage 2

A preference for the theorist style equipped them for stage 3

A preference for the pragmatist style equipped them for stage 4

All-round learners, or “integrated learners” as they were sometimes referred to, were clearly best equipped to manage all four stages. However, most people develop learning style preference that assist with some of these stages, and hinder others. Honey and Mumford (1986: 10) categorized 4 learning styles preference:

1. **Activists.** Who involved themselves fully and without bias in new experiences. They enjoyed the here and now and were happy to be dominated by immediate experiences, They were open – minded, not skeptical, and this tends to made them enthusiastic about anything new. Their philosophy was: “I’ll try anything once”. They tended to act first and considered the consequences afterwards. Their days were filled with activity. They tackle problems by brainstorming. As soon as the excitement from one activity had died down they were busy looking for the next. They tended to thrive on the challenge of new experiences but were bored with implementation and longer term consolidation. They were gregarious people constantly involving themselves with other but, in doing so, they sought to center all activities around themselves.

1.1 The activists learned best from activities as follows: (Honey and Mumford (1986: 25-29)

1.1.1 There were new experiences / problems / opportunities from which to learn.

1.1.2 They could engrossed themselves in short “here and now” activities such as business games, competitive team work tasks, role–playing exercises.

1.1.3 There was excitement / drama / crisis and things chop and changed with a range of diverse activities to tackle.

1.1.4 They had a lot of the limelight / high visibility , i.e. they could “chair” meetings , lead discussions , gave presentations.

1.1.5 They were allowed to generate ideas without constraints of policy or structure or feasibility.

1.1.6 They were thrown in at the deep end with a task they think was difficult, i.e. when set a challenge with inadequate resources and adverse conditions.

1.1.7 They were involved with other people, i.e. bouncing ideas off them , solving problems as part of a team. It was appropriate to “had a go”.

1.2 The activists learned least from , and might react against , activities as follows:

1.2.1 Learning involved a passive role, e. g. listening to lectures, monologues, explanations, statements of how things should be done, reading, watching.

1.2.2 They were asked to stand back and not been involved.

1.2.3 They were required to assimilate, analyzed and interpreted lost of “messy” data

1.2.4 They were required to engage in solitary work, i.e. reading, writing , thinking on their own.

1.2.5 They are asked to assess beforehand what they will learn , and to appraise afterwards what they had learned.

1.2.6 They were offered statements they saw as “theoretical”,  
i.e. explanation of cause or background.

1.2.7 They were asked to repeat essentially the same activity  
over and over again , i.e. when practice.

1.2.8 They had precise instructions to follow with little room  
for manouevre.

1.2.9 They were asked to do a thorough job , i.e. attend to  
detail, tic up loose ends , dot the i 's, cross t 's.

**2. Reflectors.** Who liked to stand back to ponder experiences and observed them from many different perspectives. They collected data , both first hand and from others, and preferred to think about it thoroughly before coming to any conclusion. The thought collection and analysis of data about experiences and events was what counts so they tended to postpone reaching definitive conclusions for as long as possible. Their philosophy was to be cautious. They were thoughtful people who liked to consider all possible angles and implications before making a move. They preferred to take a back seat in meetings and discussions. They enjoyed observing other people in action. They listened to others and got the drift of the discussion before making their own points. They tended to adopt a low profile and had a slightly distant , tolerant unruffled air about them. When they acted it was part of a wide picture which included the past as well as the present and others' observations as well as their own.

2.1 Reflectors learned best from activities as follows:

2.1.1 They were allowed or encouraged to watch/ think/ chew  
over activities.

2.1.2 They were able to stand back from events and listened / observe , i.e. observing a group at work, taking a back seat in a meeting , watching a film or video.

2.1.3 They were allowed to think before acting, to assimilated before commenting, i.e. time to prepare, a chance to read in advance a brief giving background data.

2.1.4 They could carried out some painstaking research, i.e. investigated, assembled information, probed to get to the bottom of things.

2.1.5 They had the opportunity to review what had happened , what they had learned.

2.1.6 They were asked to produce carefully considered analyses and reports.

2.1.7 They were helped to exchange views with other people without danger, i.e. by prior agreement, within a structured learning experience.

2.1.8 They could reach a decision in their own time without pressure and tight deadlines.

2.2 Reflectors learned least from , and might reacted against, activities as follows:

2.2.1 They were “forced” into the limelight, i.e. to act as leader/chairman, to role-play in front of on-lookers.

2.2.2 They were involved in situations which required action without planning.

2.2.3 They were pitched into doing something without warning, i.e. to produce an instant reaction, to produce an off – the – top – of – the - head idea.

2.2.4 They were given insufficient data on which to base a conclusion.

2.2.5 They were given cut and dried instructions of how things should be done.

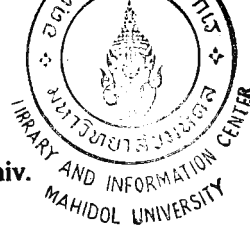
2.2.6 They were worried by time pressures or rushed from one activity to another.

2.2.7 In the interests of expediency they had to make short cuts or done a superficial job.

**3. Theorists.** Who adapted and integrated observations into complex but logically sound theories. They thought problems through in a vertical, step by step logical way. They assimilated disparate facts into coherent theories. They tended to be perfectionists who wouldn't rest easy until things were tidied and fitted into a rational scheme. They liked to analyses and synthesis. They were keened on basic assumptions, principles, theories models and systems thinking. Their philosophy prized rationality and logic "It was logical it was good". Questions they frequently asked were: "Did it made sense?" "How did this fit with that?" "What were the basic assumptions?" They tended to be detached, analytical and dedicated to rational objectivity rather than anything subjective or ambiguous. Their approach to problems was consistently logical. This was their "mental set" and they rigidly rejected anything that didn't fitted with it. They preferred to maximize certainty and felt uncomfortable with subjective judgements, lateral thinking and anything flippant.

3.1 Theorists learned best from activities as follows:

3.1.1 What was being offered was part of a system, model, concept, theory.



3.1.2 They had time to explore methodically the associations and inter – relationships between ideas , events and situations.

3.1.3 They had the chance to question and probed the basic methodology, assumptions or logic behind something, i.e. by taking part in a question and answer session, by checking a paper for inconsistencies.

3.1.4 They were intellectually stretched, i.e. by analyzing a complex situation, being tested in a tutorial session, by teaching high calibrate people who asked searching questions.

3.1.5 They were in listen to or read about ideas and concepts that emphasize rationality or logic and were well argued / elegant / watertight.

3.1.6 They could analyzed and then general the reasons for success or failure.

3.1.7 They were offered interesting ideas and concepts even though they were not immediately relevant.

3.1.8 They were required to understand and participate in complex situations.

3.2 Theorists learned least from , and might reacted against , activities as follows:

3.2.1 They were pitch forked into doing something without a context or apparent purpose.

3.2.2 They had to participate in situations emphasizing emotions and feelings.

3.2.3 They were involved in unstructured activities where ambiguity and uncertainty were high, i. e. with open – ended problems, on sensitivity training.

3.2.4 They were asked to act or decide without a basis in policy , principle or concept.

3.2.5 They were faced with a hotchpotch of alternative/ Contradictory Techniques / methods without exploring any in depth, i.e. as on a “once over lightly” course.

3.2.6 They doubted that the subject matter was method logically sound, i.e. where questionnaires hadn't been validated, where there were not any statistics to support an argument.

3.2.7 They found the subject matter platitudinous, shallow or gimmicky.

3.2.8 They felt themselves out of tune with other participants, i.e. when with lots of activists or people of lower intellectual caliber.

**4. Pragmatists.** Who were keened on trying out ideas, theories and techniques to see if they worked in practice. They positively searched out new ideas and took the first opportunity to experiment with applications. They were the sort of people who returned from management courses brimming with new ideas that they wanted to try out in practice. They liked to get on with things and acted quickly and confidently on ideas that attract them. They tended to be impatient with ruminating and open – ended discussions. They were essential practical, down to earth people who liked making practical decisions and solving problems. They responded to

problems and opportunities “as a challenge”. Their philosophy was “ There was always a better way” and “It works it was good”.

4.1 Pragmatists learned best from activities as follows:

4.1.1 There was an obvious link between the subject matter and a problem or opportunity on the job.

4.1.2 They were shown techniques for doing things with obvious practical advantages, i.e. how to save time, how to make a good first impression, how to deal with awkward people.

4.1.3 They had the chance to try out and practice techniques with coaching / feedback from a credible expert, i.e. someone who was successful and could do the techniques themselves.

4.1.4 They were exposed to a model they could emulate, i.e. a respected boss, a demonstration from someone with a proven track record, lots of examples / anecdotes, a film showing how it's done.

4.1.5 They were given techniques currently applicable to their own job.

4.1.6 They were given immediate opportunities to implement what they had learned.

4.1.7 There was a high face validity in the learning activity, i.e. a good simulation, “real” problems.

4.1.8 They could concentrate on practical issues, i.e. drawing up action plans with an obvious end product, suggesting short cuts, giving tips.

4.2 Pragmatists learned least from , and might react against , activities as follows:

4.2.1 The learning was not related to an immediate need they recognized / they could not see, an immediate relevance / practical benefit.

4.2.2 Organizers of the learning , or the event itself, seemed distant from reality, i.e. “ivory towered”, all theory and general principles , pure “chalk and talk”.

4.2.3 There was no practice or clear guidelines on how to do it.

4.2.4 They felt that people were going round in circles and not getting anywhere fast enough.

4.2.5 There were political, managerial or personal obstacles to implementation.

4.2.6 There was no apparent reward from the learning activity, i.e. more sales, shorter meetings, higher bonus, promotion.

**3. Technique and learning styles matrix** Kenneth Fee (2001: 22) described as “in order to be effective, management development techniques need to accommodate the preferred learning styles of all four types. Which techniques particularly suited which style and, where this was the case, which techniques definitely excluded certain styles. This did not mean these techniques were unusable with that type of learner, but it did represent a significant constraint, which needs to be borne in mind when designing the learning experience. The best fitted of management development techniques to preferred learning styles was summarized in the matrix as follows:

3.1 Activists tended to prefer

3.1.1 Role- playing

3.1.2 Brainstorming

- 3.1.3 Simulated situation
- 3.1.4 Small seminar
- 3.1.5 Buzz group
- 3.1.6 Games
- 3.1.7 Action learning
- 3.2 Reflectors tended to prefer
  - 3.2.1 Independent Study & tutoring
  - 3.2.2 Panel discussion
  - 3.2.3 Lecture
  - 3.2.4 Field trip
  - 3.2.5 Attending conferences
  - 3.2.6 Watching videos
  - 3.2.7 Coaching
  - 3.2.8 Distance learning
  - 3.2.9 E-learning program
- 3.3 Theorists tended to prefer
  - 3.3.1 Reasoning method
  - 3.3.2 Inquiry method activity
  - 3.3.3 Case study
  - 3.3.4 Work-based projects
- 3.4 Pragmatists tended to prefer
  - 3.4.1 Laboratory method activity
  - 3.4.2 Demonstration and practice activity
  - 3.4.3 Live project activity

### 3.4.4 Exhibitions

According to Kolb s' learning theory and theory of Honey & Mumford brought to the conclusions that the individual persons included 4 type of learning models within themselves. Each model had only one dominant characteristic. The persons who worked as same as occupation also had a learning model similarly. Exactly, we could identify the clearly learning model in each occupation and used this knowledge base to set for career selection professional development including the learning design both in the classroom and training performance of continuing education (Honey & Mumford, 1986 : 41).

In this research, the researcher studied the styles of self learning of Honey & Mumford s' theory because the researcher used as a guideline for the public health personnel development planning. There was highly supporting with self learning and all of life. The results used data to set up the training programs or the curriculum.

### **The Role and Duty of Public Health Personnel**

The Ministry of Public Health limited the role and duty of the region public health personnel in the public health management as follows: (The Ministry of Public Health, 1999 : 147)

1. There was work with public health academics in follow up, carefully, health care treatment, rehabilitation including the performance that support the cure and public health serviced by a the research methodology of public health and community problems.

2. There was planned to develop the public health of community including supervise, follow up, evaluate the performance and public the health academics.

3. There was performance in environment sanitation, control the environment quality, occupational health and other sanitation.

4. There was to train both the people and the volunteers in community and set the health service system for the target group in the duty s' areas.

5. There was coordination with another ministry and concerning organization to success the goal, to balance along with the policy and the setup projects

### **Related Research**

Joy M. Reid (1987) studied the research title the textbook along with the skillful learner who took the English subject as a second language. The sample was 1,234 foreign students in the universities of USA. There were 154 native speakers of USA students. The research instrument was a questionnaire that surveyed about the perception for the textbooks. It was found that the students who learned the English subject as a second language mostly liked the tactile and pragmatic learning textbooks. Most of them disliked the group textbooks. Within the sample, the Japans students had differ from other group at statistical significant level. About the variables found that the students who learned in major field as Engineers, Physicians, Computer business, Physical Sciences and Humanities mostly liked in the tactile learning and disliked the group learning. The students who studied in Physical Sciences major mostly liked visual learning textbooks. The students who studied in Humanities major at least liked the visual learning textbooks. The students who studied in Engineers and Computer sciences major liked the pragmatic learning textbook more than the Humanities major. The students who differed from the knowledge – base of language and the culture had different textbooks at statistical significance as the Korean students mostly liked the

visual learning textbook, the Arabian and Chinese students mostly liked the auditory learning textbooks. The Thai, Malaysian and Spanish students least liked the auditory learning textbooks. Most of them liked to learn with tactile learning textbooks. There were only in that, Spanish and Korean students who differed from the native speaker students didn't like the pragmatic learning textbooks. On the other hand, all of groups disliked the group learning textbook.

**Methee Pилanthanan (1994)** studied "the learning model of the graduate students. Both Educational Management and Vocational Educational Management by theory of David A. Kolb" The sample was students who studied in 5 universities as Chulalongkorn University, Sri Nakharinwirot University, Kasetsart University, King Mongkut's Institute of Technology Chaohuntaharn Lat Krabany and King Mongkut's Institute of Technology North Bangkok. It was found that most of students unless men or women and every group of class had an assimilater learning model more than other models.

**Sarunya Rugirekroung (1994)** studied "the learning model of the librarians in the higher education institutes with the need for training." The sample was the 109 librarians who worked in the central library in 53 higher education institutes belong to the government and private sector. The research instrument was surveyed the learning model belong to the theory of Honey and Mumford. It was found that most of librarians had the activist learning model (29.4 percent), the reflector, theorist and the pragmatist (24.8 percent , 24.8 percent and 21.1 percent , respectively). The Chi – square test found that the work time in the professional librarian had related with the learning models at statistical significant 0.05. The variables as age, educational level, the institutes where they graduated, the domicile

and the range of experience in working non related with the learning models at statistical significant 0.01.

**Waraporn Pliplakorn (1996)** studied “ the model and the method to develop the educational management in the community hospital the central region of the Ministry of Public Health. The sample was the public officers of 55 community hospitals. It was found that there were the barriers of work performances the officers had over load the tasks and they didn't interest in the educational works. There was limitation the area for set to the library.

**Chachris Chumworathayee (1997)** studied “ the performance assessment with the role of the public health officers in the south provincial region. The sample was 149 educational officers. It was found that the barriers in their works as the overload tasks, vote enough time to work with perfectly and lack of the educational supporting seriously.

**Hathairat Bunsamoe (1998)** studied the comparative study the learning model of the old mans in the social – service center, Dindaeng. The sample was the 51 old men who received service in this place. The research instrument was the questionnaires it belong to David A. Kolb. It was found that almost of the old men liked to observation more than pragmatic. They had a good vision, interested in people and had creative the imagination. The second model was tried to do, experiment, adaptation and the talent situations. They liked to solved the problem by themselves and participated with the others. The thinking model had less in their groups. They also used the intangible thinking to solve the problems, liked to work in the technical jobs and liked to join with friends and social. When compared the

learning model with the sex, age, educational level, learning activity variable found that hadn't different at statistical significant 0.05.

**Pisamai Ananjawanit (1998)** studied the educational management statement and problems in the Nursing college belong to the Praboromarajchanok Institute The Ministry of Public Health. The sample was 67 administrator the Nursing college and 242 teachers. It was found that the problems in the educational management for social as the overload tasks of the teachers who didn't enough time to educational service for the social.

**Wichian Kaenrai (1999)** studied the self development of the primary school administrators belong to the Office of the Primary Education, Supanburi province. The population was 420 primary school administrators. It was found that the problems of the self development of the primary school administrators were lack of the learning, budget supporting and information.

**Panchalee Wasanasomsit (2000)** studied the learning style of students who learned the English language as a foreign language. The sample was 318 student of the first class of Chulalongkorn University who registered in the foundation English 2 subject second semester, 1999. She studied in 6 categorized of learning styles as the visual learning, auditory learning, kinesthetic learning, tactile learning, individual learning and group learning. The research instrument was the Likert's scale questionnaires which developed by professor Joy M. Reid of university of Wyoming. It was found that the sample was mostly a kinesthetic learning style and least in a individual learning style. The second learning style was group learning. On the other hands, when compare between the visual learning and auditory learning found that there were the activities of auditory more than the visual and another activities. The

researcher compared the attitude in learning style that categorized into two groups as the sciences group that consisted of the faculty of Sciences, faculty of Engineering and faculty of Social Medicine and the Social Sciences group. The analysis found that hadn't different. The comparative analysis the median of attitude for learning styles between groups found that the Social Sciences group was a high median of auditory learning (17.6) more than visual learning (16.91). The comparative analysis by age and gender of sample found that both of male and female was a kinesthetic learning style. They liked to learn in a group learning more than individual learning. The female students was a visual learning more than male students. The proficient students liked to learn by individual learning more than the non proficient students.

## CHAPTER III

### MATERIALS AND METHODS

The research was a descriptive research aiming to study the self learning for educational enrichment of the fourth region public health personnel. The methods employed for this investigation were as follows:

#### **Population and Sample**

**1. Population** Research population included public health personnel who working at Provincial Public Health Office, Subdivision of Provincial Public Health Office, Health Centre, Regional Hospital , General Hospital , Community Hospital, The population was public health personnel who working for more than 1 year in year 2002 and under the fourth region public health office covering 7 provinces : Samutsakhon, Samutsongkhram, Ratchaburi, Petchaburi, Kanchanaburi, Nakhonpathom and Prachuapkirikhan.. There were 833 public health personnel who position health academicians, health-promotion academicians, disease-control academicians, hygiene academicians, sanitation academicians and health-promotion develop academicians.

**2. The sample** The limitation of sample and sampling had a process as follows :

2.1 The limitation of sample used the Cochran (Cochran, 1977 cited by Kijpredarborisuthi B., 2000: 164) formula with the error of random sampling (0.05)

$$n = \frac{400 N}{399 + N}$$

when  $n$  = size of sample  
 $N$  = size of total population replace in the formula,

So  $n = \frac{400 \times 833}{399 + 833}$   
 $= 270.45$

Sample sizes in the research were 271 public health personnel or 32.5 percent of total population.

2.2 Sampling. The researcher used the stratified Random sampling. The method was divided the population into 7 provinces, in each province, there were grouped the public health personnel by the office 3 level as follows :

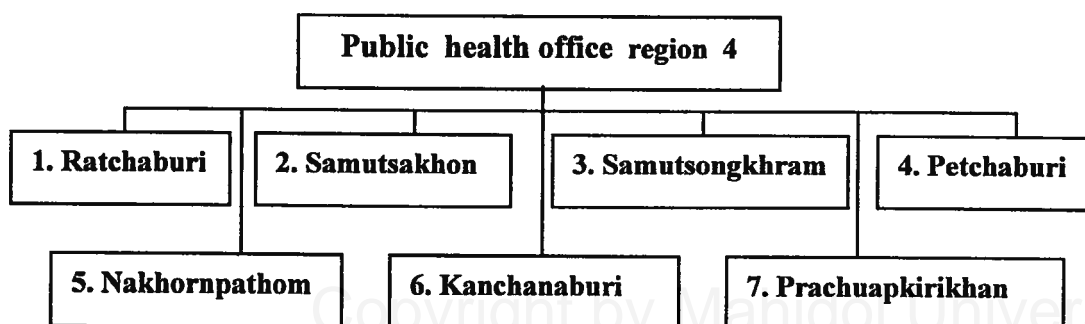
2.2.1 The Provincial Public Health Office

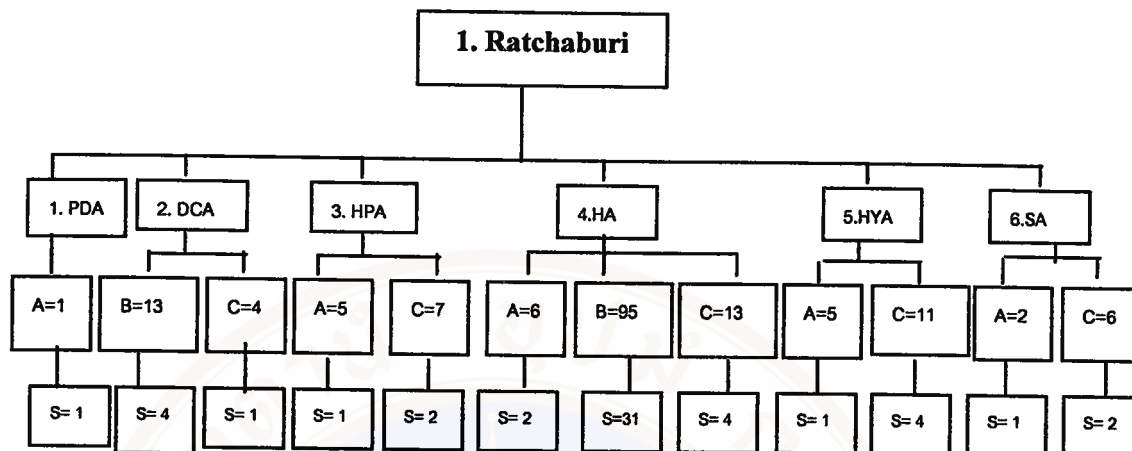
2.2.2 Subdivision of Provincial Public Health office and Health Centre.

2.2.3 Regional Hospital, General Hospital, Community Hospital

In each province used the simple random sampling for select the sample by the office. Then there were list the named in each groups to be arranged in order the numbers. The researcher drawn lots the numbers by the total of subjects in each position, work line and the offices. It showed in the diagram 3 as follows:

**Diagram 3** Number of provinces in the fourth region



**Diagram 4** Sample sizes of the public health personnel

When PDA = health-promotion develop academicians.

DCA = disease-control academicians

HPA = health-promotion academicians

HA = health academicians

HYA = hygiene academicians

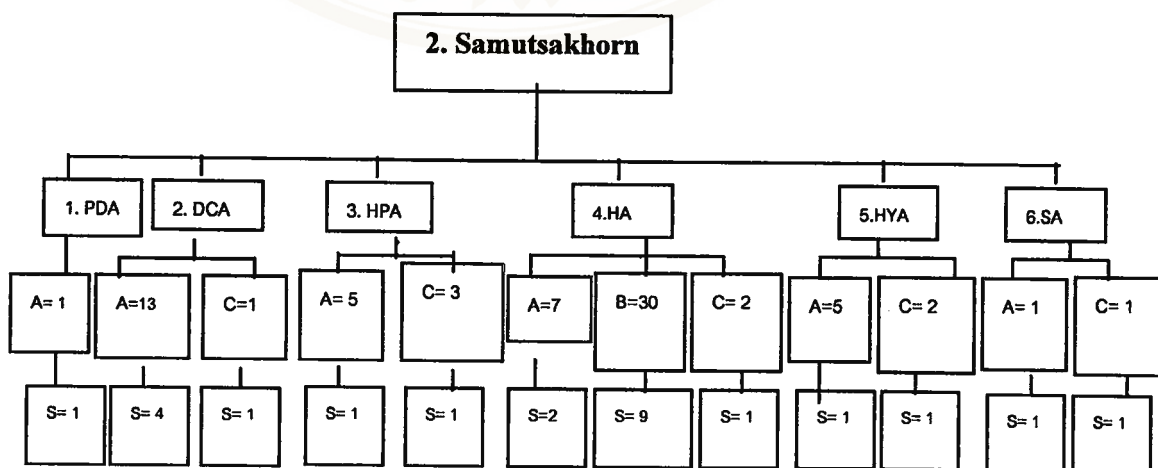
SA = sanitation academicians

A = The Provincial Public Health Office

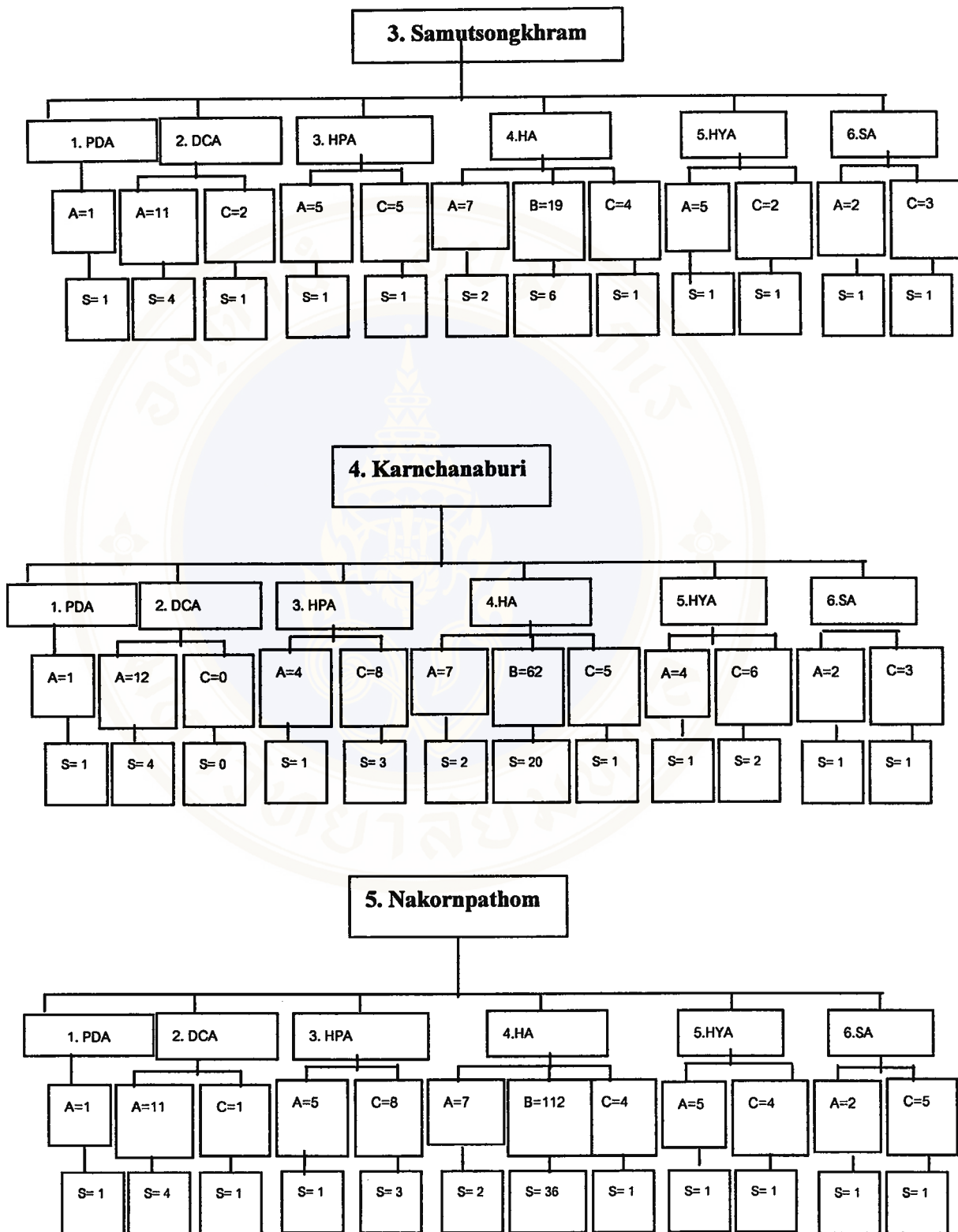
B = Subdivision of Provincial Public Health office and Health centre.

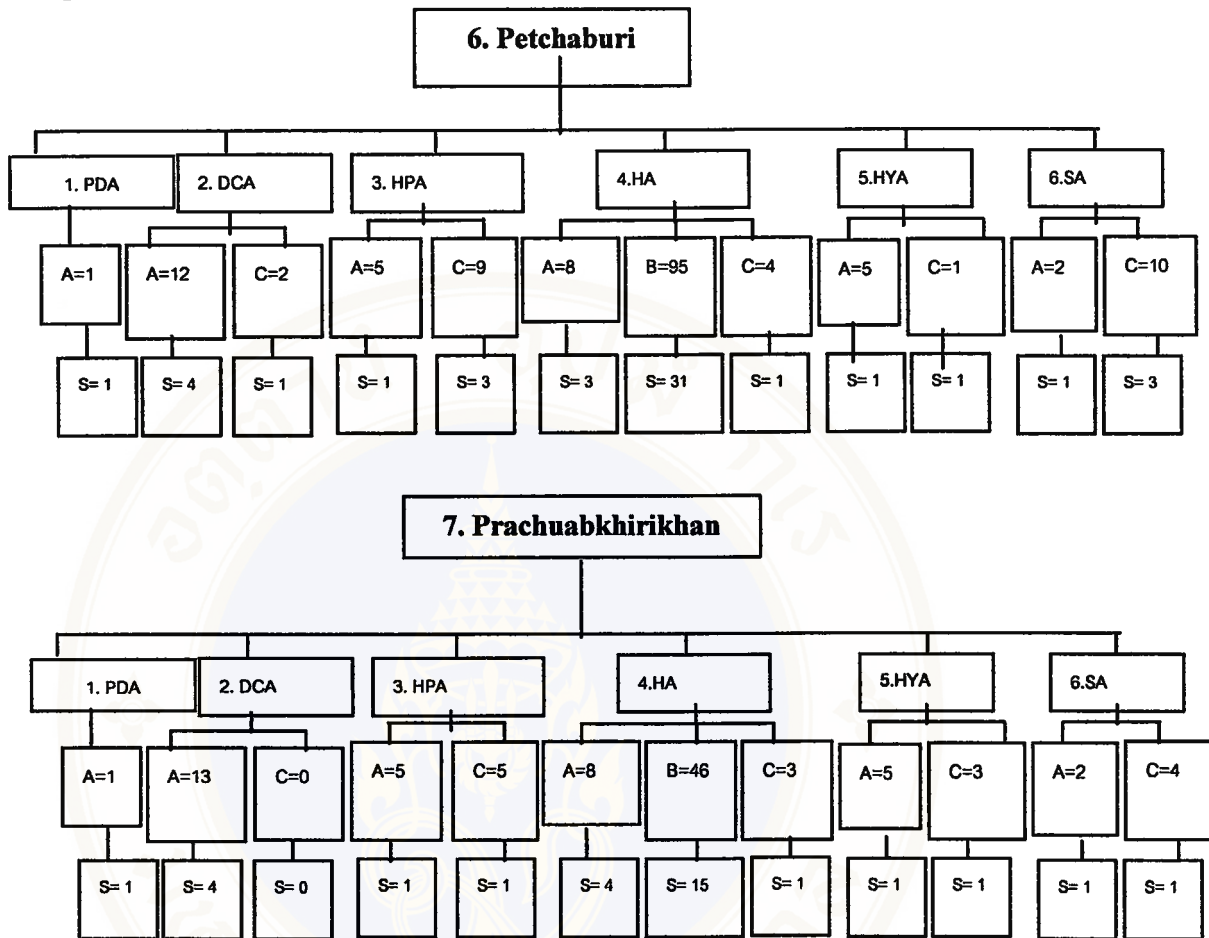
C = Regional Hospital, General Hospital, Community Hospital

S = subject group



**Diagram 4 (Cont.)**



**Diagram 4 (Cont.)**

## Research Instrument

1. The research instrument was composed of 2 questionnaires as :

1.1 The questionnaire was surveyed the styles of self learning for educational enrichment of the fourth region public health personnel. This instrument healing to “The learning styles Questionnaire in the Manual of learning styles” in Peter Honey and Alan Mumford (1986)” It had adjusted wording some questions to balance in the knowledge enrichment of self learning and it easy for the sample to do the questionnaires.

1.2 The questionnaires were surveyed about the demographic data and

the barriers to self learning for educational enrichment of the fourth region public health personnel. This questionnaires which the researcher constructed from the documents and the concerning research were consisted of 3 parts as:

**Part 1** Demographic data of respondents: gender, age, working position, educational level, field of study, working-experience, organization, working location. There were also 6 multiple-choice and closed-opened ended questions.

**Part 2** There were 4 styles in self learning for educational enrichment as the activist, the reflector, the pragmatists and the theorist. The questionnaire was 20 multiple-choices select Yes or No in each style including the 80 items in the questionnaire. The sample couldn't know the name in each style. The score criteria in each question of 4 styles in self learning for educational enrichment were consist of:

Answer	Yes	Mean	1	score
Answer	No	Mean	0	score

**Part 3** The barriers to self learning for educational enrichment put compounded the self, the office, and the supporting barriers. There were 14 items of 5 rating scale. The answers consisted of highest, high, medium, low and lowest. The sample might choose in one-choice. There were criteria as follows :

Highest	Meant	5	scores
High	Meant	4	scores
Medium	Meant	3	scores
Low	Meant	2	scores
Lowest	Meant	1	score

2. The quality of instrument. This instruments brought to 3 qualified persons to confirm the content validity as :

Dr. Chidchong S. Nantanate ; the lecturer belong to the subject of Non-formal Education, Silpakorn university.

Lect.Prasert Boonsraem ; the lecturer belong to the subject of educational technology, Sokhothai Thammathirat open university.

Lect Ong-art Sitthichroenchai ; The director of the public health administrator college, Praboromarajchanok Institute the Ministry of Public health.

After the qualified persons confirmed the content validity of this research instrument, the researcher took it to try out at the 30 public health officers who worked in 4 organization such as: the Public Health office of Nonthaburi province, Public Health office of Ampher Bangyai, the Health center in Ampher Bangyai and Pranagklao Hospital Nonthaburi province. It brought to confirm the reliability in part 2 and part 3 as follows:

Part 2 Self learning styles for educational enrichment, it analyzed by the discrimination power. There were selected the items more than  $\pm 0.2$  as a good question (Kijpredarborisuthi B., 1997: 213). The result of analysis, there were 56 items from 80 items in a good criteria. About 24 items took to adjust in wording and try out with Reliability again by Cronbach's coefficient Alpha formula (Kijpredarborisuthi B., 1997: 212) as follows:

$$r_{tt} = \frac{k}{k-1} \left\{ 1 - \frac{\sum S_i^2}{S_t^2} \right\}$$

Then

$r_{tt}$  = Reliability of scale

k = Number of items

$S_i^2$  = Item Variance

$S_t^2$  = Total Variance

The Reliability of total questionnaires were 0.8006

Part 3 The barriers to self learning for educational enrichment analyzed by the power discrimination power. There were selected the items more than  $\pm 0.2$  as a good question (Kijpredarborisuthi B., 1997: 213) The result of analysis , there were 11 items in a good criteria. At there reverred only 3 items took to adjust in wording and try out with Reliability again as part 2 by Cronbach's coefficient Alpha formula. The reliability of total questionnaires were 0.7153.

### **Data Collection**

The researcher sent the documents from the faculty of social sciences and Humanities, Mahidol University to the Head of the 4<sup>th</sup> Public health officer. It identified the objective and co-operative to answer the questionnaires. The researcher collected the data and made a code into the questionnaires. There was co-operative with the public health officers in the Provincial Public Health Office one by one. The researcher sent the 300 questionnaires by mail and it came back with completed as 237 copies as 79 percent of total questionnaires within 2 weeks.

### **Data Analysis**

The steps involved in data analysis as follows:

1. The researcher checked the completely data.
2. There was to make a code book.
3. Data Analysis used the computer with statistical package for social sciences for windows program.
4. The statistical analysis used by:

4.1 In demographic data of sample as gender, age, working position, educational level, field of study, working-experience, organization, working location was analyzed by frequency, percentage and presented as a tabulation.

4.2 Analysis the self learning styles for educational enrichment were analyzed by:

4.2.1 Frequency, arithmetic mean, standard deviation and include the total in each style .

4.2.2 There were took the score in each style to adjust to the standard score. The styles which got the highest standard score were choose to be a representation styles (Kijpredarborisuthi B., 1997: 297) as follows:

$$T = 50 + \frac{10(X - \bar{X})}{S.D.}$$

Then

T = standard score

X = the raw score in each models

$\bar{X}$  = mean of the sample group

S.D. = standard deviation

4.2.3 There were divide the scores of the self learning styles for educational enrichment into 3 level as high, medium and low as follows:

below 60 percent of total scores (below 12 scores) meant low

between 60-79 percent of total scores (12-15 scores) meant medium

over 80 percent of total scores (over 16 scores) meant high

For the interpretation, if the styles which had a low score, it meant low preference for styles. If the styles which had a medium score, it meant moderate preference for styles. If the styles had a high score, it meant strong preference for styles.

4.3 The association analysis between the independent variables and dependent variable used the Chi - Square test (Kijpredargborisuthi B., 2000: 247)

$$\chi^2 = \sum \frac{(O-E)^2}{E}$$

then  $E = \frac{R \times C}{N}$

R = total in rows

C = total in column

N = total data

df = (r-1)(c-1)

$\chi^2$  = Chi-Square score

O = Observed Value

E = Expected Value

4.4 The barriers were analyzed by frequency and percentage in each items.

### The Results Presentation

The results were presented as a tabulation and decried the data.

## CHAPTER IV

### RESULTS

This research studied about self learning for educational enrichment of the fourth region public health personnel. There were 237 public health personnel who answered the questionnaires. The research results were presented following by lecture and composed of tables. as follows:

1. The Demographic Data of the Sample.
2. Self Learning for Educational Enrichment.
3. The Barriers to Self Learning for Educational Enrichment.

#### **The Demographic Data of the Sample**

There were 237 public health personnel who answered the questionnaires. The results found that 57 percent were female and 43 percent were male. They were in the age range of 23-66 years , averaging 37 years. When considering the educational level, there were 86.1 percent who graduated a bachelor degree. Most of the public health personnel were 65.4 percent who graduated a field of study in public health, following by 17.7 percent who graduated in social science and educational, 16.9 percent who graduated in science or nursing. About the working position, 65.8 percent were the health academicians, as for working-experience, half of them (49.4 percent) had working-experience below 5 years, following by the minimum of 1 year, and the maximum of 36 years and the average working-experience was 8 years.

About the organizations, there were 39.7 percent who work at Health Centre, following by 30 percent who work at Provincial Public Health Office, 16.9 percent who work at Hospital, and the rest who work at Subdivision of Provincial Public Health Office. For the working location, there were 19 percent work at Nakhonpathom province, following by 17.7 percent 16.5 percent 14.8 percent 14.3 percent 12.7 percent work at Kanchanaburi, Ratchaburi, Prachuapkirikhan, Phetchaburi and Samutsakhon province respectively, and the rest who work at Samutsongkhram province, as shown in table 1.

**Table 1** Number and percentage of health personnel categorized by demographic data

	Number	Percentage
<b>Total</b>	237	100.0
<b>Gender</b>		
Female	135	57.0
Male	102	43.0
<b>Age</b>		
< 30 Years	18	7.6
30- 34 Years	63	26.6
35-39 Years	78	32.9
40-44 Years	56	23.6
≥ 45 Years	22	9.3
$\bar{X} = 37.3$ , S.D. = 6.14 , Min = 23 , Max = 66		
<b>Educational level</b>		
Master Degree or higher	33	13.9
Bachelor or equivalent	204	86.1
<b>Field of study</b>		
Health Sciences	155	65.4
Sciences or Nursing	40	16.9
Social Sciences and Education	42	17.7
<b>Working position</b>		
Health academicians	156	65.8
Non- health academicians	81	34.2

**Table 1 (cont.)**

	Number	Percentage
<b>Total</b>	237	100.0
<b>Working Experience</b>		
< 5 years	71	30.0
5-9 years	32	13.5
10-14 years	94	39.7
≥ 15 years	40	16.9
$\bar{X} = 8.01$ , S.D. = 5.30 , Min = 1 , Max = 36		
<b>Working location</b>		
Nakhonpathom	45	19.0
Kanchanaburi	42	17.7
Ratchaburi	39	16.5
Prachuapkirikhan	35	14.8
Phetchaburi	34	14.3
Samutsakhon	30	12.7
Samutsongkhram	12	5.1

## Self Learning for Educational Enrichment

1. Self learning styles for educational enrichment. It was revealed that among the public health personnel the most commonly practiced self learning styles for educational enrichment were the reflectors (27.4 percent), then the activists were 25.7 percent, then the pragmatists were 24.1 percent, and then the theorists were 22.8 percent, as shown in table 2.

**Table 2** Number and percentage of health personnel categorized by self learning styles for educational enrichment

Self learning styles.....	Number	Percentage
Reflectors	65	27.4
Activists	61	25.7
Pragmatists	57	24.1
Theorists	54	22.8
Total	237	100.0

2. Each the characteristic of self learning styles for educational enrichment.

2.1 The reflectors. It was revealed that the minimum score was

6 points, the maximum score was 19 points, averaging 13.97 points or 69.85 percent of the total points. This indicated that the public health personnel were moderate preference for the reflectors. When the score was distributed, there were 57.8 percent who were moderate preference for the reflectors, 27 percent who were equivalent low and strong preference for the reflectors, as shown in table 3.

**Table 3** Number and percentage of health personnel categorized by characteristic of self learning style for educational enrichment in the reflectors

Characteristic of self learning style for Educational enrichment in the reflectors	Number	Percentage
strong preference	64	27.0
moderate preference	137	57.8
low preference	36	27.0

$\bar{X} = 13.97$  , S.D. = 2.55 , Min = 6 , Max = 19

2.2 The activists. It was revealed that the minimum score was 5 points, the maximum score was 19 points, averaging 12.54 points or 62.7 percent of the total points. This indicated that the public health personnel were moderate preference for the activists. When the score was distributed, there were 53.6 percent who were moderate preference for the activists, 34.2 percent who were low preference for the activists, and 12.2 percent who were strong preference for the activists, as shown in table 4.

**Table 4** Number and percentage of health personnel categorized by characteristic of self learning style for educational enrichment in the activists

characteristic of self learning style for educational enrichment in the activists	Number	Percentage
strong preference	29	12.2
moderate preference	127	53.6
low preference	81	34.2

$\bar{X} = 12.54$  , S.D. = 2.72 , Min = 5 , Max = 19

2.3 The pragmatists. It was revealed that the minimum score was 8 points, the maximum score was 20 points, averaging 14.59 points or 72.95 percent of the total points. This indicated that the public health personnel were moderate preference for the pragmatists. When the scores were distributed, there were 57 percent who were moderate preference for pragmatists, 35 percent who were strong preference for the pragmatists and 8 percent who were low preference for the pragmatists, as shown in table 5.

**Table 5** Number and percentage of health personnel categorized by characteristic of self learning style for educational enrichment in the pragmatists

characteristic of self learning for educational enrichment in the pragmatists	Number	Percentage
strong preference	83	35.0
moderate preference	135	57.0
low preference	19	8.0

$\bar{X} = 14.59$  , S.D. = 2.16 , Min = 8 , Max = 20

2.4 The theorists. It was revealed that the minimum score was 5 points, the maximum score was 20 points, and averaging 14.11 points or 70.55 percent of the total points. This indicated that the public health personnel were moderate preference for the theorists. When the score was distributed, there were 52.7 percent who were moderate preference for theorists, 32.9 percent who were strong preference for the theorists and 14.3 percent who were low preference for the theorists, as shown in table 6.

**Table 6** Number and percentage of health personnel categorized by characteristic of self learning style for educational enrichment in the theorists

characteristic of self learning style for educational enrichment in the theorists	Number	Percentage
strong preference	78	32.9
moderate preference	125	52.7
low preference	34	14.3

$\bar{X} = 14.11$  , S.D. = 2.74 , Min = 5 , Max = 20

## The Association Between Self learning Styles for Educational Enrichment and the Demographic Data

1. Gender. There was no association between self learning styles for educational enrichment and gender. In the study, female practiced self learning styles for educational enrichment were the reflectors and the pragmatists more than male. However, they were the reflectors more than other styles. Male practiced self learning styles for educational enrichment were the activists and the theorists more than female and the activists more than other styles, as shown in table 7.

**Table 7** Number and percentage of the public health personnel categorized by gender and self learning styles for educational enrichment

gender	activists		reflectors		theorists		pragmatists	
	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
Female	31	23.0	39	28.9	30	22.2	35	25.9
Male	30	29.4	26	25.5	24	23.5	22	21.6

$\chi^2 = 1.686$  ,  $p = 0.640$  ,  $df = 3$

2. Age. There was no association between self learning styles for educational enrichment and age. In the study, the public health personnel were young of age practiced self learning styles for educational enrichment were the activists and the pragmatists more than other groups and more than other styles. However, they were old of age practiced self learning styles for educational enrichment were the reflectors and the theorists more than other groups and the theorists more than other styles, as shown in table 8.

**Table 8** Number and percentage of health personnel categorized by age and self learning styles for educational enrichment

Age	activists		reflectors		theorists		pragmatists	
	Number	Per centage	Number	Per centage	Number	Per centage	Number	Per centage
< 30 years	6	33.3	3	16.7	3	16.7	6	33.3
30-34 years	19	30.2	15	23.8	8	12.7	21	33.3
35-39 years	19	24.4	26	33.3	19	24.4	14	17.9
40-44 years	13	23.2	14	25.0	15	26.8	14	25.0
≥45 years	4	18.2	7	31.8	9	40.9	2	9.1

$$\chi^2 = 16.830, p = 0.156, df = 12$$

3. Educational level. The association between self learning styles for educational enrichment and educational level had a statistical significance at 0.05. In the study, the public health personnel who graduated a master degree or higher practiced self learning styles for educational enrichment were the activists and the reflectors more than another group and the activists more than other styles. However who graduated a bachelor degree they practiced self learning styles for educational enrichment were the theorists and the pragmatists more than another group but the reflectors more than other styles, as shown in table 9.

**Table 9** Number and percentage of health personnel categorized by educational level and self learning styles for educational enrichment

educational level	activists		reflectors		theorists		pragmatists	
	Number	Per centage	Number	Per centage	Number	Per centage	Number	Per centage
Master Degree or higher	14	42.4	10	30.3	6	18.2	3	9.1
Bachelor or equivalent	47	23.0	55	27.0	48	23.5	54	26.5

$$\chi^2 = 8.187, p = 0.042, df = 3$$

4. Field of study. There was no association between self learning styles for educational enrichment and field of study. In the study, the public health personnel graduated in public health practiced self learning styles for educational enrichment were the reflectors more than their graduated in other field of study,

and the reflectors more than other styles. Who graduated in science or nursing they practiced self learning styles for educational enrichment were the theorists and the pragmatists more than their graduation in other field of study and the reflectors, the theorists and the pragmatists more than overall. Who graduated in social science and education they practiced self learning styles for educational enrichment were the activists more than overall, as shown in table 10.

**Table 10** Number and percentage of health personnel categorized by field of study and self learning styles for educational enrichment

field of study	Activists		reflectors		theorists		pragmatists	
	Number	Per centage	Number	Per centage	Number	Per centage	Number	Per centage
Health Sciences	39	25.2	44	28.4	32	20.6	40	25.8
Sciences or Nursing	7	17.5	11	27.5	11	27.5	11	27.5
Social Sciences and education	15	35.7	10	23.8	11	26.2	6	14.3

$$\chi^2 = 5.929, p = 0.431, df = 6$$

5. Working position. There was no association between self learning styles for educational enrichment and working position. In the study, most of the public health personnel was health academicians practiced self learning styles for educational enrichment were the reflectors and the theorists more than another groups and the reflectors more than other styles. They was non-health academicians practiced self learning styles for educational enrichment were the activists and the pragmatists more than another groups and the pragmatists more than other styles, as shown in table 11.

**Table 11** Number and percentage of health personnel categorized by working position and self learning styles for educational enrichment

Working position	activists		reflectors		theorists		pragmatists	
	Number	Per centage	Number	Per centage	Number	Per centage	Number	Per centage
Health academicians	39	25.0	45	28.8	38	24.4	34	21.8
Non-health academicians	22	27.2	20	24.7	16	19.8	23	28.4

$$\chi^2 = 1.894, p = 0.595, df = 3$$

6. Working -experience. There was no association between self learning styles for educational enrichment and working experience. In the study, the public health personnel had little year of working experience practiced self learning styles for educational enrichment were the reflectors more than other groups and other styles. They had many years of working experience practiced self learning styles for educational enrichment were the activists, the theorists and the pragmatists more than other groups and the activists and the theorists more than other styles, as shown in table 12.

**Table 12** Number and percentage of health personnel categorized by working-experience and self learning styles for educational enrichment

Working-Experience	activists		reflectors		theorists		pragmatists	
	Number	Per centage	Number	Per centage	Number	Per centage	Number	Per centage
< 5 years	31	26.5	36	30.8	20	17.1	30	25.6
5-9 years	10	26.3	10	26.3	10	26.3	8	21.1
10 - 14 years	11	22.0	11	22.0	15	30.0	13	26.0
≥15 years	9	28.1	8	25.0	9	28.1	6	18.8

$$\chi^2 = 5.604, p = 0.779, df = 9$$

7. Organizations. There was no association between self learning styles for educational enrichment and organizations. In the study, the public health personnel worked in Provincial Public Health Office practiced self learning styles for educational enrichment were the activists more than overall, they



worked in Subdivision of Provincial Public Health Office practiced self learning styles for educational enrichment were the theorists and the pragmatists more than overall, and they worked in Health Centre and Hospital practiced self learning styles for educational enrichment were the reflectors more than overall, as shown in table 13.

**Table 13** Number and percentage of health personnel categorized by organization and self learning styles for educational enrichment

Organization	activists		reflectors		theorists		pragmatists	
	Number	Per centage	Number	Per centage	Number	Per centage	Number	Per centage
Provincial Public Health Office	20	28.2	14	19.7	18	25.4	19	26.8
Subdivision of Provincial Public Health Office	7	21.9	7	21.9	9	28.1	9	28.1
Health Centre	24	25.5	32	34.0	17	18.1	21	22.3
Hospital	10	25.0	12	30.0	10	25.0	8	20.0

$\chi^2 = 6.281, p = 0.711, df = 9$

8. Working location. There was no association between self learning styles for educational enrichment and working location. In the study, the public health personnel worked at Samutsakhon province practiced self learning styles for educational enrichment were the activists more than overall, they worked at Nakhonpathom province practiced self learning styles for educational enrichment were the reflectors and the theorists more than overall, they worked at Prachuapkirikhan province practiced self learning styles for educational enrichment were the pragmatists more than overall. Moreover, they worked at Samutsongkhram and Kanchanaburi province practiced self learning styles for educational enrichment were the reflectors more than overall, they worked at Phetchaburi province practiced self learning styles for educational enrichment were the reflectors and the theorists more than overall, and they worked at

Ratchaburi province practiced self learning styles for educational enrichment were the activists more than overall, as shown in table 14.

**Table 14** Number and percentage of health personnel categorized by working location and self learning styles for educational enrichment

Working location	activists		reflectors		theorists		pragmatists	
	Number	Per centage	Number	Per centage	Number	Per centage	Number	Per centage
Samutsakhon	14	46.7	5	16.7	3	10.0	8	26.7
Samutsongkhram	3	25.0	4	33.3	2	16.7	3	25.0
Kanchanaburi	11	26.2	13	31.0	9	21.4	9	21.4
Nakhonpathom	6	13.3	16	35.6	16	35.6	7	15.6
Phetchaburi	6	17.6	9	26.5	9	26.5	10	29.4
Prachuapkirikhan	8	22.9	6	17.1	8	22.9	13	37.1
Ratchaburi	13	33.3	12	30.8	7	17.9	7	17.9

$$\chi^2 = 25.139, p = 0.121, df = 18$$

### The Barriers to Self learning for Educational Enrichment

More than 50 percent of the public health personnel encountered major barriers related to work load and lack of a library, on the other hand, minor barriers related to individual health and job responsibility changes, as shown in table 15.

**Table 15** Number and percentage of health personnel categorized by level s' the barriers of self learning for educational enrichment

The barriers	lowest		low		medium		high		highest		X	S.D.
	Num ber	Per Cen tage	Num ber	Per Cen tage	Num ber	Per Cen tage	Num ber	Per Cen tage	Num ber	Per Cen tage		
1. Work load	3	1.3	28	11.8	64	27.0	98	41.4	44	8.6	3.64	0.96
2. Lack of a library	23	9.7	37	15.6	46	19.4	74	31.2	57	24.1	3.44	1.28
3. Bureaucratic regulation on monetary provisions	13	5.5	38	16.0	72	30.4	74	31.2	40	6.9	3.38	1.11
4. Books or documents for research	14	5.9	32	13.5	85	35.9	82	34.6	24	10.1	3.30	1.02
5. Knowledge source	13	5.5	39	16.5	82	34.6	76	32.1	27	11.4	3.27	1.04

**Table 15**  
**(cont.)**

The barriers	lowest		low		medium		high		highest		$\bar{X}$	S.D.
	Num ber	Per Cen tage	Num ber	Per Cen tage	Num ber	Per Cen tage	Num ber	Per Cen tage	Num ber	Per Cen tage		
6. Free time for educational enrichment	14	5.9	43	18.1	93	39.2	56	23.6	31	13.1	3.20	1.07
7.Venue for meeting, training or seminar	16	6.8	50	21.1	119	50.2	44	18.6	8	3.4	2.91	0.89
8. Family factors	39	16.5	53	22.4	70	29.5	44	18.6	31	13.1	2.89	1.26
9. Facilitation from agency	22	9.3	64	27.0	86	36.3	47	19.8	18	7.6	2.89	1.07
10.Support from supervisor/ agency	28	11.8	64	27.0	80	33.8	42	17.7	23	9.7	2.86	1.14
11.Personal expenses for educational enrichment	38	16.0	58	24.5	62	26.2	60	25.3	19	8.0	2.85	1.20
12.Existing knowledge and experience	33	13.9	84	35.4	95	40.1	24	10.1	1	0.4	2.48	0.87
13.Job responsibility changes	49	20.7	87	36.7	62	26.2	35	14.8	4	1.7	2.40	1.03
14.Individual health	89	37.6	79	33.3	48	20.3	17	7.2	4	1.7	2.02	1.01

### **Suggestion on the Barriers to Self learning for Educational Enrichment**

The public health personnel answered the questionnaires who suggested that they encountered other barriers related to inadequate books in a library e.g. the office had not a library or the bookcases, no superintendent of a library, and the outmoded books.

## **CHAPTER V**

### **DISCUSSION**

This research was to study self learning for educational enrichment of the fourth region public health personnel. The discussions of the research results were consisting of 3 parts as follows:

1. Self Learning Styles for Educational Enrichment
2. The Association Between Self Learning Styles for Educational Enrichment and Gender, Age, Educational Level, Field of Study, Working Position, Working-Experience, Organization, and Working Location
3. The Barriers to Self Learning for Educational Enrichment.

#### **Self Learning Styles for Educational Enrichment**

From the research results, among the public health personnel the most commonly practiced self learning styles for educational enrichment were the reflectors, then the activists, then the pragmatists, and then the theorists. Because of the public health personnel had type of professional which used to knowledge, ability and process of academician on medical, health, encouraging and develop its people for their jobs. Before they started their jobs who must used some process of studying, researching, analyzing, circumspect planning. Furthermore, they must worked as a priority and guideline of setting the plan which set up regulations from The Ministry of Public Health, especially the ministry's training courses take the lecture in the classroom only. As a

consequence, before they decided something who were consider, meditate and circumspect person in character. Moreover, they were able to listen the people adroitly and no participate in the activities. The finding was in line with that of Peter Honey and Alan Mumford s' theory, (Peter Honey and Alan Mumford, 1986), they described that the reflectors who enjoy observing or thoughtful other people in action liked to stand back to ponder experiences. They are thoughtful people who like to consider all possible angles and implications before making a move, especially they liked to sequence of work and no participate in the activities. Those preferable learning activities for reflectors are lecture.

In addition, they practiced self learning styles for educational enrichment were the activists, then the pragmatists, and then the theorists. Therefore they had the responsibility for practice e.g. medical services , health promotion, and health prevention. It is possible that public health personnel had many job responsibilities, including treatment, health promotion, disease prevention, rehabilitation and academic services. They had to integrate all activities involving physical and mental health and cooperate with the public and other agencies. From the work aspects, it's possible for public health personnel to employ the 3 self learning styles for educational enrichment. If their responsibilities required encountering with new things and fully participating in the activities , they could employ the activists approach of academic educational enrichment. If their responsibilities required technical expertise or transforming solution guidelines to practice, they could employ the pragmatists approach of academic educational enrichment. If their responsibilities required analytical and synthetic process and principles or theories, they could employ

the theorists approach of educational enrichment. The finding was different from that of Sarunya Rugirekroung(1994), who investigated learning styles of academic reference librarians and needs for training activities according to Peter Honey and Alan Mumford s' theory. It was found that most academic reference librarians employed the activists learning approach, followed by the reflectors, the theorists and the pragmatists approaches respectively. These approaches were in line with their habits and work aspects in that they had to deal with people, provide services and assistance to others and pay attention to new knowledge and experiences so that information services could be prompt and meet the needs of library users. This indicated that learning styles differed from individuals to individuals and from one professional group to another. This was in accordance with Kolb s' theory (1984 cited in Methee Pилanthanan, 1998: 54), explaining that individuals of the same profession might use similar learning approaches and affected the 4 learning aspects: environmental, emotional, social and physical. As a consequence, a learning approach would be effective when it is suitable for particular individual and affects the quality of their job performance.

### **The Association Between Self Learning Styles for Educational Enrichment and Gender, Age, Educational Level, Field of Study, Working Position, Working-Experience, Organization, Working Location**

It was found that the association between self learning styles for educational enrichment and educational level had a statistical significance at

0.05 but gender, age, field of study, working position, working-experience, organization, working location had not a statistical significance. The discussions of the research results were as follows:

1. Gender. There was no association between self learning styles for educational enrichment and gender which was rejected the hypothesis. This was because learning approaches of individuals in the same profession tended to be similar or the same, regardless of gender. The finding was in line with that of Methee Pilanthananan (1994) and Hathairat Bunamoe (1998), who found that learning approaches of different gender did not vary.

2. Age. There was no association between self learning styles for educational enrichment and age which was rejected the hypothesis. This was because learning approaches were individual-specific. Adults tended to have relatively stable learning approaches, particularly those in the same age range. The finding was in accordance with that of Methee Pilanthananan (1994) and Hathairat Bunamoe (1998), who found that age group did not differ in learning styles, and that of Sarunya Rugirekroung(1994), who discovered that age group was not related to learning styles.

3. Educational level. The association between self learning styles for educational enrichment and educational level had a statistical significance at 0.05. The public health personnel who graduated a mater degree or higher practiced self learning style for educational enrichment were the activists and the reflectors more than another group, and the activists more than other styles. And who graduated a bachelor degree they practiced self learning styles for educational enrichment were the theorists and the pragmatists more than another group, and

the reflectors more than other styles. This might be because those with master's degree or higher tended to be relatively active, interested in and ready to learning new things regularly. They applied their experience in learning. Moreover, the educational system for graduate studies focused on in-depth analysis and research in order to establish specialization. This made them employ activists, reflectors, and activists learning approaches more than those with undergraduate degree. The finding corresponded to that of Methee Pилanthananan (1994), who investigated learning styles of master's students according to Kolb's theory. It was revealed that most of the students employed assimilater s' learning approach. When learning approaches according to Kolb, Honey and Mumford s' theories were compared, it was found that the assimilater s' learning approach was similar to the activist s' learning style.

For undergraduate student, their learning approaches varied so that they could implement their knowledge and skills in their future professions. The instructional system focused on learning from texts, documents and experiment, making their learning styles vary. The finding was different from that of Sarunya Rugirekroung(1994), who revealed that educational level was not related to learning styles, and that of Hathairat Bunamoe (1998), revealing that learning styles and educational level were not different.

4. Field of study. There was no association between self learning styles for educational enrichment and field of study which was rejected the hypothesis. This might be because subject contents were related and could be connected to their work. The finding was in line with that of Panchalee

Wasanaomsit (2000), who discovered that field of study and learning styles were not different.

5. Working position. There was no association between self learning styles for educational enrichment and working position which was rejected the hypothesis. This was because public health personnel of any positions and responsibilities had the same common goal, that is, to achieve the goal according to the national health development plan of the Public Health Ministry. However, learning was affected by environmental, emotional, social and physical factors. The finding was in line with Kolb's theory (1985), cited in Methee Pilanthananan (1998: 53), indicating that learning styles were the results of genetics, past experience and present environment.

6. Working- experience. There was no association between self learning styles for educational enrichment and working experience which was rejected the hypothesis. This might be because professional specialization of public health personnel was specific so working experience did not change their job aspect. Nevertheless, with more working experience, they would become more skillful in their work, having no effects on changes of learning styles. The finding was different from that of Sarunya Rugirekroung (1994), who found that working experience was statistically related to learning styles at 0.05.

7. Organization and working location. There was no association between self learning styles for educational enrichment and organization and working location which was rejected the hypothesis. This might be because public health administration had to cover administration, services and academics according to the policies of the ministry. In addition, geographical

aspects, population, arts and culture of the Public Health Office Region 4 were relatively similar in many respects. The finding was in accordance with that of Sarunya Rugirekroung(1994), who revealed that domicile was not related to learning styles.

### **The Barriers to Self Learning for Educational Enrichment.**

It was found that more than 50% of the public health personnel encountered major barriers related to work load and lack of a library. This was because when we had a lot of workload, it's difficult to allocate time for or pay attention to educational enrichment. In addition, to increase knowledge in a particular field depended on other factors or components that promoted that motivation to enrich knowledge by oneself. These supporting components included motivation, learning skills, personal methods to search for knowledge, information source, libraries, books, texts, documents and technologies that easily and conveniently facilitated educational enrichment. These factors influenced people to enrich their knowledge even more. Nonetheless, there are many agencies at present that could not provide their personnel libraries within their premises due to spatial restriction, affecting academic enrichment of public health personnel. Moreover, it was revealed that self learning styles for educational enrichment were not strong preference. This indicated that the barriers affected self learning styles for educational enrichment. The finding in accordance with that of Waraporn Pliplakorn (1996) and Chachris Chumworathayee (1997), who revealed that major barriers for academic administration development were that personnel had too much

workloads and there was a spatial restriction to allocate for libraries. Pisamai Ananjawanit (1998) found that the barriers of academic administration regarding social academic services of instructors in nursing colleges was that the instructors had too much workloads, depriving them of time to provide academic services to the society. Wichian Kaenrai (1999) revealed that the barriers of self development of primary school administrators in Suphanburi province included lack of text books and documents and insufficient information. The findings were in line with Cantor s' concept (1992: 39), cited by Jesica Blackmore (1996: 2), stating that the barriers of adult education included workload, time, information, subjects of interest, readiness, and other family, professional and social problems. Suwat Wathanawong(2001: 14) indicated that the components influencing learning included maturity, motivation, learning skills and learning approaches that one liked or was keen on.

## CHAPTER VI

### CONCLUSIONS AND RECOMMENDATIONS

The Ministry of Public Health is an organization that change and reform in many aspects in order to deal with problems and changing circumstances. The said changing matters have effected to the roles of the personnel in the Ministry especially to the public health personnel which have important roles in developing the public health works and producing the quality technical works.

Using skills, knowledge and technical process to practice efficiently and objectively, the public health personnel have to develop themselves to enhance and seek the new knowledge by self learning to deal with changes and to be the basic of working. This would be the proper personnel development of The Ministry of Public Health's future plan. The plan has focused on self learning more which has the advantage on freedom to learn and make the decision on methods, times, place, costs and technical contents as wishes. The researcher, therefore, was interested in studying the self learning for educational enrichment of public health personnel. This is about to know how educational enrichment in specific patens and problems which would be the advantage as incentive for public health personnel to enhance more knowledge and probably use a basic information for the executive s' making decision on the development plan of the public health personnel.

The purposes of this research was to studying the self learning for educational enrichment of the fourth region of public health personnel, the association between self learning styles for educational enrichment and gender, age, education level, field of study, working position, working-experience, organization, working location, including the barriers to self learning for educational enrichment. The sample was 237 public health personnel who working under supervision of the Public Health Office Region 4 during the fiscal years 2002, had worked at Provincial Public Health Office, Administrative Subdivision of Provincial Public Health Office, Health Centre, Hospital, at Samutsakhon Samutsongkhram Ratchaburi Phetchaburi Kanchanaburi Nakhonpathom and Prachuapkirikhan province.

The research instrument was composed of questionnaires, which were approved by 3 expert. The questionnaires were first tried out with 30 samples whom worked in covering 4 office: Nonthaburi Provincial Public Health Office, Subdivision of Provincial Public Health Office and Health Centre in Ampher Bangyai, Pranungklaw Hospital in Nonthaburi province. The results of try out were audited the quality of instrument which find out reliability by Cronbach  $\alpha$  coefficient and validity in questionnaires s' self learning for educational enrichment value of 0.8006 and questionnaires s' the barriers to self learning for educational enrichment value of 0.7153. The total of 300 sets of questionnaires which were the data collection sent by the post. The researcher received questionnaires back in total of 237, were 79 percent. The data analyzing process used THE SPSS FOR WINDOWS PROGRAM to report by frequency, arithmetic mean, standard deviation, and Chi-square test.

## Conclusions of the Study

1. Most of the public health personnel were female (57 percent), in the age range of 23-66 years, averaging 37 years, most of them graduated a bachelor degree (86.1 percent) and field of study in public health (65.4 percent), 65.8 percent held a position of health academicians. half of them (49.4 percent) had below 5 years of working-experience. They worked at Health Centre (39.7 percent), Provincial Public Health Office (30 percent), in the rest Hospital and Subdivision of Provincial Public Health Office. For the working location, they worked at Nakhonpathom province, followed by Kanchanaburi, Ratchaburi, Prachuapkirikhan, Phetchaburi Samutsakhon and Samutsongkhram province respectively (19 percent, 17.7 percent, 16.5 percent, 14.8 percent, 14.3 percent, 2.7 percent and 5.1 percent).

2. Self learning styles for educational enrichment of public health personnel. It was revealed that among the public health personnel practiced self learning styles for educational enrichment were the reflectors (27.4 percent), then the activists (25.7 percent), then the pragmatists (24.1 percent), and then the theorists (22.8 percent).

3. The association between self learning styles for educational enrichment and the demographic data: gender, age, educational level, field of study, working position, working - experience, organization and working location. It was revealed that there was no association between self learning styles for educational enrichment and gender, age, field of study, working position, working -experience, organization and working location. But the association between self learning styles for educational enrichment and educational level had a statistical

significance at 0.05. The public health personnel graduated a master degree or higher practiced self learning styles for educational enrichment were the activists and the reflectors more than another group, and the activists more than other styles. They graduated a bachelor degree practiced self learning styles for educational enrichment were the theorists and the pragmatists more than another group, and the reflectors more than other styles.

4. The barriers to self learning for educational enrichment. It was revealed that more than 50 percent of the public health personnel encountered major barriers related to work load and lack of a library, on the other hand, minor barriers related to individual health and work transition.

## **Recommendations**

### **1. Recommendations from the study finding**

1.1 The public health personnel should be encourage to undertake self learning for educational enrichment and pursue higher education which develop by themselves and affect to strong preference for the styles.

1.2 There should be assign to duty in distinct responsibilities. And unnecessary work loads should be minimize which has an opportunity to interested in educational enrichment.

1.3 The director should provide more learning materials in the library, computer network for communication and be supportive of the personnel's self learning for educational enrichment.

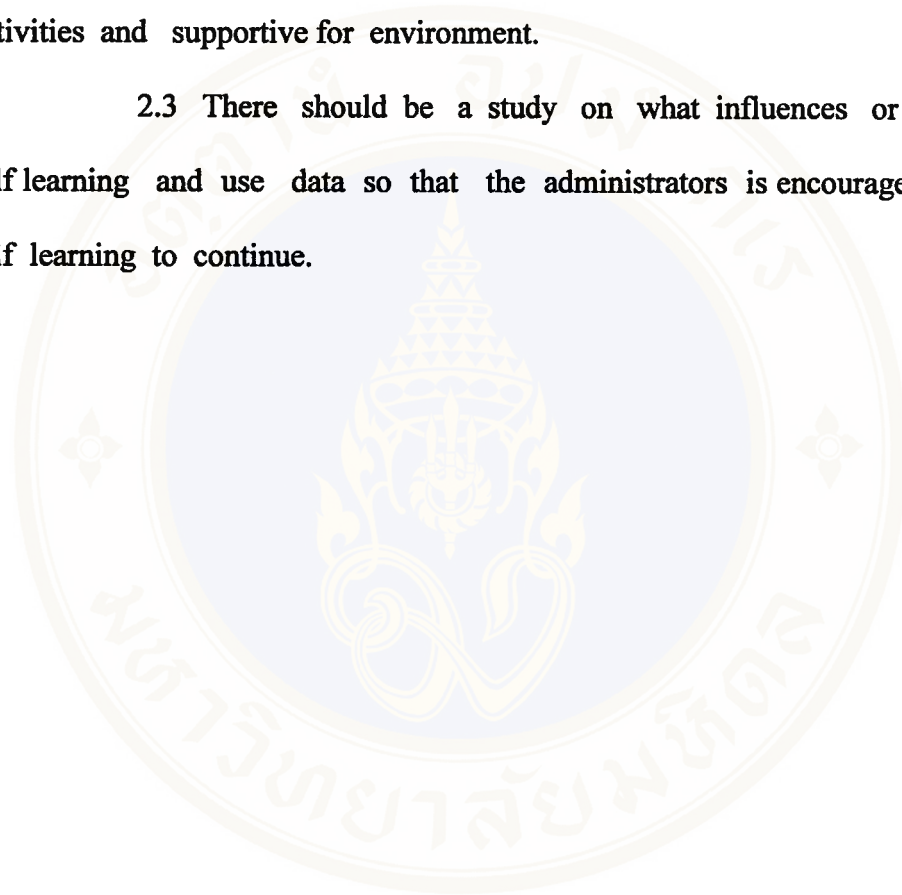
### **2. Recommendations for further studies**

2.1 There should be a study on self learning for educational

enrichment in other groups and other regions to find out define when consequence what how to improve.

2.2 There should be a study on self learning for educational enrichment in which many theories are apply to self learning for development, activities and supportive for environment.

2.3 There should be a study on what influences or motivates self learning and use data so that the administrators is encourage to undertake self learning to continue.



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<b>แบบสอบถาม</b>
<b>รูปแบบการเพิ่มพูนความรู้ทางวิชาการด้วยตนเองของบุคลากรสาธารณสุข เขต 4</b>
<p>แบบสอบถามนี้ใช้เพื่อประกอบการทำวิทยานิพนธ์ โดยเป็นส่วนหนึ่งของการศึกษาตามหลักสูตรศึกษาศาสตรมหาบัณฑิต สาขาการศึกษาผู้ใหญ่และการศึกษาต่อเนื่อง คณะสังคมศาสตร์ และมนุษยศาสตร์ มหาวิทยาลัยมหิดล จึงขอความร่วมมือจากท่านได้กรุณาตอบแบบสอบถามให้ครบถ้วนทุกข้อ แล้วส่งแบบสอบถามกลับทางไปรษณีย์ด้วยซองจดหมายที่ผนึกแสตมป์ไว้แล้วตามที่แนบมาพร้อมนี้ ข้อมูลที่ได้รับจะเป็นประโยชน์ในการพัฒนาบุคลากรสาธารณสุข และการแจ้งข้อมูลต่างๆจะเป็นไปในลักษณะข้อมูลทางสถิติโดยภาพรวมเท่านั้น</p> <p style="text-align: center;">ผู้วิจัยขอขอบคุณที่ท่านให้ความร่วมมือเป็นอย่างดีมา ณ โอกาสนี้ด้วย</p> <p style="text-align: center;">ลำนำพร สิวะภิญโญ นักศึกษานิพนธ์โท คณะสังคมศาสตร์และมนุษยศาสตร์ สาขาการศึกษาผู้ใหญ่และการศึกษาต่อเนื่อง มหาวิทยาลัยมหิดล</p>

**คำชี้แจง** แบบสอบถาม แบ่งเป็น 3 ส่วน ดังนี้

**ตอนที่ 1** ข้อมูลทั่วไป

**ตอนที่ 2** แบบสำรวจรูปแบบการเพิ่มพูนความรู้ทางวิชาการด้วยตนเอง

**ตอนที่ 3** ปัญหาอุปสรรคในการเพิ่มพูนความรู้ทางวิชาการด้วยตนเอง

**คำจำกัดความ**

1. การเพิ่มพูนความรู้ หมายถึงการศึกษา ค้นคว้า หรือเรียนรู้ด้วยตนเอง เพื่อเสริมสร้าง ความรู้ ความเข้าใจและทักษะในเนื้อหาวิชาการทางด้านสาธารณสุข
2. ความรู้ทางวิชาการ หมายถึง เนื้อหาทางสาธารณสุขที่เกี่ยวกับการสุขศึกษาและพฤติกรรมศาสตร์และประชาสัมพันธ์ การสาธารณสุขมูลฐาน ทันทสาธารณสุข การส่งเสริมสุขภาพและการรักษาพยาบาล การควบคุมโรคติดต่อทั่วไป การควบคุมโรคเอดส์และกามโรค การอนามัยสิ่งแวดล้อมและอาชีวอนามัย การคุ้มครองผู้บริโภคและเภสัชสาธารณสุข การบริหาร การวางแผนและประเมินผล การพัฒนาบุคลากร
3. รูปแบบ หมายถึง ลักษณะของวิธีการ (Style) ที่ใช้ในการศึกษา ค้นคว้า หรือเรียนรู้ด้วยตนเอง เพื่อเพิ่มพูนความรู้ทางวิชาการ

## แบบสอบถาม

รูปแบบการเพิ่มพูนความรู้ทางวิชาการด้วยตนเองของบุคลากรสาธารณสุข เขต 4

ตอนที่ 1 ข้อมูลทั่วไป

คำชี้แจง โปรดทำเครื่องหมาย  ลงใน ( ) และเติมข้อความลงในช่องว่างให้สมบูรณ์

1. เพศ      ( ) 1. หญิง                      ( ) 2. ชาย
2. อายุ.....ปี
3. ระดับการศึกษาสูงสุด
  - ( ) 1.ปริญญาเอก สาขา.....
  - ( ) 2.ปริญญาโท สาขา.....
  - ( ) 3.ปริญญาตรี สาขา.....
  - ( ) 4.อนุปริญญา สาขา.....
  - ( ) 5.ประกาศนียบัตร สาขา.....
4. ปัจจุบันดำรงตำแหน่ง
  - ( ) 1.นักวิชาการสาธารณสุขด้านส่งเสริมพัฒนา
  - ( ) 2.นักวิชาการสาธารณสุข
  - ( ) 3. นักวิชาการส่งเสริมสุขภาพ
  - ( ) 4.นักวิชาการควบคุมโรค
  - ( ) 5.นักวิชาการสุศึกษา
  - ( ) 6.นักวิชาการสุขาภิบาล
5. ประสบการณ์ในการทำงานในตำแหน่งด้านวิชาการ จำนวน.....ปี
6. ปัจจุบัน ท่านปฏิบัติงานที่ใด.....
  - ( ) 1. สำนักงานสาธารณสุขจังหวัด.....
  - ( ) 2. สำนักงานสาธารณสุขอำเภอ.....จังหวัด.....
  - ( ) 3. สถานีอนามัย..... จังหวัด.....
  - ( ) 4. โรงพยาบาล.....จังหวัด.....

## ตอนที่ 2 แบบสำรวจรูปแบบการเพิ่มพูนความรู้ทางวิชาการด้วยตนเอง

**คำชี้แจง** ขอให้ท่านตอบแบบสอบถามต่อไปนี้ทุกข้อ ด้วยความเห็นของท่านอย่างอิสระ โดยพิจารณาว่าในการเพิ่มพูนความรู้ทางวิชาการด้วยตนเองของท่านนั้น ท่านมีกิจกรรมหรือลักษณะที่ใช้ในการเรียนรู้ด้วยตนเองตามข้อมูล ต่อไปนี้หรือไม่ ถ้าข้อใด ตรง กับตัวท่าน โปรดทำเครื่องหมาย  ลงในช่อง  ใช่ ถ้าข้อใด ท่านมีความเห็นว่า ไม่ตรง กับตัวท่าน โปรดทำเครื่องหมาย  ลงในช่อง  ไม่ใช่

ข้อ ที่	ข้อความ	ใช่	ไม่ ใช่
1.	ท่านเป็นคนมุ่งมั่น เมื่อเชื่อว่าสิ่งที่ท่านศึกษาค้นคว้า อะไรเป็นสิ่งที่ถูกหรือผิด ดีหรือเลว		
2.	บ่อยครั้งที่ท่านมีกิจกรรมการเรียนรู้ ท่านมักจะไม่ได้คำนึงถึงสิ่งที่จะเกิดขึ้นได้ของผลที่จะตามมาภายหลัง		
3.	เมื่อพบปัญหาในการศึกษาค้นคว้า ท่านมักจะแก้ปัญหาด้วยวิธีการที่ละขั้นตอนอย่างเป็นระบบ		
4.	ท่านเชื่อว่า การเพิ่มพูนความรู้ของคนเรา จะถูกจำกัดและควบคุมความคิดโดยระเบียบแบบแผนและนโยบายต่างๆ ที่เป็นทางการ		
5.	เมื่อท่านได้รับมอบหมายให้ทำกิจกรรมใดกิจกรรมหนึ่ง ท่านจะทำอย่างตรงไปตรงมาตามที่คิดไม่อ้อมค้อม		
6.	เกือบทุกกิจกรรมการเรียนรู้ ท่านมักจะต้องมีการประเมินสิ่งที่ท่านเรียนรู้ทุกครั้ง		
7.	การเรียนรู้ของท่านต้องมีเวลาในการเตรียมตัว และมีเวลาไตร่ตรองก่อนการลงมือทำทุกครั้ง		
8.	โดยปกติ เรื่องที่ท่านศึกษาค้นคว้า ท่านมักถามคนอื่น ๆ เพื่อหาสมมุติฐานเบื้องต้นเกี่ยวกับเรื่องนั้น		
9.	เมื่อท่านจะต้องนำความรู้ไปใช้ในอนาคต ท่านจะมีความมุ่งมั่นต่อการศึกษาค้นคว้า		
10.	เมื่อท่านจะต้องเพิ่มพูนความรู้และใฝ่หาประสบการณ์ใหม่ๆ ท่านจะมีความกระตือรือร้นอยู่เสมอ		
11.	เมื่อท่านได้รับทราบเกี่ยวกับความรู้ ความคิด หรือวิชาการใหม่ๆ ท่านจะทดลองในทันที เพื่อค้นคว้าว่าความรู้ หรือ ความคิดนั้น จะสามารถนำไปประยุกต์ใช้กับงานได้อย่างไร		

ข้อ ที่	ข้อความ	ใช่	ไม่ ใช่
12.	ท่านเป็นคนมีวินัยต่อตนเองมาก และมักเข้มงวดกับกิจกรรมการศึกษาขั้นคว่ำ ของท่าน		
13.	ทุกเรื่องที่ท่านศึกษาขั้นคว่ำ ท่านมักจะศึกษาอย่างละเอียดถี่ถ้วน		
14.	ในกิจกรรมการเรียนรู้ ท่านจะเข้ากันได้ดีที่สุดในกับคนช่างคิด ช่างวิเคราะห์ และเข้ากันไม่ค่อยได้กับคนที่แสดงความคิดเห็นอย่างรวดเร็ว		
15.	ท่านชอบที่จะศึกษาขั้นคว่ำและรวบรวมข้อมูล ตลอดจนสำรวจตรวจสอบ ประเด็นปัญหาที่เป็นรากฐานของเรื่องต่างๆ โดยใช้ความเพียรพยายามในการทำ วิจัยตามที่ได้รับมอบหมาย		
16.	ทุกครั้งของการศึกษาขั้นคว่ำ ก่อนที่ท่านจะตัดสินใจ ท่านได้มีโอกาสทบทวน สิ่งที่เกิดขึ้นหรือใช้ประสบการณ์เดิมจากการทำงาน		
17.	ท่านมุ่งสนใจแนวความคิดที่แปลกใหม่ ไม่ธรรมดา มากกว่าแนวความคิดที่ ปฏิบัติกันอยู่โดยทั่วไป		
18.	ในกระบวนการเรียนรู้ของท่าน ท่านไม่ชอบสิ่งที่ขาดระเบียบ และชอบที่จะ จัดสิ่งต่างๆ ให้อยู่ในรูปแบบที่สอดคล้องกันมากกว่า		
19.	ท่านจะไม่แสวงหาความรู้ใหม่ ถ้าท่านคิดว่าการปฏิบัติตามแบบแผนที่วางไว้ เป็นหนทางที่ทำให้งานสำเร็จได้อย่างมีประสิทธิภาพ		
20.	ท่านเป็นคนมีหลักการและมีวินัยในการศึกษาขั้นคว่ำเรื่องที่จะเรียนรู้		
21.	ในการอภิปราย ท่านชอบมุ่งตรงเข้าสู่ประเด็นในเนื้อหาวิชานั้น		
22.	เมื่อท่านต้องมีกิจกรรมการเรียนรู้ร่วมกับผู้อื่น ท่านมักจะมีสัมพันธภาพแบบ ผิวเผินและเป็นทางการ		
23.	เมื่อมีปัญหาที่แปลกใหม่ ท่านรู้สึกทำทนายที่ได้ไปศึกษาขั้นคว่ำเพื่อแก้ปัญหานั้น		
24.	ในกิจกรรมการเรียนรู้ ท่านมักจะเข้าร่วมกิจกรรมกับคนที่รักความสนุกสนาน คล่องแคล่ว		
25.	ท่านจะพิจารณารายละเอียดต่างๆ ในเรื่องที่ศึกษาขั้นคว่ำอย่างพิถีพิถันก่อนจะ สรุปผล		
26.	ท่านคิดว่าเป็นเรื่องลำบากสำหรับท่านที่จะแสดงความคิดเห็น โดยทันที ถ้าปราศจากรากฐานของนโยบาย หลักการ หรือแนวคิด		

ข้อ ที่	ข้อความ	ใช่	ไม่ ใช่
27.	ท่านจะศึกษาค้นคว้าเฉพาะเนื้อเรื่องที่ตรงประเด็น มากกว่าดูรายละเอียด ประกอบ หรือเรื่องที่เชื่อมโยงกัน		
28.	ท่านเป็นคนค่อนข้างระมัดระวัง ไม่ด่วนสรุปเร็วเกินไปในสิ่งที่ท่านศึกษา ค้นคว้ามา		
29.	ท่านชอบที่จะแสวงหาแหล่งข้อมูลให้ได้มากที่สุดเท่าที่จะมากได้ เพื่อเป็นข้อมูล ประกอบการพิจารณาตัดสินใจในเรื่องที่ท่านศึกษาค้นคว้า		
30.	ในกระบวนการเรียนรู้ ท่านมักจะคำนึงถึงแนวคิดและทฤษฎีต่างๆ ในเรื่อง ที่ท่านจะศึกษา		
31.	ท่านถนัดในการรับฟังความคิดเห็นของผู้อื่น ก่อนที่จะแสดงความคิดเห็นของ ตนเองทุกครั้ง		
32.	ท่านมักจะแสดงความคิดเห็นอย่างเปิดเผยทุกครั้ง ที่ได้เข้าไปมีส่วนร่วมใน กิจกรรมการเรียนรู้		
33.	ถ้าตัวท่านต้องเป็นประธานในที่ประชุม หรือทำหน้าที่เป็นผู้นำการอภิปราย ท่านมักจะมีปฏิริยาต่อต้าน		
34.	ท่านชอบการเรียนรู้ที่จะตอบสนองเหตุการณ์ต่างๆ ในลักษณะที่ยืดหยุ่น หรือ เป็นไปตามความรู้สึกนึกคิดในขณะนั้น เช่น วิธีการระดมสมอง		
35.	ท่านมีความสามารถในการใช้เทคนิควิธีการของการวิเคราะห์ระบบเครือข่าย แบบ Flow chart โปรแกรมแยกย่อย และระบบการวางแผนในกระบวนการ เรียนรู้ได้ดี		
36.	ท่านจะเข้าร่วมกิจกรรมการเรียนรู้ทุกครั้ง ถ้าพบว่ามีทัศนศึกษานอกสถานที่ ร่วมด้วย		
37.	ท่านชอบศึกษาค้นคว้าในสิ่งที่เป็นปัญหาที่เกิดขึ้นจริง		
38.	เมื่อท่านต้องเป็นประธานในการประชุมหรือนำการอภิปราย ท่านจะปฏิบัติได้ ดีกว่าการนั่งฟังการบรรยาย หรือการทำงานโดยลำพัง		
39.	ในกิจกรรมการเรียนรู้ ท่านมักจะรู้สึกประทับใจกับคนที่ทำอะไรเร่งรีบ		
40.	การแข่งขันเป็นคณะ หรือ การแสดงบทบาทสมมุติ เป็นกิจกรรมการเรียนรู้ที่ ท่านชอบและรู้สึกไม่เคร่งเครียด		

ข้อที่	ข้อความ	ใช่	ไม่ใช่
41.	เรื่องที่ท่านศึกษาค้นคว้า มักเกิดจากการตัดสินใจโดยฐานของการวิเคราะห์ข้อมูลอย่างถี่ถ้วน มากกว่าการตัดสินใจโดยสัญชาตญาณ หรือการคาดเดา		
42.	ท่านเป็นคนชอบความสมบูรณ์แบบ ทุกอย่างต้องดีพร้อมในการศึกษาค้นคว้า		
43.	ในการอภิปราย ท่านมักจะแสดงความคิดเห็นอย่างอิสระ หรือแสดงความคิดเห็นที่เล่นเข้าสมองในขณะนั้นอย่างเต็มที่		
44.	ในที่ประชุม ท่านมักจะเสนอความคิดเห็นที่สามารถนำไปสู่การปฏิบัติได้		
45.	ในกิจกรรมการเรียนรู้ ท่านมักจะมีการฝ่าฝืนหรือออกนอกกฎระเบียบที่วางไว้		
46.	ท่านชอบกระบวนการเรียนรู้ที่มีการแลกเปลี่ยนความคิดเห็นหรือมีการอภิปรายเป็นคณะ		
47.	ท่านมักจะมองเห็นข้อผิดพลาด และจุดอ่อนในการแสดงความคิดเห็นของผู้อื่นเสมอ		
48.	โดยทั่วไป กิจกรรมที่ใช้ในการเรียนรู้ของท่าน ท่านชอบกิจกรรมที่ท่านมีโอกาสได้พูดมากกว่าฟังเสมอ		
49.	ท่านชอบกิจกรรมเกี่ยวกับเทคนิคการทำงาน ที่แสดงข้อได้เปรียบในการปฏิบัติอย่างชัดเจน เช่น วิธีการประหยัดเวลา เพราะเห็นว่าเป็นแนวทางที่เป็นไปได้ในการปฏิบัติงานให้สำเร็จ		
50.	ท่านคิดว่าการเขียนรายงานทางวิชาการควรจะเขียนเพียงสั้นๆ และได้เนื้อหาตรงประเด็น		
51.	ท่านเชื่อว่าความคิด ความรู้ที่เป็นตรรกวิทยาและเหตุผลเป็นสิ่งที่สำคัญที่สุดในการศึกษาค้นคว้า		
52.	ในการพูดคุยแลกเปลี่ยนความรู้ทางวิชาการกับเพื่อนร่วมงาน ท่านมักหลีกเลี่ยงเฉพาะเรื่องที่เป็นปัญหาพูดคุย มากกว่าเรื่องราวทั่วไป		
53.	โดยทั่วไป การเรียนรู้ของท่าน ท่านจะเป็นคนชอบแก้ไขปัญหาตามหลักความเป็นจริงมากกว่าตามหลักทฤษฎี		
54.	ท่านจะขาดความอดทนและหันเหออกนอกเรื่องทันทีที่พบว่า การอภิปรายนั้นไม่มีข้อสรุป		
55.	ถ้าจะต้องเขียนรายงานทางวิชาการ ท่านมักจะยกร่างหลายๆฉบับ ก่อนที่ฉบับสุดท้ายจะสำเร็จ		

ข้อที่	ข้อความ	ใช่	ไม่ใช่
56.	ท่านจะนำสิ่งที่ท่านเห็น จากการเรียนรู้มาทดลองใช้ เพื่อดูว่าจะใช้การได้หรือไม่ ในทางปฏิบัติ		
57.	ท่านมีความสามารถในการใช้หลักทางตรรกวิทยาและเหตุผล ในการศึกษาค้นคว้าหาคำตอบ		
58.	ในการเสวนาทางวิชาการ ท่านจะพอใจ ถ้าท่านได้พูดอย่างเต็มที่		
59.	ในการอภิปรายทางวิชาการ ท่านจะแสดงให้เห็นว่า ท่านสนับสนุนคนที่พูดตรงประเด็นมีเหตุผล และเล็งความคิดเห็นที่เป็นการคาดเดา		
60.	ทุกเรื่องที่ท่านเรียนรู้ ท่านมักไตร่ตรองหาทางเลือกหลายๆทาง ก่อนตัดสินใจ		
61.	เมื่อมีการหารือ หรืออภิปรายกับผู้อื่น ท่านมักจะแสดงความเห็นอย่างตรงไปตรงมามากที่สุด โดยที่ไม่ใช้อารมณ์ ความรู้สึกหรือความเห็นส่วนตัว		
62.	ในการอภิปรายทางวิชาการ ท่านชอบที่จะนั่งเงียบ มากกว่าจะเป็นผู้นำการพูด		
63.	ในการเพิ่มพูนความรู้ ท่านมักจะชอบกิจกรรมที่มีเวลาสำหรับการสำรวจ ตรวจสอบความสัมพันธ์ระหว่างความคิด เหตุการณ์ และสถานการณ์อย่างเป็นระบบระเบียบ		
64.	เมื่อมีสิ่งผิดพลาดเกิดขึ้นจากการเรียนรู้ของท่าน ท่านจะไม่ใส่ใจและถือเสียว่า นั่นคือประสบการณ์		
65.	ถ้าพบว่า สิ่งที่ท่านศึกษาค้นคว้าไม่เกี่ยวข้องกับความต้องการของท่านที่จะนำไปปฏิบัติท่านจะเลิกล้มการศึกษาค้นคว้าในครั้งนั้นทันที		
66.	การศึกษาค้นคว้าของท่าน ท่านมักจะคิดและวางแผนให้รอบคอบก่อน แล้วจึงลงมือค้นคว้า		
67.	ในการประชุมทางวิชาการ ท่านมักจะเป็นผู้สังเกตการณ์ หรือการนั่งฟังอยู่แถวหลังๆ ของห้องประชุมมากกว่าที่จะพูด		
68.	ท่านมักพึงพอใจ ถ้ากิจกรรมการเรียนรู้ของท่านมีการโต้ตอบด้วยเหตุและผล		
69.	บ่อยครั้ง ท่านเชื่อว่าวิธีการที่ได้จากการศึกษาค้นคว้าและจะนำไปปฏิบัติได้ดีหรือไม่ นั้น วัดได้จากผลงานที่ปรากฏ		
70.	ถึงแม้ว่าจะเป็นการทำร้ายความรู้สึกของผู้อื่นบ้าง ท่านก็ไม่สนใจ ถ้าท่านได้มีโอกาสทดลอง ฝึกฝนเทคนิคต่างๆ จากผู้เชี่ยวชาญที่ประสบความสำเร็จ		

ข้อที่	ข้อความ	ใช่	ไม่ใช่
71.	ในการค้นคว้าหาความรู้ ท่านไม่ชอบการมีระเบียบวิธีปฏิบัติที่ต้องเป็นไปตามแผนงานที่เฉพาะเจาะจง		
72.	ท่านชอบกิจกรรมการเรียนรู้ แบบกิจกรรมการปรึกษากลุ่มย่อย (Buzz group) หรือกิจกรรมการสัมมนากลุ่มย่อย		
73.	วิธีการค้นคว้าความรู้ของท่าน ต้องเป็นวิธีการง่ายๆ สะดวกต่อการทำงานให้สำเร็จ		
74.	เมื่อท่านต้องศึกษาค้นคว้าเรื่องใดเรื่องหนึ่ง โดยใช้วิธีการอ่าน เขียน หรือ วิเคราะห์รายละเอียดมากมาย ท่านจะเกิดความเบื่อหน่ายได้ง่าย		
75.	ท่านชอบและมีความสามารถในการศึกษาค้นคว้าหาข้อสรุป หลักการ และ ทฤษฎี เช่นการศึกษาเฉพาะกรณี (Case Study)		
76.	ถ้าท่านต้องการเพิ่มพูนความรู้ทางวิชาการ ท่านชอบฟังการบรรยายหรือการอภิปราย มากกว่าการเข้าร่วมทำกิจกรรมต่างๆ		
77.	ท่านชอบการประชุมที่มีระบบเป็นระเบียบ และดำเนินตามวาระหรือหัวข้อการประชุม		
78.	ถ้าพบว่า การศึกษาค้นคว้าของท่านมีเนื้อหาวิชาที่คลุมเครือ ท่านจะเป็นผู้ที่ทำให้เนื้อหาวิชานั้นกระจ่างชัด		
79.	ท่านเห็นว่าเป็นเรื่องสนุกที่ได้ศึกษาค้นคว้าเรื่องที่น่าตื่นเต้น เร้าใจ		
80.	ในกิจกรรมการเรียนรู้ ท่านจะเกิดการเรียนรู้ได้ดี ถ้าได้ลงมือปฏิบัติ และฝึกฝนด้วยตนเอง		

### ตอนที่ 3 ปัญหาอุปสรรคในการเพิ่มพูนความรู้ทางวิชาการ

**คำชี้แจง** ให้ท่านพิจารณาว่าแต่ละประเด็นต่อไปนี้ เป็นปัญหาระดับใดต่อการเพิ่มพูนความรู้ด้วย

ตนเองของท่าน โปรดทำเครื่องหมาย  ลงในช่อง  ที่ตรงกับตัวท่าน โดยที่

- 5 หมายถึง มีปัญหาในการเพิ่มพูนความรู้ด้วยตนเองมากที่สุด  
 4 หมายถึง มีปัญหาในการเพิ่มพูนความรู้ด้วยตนเองมาก  
 3 หมายถึง มีปัญหาในการเพิ่มพูนความรู้ด้วยตนเองปานกลาง  
 2 หมายถึง มีปัญหาในการเพิ่มพูนความรู้ด้วยตนเองน้อย  
 1 หมายถึง มีปัญหาในการเพิ่มพูนความรู้ด้วยตนเองน้อยที่สุด

ลำดับ	ข้อความ	ระดับปัญหา				
		5	4	3	2	1
1.	การหาเวลาว่างในการเพิ่มพูนความรู้					
2.	ภาระหน้าที่การงานประจำ					
3.	ปัจจัยทางด้านครอบครัว					
4.	สุขภาพของร่างกาย ได้แก่ อายุ สายตา การได้ยิน					
5.	ประสบการณ์และความรู้เดิมที่มีอยู่					
6.	การปรับเปลี่ยนหน้าที่การงานจากตำแหน่งเดิม					
7.	การเงินหรือค่าใช้จ่ายส่วนตัวในการเพิ่มพูนความรู้					
8.	การสนับสนุนจากผู้บังคับบัญชา/หน่วยงานที่สังกัด					
9.	การอำนวยความสะดวกของหน่วยงาน เช่นการแจ้งข้อมูล ข่าวสาร					
10.	ห้องสมุดในหน่วยงาน					
11.	ระเบียบการเบิกจ่ายเงินของทางราชการ					
12.	แหล่งความรู้ที่จะค้นคว้า					
13.	หนังสือหรือเอกสารสำหรับการค้นคว้า					
14.	สถานที่ที่จัดอบรม ประชุม สัมมนา					

ข้อเสนอแนะเพิ่มเติม.....

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### เฉลยแบบสำรวจรูปแบบการเพิ่มพูนความรู้ทางวิชาการด้วยตนเอง

**คำชี้แจง** รูปแบบการเพิ่มพูนความรู้ทางวิชาการด้วยตนเอง แบ่งเป็น 4 รูปแบบ คือ นักกิจกรรม นักไต่ตรอง นักทฤษฎี นักปฏิบัติ ตามทฤษฎีของ Honey and Mumford **เกณฑ์การให้คะแนน** ตอบใช่ ได้ 1 คะแนน ตอบไม่ใช่ ได้ 0 คะแนน **เกณฑ์การตัดสิน** เมื่อรวมคะแนนแล้ว คะแนนของรูปแบบการเรียนรู้รูปแบบใดอยู่ในระดับมากที่สุด เมื่อเทียบจากรายงานจำแนกรูปแบบๆ จะได้รับการตัดสินให้เป็นคนในรูปแบบนั้น **ตาราง** การจำแนกรูปแบบการเพิ่มพูนความรู้ทางวิชาการด้วยตนเอง 4 รูปแบบตามลำดับข้อจากแบบสอบถาม

รูปแบบ	นักกิจกรรม	นักไต่ตรอง	นักทฤษฎี	นักปฏิบัติ
ข้อที่	2	7	1	5
	4	13	3	9
	6	15	8	11
	10	16	12	19
	17	25	14	21
	23	28	18	27
	24	29	20	35
	32	31	22	37
	34	33	26	44
	38	36	30	49
	40	39	42	50
	43	41	47	53
	45	46	51	54
	48	52	57	56
	58	55	61	59
	64	60	63	65
	71	62	68	69
	72	66	75	70
	74	67	77	73
	79	76	78	80
รวมคะแนน				

## BIOGRAPHY

<b>NAME</b>	Lumnumporn Siwapinyo
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