Development of Standard Curriculum of Thailand on Basic Computer and Internet

Narong Sompong, Saroch Sopeerak, Jongkol Kanper,
Paitoon Srifa, Nattaphone Rampai

Faculty of Education, Department of Educational Technology, Bangkok 10900. Thailand

Abstract

The objectives of this research were 1) to study the standard curriculum on Computer and Internet in Thailand and aboard; 2) to construct the standard curriculum of Thailand on Computer and Internet; 3) To study the opinion of the experts toward the standard curriculum on Basic Computer and Internet for Thai people. 4) to study the standard curriculum of Thailand on Basic Computer and Internet by experts criticizing; and 5) to compare pre-test and post-test before and after the utilization of standard curriculum and media for Thai people. The research sample group for testing and evaluation in curriculum was multistage sampling under the criteria. They were 156 persons from five regions of Thailand. The research instruments were the standard curriculum, pretest - posttest and questionnaire as well as a satisfaction questionnaire. The research experiment had conducted by using the curriculum and media for training to the sample group. Then pre-test and post-test were applied and compare the outcome from their learning.

The research result showed that post-test score of the sample after they learn from the curriculum of every units were significantly higher than pre-test score at level .05. Moreover, the learners had the positive opinion and satisfaction toward the learning from standard curriculum and media at good level.

Keyword: Standard Curriculum, Computer, Internet

1. Introduction

Internet became to be the educational media of the new world. It could be open the world wide to the learners and provide the wisdom resources because learners could search all information conveniently, wherever computer network was accessible equally. Meanwhile, the standard curriculum development on computer and internet is much more important because of the computer and internet was applicable in education in various way. Internet affect to the human live and enhance the learning potential efficiency. Therefore, it is necessary to develop the standard curriculum in computer and internet compatible with the people needs, so they might utilize such knowledge for their live. This would be congruence with the National Education Plan of Thailand (2002-2016) which was giving the opportunity of Thai people to life long learning, improving and change them to come across the information age and innovation. They would be seeking knowledge by themselves and every organization and sector in society want to learn curiously and ready to learn. (Office of the National Education Commission, 2002)

This research, therefore had constructed the standard curriculum on basic computer and internet of Thailand for using as the format in leaning and teaching activities for Thai people.

2. Objectives

The research objective was to develop the standard curriculum of Thailand on Basic Computer and Internet which had the specific objective as this follows:

1) To study the curriculum on Basic Computer and Internet in Thailand and aboard, then compare and conclude the outcome of overall curriculum in component and structure of those curriculum.
2) To construct the standard curriculum of Thailand on Basic Computer and Internet from the IC3 - ECDL/ICDL synthesizing.
3) To study the opinion of the experts toward the construction of Competency-based Curriculum on Basic of Computer and Internet for Thai people.
4) To study the standard curriculum of Thailand on Basic Computer and Internet by experts criticizing.
5) To compare pre-test and post-test before and after the utilization of standard curriculum and media for Thai people.

3. Review of Related Literature

Suwanchote (2003) mentioned about the development of curriculum that had to compatible with the social value, social pattern and status of social problems and needs. The curriculum development had to study these following items, there were basic information about the social needs, curriculum format, the curriculum quality assessment, curriculum utilization and management, and curriculum evaluation system.

In the process of curriculum development, Saylor and Lewis (1981) suggested that there were four steps. They composed of the outside variable study, set purpose and objective for designing curriculum, curriculum using by teacher determination, and the curriculum evaluation. In the other hand, Oliva (1992) had presented that the process should begin from the target set up, then analyzing the need of community, objective design, curriculum structure management, selection of the content, teaching method, measurement and evaluation method as well as the curriculum using and curriculum processing.

4. Scope of the study

This research focuses to the study into 3 phases. The first phase, the study of 10 curriculum in Thailand and abroad, with 10 experts in computer and Internet and 3 experts in curriculum. The second phrase was curriculum construction with media production and try out with 40 respondents. The third phrase, 195 Thai people learned the Basic Computer and Internet based on the curriculum and learning materials from 4 regions all over the country.

5. Methodology

This research had developed and evaluated the standard curriculum into 3 phrases.

**Phrase one.** The formulation of standard curriculum on Basic Computer and Internet composed of 3 steps: 1) study the curriculum and Internet in Thailand and aboard, 2) construct the curriculum based on the studied of 3 curriculum, IC3, ECDL/ICDL and standard curriculum for teacher of UNESCO, and 3) conducted the focus group by 10 experts for 2 times.

**Phrase two.** The researchers had designed the standard curriculum on Basic Computer and Internet.

**Phrase three.** The standard curriculum had been tested and evaluated to the sample who stayed in 5 regions of Thailand. Pre-test and post-test had been conducted before and after learning the curriculum media and materials.

**Sample of the Study**

The sample group for testing and evaluation was sampling by multistage sampling under the committed criteria. They were Thai people who were 12-55 years old and be able to read and write English at least the beginning level. They had the basic on computer using as well as the available time to attend the training course for 2 days.

This sample group came from five regions of Thailand, 56 persons from Nakornnayok Province in central region, 30 persons from Songkla Province in Southern region, 35 persons from Northern region, 35 persons from Petchaboon Province in North region, 22 persons from Karnjanaburi Province in Western region, and 52 persons from North-Eastern region.

**Research Instruments**
Research Instruments composed of 5 items. First, there were the standard curriculum of Thailand on Basic Computer and Internet which was criticized by 10 experts with the focus group techniques. Second, Teacher and learner handbook designed in the curriculum. Third, Media had been designed based on the curriculum, composed of PowerPoint presentation, exercise and worksheet which pass the expert determine and improvement. Forth, pre-test and post-test of each unit that pass the process of IOC and other criteria such as the reliability, difficulty and discrimination, and fifth, the questionnaire in learner’s satisfaction by using rating scale.

Data collection and Data analysis
The experiment of standard curriculum, media, questionnaire and test on Basic Computer and Curriculum had been used by researchers with the sample groups in each region based on the time duration described in the curriculum. Then, the data and score was analyzed and evaluated by using percentage, mean, standard deviation, and t-test.

6. Research result
From the experiment in using the standard curriculum on Basic Computer and Internet, the result showed that post-test score of the sample after they learn from the curriculum of every units were significantly higher than pre-test score at level .05. Moreover, the learners had the positive opinion and satisfaction toward the learning of standard curriculum at good level.

On the other hand, the learners also give the opinion toward the training curriculum as this follows:
1. This curriculum gave the basic knowledge for computer and Internet user in very good level.
2. They had a good opportunity to develop computer using skill.
3. They could understand the computer system and accessories.
4. They could apply knowledge in dairy live and the community network
5. It is the updated knowledge and usability.
6. They could get the searching techniques from the Internet.
7. They could extend knowledge to the other persons widerly.
8. They got the knowledge in buying selection and computer using very well.
9. They had the high capability in online media utilization
10. This was the good channel in learning exchange.
11. They could apply the knowledge and skill for instruction in school.
12. They could really use the curriculum contents and activities.

7. Discussion and conclusion
In conclusion, the standard curriculum on Basic Computer and Internet which the researcher had developed could be used with Thai people in every region of Thailand. Because they could apply the knowledge and skill from their learning and extended their capability in computer and Internet using to support their live and updated the information technology.

Reference