THE DEVELOPMENT OF COMPUTER MULTIMEDIA TRAINING WITH THE DEMONSTRATION PROCESS AND THE FOLLOWING PRACTICE ENTITLED “THE CREATION OF PUBLIC RELATIONS WEBSITE”: A CASE STUDY OF KHLUNG SUMPHUN CLUSTERING SCHOOLS

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ABSTRACT

This research aimed to develop, to determine the effectiveness of computer multimedia and to find out the satisfaction of training in the development of computer multimedia training with the demonstration process and the following practice entitled “the Creation of Public Relations Website”: A Case study of Khlung Sumphun Clustering Schools. Instruments used in research were 1) computer multimedia training with demonstration process and the following practice entitled “the Creation of Public Relations Website”, 2) computer multimedia quality evaluation form, 3) training achievement form, 4) artifact of and satisfaction evaluation form. Sampling group were 50 teachers in Khlung Sumphun Clustering Schools. The result of this research showed that, the quality of content was good which the average was 4.14, the standard deviation was 0.43 and the developed of multimedia was excellent which the average was 4.58, the standard deviation was 0.40 , the effectiveness of the developed computer multimedia was at 88.22/87.47, which was higher than standard point of 85/85. When the pre-test and post-test scores were analyzed to find out the achievement, it was found that the effectiveness before the treatment was at 21.98 and the effectiveness after the treatment was at 43.70. It could be concluded that the achievement of the developed computer multimedia training with the demonstration process and the following practice entitled “the Creation of Public Relations Website” after treatment was higher than before treatment which the significant value is .050. The average satisfaction of sampling group was 4.11 which was high satisfaction.

Keyword

Computer Multimedia Training, Demonstration Process and Following Practice, Public Relations Website

BACKGROUND AND RATIONALE
At present, the development of information technology has advanced rapidly and their application has been used in many areas and occupations, resulting in effective, quick and accurate performance. The application of information technology also changes the living styles of people in the society. Many organizations need to plan how to adapt themselves and make use of network as well as internet to their works.

Ministry of Education recognizes the importance of information technology and computer’s role in education; therefore, the Ministry encourages schools to use computer in their instruction and public relations [1] including website to promote their institutions. This way, many educational institutions will have a good relationship with people outside. It is essential for them to select what to promote and give information which suits their target the most with effectiveness. Internet is one tool to be used in public relations. News and information about school activities as well as archive of lessons and knowledge on website can be accessed all the time. Internet is also useful in making effective interaction and communication, that is to say, people can contact via e-mail in a short time. Another way is web board where people can post their opinions and ask questions immediately. Internet is then a choice which meets the demand of the target group.

Training is a transfer of knowledge to increase the ability so that performance and duties could be done with more effectiveness. In any case, training aimed to increase the working performance [2]. In educational areas, multimedia has more roles in instruction in the form of content presentation, still images, slide, animation, graphic images, sound effects and a lot more. As for instructors who give lecture and use computer multimedia to explain the lesson in order to comply with the learning objectives by demonstration and practice, experience gained from these activities is like to be similar to experience gained directly from real practice. The training in which teachers have chances to observe and practice will help achieve the learning objectives. Teachers from this training can repeat the steps they learned in a short time. Therefore, computer multimedia training with the demonstration process and the following practice is essential as a tool for education.

According to basic survey, it was found that educational institutions under the jurisdiction of Chanthaburi Educational Service Area Office 2 or Klung Sumphun Clustering Schools which consist of 10 schools. 7 schools had no website for public relations and teachers there did not have knowledge about creating website. Training is a good way to encourage teachers to understand and know how to create website to develop their work and their instruction as well as public relations, especially when teachers have skills and are able to do by themselves.

According to the above-mentioned importance, the researchers were interested in developing the computer multimedia training with the demonstration process and the following practice entitled “the Creation of Public Relations Website”: a case study of Klung Sumphun Clustering Schools” in order that teachers could create public relations website with effectiveness.

**RESEARCH OBJECTIVES**

1. To develop computer multimedia training with the demonstration process and the following practice entitled “the Creation of Public Relations Website”: a case study of Klung Sumphun Clustering Schools.

2. To find out the quality and the effectiveness of the computer multimedia training with the demonstration process and the following practice entitled “the Creation of Public Relations Website”: a case study of Klung Sumphun Clustering Schools.

3. To find out the learning achievement of training before and after using the developed computer multimedia training with the demonstration process and the following practice entitled “the Creation of Public Relations Website”: a case study of Klung Sumphun Clustering Schools.

4. To find out the satisfaction of the trainee towards the computer multimedia training with the demonstration process and the following practice.

**EXPECTED OUTCOMES**
1. The computer multimedia training with the demonstration process and the following practice entitled “the Creation of Public Relations Website”: a case study of Klung Sumphun Clustering Schools is effective and can be used for training.

2. This could be used as a way to develop other computer multimedia trainings in the future.

HYPOTHESES

1. The quality of the computer multimedia training with the demonstration process and the following practice entitled “the Creation of Public Relations Website” is good.
2. The effectiveness of the computer multimedia training with the demonstration process and the following practice entitled “the Creation of Public Relations Website” is not less than the criteria set at 85/85.
3. The teachers who use the computer multimedia training with the demonstration process and the following practice entitled “the Creation of Public Relations Website” show their learning achievement before and after using with the statistically significant difference at .05 level.
4. The teachers have satisfaction towards the computer multimedia training with the demonstration process and the following practice entitled “the Creation of Public Relations Website”.

RESEARCH SCOPE

1. Population and Sampling Group
   Population in this study consisted of 138 teachers who did not have knowledge about creating website in 10 Klung Sumphun Clustering Schools. The sampling group for this study consisted of 50 teachers chosen by simple random sampling from the population.

2. Content Scope
   The computer multimedia training with the demonstration process and the following practice entitled “the Creation of Public Relations Website”: a case study of Klung Sumphun Clustering Schools consisted of 8 contents: 1) Basic Knowledge about Internet; 2) Introduction to Macromedia Dreamweaver; 3) Beginning creating website; 4) Adjusting Text and Background; 5) Images and Sounds; 6) Links; 7) Tables; 8) Uploading Website to Internet.

3. Variables
   3.1 Independent variable is the computer multimedia training with the demonstration process and the following practice entitled “the Creation of Public Relations Website”.
   3.2 Dependent variables are
      - The quality of the computer multimedia training with the demonstration process and the following practice entitled “the Creation of Public Relations Website”.
      - The effectiveness of the computer multimedia training with the demonstration process and the following practice entitled “the Creation of Public Relations Website”.
      - The learning achievement of the teachers who use the computer multimedia training with the demonstration process and the following practice entitled “the Creation of Public Relations Website”.
      - The satisfaction of the teachers towards the computer multimedia training with the demonstration process and the following practice entitled “the Creation of Public Relations Website”.

RESEARCH METHODOLOGY

1. Research Tools
   1.1 Computer Multimedia Training
   1.2 Computer Multimedia Quality Evaluation Form
   1.3 Training Achievement Test
   1.4 Satisfaction Evaluation Form

2. Tool Development
   2.1 Development of Computer Multimedia Training
   The development of the computer multimedia training with the demonstration process and the following practice entitled “the Creation of Public Relations Website” follows the approach in developing computer instruction packaged called IMMCIP (Interactive Multimedia Computer Instruction
2.2 Development of training achievements test

The researchers developed training achievement test after reviewing related documents and research works, setting behavioral objectives and having experts verifying the content validity of the training achievement test. After acquiring index of item objective congruence or IOC [4], the researchers revised and completed the pilot test to test the quality with 50 teachers in 10 Klung Sumphun Clustering Schools who had been trained in creating website. The test was analyzed to find out P value (P) and discrimination value (D) [5] and the reliability of the test. The reliability of the test was 0.91. Afterwards, the real test was obtained.

2.3 Development of computer multimedia quality evaluation form and satisfaction form

The evaluation forms contained rating scale for 5 levels as developed by R.A. Likert [5]. The developed computer multimedia quality evaluation form was verified by experts.

3. Experiment

The experiment was done with the sampling group of 50 teachers in 10 Klung Sumphun Clustering Schools.

RESEARCH RESULTS

This research aimed to develop the computer multimedia training with the demonstration process and the following practice entitled “the Creation of Public Relations Website”: a case study of Klung Sumphun Clustering Schools and yielded the following results.

1. The Development of Computer Multimedia Training with the Demonstration Process and the Following Practice Entitled “the Creation of Public Relations Website”: A Case Study of Klung Sumphun Clustering Schools

The researchers prepared the components essential for the development of the computer multimedia, for example, text, still images, animation, and sounds. The software used in developing computer multimedia consisted of Camtasia Studio, Macromedia Dreamweaver, and Adobe Photoshop. After completing all 8 contents for the computer multimedia, the researchers presented the contents in the following ways: 1) Registration for the training; 2) Pre-test; 3) Training for 8 contents along with the demonstration process and the following practice; and 4) Post-test.

2. The Evaluation of Computer Multimedia Training with the Demonstration Process and the Following Practice Entitled “the Creation of Public Relations Website”: A Case Study of Klung Sumphun Clustering Schools

The average score and the standard deviation for the computer multimedia training with the demonstration process and the following practice entitled “the Creation of Public Relations Website”: a case study of Klung Sumphun Clustering Schools were done by 5 experts. The average score was 4.14 and the standard deviation was 0.43, in other words, the quality was good. The experts in media production gave the average score of 4.58 with the standard deviation of 0.40.

3. The Effectiveness of Computer Multimedia Training with the Demonstration Process and the Following Practice Entitled “the Creation of Public Relations Website”: A Case Study of Klung Sumphun Clustering Schools

It could be concluded that the effectiveness of the computer multimedia training with the demonstration process and the following practice entitled “the Creation of Public Relations Website”: a case study of Klung Sumphun Clustering Schools was...
higher than the criterion set at 85/85.

4. The Comparison of Training Achievement Before and After Using the Computer Multimedia Training Entitled “the Creation of Public Relations Website”

Table 1
The training achievement of the teachers who use the computer multimedia training

* with statistically significant difference at the .05 level

According to Table 1, the comparison of the average training achievement score after using the computer multimedia training with the demonstration process and the following practice entitled “the Creation of Public Relations Website”: a case study of Klung Sumphun Clustering Schools was higher than the average training achievement score before using it with statistically significant difference at the .05 level.

5. The Teachers’ Satisfaction towards the Computer Multimedia Training with the Demonstration Process and the Following Practice Entitled “the Creation of Public Relations Website”: A Case Study of Klung Sumphun Clustering Schools

The average score of the teachers’ satisfaction towards the computer multimedia training with the demonstration process and the following practice entitled “the Creation of Public Relations Website”: a case study of Klung Sumphun Clustering Schools was 4.11 and the standard deviation was 0.41.

DISCUSSIONS

The research results from the study of the computer multimedia training with the demonstration process and the following practice entitled “the Creation of Public Relations Website”: a case study of Klung Sumphun Clustering Schools revealed that the quality was good and it complies with the research work done by Athit Jirawattanapol [6] who developed computer-assisted instruction entitled “Computer Hardware” in that the quality was good enough to help learners learn by themselves. It also complies with the research work done by Nipapan Kongkaew [7] who developed computer-assisted instruction entitled “Basic Understanding of Computer for First Year Students at Roi- Et Commercial Vocational College” in that the developed computer-assisted instruction showed good quality and the learning achievement met the defined objectives.

As for the training achievement of the teachers who used the computer multimedia training with the demonstration process and the following practice entitled “the Creation of Public Relations Website”: a case study of Klung Sumphun Clustering Schools, it was found that the average score after training was higher than the average score before training with statistically significant difference at the .05 level. It complies with the research work done by Sakchai Khomkhunot [8] who developed self-training package for elementary school teacher entitled “Conservation of Work of Art Environment” in that the sampling group had more understanding about conservation of Work of Art environment than the control group and the analysis of the average score before and after using the self-training package showed statistically significant difference at the .05 level. This also complies with Boen [9] who studied and compared the learning achievement between lecture and computer-assisted instruction for skill class in that computer-assisted instruction was more effective than lecture.

As for the satisfaction of the teachers towards the computer multimedia training with the demonstration process and the following practice entitled “the Creation of Public Relations Website”: a case study of Klung Sumphun Clustering Schools, it was found that the teachers who used the training showed high satisfaction towards the computer multimedia and interaction the most because the introduction to the lessons was interesting and the learners could control the lessons by themselves. There was also interaction between the trainers and the computer multimedia. The teachers also liked clear images and the meaningfulness of images to the content. This complies with Krepps [10] who studied the
effect of computer-assisted instruction on the work in terms of emotion and feeling of workers in that after using the training package, there were more analysis and supervision for the work. This means that the developed computer multimedia training had a great effect on the changes of the workers in terms of satisfaction towards the work in general and the stimulus to work as well as their steadiness to work.

SUGGESTIONS

1. Suggestions from Research Results
1.1 According to research results, the teachers showed high satisfaction towards the computer multimedia and interaction. They could control by themselves and there was interaction between computer multimedia and trainee. The images were relevant to the content, making it easier to understand. From this, interaction and images related to the content should be added in other computer multimedia training in the future.

1.2 According to the research results, the demonstration process and practice made it easier for the trainee to learn step by step and understand in a short time. Therefore, the demonstration process and practice should be added in other computer multimedia training in the future so that the trainees understand better.

2. Suggestion for further study
2.1 The development of computer multimedia training can be done using other techniques like Delphi technique in collecting data, making it possible to have different media type in computer multimedia training.

2.2 A study of other effects of computer multimedia training entitled “the Creation of Public Relations Website” should be conducted to find out learning achievement in other aspects and to study factors about time spent for the training and endurance to the training.

REFERENCES


Nipapan Kongkaew, (1997), The Development of Computer-Assisted Instruction Entitled “Basic Understanding of Computer for First Year Students at Roi-Et Commercial Vocational College”, Dissertation for Master’s degree in Educational Technology, Graduate School of Khon Kaen University, Abstract.


Behavior, Attitude, Operations research), Dissertation Abstracts International p. 47.