The Development of a Programmed Instruction in Basic of Photoshop for Grand 10 Students.

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Abstract

This paper aims to 1) to develop a lesson module “an introduction to Photoshop” for 10 grade students 2) to examine outcomes concerning an adoption of mobile-learning instructional management model to promote desired characteristics regarding a pursuit of knowledge and learning of grade 10 students.

A sample group was 40 ten grade students of the Demonstration School of Suan Sunandha Rajabhat University. A lesson module “an introduction to Photoshop” for 10 grade students was applied as a tool. Data analysis was performed by utilizing percentage, mean, standard deviation and t-test.

The results demonstrated that an overall assessment of quality in the lesson module “an introduction to Photoshop” for 10 grade students was in a level of “most suitability” with efficiency above the designated 80/80 scale. In the matter of learning achievement in learners who learned with such lesson model, a score was higher than pre-learning score with statistical significance at .05 level. Students satisfied with the lesson module in the “totally agreed” level.

Keywords: Lesson Module and introduction to Photoshop

Introduction

Today, it is an age of information technology which plays a significant role in daily life. Education is a factor encouraging cognition, contemplation, selection, rationalization to make a decision discreetly and to cope with events and new things experienced in the life. Education in this current age has to improve by adopting technology to help in educational development. Given than, instructional management in the age of education reform has to improve learner capabilities to be creative and to reach their highest efficiency in conformity with National Education Act of B.E. 2542 (1999) stipulated that “Educational management shall uphold the principles whereby every student possess his/her capability in self-learning and self-development and the students must the foremost priority. Educational management must encourage natural and full efficiency development in learners”. Learning management must be performed by establishing content and activity in align with learners’ interests and aptitudes and take

individuality into consideration. Learning activities should allow learners to learn practically and to think and analyze by themselves.

Vocational and technology subject group encourages knowledge understanding, routine life skills and awareness of change in learners, as well as an ability to apply knowledge related to routine life, vocation and technology in performance creatively and to compete in Thai and worldwide societies, to perceive opportunities in occupation, to love a career to have positive attitude towards career and to live in a society sufficiently (The Basic Education Core Curriculum, B.E. 2551 (2008). Adobe Photoshop CS is a computer program facilitating a creation and graphic edition, it consists of tools facilitating a user. Photoshop is capable to manage image data files efficiently. It is good technological media capable to do minor editing i.e. removing red-eye effect, marks, removing cracks and rips, color correction, color saturation and adjusting luminance, to add effects to image i.e. sepia, mosaic effect and creating panoramic image by stitching multiple images, Moreover, this program is used in photo editing and can restore an old picture like a new and clear one, edit low contrast image to high contrast image. All of these functions, properties and capabilities help learns to go along with their creativity to render image in order to have genuine color properties and promote creativity in learners.

A lesson module is created with a self-leaning in learners as an objective. It is a programed instruction dividing the lesson into intuitively sub and short section. This sub-section is called a frame, each frame contains respective descriptions and questions of a lesson from easy ones to hard ones to encourage learning in students. In addition, in case of learners do not understand or are unable to conclude the answers, they can do a review prior to next lesson; thus, the lesson module is an example of opened learning allowing learners to fully learn as per their ability. Implementation of the module in learning activities to solve learning problems or inconsistent perception of students is one of various methods which instructor should apply to learners as a lesson module or programmed lesson applied in instruction aims to meet individual learning to allow learns to learn by their existing varied ability and promote better learning achievement in learners.

With aforementioned background and rationale, the author interested to develop a lesson module “an introduction to Photoshop” for grade 10 students to improve better sufficient and efficient learning management.

Objective(s)/Research Methodology

Objective

1) To develop a lesson module “an introduction to Photoshop” for 10 grade students;
2) To examine outcomes concerning an adoption of mobile-learning instructional management model to promote desired characteristics regarding a pursuit of knowledge and learning of grade 10 students.

Scope

Sample group

A sample group consisted of 43 ten grade students of the Demonstration School of Suan Sunandha Rajabhat University.

Scope of content

A lesson module “an introduction to Photoshop” for 10 grade students was pre-designed by determining contents, objectives, methods, as well as teaching aids. Leaners could study, research and self-evaluate as per pre-designated steps. Motivation was given to learners from time to time whereby instructors gave the real-time correct answers.

A lesson module “an introduction to Photoshop” for 10 grade students contained 10 learning units as follows:

Unit 1: Introduction to Photoshop CS

Unit 2: Program components

Unit 3: How to create/open/save

Unit 4: How to use a layer

Unit 5: Editing

Unit 6: Retouching

Unit 7: How to use filters

Unit 8: Add and retouch text

Unit 9: Principle of design

Unit 10: Graphic design

Data collection procedures

1) Plan, study details, contents, document samples and related pieces of research, collect data to compile a lesson module “an introduction to Photoshop” for 10 grade students;
2) Create, develop a lesson module “an introduction to Photoshop” for 10 grade students, and simultaneously compile evaluation tools which would be applied to pre-test and post-test evaluation;
3) Inspect, rectify and improve a lesson module “an introduction to Photoshop” for 10 grade students by taking the module and evaluation tools to experts to evaluate for correctness, suitability and conformity to an indicator and objectives;

4) Experiment with learning management by implementing a lesson module “an introduction to Photoshop” for 10 grade students and analyze satisfaction data and opinion obtained from the sample group towards the module;
5) Analyze data acquired from the experiment, then analyze satisfaction data and opinion obtained from the sample group towards the module and conclude.

Tools

They consisted of

1) A lesson module “an introduction to Photoshop” for 10 grade students
2) Quality assessment forms regarding a lesson module “an introduction to Photoshop” for 10 grade students
3) Learning achievement test forms regarding a lesson module “an introduction to Photoshop” for 10 grade students
4) Satisfaction evaluation form regarding a lesson module “an introduction to Photoshop” for 10 grade students

Data collection/analysis

Data analysis was performed by applying basic statistics i.e. mean and standard deviation. Applied statistics for identifying qualitative value in the tools was indexes of item-objective congruence (IOC). T-test dependent was implemented to find learning achievement value of the sample group.

Result(s)

Data analysis results were classified into 2 parts as follows:

Part 1: outcomes of development of lesson module “an introduction to Photoshop” for 10 grade students

The development consisted of 2 parts i.e. part 1: creating lesson module “an introduction to Photoshop” for 10 grade students and part 2: Identifying qualitative value in lesson module “an introduction to Photoshop” for 10 grade students.

As per quality in the lesson module “an introduction to Photoshop” for 10 grade students according to the evaluation done by 3 experts, in overview, it is most suitable and IOCs of the lesson module and objectives were in validity, signifying that the module, “an introduction to Photoshop” for 10 grade students as evaluated by the experts was suitable to perform a field test.

In the matter of data analysis concerning efficiency of score which was a percentage of activities occurred in implementation of the lesson module “an introduction to Photoshop” for 10 grade students (E1) and data analysis concerning efficiency of score which was a

percentage of testing after implementation of lesson module “an introduction to Photoshop” for 10 grade students, the result yield E1/E2 = 87.03/87.42, signifying that the created lesson module gained E = 87.03/87.42 which was higher than designated 80/80 scale.

Part 2: outcomes concerning implementation of lesson module “an introduction to Photoshop” for 10 grade students

The implementation divided into 2 parts: learning achievement by implementing lesson module “an introduction to Photoshop” for 10 grade students and satisfaction towards the module “an introduction to Photoshop” for 10 grade students.

With regard to outcomes from pre-testing (20 marks), a sample group scored 9.00 marks; on the contrary, in post-testing, the group (with the same 20 marks) scored 17.48 marks. Obtained results were analyzed with t-dependent, giving a value = 39.52. Then, the value was compared against a scale table with statistical significance at .05 level and concluded that the learning achievement of students learned with the lesson module “an introduction to Photoshop” for 10 grade students yield higher post-testing results than pre-testing results with statistical significance with .05 level.

As for satisfaction of students towards a lesson module “an introduction to Photoshop” for 10 grade students, the average value = 4.73 and S.D. (standard deviation) = 0.44 which was, evidently, in the highest scale.

Conclusion and discussion

Study on development of mobile-learning-integrated learning activities to promote a desired characteristic: a pursuit of knowledge of 10 grade student yielded the following result:

1. Development of lesson module “an introduction to Photoshop” for 10 grade students:

   The evaluation of quality concerning the created lesson module “an introduction to Photoshop” for 10 grade students as evaluated by the experts was in the most suitable level with E value = 87.03/87.42 which was higher than designated 80/80 scale.

2. Outcomes concerning implementation of lesson module “an introduction to Photoshop” for 10 grade students

   Learning achievement of learners who learned with the module1. “an introduction to Photoshop” for 10 grade students yield higher post-testing results than pre-testing results with statistical significance with .05 level, as for satisfaction of students towards a lesson module “an introduction to Photoshop” for 10 grade students, the average value = 4.73 and S.D. (standard deviation) = 0.44 which was, evidently, in the highest scale.

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