

MULTIMEDIA AS A MEDIA FOR ANALYZING STUDENT LEARNING OUTCOMES WITH THE CONCEPT OF BLENDED LEARNING

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Keywords:
Multimedia
Education
Blended Learning
Inovation

ABSTRACT

in the world of education innovation is needed to improve the quality of education. Especially in increasingly rapid technological developments. The use of technology in the education sector makes the quality of education increasingly developed. In this study the authors made an online analytical medium that was used to test students' understanding of the lessons taught. By applying an online test at the end of the meeting. This application proves the level of ability of students in real and real time. This multimedia application also provides results directly to the participants. So that they can find out the results of their competency test directly.

INTRODUCTION

Multimedia is the use of computers to present and combine text, sound, images, animation, audio and video with tools and connections so that users can navigate, interact, work and communicate. Multimedia is often used in the world of informatics [1]. Apart from the world of informatics, multimedia is also adopted by the world of games, and also for creating websites. Multimedia is also used in the world of education and business. In the world of education, multimedia is used as a medium of teaching, both in class and individually or self-taught. In the business world, multimedia is used as a media company profile, product profile, even as an information kiosk and training media in the e-learning system [2]. In the beginning multimedia only included media which became the consumption of the senses of vision (still images, text, video motion pictures, and imagery / motion pictures), and consumption of the sense of hearing (sound) and also in the form (tangible). In its development multimedia includes kinetic (motion) and odor which are the consumption of the sense of smell. Multimedia began to incorporate kinetic elements since it was applied to a 3-dimensional film show that was combined with movement on the seat where the audience sat. Kinetic and 3-dimensional movies evoke a realistic sense. Began to be part of multimedia since it was discovered odor reproduction technology through telecommunications. With an odor detection input device, an operator can send digitizing results to the odor via the internet. The receiving

computer must provide an output device in the form of a smell reproduction machine. This odor reproduction machine mixes various types of odor materials which after being mixed produce output in the form of odors similar to data sent from the internet. By analogy with a printer, this tool makes smelly pheromones instead of ink. Output not be printed, but the scent [3].

Learning media is the media used in learning, which includes teaching aids in teaching as well as means of messenger from learning resources to recipients of learning messages (students) [4]. As a presenter and message provider, media learning in certain cases can represent educators presenting learning information to students. If the media program is designed and developed well, then the function will be played by the media even without the presence of educators. One of the multimedia devices is a video camera, now there is a handy size camcorder. With this device audiovisual activities can be recorded into VHS cassette tapes. Then the recordings are played on a video tape recorder so that they can be seen on the screen [5]. In the beginning the use of computer-based multimedia devices was known as CAI (Computer Assisted Instruction) and CMI (Computer Managed Instruction) [6].

From the above problems a system is needed that can solve the above series of problems, namely multimedia. With multimedia all students can test their learning abilities and understanding directly. Although they come from different educational backgrounds. Multimedia is a combination of various media texts, graphics, images, and videos. Multimedia is also interpreted as a computer system consisting of hardware and software that makes it easy to combine images, video, photography, graphics and animation with sound, text, data that is controlled by a computer program, thus providing interactive conditions [7].

METHOD

Based on the framework, each step can be described as follows:

- A. Defining the Scope of the Problem Space The problem to be examined must be determined in advance, because without being able to define and determine the boundaries of the problem to be studied, there will not be a best solution to the problem.
- B. The problem analysis step is to be able to understand the problem that has been determined the scope and limitations of implementing multimedia by using flash media macros 8. By analyzing the problem that has been determined, it is expected that the problems are well understood and correct, in accordance with the solutions expected.
- C. Determining Objectives Based on the understanding of the problem, the objectives to be achieved from the study are determined :
 - a. Creating multimedia applications to provide examinations to students online.

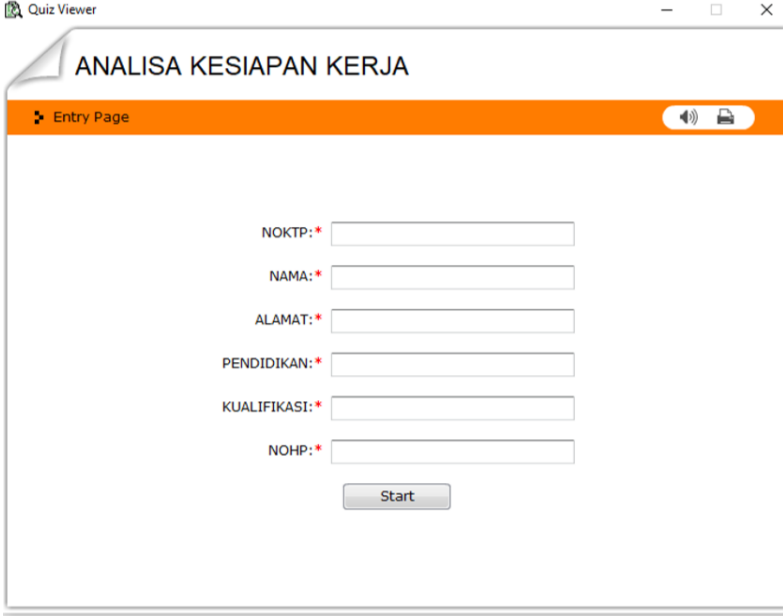
- b. Give the results of the exam directly and informative.
- c. improve the ability of students to understand learning because they are provided with online examinations
- D. Studying Literature Study existing cases from previous systems and look for references that can help answer the results of these problems.
- E. Collect Data Collect data needed to be moved into the system. Such as tutorial videos, knowledge of lessons, and questions that will be entered into the system.

RESULT AND DISCUSSION

Multimedia is the use of several different media to convey and convey information in the form of text, audio, graphics, animation, and video. Multimedia system is a system that can be used digitally, transmission and representation of several discrete (digital) media in the form of text, graphics, images, audio and video via computer.

A. Multimedia System Design

This application was built using macromedia flash 8 and php mysql. At this design stage the author designed several stages. The first interface of the application when run.



Quiz Viewer

ANALISA KESIAPAN KERJA

Entry Page

NOKTP:*

NAMA:*

ALAMAT:*

PENDIDIKAN:*

KUALIFIKASI:*

NOHP:*

Start

Image 1 . Online Test Home Preview

This is the initial design of the system development. There are several options that must be filled and fulfilled to continue into the system.

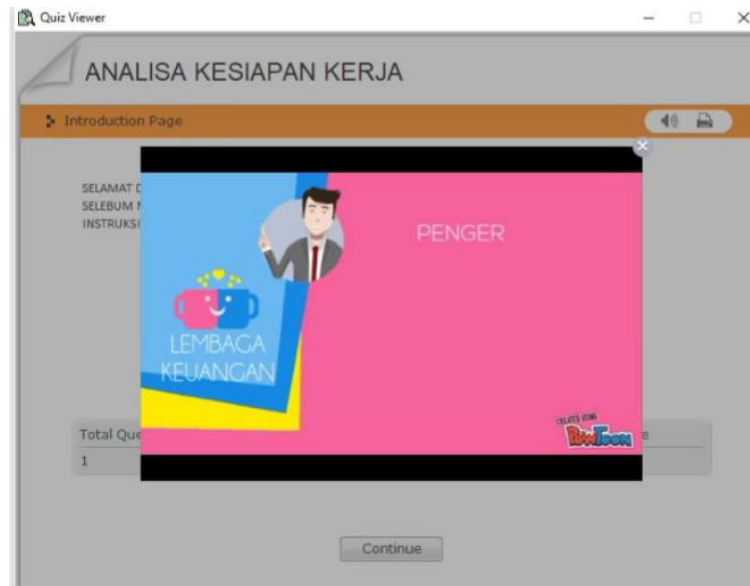


Image 2. Video based learning

On this page students will be given learning about lectures with audio and visual animation.

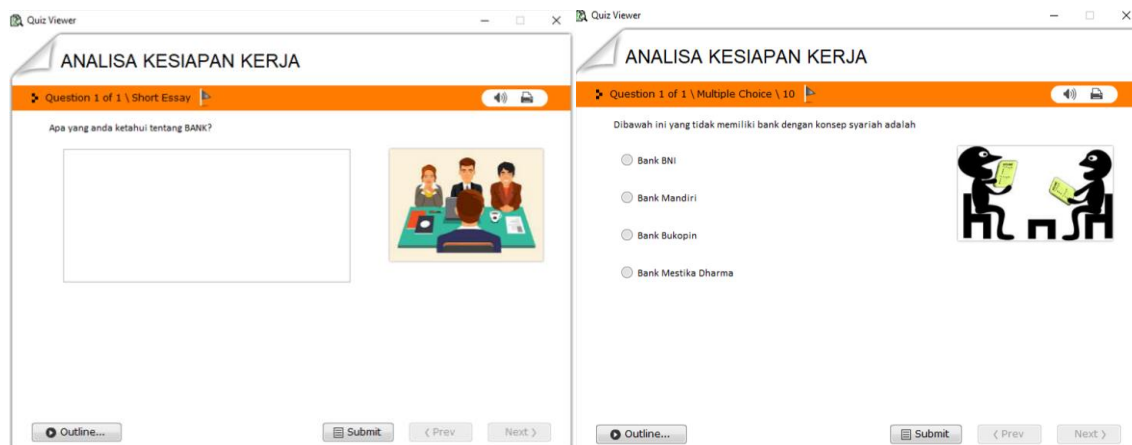


Image 3. Online Test Layout

On this page students will be asked to carry out examinations online. There are several problem, essay and objective models. The time given to complete it can be set by the lecturer concerned.

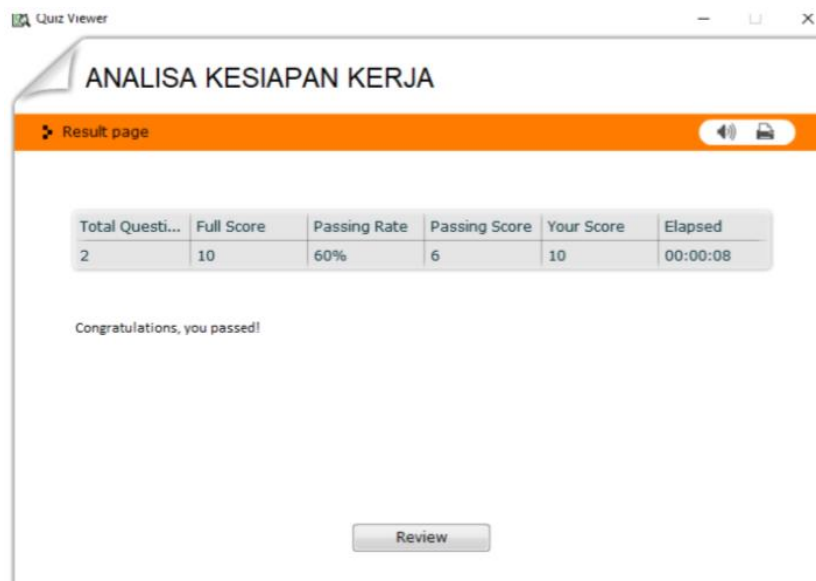


Image 4. Scoring and Exam Result

This is the result of the test trials that have been conducted by students. The value is clearly displayed.

CONCLUSION

Animation development that will be done is by giving tutorials or education about learning. At this stage the system will be presented with several videos that explain the learning material. The video will educate about the material to be tested on the test page. So that this multimedia system can help students to understand learning better.

ACKNOWLEDGMENTS

Thanks for Universitas Putra Indonesia YPTK Padang was support us to make this research and program. Thanks for LPPM Universitas Putra Indonesia YPTK Padang for accept our research and case.

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