DEVELOPING INTERACTIVE MULTIMEDIA FOR SIMPLE PAST TENSE MATERIAL AT EARLY CHILDHOOD TEACHERS EDUCATION PROGRAM

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Abstract: The study aimed: (1) to describe the condition and potential of current learning on the basic material for simple past tense, (2) to produce teaching and learning material in Compact Disc (CD) as an interactive multimedia which is integrated with basic competence in the form of procedural text with manuals and tips, (3) to analyze the effectiveness, (4) to find efficiency, and (5) to find attractiveness of the program. This was a research and development and conducted involving one semester students at STKIP KUMALA. Data were collected through observation, questionnaires and tests. Data analysis used descriptive and GAIN test. The study concluded that; (1) STKIP KUMALA had the potential of using IT, tools and infrastructure of computer, teaching material to support the teaching process, (2) the process produced the product through lector program, (3) The teaching and learning process utilizing interactive multimedia teaching material was more effective, shown by N-Gain score 0.71, (4) after using interactive multimedia, the teaching and learning process could save 90 minutes compared to the previous lesson, (5) learning using interactive multimedia was interesting, in organizing strategy (87.00%), in terms of delivery (84,97%), and in terms of program management strategies to obtain optimal learning results (85.04%).
Keywords: *English, Interactive multimedia, Simple past tense*.

INTRODUCTION

Education is defined as a conscious planned action to create learning atmosphere and learning process in which the students develop their potency actively to get religious spiritual competence, self control, character, intelligence, noble moral, and skill needed by them, society. Ideally, if the education process is conducted properly, the quality of human resources and society will develop significantly into promising positive perspective. The introduction of computer technology and its application should be started since childhood, does not discriminate and is given at all levels of education, so that telemetric can be an important part of the education system. Curriculum and learning in schools are gradually to be able to integrate the use of computer technology in the instructional activities. One of commonly used ICT devices in education is computer and known as *computer based instruction* or *computer assisted language learning.*

In Indonesian schools, the Computer Assisted Learning is called *Pembelajaran Berbasis Komputer* (PBK). Computer is used as a means of liaison between teachers and students to convey the message of learning, computer-assisted students in addition to

study the materials in the classroom; it can also review the material outside the classroom adjust to the level of speed in absorbing material or according to the student's learning style of each. Rusman (2011: 47) states that the use of computers in the learning process of learning allows the individual to foster self-reliance in learning, so that students will experience a more meaningful process compared to conventional learning. In addition, the development of computer applications now allows computer users to be able to interact directly with the source of information either online or offline, using interactive multimedia.

Learning English has four language skills arranged in a hierarchy that must be mastered. This arrangement begins with listening skills, followed by the speaking skills), and then successively followed by the reading and writing skills. The fourth of these skills must be mastered by the students so that they have the competence to speak English more extensively without ignoring the importance of vocabulary, pronunciation of a word, and mastery of good grammar. Associated with the ability to speak, many people considered that the ability of a person or English language skills demonstrated by the ability of the person speaking. This view is reasonable considering that the most important function of language is a communication tool, and communicate using language means speaking or writing.

Current conditions in the learning activities: a) the teacher still dominates the learning process, b) teaching material is limited to textbooks and Worksheet Students (LKS), c) there is no other media used in the learning process, especially computer-based media, d) the results of student learning, especially in the Basic Competency (KD) simple present tense is still likely to be low below the minimum completeness criteria (KKM), have reinforced the results of final exams 1 ECD 2014-2015 school year from 42 students. The minimum score of 79 reached only 26.58% or as many as 21 students.

Pramono (2007: 8) emphasized the definition of interactive multimedia on the frame of the use of computer-based media. They stated that multimedia is a combination of text, graphics, sound, animation and video. The users get flexibility in controlling the so-called interactive multimedia.

Definition interactive multimedia that has been raised by Pramod reinforced with the opinion expressed by Bates in Pramono (2006: 11), that among other media interactivity, the user must press a keyboard or click with the mouse to move the page (display) or enter answers of an exercise or test and computer then responds to give correct answers through a feedback. In line with the above opinion, Prastowo (2012: 31) states that the teaching material is any material (whether information, tools, and text) arranged systematically, the figures show full of competencies to be mastered and used learners in the learning process with the objective of for the planning and implementation of learning research. This study aims to (1) describe the condition and potential of interactive multimedia in the process of learning English, (2) to produce interactive multimedia, (3) to test the effectiveness of interactive multimedia, (4) to test the efficiency of interactive

multimedia, and (5) to test the attractiveness of interactive multimedia.

METHOD

This type of research was Research and Development (R & D). According to Borg & Gall (2003: 772), the development of research-oriented research is to develop and validate the products are used in education. The subjects of this study consisted of students, teachers and media experts, subject matter experts and instructional design experts. The subject of research students who were included in the study analysis of the product needs amounted to 42 students STKIP KUMALA, while on a small group test 18 students from three schools of research subjects, namely 6 students of S 1 PAUD STKIP KUMALA. At the stage of product needs analysis study, research subjects involved 3 lecturers of STKIP KUMALA with the same background of teaching subjects. Experts are then involved in product testing results.

To validate the development of the program, the writer invited a media expert who is a professor of early childhood at STKIP KUMALA Program, then the expert materials from English lecturer at S1 English, and instructional design experts by professors STKIP KUMALA Metro Lampung. The initial step in conducting research of this development was to conduct a preliminary study, there were two activities that carried out in this preliminary study, namely: (1) a literature review and (2) need analysis. In the literature review, the writer examined the literature relating to the theory, concepts and research findings that are relevant to support the preliminary study.

Activity analysis of the product needs, aims to determine the condition and potential to the possibility of products that will be developed, the instruments used for this purpose a questionnaire (shown in Appendix 14) were distributed to the research subjects are students and teachers, the determination of the teacher as respondent determined by purposive sampling, a sampling technique with particular objectives and considerations.

The feasibility of study was carried out by conducting a field survey on the availability of infrastructure such as computers become a requirement of this product development. The survey was conducted mainly at existing school environment in Metro city for the second phase of product development.

Based on the data obtained from the results of preliminary studies and then consulting with sponsor thesis, the results of these discussions were expected to be a clear picture of the product specifications will be developed along with its supporting device. Procedurally, the research activities on the development stage included: (1) the initial product development, (2) development of a package of teaching materials, (3) expert validation test, and (4) test.

After the program, then the next step was the testing of products in the form of interactive multimedia development in the learning process. Test deployment product development results in the learning process and learning English was to determine: (1) The effectiveness of the application of the product, namely the extent to which this product can improve processes and student learning outcomes, (2) Efficiency of use of

the product associated with the management of resources used in interactive multimedia, and (3) The appeal or attractiveness of the product.

The effectiveness test of the product is basically testing the usefulness of the product development results. For testing the effectiveness of the product design of research, one group posttest - pretest design was used (Arikunto, 2010: 124).

Learning efficiency was measured by various resources needed, how much the cost and how long it takes to achieve specified learning goals. The test of the attractiveness of the product aimed to determine the attractiveness and ease of use of the product. Indicators were marked with the attractiveness of the product development results repeatedly by students, because it was easy to use.

To test the attractiveness of the product a questionnaire compiled by the Likert scale was used. As the statement by Djaali (2008: 28) Likert scale is a scale that can be used to measure attitudes, opinions, and perceptions of a person or group of people about a symptom or educational phenomena. It is also reinforced with some relevant research studies by: (1) Shafei, Azadeh (2012) "Computer Assisted Learning: A Helpful Approach in Learning English"

In Line With That Yang, Je-Min, and Jae-Chon Park (2009) The new paradigm called the web 2.0 recently appeared in the web environment. They paid attention to the positive effects which may be brought about by application of the web 2.0 to e-learning; we think that it can improve problem solving skills of learners and reinforce their creativity. But until now, e-learning model, which understood the web 2.0 concept completely, has been never developed. In this context, they proposed the web 2.0-based e-learning platform which induces all the courses for education such as the selection of topic, preparation of lecture schedule and contents, teaching and learning, to be decided by participants. They believe that this platform can replace or supplement the e-learning of web 1.0 age, and realize the positive effects.

RESULTS AND DISCUSSION

Conditions and potential the design of interactive multimedia learning begins with the identification of learning needs of students in tutorials and independent. Time allocation provided was not proportional to the complexity of the text material shaped procedures manual and the tips of English teaching. With the allocation of a 2-hour lesson per week, it was not enough to study the text material form of manual procedures and tips. From the results of students' needs analysis questionnaire consisting of 10 questions, namely: (1) the students' learning has reached a minimum completeness criteria, 100% of respondents said no. (2) the students are motivated to follow English lessons, 100% of respondents said no. (3) the students encountered difficulties or obstacles in achieving linguistic, 100% of respondents said yes. (4) face-face time to learn English was enough, 100% of respondents said no. (5) teaching materials for learning English was adequate, 100% of respondents said no. (6) Service regarding adequate feedback, 100% of respondents states no. (7) The student had the potential

of ICTs, 100% of respondents said yes. (8) Facilities and infrastructure that computer or laptop that supports English to learn some vital lessons with interactive multimedia learning media, 100% of respondents said yes. (9) Students need to learn English alternative form of Computer Assisted Learning (PBB) or interactive multimedia learning media to overcome learning difficulties, 100% of respondents said yes. (10) The contents of interactive multimedia instructional media program meets the need for mastery of linguistic competence, 100% of respondents said yes.

A first step in developing interactive multimedia teaching materials in designing products performs several steps including: 1) creating instructional analysis, 2) developing an outline of the program, 3) collecting the material in accordance with the material, 4) developing the flowchart, 5) writes script program, and 6) an internal test.

There were three aspects tested relating to the newly created interactive multimedia, among others: media design, text material shaped procedures manual and tips and instructional design, each aspect was asked of his response to media experts, subject matter experts, and design experts.

In the small group trial there was some feedbacks so these media was not eligible to be tested further after the revision class product testing is limited. After some inputs from the trials carried out the field test of component of the layout, and the systems and improved teaching materials as much as possible so that the interactive multimedia approach toward perfection.

Product development resulted after several revisions through expert validation,

the next step was the testing of the product to the user group in this case students and teachers aimed to find out the weaknesses and shortcomings of the product developed.

To determine the effectiveness of interactive multimedia in the learning process, the writer utilized test instrument in the form of learning outcomes. Test the effectiveness of these media design used one group pre test - post test. To determine the ability of the students, the writer conducted field tests using N-Gain statistical calculations with large values of N-Gain = 0.70 according to the classification by Hake indicated in the table, it is known that N-Gain normalized values are in moderate classification, the level of effectiveness was effective, it could be concluded that the effectiveness of the improvement of learning ability after using interactive multimedia program is greater than the prior learning using interactive multimedia program.

Test of the efficiency of the product aims to determine how developed interactive multimedia capable of managing learning resources so as to leave plenty of time for students to learn not only in class but can be studied independently. In this study, the measurement of the efficiency of product development results completed whole learning materials, the researchers applied post-test. Show a success, if a lack of compatibility between the expected target.

Test the attractiveness of the product, aims to determine the attractiveness and ease of use of the product. 40 research subjects were asked to rate in terms of organizing strategies, strategy In terms of delivery and management of learning strategies in the use of interactive multimedia program, there are

15 items to questions related to product appeal. Based on the recapitulation of the questionnaire and then test percentages.

CONCLUSION

Based on the issues raised in the introductory chapter and in accordance with the purpose of research which has been formulated concluded matters as follows:

1. The use of instructional media average STKIP KUMALA has been widely used, only interactive multimedia integrated it into the learning process has not yet been done.
2. The creation of a media product development results in the form of interactive multimedia learning materials in the form of text manual procedures and tips English based on the analysis of the condition and learning potential.
3. Effectiveness of capacity building for English language learning using interactive multimedia learning result there is an increase of 70% before and after the product is used.
4. The level of efficiency of the product was determined, based on the concept of maximizing more time to learn, rationally based on the time used and time required result 2> 1, and the product efficiently.
5. The attractiveness of the product development results were measured by indicators of the attractiveness characterized by learning English text material shaped manual procedures through the medium of interactive multimedia learning interesting and easy to use.

SUGGESTION

Based on the conclusions and implications of research and development in this study, thewriter would like to propose some suggestions:

1. Product program of the development of this interactive multimedia should be used optimally to adjust to characteristics of students in a school. It is inseparable from the support the understanding of teachers in the use of media, especially the use of interactive multimedia as instructional media.
2. With the increased achievement of English language learning using interactive multimedia program, the development of interactive multimedia teaching materials is needed for other materials so that learning becomes interesting in addition to reach the goal, the students have a supply of technology capabilities.
3. Time savings, the study suggested the application of optimized interactive multimedia instructional materials in English language learning either in-person or for independent study outside of classroom.
4. Despite the appeal of interactive multimedia program in this study, it is suggested that in developing such a product in the next future, it is vital to observe the rules of media development for learning to be attractive and in order to facilitate the students in learning.
5. For school policy makers, this interactive media is expected to be applied not only to learning English but all subjects.

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