



Interactive Media Development to Improve Student Motivation

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ABSTRAK

Keyword:

Interactive media development;
Motivational learning.

The study aims to conduct interactive multimedia development courses learning strategies to improve student motivation learning. This research uses the R&D (research and Development) research type with the ADDIE development model. The results showed that the phase of the Interactive Multimedia Development adopted an ADDIE development model which was modified into four phases, namely analysis, design, development, and implementation. Interactive learning media testing using Google Classroom media developed with media flowcharts in line with storyboards created. The validation results of media experts are not required to revise because they meet excellent categories (92%), and good category (84%). While the results of trials in improving motivation to learn to students of University of PGRI Adi Buana Lamongan Campus average get a score of 115.46 pretes with variants of 16.56, while the test post score of 140.11 with a variant of 14.99. In addition, the results of statistical trials used using the T-Test concluded that there was an increased motivation to study learning strategy courses on students using interactive multimedia.



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A. INTRODUCTION

Education is an immaturity of learners to develop the talents, potentials and skills that are possessed in life, therefore education should be designed to provide understanding and improve learning performance Students (Daryanto, 2016). Education is also one part of the process of giving birth to a young generation who has superior quality. The quality of education is closely related to the quality of education. Improving the quality of education will lead to increased quality of education (Aqib, 2004). Improving the quality of education that should be considered primarily in the motivation of learning.

A motivation according to Schunk, Pintrich, & Meece (2012) was the process of initiating and defended the activity aimed at achieving the objectives. Motivation can also affect what we learn, when we learn and how we learn (Schunk D. H., 1995). Uno (2008) also argues that motivation is the basic impetus that moves someone to behave, this impulse is in someone who moves to do something that fits the urge in him. So the motivation to learn according to Astuti (2010) is something that encourages, moves and directs students in learning.

The motivation to learn is closely related to the behavior of learners, because motivation can improve and direct learners to always learn new things around. There are two motivations in

the students, namely intrinsic motivation and extrinsic motivation. The intrinsic motivation according to Schunk, Pintrich, & Meece (2012) refers to the motivation of involving oneself in an activity due to the value/benefit of the activity itself. If associated with the learning process, the students who arise intrinsic motivation on him will be doing the task of learning because completing the task is considered enjoyable.

While extrinsic motivation according to Schunk, Pintrich, & Meece (2012) is a motivation to immerse themselves in an activity as a way of achieving a goal. Which means students will do the task because learners believe that the activity will give reward and punishment according to the final result. Both of these motivations should be observed and also enhanced by learners because if both motivation can be improved, then students can certainly increase the motivation of learning that is in him to be able to Achieving learning objectives.

Based on the results of preliminary study conducted for students at the university of PGRI Adi Buana of Lamongan Campus, as many as 30% of students feel he has a high spirit of learning. While 70% of students still declare themselves lazy to follow the lecture process. Preliminary study results stated that lazy students follow the learning process because students feel that they are not motivated to follow the learning process and learning system used still using learning media Conventional (drawing and theory), while the learners are millennials.

Millennials or those often referred to as kids nowadays are generations present as a form of differentiation between the old generations that existed in the 90 with the current generation in existence (Mansyur, 2018). This generation demands everything to be done instantly, as this generation does not like things that tend to be slow. Millennials are synonymous with technology, particularly the Internet and social media (Sabani, 2018). Millennials' learning processes tend to be digitally based, requiring educators to better prepare learning processes that meet their current needs.

The Pew Research Center (2010) states that Millennials cannot escape the use of technology, especially the Internet, because it has become their staple needs and most of them have social media. So that students' needs about learning media are very important. Based on the results of preliminary study for students of University of PGRI Adi Buana of Lamongan Campus, said that it is necessary to develop digital-based learning media that is interactive and able to improve the motivation of learning students.

The development of media learning on millennials is an interactive medium or often called an interactive multimedia designation where the media process is sufficiently accessed digitally. Interactive Multimedia is a media innovation that can improve the motivation to learn students in the process of learning especially for students in University of PGRI Adi Buana of Lamongan Campus. Interactive Multimedia developed using the free online application from Google. This app is often called Google classroom. Google Classroom has several features that can be used and applied in the learning process. Using Google Classroom, educators are expected to make learning classes active, creative, fun and flexible. So learning motivation can increase.

Increased motivation to study in students according to Zimmerman (2000) Students who are motivated to learn a topic tend to involve themselves in various activities that he believes will help him learn, such as paying attention to Lessons, mentally organizing and memorizing the materials to be learned, noting to facilitate subsequent learning activities, examining the level of understanding, and requesting assistance when he or she does not understand the material The.

If the motivation for learning increases, then the learning process can be done completely, the buds are complete in learning. Learn to complete a teaching and learning method involving students to achieve a level of mastery set on a particular unit of study before proceeding to the

next unit of study (Davis & Sorrell, 1995). Learning Complete is essentially an individual study individual (Susanto, 2018). Learning Media developed in the form of interactive multimedia is very suitable to the learning process individually.

B. METHODS

Interactive multimedia development for students in University of PGRI Adi Buana of Lamongan Campus use the development of ADDIE. The ADDIE development model is chosen based on several reasons that this model can be applied systematically and in a theoretical basis. The ADDIE development Model has a simple and easy to apply design phase to develop learning media. ADDIE's development Model consists of five phases: Analysis, Design, Development, Implementation and Evaluation (Januszewski & Molenda, 2008).

The five phases in the ADDIE model for more details will be outlined in the components in the following Figure 1.

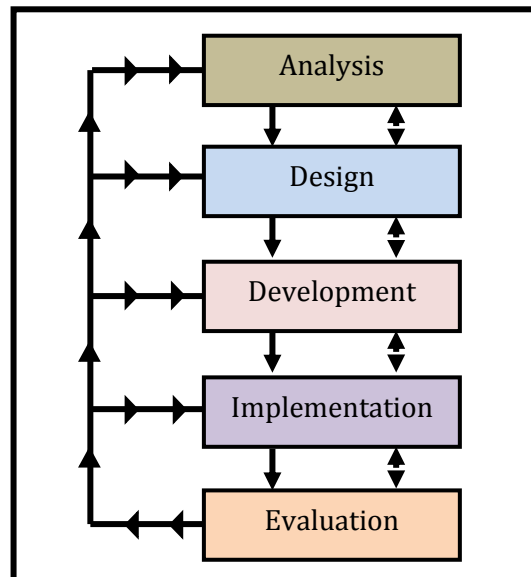


Figure 1. ADDIE Development Model
Source: (Januszewski & Molenda, 2008)

1. Analysis

The analysis consists of two phases that are analysis of needs and analysis of performance used in the process of identifying the problem that will serve as a sample.

2. Design

The design contains about the design of the media display to be developed, but before the development must be made storyboards in detail and in accordance with the objectives, the function is to facilitate the process of developing.

3. Development

Development is an interactive media creation stage that matches the design specified, so that the learning objectives can be achieved.

4. Implementation

Implementation is the most important step after the process of developing interactive multimedia, because at this stage the media will be applied and tested for learners during the learning process.

5. Evaluation

Evaluation is the final stage in the development of learning media. At this stage will be conducted evaluation against the media developed.

The development of interactive multimedia in PGRI University students Adi Buana Lamongan to improve the motivation to learn the students using data collection techniques in the form of poll. According to Agung (2010) angket is a way of obtaining or collecting data by submitting or providing a list of questions or statements to respondents or research subjects. Poll is used to collect data from media experts, experts, small group trials, trials of large groups and a poll of increased motivation to study students on the campus of PGRI Adi Buana campus Lamongan.

The instrument used to collect motivational learning data is based on the theory of Mc. Clelland (n-ACH). The N-ACH theory is a learning motivation theory that will be applied to pretest and posttest polls. Based on instruments developed by 30 questions on the pretest and Postes, only 20 questions that meet the validation or are stated as valid. So it obtained $R_{11} = 0.96$ which means that the question on the poll is relatively reliable with the criteria of the degree of reliability is very high.

The data analysis technique used is a mixed data analysis technique that is qualitative and quantitative descriptive analysis technique, as well as the inferential statistical analysis technique using T-Test. The formula used in percentage calculation of quantitative descriptive data analysis technique is $\text{percentage} = \frac{F}{N}$ (Tegeh & Kirna, 2010). As for the conversion guidelines on the scale of the PAP conversion guidelines the five-level learning media feasibility study will be formulated in the following Table 1.

Table 1. The PAP conversion Guidelines Scale learning media feasibility level.

Achievement level (%)	Qualifications	Description
90 - 100	Excellent	No need to be revised
75 - 89	Good	No need to be revised
65 - 74	Enough	Revision
55 - 64	Less	Revision
0 - 54	Very less	Revision

(Source: Agung (2010)).

Qualitative descriptive analysis techniques in the form of polls in the form of written word from various sources that are easy to understand. Qualitative Data is derived from the criticism and advice provided by experts and learners when conducting product development trials.

An inferential statistical analysis technique in the form of test-T aims to determine the differentiator gained from the analysis of the motivation data to learn English before and after the process of learning to teach using media Developed.

C. RESULT AND DISCUSSION

The results of interactive multimedia development for students in University of PGRI Adi Buana of Lamongan Campus to improve the motivation to learn to use the ADDIE development model consisting of the following five phases:

1. The analysis stage generates data obtained from curriculum analysis and lecture materials, student characteristics analysis, learning environment analysis and media analysis developed using Google classroom.
2. The design stage produces four main stages i.e. selecting and determining the material stage, selecting and determining the application software used, the main display stage of the media to be developed and the stage of developing the media flowchart Matches the created storyboard.
3. The development stage generates learning media in the form of interactive multimedia using Google Classroom that can be accessed on a laptop or gadget.
4. The stage of implementation is the test phase of interactive multimedia application that has been developed in the learning process.
5. The evaluation stage is a stage used as a benchmark or benchmark to see the success rate and media feasibility in improving the motivation of learning students.

The validation results of the media expert using a percentage formula of 92% which is then converted is included in the category so good that it does not need to be revised. The validation results of the media expert using a percentage formula of 84% which then converted into a good category so as not to be revised.

The results of small group trials of 96% which were then converted belong to the category so good that it does not need to be revised. The results of a large group trial of 94% which was subsequently converted included in the category so good that it does not need to be revised. Results of the trials in improving the motivation to learn to the students of University of PGRI Adi Buana of Lamongan campus average get a score of 115.46 pretes with variants of 16.56, while the Postes score of 140.11 with a variant of 14.99. Results of the statistical test used using test-T with the test criteria H_0 rejected if $T_{count} > this$ where this with a significant level of 5% and $DK = 20$, earned T_{count} of 3.288 and a limit of hypothesized rejection of 1,827, while H_a rejected if the $< this T_{count}$. In conclusion H_0 "there is no increase in motivation to study in university students PGRI Adi Buana Campus Lamongan After the process of teaching learning using interactive multimedia" declared rejected. H_a said "There is an increase in motivation to study for students in University of PGRI Adi Buana of Lamongan Campus using interactive multimedia" otherwise accepted.

Interactive multimedia development on students to increase the motivation to learn learners using an ADDIE development model consisting of five phases each process is systematically structured to facilitate the Developing learning media. The validation results of the material experts show a percentage score with excellent criteria. The results of the validation of the media experts indicate the percentage score with good criteria, the conclusion multimedia developed already in accordance with the assessment, Criticism, and advice from experts. The development of interactive multimedia using a free app that is on Google or commonly referred to as Google classroom.

D. CONCLUSION AND SUGGESTIONS

The development of interactive multimedia to increase the motivation of learners is a learning innovation that can be used easily and interactive multimedia developed can also be used as an alternative in the selection of media Learning aimed at improving the motivation of learning students and implementing and simultaneously improving the self-learning process

outside of class. Interactive multimedia development can also be used as a tool to ease the workload of educators whose learning process is not complete due to time constraints.

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