

Development of Learning Media Based on Adobe Flash Cs3 Program at the Lesson “Introduction Economic and Business” in Public Vocational High School (SMKN) 5 Jambi City

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Abstract: Learning in SMKN 5 Jambi city took place with conventional methods suspected causes of students tend to be passive in learning. For that sought the effort to change the method of learning that can make students active. The research aims to: 1) To study the procedure of developing instructional media based on adobe flash CS3 program. 2) To study adobe flash CS3 program-based learning media that is feasible to use. Research type is research and development with reference to Lee and Owens development model that is ADDIE (Analysis, Design, Development, Implementation and Evaluation). The subjects of the study were the students of class X in SMKN 5 Jambi city totaling 22 students. Instruments used: Observation, questionnaires, evaluation of media experts, evaluation of materials experts, media evaluation by teachers of study, media evaluation by students, and pretest and posttest questions. Research findings obtained: first: the analysis phase. Student needs analysis on learning media, second: design stage, making of media design that is storyboard, third: development stage, manufacture of media product, in form of typing and revision from experts, fourth: implementation phase, product trial, fifth: evaluation phase, based on questionnaires of media experts, materials, teachers and students can be concluded that the learning media has decent criteria. Result of research that, 1) The development of instructional media based on adobe flash CS3 program on economic and business introduction subject, done systematically by fulfilling the development model of ADDIE (analysis, design, development, implementation, and evaluation). 2) Learning media based on CS3 developed adobe flash program is feasible to be used and can improve the effectiveness of student learning on economic and business introduction subjects. From result of validation test of instructional media conclude: 1) expert validation result that is validation of content or material obtained by 87% very decent category, 2) result of media expert validation obtained by 85% decent category, 3) result of teacher study field is obtained equal to 88 % category is very feasible, and 4) the results of the assessment of the students obtained by 90% very feasible category. Development of instructional media of adobe flash program is done systematic model of ADDIE and Development of learning media can improve result of learning post-test result is 73%.

Keywords: Learning media, adobe flash CS3 program.

INTRODUCTION

Human resources such as students need to participate actively in building the nation, therefore the students need to expand enough initiatives, increase creativity, and independence in accordance with the talents, interests, and physical development and psychology of learners. Therefore, the learning process should be designed, implemented by teachers as educators to be able to make students more intelligent and intelligent in the era of advances in information and communication technology.

The rapid advancement of information and communication technology has triggered a change in the learning system in schools. Conventional learning is a method of learning that is widely used in schools today is considered not interesting anymore for students because it makes the teacher as the main actor in learning so that students do not play an active role in interacting build knowledge, attitude and behavior.

Learning process is essentially a process of learning interaction between teachers and students.

From the interaction is the transfer of knowledge between the two. The delivery of science can be expressed in various models, methods, and learning strategies. Even to facilitate the delivery of science a teacher can use the help of learning media tools. Munadi [1] the use of media or aids really helps the learning process activities, especially help improve student achievement.

From the result of field observation and requirement analysis which has been done on February 18, 2017, obtained data about the learning process that has been going on in SMKN 5 Jambi city where the teaching and learning process is still using conventional methods, the use of learning media is still less than the maximum. This is summarized in the results of needs analysis that have been done include: 1) 73% of students stated needing the media of innovative learning aids tools, 2) 82% of students are in the age of 16 years, 3) 68% of teachers still use books, 4) 82 % of students revealed that teachers have assigned training assignments to students by involving the use of ICT, 5) 91% of students agreed to develop adobe flash CS3 based learning media to help understand the material to be explained by teachers 6) 73% of teachers rarely use the facilities provided at schools, 7) 77% of students need laptops and LCD to make presentations: with power point, video and image programs. 8) 73% of students disclose the media teachers use in introductory lessons of economics and business less attractive and no less helpful understanding of the material.

Students in SMKN 5 Jambi city tends to ignore economic and business introduction lessons when teachers are teaching in teaching and learning process, they prefer to joke or even play with other friends, because they think that economic and business introduction lesson is boring, this assumption should begin to be eliminated because the real economic and business introduction is a fun science, so teachers should be able to create a fun atmosphere when economic and business introductory learning takes place. In addition to creating a fun atmosphere, teachers should be able to create meaningful learning process because when the introductory lessons of economics and business are considered as a meaningful lesson also by learners, then certainly they will try to follow the learning process that goes well.

Teachers deliver the introductory material of economics and business is done through textbook media. Whereas, the legal material of demand and the law of supply is quite a lot delivered by teachers with conventional methods that tend to be less attractive. The conventional method becomes one of the reasons students' difficulties in understanding and doing the exercises as well as in the exam because the material presented by teachers with conventional methods seem monotonous and boring. The management of this kind

of learning is still focused on the teacher. The result of student learning introductory subjects of economics and business class X PM and X AK sourced from teacher of field study seen that some students still have value under minimal mask criteria (KKM).

The development of science, knowledge, and technology succeeded in creating various kinds of software made for various purposes whose benefits and objectives are to facilitate human work. One of the software that can be used to create multimedia is Adobe Flash CS3 output from Adobe Systems Incorporated. Adobe flash is a popular and popular multimedia software to add animation and interactive websites, but flash is not only used for web applications, flash can also be developed to build desktop applications because flash applications in addition to the compilation into "swf" format, flash can also be compiled into a format "Exe" [2].

Teachers in improving the quality of student learning process more interesting can use adobe flash CS3. This media helps teachers in delivering learning materials so that students pay attention to teacher explanations, students better understand the material described by teachers, and can improve student learning outcomes. The use of Adobe CS3 adobe flash media is expected to present a more effective and interesting information media, so that the learning media used is not only textbook, but also use in the form of audio, video, graphics, photo and picture.

The above description can be formulated the problem of learning media introduction subjects of economics and business in SMKN 5 Jambi city as follows: 1) How the development of instructional media based on adobe flash CS3 program that is interesting on economic and business introduction lesson in SMKN 5 Jambi city. 2) Whether the learning media based on adobe flash CS3 program developed is feasible for use in learning and can improve the effectiveness of student learning on economic and business introduction lessons at SMKN 5 Jambi city.

LITERATURE REVIEW

The theory, which is easily meant by the theory, is that if there is an explanation of the phenomenon of nature that has been meticulously been tested many times and proved to be true, then the explanation is called the theory [3]. While [4] mentions the theory is the set of constructs, concepts, definitions, propositions that put forward systematic views of the symptoms among variables to explain the predicted symptoms. The theory according to [5] is a systematic interpretation of a field of knowledge. According to [6] that theory is a series of interrelated generalizations that still need to be observed with empirical tests. The theory according to [7] is: A set of scientifically accepted principles offered to explain a phenomenon

that provides a frame of mind for interpreting environmental observations and serves as a bridge that connects between research and education.

As mentioned by [8] and by [5] there are three theoretical functions such as the following:

First: as a guide and a source of stimulus for scientific research and thought; Secondly: to summarize a large body of knowledge about the laws of learning into a small space: Third: to explain what learning is and why learning takes place as it is. Concluded; Theory [9] is an explanation of the phenomena of carefully delivered natural nature that has been tested many times in the form of constructs, concepts, definitions, propositions proposed systematically giving a frame of mind to a field of knowledge strung together to be generalized interconnected, but still needs to be observed and proven by empirical tests.

The theory for this study [9] uses a theory of extension learning approach from Skinner's theory of Behaviorism (radical behaviorism) that is a measurable aspect of the environment of organism behavior and behavioral consequences that is an important material for scientific research and modeling communication. Some learning psychologists have their own perceptions and emphasis on the nature of learning and the process towards change as a result of learning.

The communication model used [9] is a helical Dance model is an extension of a linear and circular communication model. The helical helical definition of helical helix, which is an increasingly enlarged circular shape, points to the fact that the communication process moves forward and what is communicated will now affect the structure and content of the communications that follow. This helical Dance model by [10,11] calls it a spiral theory, can be shown the picture as follows:

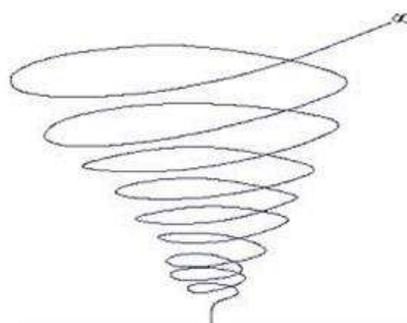


Fig-1: Dance's helical model

Dance's helical model image with this research is the development of computer-based learning media that originated from a point that the process of moving forward communication continues to grow to the point of infinity, namely the development of communication media and the development of continuous learning.

Learning in the classroom contains elements of communication, in the process of teaching and learning communication elements are very influenced on the level of understanding of learners on the material provided by teachers in the learning process. Teaching and learning process is essentially a process of communication, namely the process of delivering messages from the source message, channel / media and the recipient of messages is the components of the communication process. The message to be communicated is the content of teaching or upbringing that is in the curriculum. The source of the message can be teachers, students, other people or book authors.

The helical dance model underscores the dynamic nature of the communication process, social processes, elements, relationships and a constantly evolving environment. The helix describes how aspects of the process change over time. Based on some of the above explanation can be argued that the process of

teaching and learning is essentially a process of communication, namely the process of delivering messages from the source message, channel / media and the recipient of the message is the components of the communication process. The message to be communicated is the content of teaching or upbringing that is in the curriculum. The source of the message can be teachers, students, other people or book authors. The channel is the educational medium and the recipient of the message is a student or a teacher. The above communication model confirms that the key in communication is having to deliver a viable message to use and the communication process move forward through media or multimedia.

Multimedia is the advancement of computer media that gives some advantages for audio visual production activities. In recent years the computer has received great attention because of its ability to be used in various areas of learning activities. Through the combined multimedia of media elements such as text, graphics, images, animation, video and audio can help learning. Revealed [12]: "has been identified as a potential method for improving the quality of the learning process specifically and the user experience of the computer in general. Users encourage user interaction, this ensures that the user can not be a

passive participant of the learning experience.) Multimedia makes the potential sense of learners can be accommodated so that learning outcomes can be predicted to increase. In its development, multimedia learning is divided into four models of models based on models of hyper models [13], which consist of 1) model tutorial, 2) drill and practice model, 3) simulation model, 4) game model, and 5) hybrid model based on this, multimedia in the learning process can be used three functions, namely as follows; 1) instructional tool functions, 2) interactive tutorial functions, and 3) source functions for learning. Multimedia model and function is obtained superiority for learning [14], namely;

- 1) Enlarge a very small and invisible object by the eye
- 2) Minimize the very large objects that cannot be presented in school
- 3) Presenting objects or events that are complex, complicated and take place sooner or later
- 4) Presenting objects or distant events
- 5) Increase the attractiveness and attention of students

Multimedia learning when selected, developed and used appropriately and well, can provide enormous benefits for teachers and students, that is the learning process more interesting, more interactive, the amount of teaching time can be reduced, the quality of student learning can be improved in the learning process can be done anywhere and anytime, and student learning attitudes can be improved.

From the above explanation it can be argued that multimedia-based learning is a learning activity that utilizes computers to create and combine text, graphics, audio, motion pictures (video and animation) using links and tools that allow the user to interact and communicate

RESEARCH METHODS

The research approach is research and development with reference to the development model of Lee and Owens [15] that is ADDIE (Analysis, Design, Development, Implementation, and Evaluation).

The product developed is a learning media product on economic and business introduction lessons at SMKN 5 Jambi city. The development model used in this study is a conceptual development model that is an analytical model that delivers or explains its components. The study refers to the development model by Lee and Owens (2004: 128), a development model that uses 5 development stages called ADDIE (analysis, design, development, implementation, and evaluation), following the stages on Lee and Owens' model [15]. The description of the stages of the model is described as follows: Analysis phase, design stage, adobe flash CS3 development stage, development stage, implementation stage.

The test subjects in this research and development consist of: media expert, material expert, teacher of introduction of economy and business class X AK in SMKN 5 Jambi city and students of class X AK in SMKN 5 Jambi city counted 10 people, in small groups and large group trials of 22 people.

The instrument used in research development of adobe flash CS3 learning media on economic and business introduction lesson in SMKN 5 Jambi city is in the form of: questionnaire, test, and observation.

RESULTS AND DISCUSSION

Results

Presentation of data on research and development of instructional media of economic and business based on adobe flash CS3 program is the result of: validation of media expert, material expert, small group trial, and large group trial. Testing in this research obtained the following results: (1) instructional media based on adobe flash CS3 program on economic and business introduction lesson in SMKN 5 Jambi city produce interesting product, (2) validation result done by expert team that is material expert and media experts in the form of questionnaires, (3) adobe flash CS3 based learning media developed on the subject of economic and business introduction in SMKN 5 Jambi city can improve student learning outcomes.

Analysis Phase

The steps in the analysis of the front-end analysis, consists of:

Needs Analysis

In the identification of expectations in facilitating the introductory learning of economics and business students, as many as 18% of students stated need of simplification of learning materials, 73% of students stated need the media of innovative learning tool aids, and 9% of students stated need adequate learning resources.

Participant Analysis

Students in SMKN 5 Jambi city class X have an age range 15-17 years. Of the 22 students given the questionnaire obtained data that 5% of students with age 15 years, 82% of students with age 16 years, and 23% with age 17 years.

Analysis Technology

Based on the results of questionnaire dissemination, related technology used by teachers in introductory learning of economy and business class X, that is 68% teachers use book, 14% of teachers use laptop and infokus, and 18% teacher use computer.

Task Analysis

Based on the results of observation through the questionnaire obtained information, that 82% of

students revealed the teacher has given the task of training to students by involving the utilization of ICT.

Incident-Critical Analysis

Based on the results of observations through questionnaires to the students, as many as 91% of students agree developed learning media based adobe flash CS3 program to help understand the material to be explained by the teacher.

Situation Analysis

Results of questionnaires distributed to students related to the intensity of use of facilities provided by schools; 73% of teachers rarely use, 18% of teachers never use, and 9% of teachers sometimes use the facilities provided at school.

Goal Analysis

The objective analysis is to determine the domains to be achieved in accordance with the learning objectives. In this case the authors analyze what learning objectives to be achieved by students.

Media Analysis

Based on the results of media observations or tools that most students need to facilitate the introductory learning of economics and business, that through the spreading of the questionnaire obtained the results that 9% need a book media, 77% of students membutuhkan laptop and infocus (presentation: power point, video, image) and 14% of students need Internet-based media.

Table-1: Analysis of Learning Domains

Basic Competencies	Indicator	Domain
1. Describe the curve and balance of demand and supply	Describes the law of demand	C1, C2
	Explains the law of supply	C1, C2
	Describe the demand curve	C1, C2
	Describe the supply curve	C2
2. Evaluate the occurrence of demand and supply curve shifts	Distinguishes demand and supply balance curves	C4
	Distinguish buyers marginal, marginal and sub marginal	C4
	Describe the super marginal salesperson	C2, C4
	Describes the marginal seller	C2, C4
	Describe the sub marginal seller	C2, C4

Analysis Extant-Data (Teaching materials)

From the questionnaire to the students about the media used by teachers in the introductory learning of economy and business class X, it was found that as many as 5% of students express interesting and helpful in understanding the material, as much as 23% of students express less interesting, but help understand the material, and as much as 73% students express less interesting and do not help understand the material.

Based on the results of this questionnaire the authors decided to develop learning media based adobe flash CS3 program in the hope of helping students understand the material described by the teacher.

Cost Analysis

Cost analysis is performed to identify the cost to be used as well as the benefits to be gained by developing this product. In the development of learning media based adobe flash CS3 program is the author pays teachers 1 person expert in adobe flash CS3 of Rp. 500.000, -. after learning about the manufacture of products, researchers get the advantage that researchers become experts in making adobe flash CS3 media products

(Design Phase)

The design stage of learning media development based on adobe flash CS3 program as follows:

Schedule Settings

In making this instructional media done schedule arrangement in advance that includes schedule making of product which spend time of 6 month that is by preparing:

- a) 2x meeting implementation plan
- b) Syllabus
- c) Preparing introductory materials for economic and business material law and demand
 - 1) Text: material, practice questions, test questions.
 - 2) Videos related to the material.
 - 3) DVD RW to media.
- d) Create a media concept

Team of experts

The making of this media has stages and work teams consisting of 3 parts with the tasks and roles of each, namely: a) the author as a product developer, b) team of experts (material experts and media experts) who act as a validator of the product has been developed, c) teachers as users using media products

adobe flash CS3 program and d) students of class X AK in SMKN 5 Jambi city as the subject of trials, as users of products that have been developed.

Media specifications

Media specifications Media specifications include media products, programs used, and other elements used to develop the product. Other media specifications are:

- a) Learning media based on adobe flash CS3 program is packaged in CD form distributed to all students and inside there are five menus which include: directions, KD, material, evaluation, video, profile, and out.
- b) Media is stored in application format.
- c) The CD cover is printed using photo paper.

Stage of learning media based adobe flash CS3

The stage of making learning media based adobe flash CS3 program, that is:

- a) Preparing RRP, syllabus and package book.
- b) Prepare teaching materials
- c) Preparing for evaluation and test questions.
- d) Install *adobe flash CS3*:
 - 1) Create a *flash document*
 - 2) Create a design option with action script 3.0
 - 3) Separate each file in a folder
 - 4) Create text, animations, import videos, and images in Adobe Flash CS3
 - 5) Brings all the files into adobe flash CS3

Publish the design results with the application form Planning Configuration Control and Review

This is the final step required in designing the design specifications of learning media based on Adobe CS3 adobe flash program, before the product is validated by the experts for review. Activities at this stage consist of a complete and correct labeling of the design of learning media products based on adobe flash CS3 program that will be tested to the expert for review. At this stage the task of the developer is to keep track of what needs to be fixed and prepare the assessment sheet. A series of design specifications of learning media based on adobe flash CS3 program are presented in the research attachment page.

Using media Development Phase

Development stage is the stage of realizing product design that is ready to be implemented. The design realization includes: a) making the product at the beginning to the end, b) making an instrument to measure product performance in the form of a questionnaire, and c) validation by a team of experts consisting of material experts and media experts.

Based on the results of questionnaire analysis needs, then the preparation of adobe flash CS3 based learning media on the subject of economic and business

introduction prepared in accordance with the reference and consideration of the results of needs analysis. Although in the preparation of adobe flash CS3 based learning media on the subject of economic and business introduction there are many adjustments with some considerations. But the questionnaire needs still be used as a reference in the preparation of learning media based adobe flash CS3 program on the subject of economic and business introduction.

Material Validation Result Data

The criteria assessed in the content validation of learning media based on adobe flash CS3 program introduces economic and business subjects are five criteria: first: quality of content; second: integration of learning objectives; third: reciprocity and adaptation; fourth: motivation and fifth: flexibility use. These criteria are expressed through 13 questions. validation is done once on March 23, 2017.

Points obtained from material validation, amounting to 45, then converted into percentage types with the following formula:

$$P = \frac{\sum x}{\sum x_1} \times 100 \% \quad P = \frac{45}{52} \times 100 \% \quad P = 87 \%$$

Based on the calculation, obtained a percentage of material validation process of 87%. If converted into eligibility criteria.

Media Validation Result Data

Expert media validation is an expert assessment activity to media feasibility which is used as adobe flash CS3 based teaching materials, validation is done on April 01, 2017 which aims to assess the feasibility of media used in developed product so that after validation will get suggestion and also input to be revised so that the media developed can be considered feasible. Point obtained from media validation, which amounted to 44, then converted into type percentage with the following formula:

$$P = \frac{\sum x}{\sum x_1} \times 100 \% \quad P = \frac{44}{52} \times 100 \% \quad P = 85 \%$$

Based on the calculation, the percentage of media validation process is 85%. If converted into eligibility criteria.

Implementation Phase

Product in the form of adobe flash CS3 based learning media that has been developed and validated followed by revisions then implemented in the form of small group trials and large group trials conducted at SMK N 5 Jambi city. The test product is tested to 10 students for (small group trial) and 22 students (large

group trials) to find out the eligibility of instructional media. Students are asked to respond to media that has been developed through questionnaires.

Test Result Data

Trial of Field Study Teachers

Trial of teacher of field study is step test conducted for on April 3, 2017 aims to see the possibility of using learning media based on adobe flash CS3 program in real learning. Assessment of teachers of this field of study is very important to see the perfection of material from the learning media, along with their suitability to the characteristics of students of the institution. Trials conducted by a Master of Introduction to Economics and Business Studies at SMKN 5 Jambi city who teaches in grade X selected as the subject of research and development try this is done.

Points gained from the teacher's field trials, which amounted to 71, were then converted into percentage types with the following formula:

$$P = \frac{\Sigma x}{\Sigma x_1} \times 100 \% \quad P = \frac{71}{52} \times 100 \% \quad P = 88 \%$$

Based on the calculation, if converted into the criteria of eligibility level obtained percentage of the trial process of teachers in the field of 88%.

Small Group Trials

Small group trials of 10 people or initial field trials are focused on product refinement. The respondents use learning media products based on adobe flash CS3 program introductory economy and business courses, then provide an assessment of the product through a questionnaire. Small group trials are a media feasibility test process involving 10 selected students with a learning achievement criteria on economic and business introductory lessons, the lower classes conducted on 13 April 2017.

Points obtained from a small group trial, numbering 422, were then converted into percentage types with the following formula:

$$P = \frac{\Sigma x}{\Sigma x_1} \times 100 \% \quad P = \frac{422}{480} \times 100 \% \quad P = 88 \%$$

Based on calculations, if converted into eligibility criteria. obtained a percentage of small group trial process of 88%.

Large Group Trial

A large group trial of 22 people or field trials focused on product refinement, and eligibility at the population level. This trial was conducted on 22

students of class X AK in SMKN 5 Jambi city on 27 April 2017.

Points obtained from large group trials, numbering 951, were then converted into percentage types with the following formula:

$$P = \frac{\Sigma x}{\Sigma x_1} \times 100 \% \quad P = \frac{951}{1056} \times 100 \% \quad P = 90 \%$$

Based on the calculation if converted into the criteria of eligibility level obtained a percentage of the large group trial process of 90%.

Large group testing is also done through the test of learning outcomes (comparative pre-test and post-test) has been disseminated to students of class X AK in SMKN 5 Jambi city Academic Year 2017/2018 on economic and business introduction to 22 students.

Product validation is based on feedback from media expert and content expert review. After a pilot in the field of study, a small group trial. In the next step, a large group trial was conducted to 22 students who aim to know the effectiveness of the product development. Before the test results before the study on April 22, 2017 and after on May 6, 2017 (pre-test and post-test) the learning process, the first test in the test tested to students in SMKN 5 Jambi city but in the class different, that is class X Marketing on April 08, 2017.

Based on the calculation, through the test of learning outcomes that have been done to 22 students, obtained difference of percentage of pre-test and post-test by 11%. From the above results can be seen that after the use of learning media based adobe flash CS3 program on the subject of economic and business introduction of student learning outcomes increased. If converted into post-test result criteria is 73% feasibility level, pre-test and post-test results from adobe flash CS3 program-based learning media are at a very reasonable level. Of the 22 students there are 17 students who experience an increase in value, 2 students have decreased values, and 3 students the value is fixed so that the above calculation results can be concluded that with the media can improve student learning outcomes.

Evaluation

Evaluation is a process to see if the learning system being built is successful or failing, in accordance with the initial expectations or not. Evaluation of learning media is needed to improve learning media. Evaluation aims to see the feasibility of the media. Evaluation is done by revising the product based on expert suggestions through a questionnaire. The next evaluation was done after the media was

tested on the students so that in the end produced a ready-to-use product.

Development Results

Adobe Flash CS3 Specification Development Result

Media specifications include media products, programs used, and other elements used to develop the product. The media specifications are:

- a) Learning media based on adobe flash CS3 program is packaged in CD form distributed to all students and inside there are five menus which include: directions, KD, material, evaluation, video, profile, and out.
- b) Media is stored in application format.
- c) *The CD cover is printed using photo paper.*

The stage of making learning media based adobe flash CS3 program, namely:

- a) Preparing RRP, syllabus and package book.
- b) Prepare teaching materials
- c) Preparing for evaluation and test questions.
- d) Install adobe flash CS:
 - 1) Create a flash document
 - 2) Create a design option with action sript 3.0
 - 3) Separate each file in a folder
 - 4) Create text, animation, import videos, and images in adobe flash CS3
 - 5) Unify all the files into adobe flash CS3
 - 6) Publish the design results with the application form.

End Product Discussion

Revised Product Review

The development process is done through 5 stages of adopting the stages of Lee and Owens [15] model, ADDIE (analysis, design, development, implementation, and evaluation). The research based on the issues raised from SMKN 5 Jambi city which then found a potential and problem solving in the form of procurement is a learning medium. Learning media according to Munadi [1] is defined as everything that can deliver and deliver messages from the source in a planned manner so as to create a conducive learning environment from the recipient can make the learning process efficiently and effectively. The function of a learning media as described by Munadi [1] is to streamline the process of communication learning so that the desired goals are achieved.

Data obtained from the results of field observation and questionnaire needs analysis given to students of class X AK in SMKN 5 Jambi city serve as the basis in making learning media introduction economy and business based adobe flash CS3 program as an input of learning that is integrated with student learning outcomes as learning output. The process of making media through the making of media design, media validation, as well as trial media usage based on direction and guidance from mentors.

Based on the test results, can know the quality of products as follows:

1. The quality of the media is viewed from aspects of the introductory field of economics and business; Based on the assessment of expert content validation results on learning media products with 13 items of questions. Obtained assessment of some indicators obtained the highest score for each item is 4. Then the feasibility obtained from media expert test is 87%. That the learning media obtain very decent category, so that the learning media is very feasible to use.
2. Quality of media viewed from the aspect of multimedia learning based on the results of validation of media experts on learning media products with 13 items of questions, obtained the highest assessment for each item is 4. Then the feasibility obtained from media validity test is 85%, concluded that the learning media to obtain category is feasible, so the learning media is feasible to use.
3. Quality of media viewed from the aspect of multimedia learning: based on the results of experiments on teachers of the field of study of the product with 20 items questions about the feasibility of learning media content obtained the highest score each item is 4 test results validation of media experts is 88%.
4. Then the feasibility obtained from media test media that is 88% can be stated that the learning media obtain very decent category, so that the learning media is very feasible to use.
5. The quality of media is reviewed from the aspect of multimedia learning, that based on the results of the assessment of the students by asking 13 questions to the 10 respondents students obtained the result of 88%, it can be stated that the learning media based on adobe flash CS3 program get very decent category; got the score where the highest score for each item is 4.
6. Quality of media viewed from the aspect of multimedia learning based on product revisions and assessment results of students by asking 13 questions to 22 respondents of the subjects of the test subjects. Obtained results on a large group trial of 90%. it can be stated that the learning media based on adobe flash CS3 program obtain very feasible category.

Get the highest score for each item is 4.

Product Use

Adobe flash CS3 program product developed, used for learning media In the world of multimedia education is used as a medium of learning, both in the classroom and individually. The existence of multimedia researchers use to be used as a solution to problem solving facing the world of special education

in using learning media. Researchers strive to develop learning media that can be accepted by students well.

Based on observations on small group trials and large group trials, there are still students who tend to ignore economic and business introductory lessons when teachers are teaching. Students are more likely to joke while the other students are very concerned about the explanation of the teacher. The *kesulitan* are individual ie students who are less active in learning.

Thus, the learning media based on adobe flash CS3 program has been adapted for students who have an active attitude in learning, whereas passive students of low learning attention needed further guidance in using adobe flash CS3 program media

Product Use Results

Learning outcomes using learning media adobe flash CS3 learning program developed get values in the range well up to very well. Based on test result after pre-test and post-test on large group trial to 22 people, before given adobe flash CS3 program it can be seen that learning pre-test is on criteria not reach enough value.

After the students are given adobe flash CS3 program and done post-test it can be seen that the average value of 62 increased to an average of 73. Obtained difference of percentage of pre-test and post-test by 11%. CS3 adobe flash program student learning outcomes become increasing. If converted into post-test result criteria is 73%. shows that the developed learning media has a very good feasibility if used for student learning resources.

Learning media developed has several advantages and disadvantages. The advantages of learning media developed are:

Advantages:

- 1) Learning media created using Adobe Flash CS3 software with action script 3.0 claimed faster command execution process than in the previous version 2.0 script action.
- 2) Learning media is developed based on the assessment of the expert validator, setting a good layout, so as to provide convenience and comfort for students in using this media.
- 3) Media learning that contains video, giving more appeal to students than just reading books with the same material.
- 4) Learning media made with five divisions namely basic competence, material, evaluation, video and profile. Be a special attraction for students.
- 5) Learning media be equipped with question banks can be accessed by students. This can be used to measure the content of the content that the teacher

has learned and can update to enrich the media content.

Disadvantages:

- 1) Price will be relatively expensive, because it must produce two products at once in the form of CD learning media duplication.
- 2) To operate this media requires a set of computers or laptops. For that users must provide a laptop with specific specifications for learning media can run with a maximum.

Based on data of small group and large group experiment result and above explanation, it can be stated that by using adobe flash CS3 program based learning media developed, it is effective to improve learning result introduction of economy and business of student at class X AK at SMKN 5 Jambi city. Thus it can be said that the use of learning media based on adobe flash CS3 program used in the learning process turned out to have high attractiveness for learners, learning is more fun because students feel a new nuance in the learning process and can improve student learning outcomes.

CONCLUSIONS

Adobe Flash CS3 Based Learning Media in economic and business introductory lessons has been revised according to the advice of a team of experts, both media experts and content experts. And have been tested on small groups and large groups in SMKN 5 Jambi city so that it can be concluded as follows:

1. Procedure of learning media development based on adobe flash CS3 program on economic and business introduction lesson in SMKN 5 Jambi city, done systematically by fulfilling development model through step of abbreviated ADDIE (analysis, design, development, implementation, and evaluation). Which produces learning media products based on adobe flash CS3 interesting program.
2. Learning media based adobe flash CS3 program developed feasible to use and can improve the effectiveness of student learning on the subject of economic and business introduction in SMKN 5 Jambi city. On the subject of the law of demand and law of instructional media offer is feasible to use it can be obtained from the test results as: 1) the results of material content expert validation 87% very decent category, 2) media expert media validation 85% feasible category, 3) result 88% category of study subjects are highly eligible, and 4) the results of the assessment of 90% students are highly feasible. And learning media can improve learning result can be seen from difference of percentage from pre-test and post-test process equal to 11%. If converted into post-test result criteria is 73%. From 22 students there were 17 students who experienced an increase in value, 2

students experienced impairment, and 3 students fixed value.

RECOMMENDATIONS

Theoretical suggestion

In general, to the next researcher is suggested to be able to test the effect of using Adobe Flash CS3 based learning media on other subjects. The development of Adobe Flash CS3-based learning media on introductory subjects of economics and business schools is still needed. So the development of learning media is expected to be more varied again.

Practical Suggestion

In the next researcher, Adobe Flash CS3 based learning media to be examined on other subjects and did research with different variables.

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