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Interactive Learning Media Using Kvisoft Flipbook Maker for Mathematics Learning S Fahmi1, S W Priwantoro1, R A Cahdriyana1, A Hendroanto1, S N Rohmah1, and L C Nisa2 1Universitas Ahmad Dahlan, Jl. Ring Road Selatan, Yogyakarta, Indonesia 2UIN Walisongo, Jl. Walisongo, Tambakaji, Ngaliyan, Semarang, Indonesia E-mail: syariful.fahmi@pmat.uad.ac.id Abstract.

This study aims to produce interactive learning media using Kvisoft Flipbook Maker for mathematics learning for 5th semester students in Mathematics Department of Universitas Ahmad Dahlan as well as knowing the feasibility of the learning media based on the assessment of media experts, material and learning experts and 70 students.

The development model used was the Borg and Gall development model which are 1) needs analysis, 2) preparing media designs, and 3) making learning media in the form of e-modules arranged in the form of compact disks (CDs). Learning media that has been made is validated to expert lecturers. Subsequent input is used to revise the e-module.

The final contents of this e-module are: Basic Competency and Competency Standards, Instructions for Use, Material, Video related to material and Evaluation. The developing learning media has validated by the material expert and media expert. The material expert result shows 3,389 score for the content aspect, 3,5 score for presentation with the learning approach, and 3,222 score for didactic requirements aspect. The final score 3,383 shows a very valid criteria.

The resulting assessment of media expert of an interactive learning media using Kvisoft Flipbook Maker shows 3,556 score for the languages aspect and 3,5 score for the graphics aspect. The final score 3,524 shows very valid criteria. The questionnaire result of students response used to find out the practicality value. From the student response questionnaire data obtained a score of 3.24 with good criteria. 1.

Introduction Education is a primary need which must be fulfilled by every citizen in community life, nation and state because the life quality of a nation is influenced by its education. This is appropriate with Hamalik, "eon s processof nfuenced he udentto abltadept good possie n hei neighborhood, therefore it will create a change in theirself to function adequately in community lives" [1].

So, education is a process to develop the students potencies and the teacher is needed to develop the potency and creativity of the students in a learning so it will create students changes. Learning is a process characterized by the presence of changes in a person. Changes as a result of the learning process can be shown in various forms such as changing knowledge, understanding, attitudes and skills, whose behavior, skills and ability, power reaction, power reception and other aspects on the individual [2].

The making of a media multimedia based is not yet much done by software which is open source. One of the software used is Ksoft Fliker'te used t make a display of a book or other teaching material into a book / digital electronic module in the form of a flipbook. The software The Sixth Seminar Nasional Pendidikan Matematika Universitas Ahmad Dahlan 2018 IOP Conf. Series: Journal of Physics: Conf.

Series 1188 (2019) 012075 IOP Publishing doi:10.1088/1742-6596/1188/1/012075 2 can be downloaded freely or free via internet access [3]. The Kvisoft FlipbookMaker is become a media to convert the document in the form of PDF to be a digital publication which displayed like a varied, innovative, and efficient/digital magazine. A learning process needs a Learning Resources.

The Learning Resources are a group of materials or situations which created intentionally and it makes to enable the students to study by themselves individually Percival & Ellington [4]. One of the learning resources that can be developed by the teacher is Kvisoft FlipbookMaker. This software not only to make a learning presentation but also to develop the interactive learning where the students do a learning activity with the prepared display.

Kvisoft FlipbookMaker can be the solution in providing learning media, so it supports the argument "tideas that can be applied is to utilize computer- basa in toces Inihemat" [6]. A Kvisoft flipbook maker is a software for developing the electronic based learning module. Moduleis a material that designed to learn independently by the students in the learning process.

Module is called a learning media to learning independently because in it has been equipped with instructions for self-study. It means the user of the module can do the learning process without the presence of the instructor directly [7]. The researcher obtained the data that the students are still dependent on lecturers in the implementation of Mathematics Learning Multimedia courses, so all this time the lecturers still use the lecture method and students are still passive.

The learning atmosphere experienced by the students are still passive, it makes their motivation to study decline. One of the factors that causes the low students learning out comes is the inaccurate lecturers in choosing a learning approach.For this reason, a learning approach is needed so students are able to construct the knowledge from a real context.This is appropriate with Hamalik " if a subject in the class is related to the student's personal life and interest, then the learning process usually involves and motivates the students" [1] Based on the background above, the research focuses on developing the learning media for Mathematics Learning Multimedia (Multimedia Pembelajaran Matematika) coursesusing Kvisoft flipbook maker.

Formulation of the problem of the research are 1) How to develop learning media using Kvisoft flipbook Maker in Mathematics Learning Multimedia courses? 2)How is the feasibility of learning media using Kvisoft flipbook Maker in Mathematics Learning Multimedia courses? 2. Method This research is a development research. The research focuses in the developing the learning media for Mathematics Learning Multimedia courses using KvisoftFlipbook Maker.

the research design used refers to ADDIE. ADDIE models are consists of 5 steps; analysis, design, development, implementation, and evaluation [7]. The trial design used in this research are small class trials and large class trials. The small class trial is to find out the understanding level and respond of the students to the learning media before tested in the large class trial.

The large class trial is to find out the feasibility of the product in the learning process. The trial subjects of the research are the material expert, the media expert, and the class A and B students of Mathematics Learning Multimedia courses. This research using the instrument in the form of a questionnaire to gain the data.

The instruments used are; the students respond instrument, the feasibility trial for a material expert instrument, and the feasibility trial for media expert instrument. In this research to find out and measure the feasibility of the learning media is analyze the students respond instrument, the feasibility trial for a material expert instrument, and

the feasibility trial for media expert instrument. The dataobtained were analyzed qualitatively and quantitatively.

The quantitative data obtained will be calculated using the average score formula : ??⁻ = ? ?? ?? Keterangan: ??⁻ : Average ? ?? : Total score ?? : Total validator The Sixth Seminar Nasional Pendidikan Matematika Universitas Ahmad Dahlan 2018 IOP Conf. Series: Journal of Physics: Conf. Series 1188 (2019) 012075 IOP Publishing doi:10.1088/1742-6596/1188/1/012075 3 Furthermore, the data obtained is converted into qualitative values based on validity criteria. The criteria can be seen on Table 1. Table 1.

Quantitative Data Conversion to Qualitative Data for Product's Prevalence/Practicality Interval Criteria ???? + 1, 5 ???? < ?? ???? + 0, 5 ???? < ?? = ???? + 1, 5 ???? - 0, 5 ???? < ?? = ???? + 0, 5 ???? - 1, 5 ???? < ?? = ???? - 0, 5 ???? - 1, 5 1 2 (maximum score + minimum score) Si = ideal standard deviation = 1 6 (maximum score – minimum score) After the calculation, the result of validation criteria can be seen on Table 2. Tabel 2.Validation Criteria for Learning Media (Widyoko, 2014) No Average Criteria 1 ?? $^-$ > 3, 3.

Result and discussion In the development research, the trial data were obtained from several phases, that is: the analysis phase aims to analyze a development and an eligibility of development requirements. The analysis phase in this development research involves the curriculum analysis, need analysis and the analysis of students characteristic.

This design type is divided into 3 phase, that is designing mathematics instrument of content media assessment. The implementation phase is the application of the actual class in the learning process. This trial involved 9 of 5th-semester students of class A in the Ahmad Dahlan University mathematics education study program.

This phase is to give the assessment of the quality of media produced. This assessment is divided into three aspects that are arterials expert, media expert, and student response. The assessment will be used as a reference in determining whether or not the learning media are developed.

The assessment result of learning media using Kvisoft Flipbook Maker for multimedia courses in mathematics learning for V semester students in the Ahmad Dahlan University Mathematics Education study program can be viewed from the various aspects. First, quality analysis of interactive learning media using Kvisoft flipbook Maker based on the material aspects can be seen in the Table 3.

The developing learning media has validated by the material expert and media expert. The material expert is the UAD Mathematics Education lecturer. The media experts are three UAD Mathematics Education lecturers. The material expert result shows 3,389 score for the content aspect, 3,5 score for presentation with the learning approach, and 3,222 score for didactic requirements aspect. The final score 3,383 shows very valid criteria.

The resulting assessment of media expert of an interactive learning media using Kvisoft Flipbook Maker shows 3,556 score for the languages aspect and 3,5 score The Sixth Seminar Nasional Pendidikan Matematika Universitas Ahmad Dahlan 2018 IOP Conf. Series: Journal of Physics: Conf. Series 1188 (2019) 012075 IOP Publishing doi:10.1088/1742-6596/1188/1/012075 4 for the graphics aspect. The final score 3,524 shows very valid criteria. The questionnaire result of students response used to find out the practicality value.

From the student response questionnaire data obtained a score of 3.24 with good criteria. Tabel 3. The Calculation Result of Feasibility Questionnaire by Material Expert No Evaluator Total Score Criteria 1. Material expert 1 3, 25 Valid 2. Material expert 2 3, 55 3. Material expert 3 3, 35 Kvisoft flipbook Maker based on the media aspects can be seen in the table as follows: Tabel 4.

The Calculation Result of Feasibility Questionnaire by Media Expert No Evaluator Total Score Criteria 1. Media expert 1 3.57 Very Valid 2. Media expert 2 3,86 Very Valid 3. Media expert 3 3,14 Valid Average score 3,52 Very Valid Tabel 4 menunjukan hasil kelayakan media pembelajaran interaktif dengan menggunakan Kvisoft flipbook maker berdasarkan penilaian ahli media.

Ahli media 1 memberi nilai keseluruha n media dengan skor 3,57 (very valid), ahli media 2 dengan skor 3,86 (very valid) dan ahli media 3 dengan skor 3,14 (valid). The fin al score 3,52 shows very valid criteria . Quality Analysis of interactive learning media using Kvisoft flipbook Maker based on the student response can be seen in the table as follows: The Sixth Seminar Nasional Pendidikan Matematika Universitas Ahmad Dahlan 2018 IOP Conf. Series: Journal of Physics: Conf. Series 1188 (2019) 012075 IOP Publishing doi:10.1088/1742-6596/1188/1/012075 5 Tabel 5. The Calculation Result of Students Response No Evaluator Total Score Criteria 1.

Students 3,24 Valid Tabel 5 menunjukan hasil kelayakan media pembelajaran interaktif dengan menggunakan Kvisoft flipbook maker berdasarkan penilaian uji lapangan oleh mahasiswa. The questionnaire result of students response used to find out the

practicality value. From the student response questionnaire data obtained a score of 3.24 with good criteria.

The product of media using Kvisoft Flipbook Maker which has been assessed by-product assessment expert and education practitioner, then it is revised according to the suggestions, comments and advises for the improvement that was given. The assessment result of learning media shows 3,383 scores for material expert, 3,524 scores for media expert and the total score is 3,441 with a very good score.

Based on the resulting score, it means that the score from media expert is 3,524 whereas the score from the student response is 3,24 as the lower score. Students should carry out the independent activities to wrap up the task in learning media interactive using Kvisoft Flipbook Maker. Students also actively to ask a question about difficult things so students need to be assisted in completing activities in the learning media.

Students have some difficulties in understanding the step because students are not familiar with using interactive learning media by using Kvisoft Flipbook Maker. It is a kind of reliable software that is designed to convert PDF document back to digital publishing. This software can change the display of PDF document more interesting like a book.

This research findings support by Ramdania statement, by using that software, the display of media will be more varied, not only in a text but also the image, video, and audio can be inserted into this media so the learning process will be interested [8-9]. Kvisoft flipbook maker display in a form of the module can provide a variety of strategy.

Transforming the complex to a simple material, and improve students motivation with a visual learning style. 4. Conclusion Based on the research findings and discussion can be concluded that the developing of an interactive learning media using Kvisoft Flipbook Maker with ADDIE approach; analysis, design, development, implementation dan evaluation.

The stages of the analysis consist of need analysis, curriculum analysis, and students characteristic analysis. The stages of the design consist of media planning, planning, and validation of the instrument of assessment of learning devices. An interactive learning media using Kvisoft Flipbook Maker designed with pay attention in the feasible content, languages, presentation, and graphics.

The stages of the development consist of the developing learnig media, material expert validation, media expert, and learning media revision. The stages of the implementation

consist of an interactive learning media <mark>using Kvisoft Flipbook Maker</mark> trials, trial product data analysis, and the stages of evaluation is the learning media revision to improve the developing product. The developing learning media has validated by the material expert and media expert.

The material expert is the UAD Mathematics Education lecturer. The media experts are three UAD Mathematics Education lecturers. The material expert result shows 3,389 score for the content aspect, 3,5 score for presentation with the learning approach, and 3,222 score for didactic requirements aspect. The final score 3,383 shows very valid criteria.

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