Development of Interactive Media Based on Ispring Suite in Learning and Teaching Learning Strategies at Department of Primary School Teacher Education, Medan State University

Sorta Simanjuntak[1], Daitin Tarigan, Silvia

{simanjuntaksorta59@gmail.com[1]}

Medan State University, Medan, Indonesia

Abstract. This research is motivated by learning that is still conventional without using media that can increase students' interest and attention, so that learning that is conditioned has less potential to activate and involve aspects of students' personalities optimally. Therefore, this research was designed to develop research media that can increase student involvement in learning. In this regard, the objectives of this research are: to test feasibility i S pring Suite based interactive media on learning teaching and learning strategies at Department of Primary School Teacher Education, Medan State University. The research uses the Research & Development method by following the stages according to the ADDIE model . Data collection was carried out by distributing a number of closed questionnaires with 5 choices according to a Likert scale. Data analysis was carried out using quantitative descriptive analysis techniques. Based on the results of the descriptive analysis, it was stated that the validity of the media design was classified as very feasible with a feasibility percentage of 88%; and validity of the material media is classified as very feasible with a percentage of 90%. The average percentage of validity of interactive media based on iSpring Suite is 89% with a very feasible category. It was concluded that the interactive media based on the i Spring Suite produced was very suitable for use in teaching and learning strategies at Department of Primary School Teacher Education, Medan State University

Keywords: iSpring Suite interactive media, Material Design and Feasibility.

1 Introduction

Based on Law Number 20 of 2003 explained that education can be interpreted as a conscious effort to condition the learning process which can activate students to develop their potential. So that students are able to actualize religious spiritual strength, self-control, personality, intelligence, noble morals, and skills needed by themselves, society, nation and country [7]. One of the efforts or efforts that educators can make is to make the learning process more effective/dynamic and bring optimal results is by conditioning the learning process to actively involve students both

physically and psychologically. Student activity in the lecture process can be realized well if the learning process is supported by interactive learning media. The relationship between Maryono & Purnama[1] explains that learning media is anything that can be used in the process of conveying messages so as to stimulate students' attention, interest, thoughts and feelings in learning activities so that learning objectives are achieved. Taufiq also conveyed the same thing[2] Learning media is a message distributor that can stimulate students' thoughts, feelings, interests and attention to focus on the material presented. Khulquo[3] Learning media means tools, materials or techniques that allow them to be used in the learning process so that the teacher's communication interaction process with students can take place appropriately. From this quote, it is clear that the delivery of teaching material supported by learning media will arouse students' interest in carrying out learning activities optimally. . As Pratiwi[4] said, learning media can increase student motivation in carrying out learning and can encourage students to achieve optimal learning outcomes.

Furthermore, the educational process carried out in accordance with Minister of Education and Culture Regulation Number 59 of 2014 h now provides opportunities for students to develop their potential. himself to be able to think rationally and logically by giving meaning to what he sees, hears, reads and learns to apply it in everyday life. .[8]

The development of Science and Technology has brought about a major revolution in the implementation of education. In fact, it creates many problems and challenges which result in new practices in the implementation of education. For example, the implementation of education must use interactive multimedia. All problems and challenges faced refer to improving learning outcomes which can have an effective impact. and high quality education according to the needs of the Indonesian people.

Based on the results of researchers' observations, Department of Primary School Teacher Education, Medan State University learning has not promised full activity for students, in fact the learning process is relatively vacuum, even if there is visible student activity it cannot last long which results in students' understanding and knowledge being relatively shallow and limited. This situation also appears in Teaching and Learning Strategy learning. Students tend to be bored and less motivated to deepen and broaden their understanding of the course material being studied, apart from that when the learning process is less interactive between each other and with the lecturer.

Conceptually, one of the efforts that can be made to condition learning that has the potential to activate students physically, psychologically and socially is learning conditions that use innovative, varied, interesting and contextual media according to learning outcomes and the student's level of ability. self . Media that has these characteristics is interactive media based on iSpring Suite. ISpring suite is software that can be operated to produce learning media such as learning videos. The device is integrated with PowerPoint and then collaborated with several supporting software so that the resulting media display is more attractive and has the potential to activate students. Apart from that, the media produced by iSpring Suite can make it easier for teachers to convey teaching material and result in students being more focused, serious and understanding learning material more quickly[14].

ISpring suite is high quality app as it can be used as interactive learning multimedia such as slide presentations, videos, animations, images, quizzes , sound and so on etc.. ISpring suites is software Which very easy for because teachers to master. This application is integrated with Microsoft PowerPoint so the menus and programming language are very simple and not foreign

for user new Which No own skill special in the field technology. The resulting media can be converted in flash (swf) format, and HTML 5 and can be published in web form, iSpring cloud , CD, iSpring learn , LMA and videos which can later be accessed both online and offline on laptops, smartphones and its kind.[5]

In short, iSpring Suite-based interactive learning media is software that can be used with a combination of sound, animation, video, text, graphics and is equipped with navigation buttons. So that the message delivery becomes clearer, and can stimulate aspects of students' personalities physically and psychologically in the learning process. Simultaneously, it can improve the learning process in a relatively effective and productive way. .

With interactive media based It is hoped that the iSpring Suite will make it easier for students to understand the learning material presented by lecturers, promising a learning process that can fully activate students physically, socially and intellectually according to learning objectives.[6] Because learning conditions accompanied by media have shown psychological interest for students. , which can result in the growth of learning motivation, enthusiasm for learning , interest in learning and active learning for students. This will directly have a positive effect on increasing student learning outcomes. One of the uses of such media is the use of interactive multimedia iSpring Suite . This means that with the iSpring suite media, it is hoped that students and students will have learning problems resolved effectively, so that the quality of learning increases and is optimal for lecture outcomes as they should be.

Based on the background description above, the following problem arises: what is the feasibility level of iSpring Suite based interactive media ? learning teaching and learning strategies at Department of Primary School Teacher Education, Medan State University? ; Meanwhile, the aim of this research is to: (1) test the feasibility of iSpring Suite based interactive media developed in learning teaching and learning strategies at Department of Primary School Teacher Education, Medan State University

2   Methods

Design includes quasi -experimental research which was conducted on two groups, namely the experimental group (users of interactive media based on ISpring Suite) and the control group (not product users), both of which were independent. This research was carried out at Department of Primary School Teacher Education, Medan State University , with research starting from January 2023 to December 2023 with a time allocation of approximately 11 months.[9]

The subjects of this research are divided into two, namely experts (Validators) and user test subjects (Audience). [10] The expert subjects with the role of validitor consist of media and material experts : Meanwhile, the test audience is the fifth semester Department of Primary School Teacher Education, Medan State University students, who are taking the teaching and learning strategy course in elementary school, namely class G as the control class and class H as the experimental class with the number of subjects 80 people. Meanwhile, the research object that will be developed and its suitability will be validated in the experimental class is ISpring Suite-based interactive media in teaching and learning strategy learning at Department of Primary School Teacher Education, Medan State University, Medan State University.[13]

The method used in this research is the research development (R&D) method using stages according to the ADDIE model, namely the Analysis , Design , Development , Implementation and Evaluation stages .[11]

The research data collection tool is a closed questionnaire with five choices according to a Likert scale. Data processing is carried out by calculating percentage values according to the formula: Ps =. ($\sum$n)/skormak x 100%. The results of research data processing are then analyzed descriptively in percentage terms, by interpreting them based on the assessment criteria proposed by Arikunto 2009[15] as follows:

Table 1. Feasibility Assessment Criteria

Percentage	Criteria
81% - 100 %	Very decent
61% - 80%	Worthy
41 % - 60%	Worth revision
21 % - 40%	Decent enough
<21%	Not really worth it

3 Results and Discussion

3.1 Results

Based on the framework that has been determined according to the research model, the stages of developing iSpring Suite-based interactive media in this research were carried out by following the following stages:

A. Analysis Stage *(Analysis)*

At this analysis stage , researchers found that the learning media used in learning was less varied , the learning strategies had less potential or did not allow students to be physically, socially and intellectually active. So students' thinking abilities do not guarantee the creativity required by learning at the PT level. For this reason, the development of interactive learning media with multimedia, namely *ISpring Suite-* based interactive media in teaching and learning strategies at Department of Primary School Teacher Education, Medan State University is considered very necessary.

B. Design Stage *(Design)*

At the design stage of media development in the form of interactive media based on *ISpring Suite ,* researchers carried out activities : (1) prepare RPS for SBM courses (2) determine lecture objectives (3) compiling lecture materials according to the learning objectives to be achieved, (4) preparing tests or evaluation tools, designing initial products, material structure, and preparing assessment instruments.

C. Development Stage *(Development)*
    1. iSpring Suite Interactive Media Design

Stage aims to produce a product , namely: interactive media based on ISpring Suite in learning. Teaching and learning strategies in Department of Primary School Teacher ducation, Medan State University. The development of this media was carried out by using Microsoft Office applications Power Point with iSpring Add-ins , including activities:
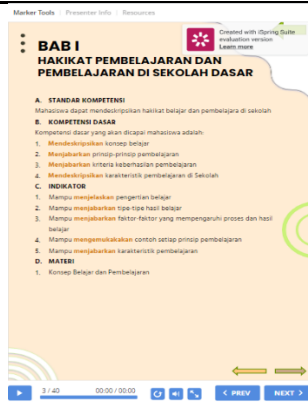
a. Media elements (images) that support learning material
b. Preparation and development of learning media which includes: (a) title page ; (b) the main menu contains material; videos: and quizzes ; (c) KD menu, indicators, goals; (d) concept map menu; (e) material menu; (f) video menu; (g) quiz menu; and (h) evaluation menu,
c. Product validation with design experts and material experts

The product design has various menus according to the components or features that can be produced by the iSpring Suite device. The product designs that will be produced through Ibni research are as shown in the following table:

Table 1. Interactive Media development plan based iSpring Suite

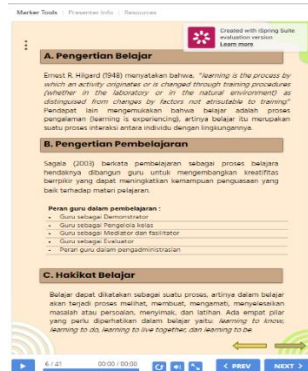| Page	Design/Menu.	Information
Opening		• .Appearance Opening material title: " Welcome to the Teaching and Learning Strategy Course " • Knob " Profile " used start using media
Welcome Page		Opening Menu : Contains the name of the course and the name of the teaching lecturer or media developer
Main course		The main menu contains: • Material; Videos:; Quiz Each box can be clicked to go directly to the contents of the chapter or video and quiz

|		
KD Menu, Indicator, Objective		Menu "KD, Indicators and goals". KD, indicators and goals, viewed with:. Button with arrow to the right to continue to the goals page. Button with an arrow to the left to continue to the previous page. The " arrow at the top right " button is used to return to the main menu.
Map Menu Draft		The "Concept Map" menu contains the concept of material in the media. This concept map is made in chart form so that it is easy to understand the flow of the material
Menu Material		Appearance menu for selecting sub-materials to be studied regarding SBM. Button with arrow to the right to continue to the destination page. Button with left arrow to continue to the previous page. The " arrow at the top right " button is used to return to the main menu.
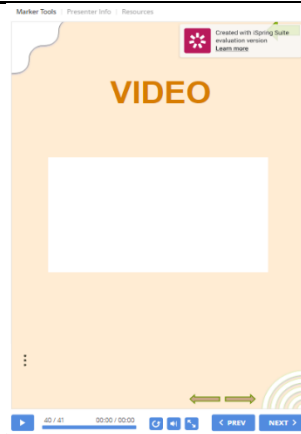
|		
Menu Videos		Menu "Video" to display videos about SBM material. Button with arrow to the right to continue to the destination page. Button with left arrow to continue to the previous page. The " arrow at the top right " button is used to return to the main menu.
Menu Quiz		The quiz menu consists of short questions that students must answer. Button with left arrow to continue to the previous page.
Menu Evaluation		Menu Evaluate questions Which must answered by students to measure student interest. to return to the main menu. Menu "Snooze" to postpone the quiz. Menu with arrow to return to previous view.

2. Revision of Learning Media

The research development product, namely learning media , was validated by media experts and material experts. Validation test data, for example suggestions, comments and input, will be used as a basis for improving the learning media being developed until the product reaches the validity criteria. Stage parameters evaluation carried out, described as the following flow of activities:
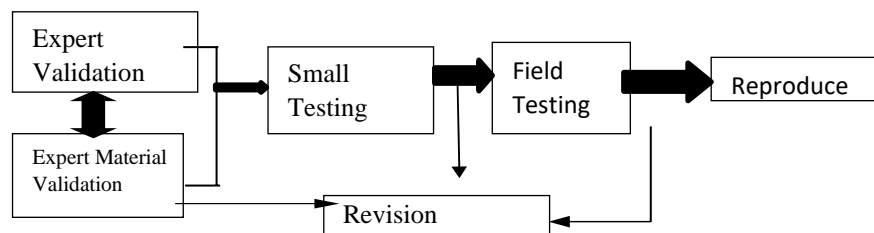
Fig. 1. Flow of iSpring Suite Product Evaluation Activities

The media developed was validated by a design expert, namely Mr. Prof. Dr. Paningkat Siburian, MPd , and material experts, namely Mrs. Prof, DR, Naeklan Simbolon, MPd.. Testing the validity of the media was carried out once because the average calculation was classified as very feasible, but revisions were still made to improve what was still not feasible. The interactive media validation test results from the relevant validator are as follows:

3. Test Validation Appropriateness by Expert Material.
   Validation test resultsWhich carried out by design experts, is like data on table under:

Table 2. Results Validation Test Media Design Feasibility byExpert Design

Component /Aspect	tool	$\bar{x}$ sc	%	Ket.
Media Display	4	89	89%	S. Worthy
Media effectiveness	5	107	86%	S. Worthy
Media Utilization	4	88	88%	S. Worthy
Product Readability	3	68	91%	Worthy
Software	4	87	87%	S. Worthy
Average value		439	88%	S. Worthy

From table 5.1. above, it can be explained that mean score of design expert validation test results media , obtained at 439 with a maximum score of 500. After processing, it is achieved percentage of media design feasibility tests is as big as 88% by category very worthy. Based on the analysis of this test data, it is concluded that Media Judging from its design, the Spring Suite- based interactive I nteractive is very suitable for use in Teaching and Learning Strategy learning at Department of Primary School Teacher Education, Medan State University. Next, the tabulation of material feasibility validation test data is presented as follows:

Table 3. Tabulation Data Results Test Material Eligibility Validation

Aspect	Tool	$\bar{x}$s c	%	Category
Suitability of material with KD/Indicators/Objectives	4	90	90%	S. worth-

Completeness of learning devices	2	45	90%	S. worthy
Material coverage	3	70	93%	S. worthy
Presentation/Learning with media	5	110	88%	S. worthy
Language	3	67	89%	S. worthy
Completeness of device elements	3	69	92%	S. worthy
Average value		451	90%	S. Worthy

From table 5.2 above, it can be explained that score material expert validation test results were obtained as big as 451 hear maximum score 500 . After processed so achievements percentage test appropriateness material amounting to 90% by category very worthy. Therefore concluded that based on the results of the expert test the material is stated that the validity of the material from the interactive media based on the iSring Suite developed is classified as very suitable for teaching and learning strategy learning at Department of Primary School Teacher Education, Medan State University

3.2 Discussion

The aim of this researcher is to develop interactive media based on iSpring Suite. The development process follows five (5) according to the ADDIE model, namely the Analysis stage, Design stage, Development stage, Implementation stage, Evaluation stage. In this regard, the researchers carried out the following activities:

a. Analysis stage, which is carried out in relation to student needs; student characteristics; learning strategies. The results show that the learning strategies carried out by lecturers still rarely use media that can optimally increase student learning activity. To realize interactive learning as one of the characteristics of innovative learning, researchers agreed to develop learning media, namely interactive media based on iSpring Suite. His relationship is Sudarto (12) said. *iSpring suites* own a number of strength among them namely: *Software iSpring suites* in its operation connected on *Microsoftpowerpoint* so very easy to use.

b. design stage. On stage This researcher compile plan beginning And provide the materials needed for learning design using interactive media based on iSpring Suite, namely: . 1) prepare the RPS for SBM courses (2) determine the lecture objectives (3) compiling lecture materials according to the learning objectives to be achieved, (4) preparing tests or evaluation tools, designing initial products, material structure, and preparing assessment instruments.

c. Development stage, in this stage researchers begin to create interactive media products based on Ispring Suite. To control quality, validation tests are carried out to iSpring-based interactive media produced, for use ensure validity The resulting media is in accordance with the needs and objectives underlying this research.

Based on the results of validation tests carried out, the iSpring Suite based interactive media developed is classified as very suitable for use in SBM learning at Department of Primary School Teacher Education, Medan State University with an average score of: 89%. With the results of the following data analysis:

a. The results of the feasibility test by the design expert obtained a score of 439 out of a total score of 500 with a feasibility percentage value of 88%.
b. The results of the feasibility test by the material expert obtained a score of 451 out of a total score of 500 with a feasibility percentage value of 90%.

4 Conclusion

From the review of this research, it was found that the interactive media based on the iSpring Suite developed was very suitable for use in Department of Primary School Teacher Education, Medan State University students' lectures on SBM courses. With a percentage value of media design of 88% and a percentage value of material in the media of 90%.

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