DEVELOPMENT OF SCHOOLEY-BASED E-LEARNING IN ISLAMIC ECONOMICS COURSE TADRIS STUDY PROGRAM KH ACHMAD SIDDIQ INSTITUTE OF ISLAMIC RELIGION 2019

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Abstract
Utilization of information technology has become a necessity in almost every sector of life, including the world of education by presenting e-learning systems in educational institutions to increase the effectiveness and flexibility of learning. E-learning enables learning interactions between students and educators by accessing information and subject matter/lectures anytime and anywhere. The same is true for learning the Islamic Economics course at the Social Sciences Tadris Study Program which in its implementation coincides with the Internship II activities at partner SMP/MTs, so that both activities can run well without having to leave one of them. The objectives of this study are: 1) To describe the development of Schoology-based E-learning in the Islamic Economics course at the Social Studies Tadris Study Program IAIN Jember in 2019; 2) Describe the feasibility and effectiveness of Schoology-based E-learning development products in the Islamic Economics course at the Social Studies Tadris Study Program IAIN Jember in 2019. This research uses an adapted research and development model from Sugiyono include: 1) Potential and problems; 2) Gathering information; 3) Product Design; 4) Design validation; 5) Design improvements; 6) Product trial; 7) Product revision; 8) Trial of use; 9) Product Revision; 10) Mass Product Manufacturing. The research instruments used were: 1) validation questionnaires for experts, 2) product applicability observation sheets, 3) practice questions, 4) assessment rubrics, 5) lecturer and student response questionnaires, and (5) interview guidelines for lecturers and students. The data obtained in the form of quantitative and qualitative. Quantitative data analysis used descriptive percentage technique. The results of the study show that: 1) E-learning products based on Schoology in the Islamic Economics course are arranged using features namely: Add file/Link/External Tools in the form of power point or Theory each chapter Islamic Economics, Add Discussion in the form of a discussion forum, Add Link in the form of connected learning videos with youtube, Add Test/Quiz in the form of Quiz and Add Assignment in the form of Tasks, 2) The development of Schoology-based E-learning which is compiled has the feasibility of a material expert of 78.2%, which means that the Islamic Economics e-learning module material is valid or feasible to use. The results from IT experts and design percentages are 80% which means that the IT e-learning design is valid or feasible to use. The results of the assessment from the initial trial stage obtained an average percentage of 81.25%, which means that e-learning is very valid so that the product can be used without revision. Test the effectiveness of e-learning with use calculation NGain Score shows the average value of NGain Score is 0.5326 is categorized as moderate or quite effective, with a minimum N-Gain Score value of 0.14 and a maximum N-Gain Score value of 0.93. So it can be concluded that the use of e-learning schoology in the Islamic Economics course is quite effective in improving the learning outcomes of Tadris IPS IAIN Jember students.

Say key: e-learning, schoology, economics islam

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INTRODUCTION

The development of science and technology has brought significant changes in human life. Information and communication can be traced easily and quickly without any boundaries of space and time. Likewise, in the world of education, the development of information technology media cannot be avoided, especially for students today who incidentally are the millennial generation who are easily able to absorb any existing technological developments. Students through the internet can browse/access various sources of information that have to do with learning materials at school and college easily.

The rapid development of information and communication technology has an impact on innovation in the world of education to take advantage of the results of technology, especially in learning. One of these can be seen from the use of e-learning systems in educational institutions to increase the effectiveness and flexibility of learning.

E-learning is an electronic-based learning process (Miraz et al., 2018; Peng & Hwang, 2021) (Li et al., 2021; Skinner & Kingsley, 1947). This electronic learning can be done using internet, intranet, and web-based technology that allows learning interactions between students and educators by accessing information and subject matter anytime and anywhere (Rusman, 2012). In e-learning even though the communication that occurs is not directly face to face, interactive discussions between students and educators can still be done online and in real time. This e-learning system has no access restrictions and can be done at any time. E-learning can be done in schools and universities. The use of e-learning is not limited to certain subjects or subjects. Likewise in the Islamic Economics course which in its learning faces problems, especially those related to the flexibility of the implementation of lectures.

Based on an interview conducted with Mohammad Eka Rahman, M.SEI as a lecturer in the Islamic Economics course, he stated that Islamic Economics is an elective course for the Social Studies Study Program that is taken by students in the seventh semester. At the same time in the semester, students must carry out Internship II activities which are an integration of teaching practice activities (PPL II) and Real Work Lectures (KKN). Internship II activities are carried out in schools for 2.5 months. Islamic Economics Lecture is held at 14.30 WIB. Even though at that time, students who carried out Internship II in schools such as at MTs Bangsalsari had just finished at 15.00 WIB. Furthermore, in the 5th week of Internship II students must have started implementing the KKN work program which is carried out on an ongoing basis which is carried out outside school hours, namely in the afternoon.
This is in line with what Abdurrahman Ahmad said that the implementation of Internship II at the Faculty of Tarbiyah and Teacher Training which was distributed in the seventh semester had its own impact on students, one of which was that students could not attend lectures for 2.5 months or more. Social Studies students in semester VII are still taking 2 (two) courses, namely Islamic Economics and Taxation courses.

This reality becomes a separate problem in the learning process for Islamic Economics courses, especially on the quantity of face-to-face meetings between lecturers and students in class and the quality of existing learning. In this case, the existence of electronic-based learning which is often termed "E-learning can be a solution to solving these problems. Learning no longer has to be done face to face between lecturers and students in the classroom. Interaction between lecturers and students can occur anywhere and anytime, not limited to the classroom. School chosen because it is more familiar to students, considering that has features that are not much different from social media Facebook.

LITERATURE REVIEW
E-learning

Daryanto (2010: 168) asserts that E-learning is a system in the learning process that utilizes electronic media as a tool in teaching and learning activities. According to Linde (Dewi, et. al, 2004: 197) e-learning is learning that is carried out with the support of technological services such as telephone, audio, videotape, satellite or computer transmission. Mayub (2005:11) suggests e-learning as an effort to create electronic classes that are equivalent to conventional classes in schools.

Cisco in Rusman (2012: 348) describes the characteristics of e-learning as follows:
1. use of electronic technology services. Educators and students, between students or educators and other educators can communicate easily without being limited by time and place;
2. Take advantage of the advantages of computers (Digital Media and Computer Networks);
3. Using self-learning materials that are stored on a computer so that they can be accessed by teachers and students anytime and anywhere if the person concerned requires it;
4. Utilizing the learning schedule, curriculum, results, willingness to learn and matters related to educational administration can be viewed at any time on the computer.

Learning e-learning requires several infrastructures (Asrori and Fachrurozie, 2011: 4) including: (1) e-learning infrastructure, including computers, equipment that supports synchronous
services such as equipment for teleconferences. (2) e-learning application, is software to implement virtual teaching and learning activities (Kumar Basak et al., 2018), (Moore et al., 2011). In this case using the schoology application. (3) E-learning content includes ebooks, learning videos, related learning links, and edkumar Basak, S., Wotto, M., & Bélanger, P. (2018). E-learning, M-learning and D-learning: Conceptual definition and comparative analysis. E-Learning and Digital Media. https://doi.org/10.1177/2042753018785180


on. The availability of complete e-learning facilities and infrastructure further supports e-learning-based teaching and learning activities. In an era that uses technology as it is today, e-learning is very useful for students, teachers, and related institutions.

According to Soemantri (2004: 28) the function of e-learning on classroom learning is as follows:

1. Supplements that are optional / optional, students or students are free to make choices, whether they will use the material contained in e-learning or not. Students are not charged with the obligation to access material in e-learning. However, if students want to use it, they will have additional knowledge and insight.

2. Complementary or complementary, namely e-learning material used as a complement to face-to-face learning materials.
3. Substitution or substitute, namely if e-learning is implemented as a substitute for face-to-face lectures. In this case, students do not have face-to-face obligations because they have been replaced with e-learning.

Benefits of using e-learning for educators are:

1. Educators can control student learning activities, including what material students learn, how long it takes students to learn the material, when students learn and others.

2. More flexible in managing learning materials. Educators can add learning resources from related websites or blogs, or can add material in the form of learning videos sourced from YouTube or related links.

3. Time and place are not limited, educators can design, answer questions, ask questions and control teaching and learning activities without being limited by time and place.

4. Makes it easier to correct student assignments and notify students of grades directly, and can even see the intensity of students uploading their assignments.

5. Make it easier to check the assignments of students who do plagiarism.

In addition to these advantages, e-learning also has weaknesses, including students inviting friends to manage their accounts and do their assignments. However, this can still be resolved by conducting teleconferences on learning activities.

School

Schoology according to Aminoto and Pathoni (2014: 21) is a website that combines e-learning and social networking. Schoology is easier to understand for students, because its features are not much different from Facebook’s social media. Schoology also has a feature for status updates, just like the one on Facebook. Initially, schoology was only a service for sending and receiving files, then it was developed with features to support online-based learning activities. Schoology is able to provide up to 15 GB of space to upload files for 100 users. Schoology has many features, namely:

a. Courses, is a facility to create classes on certain subjects that can be tailored to the needs, such as economics class, sociology class, religion class and so on. This class can also be added according to the type of class, for example economy class 1A. On the course menu there are sub menus, namely:

b. Assignments, serves to upload files or assignments by students, or design assignments by teachers.

c. Tests/Quizzes, serves to design quizzes and tests that can be in the form of multiple
choice questions, true and false, short entries, matchmaking, and so on. Schoology is also equipped with symbols, equations and latex. This means that all types of questions can be written in schoology.

d. Files/Links, serves to upload certain material files or links. Uploaded material files can be in the form of power point, Microsoft Word, Microsoft Excel, PDF, MP4 or MP3.

e. Discussion, serves to create a discussion forum in one class.

f. Albums, serves to store photo files that have been uploaded.

gh. Resources, serves to create groups.

h. Resources, is a learning resource facility.

Schoology has another feature in the form of attendance or attendance to monitor student attendance. Another feature is that Analytics functions to monitor student activities on each course, assignment, discussion, or other activity. In this feature we can monitor what activities are carried out by students at the time of logging in, including at what time students log in.

Method

Study this using research model and development. Sugiyono (2017:407) explains that study and development is method research used for produce product certain, and for test effectiveness product that. Borg & Gall (2003:271) reveals research development is a process used for develop and validate products education. Function study and development is for validate and develop something product. The research and development steps consist of: of 10 (ten) stages namely: 1) Potential and problem; 2) Collect information; 3) Design Product; 4) Validation design; 5) Repair design; 6) Test try product; 7) Revision product; 8) Test try usage; 9) Revision Product; 10) Manufacture Product Mass Sugiyono (2017: 409)

Study and development carried out in study this quote opinion Sugiyono (2015: 33) is at level 3 that is researcher To do study for develop products that have been exist (use application Schoology), make product and test effectiveness use product that. Instrument research used are: 1) questionnaire validation for para expert, 2) sheet observation applicability product, 3) exercise questions, 4) rubric assessment, 5) questionnaire response lecturer and students, as well as (5) guidelines Interview for lecturer and student. Expert in study this there is three that is expert material, expert IT expert and design. Type of data obtained in the form of quantitative data and qualitative. Quantitative data obtained from questionnaire evaluation product structured development with scale Likert by expert materials, IT experts and design as well as user limited, while qualitative data obtained through charging comment and advice, good from expert nor user limited. Quantitative data analysis use technique descriptive percentage that is amount answer respondent in one item divided with amount ideal answer in one item.
Results and Discussion

1. E-learning Based Development schoolology in the Islamic Economics course at the Social Sciences Tadris Study Program

E-learning Based Development schoolology the Islamic Economics course in the Social Studies Tadris Study Program is carried out with the following steps:

a. Potential Problems

Students of Tadris IPS class 2016 or semester VII who take part in internship II at school are still taking several courses, one of which is the Islamic Economics course, so that in one semester it is difficult to carry out face-to-face lectures as a whole. If students carry out Internship II as well as carry out face-to-face lectures, there will be a risk that the Internship II activity process does not run optimally. Because in Internship II activities there are various preparations for teaching, carrying out the learning process and carrying out assessments, besides that there is also the task of carrying out the Real Work Lecture program carried out in schools. Another obstacle is the distance between the school and the campus and not all of the students’ residences are close, but some of the Internship II locations are far from the campus and student residences. If the lecture is conducted face-to-face in full, there will be a risk that one of the courses will get poor and less than optimal results.

b. Data collection

Data collection in the field found 3 basic things, namely: first , based on the document analysis of the Intern II Faculty of Tarbiyah and Teacher Training IAIN Jember, students of the Social Studies Study Program who met the requirements and were able to carry out internship II in schools there were 32 students who were placed in SMP and MTs which are in the area around Jember, namely MTsN 1 Jember, MTsN 4 Jember (Bangsalsari), MTs ASHRI, MTs ANNURYAH, SMPN 1 Jember, SMPN 4 J bucket, SMPN 5 J bucket, SMPN 6 J bucket, SMPN 8 J bucket, SMPN 9 J bucket, SMPN 1 Ambulu, SMPN 1 J enggawah, SMP NURIS Jember, SMP Plus D Arussholah, Argopuro Middle School Holy J bucket. Second, the learning of Islamic Economics courses runs according to schedule so that students who do internship II at MTsN 4 Jember (Bangsalsari) and SMPN 1 Ambulu are often late and permission does not enter. Third, Based on the results of the analysis of the RPS document, the Islamic Economics course generally discusses economic theory in an Islamic perspective including the basic philosophy of Islamic economics, the development of Islamic economic thought, property and ownership in Islam, money in an Islamic perspective, sharia transaction contracts, theory consumption in Islam, production theory in Islam, market mechanisms. The literature used is
actually quite good, but sometimes students are not able to fully understand the explanations in the book. So it is necessary to know the real picture through learning videos. Based on the problems found in the observations, one alternative solution that is able to support the achievement of learning objectives is to develop e-learning and there are still several face-to-face meetings.

c. Product Design

Product design utilizes a number of feature namely: Add file/Link/External Tools in the form of power point or Theory each chapter Islamic Economics, Add Discussion in the form of a discussion forum, Add Link in the form of connected learning videos with youtube, Add Test/Quiz in the form of Quiz and Add Assignment in the form of task.

d. Product Validation

Product development was validated by a material expert, namely Toton Fanshurna, MEI (FEBI Islamic Economics subject), IT and design expert Cahyo Wahyudi, S.Kom education staff/IT expert IAIN Jember.

e. Product revision

The revision of the E-learning schoology product is divided into three stages, namely: (a) the first revision stage, namely analysis of material experts, IT experts and design (b) the second revision stage, namely initial field trials; and (c) the third revision phase of the main field trial consisting of responses from lecturers and students. The first revision stage is from material experts and design/IT experts. The material expert revealed that the video was in accordance with the material, but it would be better if each meeting had a learning video. Based on this input, a learning video was added at each meeting. Design and IT experts gave a response that the questions in the quiz should not be separated, made one page. For this reason, product improvements were made in the form of quiz questions, made up of one page with several questions and not one page per question. The second revision stage, obtaining suggestions and input from the initial field trial, that is, each task is given instructions on how to do it, and each discussion is given clear instructions. Product improvement is carried out by adding working instructions for each task and clear instructions for each discussion activity. The third revision was carried out after the implementation of the main field trial by receiving input, namely SAP and Syllabus to be uploaded in a separate folder as a guide for lecturers and students. Repairs are made with SAP and Syllabus is uploaded in a separate folder.

f. Product Trial

The product trial was carried out after the revision of the product design based on the
validation results from the experts. The initial trial was conducted on 10 students with different academic abilities.

g. Trial Usage

The subjects of the trial use were all students of Tadris Social Sciences class of 2016, totaling 38 students.

h. Product Revision and Final Product

Product revisions have been carried out to produce a final product, but wider product trials (dissemination) have not been carried out.


The feasibility and effectiveness of Schoology-based E-learning products that are prepared can be done in the following ways:

a. Test results of material experts, IT and design experts

Based on the analysis of the material expert validation questionnaire, the percentage of validity of 78.2% is included in the very valid category based on the Akbar and Sriwijaya formulas so that the product can be used. The results of the IT validation and design questionnaire analysis, obtained the percentage of validity of 80%. Based on the criteria used according to the formula of Akbar and Sriwijaya (2011: 207) it can be concluded that the results obtained related to the module design are very valid or feasible so that the product can be used. However, various suggestions from these experts are still taken into consideration to revise this product before being tested on students.

b. Early stage trials and field trials

The results of the assessment from the initial trial stage obtained an average percentage of 81.25%, which means that e-learning is very valid so that the product can be used without revision. Based on the criteria used according to the Akbar and Sriwijaya formula, it can be concluded that e-learning is very valid so that the product can be used without revision. However, various suggestions from these students are still taken into consideration to revise this product before being tested in the trial phase of use.

Other indicators of the effectiveness of e-learning developed in field trials are:

1. student response.

Based on the results of the student response questionnaire analysis of 38 students showed an average of 89.73%. According to the analysis study, it is in the very high category.
2. Lecturer response

The response from the lecturer is also an indicator of the effectiveness of e-learning. Based on the results of the questionnaire analysis, the lecturer's response to this e-learning shows an average of 88.00%. That is included in the very high category.

3. Student Learning Outcomes

Data on student learning outcomes were obtained from test results taken before and after participating in E-learning. The items are analyzed first before being used, namely by analyzing the level of difficulty and distinguishing power. Before the sample t-test was carried out to find out the differences before the E-learning was carried out, a prerequisite test was carried out in the form of a normality test. The results of the normality test can be seen that the student learning outcomes data are normally distributed. This can be proven from the significance value of the pre-test group of 0.355>0.05 and the significance of the post-test group of 0.138>0.05. To find out the difference in learning outcomes before and after Schoology-based E-learning is implemented, it can be seen the summary of the results of data processing using SPSS below.

<table>
<thead>
<tr>
<th>Paired Sample Statistics</th>
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<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Pairs 1 pre test</td>
</tr>
<tr>
<td>Pairs 1 post test</td>
</tr>
</tbody>
</table>

It can be seen in the table that the number of respondents is 38 people, the pre-test value obtained the average learning outcome was 57.63, while the post-test score obtained the average learning outcome was 79.79, the standard deviation value in the pre-test was 8.836 and the standard deviation value in the post-test was 10.871, the mean standard error value for the pre test is 1.433 and the mean standard error value for the post test is 1.763. The conclusion descriptively shows that there is a difference in the average student learning outcomes between the pre-test and post-test. This can be proven by the value of pre test 57.63 < post test 79.79. While the output of the Paired Sample Test is as follows:

<table>
<thead>
<tr>
<th>Paired Samples Test</th>
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</thead>
<tbody>
<tr>
<td>Paired Differences</td>
</tr>
</tbody>
</table>

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Based on the table, the t-count value is -14,335 (negative value) which means that the average value of pre-test learning outcomes is lower than the post-test average. Value of Sig. (2-tailed) is 0.000 < 0.05, which means that there is a difference in the average pre-test and post-test learning outcomes and there is an effect of using e-learning schoology in improving student learning outcomes in Islamic Economics courses. While the value of the Mean Paired Differences is as follows:

**Paired Samples Test**

<table>
<thead>
<tr>
<th>Paired Differences</th>
<th>mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>pre test - post test</td>
<td>22.158</td>
<td>9.528</td>
<td>1.546</td>
</tr>
</tbody>
</table>

The value of Mean Paired Differences is -22.158. This value is obtained from the difference between the average pre-test and post-test learning outcomes, namely 57.63 - 79.79 = -22.158 with a difference of -25.290 to -19.026. The results of the calculation of the N-Gain Score are as follows:

<table>
<thead>
<tr>
<th>No</th>
<th>pre_test</th>
<th>post_test</th>
<th>post_le_sss_pre</th>
<th>Hundred_le_sss_pre</th>
<th>NGain_Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>55</td>
<td>81</td>
<td>26.00</td>
<td>45.00</td>
<td>0.58</td>
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<td>0.77</td>
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<td>3</td>
<td>59</td>
<td>76</td>
<td>17.00</td>
<td>41.00</td>
<td>0.41</td>
</tr>
<tr>
<td>4</td>
<td>62</td>
<td>73</td>
<td>11.00</td>
<td>38.00</td>
<td>0.29</td>
</tr>
<tr>
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<td>48</td>
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<td>33.00</td>
<td>52.00</td>
<td>0.63</td>
</tr>
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<td>6</td>
<td>61</td>
<td>80</td>
<td>19.00</td>
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</tr>
<tr>
<td>7</td>
<td>68</td>
<td>83</td>
<td>15.00</td>
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</tr>
<tr>
<td>8</td>
<td>56</td>
<td>94</td>
<td>38.00</td>
<td>44.00</td>
<td>0.86</td>
</tr>
</tbody>
</table>
calculation of the N-Gain Score test obtained data that the average N-Gain Score is 0.5326 including the moderate category or quite effective, with a minimum N-Gain Score value of 0.14 and a maximum N-Gain Score value of 0, 93. So it can be concluded that the use of e-learning schoology in the Islamic Economics course is quite effective in improving the learning outcomes of Tadris IPS students at IAIN Jember.

Based on the data analysis of the test results from material experts, IT and design experts, early stage trials and field trials, and effectiveness tests, it can be concluded that schoology - based e-
learning for Islamic Economics courses for Tadris IPS students at IAIN Jember has been declared valid or feasible and effectively used.

CONCLUSION

E-learning products based on Schoology in the Islamic Economics course are developed starting from analysis potentials and problems; gather information; product design; design validation; design improvements; product trial: product revision; test use; product revisions and final products. Product design take advantage of features namely: Add file/Link/External Tools in the form of power point or Theory each chapter Islamic Economics, Add Discussion in the form of a discussion forum, Add Link in the form of connected learning videos with youtube, Add Test/Quiz in the form of Quiz and Add Assignment in the form of task. The development of Schoology-based E-learning has the feasibility of a material expert of 78.2%, meaning that the Islamic Economics e-learning module material is valid or feasible to use. The results from IT and design experts obtained a percentage of 80% which means that the IT e-learning design is valid or feasible to use. The initial trial stage obtained an average of 81.25%, which means that e-learning is very valid so that the product can be used without revision. Test the effectiveness of e-learning with use calculation NGain Score shows the average value of NGain Score is 0.5326 is categorized as moderate or quite effective, with a minimum N-Gain Score value of 0.14 and a maximum N-Gain Score value of 0.93, so it can be concluded that the use of e-learning schoology in Islamic Economics courses is quite effective for improving student learning outcomes of Tadris IPS IAIN Jember.

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