Development of Contextual Teaching Learning Model Based on Blended Learning

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ABSTRACT
The research objectives were to analyze: (1) the feasibility of a blended learning-based contextual learning model for the lesson planning course, and (2) the effectiveness of the blended learning-based contextual learning model for the lesson planning course. The research method used is development research. The resulting learning tools were validated by experts, then continued with individual tests, small group tests and field groups. Testing the effectiveness of the learning model is done by testing the t test statistic. The research findings show: (1) a contextual learning model based on blended learning, the lesson planning course is developed starting from needs analysis, design, evaluation and trial stages to produce a syntax for learning models and learning tools in the form of model books, lecturer manuals, student manuals and textbooks that are expert validation and the results show the level of feasibility for use in learning activities in the Learning Planning course, and (2) the contextual learning model based on blended learning for the Learning Planning subject is proven to be effective for use in learning, this can be seen from the results of statistical testing where the calculated price is known (4.33) > t table (1.988), so it can be concluded that this learning model is effective in improving student learning outcomes.

Keywords: Contextual Teaching Learning, Model, Blended Learning

1. INTRODUCTION
The use of information and communication technology in the implementation of higher education is important because of the dynamics and flexibility of contemporary developments that surround the university. This is related to the process of growth and development of higher education institutions that cannot be separated from internal factors and external factors that surround it. Internal factors are related to the dynamics and flexibility contained within the higher education institution while external factors are related to the dynamics and flexibility of developments that occur outside the higher education institution but have an impact on the higher education institution.

In addition, to realize the implementation of education as an institution that can encourage the progress of the nation, it is inevitable that there will be a need to organize learning based on information and communication technology, especially now that science, technology, and art are developing and disseminated through information and communication technology, so that a higher education institution that wants to develop and continue to exist then there is no other choice, apart from having to participate in utilizing information and communication technology, both as a source of learning and only used as a tool to help carry out administrative tasks.

The use of information and communication technology in learning is intended to overcome the problems of equity, relevance, and education governance in Indonesia, this is in line with the vision of the Faculty of Tarbiyah and Teacher Training at the State Islamic University of North Sumatra (FITK UIN) Medan to become a superior faculty in the development of education. Integrated Islam at the national level to create a learning society in 2025. This vision will not be achieved if the entire academic community does not improve themselves in improving the quality of education, including the use of information and communication technology in lectures and in the management of institutions.

Observing the vision of FITK UIN SU Medan, one of the efforts to improve the quality, relevance and competitiveness of the output is through the use of information and communication technology. This has been initiated by FITK UIN SU Medan by developing various programs, especially related to information and
communication technology-based learning facilities, including by creating internet networks within the Faculty that are easily accessible by lecturers and students and designing various portal applications for students and lecturers.

The use of information and communication technology in the practical dimension, especially among lecturers and students, has an influence on changing the mindset and action patterns of lecturers and students in the implementation of course learning which leads to the expectations and demands of the lecture process they experience. In general, students are expected to be professional people to be able to work when they graduate from college; they also have the ability to choose how and what they want to learn, and when they learn it. The development of information and communication technology has also opened up opportunities and encouraged a revolution in the way students learn and the way lecturers teach and how information is conveyed, including in the world of education.

2. LITERATURE REVIEW

Contextual learning is a holistic learning process and aims to motivate students to understand the meaning of the subject matter being studied by relating the material to the context of their daily lives (personal, social, and cultural contexts). Thus, students have knowledge/skills that can be flexibly applied (transferred) from one problem/context to another.

Contextual learning is influenced by constructivism philosophy which was initiated by Mark Baldwin and further developed by Jean Piaget (Sanjaya, 2014: 256). Piaget argues that since childhood every student already has a cognitive structure which is then called a schema. The scheme is formed because of experience, and the process of perfecting the scheme is called assimilation and the greater the growth of students, the more perfect the scheme will be, which is then called the accommodation process.

Some experts include Glasserfeld (1989), Johnson (2002), Blancard, Bern and Erickson (2001), Hull's and Sounders (1996), Sanjaya (2014), Al-Tabany (2014), Supriyono (2009), Daryanto (2012), emphasized that contextual learning emphasizes the process of full involvement of students to be able to find the material being studied and relate it to real life situations so as to encourage students to be able to apply it. There are three things that must be understood, namely: (1) emphasizing the process of student involvement in finding material, (2) encouraging students to find the relationship between the material being studied and real-life situations, and (3) encouraging students to be able to apply knowledge acquired in life (Sanjaya, 2014).

Furthermore, related to blended learning, expert opinions can be traced including Delialioglu (2015), Garrison and Vaughan (2008), Smaldino et al (2008), Stacey and Gerbic (2009), Kenney & Newcombe (2011), Thorne (2003), Bates (2005), More and Guy (2016), Ahmad and Ismail (2013), Klimova and Kacetl (2013) can be interpreted blended learning is the integration of independent learning and or e-learning with face-to-face learning that encourages desired developments such as more individual and flexible learning.

Blended learning is not a simple combination of face-to-face learning with e-learning, but consists of standard learning arrangements (class meetings) as well as offline activities outside the classroom (tutorials, classes from other institutions in the school, peer-review, workshops and mediation learning), computer (online learning).

Horn and Staker (2015:37) classify four blended learning models as follows:

a. Rotation model (rotation model)

The rotation model is a learning activity carried out by students from one learning center to another according to the schedule or time specified in the semester learning plan that has been determined by the course lecturer. Students learn in a designed learning activity cycle, namely attending lectures in class, carrying out small group discussions, online learning, including working on assignments given by the lecturer together collaboratively and then returning to study in class face to face with the lecturer.

b. Flexible model (flex model)

This model is carried out by placing learning plans and learning materials that have been designed online in e-learning facilities. Student learning activities are mainly carried out online, lecturers will provide face-to-face learning support in class flexibly if students need face-to-face learning. For example: students get online learning from lecturers by opening a website that has been prepared by the lecturer. Student scores will be entered into the data dashboard to be checked by the lecturer concerned.
c. a la carte models

The a la carte model or self-blend model is a model in which students independently take the initiative to take online classes both on campus and off campus. The online classes that these students participate in complement face-to-face classes on campus. Students combine online learning activities and face-to-face learning activities in class according to their learning needs from the student's perspective.

d. Enriched virtual

Enriched virtual is a model where students in one class study together in class and at other times study remotely by presenting learning materials and face-to-face with lecturers online. Online learning can use several kinds of devices such as video conferencing, webex, learning management system (LMS) and so on. This model is usually carried out by students who do not have enough time to study in class.

3. RESEARCH METHOD

The type of research used is development research which aims to develop a contextual learning model based on blended learning in the Lesson Planning course. The place of research was carried out at the Islamic Religious Education Study Program, Faculty of Tarbiyah and Teacher Training, State Islamic University of North Sumatra. The procedures that were followed in this study were as follows: (1) preliminary research, (2) planning for model development, and (3) validation, evaluation and revision of the model, and (4) implementation of the learning model. The research instruments used in this study were: (1) validation sheets, and (2) learning outcomes tests. Validation sheets are given to experts and test subjects are used to provide a feasibility assessment of the feasibility of the product, while the learning outcomes test is given to students to see the effectiveness of the product being developed. Furthermore, data analysis to see the feasibility of the learning model product is carried out after the data and information needed are collected. The assessment sheet is then scored, and calculates the average score and then determines the appropriate category by comparing with the eligibility criteria, in this case the acceptance criteria for testing the feasibility hypothesis of the expert learning model is a hypothesis. alternative is accepted if the average score is > 3.00. Tests to see the effect of the learning model developed were carried out by comparing the average learning outcomes in the experimental class and the control class.

The analytical technique used is using t-test. Furthermore, to determine the effectiveness category of the learning model, a normalized gain test (N-Gain) is carried out. The criteria for acceptance of the effectiveness of the blended learning-based contextual learning model is if the results of the N-Gain calculation are in the 0.30 N-Gain 0.70 medium category.

4. RESULTS AND DISCUSSIONS

4.1. Result

The recapitulation of the results of the validation of the feasibility of blended learning-based contextual learning model books by experts can be seen in Table 1 below:

**Tabel 3. Expert Eligibility Recapitulation of Model Books**

<table>
<thead>
<tr>
<th>No</th>
<th>Experts</th>
<th>Skor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Learning Design</td>
<td>3,52</td>
</tr>
<tr>
<td>2</td>
<td>Material</td>
<td>3,08</td>
</tr>
<tr>
<td>3</td>
<td>Media</td>
<td>3,58</td>
</tr>
<tr>
<td></td>
<td><em>Average</em></td>
<td>3,39</td>
</tr>
</tbody>
</table>

Referring to Table 1 above, it can be seen that the expert's assessment of the feasibility of the blended learning-based contextual learning model book obtained an average score of 3.39 and was in the appropriate category without revision.

The recapitulation of the results of the expert feasibility assessment of the blended learning-based contextual learning model lecturer manual is listed in the following table:

**Tabel 2. Expert Eligibility Recapitulation of Lecturer Handbook**

<table>
<thead>
<tr>
<th>No</th>
<th>Experts</th>
<th>Skor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Learning Design</td>
<td>3,59</td>
</tr>
<tr>
<td>2</td>
<td>Material</td>
<td>2,77</td>
</tr>
<tr>
<td>3</td>
<td>Media</td>
<td>3,44</td>
</tr>
<tr>
<td></td>
<td><em>Average</em></td>
<td>3,26</td>
</tr>
</tbody>
</table>

Referring to Table 2, it can be seen that the expert's feasibility assessment of the lecturer's manual for blended learning-based contextual learning models obtained an average score of 3.26 and was in the feasible category without revision.

The recapitulation of the results of the feasibility assessment of the student manual for blended learning-
based contextual learning models can be seen in Table 3 below:

**Table 3. Expert Eligibility Recapitulation Against Student Manual**

<table>
<thead>
<tr>
<th>No</th>
<th>Experts</th>
<th>Skor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Learning Design</td>
<td>3.59</td>
</tr>
<tr>
<td>2</td>
<td>Material</td>
<td>2.88</td>
</tr>
<tr>
<td>3</td>
<td>Media</td>
<td>3.45</td>
</tr>
<tr>
<td></td>
<td><strong>Average</strong></td>
<td><strong>3.31</strong></td>
</tr>
</tbody>
</table>

Referring to Table 3, it can be seen that the recapitulation of the expert feasibility assessment of the blended learning-based contextual learning model student manual obtained an average score of 3.31 and was in the appropriate category without revision.

The recapitulation of the feasibility of blended learning-based contextual learning model textbooks by experts is listed in Table 4 below:

**Table 4. Expert Eligibility Recapitulation of Textbooks**

<table>
<thead>
<tr>
<th>No</th>
<th>Experts</th>
<th>Skor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Learning Design</td>
<td>3.70</td>
</tr>
<tr>
<td>2</td>
<td>Material</td>
<td>2.97</td>
</tr>
<tr>
<td>3</td>
<td>Media</td>
<td>3.52</td>
</tr>
<tr>
<td></td>
<td><strong>Average</strong></td>
<td><strong>3.39</strong></td>
</tr>
</tbody>
</table>

Referring to Table 4, it can be seen that the assessment of the feasibility of the blended learning-based contextual learning model textbook by the expert obtained an average score of 3.39 and was in the appropriate category without revision.

The results of individual trials of contextual learning model textbooks based on blended learning can be seen in Table 5 below:

**Table 5. Individual Trial Results**

<table>
<thead>
<tr>
<th>No</th>
<th>Assessment Aspect</th>
<th>Skor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Material Clarity</td>
<td>3.33</td>
</tr>
<tr>
<td>2</td>
<td>Display Attractiveness</td>
<td>3.28</td>
</tr>
<tr>
<td>3</td>
<td>Graphics</td>
<td>3.53</td>
</tr>
<tr>
<td>4</td>
<td>Usefulness</td>
<td>3.33</td>
</tr>
<tr>
<td>5</td>
<td>Language Clarity</td>
<td>4.00</td>
</tr>
<tr>
<td></td>
<td><strong>Average</strong></td>
<td><strong>3.49</strong></td>
</tr>
</tbody>
</table>

Referring to Table 5, it can be seen that the results of individual trials on blended learning-based contextual learning model textbooks obtained an average score of 3.49 with a decent category without revision.

The results of small group trials on blended learning-based contextual learning model textbooks can be seen in Table 6 below:

**Table 6. Small Group Trial Results**

<table>
<thead>
<tr>
<th>No</th>
<th>Assessment Aspect</th>
<th>Skor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Material Clarity</td>
<td>3.40</td>
</tr>
<tr>
<td>2</td>
<td>Display Attractiveness</td>
<td>3.50</td>
</tr>
<tr>
<td>3</td>
<td>Graphics</td>
<td>3.40</td>
</tr>
<tr>
<td>4</td>
<td>Usefulness</td>
<td>3.35</td>
</tr>
<tr>
<td>5</td>
<td>Language Clarity</td>
<td>3.40</td>
</tr>
<tr>
<td></td>
<td><strong>Average</strong></td>
<td><strong>3.41</strong></td>
</tr>
</tbody>
</table>

Referring to Table 6, it can be seen that the results of small group trials on blended learning-based contextual learning model textbooks obtained an average score of 3.41 with a feasible category without revision.

The results of field group trials on contextual learning model textbooks based on blended learning can be seen in Table 7 below:

**Table 7. Field Small Group Trial Results**

<table>
<thead>
<tr>
<th>No</th>
<th>Assessment Aspect</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Material Clarity</td>
<td>3.35</td>
</tr>
<tr>
<td>2</td>
<td>Display</td>
<td>3.40</td>
</tr>
<tr>
<td>3</td>
<td>Graphics</td>
<td>3.40</td>
</tr>
<tr>
<td>4</td>
<td>Usefulness</td>
<td>3.45</td>
</tr>
<tr>
<td>5</td>
<td>Language Clarity</td>
<td>3.50</td>
</tr>
<tr>
<td></td>
<td><strong>Average</strong></td>
<td><strong>3.42</strong></td>
</tr>
</tbody>
</table>

Referring to Table 7, it can be seen that the results of field group trials on blended learning-based contextual learning model textbooks obtained an average score of 3.42 with a feasible category without revision.

Based on the results of statistical tests, the tcount value is 4.33 and the table price at α = 0.05 is 1.998. Because the value of tcount > ttable value, Ho is rejected and Ha is accepted, in this case the learning outcomes of students who are taught a blended learning-based contextual learning model are higher than those taught with an expository learning model. Furthermore, to see the level of effectiveness of the learning model, a normalized gain test (N-Gain) is carried out, in this case the calculated N-Gain price of 0.40 is in the medium category, so it can be concluded that the level of effectiveness of the contextual learning model based on blended learning is to improve achievement student learning outcomes are moderate.
4.2. Discussion

The design of the blended learning-based contextual learning model book that the researcher developed, the learning design expert who validates providing suggestions for the model book product is: it needs to be made and accompanied by a philosophical basis for the model, the psychological basis for the model and the practical basis for the model, it is necessary for each element of the reaction principle, system social, support systems, the impact achieved is made on each model syntax on the implementation of the model, and writing techniques need to be refined.

Suggestions given by material experts for the contextual learning model book based on blended learning are: the cover design of the model book needs to be improved, the writing system is improved, the material coverage is added, and summary explanations, practice questions and assignments are added. Furthermore, the advice given by media experts to the contextual learning model book based on blended learning is to complete the model book document by adding theory and the basis for developing a learning model.

In detail, the contextual learning model book based on blended learning that was developed contains rational arguments related to the problem of increasing student learning outcomes in the Learning Planning course through the application of contextual learning based on blended learning. The model book is also equipped with theoretical studies related to the basis of the developed learning model. The model book also contains a design for the development of the developed learning model, complemented by guidelines for the implementation of learning and its assessment. The urgency of this model book as a lecturer guide is in line with Majid's (2005) explanation that all forms of materials are used to assist educators in carrying out learning activities. The material in question can be in the form of written material or unwritten material.

The findings of this study support the results of previous studies including: (1) Marlina's (2020) research on the development of blended learning models assisted by the Sevima Edlink application, (2) Waseso and Fuadi (2020) research on the implementation of blended learning-based learning using WhatsApp media to improve self-esteem, students' directed learning, and (3) Setiawan and Sudana's research (2019) on the application of contextual learning models to improve mathematics learning outcomes.

The expert's assessment of the lecturer's guideline for blended learning-based contextual learning models obtained a cumulative average score of 3.26 eligible categories without revision. This means that the lecturer's guideline for the blended learning-based contextual learning model that was developed reflects the level of feasibility to be used in the implementation of the next stage, but of course by accommodating suggestions for improvement. Suggestions from learning design experts, materials experts, and media experts for improving the teacher guidelines for blended learning-based contextual learning models are summarized as follows: (1) the formulation of course descriptions needs to be added on how to assess them, (2) general learning objectives, preferably clear operational verbs , (3) special learning objectives need to contain elements of ABCD, (4) specific learning objectives should not use the verb "explain" only, (5) should make a behavioral structure chart (competency map) the results of instructional analysis, (6) improve the formulation of objectives learning and assessment instruments, (7) pay attention to the accuracy of the material with learning needs, (8) teaching materials should be described according to current needs, (9) exposure is carried out systematically, and (10) exercises and assessments need to be improved.

The revised blended learning-based contextual learning model lecturer guidelines based on suggestions for improvement of learning design experts, materials experts and media experts were then reconfirmed to these experts to be recommended as learning development products that are feasible to use. The purpose of accommodating suggestions for improvement submitted by experts to the lecturer's guidelines is that the lecturer's manual is a guide that can be applied by lecturers in carrying out the learning of the Lesson Planning course.

Expert advice related to the lecturer manual is to design learner-centered learning, in this case the developer applies a blended learning-based contextual learning model where the learning syntax contains learning activities centered on student learning activities as users which are carried out independently or independently, group.

The urgency of implementing learner-centred learning is because the current trend of learning is learning that has a paradigm of student-centre, that is, students are subjects who learn not as objects. In this case placing students as learning subjects is important because the learning process that places students as
learning subjects means that the learning process pays attention to individual student differences from various aspects such as absorption ability, thinking development, motivation and interest.

The above statement is emphasized by Johnson (2007) that contextual learning is a learning process that aims to help students see the meaning of the academic material they are studying by connecting academic subjects with the context of their daily lives, namely those related to the context of personal, social and cultural circumstances. Komalasari (2010:6) that contextual learning is a learning and teaching concept that helps educators relate the material they teach to students’ real-world situations and encourages students to make connections between their knowledge and its application in their lives as members of the family and community, country.

The assessment of the feasibility of the blended learning-based contextual learning model student manual shows a cumulative score of 3.31 with a feasible category without revision. This means that the student manual of the blended learning-based contextual learning model that was developed reflects the level of feasibility for use. The results of the validation by a team of experts on the student manual of the contextual learning model based on blended learning are valid to be continued at the next stage, but of course by accommodating suggestions for improvement submitted by experts.

Suggestions from experts for improvement of the student manual for blended learning-based contextual learning models are as follows: (1) the formulation of course descriptions needs to be added on how to assess them, (2) general learning objectives, preferably clear operational verbs, (3) specific learning objectives need to be contains ABCD elements, (4) learning objectives in particular should not use the verb “explain” only, (5) it is better to make a behavior structure chart (competency map) from the results of instructional analysis, (6) the scope of lecture material to be added, (7) cover (image) should be adapted to the type of book and describe contextual learning, (8) the available materials should be adapted to the chapter structure and presentation of the main points of discussion, and (9) questions/exercises are added and final grade guidelines are made.

Based on the suggestions for improvement submitted by the expert, the student manual for the contextual learning model based on blended learning was then revised. This improvement is important because the product of this student manual is a guide for students in taking lessons in Learning Planning, so that learning that is followed by students both in class and online can run effectively, efficiently and interestingly.

The role of the student manual as a guide that can assist students in participating in the learning of the Learning Planning course is emphasized by Yaumi (2013) that the student manual is a means of achieving competency standards, basic competencies or learning objectives and as an optimization of services to students. The same thing is explained by Siregar and Nara (2010:126) that books as learning resources are useful to provide a more concrete and direct learning experience to students.

The expert's assessment of the contextual learning model textbook based on blended learning above, it can be seen that the cumulative score is: 3.39 with a decent category without revision. This means that the textbooks developed reflect the level of feasibility for use, but of course by accommodating suggestions for improvement submitted by experts.

Suggestions submitted by experts on contextual learning model textbooks based on blended learning are described as follows: (1) writing learning objectives should be complete with ABCD elements, (2) pay attention to the table of contents, (3) pay attention to writing technicalities, (4) need to make a competency chart as a result of learning analysis, (5) pay attention to the accuracy of the use of words and sentences, (6) the scope of teaching materials to be added, (7) pay attention to the systematics of writing chapters in textbooks, (8) reference sources to add lag, (9) pay attention to consistency of writing between discussion chapters, (10) pay attention to writing arrangements and techniques, and (11) color display on each icon in the chapter to make it more contrast.

Textbooks are designed in the form of printed materials in the form of a series of writings, therefore they must be written in language rules and readability levels that are easy to understand and attract students' attention, because students have individual characteristics that are different from one another. This is confirmed by Seels and Richey (1994) that the characteristics of students are the background experience of students that affect the effectiveness of the learning process.

The use of the developed textbooks gives students its own color, namely students study in class and learn outside the classroom to find learning resources anywhere and anytime. Such learning proves that
students have interest and motivation and work hard to acquire knowledge and skills. This explanation implies that learning activities that facilitate students to learn actively.

The results of testing the effect of the contextual learning model based on blended learning by comparing the results of learning outcomes in the experimental class and in the control class obtained the calculation of the value of $t_{count} = 4.33$ while the price of $t_{table}$ at $= 0.05$ is $1.998$. Because the value of $t_{count} > t_{table}$ value, $H_0$ is rejected and $H_a$ is accepted, that is, there are differences in student learning outcomes who are taught contextual learning models based on blended learning and those taught by expository learning models. In this case, the learning outcomes of students who are taught using a contextual learning model based on blended learning are higher than the learning outcomes of students who are taught using an expository learning model. Thus, it can be concluded that the contextual learning model based on blended learning can improve student learning outcomes.

Furthermore, to see the level of effectiveness of the contextual learning model based on blended learning, it is shown through the results of the N-Gain test. In this case, the N-Gain coefficient is $0.40$ in the medium category. Based on the explanation in the previous chapter, the acceptance criteria for the level of effectiveness of the blended learning-based contextual learning model is if the results of the N-Gain calculation are in the $0.30$ N-Gain $0.70$ medium category. Thus, it can be interpreted that the level of effectiveness of the blended learning-based contextual learning model to improve student learning outcomes is moderate.

To achieve the level of effectiveness of this blended learning-based contextual learning model, it cannot be separated from various factors, namely the ability of lecturers to plan, manage and assess learning as well as the availability of learning tools. If further explored, it is found that it is related to the ability of lecturers in mastering the theories that underlie contextual learning models and lecturers' performance in carrying out learning. For this reason, the role of lecturers as facilitators, motivators, moderators, consultants, and designers is important to be improved.

Associated with the role of lecturers in managing learning described in the implementation of this learning model is in line with the assertion conveyed by Joyce and Weil (2003) that for the creation of this social system and support system, according to the role or task of educators is to provide an intellectual environment and encourage interaction. students with other students, between students and other learning resources.

In addition, the availability of developed products which are planned or by design printed learning resources used in learning the Learning Planning course is a determining factor in achieving the effectiveness of the blended learning-based contextual learning model. AECT (1986) explains that learning resources can be grouped into two parts, namely: (1) planned learning resources (by design), namely all learning resources that have been specifically developed as components of an instructional system to provide targeted and formal learning facilities; and (2) learning resources because they are utilized (by utilization), namely sources that are not specifically designed for learning purposes but can be found, applied and used for learning purposes.

5. CONCLUSION AND SUGGESTION

Based on the research findings, it can be concluded as follows:

a. The contextual learning model based on blended learning for the Learning Planning course was developed starting from needs analysis, design, evaluation and revision, then proceeded to the trial stage so as to produce learning models and learning tools in the form of model books, lecturer manuals, student manuals and textbooks. The resulting learning model device has been validated by experts and the results indicate the level of feasibility to be used in learning activities for the Lesson Planning course.

b. The contextual learning model based on blended learning for the Lesson Planning course is proven to have an effect on improving student learning outcomes, this can be seen from the results of statistical tests where it is known that the price of $t_{count} (4.33) > t_{table} (1.998)$. Furthermore, the level of effectiveness of the contextual learning model based on blended learning is moderate, it can be seen from the N-Gain coefficient is $0.40$.

Suggestions that can be submitted related to this research are as follows:

a. To be able to implement internet-based learning models such as blended learning models, it is necessary to support material readiness in the form of learning tools and technical readiness support in the form of internet facilities.
b. To develop the same product in other subjects, especially in designing blended learning, it is recommended for lecturers as other developers to make adjustments in learning design by analyzing learning needs, student characteristics and context appropriately.

c. The study program party should form an expert team that works in developing courses in the study program area within the Faculty.

d. The faculty should be able to provide an accessibility stimulus to subject teachers to increase the ability to design learning through training and workshops.

e. The Chancellor should provide stimulus rewards and especially funding for course instructors to be able to design their lectures with appropriate learning design studies so that in the future appropriate and effective learning design products will be born.

REFERENCES


