

# The Needs of Junior High School Students on Blended Learning Models Type Lab Rotation Model for Writing Skill in English Language Learning

Zulraudah<sup>1</sup>, Hermawati Syarif<sup>2</sup>, and Refnaldi<sup>3</sup>

<sup>1</sup> Universitas Negeri Padang, Padang, Indonesia, ✉ (e-mail) [Zulraudah.zr@gmail.com](mailto:Zulraudah.zr@gmail.com),  
[hermawati\\_sy@yahoo.com](mailto:hermawati_sy@yahoo.com) [refnaldi@yahoo.com](mailto:refnaldi@yahoo.com)

## Abstract

The learning model is a most influential thing to support a learning process so as to produce a good result. Lab rotation which is a branch of Blended learning is one of the learning models that has been proven to have a good impact on the learning process and also improves learning outcomes. This article contains the results of the need analysis of grade 7 junior high school students, which is part of a research and development project, which aims to find out students' needs for the Lab rotation learning model for writing skills in English. The results of this need analysis show that 80% of students need an innovative learning models and use computers or other technology tools as learning media for them. Such as the learning inputs using video, recording dialogue and so on, also learning activities that allow them to learn independently before discussing in the class. This discovery will be used to develop the Lab Rotation learning model for writing skills in English learning for 7th grade students of Sabbihisma Middle School, Padang, West Sumatra. At last, hopefully this research can make a good contribution to the development of writing skills learning models in English lesson.

**Keywords:** *need analysis, models of teaching, Lab rotation model, Blended learning, research and development, writing skills*

---

## Introduction

In this globalization era, the use of technology has become apart of human's life. Technological progress is not only enjoyable for the upper class or adult but also for the lower class and teenagers. Every people in every classes and ages need the technology in their activities. The technological developments that occur today are products of the continuous of education. Then also a new face that must be faced and accepted by the world of education. The education must follow the development occurred in the environment. Then, education has a responsibility to introduce it clearly and positively to the students. So students can get many positive things from all the development and use it in a good way, especially for the very rapid technological development nowadays.

Blended learning is one of the latest learning models that combines online (technology-based learning) and offline (face-to-face learning) learning. There are many definitions of blended learning. However, the emphasis here is that Blended learning is an innovative learning model that is starting to keep abreast of current technological developments. According to Bersin (2004), Blended learning is a combination of the use of various technology media, activities, and types of events to achieve a goal in a learning process. Blended learning can also be said as a learning method that combines two or more methods and approaches in learning. In learning using the Blended learning method, the characteristics of traditional learning are combined with technology-based learning. In this Blended learning model, learning is no longer centered on the teacher. This model has the opportunity to increase interaction between students and students, students with learning content, students with other learning resources, and students with teachers. This model also has other advantages that students can learn independently according to their own learning styles during online learning. Students can learn in ways that are considered easier for students in understanding the content of the learning.

There are several studies on blended learning. The study looked at several aspects such as the effects, usefulness, and development of the blended learning model. The research on the effects of blended learning has been carried out by several researchers. One of these researchers is Ceylan and Ayse (2017). They examined the effects of the Blended learning model on student learning outcomes. This research was conducted on 6th grade students in Turkey. Clement (2007) also conducted research to test the effectiveness

of this Blended Learning model. He does not only examine effectiveness but also look at how students respond to learning. From all the research on the effectiveness of blended learning on learning outcomes achieved by students, it appears that learning uses this blended learning model is more effective in improving student learning outcomes than the learning model commonly used by teachers. Other aspects that are seen as behavior and students' perceptions of this model, also show a positive results. It can be seen in Clement's (2007) study that students are very happy and motivated in learning by using this model.

The development of the Blended learning learning model has also been carried out in several studies throughout the world. Likewise in Indonesia, some researchers have tried to develop this learning model for several high schools and universities. Like Awan (2017) conducted developmental research on the Blended learning learning model using the Edmodo application for high school Geography subjects. Agus, et al (2015) and Nur aeni, et al (2017) have also carried out the same research on the development of the Blended learning learning model. Research on the development of learning models was conducted by Setiadi et al. (2016). They developed learning models to improve teacher professionalism. All of these studies have tried to develop the Blended learning model, then see the effectiveness of the learning outcomes. From all of these studies it appears that the Blended learning learning model that they have developed greatly influences the improvement of student learning outcomes. The results of their validity also indicate that the Blended Learning learning model is very feasible to use.

Whereas for research analyzing the needs of target users has been done by Purtadi et.al (2014) for chemistry teachers in Sleman. They have analyzed the needs of chemistry teachers in the district for training programs to improve inquiry skills and scaffolding based on Blended learning. From the results of this study it was seen that teachers responded positively to the training they would take later based on Blended learning. Seeing so much research that examines the usefulness, effectiveness and development of Blended learning learning models, Blended learning can continue to be developed in various schools as an innovative learning model that is in line with the development of the technology nowadays.

Actually, there are many types of learning model in Blended learning. One of them is lab rotation learning model. The learning proces is done both in classroom and computer laboratory in this kind of the blended learning type. So the computer laboratory can be used in this Blended learning type. In Lab rotation, students will do some rotation between class and computer lab during their learning proces. Students can use the computers that are facilitated by the school as tools for them to dig the knowledge deeply with their friend and under the guidance of the teacher. Specifically for lab rotation model, there are many things can be studied from this model. The first is about the implementation of this lab rotation model. The reseach can be about how to implement the lab rotation to students. Then researchers can also see and analyze how students' perceptions of learning they have done by using the lab rotation learning model. After that, the researchers can also do an experiment about the effectiveness of this lab rotation model. The researchers can compare its effectiveness with the common learning model that has been used by teacher on the learning outcomes and students motivation. Whether the students learning outcomes and motivations will increase when they learn by using lab rotation model or not.

However, the reseacrh on the Lab rotation model has not been done too much, especially for reserach on the development of learning designs that use Lab rotation as the learning model. So, before doing the developmental reserch , the first thing to do is analyzing the students needs. So, This article is part of the research development of blended learning model with lab rotation type for junior high school students. Where This research will be conducted in a middle school that boarding based school. Where students stay in school for 24 hours. This analysis research aims to see the needs of students at this school for learning English using the Blended learning model which the type is lab rotation.

As known that need analysis is the important part in developing the English teaching model. It determines the direction in designing the model of instruction. it means that, the developing of a learning model should analyze the needs of the future users. As stated in Dudley-Evan and St. John (1998), the first step to conduct the developmental research is identifying the learners' needs in learning the language. It is about the skills they need most. Whether it is reading some literature, or speaking skill in order to be able to perform some tasks during their study or their workplaces later. These needs will be discover by using the need analysis process as the important step in conducting the developmental research.

Needs analysis in Nation and John Macalister (2010) are divided into two. They are target needs and learning needs. The target defines as what the learners need to do in the target situation. There are three focuses in the target needs. Thye are necessities, lack, and wants. The necessities according to Hutchinson and Waters (1978) is what the learners have to know to get the effective result in the target situation or According to Richterich (1973) it is stated as an objective needs. Everyone can have different desires and needs for what they are, they need to achieve maximum results from the learning they will follow. For lab rotation, this analysis of wants will be made to analyze whether the needs for learning using computers and technology will be in accordance with their desire to improve their learning outcomes.

Lack or according to Allwright and Allwright (1979) is what learner already knows to address necessities. In another word, it is what the learner knows already, so that the teacher or the facilitator can decide which of the necessities the learner's lack. So, lacks is some information that will be analyzed about the difference between the student's present competence and the desired competence. The teaching model developer or designer should know what kinds of knowledge, skill, and learning style that students want to study and what and how they have learned before. As for wants is what the learners feel they need in order to operate the target situation or it is also called as subjective needs. The needs that stated as an individual needs. Meanwhile, according to Berwick (1989), there are three categories of needs, what he said as the language proficiency view of needs, the psychological view, and the specific purposes view.

The importance of analyzing students' needs are mentioned in Mackay and Mountford (1978), Robinson (1980), Hutchinson and Waters (1987), Yalden (1987), and Steven (1977). They said that An action toward learner centred and go away from teacher centred should be designed to fulfil the appropriate needs of students. Yalden (1983) added that need analysis is the main point and step in designing a course. In gathering the data of needs analysis, the researcher needs some instruments. Schroder (1981) suggested *Questionnaires, interviews, participatory observations* and *thinking aloud* as suitable tools for getting at needs. In this design of Lab rotation teaching model research, the instrument that will be used in gathering information is questionnaires and interview.

Some aspects that will be asked in this need analysis is about the learning activities. What kind of activity that students really want to do in their learning process. As known that in Lab rotation model, students will do the learning process in a rotation between classroom and computer laboratory. So, there are two kinds of learning zone that will be faced by students, online and offline zone. In these two zone, the learning activity should be enjoyable and engaging to what the students need and want to do. There are so many activities that students can do in their learning process, some of them according to Gwyther (2011) in face to face phase there are some activities that can be done, for example quiz, watching a video, a group work, or group discussion, and for the assessment it can be in the form of group project, individual assessment, and skills assessment. Meanwhile in online phase, they can do an online lecture, peer review of learners' work, group research project or discussion, reading/watching the knowledge text/ video/ power point. Before going to design the learning model, it is really important to ask and analyse what activities that are suitable and enjoyable for learners to do during their learning process.

**Method**

This research used a survey method by distributing questionnaires to Sabbihisma Middle School. The subjects of this study were all 7th and 8th grade of Sabbihisma Middle School students, plus two English teachers who were interviewed about the readiness, knowledge of the Blended Learning model, and school facilities that support the Blended Learning process with Lab Rotation type. Meanwhile, the object of this research is the students' need for learning English especially in writing skills based on Blended learning with Lab rotation type. The questionnaire was used to collect data on student needs in using instructional media on English material. It was made in Indonesian language for getting the clear information from the respondents. The results is the basis for developing the learning model later. The aspect that will be asked in the questionnaire is:

Table 1. The Aspects in Questionnaire

No.	The Aspects
1.	Learning activities that have been done
2.	What kind of media that has been used by the teacher
3.	What kind of activities that suitable for students in the boarding school
4.	What activities that students really want to do in their learning process
5.	How was the teachers' role
6.	What students really want about the teachers' role during their learning

As known that the contents of this questionnaire regarding learning English so far, students' needs for learning English with the Lab rotation model, the availability of supporting facilities, and also activities that will be carried out during the teaching and learning process using the Lab rotation model. Meanwhile, the informal interview system is used to find out the teacher's needs also. The contents of the interview are about the teacher's knowledge of Blended Learning-based learning, the learning process that has been used, school facilities, and the possibility of implementing Blended learning model with Lab rotation type in SMP Sabbihisma. As a guide for the interview, a checklist sheet has been prepared which also contains

questions to support the interview. Furthermore, the questionnaire for students and supporting sheet were validated by two experts.

The questionnaire that was distributed then was analyzed descriptively. This analysis includes the sections that have been listed for later conclusions drawn about the needs of students and the possibility for the implementation of learning English using Blended Learning models with the type of Lab Rotation, especially in writing skills in Sabbihisma Middle School.

The Questionnaire instrument developed has four major sections as follows:

1. Introduction

This section contains an explanation of the purpose of filling out the questionnaire and how to fill it out. So, part of the introduction contains:

- a. Biodata of Respondent
- b. Background and purpose of filling out the questionnaire
- c. Filling The Sheets instructions

2. The General Questions

This section of general questions (part A) contains 14 questions to be filled out by students. The question is

- a. students' opinions on learning English so far
  - b. Student opinion regarding technology-based learning
  - c. The desire of students to try to apply technology-based learning models
3. The Questions Regarding Inputs and activities in learning in each KD 4

The question section about the input and activities that students expect to do in learning English (part B) contains 44 items. Which part consists of 20 questions about the type of input desired by students in learning English, and 24 questions about activities that students want to do in learning English. All questions in part B will be filled by students for 4 basic competencies (KD 4.1, 4.2, 4.3, and 4.4).

4. The Questions Regarding input and learning activities on supporting materia

This is the last part of the questionnaire (part C). In this section students will answer questions related to supporting material such as, verb, introduction to be, recognition of time, and noun phrase. The question is in the form of input and activities desired by students to be translated into English learning. In this section there are 13 items.

There are two kinds of data will be used in this study, qualitative and quatitative data. The sources of the data will be taken from questionnaire and checklist. The data which are collected by using questionnaire will be analyzed by using quantitative analysis. The score gained from the aforementioned observation form. It will be analyzed by using following formula, as stated in Sudjono (2005) that the mean score comes from the sum of data is devided by the numbers of graders.

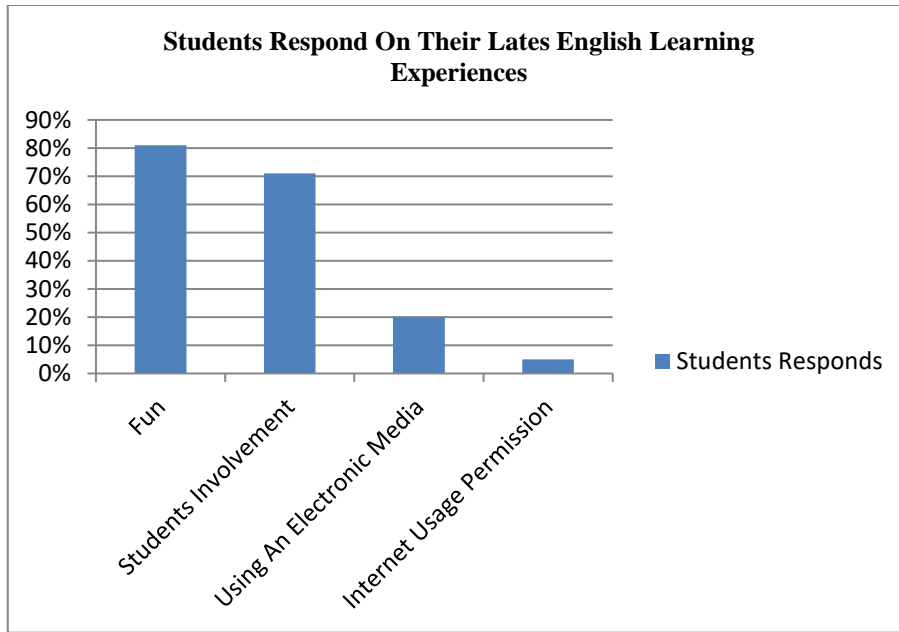
$$Avarege\ score = \frac{Total\ Score}{Number\ Of\ Graders}$$

The data taken from infromal observation will be analysed by the qualitative analysis. It is taken from informal interview to some English teachers in Sabbihisma Islamic Boarding Schhol and the English teacher in other schools. The aim of this informal observation is to get some information about the importance lab rotation as the teaching model, and its efectiveness to use.

## Results and Discussion

The results of the distribution of questionnaires to see the needs of students and teachers in Sabbihisma Middle School are

1. The General Questions
  - a. Student satisfaction towards learning English so far and their nopinion regarding technology-based learning (Blended Learning)

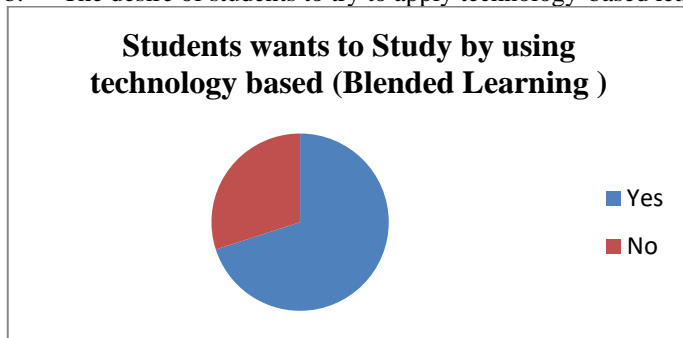


Picture 1. Students’ responds on their English learning experience

Judging from the response of students to learning English so far is 81% fun and 71% of students agree that activities in learning English so far quite often involve students. from these results it can be concluded that learning English in Sabbihisma Middle School is fun for students.

The chart above contains the students' responses to the use of technology-based media in learning English so far. Here it can be seen that the use of electronic-based media tends to be low (20%). Likewise, the granting of permission for the use of the Internet is very minimal, only 5% of students respond that they are allowed to use the internet to support their learning.

b. The desire of students to try to apply technology-based learning models



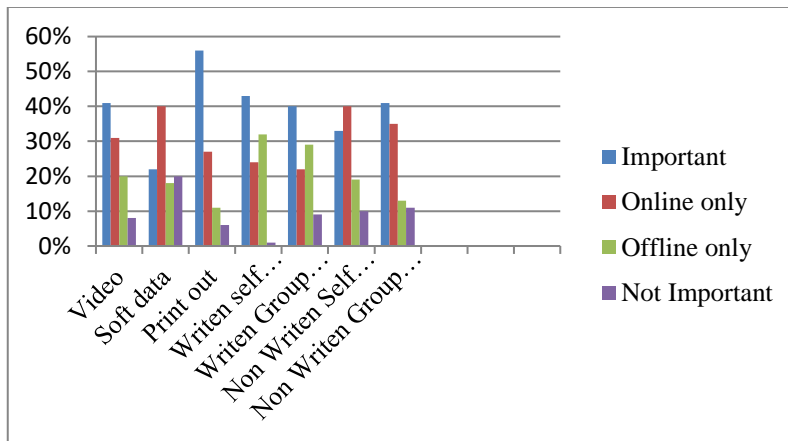
Picture 2 Students’ respond on using of electronic media

The chart above contains the desires of students towards a learning model based on technology, or it can be said as a Blended Learning model. Around 80% of students responded 'yes' to questions asking if they wanted to do English learning using technology as a learning media?

From the three categories of questions above, it can be concluded that the learning of English during the time tends to be fun and students are quite active in every activity in learning. However, students also want a few changes to the learning media that so far seem less up to date. Due to the use of technology-based learning media is very minimal, so students want their English learning using media that follows the times.

2. Questions Regarding Input and learning activities in each KD

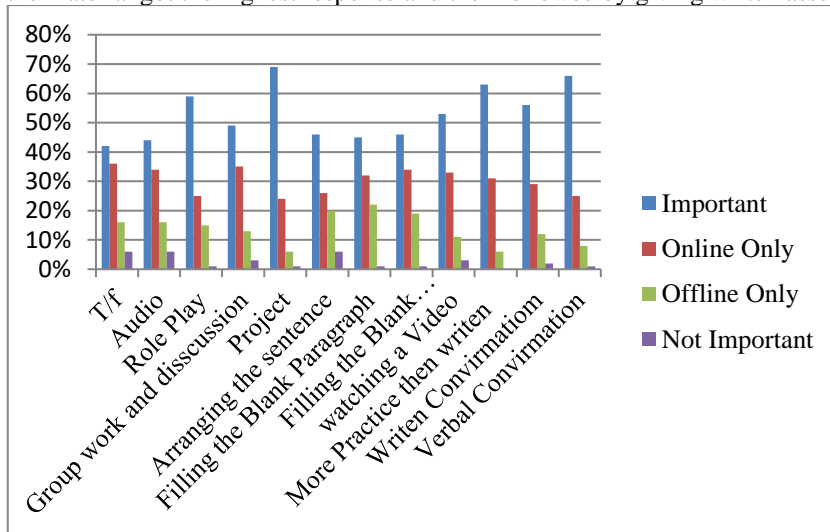
Student answers for each KD tend to be the same, so the analysis is made for all competencies (KD) only and not elaborated per competency (KD) because of the similarity of student choice results for each competency



Picture 3. Students' needs on the media will be used to transfer the English material

The chart above is a chart containing student responses to the media that will be used to input English learning materials to students. There are 4 answers that students will choose, among others, important, only for online classes, only for offline classes, and not important. Students will be critical if students feel that giving input as asked is important to them. Then students will check 'only onlone class' if they feel that the input material is only they want to do in the online class. Whereas on the contrary if they only want to get it in the offline class they will mark it in the 'only offline class' section. Meanwhile, if they feel it is not too important to do or give, then they will check 'not important'.

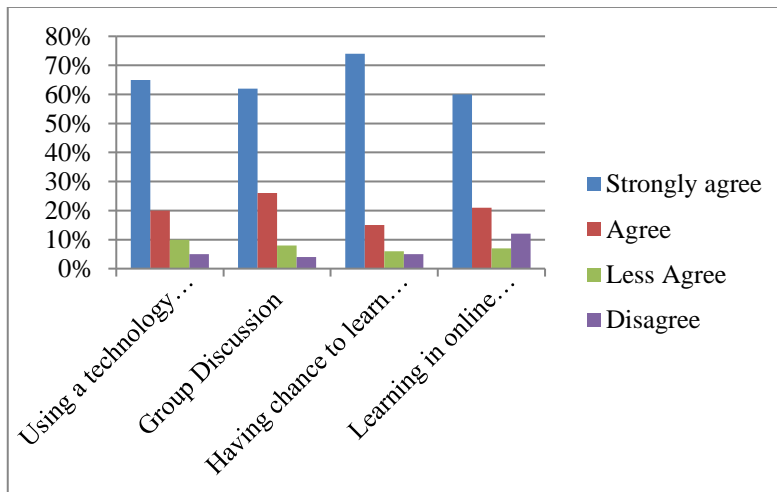
From the chart above, it can be seen that the input using soft data, video, non-written self assessment, and non-written group assessment can be ranked highly to be done online. Whereas for giving material using print out the material got the highest response and then followed by giving written assessment.



Picture 4. Students' needs on the activities will be done while learning English

For activities selected by students, see the section above. It can be seen that most students respond to the project as the highest response in learning activities that are considered important for students and then followed by verbal confirmation. While 65% of students feel that they feel it is important to practice more than just writing practice. While in the online class, students respond more to T / F activities, audio recordings, and group discussions.

3. Questions Regarding Input and learning activities on supporting material (verb, pengenalan to be, pengenalan waktu, dan noun phrase)



Picture 5 Students' needs on the activities and media inputs of the Supporting materials for English lesson

This is the final chart for student analysis needs. This chart contains the opinions of students about providing input and activities that they prefer to do in learning English. From the chart above it can be seen that students strongly agree that technology-based English learning, in this case, is referred to as Blended learning. Students also want more learning to give them the opportunity to learn independently first before discussing in class as usual. This is also evident from the large student responses to learning that began in the online classroom first. In this online class they can learn independently with the material given to them. They can explore the learning material that has been given with their respective learning styles so that they are easier to understand. So after they study the material in the online class, it is hoped that they will be ready to have a tough discussion in the classroom under the guidance of their subject teacher.

As for the response from the English teacher interviewed that the teachers had never known about learning with this Blended learning model. When they are told about this learning model, they are optimistic that this learning model will have a positive effect on learning English later. The teachers also added that learning with this blended learning model is a new thing that is worth trying and can be applied especially in Sabbihisma Middle School.

Associated with supporting facilities such as the availability of computers is sufficient for students to study in the computer labor room that has been available. "If it is seen from the situation of Sabbihisma Middle School which is behind a Boarding School, where students are in the school environment for 24 hours, then online classes will also be able to be held in the afternoon and offline classes can be scheduled as usual. So students can take advantage of their afternoon time by studying independently in computer labor.

When compared with the need analysis conducted by Purtadi et. al (2014) who analyzed the needs of the kima teachers for Blended learning-based training, there was a similarity that these respondents alike wanted an innovative update to obtain a knowledge that was important to them. When compared also the chemistry teacher's understanding (Purtadi's research subject) with the English teacher who has been analyzed in Sabbihisma on this Blended learning model, there are also similarities that these two groups of teachers do not yet have an adequate understanding of this Blended Learning model. But they both want an innovative learning so that it will make students more active in learning.

The fundamental difference from Purtadi's (2014) study is the age and occupation of respondents. In the survey of Purtadi (2014) the respondents were only teachers. This is because the training to be carried out is teacher training. Whereas in this need analysis study, the majority of respondents were students (113 students) and only 2 teachers. Another difference is the subject choosen. Purtadi's research (2014) is a need analysis research for chemistry teachers, while this research is for students and English teachers. Also the place to carry out this need analysis is in Sabbihisma based boarding schools. Where students will not get out of the school environment all day, because they live in a dormitory in the school environment. But the result from both these need analysis research is similar. Those respondents need a brand new teaching model. An innovative teaching model that can increase their motivation to study.

So that, the learning process of English writing skill for 7 grade students of Sabbihisma junior high school will be developed according to their needs and wants. The Lab rotation teaching model will starts from the online class then continue to the offline class. Students will have a chance to explore the knowledge by themselves, then discuss it in the face – to – face class as usual.

## Conclusions

So, from this result it can be concluded that learning English using Blended learning model with Lab rotation type is very possible to be done in Sabbihisma Middle School. This can be seen from the responses of students who want a lot of changes in the English learning model that utilizes Electronic media more as a medium for supporting their knowledge transfer.

If seen from the input and activities desired by students, students want teaching material that they will learn independently in the computer laboratory (online class) can be summarized clearly, precisely, completely, and interestingly in soft data. The use of video as one part of the soft data also seems to be of interest to most students. Making a simple project also becomes an activity that is highly desired by students to work on in learning English. As for the face-to-face class (offline class) students want to be given a print out containing a summary of clear and complete teaching materials. Group discussion is also an activity that students want to be able to do in the offline class.

As for the exercise or assessment and confirmation section in the online class, students want an exercise in the form of T / F questions and they are more likely to verbally confirm than written. Whereas in the offline class students want a written assessment that can measure their level of understanding. In general, students want online classroom learning so that they can learn independently with their learning styles and according to the results of need analysis that has been done. After that, it will be continued in the offline class by discussing or working on a simple project guided by the teacher.

## References

- Academy, Khan. 2011. The Lab Rotation Model. [Video], Retrived from <https://www.khanacademy.org/partner-content/ssf-cci/sscc-intro-blended-learning/sscc-blended-learning-models/v/sscc-blended-lab>
- Bersin, Josh. 2004. *The Blended Learning Book; Best Practices, Proven Methodologies, and Lesson Learned*. USA: Pfeiffer Publishing
- Cakir, Dr. Kamil. 2006. *The Use of Video as an Audio Visual Material in Foreign Language and Teaching Classroom*. October 2006 ISSN. 1030-6521, volume 5 issue 4 article 9. Retrieve from [www.tujet.net](http://www.tujet.net)
- Ceylan, Veysel Karani and Ayase Elitok Kesici. 2017. *Effect of Blended Learning to Academic Achievemnet*". ISN: 2458 – 9489, vol. 4 issue 1 year 2017. Retrieved from [www.journalofhumansciences](http://www.journalofhumansciences)
- Clemen, C, Chen and Keith T. Jones. 2007. *Blended learning vs Traditional Classroom Setting: Assessing Effectiveness and Students Perceptions in AN MBA Accounting Course*". Vol 4, Number 1, Jan 2007. Retrived from [www.TheJournalofEducatorOnline](http://www.TheJournalofEducatorOnline)
- Cresswell, John W. 2012. *Educational Research: Planning Conducting, and Evaluating Quantitative and Qualitative Reserach (4th edition)*. New Jersey: Pearson Education
- Cheung, Simon k.s. et all. 2018. *Blended Learning: Enhanching Learning Success: 11 th International Conferences*. Hong Kong: The Springer.
- DEPDIKNAS . 2002. *Panduan Kurikulum Berbasis Kompetensi*. Jakarta: Departemen Pendidikan Nasional
- DEPDIKNAS . 2013. *Panduan Kurikulum 2013*. Jakarta: Departemen Pendidikan Nasional
- Eastman, Perkins. 2015. *Blended earning deisgn Guidliness*. Wasington
- Educational Technology Division Ministry of Education. 2006. *Project-Based Learning Handbook "Educating The Millennial Learner"*. Kuala Lumpur: Communications and Training Sector Smart Educational Development Educational Technology Divisiom Ministry Of Education
- Jessica S, Ayala. 2009. *Blended Learning as A New Approach to Social Work Education*. Journal of social work education, vol. 45. No. 2.
- Joyce, Bruce R. Et al. (2015). *Models Of Teaching*, Ninth Edition. USA: Pearson
- Kheirzadeh, Sheila Marzeih Bahrami Birzani. 2018. *Exploring The Effectiveness of Blended Learning in Improving Reading Comprehension Among Iranian EFL Students*. Journal of Applied Linguistics of Language Research. Volume 5, issue 1, 2018, pp 106 – 120 , ISSN: 2376 – 760x. Retrieve from [www.jalr.com](http://www.jalr.com)
- Kurniati, Dewi. 2015. *Study tentang Faktor – Faktor Penyebab Kesulitan Belajar Menyimak Bahasa Inggris Pada Mahasiswa Semester III PBI IAIN Raden Intan Lampung tahun Pelajaran 2015/2016*. Retrieved from [www.media.neliti.com](http://www.media.neliti.com)
- Mackay, R. & Mountford, A. (1978). *English for Specific Purposes*. London: Longman
- Management, Assosiation USA. (2018). *Online Course Management: Concepts, Methodologies, Tools, and Applications*. USA: IGI Global
- Picciano, Anthony G. 2014. *Blended Learning Research, Persvective*. New York: Routledge



- Purtadi, Sukisman, et.al .2014. Analisis Kebutuhan Guru Kimia terhadap Program Pelatihan Peningkatan Keterampilan Inkuiri dan Scaffolding Peningkatan Keterampilan Berbasis Blended Elarning. *Jurnal Pendidikan Matematika dan Sains Tahun II*, No. 1, Juni 2014
- Tuirlina, Isrok'atun.2016.*Model Pembelajaran Matematika Situation – Based Learning di Sekolah Dasar*.Indonesia: UPI Sumedang Press
- Vandermolen. 2010.*The Examination of the implementation of Blended Learning Instruction on The Teaching and Learning Environment in Two West – Michigan School District*. Dissertation
- Wilis, Royce, et al. 2018. *Towards A Strategic Blend Education*. London: Oxford Global Press
- Yalden, J. 1987. *Principles of course design for language teaching*. Cambridge:C.U.P
- Zaim, M. 2016.*Evaluasi Pembelajaran Bahasa Inggris*.Indonesia: Kencana