Students' Need Analysis of Problem Based Learning Model with Blended Learning in EFL Academic Reading

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Students' Need Analysis of Problem Based Learning Model with Blended Learning in EFL Academic Reading

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Abstract
Academic reading is one of the necessary skills for college students. The research aim is to provide a detailed description and identify the students' need to develop EFL academic reading learning model using problem-based learning (PBL) with blended learning (BL). The study is a survey research at the English Education study program, Faculty of teacher training and Education, Muhammadaiyah University of Mataram. The participant was 52 students from the English Education study program, Faculty of teacher training and Education, Muhammadaiyah University of Mataram which distributed 77 statements from 11 variables of questionnaires. The strategy for collecting the data via questionnaires and interviews. The result shows that the participants require suitable learning goals with EFL reading academic, variation of topics, exercises carried out through understanding until evaluation, assessment is performed at end of each topic which undertaken individually or in groups, syntaxes of PBL model with BL in EFL academic reading are started from review the previous topic and ended with reflection and evaluation, BL is applied a reinforcement, the social system is undertaken by making students as a subject not object of learning, the reaction system by service process without regard to background, the support system is in line with students need, learning impact by improving students' problem-solving skill, and companion impacts by having communication, collaboration, creativity, leadership, and team management skills as well as attitude to accept the opinions of others.

Keywords: Problem based learning, blended learning, academic reading, need analysis

INTRODUCTION

Reading is the process of constructing meaning from the text that entangles several strategies effectively to comprehend, synthesize and communicate information (Maher & Shehata, 2017). Reading is also defined as an umbrella term that involves a set of complicated and interrelated activities (Baker et al., 2019), to comprehend reading text about language which is very important for students to be successful in higher education (Yapp & Graaff, 2021), or academic success (Baker et al., 2019). Sharma et al. (2017) point out that reading is an important component of the learning process, especially When students read before class because it increases their performance, develops their class participation, and improves their compression which is in line with the information presented. One type of reading is academic reading.

Academic reading is undoubtedly an imperative ability in higher education (Kimberley & Thursby, 2020; Xiaohua Liu & Read, 2020), which is considered a

scholarly activity for students to participate in at university (Yapp & Graaff, 2021), with reference to a text assigned as part of the academic lesson (Desa et al., 2020). Reading academic has become the subject of a small but growing area of interest (Baker, 2018), characterized by the utilization of a more formal tone, content intricacy, and a degree of impersonality in the position of the author (Muñoz & Valenzuela, 2020), which takes place in academic settings (Taghizadeh & Khalili, 2019). In the academic reading course, the students practice reading and vocabulary acquisition strategies, learn to identify distinct text types, elicit and save academic source texts, and analyze the structure of IMRD (Introduction, Methods, Results, Discussion) journal articles (Yang, 2020).

Academic reading is distinct from other forms of reading (Maguire & Reynolds, 2020; Maher & Shehata, 2017; Sohail, 2015) because it is complicated and discipline-specific. It encompasses a measured, challenging, and multifaceted process in which students are dynamically engaged with various reading strategies (Sohail, 2015), another reason because the reader has to be critical, understand the author's intention and be able to evaluate the worthiness of the text (Maher & Shehata, 2017), the next reason that academic reading is focused, complex, challenging, and discipline-specific that make it dissimilar from everyday reading (Maguire & Reynolds, 2020). Whereas Desa et al. (2020) put forwards that academic reading and the advancement of college reading abilities from beginner to expert are not automatic outcomes but it is a processes carried out by readers continuously. Therefore, understanding academic reading practices are believed to be vital to assist students and researchers to achieve better utilization of research papers books available, and success in academic reading (Maher & Shehata, 2017), which is influenced by at least three factors: reader characteristics, the properties of the texts, and the demand of the reading task bound within sociocultural context (Rahman, 2020).

Academic reading problems are commonly caused by reading efficiency (e.g. insufficient reading experiences; ineffective reading habit or method; and difficult reading material), comprehension (e.g. unfamiliar words; difficult language, material, or writing styles of the author; complex or long sentence structures; lack of background knowledge; unfamiliar text structure such as cultural difference in text structure; failure to integrate information within text; psychological disorder; limited reading experiences in general; time constraint; insufficient exposure to English; limited experience with or knowledge about academic texts; and dense information), information evaluation and intertextual model building (comprehension problem and reading uncritically), and length or number of texts (Liu & Read, 2020).

The previous research about academic reading such as undertaken by Afdal et al. (2022) that is focused on how *academic reading* as a social practice may increase various aspects of academic literacies among undergraduate students. Then, explored the role of vocabulary breadth and depth in second language learners' performance in IELTS academic reading tests in China (Chen & Liu, 2020), surveys of university academic reading generally utilized questionnaires and fell short of an in-depth analysis of students' skill requires and difficulties (Xiaohua Liu & Read, 2020). Before the 2000s, most researchers on academic reading is

concentrated on student learning via text and usually described the relationship between approach, conception, and outcome (Afdal et al., 2022). Therefore, the researchers would like

Another researcher who has conducted research on academic reading is Liu & Read (2020) concentrated on survey of general skill needs and challenges in university academic reading. They found that there are five important academic reading skill for students, they are comprehension skill (e.g. understanding text aim; main ideas; details; author's intention; implied meaning; general comprehension; integrating information within text), linguistics and discourse knowledge (e.g. word recognition; grammar; discourse structure; vocabulary; language knowledge; and spelling), reading strategies and efficiency (reading expeditiously likes skimming and scanning; extracting important, useful or relevant information efficiently; close reading, tolerating specific comprehension failures; inferring meaning of words or sentences from contexts; reading with a purpose; reading strategically; and making predictions), affective factors (e.g. attention; motivation; and concentration), and critical reading, information reconstruction skills, and intertextual model building (e.g. paraphrasing in one's own sentences; critically evaluation or critiquing information; integrating information from multiple texts; discussing, expressing, and constructing ideas or meanings). Therefore, the researchers are feel like filling the gap that is still lacking by other researchers, which is related to learning reading academics using the PBL model

PBL is student's center learning model which is initiated with the presentation of an ill-structured problem to be solved that has potentially multiple solutions and educators act as facilitators through the process for guiding learners with metacognitive questions as they actively construct knowledge by defining learning goals, seeking information to build upon prior knowledge, reflecting on the learning process, and participating in active group collaboration (Moallem et al., 2019). PBL is a learning model who has potential to link many problems in everyday life (Faqiroh, 2020). In PBL, students are expected to spend the majority of their time studying on their own or with their classmates rather than under the instruction of an educator, which means that the use of lecturing must be limited and access to quality learning resources guaranteed (Moallem et al., 2019).

The core characteristics of PBL are learning is student centered; small group, constructive, collaborative, and competence based learning; an educator is present as a guide; real-world contextualized problems are presented as the trigger for learning; the problem are utilized to achieve the required knowledge and problem solving skills; and new information is acquired through self-directed learning (Zwaal, 2019). While Vleuten & Schuwirth (2019) point out four characteristics of PBL, they are the use of engaging tasks or problem as a starting point for learning, self-directed and self-regulated learning, working in groups of learners tackling these tasks, and the role of the teachers as a facilitator of this process.

The five stages of learning through the PBL are integrating students to the problem, organizing students to learn, guiding the investigation, developing and presenting the work, and analyzing and evaluating the problem-solving process (Arends, 2004; Khoiriyah et al., 2018; Strobel & Barneveld, 2009). Another stage

for implementing PBL mode in teaching are an educator presents the problem to the students, the students identify the problem, the students search information from various sources to solve the problem, the students choose the most appropriate solution to solve the problem, and the educator evaluates the students' work (Saputra, 2019).

PBL model has many advantages in teaching and learning proses such as significant impact towards social science and learning outcomes (Permatasari & Info, 2019), increase learning achievement and students' understanding (Doymus, 2008), develop students' critical thinking skill (Saputra, 2019), improve learning quality (Nurtanto et al., 2019). In this study focused on the PBL model with blended learning (BL).

BL is learning that mixes of synchronous and asynchronous activities (Heilporn et al., 2021). Early definitions described of BL as the integration of face-to-face instruction and online learning (Castro-gil & Correa, 2021). BL is also pointed out as a new information technology-assisted teaching model in twenty-first century which is generally include the combination of traditional face to face and online learning (Xu Liu, 2021), which is very interesting because it has the potential to optimize student engagement in learning (Halverson & Graham, 2019; Manwaring et al., 2017), improve learning performance, and make significant changes in students' writing (López-pellisa et al., 2020). In this study focuses on need analysis of PBL model with BL in EFL academic reading.

Need analysis refers to the techniques for gathering and assessing appropriate information to learning design (Hyland, 2006). Needs analysis is also defined as a way to identify "what learners will be required to do with the foreign language in the target situation and how learners might best master the target language during the period of learning (Kim, 2013). Need analysis is conducted to establish the "what" and the "how" of a course (Flowerdew, 2012). It is the first stage to design a PBL model with BL in EFL academic reading, followed by learning model design, material selection, methodology, assessment, and evaluation.

The purpose of this study was to provide a detailed description and identify the students' needs for a PBL model with BL in EFL academic reading that will be utilized as a reference in designing learning models that suitable with the needs and not the wishes of the researchers.

METHOD

This study is a survey research at the English Education study program, Faculty of teacher training and Education, Muhammadaiyah University of Mataram. The respondents are students who are currently taking and who have taken EFL reading academic courses in the English education program, faculty of teacher training and education at muhammadiyah university of mataram, totaling 52 students with details of 22 males and 30 females. The instrument distributed to gather the data was eleven variables from a questionnaire consisting of 77 statements. The data analysis used quantitate research to identify the data from the questionnaires.

RESULT AND DISCUSSION

The result of need analysis from 77 statements as an instrument distributed to the respondents can be classified into eleven variables of need, namely learning objectives, topics, exercises, assessment, syntax of problem-based learning models, blended learning, social system, reaction system, support system, learning impact, and companion impact. The explanation of the research findings can be put forward as follows.

1. Learning objectives

Learning objectives variable consists of four statements and the results can be seen in chart 1.

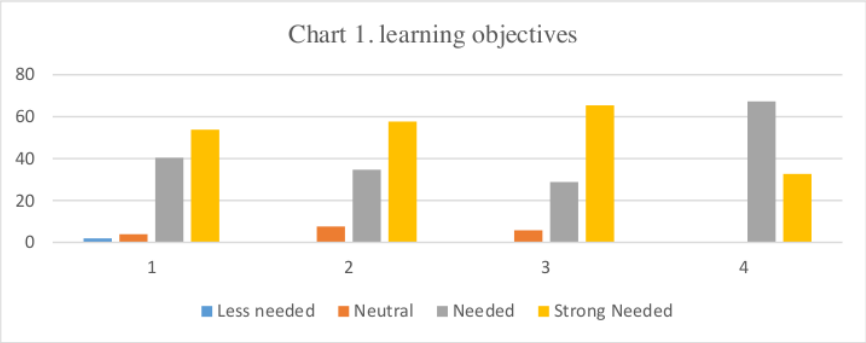


Chart 1 shows that the first statement about students understanding the concept of academic reading was answered by respondents with an average of 53.8 % is strongly needed, 40.3 % is needed, 3.9 is neutral, and 1.9 % is less needed. The second was about students able to think critically to find the problem being discussed responded with 57.7% is strongly needed, 34.6 % is needed, and 7.7 % is neutral. The third was about students can understand English reading text was responded with 65.4 % is strongly needed, 28.9 % is needed, and 5.8 % is neutral. Then, the fourth about the students can enrich their mastery of English vocabulary topics was responded with 32.7 % is strongly needed and 67.3 % is needed.

2. Topics

The topics variable is ten statements and the findings can be looked in chart 2.

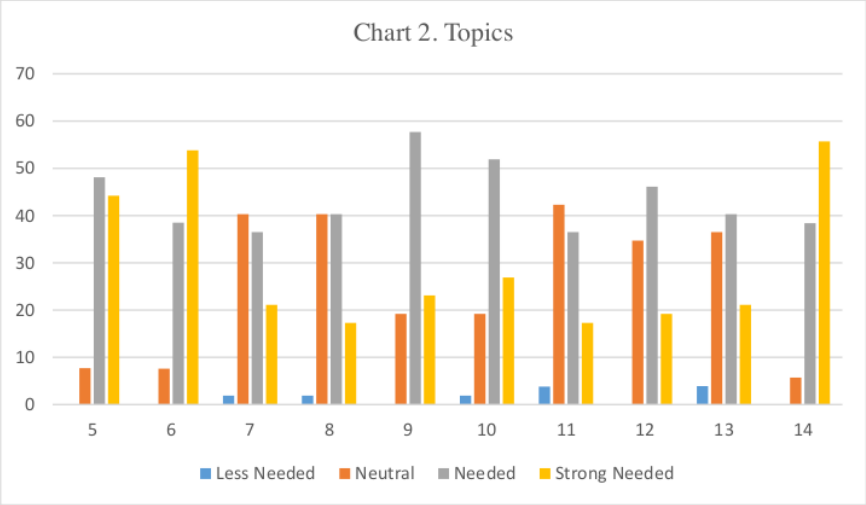
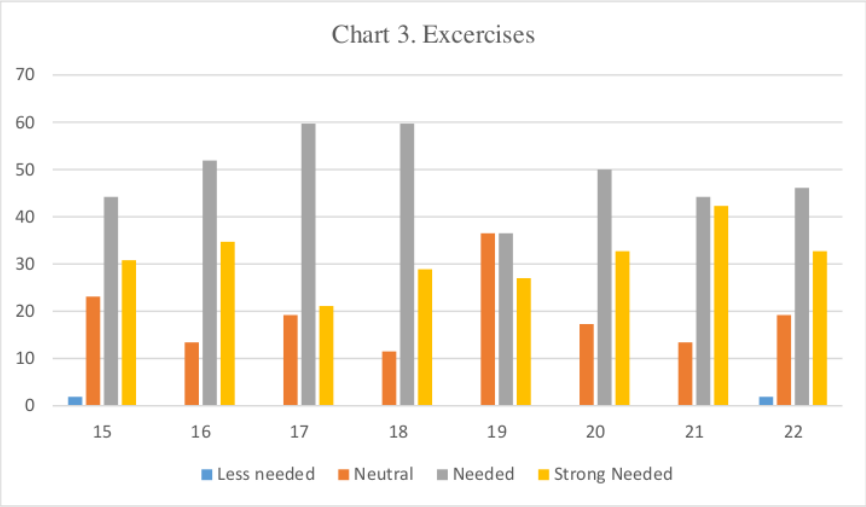


Chart 2 pointed out that statement number 5 about students need topics about language skills was answered by an average of 44.2 % is strongly needed, 48.1 % is needed, and 7.7 % is neutral. Number 6 about students need learning topics about education was answered by 53.8 % is strongly needed, 38.5 is needed, and 7.7 % is neutral. Number 7 was about students need a topic of learning about politics was 21.1 % is strongly needed, 36.6 is needed, 40.4 % is neutral, and 1.9 is less needed. Number 8 about students need learning topics about economics was 17.3 % is strongly needed, 40.4 is needed, 40.4 % is neutral, and 1.9 % is less needed. Number 9 about students need learning topics about social was 23.1 % is strongly needed, 57.7 % is needed, and 19.2 % is neutral. Number 10 about students need learning topics about culture was 26.9 % is strongly needed, 51.9 % is needed, 19.2 % is neutral, and 1.9 % is less needed. Number 11 about students need learning topics about sports was 17.3 % is strongly needed, 36.6 % is needed, 42.3 % is neutral, and 3.8 % is less needed. Number 12 was students need learning topics about the environment was 19.2 % is strongly needed, 46.2 % is needed, and 34.6 % is neutral. Number 13 about students need learning topics about health was 21.2 % is strongly needed, 40.4 % is needed, 36.6 % is neutral, and 3.8 % is less needed. And number 14 about students need learning topics about technology was 55.8 % is strongly needed, 38.8 % is needed, and 5.4 % is neutral.

3. Exercises

The variable of exercises consists of eight statements that can be looked at as in chart 3.



Chat 3 puts forward that the statement in number 15 about the types of exercises used in academic reading exercises is in the form of understanding reading texts were answered by respondents with an average of 30.8 % is strongly needed, 44.2 % is needed, 23.1 % is neutral, and 1.9 % is less needed. Number 16 about the types of exercises used in academic reading exercises are in the form of comprehending reading texts was 34.6 % is strongly needed, 51.9 % is needed, and 13.5 % is neutral. Number 17 about the types of exercises used in academic reading exercises are in the form of applying reading texts was 21.2 % is strongly needed, 59.6 % is needed, and 19.2 % is neutral. Number 18 about types of exercises used in academic reading exercises in the form of reading text analysis was 28.9 % is strongly needed, 59.7 % is needed, and 11.5 % is neutral. Number 19 about the types of exercises used in academic reading exercises are in the form of synthesizing reading texts was 27 % is strongly needed, 36.5 % is needed, and 36.5 % is neutral. Number 20 about types of exercises used in academic reading exercises in the form of evaluation of reading texts was 32.7 % is strongly needed, 50 % is needed, and 17.3 % is neutral. Number 21 about exercises are carried out both individually and in groups was 42.3 % is strongly needed, 44.2 % is needed, and 13.5 % is neutral. And number 22 about exercises are given on each topic was 32.7 % is strongly needed, 46.2 % is needed, 19.2 % is neutral, and 1.9 % is less needed.

4. Leaning assessment

The learning assessment variable consists of eight statements that can be realized as in chart 4.

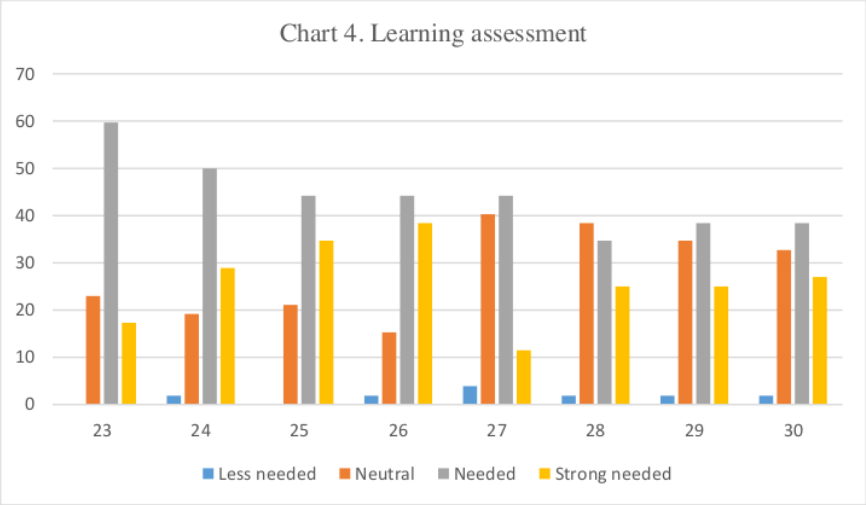


Chart 4 points out that the statements of number 23 about assessment is carried out at the end of each topic was responded by respondents with an average of 17.3 % is strongly needed, 59.6 % is needed, and 23.1 % is neutral. Number 24 about the type of assessment is given based on the material on each topic, both related to theory and reading texts was 28.9 % is strongly needed, 50 % is needed, 19.2 % is neutral, and 1.9 % is less needed. Number 25 about the assessment process is carried out individually or in groups. 26. Students understand process assessment in academic reading learning was 38.5 % is strongly needed, 44.2 % is needed, 15.4 % is neutral, and 1.9 % is less needed. Number 27 about assessment is done by summarizing the material was 11.6 % is strongly needed, 44.2 % is needed, 40.4 % is neutral, and 3.8 % is less needed. Number 28 about assessment is done by retelling was 25 % is strongly needed, 34.6 % is needed, 38.5 % is neutral, and 1.9 % is less needed. Number 29 about assessment is done by means of subjective tests was 25% is strongly needed, 38.5 % is needed, 34.6 % is neutral, and 1.9 % is less needed. And, number 30 about assessment is done by means of an objective test Syntax needs of problem-based learning models was 26.9 % is strongly needed, 38.5 % is needed, 32.7 % is neutral, and 1.9 % is less needed.

5. Syntax of problem-based learning model

The variable of syntax of problem-based learning model are twenty statements that can be appreciated as in chart 5.

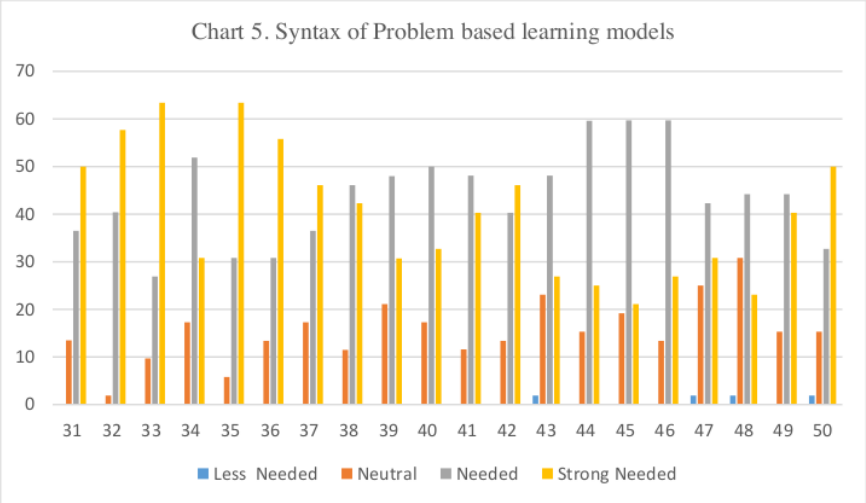


Chart 5 addresses that statement of number 31 about the teacher starts the lesson by reviewing the topic of the previous lesson was responded by respondents with an average of 50% is strongly needed, 36.5 % is needed, and 13.5 % is neutral. Number 32 about the lecturer conveys the topic to be studied was 57.7 % is strongly needed, 40.4 % is needed, and 1.9% is neutral. Number 33 about the lecturer conveys the learning objectives at the beginning of each lecture was 63.5 % is strongly needed, 26.9 % is needed, and 9.6 % is neutral. Number 34 about lecturers submit reading texts to raise problems was 30.8 % is strongly needed, 51.9 % is needed, and 17.3 % is neutral. Number 35 about lecturers motivate students to be involved in solving selected problems was 63.4 % is strongly needed, 30.8 % is needed, and 5.8 % is neutral. Number 36 about a lecturer and students design learning groups according to learning needs was 55.8 % is strongly needed, 30.8 % is needed, and 13.4 % is neutral. And, number 37 about lecturers and students divide the roles of each group member in the learning process and explain the steps for completing the task was 46.2 % is strongly needed, 36.5 % is needed, and 17.3 % is neutral.

Whereas, number 38 about lecturers formulate and explain formative assessment methods to measure the achievement of learning goals was 42.3 % is strongly needed, 46.2 % is needed, and 11.5 % is neutral. Number 39 about lecturers provide assistance to students to organize assignments related to the problems that have been selected was 30.8 % is strongly needed, 48 % is needed, and 21.2 % is neutral. Number 40 about lecturers encourage students to collect information was

32.7 % is strongly needed, 50 % is needed, and 17.3 % is neutral. Number 41 about lecturers help to design experiments that will be carried out by students was 40.4 % is strongly needed, 48.1 % is needed, and 11.5 % is neutral. Number 42 about lecturers encourage students to conduct experiments to get problem solving ideas was 46.2 % is strongly needed, 40.4 % is needed, and 13.5 % is neutral. Number 43 about lecturers provide assistance in making experimental reports to be shared with others was 26.9 % is strongly needed, 48.1 % is needed, 23.1 % is neutral, and 1.9 is less needed. And, number 44 about each group member is asked to present the results of their investigation was 25 % is strongly needed, 59.6 % is needed, and 15.4 % is neutral.

Then, number 45 was lecturers and students are asked to provide input on the results of the investigations presented was 21.1 % is strongly needed, 59.6 % is needed, and 19.2 % is neutral. Number 46 about the lecturer notes and summarizes the student's mindset as input for the next meeting was 26.9 % is strongly needed, 59.6 % is needed, and 13.5 % is neutral. Number 47 about assessment is carried out by the lecturer during the learning process related to group activities was 30.7 % is strongly needed, 42.3 % is needed, 25 % is neutral, and 1.9 is less needed. Number 48 about group evaluation via each group member was 23.1 % is strongly needed, 44.2 % is needed, 30.8 % is neutral, and 1.9 % is less needed. Number 49 was lecturers convey positive affirmations on student achievement was 40.4 % is strongly needed, 44.2 % is needed, and 15.4 % is neutral. And, number 50 about lecturers help students to reflect and evaluate the experiments or investigations that have been carried out was 50% is strongly needed, 32.7 % is needed, 15.4 % is neutral, and 1.9 % is less needed.

6. Blended learning

Blended learning variable concentrated on six statements that can be seen as in chat 6.

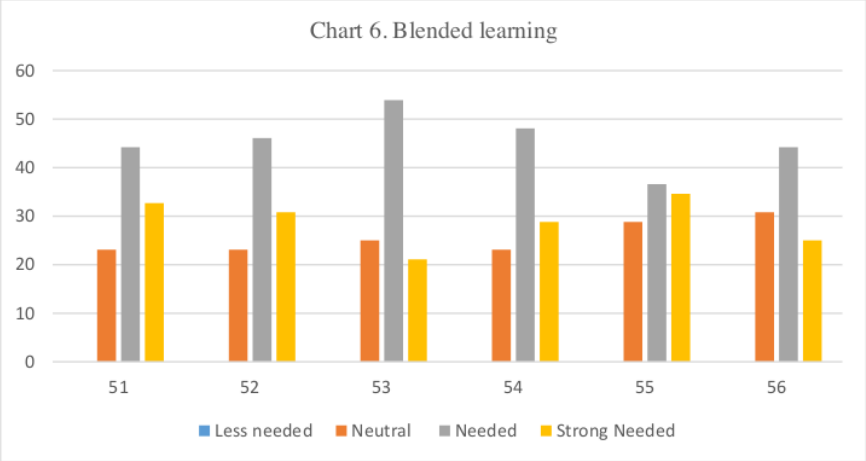


Chart 6 asserts that the statement of number 51 about the learning process is carried out by blended learning process was answered by respondents with an average of 32.7 % is strongly needed, 44.2 % is needed, and 23.1 % is neutral. Number 52 about blended learning is implemented as reinforcement was 30.8 % is strongly needed, 46.2 % is needed, and 23.1 % is neutral. Number 53 about flipped blended learning (instruction and investigation via online and presentation of results via offline) is implemented in learning was 21.2 % is strongly needed, 53.8 % is needed, and 25 % is neutral. Number 54 about blended learning increases student engagement was 28.8 % is strongly needed, 48.1 % is needed, and 23.1 % is neutral. Number 55 about blended learning inside-out (offline to during) is applied in learning was 40.4 % is strongly needed, 36.5 % is needed, and 28.8% is neutral. And, number 56 about blended learning outside-in (online to offline) is applied in learning was 25 % is strongly needed, 44.2 % is needed, and 30.8 % is neutral.

7. Social System

The social system variable focused on five statements and the results can be appeared as in chart 7.

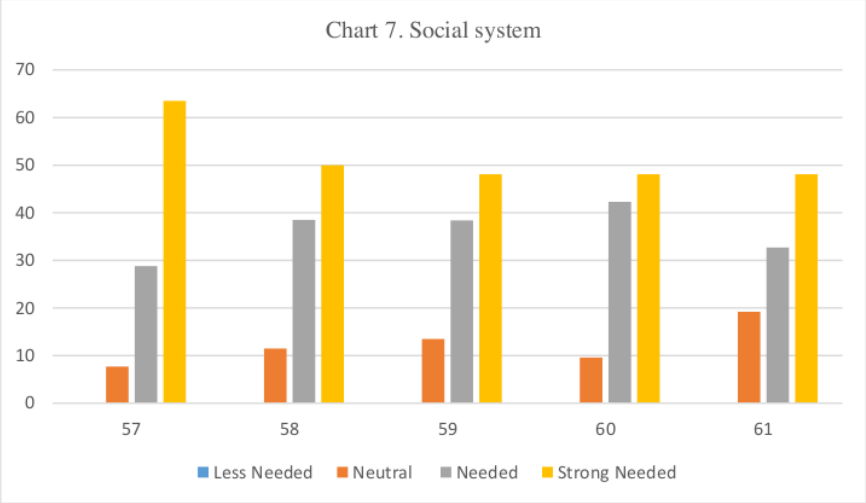


Chart 7 points out that the statement of number 57 about lecturers motivate students was answered by respondents with an average of 63.5 % is strongly needed, 28.8 % is needed, and 7.7 % is neutral. Number 58 about lecturers become facilitators in learning was 50 % is strongly needed, 38.5 % is needed, and 11.5 % is neutral. Number 59 about lecturers build instruction with students when learning takes place was 48 % is strongly needed, 38.5 % is needed, and 13.5 % is neutral. Number 60 about lecturers prepare time for students to consult was 48.1 % is strongly needed, 42.3 % is needed, and 9.6 % is neutral. And, number 61 about

lecturers make students as subjects and not objects of learning was 48.1 % is strongly needed, 32.6 % is needed, and 19.2 % is neutral.

8. Reaction System

The reaction system variable focused on three statements from the instrument and the findings can be seen as in chart 8.

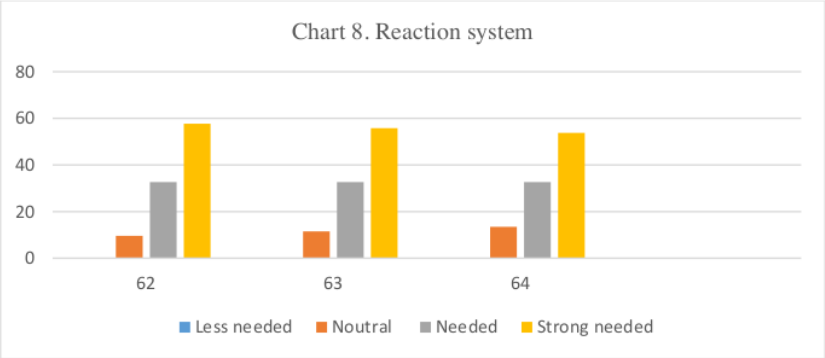


Chart 8 puts forward that the statement of number 62 about lecturers respond directly was responded with an average of 57.7 % is strongly needed, 32.7 % is needed, and 9.6 % is neutral. Number 63 about lecturers give positive appreciation to students who complete assignments on time was 55.8 % is strongly needed, 32.7 % is needed, and 11.5 % is neutral. And, number 64 about the service process is for all students regardless of their background was 53.8 % is strongly needed, 32.7 % is needed, and 13.5 % is neutral.

9. Support system

The variable of support system concentrated into three statement from the questionnaire that can be illustrated as in chart 9.

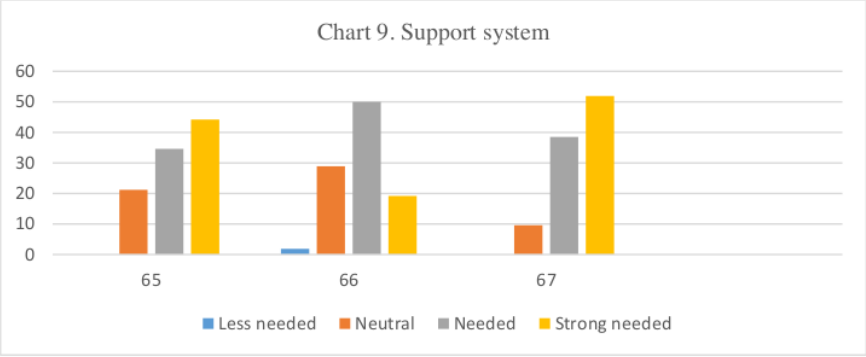


Chart 9 asserts that statement of number 65 about luquid crystal display (LCD) for use in learning was answered with an average of 44.2 % is strongly needed, 34.6 % is needed, and 21.3 % is neutral. Number 66 about materials are always prepared in

the form of power points was 19.3 % is strongly needed, 50 % is needed, 28.8 % is neutral and 1.9 % is less needed. And number 67 about lecturers provide teaching materials according to student needs was 51.9 % is strongly needed, 38.5 % is needed, and 9.6 % is neutral.

10. Learning impact

The variable of learning impact is emphasized of four statements from the questionnaire that can be illustrated as in chart 10.

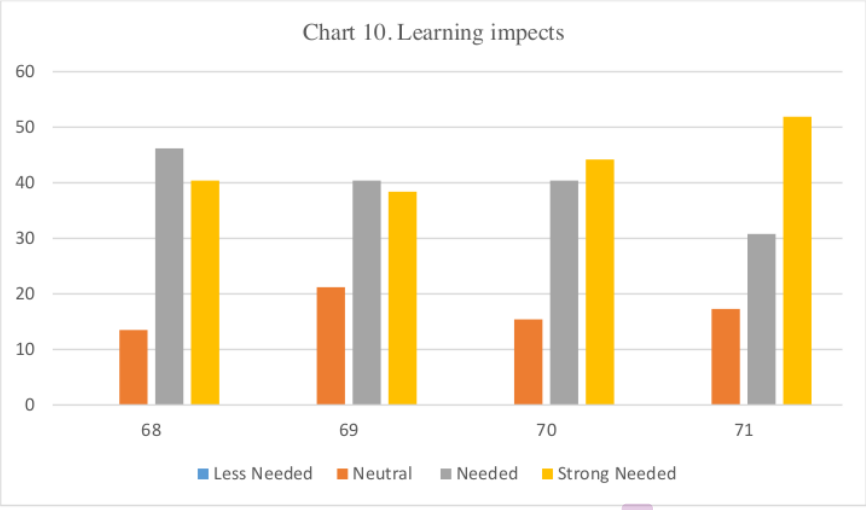


Chart 10 shows that the statements of number 68 about at the end of the lesson students understand the concept of academic reading was responded with an average of 40.4 % is strongly needed, 46.2 % is needed, and 13.5 % is neutral. Number 69 about students have problem solving skills was 38.5 % is strongly needed, 40.4 % is needed, and 21.1 % is neutral. Number 70 about students have academic reading skills was 44.2 % is strongly needed, 40.4 % is needed, and 15.4 % is neutral. And, number 71 about students have the ability to think critically to get problem solving to the problems that occur was 51.9 % is strongly needed, 30.8 % is needed, and 1.9 % is neutral.

11. Companion impacts

The variable of companion impacts is focused on six statements of the questionnaire that can be seen as in chart 11.

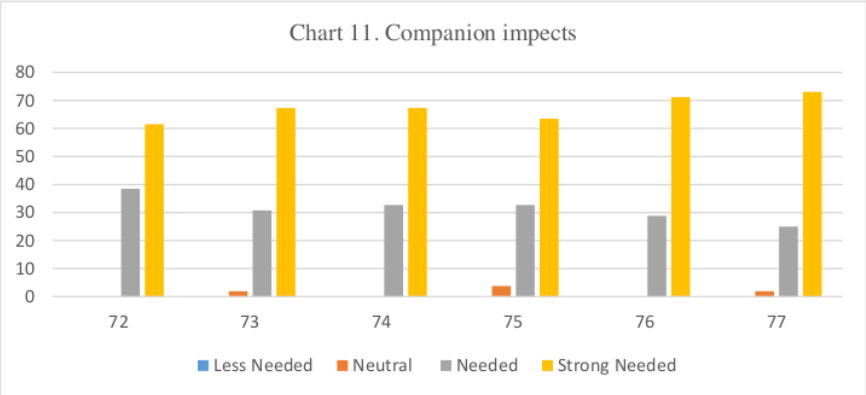


Chart 11 addresses that the statement of number 72 about students have communication skills was responded with an average of 61.5 % is strongly needed and 38.5 % is needed. Number 73 about students have collaboration skills was 67.3 % is strongly needed, 30.8 % is needed, and 1.9 % is neutral. Number 74 about students have creative abilities was 67.3 % is strongly needed and 32.7 % is needed. Number 75 about students have leadership skills in team management was 63.5 % is strongly needed, 32.7 % is needed, and 3.8 % is neutral. Number 76 about students will have the attitude to accept the opinions of others was 71.2 % is strongly needed and 28.8 % is needed. And number 77 about students are open to suggestions and criticism was 73.1 % is strongly needed, 25% is needed, and 1.9 % is neutral.

Discussion

The purpose of this study is to identify students' needs for the problem-based learning model with blended leaning of academic reading and it was found that there are eleven variables required by students, namely the learning objectives, topics, exercises, assessment, syntax of problem-based learning models, blended learning, social system, reaction system, support system, learning impact, and companion impact.

Learning objective variable is focused on four statement needed by students such understanding the concept of reading can assist students apply approaches, methods, strategies, and techniques effectively that are appropriate to their reading needs (Maher & Shehata, 2017), to develop critical thinking skill, improve the ability to comprehend English reading text, and enrich students' English vocabulary mastery. While, topic variable is concentrated to the ten topics that is required by students in learning academic reading such as language, education, politic, economic, social, culture, sport, environment, healthy, and technology. Then, variable of exercises consists of eight statements that is needed by students such as academic reading exercises are in the form of understand, comprehend, apply, analysis, synthesis, evaluation of reading texts, and given on each topic.

Leaning assessment variable consists of eight statements that is needed by students. They are assessment is carried out at the end of each topic, the type of assessment is given based on the material on each topic, both related to theory and reading texts, the assessment process is carried out individually or in groups, students understand process assessment in academic reading learning, assessment is done by summarizing the material, assessment is done by retelling, assessment is done by subjective tests, and assessment is done by means of an objective test Syntax needs of problem based learning models.

The variable of syntax of problem-based learning model are twenty statements that is needed by students, such as a lecturer starts the lesson by reviewing the topic of the previous lesson, a lecturer conveys the topic to be studied, a lecturer conveys the learning objectives at the beginning of each lecture, a lecturer submits reading texts to raise problems, a lecturer motivates students to be involved in solving selected problems, a lecturer and students design learning groups according to learning needs, a lecturer and students divide the roles of each group member in the learning process and explain the steps for completing the task, a lecturer formulates and explains formative assessment methods to measure the achievement of learning goals, a lecturer provides assistance to students to organize assignments related to the problems that have been selected, a lecturer encourages students to collect information, a lecturer helps to design experiments that will be carried out by students, a lecturer encourages students to conduct experiments to get problem solving ideas, a lecturer provides assistance in making experimental reports to be shared with others, each group member is asked to present the results of their investigation, a lecturer and students are asked to provide input on the results of the investigations presented, a lecturer notes and summarizes the student's mindset as input for the next meeting, assessment is carried out by the lecturer during the learning process related to group activities, group evaluation via each group member, a lecturer conveys positive affirmations on student achievement and a lecturer helps students to reflect and evaluate the experiments or investigations that have been carried out.

Blended learning variable concentrated on six statements that is required by students, likes learning process is carried out by blended learning process, blended learning is implemented as reinforcement, flipped blended learning (instruction and investigation via online and presentation of results via offline) is implemented in learning, blended learning increases student engagement, blended learning inside-out (offline to during) is applied in learning, and blended learning outside-in (online to offline) is applied in learning.

The social system variable focused on five statements that is needed by students such as a lecturer motivates students, a lecturer becomes facilitators in learning, a lecturer builds instruction with students when learning takes place, a lecturer prepares time for students to consult, and a lecturer makes students as subjects and not objects of learning. Whereas, reaction system variable focused on three statements that is needed by students likes a lecturer responds directly a lecturer

gives positive appreciation to students who complete assignments on time, and the service process is for all students regardless of their background. While, variable of support system concentrated into three statement, such as luquid crystal display (LCD) for use in learning, materials are always prepared in the form of power points, and a lecturer provides teaching materials according to student needs.

The learning impact variable is emphasized of four statements, such as t the end of the lesson students understand the concept of academic reading, students have problem solving skills, students have academic reading skills, and students have the ability to think critically to get problem solving to the problems that occur. Then, companion impacts variable is focused on six statements, namely students have communication skills, students have collaboration skills, students have creative abilities, students have leadership skills in team management, students will have the attitude to accept the opinions of others, and students are open to suggestions and criticism.

Conclusion

The result of the result reveled that in designing PBL model with blended learning in EFL academic reading requires eleven variables namely appropriate learning objectives; topics variations; exercises to understand, comprehend, apply, analysis, synthesis, and evaluation reading text; assessment is carried out at the end of each topic both theory and practice which is undertaken through individually or in groups with summary and retell reading text materials; syntax of problem-based learning models by review the previous topic, inform a topic, convey a topic to be discussed, give a reading text to raise problems, motivate students, make many small groups, divide the roles of each groups, formulate and explain formative assessment method, give assistance, encourage to collect information, design investigation, drive the students to perform an research to overcome the problem, assist in making research reports, asked students to present the results of their investigation, give input of the presentation, give reflection and evaluation; blended learning is implemented as reinforcement and flipped blended learning, inside-out, and inside-in are applied in learning; social system by motivate, facilitate, build instruction, prepare time to consult, make students as subject and not object of learning; reaction system by respond directly, positive appreciations, and serve regardless of background; support system by LCD, power point material, and teaching material as needed; learning impact by comprehend the concept of academic reading, problem solving, reading academic skill, and critical thinking; and companion impact by have communication, collaboration, creativity, leadership, and team management skills as well as attitude to accept the opinions of others. In addition, openness to suggestions and criticism.

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References

Afdal, H. W., Spernes, K., & Hoff, R. (2022). Academic reading as a social practice in higher education. *Higher Education*, *1*. https://doi.org/10.1007/s10734-022-00893-x

Arends, R. (2004). *Learning to Teach*. London: McGraw-Hill.

Baker, S. (2018). *Shifts in the treatment of knowledge in academic reading and writing : Adding complexity to students ' transitions between A-levels and university in the UK*. https://doi.org/10.1177/1474022217722433

Baker, S., Bangeni, B., Burke, R., Hunma, A., & Baker, S. (2019). *The invisibility of academic reading as social practice and its implications for equity in higher education : a scoping study implications for equity in higher education : a scoping study*. *4360*. https://doi.org/10.1080/07294360.2018.1540554

Castro-gil, R., & Correa, D. (2021). Transparency in previous literature reviews about blended learning in higher education. *Education and Information Technologies*, 3399–3426.

Chen, C., & Liu, Y. (2020). *The role of vocabulary breadth and depth in IELTS academic reading tests*. *32*(1), 1–27.

Desa, G., Pamela, J. H., Gorzycki, M., & Allen, D. D. (2020). Essential but Invisible : Collegiate Academic Reading Explored from the Faculty Perspective Essential but Invisible : Collegiate Academic Reading Explored from the Faculty Perspective. *College Teaching*, *68*(3), 126–137. https://doi.org/10.1080/87567555.2020.1766406

Doymus, K. (2008). Teaching Chemical Equilibrium with the Jigsaw Technique. *Research in Science Education*, *38*(2), 249–260. https://doi.org/https://doi.org/10.1007/s11165-007-9047-8.

Faqiroh, B. Z. (2020). Indonesian Journal of Curriculum Problem-Based Learning Model for Junior High School in Indonesia (2010-2019). *Indonesian Journal of Curriculum and Educational Technology Studies*, *8*(5), 42–48.

Flowerdew, L. (2012). Needs Analysis and Curriculum Development in ESP. *The Handbook of English for Specific Purposes*, 325–346. https://doi.org/10.1002/9781118339855.ch17

Halverson, L. R., & Graham, C. R. (2019). Learner Engagement in Blended Learning Environments : A Conceptual Framework. *The Internet and Higher Education*, *23*(2), 145–178. https://doi.org/10.24059/olj.v23i2.1481

Heilporn, G., Lakhal, S., & Bélisle, M. (2021). An examination of teachers ' strategies to foster student engagement in blended learning in higher education. *International Journal of Educational Technology in Higher Education*. https://doi.org/10.1186/s41239-021-00260-3

Hyland, K. (2006). *English for Academic Purposes*. London: Routledge.

Khoiriyah, A. J., Java, E., & Java, E. (2018). Problem-Based Learning : Creative Thinking Skills , Problem- Solving Skills , and Learning Outcome of Seventh

Grade. *Indonesian Journal of Biology Educati*, *4*(2), 151–160.

Kim, H. H. (2013). Needs analysis for english for specific purpose course development for engineering students in Korea. *International Journal of Multimedia and Ubiquitous Engineering*, *8*(6), 279–288. https://doi.org/10.14257/ijmue.2013.8.6.28

Kimberley, E., & Thursby, M. (2020). *Framing the text : understanding emotional barriers to academic reading*. *17*(2).

Liu, Xiaohua, & Read, J. (2020). General Skill Needs and Challenges in University Academic Reading: Voices from Undergraduates and Language Teachers. *Journal of College Reading and Learning*, *50*(2), 70–93. https://doi.org/10.1080/10790195.2020.1734885

Liu, Xu. (2021). *Primary Scinence curriculum student accptance of blended learning: structural equation modeling and visual analytics*. https://doi.org/https://doi.org/10.1007/840692-021-00206-8

López-pellisa, T., Rotger, N., & Rodríguez-Gallego, F. (2020). Collaborative writing at work : Peer feedback in a blended learning environment. *Education and Information Technologies*. https://doi.org/https://doi.org/10.1007/s10639-020-10312-2

Maguire, M., & Reynolds, A. E. (2020). *Reading to Be : The role of academic reading in emergent academic and professional student identities*. *17*(2).

Maher, A., & Shehata, K. (2017). Understanding academic reading behavior of Arab postgraduate students. *Journal of Librarianship and Information Science*. https://doi.org/10.1177/0961000617742468

Manwaring, K. C., Larsen, R., Graham, C., Brigham, H., & Halverson, L. R. (2017). Investigating student engagement in blended learning settings using experience sampling and structural equation modeling. *The Internet and Higher Education*, *35*, 21–33. https://doi.org/10.1016/j.iheduc.2017.06.002

Moallem, M., Hung, W., & Dabbagh, N. (2019). *A Short Intellectual History of Problem - Based Learning The Early History of PBL : 1963 – 1980 McMaster ' s Pioneering Program in Medical Education*. 3–24.

Muñoz, C., & Valenzuela, J. (2020). Demotivation in academic reading during teacher training. *Journal of Research in Reading*, *43*(1), 41–56. https://doi.org/10.1111/1467-9817.12288

Nurtanto, M., Fawaid, M., & Sofyan, H. (2019). Problem Based Learning (PBL) in Industry 4 . 0 : Improving Learning Quality through Character-Based Literacy Learning and Life Career Skill (LL-LCS). *Journal of Physics*, 0–10. https://doi.org/10.1088/1742-6596/1573/1/012006

Permatasari, B. D., & Info, A. (2019). The influence of problem based learning towards social science learning outcomes viewed from learning interest. *International Journal of Evaluation and Research in Education (IJERE)*, *8*(1), 39–46. https://doi.org/10.11591/ijere.v8.i1.pp39-46

Rahman, K. (2020). Perceived Use of Metacognitive Strategies by EFL Undergraduates in Academic Reading. *Voices of English Language Education Society*, *4*(1), 44–52. https://doi.org/10.29408/veles.v4i1.1975

Saputra, M. D. (2019). Developing Critical-Thinking Skills through the Collaboration of Jigsaw Model with Problem-Based Learning Model.

International Journal of Instruction, *12*(1), 1077–1094.

Sharma, A., Hoof, H. B. Van, & Ramsay, C. (2017). *The influence of time on the decisions that students make about their academic reading*. https://doi.org/10.1177/1469787417731200

Sohail, S. (2015). Academic Reading Strategies used by Leeds Metropolitan University Graduates: A Case Study. *Journal of Education and Educational Development*, *2*(2).

Strobel, J., & Barneveld, A. V. (2009). When is PBL more effective ? A meta-synthesis of meta-analyses comparing PBL to conventional classrooms. *Nterdisciplinary Journal of Problem-Based Learning*, *3*(1), 44–58. https://doi.org/https://doi.org/10.7771/15415015.

Taghizadeh, M., & Khalili, M. (2019). Engineering Students ' Academic Reading Comprehension : The Contribution of Attitude , Breadth and Depth of Vocabulary Knowledge. *Iranian Journal of English for Academic Purposes*, *8*(1), 49–66.

Vleuten, C. P. M. Van Der, & Schuwirth, L. W. T. (2019). Assessment in the context of problem - based learning. *Advances in Health Sciences Education*, *August*. https://doi.org/10.1007/s10459-019-09909-1

Yang, Z. (2020). A Case for Hybrid Learning : Using a Hybrid Model to Teach Advanced Academic Reading. *ORTESOL Journal*, *37*, 11–22.

Yapp, D., & Graaff, R. De. (2021). *Effects of reading strategy instruction in English as a second language on students ' academic reading comprehension*. https://doi.org/10.1177/1362168820985236

Zwaal, W. (2019). *Assessment for problem-based learning*. *9*(2), 77–82.

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