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Blended Learning For English Language Teaching (ELT) Classroom In Higher Education

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Abstract

To meet the requirements of the fourth industrial revolution, education plays a critical role in creating skilled and marketable human capital, so an instructional model that promotes student self-directed learning is needed. The digital era has had a major effect on English Language Teaching (ELT), allowing teachers to perform distance or combined learning. Blended learning is a learning model that focuses on promoting student individuality through the usage of various mobile technologies. Consequently, The purpose of this research is to provide information about an instructional template for a new blended learning model that uses the ADDIE model to help students develop self-directed learning. The ADDIE model is a modular framework that includes all of the required elements for creating effective ELT instruction. This study was conducted in Universitas Muhammadiyah Parepare. This paper also discusses a number of modern technologies that enable students to obtain individualized attention and new learning opportunities. As a result of this research, a new blended learning model has been developed to assist students in developing self-directed learning skills in English through the use of a variety of modern technologies.

Keywords: Self-regulated learning, ELT Classroom, Moodle, Blended Learning

INTRODUCTION

Higher education institutions are becoming more important in the production of skilled and marketable human capital in recent years. In order to encounter the strains of the globalization age, the quality of human capital has become increasingly necessary(Limbong, 2018). The theory of education 4.0 arises as a product of the IR 4.0. To satisfy the fourth IR 4.0 criterion, learning systems must be adaptable to each individual student As a result, in the education 4.0 context, learning management systems based on IR 4.0 characteristics such as digitalization, internet of people, internet of things (IoT), iCloud data, big data, and artificial intelligence must be prioritized (Afrianto, 2018). The aim of Education 4.0 is to encourage and familiarize students with technologically based tools and services (Mourtzis et al., 2018),(Sharma, 2019). It also aspires to enhance digital technological abilities. at all degrees, as well as the usage of new technology into English teaching and learning classroom (Hariharasudan & Kot, 2018). Thus, in this evolution age where human and technology are aligned to unlock new possibilities, such as renewable learning content and the creation of four core skills including reading, listening, speaking and writing. As a result, in this evolution era, where human and technological developments are aligned to unlock new possibilities, such as renewable learning content and the growth of four core skills, including problem-solving and critical thinking skill, communication, collaboration skill, and creativity, the capability to create new stuff, emerging technological advancements play a major role in bringing education 4.0 to life (Tvenge & Martinsen, 2018),(Hussin, 2018),(Hermann et al., 2016).

As the present classroom changes, teachers' behavior in English Language and Teaching (ELT) changes, and teachers must adapt their roles and obligations to get together the fourth

educational requirements (Abdul Razak et al., 2018). The teacher should incorporate more modern technology into the classroom. To make learning more enjoyable, they need to be more imaginative with their lesson planning. (Hussin, 2018). The aim of Education 4.0 is to integrate a variety of learning paths through the use of technology, with an attention on imparting life skills as well as using instructional method centered on the student's needs and activities (Jhingan, 2017). Teachers may use modern technology to develop and implement a teaching method that enables students to control their own learning. Blended learning is a method of instruction that emphasizes on the learner's autonomy and creativity in instruction through the various digital technologies application. By integrating these features, blended learning will improve efficiency, which can lead to improved language teaching outcomes. As a result, blended learning tends to be an educational approach that can be used in new language teaching to ensure that students acquire the most awareness and language mastery possible (Tawil, 2018). Courses focusing on language skills, especially grammar, are well-suited to blended learning (Isti & Dharma, 2018). The goal of this study is to promote a variety of modern technologies that enable students to receive individualized attention and new learning opportunities. The objective of this study is to produce an instructional model applying innovative technologies that can assist people. As a result of this research, a new blended learning model has been developed to help students improve their self-directed learning skills in English by incorporating a variety of modern technologies.

Literature Review

Blended Learning Environment

The supremacy of ICT in the contemporary phase of language advancement in a university is marked by the capacity to enhance conventional teaching types and methods, thus positively affecting the process of foreign language mastery holistically (Krasnova, 2015). ICT has the ability to enhance student success and alter the essence of core subject practice and pedagogy (Qasem & Viswanathappa, 2016). The advancement of the digital era has had a major effect on English Language Teaching (ELT). It enables teachers utilize mixed learning or distance learning techniques. Learning in the future will be more interactive, affecting not just the learning process but just the learners and teachers in general. (Akyuz & Yavuz, 2015). The mode of delivery of online courses has a major effect on student learning and interaction (Chen et al., 2019). Blended learning is an educational style that allows students to learn on their own.

Blended Learning is an educational model that utilizes a range of different technology to help students achieve independence in their learning (Oproiu, 2015a). The internet provides new tools for teaching, learning, and assessment. The blended learning can successfully develop students' self-learning, realistic implementation, and creativity skills (Tong et al., 2020). The utilization of new information technologies are a necessity, constrained on the one hand by scientific and technological progress and on the other hand by societal needs (Matukhin & Zhitkova, 2015),(Mofawiz Alfawaz & Ibrahim Mohammed Ibrahim, 2018). Blended environments are the best choice for realistic learning in order to meet the requirements of IR 4.0 (Shivam & Singh, 2015). This teaching method is becoming increasingly popular in schools all over the world. (Nazarenko, 2015). These learning practices may be incorporated into cyber-physical production processes, according to the fourth sector. (1) Unsynchronized social learning in virtual classrooms, (2) bridging formal and informal learning paradigms, (3) systematic utilization of real-time data analysis and visualization, (4) asynchronous, (5) adaptive learning and individually tailored learning direction, speed, and assessment, and (6) active and continuous career planning and management by and for individuals. (7) Using learning factories to facilitate coordinated social instructions (Tvenge & Martinsen, 2018).

Blended learning is a proactive and comprehensive attitude to combining times and forms of learning, incorporating the best elements of traditional meeting (face-to-face) and experiences in online classoom for each discipline while utilizing effective ICTs, such as computers and tablets. (1) activities and formats for face-to-face and online learning, (2) traditional timetabled classes in various modes, such as weekday, intense, external, trimester, and sabbatical learning, (3) traditional timetabled classes in various modes, such as weekday, intense, external, trimester (3) well-established technologies include lecture capture and/or social media and emerging technologies, (4) simulations, community activities, site-based learning, and practical(Saliba et al., 2013).

Several studies on blended learning have been conducted, with the findings indicating that it promotes positive attitudes toward the learning process, such as the affordances of blended learning (Owston, 2018), EFL instructors' perceptions on blended learning (Kofar, 2016b), ICT in blended learning model[19], EFL learners' perspective toward blended learning (Bader Al Bataineh et al., 2019), and the impact of blended learning approach in learning English (Hamouda, 2018) and the blended learning effect on EFL (Isti & Dharma, 2018),(Bader Al Bataineh et al., 2019). The previous research results indicates that EFL teachers have a positive mindset towards the integration of online learning and direct meeting in teaching grammar and writing(Kofar, 2016b),(Bader Al Bataineh et al., 2019),(Kofar, 2016a). Students can participate in the online portion of their course whenever and wherever they want with blended learning (Owston, 2018). A blended teaching approach will create a more favorable environment for EFL students to improve their writing skills (Hamouda, 2018).

They did, however, discover a slew of roadblocks to its introduction. It offers a mechanism and a framework for self-evaluation that addresses issues of sustainability and scalability. (Ping, 2017). Technology must have an impact on efficiency, dependability, and navigational ease. Teachers, on the other hand, use technology to interact with and involve their students. The technology platform is just as critical as the language itself when it comes to language learning. In addition, there are four major obstacles to overcome. Incorporating versatility, encouraging engagement, promoting students' learning activities, as well as cultivating an affective learning setting are all aspects to consider when developing a blended learning environment(Boelens et al., 2017). These courses provided online assistance for managing students' self-study work, such as (1) successful presentation, (2) scholarly listening, (3) argumentative writing, (3) debating, and (4) technical translation[(Krasnova, 2015). The degree which students are willing to put in their time in their classes simulated study environment using all of the LMS's tools defines the efficacy of a blended learning model implementation. Of course, a diligent student's attitude toward completing an assignment has a huge effect on the successful use of ICT in eLearning(Hubackova & Semradova, 2016).

The utilization of blended learning technology offers a variety of benefits, including (1) bringing a constructive and enjoyable learning atmosphere, (2) promoting the learner's ability to learn independently and achieve academic success, and (3) allowing students to learn at any time. As a consequence, having a basic understanding of how ICT is used is required in order to build blended learning. In addition, begin by researching the criteria for designing blended learning(Badaruddin et al., 2019). Technology will not only increase efficiency in the Information and Communication Technology (ICT) era, but it will also bind students to the outside world (Shivam & Singh, 2015). It indicates that the teachers were enthusiastic about incorporating ICT into their classrooms. Even though, the term "technology" has been applied to define a combination of traditional instruction and facilitating technologies, (Broadbent et al., 2020). Traditional campus-based classes, as well as hybrid and distance learning programs, have benefited from digital technologies (Harrison, 2019). By providing advancement and

distinction of the learning experience while incorporating the standards of transparency, flexibility, and accessibility, blended learning ensures objectivity in knowledge assessment(Matukhin & Zhitkova, 2015). However, in developing materials, it is very challenging and needs many time to prepare and evaluate it(Klimova, 2015).

The Essential of Self-regulated learning in ELT

In general, university student has strong self-regulated learning strategies for blended teaching (Ting & Chao, 2013). SRL encompasses theories and research on how learners make decisions about learning, the factors that influence these decisions, how frequently and easily learners make decisions, and how these elements relate to other learning characteristics like motivation and achievement(Winne, 2015). Some experts have studied related to the student's self-regulated learning (SRL, with findings indicating that self-regulated learners apply a variety of instructional strategies to achieve their goals. (Broadbent et al., 2020). In college teaching and learning contexts, Web 2.0 technologies presents many social software tools providing innovation, particularly in terms of supporting student self-regulation(Kitsantas & Dabbagh, 2009). Self-regulated learning as a variable that aids in the understanding of how learning happens in work-related training, as well as the development of tools that allow organizations to measure and promote self-regulated learning among their employees(Winne, 2015). Self-regulated learning facilitates the student regarding how to become masters of independent learnings. The self-directed process by which learners transform their mental abilities into task-related skills in a variety of areas of functioning is known as self-regulation. (Zimmerman, 2015). It is neither a mental nor a physical ability. In general, according to the findings university students have good self-regulated learning strategies for blended instruction, (Ting & Chao, 2013).

Blended Learning Model: Moodle as a Platform

Learning management systems (LMS) are evolving into intelligent systems that are constantly learning and improving, have a high level of adaptability to changing environments, improved resource efficiency, and intelligent human-technology combinations that enable better collaboration among learners, tutors, and students. (Tvenge & Martinsen, 2018),(Chourishi, 2015). LMS software can help a company's learning system run more efficiently while also providing a number of other benefits, such as (1) the ability to easily adapt and reuse materials over time, (2) curriculum creators will have more options in terms of delivery method, material design, and evaluation techniques, as well as (3) creating scale economies that diminish the cost of expanding and upholding the content that was previously outsourced to third parties.(Subramanian et al., 2014). Moodle-based Learning Management System (LMS) platform enables teachers to be creative in producing high-quality online learning for a variety of purposes, including regular or irregular learning, blended learning or e-learning, and both initial and ongoing training. (Chourishi, 2015),(Oproiu, 2015b). The educational approach serves as an English Learning and Teaching platform (Arham & Akrab, 2019). Moodle becomes a useful tool in a blended learning setting, encourages and strengthens collaboration between educators and pupils in their common goal of improving academic performance(A. Gildin, 2013). The students thought the Moodle-based instruction was a good instructional tool. It help the students understanding the passages they had read in written English(Chang & Lan, 2019). With the following functionalities or affordances, the Moodle platform provides complete online system, namely; a) In-service teacher with internet access could communicate directly with the students and ask for regarding content of subject matter content, didactical abilities, or tasks or exercises; b) In-service teachers could participate in asynchronous chat

sessions with other students and facilitators without having to be present physically on the discussion forum at the same time; c) In-service teachers could participate in synchronous chat sessions with other students and facilitators without having to be physically present in the chat room at the same time d) In-service teachers could submit their assignments online and obtain feedback from facilitators by reverse communication; and e) In- service, Moodle could be accessed by the teachers via the internet, either through their own home connections, second and third generation cell phones, internet cafes, school computer lab facilities, or any other outlets available to them.(Ndlovu & Mostert, 2014b)

Moodle has a space that is called as Wiki. It provides a space for the students that unable the student work together to complete collaborative activities. It's great for group work and can be used in seminar or project activities. The following are some of the benefits of utilizing this platform for educational purposes: (1) Due to the virtual classes created, teaching staff can communicate more easily with students who applied for the course. (2) It could serve as a place where courses, laboratory and seminar topics, and It is possible to post the bibliography that is required. (3) A virtual secretariat (a place where the data of students can be easily accessed) could be created. (4) It uses online testing to assess knowledge and allow users to assess themselves. (5) It facilitates effective communication and socialization between trainees and teaching staff through the use of a chat or forum. All users of Moodle platform can communicate with teaching staff individually, they can accomplish, and they can discuss about the topic or issues (Oproiu, 2015b). The use of ICT in education, such as e-learning through Moodle, allows for greater educational effectiveness. E-learning allows students, tutors, and learners to collaborate more effectively. E-learning can improve accessibility, usability, and student collaboration, as well as student and teacher motivation(Chourishi, 2015). The internet creates new opportunities for teaching, learning, and assessment (Oproiu, 2015a). Learners were able to connect virtually with one another and share knowledge, discussions, ideas, and experiences as part of a community of adult learners using the Moodle platform. They were also able to collaborate with their lecturers in order to obtain a good understanding of topics or concepts that they didn't fully comprehend with positive feedback from students and a successful adoption of Moodle by teachers(Ndlovu & Mostert, 2014a),(Goyal & Tambe, 2015).

METHOD

Research Design

This study applied Research and Development (R&D) using ADDIE model. ADDIE is one of the learning design models that use a systematic approach to learning, select after careful concern of the fact that it was developed in a systematic manner and is based on learning design theoretical foundations. This model has structured, programmed and systematic activities sequences so that it can identify and solve problems relating to learning resources, students' needs and characteristics (Allen, 2006).This model consists of five phases, namely: (1) analyze, (2) design, (3) development, (4) implementation, and (5) evaluation. Visually the ADDIE Model steps can be seen in Figure 1.

Fig.1. Addie Model (Allen, 2006)

1. *Analysis phase.* This step aims to identify the instructional problem, learning objective, learning environment, and the student's characteristics and needs related to their knowledge, attitudes and skills. At this step, several activities done including developing learning outlines, learning places and technological tools, identify and instructional resource identification and research, and delivery and assessment strategies are all things to consider.
2. Design phase. This step aims to produce initial draft of blended learning model product and learning documents. The design phase covers various steps regarding (1) storyboard the design, (2) plan and conducts test using prototypes, (3) recognize the network capacity, (4) develop online learning spaces and (5) modify the technology options.
3. Development phase. This step is done based on the result of analysis and design step. The activities of this step covers (1) decide whether to insource or outsource tasks, (2) conduct the test and (2) confirm licensing, copyright, and accessibility.
4. Implementation phase. This step is implementing the plan into action. The activities at the step consist of (1) prepare educators to educate, (2) provide tools to the learners and (3) conduct delivery and assessment.
5. Evaluation phase. At this step, several activities is done including (1) collect and assess the data and (2) share the results with stakeholders.

Participant and Data Source

This research was conducted at Universitas Muhammdiayah Parepare ranging for eight months. This study gathered both quantitative and qualitative data. These data provide information or are used to make decisions regarding a description of the validity, practicality, and effectiveness of the learning model being developed. The instrument of the research used is observation sheet to evaluate the implementation of Moodle-based blended learning model. It includes:

1. The Implementation of Moodle-based blended learning Model. This is intended to know what the product fulfill the criteria of practicability. The implementation of instruction referred to four aspects covering (1) syntax, (2) social system, (3) reaction of the implementation, and (4) supporting system. The indicators of implementation are divided into three categories, namely (a) full- implemented, (b) half-implemented, and (c) not implemented.

2. The teacher capability in managing the instruction. This is intended to gain the data regarding the teacher ability in managing the instruction. There are three aspects including (a) syntax, (b) suitability between lesson plan and its instruction, and (c) classroom atmosphere. The categories of evaluation consists of very good (5), good (4), enough (3), poor (2) and very poor (1).
3. The student's activities. This is used to observe the students' activities during learning process. The student's activities covers their participation or attention on learning activities, such as paying attention the teacher explanation or doing activities not relevant to learning activities. In addition, the researcher uses questionnaire to know the student's response to the instruction

RESULTS AND DISCUSSION

This research aims to explore the result of blended learning model implementation at Universitas Muhammadiyah Parepare including the practicability and effectiveness of blended learning model. Development design of Moodle-blended Learning for ELT has followed the five step of ADDIE Model. The initial step of this research is an initial investigation that is carried out as an attempt to determine the initial conditions that occur in research subjects. Furthermore, the design step to produce the model.

The implementation of product based on social system component

Based on the result of observation on the implementation of Moodle-Based Blended Learning model, it can be stated that in the 2 (two) initial meetings the aspects that were not implemented, namely group cooperation and student-student, lecturer-student group collaboration survived the learning process. This can be seen in table 1.

Table 1. Results of Observation of the Implementation of blended learning model based on social system components

No.	Observed Aspects	Validator			$\bar{X}$	Criteria
		1	2	3		
1.	Cooperation among students	2.00	2.00	1.00	1.67	Yes
2.	Cooperation between lecturers and students	1.00	1.00	1.00	1.00	No
3.	Cooperation amomg groups	1.00	2.00	2.00	1.67	Yes
4.	Freedom of expression	2.00	2.00	2.00	2.00	Yes
	Average	1.50	1.75	1.50	1.58	Yes

The Implementation of Product Based on the Reaction Principle Components

The results of observations on the implementation of the reaction principle components during the trial are presented in Table 3. Based on this table, it can be observed that the aspect of the reaction principle that is not implemented is that the lecturer does not provide adequate learning resources to students. The teacher gives very good reaction on providing assistance ih the form of guidance to individuals and groups.

Table 2. Results of Observation of the Implementation of the Reaction Principle Components

No.	Observed Aspects	Validator			$\bar{X}$	Criteria
		1	2	3		
1.	Teacher creates an atmosphere for learning group	2.00	2.00	1.00	1.67	Yes
2.	Teacher provides adequate learning resources	1.00	1.00	1.00	1.00	No
3.	The teacher directs students to always be on	1.00	2.00	2.00	1.67	Yes

	duty					
4.	Teacher provides assistance in the form of guidance to individuals and groups	2.00	2.00	2.00	2.00	Yes
5.	Teacher provides feedback	2.00	2.00	1.00	1.67	Yes
	Average	1.50	1.75	1.50	1.58	Yes

The Implementation of the Product based on Supporting System Components

Based on the result of implementation of blended learning model based on supporting system components, it can be seen that the implementation of blended learning comes upon the problem on access speed and easy to access e-learning. The table 3 indicates that some supporting system components has been well-done by the teacher, such as lesson plan, manual book for blended learning model with Moodle platform.

Table 3. Results of Observation based on Supporting System Components

No.	Observed aspects	Validator			$\bar{X}$	criteria
		1	2	3		
1.	Lesson Plan	2.00	2.00	2.00	2.00	Yes
2.	Manual book of blended learning model	2.00	2.00	2.00	2.00	Yes
3.	Instructional Media	2.00	2.00	2.00	2.00	Yes
4.	Worksheet	2.00	2.00	2.00	2.00	Yes
5.	Evaluation Instrument	2.00	2.00	2.00	2.00	Yes
6.	Available Internet	1.00	2.00	2.00	1.67	Yes
7.	Access speed	1.00	1.00	1.00	1.00	No
8.	Easy to access e-learning	1.00	1.00	1.00	1.00	No
	Mean score	1.63	1.75	1.75	1.71	Yes

The Ability of the Teacher in Managing the Instruction

Instructional management is defined as an effort to regulate, control, and manage instructional activities based on teaching concepts and principles in order to achieve teaching goals in a more effective, efficient, and productive manner. When it comes to classroom learning activities, a teacher's ability to master the class is frequently lacking, resulting in the failure to meet educational objectives. An educator's class mastery consists of two main activities: managing humans and managing the physical environment. Managing humans necessitates an educator's ability to effectively manage all of his students, whereas managing physically necessitates an educator's ability to effectively manage all of his students. The lecturer's ability to manage the instruction is one indicator of the practicality of the blended learning model. Table 4 summarizes the findings of observations on the teacher's ability to manage the classroom.

Table 4. The result of observation on the teacher ability to manage the instruction

No.	Observed Aspects	$\bar{X}$	Criteria
I	Preliminary activities	3.92	Very good
1	Preparing and motivating student to learn	4.00	Very good
2	Delivering learning objectives and material coverage	4.00	Very good
3	Setting up pretest on-line	4.00	Very good
4	Divide groups heterogeneously	3.67	Very good
II	Core activities	3.67	Very good
A	Classical Syntax		
5	Phase 1: Watching learning videos from youtube (Observing)	4.00	Very good

6	Phase 2: Tells his understanding of the learning video and formulates problems (Asking)	3.00	Good
7	Phase 3: Accessing subject matter from various learning sources (books, e-books, websites, YouTube, etc.) (exploring)	4.00	Very good
8	Phase 4: Conducting an experiment based on a worksheet (Exploring)	3.00	Good
9	Phase 5: Collect and analyze experimental data (Associate)	4.00	Very good
10	Phase 6: Presenting the results of the experiment (communicating)	4.00	Very good
B	E-learning syntax		
11	Phase 7: Choosing a learning topic & listening to the learning objectives	4.00	Very good
12	Phase 8: Studying material through files (documents, videos & presentations)	4.00	Very good
13	Phase 9: Deepening the material through on-line discussions (forums, chatting & streaming)	3.00	Good
14	Phase 10: Experiment with a worksheet using virtual Classroom	3.00	Good
15	Phase 11: Uploading the assignment (trial report)	4.00	Very good
16	Phase 12: Doing tests & seeing grades	4.00	Very good
III	Closing Activities	3.50	Good
17	Ability to emphasize important things / essence related to learning	3.00	Good
18	Ability to submit the title of the next sub material / give homework to students / Closing of the lesson	4.00	Very good
IV	Compliance with RPS	4.00	Very good
19	Learning activities according to the allocation of time	4.00	Very good
20	The learning stages are in accordance with the RPS	4.00	Very good
	Average	3.77	Very good

Based on the table 5, it can be concluded that there are 14 (fourteen) aspects from 20 aspect the teacher manage the instruction with very good criteria and 6 (six) aspects with good criteria. Meanwhile, the effectiveness of the blended learning model is shown by student activities in learning and students' responses to learning.

Students' activities in learning

The results of the analysis of student activities in learning process using the blended learning model are shown in Table 5.

Table 5. Results of Student Activities in Learning

No.	Student Activities	Meeting to-					Ẍ	%
		1	2	3	4	5		
	Classical							
1	Tidy up the class, give greetings and listen to the benefits of the material to be studied	35	35	35	35	35	35	100
2	Read and understand learning objectives & material coverage	35	35	35	35	35	35	100
3	Pretest	35	35	35	35	35	35	100
4	In groups according to the direction of the lecturer	35	35	35	35	35	35	100
5	Observe and tell his understanding of the learning video	35	35	35	35	35	35	100
	Watch learning videos	35	35	35	35	35	35	100
	Tells his understanding	1	2	3	5	7	4	24
	Formulate a problem	2	3	4	4	4	3	23

7	Study the material through:							
	Tutorial video	35	35	35	35	35	35	100
	Presentation	35	35	35	35	35	35	100
	Package Book	35	35	35	35	35	35	100
	e-book	6	6	6	6	6	6	40
8	Deepen the material through group discussions							
	Asking the Lecturer	2	3	5	4	4	4	24
	Ask friends	1	5	6	5	5	4	29
	Answer the question	1	3	5	7	9	5	33
	Respond / comment	1	3	5	7	9	5	33
9	Conduct an experiment based on a worksheet	35	35	35	35	35	35	100
10	Collect and analyze experimental data	35	35	35	35	35	35	100
11	Presenting the results of learning (experiment)	35	35	35	35	35	35	100
12	Listening to the form of assignment	35	35	35	35	35	35	100
13	Listening to the lesson plan for the next meeting	35	35	35	35	35	35	100
	E-Learning							
14	Access the website & login to the e-learning program	35	35	35	35	35	35	100
15	Choosing a learning topic & Listening to the learning objectives	35	35	35	35	35	35	100
16	Study material through files	35	35	35	35	35	35	
	Download document files	35	35	35	35	35	35	100
	Download video files	35	35	35	35	35	35	100
	Download the presentation file	35	35	35	35	35	35	100
17	Deepen the material through on-line discussion							
	Discussion through forums	4	6	5	4	15	7	45
	Discussion through chat	8	7	8	9	9	8	55
	Discussion via streaming	35	35	35	35	35	35	100
18	Perform experiments according to the worksheet using virtual classroom							
	Download the worksheet	5	5	5	5	5	5	33
	Download virtual programs	5	5	5	5	5	5	33
	Uploading assignment (experiment report)	5	5	5	5	5	5	33
21	Doing the Post test	35	35	35	35	35	35	100
22	Log out of the program	35	35	35	35	35	35	100
		10	11	11	11	12	11	74

Based on the data in the table, it was found that in general students follow the learning steps in accordance with the syntax of the blended learning model. In addition, there was an increase in discussion activities both individually and in groups, collection of assignments, and the use of various learning resources. Based on the data in the table, it was found that students generally felt happy about learning activities using the blended learning model, the worksheets used, the learning atmosphere both face-to-face and e-learning, and the way the lecturer taught.

Most of the students responded that learning activities using the blended learning model were new. Students have a great interest in participating in learning activities with a blended learning model; this can be seen from the responses given by students. Students clearly understand the guidelines for the blended learning model, worksheets, competency tests for learning outcomes, and how lecturers teach. In addition, students are interested in the appearance of the blended learning model, especially Moodle-based e-learning media. Student comments on learning vary, but generally provide constructive comments on the implementation of learning. Most of the students commented on the learning atmosphere, especially e-learning. Based on the description of the student's response to learning using the blended learning model, it was found that students gave a positive response. Thus, the blended learning model meets the effectiveness criteria according to student responses.

Discussion

The effectiveness of Moodle-based blended learning model is determined by three indicators, namely the competence of students' learning outcomes, students' activities in learning, and students' responses to Moodle-blended learning model. The results of implementing Moodle-based blended learning indicate that teachers become more creative when it comes to producing high-quality online learning for a variety of purposes. It allows students, tutors, and learners to collaborate more effectively (Chourishi, 2015; Oproiu, 2015b). This model ensures the teacher to prepare and motivate student to learn as well as improve accessibility, usability, and student collaboration, (Chourishi, 2015). The internet creates new opportunities for teaching, learning, and assessment (Oproiu, 2015a). Learners were able to connect virtually with one another and share knowledge, discussions, ideas, and experiences as part of a community of adult learners using the Moodle platform.

They were also able to collaborate with their lecturers in order to obtain a good understanding of topics or concepts that they didn't fully comprehend with positive feedback from students and a successful adoption of Moodle by teachers(Ndlovu & Mostert, 2014a),(Goyal & Tambe, 2015). As a result, blended learning tends to be an educational approach that can be used in new language teaching to ensure that students acquire the most awareness and language mastery possible (Tawil, 2018). The internet provides new tools for teaching, learning, and assessment. Another finding from this study is that in general active learners follow the learning steps in accordance with the Moodle-based blended learning model. The blended learning can successfully develop students' self-learning, realistic implementation, and creativity skills (Tong et al., 2020). The Moodle-based blended learning model encourages the teacher to create atmosphere for group for leaning and build cooperation among students and groups (Tvenge & Martinsen, 2018),(Chourishi, 2015).

However, this model cannot build collaboration between teacher and students. Moodle could be accessed by the teachers via the internet, either through their own home connections, second and third generation cell phones, internet cafes, school computer lab facilities, or any other outlets available to them.(Ndlovu & Mostert, 2014b). Based on the description of the student's response to learning using the blended learning model, it was found that students gave a positive response. This is suitable with learning characteristics like motivation and achievement(Winne, 2015). Some experts have studied related to the student’s self-regulated learning (SRL, with findings indicating that self-regulated learners use a variety of learning strategies to achieve their goals. (Broadbent et al. 2020). All users of Moodle platform can communicate with teaching staff individually, they can accomplish, and they can discuss about the topic or issues (Oproiu, 2015b). In addition, the description of the student's response to learning using the blended learning model, it was found that students gave a positive response.

Thus, the blended learning model meets the effectiveness criteria according to student responses.

CONCLUSION

The result of the research indicates that the product of blended learning model for ELT was developed based on ADDIE model consisting of the five steps including analysis, design, development, implementation, and evaluation. Based on the implementation of Moodle-based blended learning, it can be known that this model is able to build the students self-regulated learning, interest and motivation. The student's response indicates a positive response that the Moodle-based blended learning model meets the effectiveness criteria.

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