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Using podcast for EFL students in language learning

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One of the popular products of technology created to support language learning is podcast. As a digital recording, podcast can be used to support English language learning, specifically on the listening skill. This study reviews the effects of using podcast in supporting language learning. The aim of this study is to introduce podcast as a tool for developing language skill. Podcast as a tool has the power to motivate students in learning English. This study reviewed 20 articles published around 2020-2010 to find the effects of using podcast in teaching English to EFL students. The result of this study showed that podcast can increase language ability, especially the listening skill. Furthermore, podcast can motivate students in learning language. Teachers are recommended to use podcast as an interesting technological tool to support language learning for Indonesian students. The students confirmed that podcast is fascinating when it is used in the learning of listening skill. Podcast is a potential choice as an English learning support and it allows teachers to incorporate technology in teaching. It is important to note that the intention is not to replace teacher's presence with podcast. Therefore, it is suggested that in using podcast teachers should provide proper guidance for their students on how get its full potential.

Keywords: English learning, EFL, Podcast

INTRODUCTION

English language is one of the subjects that Indonesian students learn in school. As stated by Sodik and Wijaya (2013), English is a mandatory major in Indonesia. As a core subject, English classes are equipped with tests and examination. There are different types of examination, such as national or final-examination, and mid-semester examination. English examinations are commonly divided into four skills; listening, writing, reading and speaking skills. Each school might employ different examination models. Mukarrama et al. (2015) stated that there are four skills that students learn in English as the second or foreign language, namely; listening, reading, speaking and writing. Meanwhile, according to Asmawati (2017) listening skill poses as a big challenge for Indonesians students because they are hardly exposed to native voice. In addition, Indonesian schools prefer to use teacher's voice to assist students in learning English listening skill rather than using native speakers' voice.

As one of the most important skills in second language acquisition or foreign language, according to Ranukadevi (2014), listening has a significant part in English, since it is one of the four main strengths of language development. While other abilities, such as reading, communicating and writing, are important to the growth of language skills, listening leads mainly to language competence. Listening aids us to know our environment and it is one of term in successful communication Gilakjani et al. (2019).

Listening needs more efforts to attention and concentration to comprehend the material that included knowing dialogue and monologue text.

Listening is a central of learning because hearing a sound process is a skill that the students achieve an effective communication and great academic achievement among learners (Mohamed et al., 2018). According to Underwood (1989), listening means "the activity of paying attention to and trying to get meaning from something what we hear" (p.36). In addition, Listening is a process to identify, understand what speakers are saying, and the listeners are able to repeat the sound of what they heard (Hamouda, 2013).

In the real contexts, the reality of teaching listening is still far from the expectation. Listening is considered a big challenge for learners as they often face difficulties in understanding the meaning or the purpose of the sound. There are some reasons why students face difficulties in the listening aspect. Firstly, English is a foreign language which is hardly used by students in their daily life. Listening materials also mostly use different accents, different idioms, and uncommon vocabulary. Another crucial factor is that students are used to listen to non-native speakers in class and are forced to understand a listening test given in the native voice. Moreover, the length and speed of the listening materials and the lack of concentration influence how students understand and take the information Bingol et al. (2014) . Those factors make it difficult for students to understand and obtain information. Based on the author's interview with 20 Indonesians' students in Sidoarjo, the students claimed that while they hardly listen to authentic speakers, they have to listen to sets of questions spoken by native speakers, such as in TOEFL test or National Examination. Moreover, Lie (2007) in her investigation found a conclusion that the greatest constraint of the EFL listening in Indonesia is contributed by a low exposure to the target language. Students consider it difficult to understand and get the idea of the topic, and they feel unprepared when they have to do test on listening skill. In other words, listening becomes a neglected skill in the field of teaching English as a foreign language.

To restrain this case, there are several media that teacher can use in language learning especially for listening skill. In addition, technology as media has a role to be not replaced the traditional education system that involves teachers, schools, and parents, but it supports teaching to be easier in variety tools (Retnawati, 2019). The teacher can use podcast for listening. Podcast is an audio publishing to the internet, it is defined as sources academic field and has several kinds of material for learning (Asmawati, 2017). Podcast is considered as a new innovation for building up students' listening and talking abilities (SZE, 2006, p. 127). Podcast has some kind of contents, it can be audio, video, and image materials (Rosell-Aguilar, 2007).

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reasons why students face difficulties in the listening aspect. Firstly, English is a foreign language which is hardly used by students in their daily life. Listening materials also mostly use different accents, different idioms, and uncommon vocabulary. Another crucial factor is that students are used to listen to non-native speakers in class and are forced to understand a listening test given in the native voice. Moreover, the length and speed of the listening materials and the lack of concentration influence how students understand and take the information Bingol et al. (2014) . Those factors make it difficult for students to understand and obtain information. Based on the author's interview with 20 Indonesians' students in Sidoarjo, the students claimed that while they hardly listen to authentic speakers, they have to listen to sets of questions spoken by native speakers, such as in TOEFL test or National Examination. Moreover, Lie (2007) in her investigation found a conclusion that the greatest constraint of the EFL listening in Indonesia is contributed by a low exposure to the target language. Students consider it difficult to understand and get the idea of the topic, and they feel unprepared when they have to do test on listening skill. In other words, listening becomes a neglected skill in the field of teaching English as a foreign language.

To overcome this case, there are several media that teachers can use as supports for language learning especially for listening skill. In addition, technology as media allows the roles of traditional education system that involves teachers, schools, and parents to be maintained while it enables interactive learning supported by various learning tools Retnawati (2019) . Teachers can use podcast for listening activities. Podcast is an audio recording which is published on the internet and it is defined as a source of learning Asmawati (2017) . Podcast is considered as a new innovation for building students' listening and speaking abilities (SZE, 2006, p. 127). Podcast has different forms of content; it can be in the form of audio, video, and image materials Rosell-Aguilar (2007).

Nowadays, podcast is used by radio, television or social media to share interesting information to their listeners Scutter et al. (2010) . Podcast as learning materials are categorized into two groups. The first is authentic contents from native speakers which is not intended for learning. These types of podcast are usually under the themes such as sport or television system. The second is podcast with learning content which is specifically designed for learning. For this type of podcast, the materials are created for designated students. A good example for this is podcast as the material which is given from the teacher for learning Fernandez et al. (2009).

Using podcast has benefit for both the students and the teachers. The obvious benefit of podcast for students is that podcast offers up-to-date content and authentic native voices which are good for listening practice Kohler et al. (2010) . Furthermore, podcast is easy to find and download. Students can access podcast everywhere and anytime they want. According to Ducate and Lomicka (2009) , podcast can train students to practice pronunciation. In addition, Nataatmadja and Dyson (2008) & Stanley (2006) proposed that podcast is handy to use

in learning. For teachers, the benefit of podcast first and foremost is that it aids teachers in teaching their materials, especially for listening skill. By using podcast, teachers can support the students in building self-confidence, and they can make the learning situation enjoyable. Student's self-confidence may improve because they are able to understand the rhetoric of a particular topic as a result of listening repetition. Hasan (2013) also added that podcast can be used as a support tool in teaching in EFL classrooms.

Moreover, Fernandez et al. (2009) said that podcast increases connection between teachers and students. Using podcast on learning process allows teachers to alternate their teaching approaches and it allows students to feel included and belonging to the learning community Palenque (2016) . Using resources with authentic native speakers, such as podcast, is not defined as a pedagogical approach, but it provides an authentic language context with native speakers who are fluent in their spoken language. Using podcast in test preparation is an option that teachers can use to help the students in learning the English subject. Podcast presents the combination of e-learning with audio, video, and text files, which can instantly replace language laboratories, compact disc, DVD, or radio cassettes, which are usually used in ordinary language classrooms. It makes it easier for the students to be invested in their language learning. Furthermore, it does not only make students able to explore many language inputs, podcast can also stimulate them into the target language because podcast brings authentic English experience to occur in the classroom.

Podcast also encourages students to manage their focus on the task, recognize new vocabulary, memorize the sounds of the spoken words, and boost their linguistic competence in order to be a more effective listener. To use a podcast, teacher should prepare the activities that match with the students' ability; that is, podcast with very simple texts should be given to students with lower competence level. From here, they can move to the complicated authentic materials when the students have become advanced.

In a previous study by Hasan (2013), twenty journal articles were identified to investigate the effects of podcast on English as second language students' language skills and attitude. The results of the study revealed that podcast can be a medium which supports language learning. The second study was carried out by Heilesen (2010) who reviewed the literature that was published on 2004– 2009 and dealt with the experiences of using podcast in higher education. Heilesen (2010) concluded that many students were interested with podcast as a genuine improvement to the study environment, and they used the new tool rationally as a supplement to their study activities. The third study by Yoestara and Putri (2019) used different sources to identify the improvement of EFL students in listening and speaking. It was concluded that podcast can develop listening & speaking skill for Indonesian students.

These journals are all concerned about the use of podcast. The first study focuses on the reviews written from around 2003 to 2013 and explores how podcast as a medium can be applied to support language learning on EFL students. The second study is concerned on the reviews of studies conducted around 2004 to 2009 about the use of podcast in higher education. The third study is concerned on the reviews of studies written around 2018 to 2007 which talk about how podcast can improve listening and speaking performance. To put this study into the context, the focus of this study is on the reviews about the effects of using podcast produced by non-native speakers in improving students' listening skill.

METHODS

In this paper, the author collected references from various sources, namely Google Scholar, Sinta, JSTOR, online-literature.com, Ijern.com, Scopus, Research Gate, and Sciencedirect. In addition, the author used podcast from various sources, which were traced using keywords including English Learning, Podcast for Learning, Podcast of EFL students, Podcast for English Learning. From these sources, the author found a total of 150 references which are relevant with the study. From 150 references, 100 were excluded because the research on podcast was conducted more than 10 years ago. Similarly, 80 journals were excluded again because the research was focused on podcast for languages other than English. Eventually, a total of 20 journals with close relevance and within 10 year publication period were selected as depicted in **Figure 1**. To begin the review, the articles were selected and read before the tentative research topic category was selected. The topic category is podcast in language learning for EFL students. After that, the author read and compared the theme of the first article with the second article. Each article was scrutinized and compared with each other.

DISCUSSION

This study has identified two major themes. The first theme is concerned with the effect of podcast which is shown to be able to motivate students in language learning. The second theme is podcast can be a potential choice to assist language learning especially in improving their listening skills.

THE EFFECT OF PODCAST IN IMPROVING THE STUDENTS' MOTIVATION IN LANGUAGE LEARNING

In this era, technology is important to support learning process. One of the products of technology that is now popular in language learning due to its breakthrough is podcast. Podcast has selections of content that can support language learning. This statement is supported by Rosell-Aguilar (2007) who conducted a survey on podcast. Rosell-Aguilar (2007) found that podcast could attract male students' attention in language learning. Talking about podcast power in language skill, Gold-

Author's Name	Year	Method	Result
Li	2010	Qualitative	Podcast has enhanced student language skill.
Knight	2010	Qualitative	Podcast can develop students' phonetics' ability.
Traphagan	2010	Quantitative	Podcasting adversely affects students' attention levels in class.
Chan, Chi & Li	2011	Qualitative	The use of podcast has an impact for the students' motivational in language.
Artyushina	2011	Qualitative	Podcast can improve students listening skill and build an education activity.
Al Qasim	2013	Quantitative	Podcast can make positive and significant difference to the listening comprehension for EFL higher education students in Arabic.
Rosel	2013	Qualitative	Podcast content help the user to learn language.
Farshi & Mohammadi	2013	Qualitative	Leaners felt that podcast help them to motivate in language learning.
Yeh	2013	Qualitative	Podcast enhanced students' language proficiency and knowledge.
Kargozari & Zarinkamar	2014	Quantitative	The use of podcast as an instructive gadget in learning vocabulary was extensively more viable.
Asoodar, Seyyedeh, Shahin & Piet	2014	Quantitative & Qualitative	Podcasting proved highly effective in motivating the students.
Faramzi,&Akram	2015	Qualitative	Podcast gives opportunity for the students and curriculum developer to broaden the learning style alternative in a more friendly way.
Shiri	2015	Quantitative & Qualitative	Podcast improve students' language skill.
Davoudi and Rezaeri	2016	Quantitative	There is no significant difference in language comprehension scores by using podcast.
Wei & Ram	2016	Quantitative	Podcast has a potential to improve language learning.
Goldman	2018	Qualitative	Podcast can bring education and classroom environment.
Sendag, Nuray, & Sacip	2018	Quantitative	Podcast and listening aid has a significant impact on listening comprehension.
Nikolou & Darra	2018	Quantitative & Qualitative	Podcast is interesting and attracting students' attention.
Lio	2019	Quantitative & Qualitative	Podcast can motivate the students in listening.
Xiangming, Liu & Zhang	2020	Quantitative & Qualitative	Podcast can deliver knowledge.

FIGURE 1 | List of journal articles which are analyzed in this study

man (2018), after conducting research on 13 sources, found that podcast has benefits for both the students and the teachers. Goldman stated that Podcast can improve classroom environment for both the teachers and students. Learning through podcast allows students to understand the application of technology in learning process and allows teachers to adjust with technology-based teaching.

As a digital tool in language learning, podcast can attract students attention through various podcast contents. The abundance of contents found in podcast has a good impact on students' motivation. Nikolou and Darra (2018) interviewed 28 EFL pupils to conduct a quantitative research about the use of podcast. They concluded that podcast is interesting for the students and it allows them to interact in English with others in the classroom. Through learning from podcast, students' interaction during language learning can improve their motivation. Asoodar et al. (2014), who did a qualitative and quantitative research on this topic, concluded that podcast is proven to be highly effective in motivating the students. In addition,

it was found that the male students were more attracted in using podcast as a medium than female students. Meanwhile, the female students were satisfied with using podcast in their English language process. Chan et al. (2011) also concluded that the use of podcast has an impact on the students' motivation in language learning. Podcast can help improve students' motivation because it has various choices of content that students can use in learning. Furthermore, teachers can choose a content which is proper for the students' ability. Nikolou and Darra (2018) found that students expressed that the content on podcast is interesting and helpful. It is also confirmed by a questionnaire research conducted by Farshi (2013) who concluded that learners felt that podcast contents help them to be more motivated in language learning. From the two reviews above, it can be concluded that podcast can be easily incorporated into the curriculum and once the content is deemed appropriate, podcast can enhance student's performance.

Despite its positive effects, Farshi (2013) also found that some students faced difficulty in accessing the podcast because

of internet connection problem and difficulty in filtering the content. Traphagan et al. (2010) who did a quantitative research in 2010, found that podcast adversely affects students' attention levels in class. Therefore, as advocated by Hur and Suh (2012), when using podcast, teachers should be involved and accompany the students. Podcast should not replace teachers' role. Furthermore, teachers should accompany students in using podcast. Teachers need to consider about internet connection and make sure that internet connection problem can be overcome. By and large, podcast is a good media to motivate and contribute in English language learning, but it still needs controlling by the teachers.

PODCAST ON STUDENTS' LISTENING SKILL ESPECIALLY FOR NON-NATIVE

Podcast is a potential tool that can be used to support learning language, especially for listening skills. Fadda and Qasim (2013) conducted a quantitative research with 46 female EFL students in higher education in Saudi. It was concluded that the use of podcast made a positive and significant difference to the listening comprehension for EFL students in Saudi.

Kargozari and Zarinkamar (2014) conducted an experimental research with 32 EFL students majoring in TEF in Iran and concluded that the use of podcast as an instructive media in learning vocabulary is extensively more viable than the traditional procedures utilized generally as a part of EFL classes. Artyushina et al. (2011) found that podcast can improve student's listening skill and build a meaningful education activity. Furthermore, improvement in listening skill has an impact on student's language skill. This finding is also confirmed by the results of interview and questionnaire research with EFL students from Hong Kong by Li (2012).

In Indonesia, podcast can motivate students to learn the listening skill. Lio (2019) found from quasi experimental research that podcast was an effective media to teach and learn English. Indonesian students are interested in podcast and it has good effects on their listening skill. Furthermore, podcast can deliver knowledge for the listener. This statement is in line with Xiangming et al. (2020) who conducted a quantitative & qualitative study in 2020. In addition, Knight (2010) found that podcast can develop student phonetics' ability.

In addition to the points mentioned above, this study also found that there was no significant difference in language comprehension scores obtained by students after experiencing learning using podcast. However, Şendağ et al. (2018) did an experimental design study and found that podcast and listening aid had a significant impact on listening comprehension for students.

From the studies above, podcast can be considered a potential media for learning. Podcast has a potential to improve language learning and it can be an alternative tool in language learning. It is confirmed by a qualitative research conducted by Wei and Ram (2016), who concluded that podcast has a potential to improve students' skill and awareness during language learning process. In addition, podcast gives opportunity for the students and curriculum developer to broaden the learning style alternatives in a more friendly way. Yeh (2013) also added that podcast enhances student language proficiency and knowledge.

CONCLUSION

From the studies, it can be concluded that a podcast shares similarity with a public library that provides materials or resources straight to users' devices. Podcast is very useful in language learning because it does not only help students master the listening skill, but also motivates students to learn. Podcast allows students to have interaction during the language learning process. In Indonesia, podcast can be a tool that can be suggested to use as an innovation. It can motivate Indonesian students to learn and practice language, especially in listening skill. Students are interested in using podcast for English language learning. Having an interest in learning determines the success of learning activities as liking or disliking objects that are valued for someone is a stimulus that leads someone to particular aims. It is also worth-noting that podcast are not meant to replace teachers' role. Teachers should be aware that they need to find podcast contents that are appropriate for the students level, and they should prepare the access to the podcast before the students can use it. Podcast as a tool that support students in learning the listening skill is more practical and helpful than using the talk and chalk method. Teachers can implement podcast into the related curriculum and the learning syllabus to support students in the learning of listening skill. This study suggests that podcast be used in language learning to develop students' listening ability. Furthermore, when teaching listening skill, podcast delivered by native speakers is proven to be more effective than using teacher or non-native voice.

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Compensation strategies in speaking activities for non-English department students: Poor and competent speakers

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This study investigated the compensation strategies which were used by competent and poor speakers to avoid communication gap in speaking activities. This study used descriptive quantitative design. Data collection used an observation sheet and a questionnaire. The findings showed that the strategy which dominant used by either competent speakers or poor speakers as their group tendencies that was selecting the topic with the same overall average score of 4.0; competent speakers mostly used selecting the topic with the overall average of 4.0, adjusting or approximating the message with the overall average of 3.6 and using mime or gesture with the overall average of 3.5; poor speakers also mostly used selecting the topic with the overall average of 4.0 and coining word of 3.5. Competent speakers much more used compensation strategies than poor speakers. Thus, its major implication for pedagogy is that compensation strategies are extremely useful as guidance to avoid communication gap in speaking activities.

Keywords: Speaking Activities, Poor and competent speaker, Compensation strategies

INTRODUCTION

Speaking is the process of interacting and constructing meaning that receives and processes information Syafryadin et al. (2019). However, There are still large number of problems faced whoever studies English as foreign language particularly in applying speaking English. It is hard for the students in determining or choosing such strategy which is proper for helping them to be a competent speaker. This condition also happens with the students of foreign language learner (FLL) in Indonesia. Those cases make some experts on psycholinguistic and sociolinguistic interest to show up their view point in the process of choosing appropriate strategies in using English a foreign language communicatively. Learning strategies used by individual or the student to assist them to be more comprehension and receive more information Graham (1997). O"malley and &chamot (1990) in Prabawa says that competent learners use proper learning strategy and conscious with their existences as learner and the process of learning they apply Prabawa (2016).

Over all, each expert has own paradigm in diagnosing problems in speaking strategies to avoid the gap of communication. However, Oxford (1990a), compensation strategies are aimed to lead the students to be easier in learning and communicating in foreign language. Therefore, she further stated that what Chamot suggests with proper guidance, learner of foreign language could become more aware of certain strategies they never thought on their own and that will

contribute to learning efficiency and effectiveness.

There were some researchers who had conducted the study about compensation strategies. Karbalaei and &negin (2014) searched about compensation strategies on tracking movement in EFL learners' speaking skill. In this research, the researchers aimed to study compensation strategies used by Iranian elementary EFL learners across the speaking skill. The participants of the research were the sample of 120 EFL elementary male and female learners whose ages ranged between 11 and 25 at a language institute in Rostam, Iran were homogenized through the standardized Key English Test (KET). It is different from this study. The participants of this study were focusing on competent and poor speakers as participants of the study with lottery system in determining sample from a population of EFL in English StudyProgram at one of the universities in Kendari, Indonesia. Another study conducted the research on compensation strategies namely Hanifa (2016). Gani et al. (2015) investigated the language learning strategies in learning speaking used by poor performance student. The main focus of Hanifa (2016) was only on poor performance students as the participant of the study and used some strategies besides compensation strategies, however in this research, not only had difference participants, namely competent and poor speakers, but also used of specific strategies, that is compensation strategies. Gharbavi and Mousavi (2012) also found in their research that high level learners used greater number of strategies to develop their language skills. This finding was in accordance with Zare (2012) said that language learning strategies have received a particular attention since the late 1970s. Many of the initial studies on language learning strategies were aimed at defining the "Good" language learner. The choice of certain strategies is also crucial to build the students' skill. Furthermore, there are many factors that influence the choice of strategy, including to the choice of compensation strategies in speaking activities. These factor such as motivation, comfort, value, and integrative orientation and so many more. Mistar et al. (2014) found that the use of strategies of learning speaking was significantly different with the successful learners reporting higher intensity of use than the less successful learners did. They explain that the successful learners are better at employing various strategies to learn speaking skill than the less successful learners are.

Based on the problems and previous studies, the writers investigated what compensation strategies mostly used in overcoming limitation in speaking activities to avoid the gap of communication. Compensation strategies are an alternative strategy to guide students in overcoming their difficulty in mastering language. In addition, the writers also investigated compensation strategies mostly used either by competent speaker or poor speaker, especially in the classroom speaking activities. In the case of communication classroom, Hussain (2017) stated that the available environment of the learner is mother tongue in his surroundings; therefore, the teaching learning strategy should differ greatly. Furthermore, Razmjoo et al. (2011) view that language learning instruction is a teach-

ing approach that aims to raise learner awareness of learning strategies and provide learners with systematic practice, reinforcement and self monitoring of their strategy use while attending to language learning activities. In this case, language learning activities are related to speaking activities in avoiding communication gap. This study aimed to explain the compensation dominant strategies applied by the students of semester 4 in speaking activities to avoid communication gap, described the compensation strategies mostly used by competent speakers and knew compensation strategies mostly used by poor speakers.

METHODS

This study applied descriptive quantitative design which its aim is to describe the fact or area interest factually and accurately. The choice of descriptive design is simply because of this study only aimed to find out the compensation strategies are mostly used by the students in speaking activities without comparing each strategy, make prediction, or something like that. This is in line with Walidin et al. (2015) said that descriptive knowledge appears when someone could describe, drawing anything specifications, characters, and phenomenon that is clear in his sight and that description done objectively or righteousness. Thus, this study is not to seek or to explain relationship, test hypothesis, make prediction, or gets a meaning and implication" Isaac and Michael in Malfinas (2008). The population of this study consists of 83 students, where competent speakers consist of 24 students and poor speakers of 25 students at Non-English study program at one of the universities in Kendari. They are divided into two classes, namely odd class and even class. Because of those classes are homogeneity where there is no divided of class based on the students' achievement, so the writers chose event class through lottery system. The writers also used simple random sampling through lottery system, where all the individuals in the defined population have equal and independent chance of being selected as a number of a sample. In descriptive research it is suggested to take the sample 10-20% from the total population. Further that, great number of sample in a research will be reduced biases of the data (Adapted from Ary in Malfinas (2008). However, it is difficult to control great number of sample while the writer wants to get an accurate data. Therefore, the writer considered that the less sample which used the more accurate data could be got. Then, the writer took about 20 % of poor speakers from total population of 25 students and also about 20 % from competent speakers from total population of 24 students. So, the total number of sample chosen is 10 students (5 for competent speakers and 5 for poor speakers). The choice of competent speakers and poor speakers were based on the students' speaking II final score. In this case, the students with speaking II final score got A were categorized as competent speakers and C categorized as poor speakers. The categorization relied on the characteristic of Good and Poor Language Learner. However, the researcher

found that the students with A and C final score were more than 5 students. Therefore, to determine which students would be used as competent and poor speakers, the researcher also used lottery system.

In collecting data, the writers used questionnaire which was adopted from Oxford (1990b) and observation sheet. Furthermore, the identification of compensation strategies applied by the students was in observation sheet. In order to determine which compensation strategies mostly used by the students, the questionnaire guided by Oxford (1990a), namely Strategy Inventory for Language Learning (SILL). This strategy helps students to be conscious with strategy they use in learning language and also helps teacher to teach speaking more successfully. In addition, the number of questionnaire was of 40 items of compensation strategies in speaking activities. These strategies involve: switching to the mother tongue for 5 items; getting help for 5 items; using mime or gesture for 5 items; avoiding communication partially or totally for 5 items; selecting the topic for 5 items; adjusting or approximating the message for 5 items; coining word for 5 items; and using a circumlocution or synonym for 5 items. So, each strategy consists of 5 items. The data analyzed based on nominal scale of the result of students' SILL average for each part of compensation strategies which is also accordance with Oxford (1990a).

The writers analyzed the data collection under nominal scale by the use of scoring system accordance with Oxford (1990a). The result each compensation strategies score were added up and calculated by for every category to find out the overall and average score. Its procedures can be seen in the appendices of general instructions to administrators of the strategy inventory for language learning (SILL). The overall and average score transferred into the compensation strategies commonly used in speaking activities either by competent speakers or poor speakers. This commonly strategies used to show the compensation strategies result for each speaker and also the group tendencies. Then, the nominal scale of data analysis based on the score got the speakers as in the following. (1) 3.5 to 5.0 indicate a high level of development in that particular type of compensation strategies, (2) 2.5 to 3.4 indicate medium level of development in that particular type of compensation strategies. (3) 1.0 to 2.4 indicates low level of development in that particular type of compensation strategies.

RESULTS AND DISCUSSION

Findings
The findings of this study were taken from observation sheet and questionnaire analysis. The Analysis and its description can be seen as follows:

Observation Sheet
The result of observation sheet found that there were some strategies applied by competent speakers such as switching to the mother tongue for one time; getting help for five times; using mime or gesture for three times; adjusting or approximating the message for one time, avoiding communication partially or totally for one time, and using a circumlocution or synonym. In addition, the researcher found that poor speakers tended to speak less than competent speakers. They only applied few strategies such as using mime or gesture for one time and getting help for two times. For the strategy of selecting the topic, there was no appeared because all topics in speaking activities (either in form of presentation, group discussion as well as in pairs) were chosen or provided by the lecture. For more explanation, it can be seen in **Figure 1** .

FIGURE 1 | Types of compensation strategies applied by competent and poor speakers
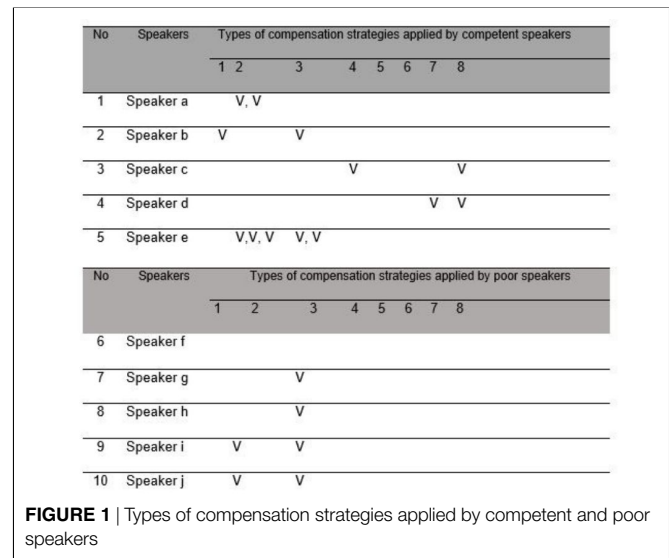
Based on the data in the **Figure 1**, it is found that competent speakers that consist of speaker a, b, c, d and e used some strategies in their speaking activities process. Speaker a tended to use getting help. Student b tended to apply switching to the mother tongue and using mime or gesture as their strategy. Speaker c tended to used avoiding communication partially or totally and using a synonym. Speaker d tended to use coining word and using a synonym. Speaker e tended to use getting help and using mime or gesture. Next, poor speakers that consist of speaker f, g, h, i and j also used some strategies in their speaking activities process. Speaker f used nothing of compensation strategies. Speaker g used the strategy of using mime or gesture. Speaker h used mime or gesture. Speaker i used getting help and using mime or gesture. And, Speaker j used he strategies of getting help and using mime or gesture. From the data, the writers found that small quantity of strategy used caused of the tendencies of poor speakers were spoken less and tended to read the journal a lot than spoke out with their own word to describe the content of journal or event for giving comment toward their friends in speaking activities process. Therefore, it is hard for the writers to determine compensation strategies applied by competent speakers and poor speakers either for their own (individually) or in group tendencies. However, the

data from observation had given such a signal of the existence of compensation strategies in speaking activities' usage.

Questionnaire

This section presents clearly the different kinds of compensation strategies that are mostly used by each competent and poor speaker in the form of SILL (Strategy Inventory for Language Learning) and also their both tendencies. Each speaker consists of 5 speakers. The names of competent speakers are symbolized with speaker a, b, c, d, and e, while poor speaker are symbolized with speaker f, g, h, i, and j. The findings can be summarized as in the following table of averages and overall averages SILL result for both competent speakers and poor speaker as in **Table 1**. Letter H and M are category for high; medium (M) and low (L) of SILL result of competent speakers. In addition, number1, 2, 3, 4, 5, 6, 7, and 8 are type of compensation strategies ; 1 as switching to the mother tongue, 2 as getting help, 3 as using mime or gesture, 4 as avoiding communication partially or totally, 5 as selecting the topic, 6 as adjusting or approximating the message, 7 as coining word, and 8 as using a circumlocution or synonym.

Based on the **Table 1**, competent speakers used different compensation strategy. From the eight compensation strategies, getting help takes the first position, with the average score 4. And the last positions are selecting the topic and the strategy of avoiding communication partially or totally with the same average score 2.6. The third position, the fourth position, the fifth position and the last position have same category, namely in the medium category. For competent speaker b, it indicates that the first position placed selecting the topic and using gesture with the same average score of 4.4. The last position placed adjusting or approximating the message with the average score 2.4. The average score of 4.4, and 3.8 categorized as high level by means that these strategies most always used by student b. Next, the average score of 3.4, 3.0 and 2.6 categorized as medium level by means that those strategies somewhat used. Last, the average of 2.4 categorized as low level by means that these strategies never or almost never used by the speaker.

Competent speaker c, it indicates that the first position placed selecting the topic with the average score 4.6. And, the last position placed avoiding communication with the average score 1.8. In addition, the averages score of 4.6, 4.2, and 3.8 means that these strategies are mostly always used by student c. The average score of 3.2 means that this strategy is somewhat used. Last, the average score of 2.4 and 1.8 categorized as low level by means that these strategies are never or almost never used. For competent speaker d, it shows that the first position placed selecting the topic with the average score 4.4. The last position placed switching to or altering to the mother tongue and avoiding or ejecting communication partially or totally with the average score 2.2. The average score of 4.4, 4.0, and 3.8 categorized as high level by means that those strategies are almost always used by speaker d. The average score of 3.2, 2.8, 2.6 are categorized as medium level which by means that these

strategies somewhat used. And the average score of 2.2 is categorized as low level by means that this strategy is somewhat used in speaking activities.

For competent speaker e, it shows that selecting the topic placed the first position from other compensation strategies with the average score 4.4. The last position placed avoiding communication partially or totally with the average score 2.2. The average score of 4.4 and 3.6 categorized as high level by means that this strategy is always or almost always used by the student e. The average score of 3.4, 3.2, and 2.6 categorized as medium level where these strategies somewhat used. In addition, the average score of 2.4 and 2.2 categorized as low level by means that these strategies are never or almost never used by student e in speaking activities.

Notes:

a. Letter H and M are category for high; medium (M) and low (L) of SILL result of poor speakers.

b. Number 1, 2, 3, 4, 5, 6, 7, and 8 are type of compensation strategies ; 1 as switching to the mother tongue, 2 as getting help, 3 as using mime or gesture, 4 as avoiding communication partially or totally, 5 as selecting the topic, 6 as adjusting or approximating the message,7 as coining word, and 8 as using a circumlocution or synonym.

Based on **Table 2** for poor speaker f shows that selecting the topic placed the first position from other compensation strategies with the average score 3.8. The last position placed Using mime or gesture with the average score 1.2. The average score of 3.8 and 3.6 categorized as high level by means that those strategies always or almost always used by the speaker f. The average score 2.8 categorized as medium level where this strategy somewhat used. In addition, the average score 1.8, 1.6, 1.4 and 1.2 categorized as low level by means that those strategies never or almost never used by speaker e in speaking activities.

For poor speaker, it shows that selecting the topic placed the first position from other compensation strategies with the average score 5.0. And, the last position placed avoiding communication with the average score 1.8. The average score of 5.0, 4.0, and 3.8 categorized as high level by means that these strategies always or almost always used by the speaker g. The average score 3.2 categorized as medium level where the student somewhat used this strategy in speaking activities. And, score of average of 2.0 and 1.8 categorized as low level where the student never or almost never used these strategies.

For poor speaker h, it shows that getting help placed the first position from other compensation strategies with the average score 3.6. The sixth position placed using synonym with the overall average of 1.4. The average score of 3.6 categorized as high level by means that that strategy always or almost always used by the student h. The average score 3.4 and 3.2, and 3.0 categorized as medium level where the student somewhat used those strategies in speaking activities. The average score 2.4, 2.2 and 1.4 categorized as low level by means that the student h never or almost never used that strategy. For poor speaker I, it shows that selecting the topic placed the first position from other compensation strategies with the average score 4.0. The

TABLE 1 | Total score of averages and overall averages for each competent speaker

No.	Name Competent speakers	Score for each compensation strategies								Overall average for each students	Category of overall Average
		1	2	3	4	5	6	7	8		
1	Speaker a	3.2	4.4	3.4	2.6	2.6	3.8	3.4	2.8	3.2	M
2	Speaker b	3.8	3.4	4.4	2.6	4.4	2.4	3.0	3.4	3.4	M
3	Speaker c	2.4	3.2	3.8	1.8	4.6	4.2	3.2	4.2	3.4	M
4	Speaker d	2.2	2.8	2.6	2.2	4.4	4.0	3.2	3.8	3.1	M
5	Speaker e	2.6	3.4	3.4	2.2	4.4	3.6	3.2	2.4	3.1	M
Overall average for competent speakers										3.2	M
Overall Average for each compensation strategies		2.8	3.4	3.5	2.2	4.0	3.6	3.2	3.3	3.2	M
Category		M	M	M	L	H	H	M	M	M	M

TABLE 2 | Total score of averages and overall averages for poor speakers

No	Name Poor speakers	Score for each compensation strategies								Overall average for each students	Category of overall average
		1	2	3	4	5	6	7	8		
6	Speaker f	3.6	2.8	1.2	1.6	3.8	1.8	2.8	1.4	2.3	M
7	Speaker g	3.8	3.8	3.2	1.8	5.0	3.2	4.0	2.0	3.3	H
8	Speaker h	3.2	3.6	3.0	2.2	2.4	3.4	3.2	1.4	2.8	M
9	Speaker i	3.6	3.0	3.2	2.2	4.0	2.4	3.6	2.4	3.0	M
10	Speaker j	3.2	4.2	4.4	1.8	5.0	3.8	4.2	2.4	3.6	H
Overall average for poor speakers										3.0	M
Overall Average for each strategy		3.4	3.4	3.0	1.9	4.0	2.9	3.5	1.9	3.0	M
Category		M	M	M	L	H	M	H	L	M	M

last position placed Avoiding communication is with the average score of 2.2. The average score 4.0 and 3.6 categorized as high level by means that that strategy always or almost always used by the student i. The average score of 3.2 and 3.0 categorized as medium level where the student somewhat used these strategies in speaking activities. The average score of 2.4 and 2.2 categorized as low level by means that the student h never or almost never used that strategy.

For poor speaker j, it shows that selecting the topic placed the first position from other compensation strategies with the average score 5.0. Avoiding communication placed the last position with the overall average of 1.8 placed the last position.

The average score of 5.0 and 4.4, 4.2 and 3.8 categorized as high level by means that these strategies always or almost always used by the student j. The average score of 3.2 categorized as medium level where the student somewhat used these strategies in speaking activities. Finally, the score of 2.4 and 1.8 categorized as low level where categorized that the students never or almost never used these strategies.

Discussion

Grice in Kronfeld and Searle (1990) stated that achievement of communication goals in speaking is by getting the audience in recognizing our intentions for achieving those goals. In communication, speaking is a mayor skill Hussain (2017). Compensation strategies is a part of communicative competence which has many advantages. Another strategy in communication competence is pragmatic strategy. However, pragmatic strategy has own tendencies in its communication goal such as hate speech Ononye and Nwachukwu (2019). It is different from communication goal in compensation strategy. In communicative competence, compensation strategies aim to guide learners to be successful in mastering foreign language and confidence in communication. Choosing certain strategies is also crucial to build the students' skill. There are some important factors possible influencing the choice of compensation strategies, especially in speaking activities. Related to the findings, competent speakers tended to be interested in communicating and taking much willingness in the real communication. The students determine that their strategies bring better influence to their learning process Gani et al. (2015). In a line with this, Kumari (2014) in Hussain (2017) said that a variety of function based activities and tasks can be used to develop speaking skills which are given such as: dialogue, role-play, opinion/ideas, problems (group work), problems (group work), visual comprehension, dreams or ambitions, rhymes and tongue twisters, and songs. Those speaking activities will be able to build EFL speaking skill upgrading. This phenomenon also found in this study that competent speakers tend to use compensation strategies much more than poor speakers. It means that the more strategies they use in speaking activities, the more upgrading speaking ability they will get. This can be seen in the result of observation sheet and questionnaire. In Observation, poor speakers only used two types of strategies, namely using gesture and getting help, while competent speakers used nearly all of the eight compensation strategies namely mime or gesture, switching or altering to the mother tongue, getting help, synonym, adjusting or approximating the message, and avoid or ejecting communication partially or totally. The result of questionnaire found that competent speakers used 3 strategies with the high level (selecting to the topic, adjusting the message, and using gesture). In the contrary, poor speakers only used two strategies with categorized as high level (selecting to the topic and coining word).

General mood has positively and significantly correlation with the choose of such strategies Ghenaati and Naeini (2019).

This also happens to competent and poor speakers in speaking activities. Competent speakers and poor speakers were different in using those strategies. For instance, speaker i mostly used switching to the mother tongue, selecting the topic and coining word while speaker c tended to use selecting the topic, adjusting and approximating the message, and using a circumlocution or synonym. A line with this, Karbalaei and &negin (2014) found that Iranian EFL students tended to use various kinds of compensation strategies in communicating their intended meanings. However, in competent speakers, it was dominated by selecting the topic. The finding of this study also related to Rose and Nichole in Muslatif (2006) who found that," everyone has her/his own strategies, but sometimes one strategy is dominated". In poor speakers, the writers found that there was also dominated strategy used namely selecting the topic. This tendency was the same with what happens in the competent speakers. The poor speakers also mostly used coining word as their strategies in speaking activities. Then, several strategies were in the medium level. Using synonym and avoiding communication partially or totally were in the low level. These strategies are never or almost never used. The phenomenon above also shows that each poor speaker used varieties compensation strategies. That my caused of every student different in using of every strategy even though in the same skill Brophy and Blumenfield in Humaeri (2003).

In addition, many experts also found that there are many reasons of why the uses of compensation strategies in speaking activities are different. This is also happened to the student when the writer did observation. Speaker e, for examples, figured out a number of aspects in journal speaking by using her finger nail. This is also happened to the speaker b that used a mother tongue of "berkorban" to avoid her communication gap. This phenomenon also happened to the speakers d who made the idea simpler or more precise to indicate the word she means.

Furthermore, the strategy such coining word used when the students lack of proper vocabulary. Very often, a learner has to make do with the language he or she has available to try and to carry on with the speech. In other words, he or she needs to coin words or expressions so as to maintain smooth conversations. This strategy actually exploits and extends his or her communicative competence (adapted in Dong and Fang (2010)). In this study, that phenomenon is the same with what speaker d had done in her speaking activities. The use of the compensation strategy such getting help is because whenever the students have a doubt, so they resorted to the other student to ask for the missing information. They also can apply the compensation strategy of Adjusting or approximating the message with aim to find a simple way of expressing opinion and remained quiet. Again, the student's insecurity prevented from participating in an oral task, and then they use avoiding communication partially or totally. When the students ran out of words, they sometimes employ physical actions. In other words, another expert states that" they exploit using mime or gesture to make them understood" Blazquez (2007).

From the elaboration above (observation sheet as well as in questionnaire), the writers conclude that there is one strategy dominates other strategies in speaking activities, namely selecting the topic; Competent speakers much more used compensation strategies than poor speakers. This finding accordance with Gani et al. (2015) found that high performance speaking students had better balance in using all kinds of learning strategies (memory, cognitive, compensatory, metacognitive, affective, and social) for enhancing their speaking skills; the same could not be found with low performance speaking students Gani et al. (2015). Oxford (1990a) as cited in Gani et al. (2015) also state that the use of appropriate language learning strategies is a major contribution for development of communicative competence. The view point also correspond with O"malley and &chamot (1990) who state that more effective (high speaking performance) students generally use a greater variety of strategies and use them in more ways to help them complete language tasks more successfully; conversely, less effective (low speaking performance). In addition, O"malley and &chamot (1990) said that students not only have fewer strategies but also frequently use strategies that are inappropriate to the task at hand and which does not lead to successful task completion. In brief, the use of appropriate language learning strategies gave a greater contribution for the development of competence in speaking Gani et al. (2015). In the contrary, poor speakers use speaking strategies are less than competent speakers. This finding is in a line with what Gani et al. (2015) state for poor speaking performance that the students did not have consistency in using all kinds of learning strategies. Hanifa (2016) state found that the students of poor speakers relied more on compensation and social strategies compared to memory, cognitive, metacognitive, and affective strategies while learning speaking skill. Apart from that, some students seemed to use strategies that were not very effective to accomplish the language tasks. Therefore, their strategies only gave a little contribution toward their learning process Han-

ifa (2016). Another finding about the use of strategy in learning is from Rasiban et al. (2019). Rasiban et al. (2019) found that the use of mimetic strategies in Japanese kanji learning was successfully enhanced the students' comprehension of lexically and semantically Rasiban et al. (2019). Therefore, the key word here is compensation strategies are useful as guidance for both competent and poor speakers to avoid communication gap in speaking activities.

CONCLUSION

Based on the findings (either in observation sheet as well as in questionnaire), the writers conclude six important points. The first, competent speakers (student a, b, c, d, and e) mostly used selecting the topic and adjusting or approximating the message and using mime or gesture in their speaking activities to avoid communication gap. The second, poor speakers (student f, g, h, i and j) also have the same tendencies as competent speaker that they mostly used selecting to the topic. In addition, they also mostly used coining word in their speaking activities to avoid communication gap. The third, the group tendencies of both competent and poor speakers are they mostly used selecting the topic to avoid communication gap in speaking activities. The fourth, competent speakers much more used compensation strategies than poor speakers. The fifth, compensation strategies are extremely useful as guidance for both competent and poor speakers to avid of communication gap in speaking activities.

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Conflict of Interest Statement: The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Designing pedagogical narrative stories: Delving deeper into problem-solving skills of pre-service English teachers

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Educating Pre-Service English Teachers (PSETs) to be ready to face challenges is a response to the fast-changing globalized world. Hence, preparing future teachers to apply problem-solving skills in dealing with teachers' challenges in the classroom is necessary. This study was intended to design a set of pedagogical narrative stories which enquire problem-solving skills of PSETs. The pedagogical narrative stories were designed as a supplementary material in micro teaching class to help PSETs understand the complex issues of teaching and learning process. This study was based on ADDIE model, comprising five phases, namely Analysis, Design, Development, Implementation, and Evaluation. The designed material product consists of six units of teachers' real life in adapted stories. Each unit contains critical discussion and reflective activities, namely: Story, Individual Reflection, Group Sharing, Class Discussion and Resolution. The product trial was field-tested in the micro teaching class by nineteen senior PSETs. The final product was validated by subject matter expert who has credibility in writing English learning books. The validated outcome showed that the supplementary materials are appropriate for PSETs in micro teaching class. The finding is projected to construct positive awareness on the importance of problem-solving skills to enhance PSETs' competence in dealing with classroom problems by answering questions more critically and reflectively. Next, problem-solving skills are also expected to optimize PSETs higher order thinking skills by being a decision maker in multifaceted challenges in the classroom.

Keywords: narrative stories, PSETs, ADDIE model, problemsolving skills

INTRODUCTION

Problem-solving has unquestionably become a fundamental skill in the 21st century learning. This statement is particularly most relevant for teachers and Pre-Service English Teachers (PSETs) as it is fundamental for them to acquire problem-solving skills in dealing with classroom challenges. Several studies corroborate that teachers' ability in solving problem is an essential component in facing the 21st century teaching and learning challenges Zahrani and Elyas (2017). Meanwhile, Yen and Halili (2015) are right in saying that problem-solving skill is used in knowing how far the teacher is able to respond the existing challenges in teaching and learning process. Thus, since this skill is required by PSETs in coping with the imminent problems they will encounter, PSETs need to be equipped with supplementary materials with real classroom problems before they are placed in teaching practice to advance their problem-

solving skills. In fact, there are only a few research studies on problem-solving materials provided to PSETs. S Setiawan et al. (2018) argue on their research that most pre-service teachers, especially in Indonesia are still unfamiliar with a problem-solving technique in the classroom learning process. This situation is crucial to discuss since it is closely related to how PSETs develop their teacher professionalism. Likewise, Aimah et al. (2017) state that improving teacher professionalism is one of the major endeavours to develop the learning quality since teachers are the fundamental aspect to determine the quality of education system. Therefore, appropriate supplementary materials combined with PSETs' needs are imperative to gain knowledge of certain competencies.

Other studies took more focus on pedagogical competencies that should be mastered by teachers. For example, Hakim (2015) specifies his study on defining pedagogical competencies as the teachers' ability to conduct educational learning, facilitate the development of learners' potential, communicate with students effectively and take action to improve the quality of reflective learning. In Indonesia, it is an essential factor for teachers to have the expertise, especially in managing students' learning process and contributing the students' development because of the ever increasing technology and communication advancement these days Ramlawati et al. (2018). By realizing the importance of pedagogical competencies, teacher competency test is carried out to see the extent of teacher performance.

Based on Indonesia Ministry of Education, the result of the teachers' pedagogical competency test in 2019 is at the value of 50.4. Derived from the data, the teachers' pedagogical performance was not yet maximum since the average score of teacher competency test is 54.1 out of 100. Hence, the development of pedagogical competencies should be improved by giving various approaches for pre-service teachers, for example by becoming more actively engaged in micro teaching class process (Rahman, 2014). One of the approaches which are relatable to the future needs is developing teachers' higher order thinking skill, which includes teaching problem-solving skills to sharpen up teachers' capability to solve problems in a form of reflective activities (Kemdikbud, 2020). Therefore, PSETs who join micro-teaching class are prepared to become professional teachers who can deal with the full twist and turn situations by equipping the problem-solving supplementary materials.

In this study, the stories are formed in narrative stories that portray unresolved and thought-provoking situations and actively engage PSETs to build up a solution to the problems. Jonassen and Hernandez-Serrano (2014) affirm that stories are the most powerful feature for describing essential knowledge that is related to the problem-solving skills. In delivering the value of problem-solving skill through narrative stories, the researchers used the concept of Problem Based Learning (PBL) by (Barrows, 1985; Kauchak and Eggen, 1998) and summarized PBL lesson planning into two steps. The first step was identifying the learning objectives, topic, and problem of the stories. The story was based on the accounts of teachers'

voices from their authentic experiences that are expected to inspire the reader. The researchers constructed the pedagogical narrative stories based on the situations experienced by other teachers to examine how PSETs think through specific situation. Then, the second step was assessing the follow up activity by considering what types of activities to be used in class. Those steps were then employed in developing the narrative stories by making the preliminary product.

The previous studies show that the role of narrative stories is broad. Yet none of the references discusses the research on designing pedagogical narrative stories for PSETs in developing problem-solving skills. This is another reason why the researchers intended to design these materials. The intention of this study is in line with the research of Lozano and Lozano and Lozano (2017) who argued that the sustainability of higher education development should focus on the appropriate design materials for the optimal benefits of the students. There are at least three benefits of this study. First, this design can help PSETs understand the complex issues of teaching and learning process. Second, the pedagogical narrative stories can guide PSETs to develop their problem-solving skills by answering questions more reflectively and critically. Third, PSETs can also indirectly learn to be a decision maker in complex situations that are likely to occur in the classroom by optimizing their higher-order thinking skills. By taking these benefits into account, the researchers' main goal is to design a set of supplementary materials packaged with pedagogical narrative stories. The research question is formulated as follows: How is a set of pedagogical narrative stories designed to hone problem-solving skills of PSETs?

METHOD

This study employed ADDIE model facilitating a practical framework for designing pedagogical narrative stories to hone problem-solving skills of PSETs. The research question was answered through the selected steps of ADDIE instructional design as it provides a critical component in each phase (Branch, 2009; Cheung, 2016). To know the credibility of the design materials, the researchers used formative assessment to evaluate data from each phase for continuous design improvement. In the last phase, a summative assessment was conducted to check the whole practicability of the last edited version. Both assessments were incorporated into the research procedures through instructional design development. The procedure of this study was illustrated in **Figure 1**.

In designing pedagogical narrative stories, this study used five phases of ADDIE model along with selected steps: 1) Analysis, the phase for examining the PSETs' needs; 2) Design, the phase for creating the product framework by identifying the learning objectives and product online through narrative stories for more effective delivery; 3) Development, the phase for presenting the factual stories along with reflective questions and selecting illustration as the supporting media of the prod-

FIGURE 1 | Research Procedures in ADDIE model
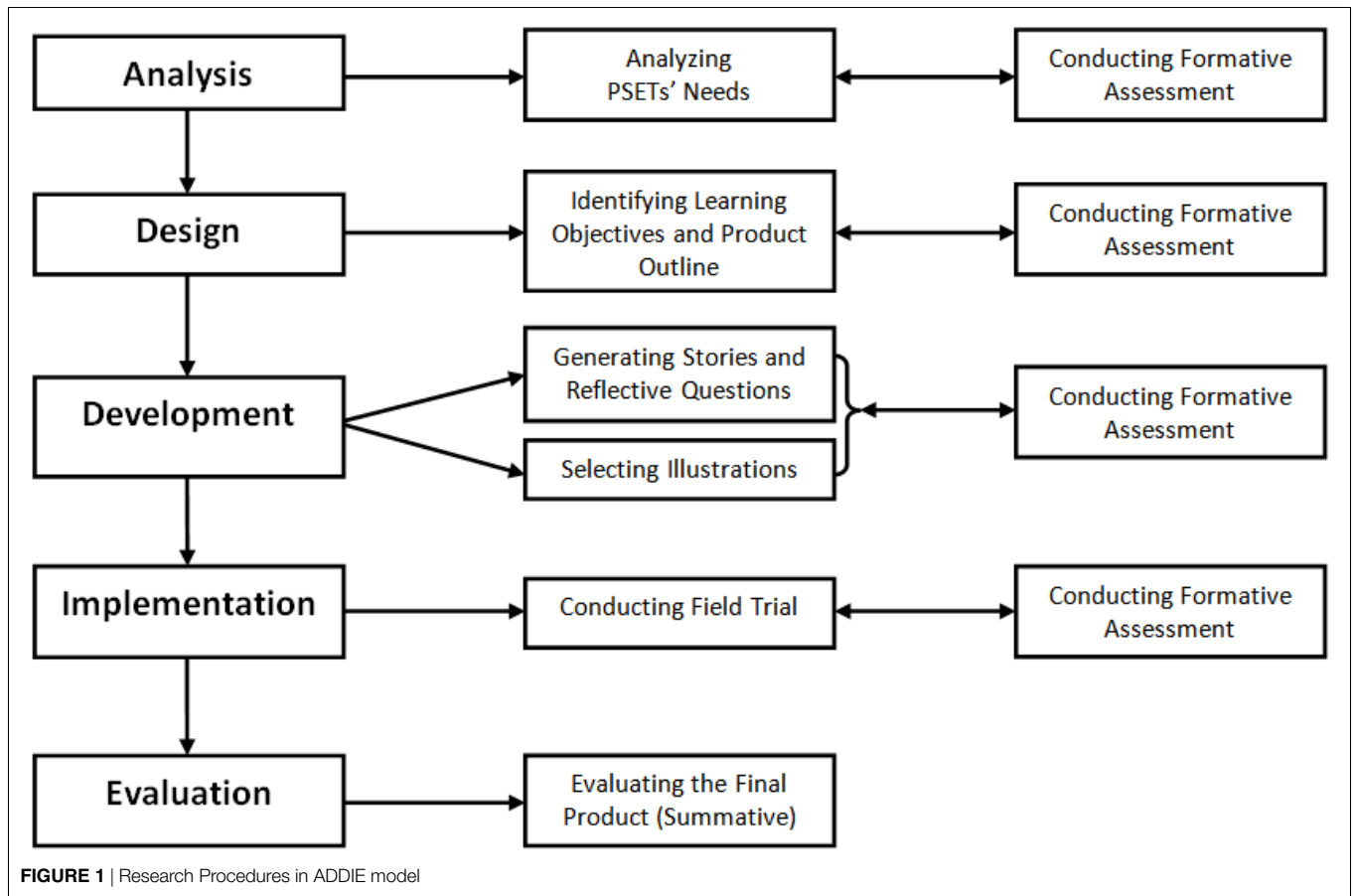
uct; 4) Implementation, the phase for applying the instructional design through field trial; 5) Evaluation, the phase for evaluating and measuring the final product design.

This study was conducted in English Language Education Study Program (ELESP) Sanata Dharma University. The subjects of this study were put into a different phase of ADDIE instructional design as each phase required data. The subjects and the data gathering technique instruments were described in **Table 1**.

The English Lecturers, English Teachers, PSETs, Head of Teaching Practicum Program, Teacher Professional Development Expert and Subject Matter Expert were invited with purposive sampling based on their expertise to obtain valid data, whereas the nineteen PSETs were recruited for implementation phase with cluster sampling by considering the time and schedule. The PSETs voluntarily participated with no power relation was exerted to recruit them in this research.

The data from interview and questionnaire were used to give the interpretation of each phase and to show whether the design was acceptable or not. The questionnaire was adopted from (Delisle, 1997)to assess whether the pedagogical narrative story can facilitate PSETs in civilizing their problem-solving skills by linking the PSETs' needs and learning goal. The Likert scale technique was used to collect the data as this instrument

can accommodate various participants' responses towards the statement. Additionally, the participants were invited to give comments and suggestions.

This research utilized qualitative analysis techniques. The data was collected from the interview and questionnaire then analyzed by using a qualitative way in descriptive analysis (Lichtman, 2012). The descriptive analysis consisted of data transcribing, coding, categorizing, and conceptualizing. To find out validation from the data, the researchers used the member checking proposed by Shenton (2004)to ensure the trustworthiness of the data whether the interview transcript was in accordance with what was conveyed by the participants. The strategy was carried out to maintain the authenticity of the data and to anticipate misinterpretation from the writers to the participant's data.

RESULTS AND DISCUSSION

This part deals with the steps of designing pedagogical narrative story in delving deeper PSETs' problem-solving skills. The discussion presents the elaboration of five phases of ADDIE model: Analysis, Design, Development, Implementation, and Evaluation.

TABLE 1 | Subjects of the Study with Instruments

Phase	Subjects	Instruments
	English Teachers, English Lecturers	Interview
Analysis	PSETs	Interview
	The head of Teaching Practicum Program (as evaluator)	Interview
Design	Five English Lecturers and five English Teachers (as evaluators)	Questionnaire
Develop	Teacher Professional Development Expert (as evaluator)	Interview
Implementation	Nineteen PSETs (micro teaching students)	Questionnaire
Evaluation	Subject Matter Expert as evaluator	Questionnaire

ANALYSIS PHASE

Interviews were conducted as a part of information collection to obtain accurate data and to identify the urgency of this study. English Teachers, English Lecturers, and PSETs were recruited to answer open-ended interview with two initial questions to discuss, namely: (1) What do PSETs need to do to improve their quality/skills as teacher candidates? (2) What kind of inputs or feedbacks should PSETs learn during the teaching practicum?

Through these questions, the researchers analysed the PSETs' needs based on the interview result. The outcomes were (1) the majority of PSETs experienced difficulties in pedagogical competencies, especially in material and classroom mastery; (2) there were some moments where the school complained about the readiness of practicing teacher during the teaching practicum; (3) PSETs needed to learn how to deal with an unexpected incident beyond teaching materials in class; (4) teacher candidates from English Language Study Program (PSETs) currently had to compete with teachers from English Literature. Therefore, PSETs must be equipped with soft skills which later became their foundation as teachers. One of the skills that could be given is problem-solving skills; (5) PSETs were trained to master knowledge, but their self-mastery of the situation in the classroom was still low. PSETs were easily discouraged in facing problems, this situation made them confused about what they had to do in dealing with their issues. From the points obtained during the interview, the supplementary material was required to support the potential teachers in addressing problems they faced in the classroom. Thus, it is necessary to prepare future teachers who could apply their problem-solving skills in handling obstacles in a school context.

The researchers also discovered deeper questions to the participants related to the PSETs' problems faced in teaching process and the ways of responding the problems. After their stories were collected, the researchers listed the possible topics by identifying the problem faced by PSETs. The researchers found twelve stories' topics which were categorized into four problem themes proposed by (Soleimani and Razmjoo, 2016). Those themes were instructional problems, behavioural problems, ethical problems, and psychological problems. The problems raised from the participants were based on the factual and real stories, which had a strong correlation with PSETs' pedagogical challenges.

The interview result was checked and evaluated to see whether it met the PSET needs by the Head of Teaching Practicum as a formative evaluation. The Head of Teaching Practicum argued that problems faced by the teacher candidates mostly came from their unawareness in solving problems. The problems appeared from several causes. One of them was about teachers' pedagogical challenges, which often render them to feel unprepared for being teachers at school. Hence, they needed to be equipped with skills that had not been taught in micro teaching class through problem-solving supplementary materials.

DESIGN PHASE

In the second phase, the researchers used the concept of Problem-Based Learning (PBL) (Barrows, 1985; Kauchak and Eggen, 1998) to identify the learning objectives and the product outline by integrating the analysis result. First, the researchers identified the learning objectives, which in line with PBL principles by Savin-Baden (2003, p.18). These are (1) to identify the problem in the story, (2) to explain the first impression about the problem, (3) to generate ideas in solving problem, (4) to discuss the problem in groups and underline the main points of solution from other group members, (5) to justify the underlying beliefs to cope with such problems in the future. Second, the researchers identified the product outline by listing the possible topics along with the problem themes presented and wrapping up in a form of questionnaire. The questionnaire was developed with a Likert scale ranged 1-5 which illustrated (1) not feasible, (2) not necessary, (3) neutral, (4) necessary, (5) feasible.

To clarify the direction of the designing process, the researchers comprised the learning objectives in the first sheet of the questionnaire. Five Micro Teaching Lecturers and five English Teachers were invited to fill the questionnaire and give suggestion as a formative evaluation to see the urgency of

the topics, especially for teachers' pedagogical improvement. The researchers used the two points of views from the micro teaching lecturers and the English teachers to look at the topic urgency from two sides. Micro teaching lecturers distinguished the topics in terms of materials compatibility for micro teaching class. Meanwhile, English teachers distinguished the topics in terms of teachers' teaching obstacles in class.

From the twelve topics and problems provided in the questionnaire, the respondents were inquired to identify the topics which were suitable for PSETs in dealing with future problems in the school context. The following **Table 2** below is the list of top six topics chosen by the respondents.

The average score of the feasibility degree of the six chosen topics above was 4.2, indicating the topics were appropriate to be developed in the next phase. Based on the data obtained, the ethical problem that talked about breaking the rules was the foremost topic chosen by respondents. Ethical problems related to the student discipline and the inner relationship between teacher and student are cases that often occur, especially for teachers who have an intersection between school regulation and their conscience as a teacher.

The problems given here were arranged in the form of ill structured way which is categorized as problems that have more than one solution (Kauchak and Eggen, 1998). By doing so, students were required to be more active in developing their critical thinking to provide solutions to existing problems effectively. Hence, these six topics chosen became the blueprint for the researchers to develop the preliminary product.

DEVELOPMENT PHASE

After composing the product framework, the researchers organized the set of real learning materials by generating stories, generating reflective activities, and selecting illustration. The stories were taken from the chosen topics and developed into narrative stories as a reflective activity to explore diverse viewpoints by creating a non-judgmental environment for the topic raised in a story. The following was a description of how the researchers developed the product.

First, the researchers generated the stories by sorting the topics chosen into four themes, namely: instructional problem, behavioural problem, ethical problem, and psychological problem (Soleimani and Razmjoo, 2016). By categorizing these themes, it is aimed to help PSETs understand the problems and topics effectively. Then, these topics were developed into an appropriate title to open PSETs' imagination before starting reading the story. The researchers selected the title that was not straight forward leading into the content so that the story was not easy to guess Juzwik and Ives (2010). So, this preliminary product has six units which consist of six real story titles as described in **Table 3** .

After getting the appropriate title in each unit, **Figure 2** presented the explanation on how the researchers generated the pedagogical narrative story by starting to give clear instruction

in code [a]. This instruction taught the readers how to be in others' position then took steps if they were in that position. Code [b] described the character and the situation of the story (b). Then, code [c] explained the problems or obstacles faced by the character.
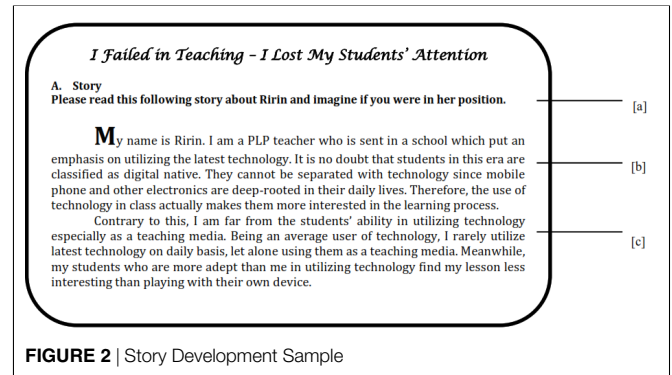
FIGURE 2 | Story Development Sample

Figure 7 illustrated the story complication and resolution. The story complication is in the code [d] where the researchers started using dictions in order to make the readers feel the tension. Code [d] presented where the problem and obstacles experienced by the character began to be elaborated. To end the story, the researchers drew on resolution in code [e] by using ill structured way which allows the problem to have more than one solution. PSETs are required to be more active in developing their critical thinking to provide effective solutions which required trust, inspiration, and empathy on the existing problems. The story was then continued to the next reflective questions to apply problem-solving skills through the concept of collaborative way.
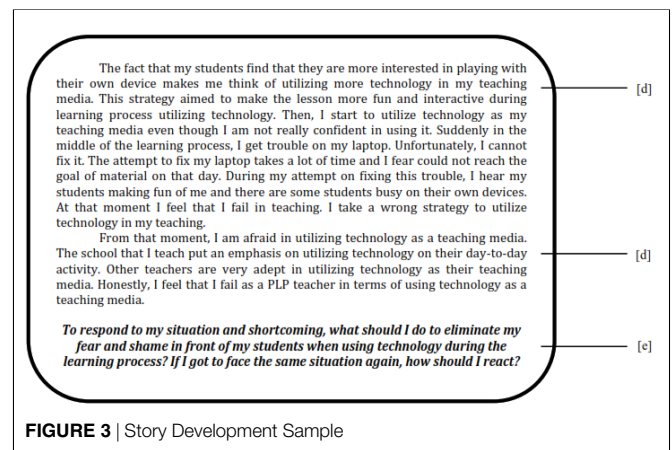
FIGURE 3 | Story Development Sample

Second, the researchers generated the reflective questions into learning activities by adjusting the learning objectives. The learning objectives were accomplished into three cycles of reflection consisting of (1) self-reflection or individual reflection that ask PSETs to take notes of some points of the story that was valuable for them. At this stage, PSETs are also asked to identify the problem of the story; (2) Group Sharing requires

TABLE 2 | TABLE 2 |Topic Validity

No	Topic (s)	Five Micro-teaching Lecturers Average Score	Five English Teachers Average Score	Total %
1	**Ethical Problem:** Breaking the rule	4.2	5	**92%**
2	**Psychological Problem:** Teachers' mental block	4.4	4.4	**88%**
3	**Instructional Problem:** Wide Learning Gap	3.8	4.4	**82%**
4	**Behavioural Problem:** Avoidance	4.4	4	**84%**
5	**Instructional Problem:** Learning Distraction	4.4	3.8	**82%**
6	**Behavioural Problem:** Troubled Student	3.8	4	**78%**

TABLE 3 | Developed Story Titles

No	Topic (s)	Story Title	Unit
1	**Instructional Problem:** Wide Learning Gap	My Students Have Different Needs	Unit 1
2	**Instructional Problem:** Learning Distraction	I Failed in Teaching – I Lost My Students' Attention	Unit 2
3	**Behavioural Problem:** Avoidance	My Student says "I don't want to be here!"	Unit 3
4	**Behavioural Problem:** Troubled Student	Sitting on the Dilemma	Unit 4
5	**Ethical Problem:** Breaking the rule	When School Policies Meet Conscience	Unit 5
6	**Psychological Problem:** Teachers' mental block	Test, Test, and Test	Unit 6

the PSETs to make a group of three or four, then each member shares what they have got from the self-reflection. Each member of the group listens to the others' response and takes notes of every member's response. The PSETs may jot down some interesting notions or sentences from each of the group member; (3) Class discussion is an activity where PSETs shares any lesson they have got from the group sharing. These three reflection cycles are then closed with their own Resolution. This resolution aims to familiarize them with rethinking what they have learned and navigate what they will do in the future. To sum up the learning objectives, the researchers developed the design materials into six units consisting of five learning activities, namely: Story, Individual Reflection, Group Sharing, Class Discussion, and Resolution.

Third, the researchers selected the illustration as the supporting media. To support the story and to make it more alive, some pictures were added to visually contextualize the situation (Lee et al., 2015). The pictures used in this design were illustrated in **Figure 4**.

Visualization could bring the soul of the story (Fariyatul and Bandono, 2017; Hsiu-Chih, 2008) and help the readers to predict the story before reading it. From those pictures, PSETs were expected to imagine the stories' plot more precisely (Jonassen and Hernandez-Serrano, 2014). The pictures were presented in the pre-activity of the lesson plan along with the preliminary product which was used in the implementation phase process.

For continuous design improvement, the researchers sent the preliminary product to the Teacher Professional Expert as a formative assessment. The expert suggested that the stories were still lacking in the emotional sense. Therefore, improving the selection of the diction in the stories could provide more senses of engagement to the target readers. The reflective questions and the illustrations should provide the critical instruction so the PSETs can hone their skills in solving problems.

IMPLEMENTATION PHASE

After the preliminary product was revised based on the expert suggestions, the product was field tested in the real micro teaching class consisted of nineteen PSETs. The field trial was conducted six times for all of six units in one class. By conducting field trial, the learning product was assessed in terms of the product practicability. The researchers used questionnaire with range 1 to 5 of the Likert scale, which illustrated 5 (Very Good), 4 (Good), 3 (Fair), 2 (Poor), 1 (Very Poor). The specification of the questionnaire for PSETs was described in **Table 4**.
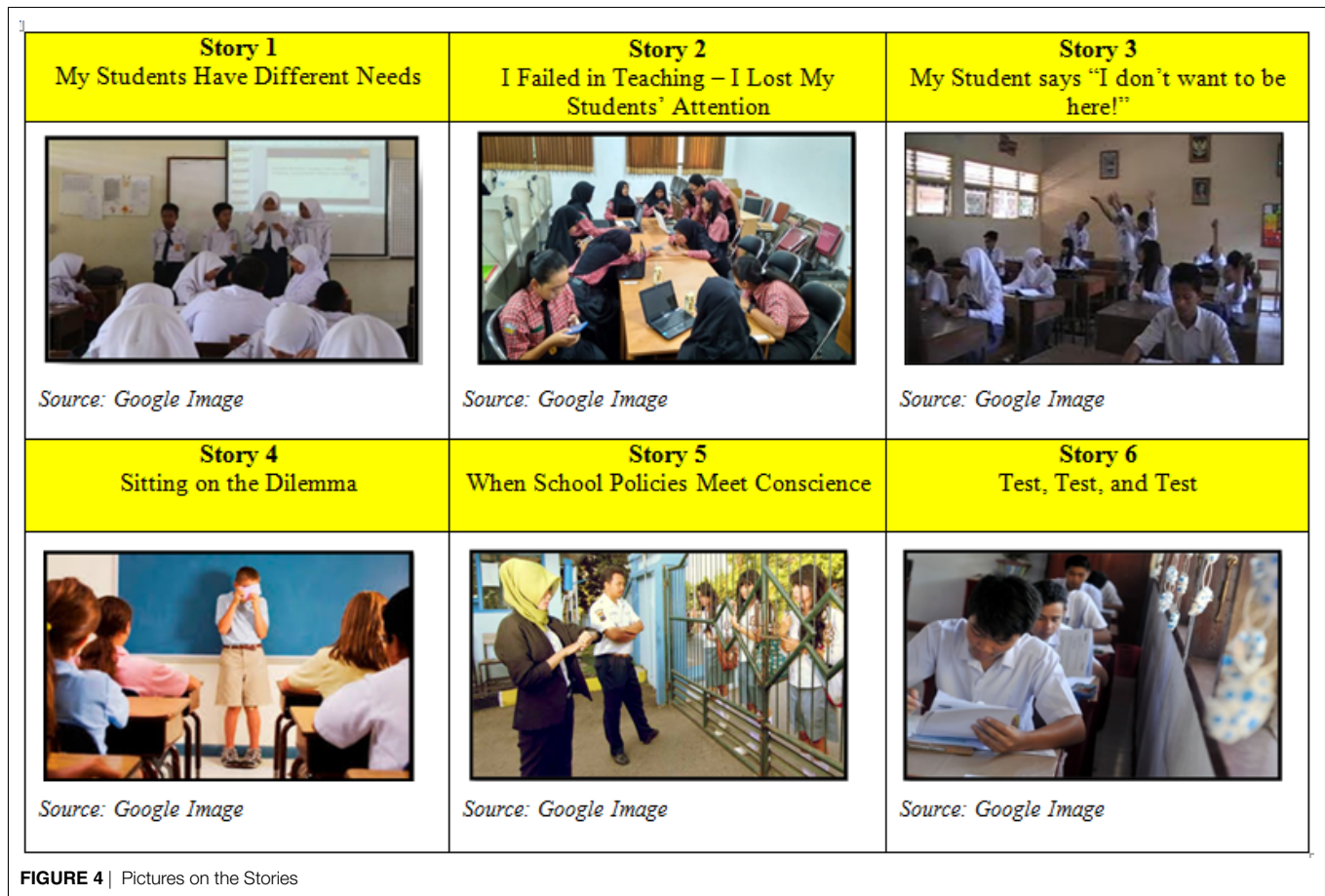
FIGURE 4 | Pictures on the Stories

TABLE 4 | Specifications of Design Validation Sheets by PSETs

Aspect (s)	Number(s) of Statement
Story Plot Clarity	Q1
Story Engagement	Q2, Q3
The appropriateness between story and PSETs' needs	Q4
The appropriateness between reflective activities and PSETs' needs	Q5

FIGURE 5 | PSETs' Assessment Result from each Story

Nineteen PSETs participated in the micro teaching class and filled the questionnaire as a formative assessment along with their opinions and suggestions. The results of the four aspects in the product assessment in Figure 5 indicate that the average score of story plot clarity was 4.63, story engagement was 4.70, the appropriateness between story and PSETs' needs was 4.52, and the appropriateness between reflective activities and PSETs' needs was 4.56. The general average for all stories was 4.60. From these results, the story engagement was considered as the best aspect for the participants.

The PSETs gave positive feedback about the product design. The stories were packaged in the relevant problems, so they could feel the main character's feelings. The story entitled "I Failed in Teaching: I Lost My Students' Attention" was the most relevant story that they might have.

The story is so me. I am so nervous when

I deal with technology. Moreover, I will be more nervous when I meet my students later. By doing this activity, I know what I should do.

P1, the questionnaire

The story presented was short and understandable, which did not make them bored in reading it. The problem raised in each story encouraged the PSETs to think more critically and reflectively, which was enjoyable for them.

…. this material should be provided in another class too I guess…

P2, the questionnaire

The story positioned me not only as a teacher but also as a student. I have been in a student's position. Both had difficult choices.

P3, the questionnaire

The story engagement was deeply felt by PSETs. On the other hand, some suggestions were also given by PSETs related to the content of the stories. The story entitled "Sitting on the Dilemma" was suggested to add more explanation about dysarthria (speech disorder) so the readers can feel the dilemma faced by the main character. There were some vocabularies that they have not heard before, preventing them from understanding the story plot more comprehensively. The researchers then undertook the last minor revisions based on PSETs feedback in adding some sentences and modifying some words to secure more lively senses of the stories for the readers. Next, for the last ADDIE phase, the researchers went through the summative assessment to validate the final product.

EVALUATION PHASE

The final evaluation assessment was conducted by a Subject Matter Expert (SME) who has credibility in validating English learning materials. Both evaluators validated the final product by scoring the product through a questionnaire as a summative assessment. The researchers performed the revisions through formative assessment in the previous phases to generate the design improvement. There was no revision process in the summative assessment since it was the final product (Branch, 2009; Cheung, 2016). The researchers used questionnaire with range 1 to 5 of the Likert scale, which illustrated 5 (Very Good), 4 (Good), 3 (Fair), 2 (Poor), 1 (Very Poor). The questionnaire contained ten statements to assess each unit of the product. Some spaces were also provided for SMEs to give comments and suggestions. The specification of the questionnaire for SMEs was described in Table 5.

The result of six aspects in the final product assessment showed that the average of the content linguistics was 4.70, the story engagement was 4.78, the correlation with the problem in the school context was 4.72, the appropriateness between reflective activities and problem-solving skills enhancement was 4.90, the problem clarity was 4.64, the appropriateness between story and learning goals was 4.70. From the score presented, the final product was categorized as a very good level and was classified as feasible and practical. **Figure 6** and **Figure 7** presented the sample of final product display after going through several stages of revision.
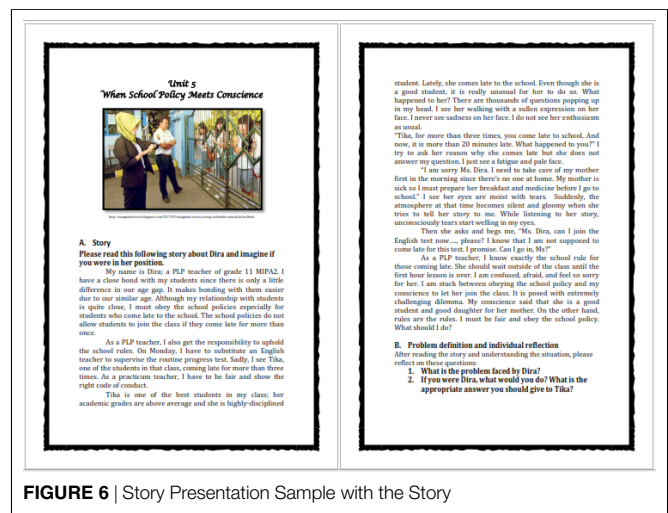
FIGURE 6 | Story Presentation Sample with the Story
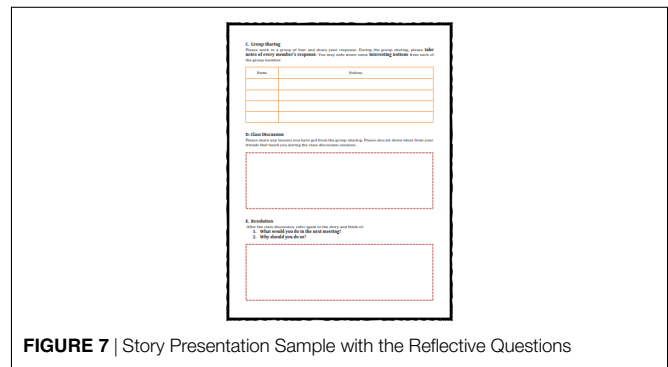
FIGURE 7 | Story Presentation Sample with the Reflective Questions

In line with the Subject Matter Expert's feedback, the diction, the emotion in words, the visualization through pictures, and follow up activities were very influential for PSETs in interpreting stories into their problem-solving skills. The expert stated that PSETs are expected to know themselves as a teacher and learn how to maintain themselves in a certain situation by having the ability to interpret the stories and solve the problem presented in this product. From the average score and the comments from the SME, the pedagogical narrative stories were considered practical since it is able to develop PSETs' problem-solving skills in facing the twist and turns of future situations when they encounter a real teaching context.

TABLE 5 | Specifications of Design Validation Sheets by SMEs

Aspect (s)	Number(s) of Statement
Linguistics aspect of the content	Q1
The story engagement	Q2, Q3
The correlation with real problem in the school context	Q4
The appropriateness between reflective activities and problem-solving enhancement	Q5, Q8
The problem clarity	Q6
The appropriateness between story and learning goals	Q7, Q9, Q10

CONCLUSION

This study aimed to design a set of pedagogical narrative stories as supplementary materials in micro teaching class by considering the roadmap of Indonesia Ministry of Education and Culture to facilitate PSETs develop problem-solving skills.

There were some conclusions written as follows: First, the product was designed using ADDIE (Analysis, Design, Development, Implementation, and Evaluation) model. The formative assessment was done at the end of analysis, design, development, and implementation phase. Meanwhile, summative assessment was done at the evaluation phase. The product of pedagogical narrative stories concerning with instructional problem, behavioural problem, psychological problem and ethical problem were packaged into six real stories along with critical discussion and reflective questions.

Second, the preliminary product was field tested in the real micro teaching class with the average score of 4.60. Based on the feedback, there was a minor revision on the story content. The final product was validated by an SME, resulting the average score of 4.70and was classified as a very good level for supplementary materials in micro teaching class. This study is expected to contribute to at least three parties, namely the English Education Study Program, PSETs, and future researchers. The study program can apply this product as a supplementary material for micro teaching class. PSETs can also be facilitated with factual classroom problems to develop their problem-solving skills. As for future researchers, it is vital to continue exploring the area of designing more varieties of reflective narrative stories to develop PSETs' problem solving skill. The meaningful narrative varieties as such have potentials to genuinely challenge PSETs' knowledge and imagination and elicit their maximum creativity and critical thinking in coping with the ever-changing classroom dynamics.

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Character education in English subject: Teachers' perceptions and strategies

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Character education is a purposeful, proactive attempt to develop good character in students or, more simply, to teach students about the right and the wrong. In relation to character education, the purposes of this study were to find out teachers' perceptions of character education and their strategies to implement it in the classroom. In addition, this study also investigated the teachers' problems in implementing character education and their proposed solution. The participants of this study were two teachers of English at one of public senior high school in Palembang and the students from two classes which taught by the two teachers. The data of this study were collected through questionnaire, interviews, classroom observation, and document review. The results of this study showed that the teachers agreed that character education was important to be applied during the teaching and learning programs through strategies such as group discussion or individual assignment. Students' characters and behaviors stated by the teachers as the problem in teaching the character education and having communication with students and observing them during the teaching and learning process were mentions as the ways to solve the problem.

Keywords: Character education, teachers' perceptions, strategies, problems, solution

INTRODUCTION

Globalization era brings a big effect on today's social life, there was a change in the way people live, think and act. It also gives a big influence on the educational area, especially in students' characters. The teachers' and school's role were really needed in order to 'fix' students' condition and to fulfill the needs in this modern era. They need to have a strong character which will help them in making decisions and in overcoming any obstacles in the life. Dealing the challenges of the 21st century requires an intentional effort to cultivate personal growth of students and the ability to fulfill social and community responsibilities as a global citizen (Bialik et al., 2015).

The Indonesia government has already set up the goal of National Education to make smart Indonesian students with a good attitude, behavior that would lead them to have a good characteristic. It was proved in The 1945 Constitution Article 31 point 3 and the government regulation of National Education system number 20 years 2003. Through the constitution and the regulation, Indonesia government hopes that the national education can create a good human or students with good character, moral, attitude who believe and piety to God Almighty, noble, healthy, knowledgeable, capable, creative, independent, and being a democratic and responsible citizen and it is in line with the eighteen characters value defined by the Ministry of Indonesia National Education, as follows: 1) Religious, 2) honest, 3) tolerance, 4) discipline, 5) work hard, 6) creative, 7) independent, 8) democratic, 9) curiosity, 10) the spirit of nationality, 11) love

the homeland, 12) appreciating the achievement, 13) communicative, 14) love the peace, 15) reading interest, 16) environmental awareness, 17) social awareness and 18) responsibility (Indriani and E, 2017).

Character is the mental and moral qualities of someone. The character can be defined as a full set of psychological characteristics, formed in part by growth in cognition that enables a person to act as a moral agent (Althof and Berkowitz*, 2006). On the other hand, character means the individuals inner makeup as a well-established structural whole as manifested in the individual's actions habits and mode of thought, as well as in the human sphere of the emotions (Bialik et al., 2015).

Whereas, character education is about the acquisition and strengthening of virtues (qualities), values (ideal and concept), the capacity to make wise choices for a well-rounded life and thriving society and good hope for people in this global era because character education aims are to build the foundation to lifelong learning, support successful relationships at home, in the community and the workplace, and last character education can develop the personal values and virtues for sustainable participation in a globalized world (Jubilee Centre of Character and Virtues, 2017). Character education is also defined as the intentional effort that needs to be developed in core ethical and performance values of young people (Lickona et al., 2014).

In the Indonesia education system, character education included in the newest curriculum designed by the governance, the 2013 curriculum. They claimed that all subjects were fully integrated with character values so it means that those character traits must be involved in lesson plans and must be applied during the teaching and learning process. The governance hopes that the teacher or the school can give and deliver the character education in the class through the material that they use in delivering the subject matter as it mentioned by Stiff-Williams (2010) that character education must be integrated with field studies and continuous through all classes and taught by all teachers. Yet, the fact is nowadays the teacher and the school, they are focusing more on the students' skill rather than students' character (Bialik et al., 2015). The lesson plan with character values included might be designed by the teachers but in fact, the activities done by the teachers in the classroom did not promote the character values (Pratiwi, 2018).

Teaching and implementing character education in the classroom are not easy, the school together with teachers must be planned the direct instruction in advance (Pala, 2011). Some strategies might be used by the teachers in implementing character education during the teaching and learning process, such as discussion, brainstorming, or doing the assignment. Reading literature could also be a strategy to build students' character. It is in line with Tyra (2012) who said that children's literature can be a strategy for the teacher in teaching character education in English classrooms. Smith and B (2002) said that whether told in the books of children or of adults, stories give the reader an experience of living through the trials and thrills of characters. The discussion could also be a strategy for the teachers in teaching the character education in the learning

program (Leifeld and A, 2015). Discussion is a hidden project of teacher, through discussion in the classroom the teacher can insert and teach character education to the students.

In developing students' character, the teachers need a long process. They might find some problems during the process. Students' backgrounds and the lack of knowledge about character education from the teacher could be the problems for teachers implementing character education in the classroom. Students came to the school with different backgrounds and diverse characters. Without a doubt, it would affect the way they socialized in school. It was noted by UNESCO (2010) that the values and attitudes people live by affecting the way they relate to others and their activities. While students' social environment such as family, friends, and school helps them in creating their character (Ozen, 2011). There should be adequate knowledge of the teacher to solve this but in fact, many EFL teachers in Indonesia got difficulties in implementing character education during teaching and learning process such as connecting the character and the teaching material, the lack of experiences in teaching the character values and students' background (Nova, 2017).

Despite that, the problems that the teacher faced during the process of developing students' character were not a 'dead-end'. The teacher might use an activity that could help them such as observation. Observation plays a main role in teaching practice, it helps the teacher to collect the information about their students that can later use during the follow-up discussion (Richards et al., 2011). Then, the rich content of the subject matter could also help the teacher in developing students' character. Lickona in 1993 said that teachers can teach values through the curriculum by using ethically rich content of the academic subjects.

This study was in line with some studies done by Ampel (2009) and Nova (2017). Ampel in 2009 shared the teachers' perceptions of character education, it said that character education proved to be useful in expressing the ideal and explicit action for the school to ensure a balance between academics and positive character values but this situation might not be implemented in the school environment if the teachers do not have adequate knowledge and skills of character education. In fact, rather than building students' character, some teachers focusing more on raising the students' scores.

Then, Nova in 2017 whose study was to know the implementation of character education in Indonesian EFL classroom, had found out that Indonesian EFL teachers have inserted character education during the teaching and learning process with several frequencies and different focuses. Yet, there were several obstacles that the teacher faced during the implementation of character value that categorized three major obstacles; they were teachers' pedagogic, students, and the teachers themselves. However, there is a gap between this study and the two previous studies. The data collection of those studies was taken from several schools with a large number of teachers as the participant. While this study conducted at one school in Palembang with only two teachers of English as the

participants. Thus, there might be a possibility that the result of this study could not be generalized to other teachers from a different school and the responds to the questions were not answered carefully. The lack of understanding and teachers' reluctance may have influenced teachers in responding to the questions.

By looking from the previous related study, this study is essential to be undertaken because it is expected that the results of this study could change some teachers' mindset that prioritizes more in students' academic achievement only and also help the teacher, especially the teacher of English, to find out the appropriate strategy in implementing character education in the classroom.

So, to reach the expectation of this study, the writer conducted a study in one of public senior high school in Palembang where they had already applied the 2013 curriculum which means they should provide some activities to build students' character during the teaching and learning process. Moreover, based on the pre-observation, the teachers claimed that they have already applied and taught character education through some activity both outside and inside the classroom. Thus, the objectives of this study were to find out teachers' perceptions of character education and their strategies in implementing the character traits in the classroom. This study was also to know the problems or challenges that teachers got during the implementation and also their solution for the problem.

METHOD

This study was a qualitative study which use descriptive qualitative to describe the finding. This study was conducted to get the perceptions among teachers of English of character education. Qualitative study is used to explore a problem and develop a detail understanding of a central phenomenon (Creswell and W, 2012). The site of this study was in one of public senior high school in Palembang. The participants of this study were the teachers of English from that school who taught the tenth grade with the total number of two people and the students from both classes. The initial of the teacher would be Teacher 1 (T1) and teacher 2 (T2). The information of the participants was presented in **Table 1**:

This research study used a triangulation technique. This research study was used methodological triangulation which involved the use of multiple methods of data collection (Carter et al., 2014). The ways to collect the data were presented in **Table 2**:

In collecting the data, the two teachers of English had to answer the questionnaire. The questionnaire was about character education. The questionnaire was used to get the teachers' perceptions about the character education in English classroom. The questionnaire was based on five points of Likert scale from strongly agree (SA) to strongly disagree (SD), for this research the teachers have to choose always, almost always, sometimes, never and unsure to answer the questionnaire. The

questionnaire was taken from a thesis written by Tuff (2009), and it consisted of 5 questions, 3 questions in section one which talked about the demographic information of teachers and 2 questions in section two which talked about the teachers' perceptions of character education. The complete results of questionnaire could be seen in the appendix.

After giving a questionnaire, the interviews were conducted with the teachers in order to strengthen the perception. The interview questions related to the research problem. The questions for the interview were the open-ended questions which will follow up the response that interviewees give to the particular questions by the researcher to encourage them to elaborate and explain their thinking (Fraenkel & Wallen, 2012). In order to know the strategies used by the teachers, the observations were conducted in both of the teachers' classes. The observation was conducted while the teacher was teaching, this activity was conducted to see what strategies that the teachers use in characterize students. The writer also observed the students in both classrooms, this observation was conduct to see whether the students had already characterized by the activities that the teacher gave to them or not. The teachers' lesson plans were reviewed by the writer with document review. The document review was conducted in order to get more information about the strategies. The data from lesson plan was used to support the result of observation.

The descriptive analysis was used to analyze the instruments. Each question in the questionnaire was analyzed and described by seeing the total percentage of the point in the questionnaire. Then, the writer transcribed the record of the interview and made it as a script. This necessitates a need to convert these words to a computer document for analysis. Alternatively, the writer might listen to the tapes or read the field notes to begin the process of analysis (Creswell and W, 2012). After that, the writer analyzed the script along with the result of the questionnaire and then describes them to get the perception.

For the observation, the writer saw the result of the observation through the checklist then described it based on the checklist to find out the strategies used by the teacher in applying and implementing the character education. In order to strengthen the result of observation, the writer reviewed the lesson plan used by the teachers when they taught the subject material. The results of the document review were described by the writer.

FINDINGS AND DISCUSSION

Teachers' Perceptions of Character Education

After analyzing the data, it was found that both of the teachers of English from this school shared the same perceptions about character education. They agreed that character education program was really important to be inserted in the teaching and

TABLE 1 | **Demographic Information of the Teacher**

Respondent	Age	Experience	Male/Female
Teacher 1	42 years old	>15 years	Male
Teacher 2	25-30 years old	1-5 years	Female

TABLE 2 | I**nstruments of the Study**

No	Research Questions	Instruments			
		Questionnaire	Interview	Observation	Document
1	What are the teacher's Perceptions of character education in English subject?	P (English teachers)	P (English teachers)		
2	How are the teachers' strategies in applying character education during teaching and learning process of English subject?		P (English teachers)	P (English teachers, students)	P (lesson plan)
3	What is the problem faced by the teachers in applying character education during teaching and learning process?		P (English teachers)		
4	What is teachers' solution for the problem that they faced?		P (English teachers)		

learning process and they also agreed that school takes a big responsibility in creating their students' character.

From the result of the questionnaire, both of the teachers gave a positive response over the first question. Teacher 1 and teacher 2 chose primary (100%) as their responses to the question. Both of them were agreed that school had a big responsibility in developing students' character. The way teachers and other staff interacted would influence the way students socialized with others. It could be proved from both of the teachers' responses to the questions about the school's responsibility in teaching 18 characters value which presented in **Table 3**:

The second question was talking about which character education traits that the teachers integrated into their teaching practice. The first teacher who was taught more than 15 years respond it that he always integrated (100%) those 18 character education traits by the Ministry of Indonesia National Education in the classroom. Inversely proportional to teacher 1, the second teacher was choosing always (66.6%) and almost always (33.3%) as her responses. She did not integrate all the character traits during the teaching and learning process because of the lack of knowledge about the character she said. There were only 12 character values that she believes integrated by her during the teaching and learning process. It could be proved from their responses which presented in :

School was a place where students' character gets easily to influence because they spend most of their time in this place. It could be from their teachers, friend, and school environment. It is a must for the school to develop their students' knowledge and skills along with the good character. Character education is not a subject that can be taught directly like math or biology, it is something that must be integrated with the subject matters and implemented during the teaching program. Stiff-Williams

(2010) said that character education must be integrated with field studies and continuous through all classes and taught by all teachers. Moreover, schools have a responsibility to foster a virtue, define and make a priority list of what they want then integrate them into all teaching (Jubilee Centre of Character and Virtues, 2017). Then, Ampel (2009) said that school is an academic place that prepares the future life of the country's youth, both from their academics and attitude.

Character education gives a good impact on students' life. Goss et al. (2014) said that attitude and character can have a major impact for school environment. Then, high-quality character education can promote academic achievement (Benninga et al., 2006). From the interview, the two teachers from this public school Palembang agreed that character education had a positive impact for the school environment, especially for their students. It could be seen in the results of the interview of teacher 1 and teacher 2:

Teacher 1:

I saw some students get a problem in their first year at the school, for example, they are not discipline and get a bad score in some subjects. But through the rules made by the school and also the motivation given by the teacher, slowly but sure they change into someone better than they used to be."

Teacher 2:

"Character education is really important to be inserted in the school subject. For me, education could be a good place to build a character. The good character of students will lead them to good achievement."

Next, based on the interview results, these two teachers of English agreed that in success the character education program, there must a good collaboration between parents and school.

TABLE 3 | Level of Responsibility school should play in Teaching 18 Character Education Traits

No	Character Traits	Primary		Somewhat		Just a bit		Not at all	
		T1	T2	T1	T2	T1	T2	T1	T2
1	Religious	P	P	–	–	–	–	–	–
2	Honesty	P	P	–	–	–	–	–	–
3	Tolerance	P	P	–	–	–	–	–	–
4	Discipline	P	P	–	–	–	–	–	–
…	….	P	P	–	–	–	–	–	–
17	Social caring	P	P	–	–	–	–	–	–
18	Responsibility	P	P	–	–	–	–	–	–
N		18	18	0	0	0	0	0	0
Percentage		100%	100%	0%	0%	0%	0%	0%	0%

No	Character Traits	A		AA		S		N		UNS	
		T1	T2	T1	T2	T1	T2	T1	T2	T1	T2
1	Religious	P	P	-	-	-	-	-	-	-	-
2	Honesty	P	P	-	-	-	-	-	-	-	-
7	Independent	P	-	-	P	-	-	-	-	-	-
…	…	P	P	-	-	-	-	-	-	-	-
8	Democratic	P	-	-	P	-	-	-	-	-	-
10	The spirit of Nationality	P	-	-	P	-	-	-	-	-	-
N		18	12	0	6	0	0	0	0	0	0
Percentage		100%	66.6%	0%	33.3%	0%	0%	0%	0%	0%	0%

Teacher 1:

"Well, there should be collaboration among parents, school and teachers to shape students' character education. School and teacher have to work together with parents to develop students' character. For me, children's character development has happened in the home means from their parents."

Teacher 2:

"That's right; I agree with the statement that parents, school, and teacher should do a collaboration in developing students' character because I think it will be useless if we the teachers and school have already taught students about character education but there is no support from their parents. It will make the students get confused because what they get in the school is different from what they get in the home."

Big support and good collaboration between parents and the school's staff is really important to success the character education program. A good communication between teachers and parents could be a kind of collaboration between them. Parents were the first and important moral educators of their children (Lickona et al., 2014). Yet, schools play an important role, along with parents and community members in modeling, reinforcing the important value, and preparing students to be better than they used to be (Tuff, 2009).

Teachers' Strategies in Applying Character Education

From the interviews and observation results regarding to the teachers' strategies, both of the teachers were already trying so hard to shape their students' character. They used some strategies that might be effective in implementing character values because they realize that character education could give a good impact both for their attitude and achievement though some values that did not applied by the teachers during the learning process. Those strategies used by them were hidden in the learning activities started from the pre-activity, whilst activity, and post-activity. Yet, the most strategy used by the teacher to build students' character was group discussion. They also made themselves as an example in showing the good character. The list of strategies that teachers used in implementing character education could be seen in Table 4 :

As it was mention before, the most strategy used by both teachers was group discussion through literature. They believe that by doing this activity, students might build their character because discussion let students to share their point of view and taught students to appreciate each other or it could be said that discussion was used as a method which shared a different point of view that involves both written and oral expression (Jubilee Centre of Character and Virtues, 2017). Then, litera-

TABLE 4 | The **strategies that the Teachers Used in Implementing Character Education**

NO	Strategies	Character Education Traits
1	Praising God Almighty	Religious
2	Brain storming	Curiosity
3	Group Discussion	Tolerance, Honesty, Democratic, Appreciating, Responsibility, Communicative, Creative, Independent.
4	Doing assignment	Responsibility, Discipline, Independent, Creative, Honesty, Reading Interest.

ture might also be a strategy and technique that help students to build their character. Children's literature can be a strategy that might help the teacher in applying character education in EFL classroom (Tyra, 2012) because reading and responding to literary works do not only function as something entertaining for the students but also give moral values that will influence their behavior and to strengthen the establishment of character and personality (Inderawati, 2012).

Besides observing the teachers, the writer was also observing the students from 2 different classrooms, one class from teacher 1 and one class from teacher 2. Based on the observation, the students from those two classes had already performed the good characters, though they did all the activities just because following their teachers' instruction. But without they realize, they had already shaped themselves into a good student with a good attitude and character. Even though some character traits were not appeared at that time, but the writer believes that someday the students will form others character since they are still in a process.

Teachers' Problems in Applying Character Education

Teaching students in digital era were full of challenges, they were 'a product' of today's modernization. During teaching and implementing character education in the classroom, the teachers might get the challenges and both teachers were agreed there were challenges in teaching and implementing the character education in the classroom. The following were the teachers' statements:

> My students came from different backgrounds and also came with a different character. Some of them are really active while some of them are the attention seeker, they do everything only to get the teachers' attention. It is not easy to deal with them.
>
> *Teacher 1*

> Sometimes I got difficulties to make the students who were not really active be a little bit active, to make the active students not covered all the activity and make the trouble maker realized that what they did all this

time was not good. I am also a new teacher here, I get lack of training about character education.

> *Teacher 2*

So, from the interview results, it could be said that both of the teachers got a problem in understanding their students' character that came from different backgrounds and the lack of knowledge and training about character education. Those problems faced by teacher 1 and teacher 2 were in line with a statement from Nova (2017) who stated that connecting the character values and teaching material, the lack of experiences regarding character education and students' background were the difficulties that many EFL teachers in Indonesia faced during the process of implementing the character value. Whereas, according to Leifeld and A (2015) teacher should actively learn a specific curriculum and method to get success in teaching character education in the classroom because teaching character education to the students is not only by giving some advice to them but also showing how exactly the value work in the real life.

Teachers' Solutions to the Problems

Teacher was a facilitator for students in learning the academic and a model in implementing the character values, they had a responsibility to tell and show his/her students which one was wrong and which one was right though they faced some problems during the process. Yet, the problems were not a failure for the teacher. Based on the interview result, it could be concluded that teacher 1 and teacher 2 tried their best to deal with the problems they found out during implementing the character education. Here were the teachers' answers during the interview:

> I tried to communicate with my students. Asked them what was their reason to behave so badly in the classroom and what they actually wanted to. After that, I motivated them, guided them so that sooner or later the students could change to be a good individual.
>
> *Teacher 1*

I observe my students first and make a note about them. The observation is to know the reason why they act like that and also as the reflection for me. Then, I tried to find and read as many research articles related to character education as I can. It quite effective for me. I observe my students first and make a note about them. The observation is to know the reason why they act like that and also as the reflection for me. Then, I tried to find and read as many research articles related to character education as I can. It quite effective for me.

Teacher 2

"I observe my students first and make a note about them. The observation is to know the reason why they act like that and also as the reflection for me. Then, I tried to find and read as many research articles related to character education as I can. It quite effective for me."

From the interview results above, it could be concluded that both teachers used the positive things that they thought might help them in facing the problem such as communicate with students and then observe them. Communication between teachers and students was really important because an act of communication generally has a desired outcome and communication is affected by the emotions, beliefs, and social orientations of those involved (Metusalem et al., 2017). So, through this activity, the teachers might get more information about their students. Knowing their problems, knowing what they actually wanted to do, or even knowing who their students were. Through communication, the teachers could decide which strategy that they are going to use in implementing the character education. Moreover, communication between teachers and students is one of the ways to strengthen the character values in the school environment (Jubilee Centre of Character and Virtues, 2017).

Then, besides did communication with their students, the teachers were also observing their students. As an educator, observing their students was a good way to know students more. By doing observation, the teacher would acquire more about their students' information that can later use during the follow-up discussion (Richards et al., 2011). So, it could be said that by observing their students, teachers can get more information that can be useful for them in deciding which strategy that might help them in developing students' character.

To sum up, the same perceptions among teachers and the same strategies regarding the character education were really important because when the teachers did not share the same perceptions about this program, there will not be a general character education culture in the school environment. Ampel (2009) stated that it is a must for all teachers to be ready and own similar perceptions on importance, efficacy, and practice of character education to possess a quality and consistent character education program within a school environment.

CONCLUSIONS

This study was talking about teachers' perceptions of character education and their strategies when they applied and implemented character education program during the teaching and learning process. The results of this study indicated that two teachers of English from one of public school in Palembang had the same perceptions. They agreed that character education is really important for students because character education teaches students to be an educated person who has a good attitude and can be wise in choosing between right and wrong for their own life and people around them.

Next, from the strategies that those two teachers used in teaching and applying character education during the teaching and learning process, they also share almost the same strategy. For example, they used group discussion as a strategy to implement character values during teaching and learning process, they let their students build their character by sharing opinion and discuss a topic in a group but it does not mean that the teachers do not care with students. The teachers are a facilitator, a guide, and a role model for students during the process of implementing character values. They will be there when students need help and guidance from them.

Then, the problems that both teachers get during the implementation of character education in the classroom are actually almost the same. Both of them get difficulties in dealing or understanding students' character because each student shares a different character. Yet, they had tried their best to clear the problem. They had found the solution for the problems such as communicating with students and observing the students. Summing up, the result of this study might not be the best. Yet, it could be additional information for other teachers in understanding character education. It also could help the teachers to change their mindset that character education is as important as students' academics. Besides, the result of this study might help teachers to find out strategies in implementing character education that fit with their teaching style.

Last but not least, some suggestions are given to the teachers and the school. Suggestion for the teachers is they need to prepare everything well in order to implement character education during teaching and learning process. Find more resources or teaching material that reflects character education or teaching material that could shape students' character. Be consistent in showing the character value to the students as they are the real role model for them in the school. For the school, big support is really important to success character education program. Facilitate teachers by giving a chance to join character education training. Set a friendly school environment that could shape and develop students' character. School environment is a perfect place for children to experience lesson related to character issues (Skinner and S, 2013).

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EFL learners' phonemic awareness: A correlation between English phoneme identification skill and word processing

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This research aims to find out the correlation between English phoneme identification skills and word processing. It applies the quantitative approach with correlation design. The participants are 100 of 3rd- semester students in English Language Education Program. The correlational result reveals that it has correlation with .382 degrees in phoneme identification skill toward blending skill with the significance level .000, and .359 degrees in phoneme identification skill toward segmentation skill with the significance level .000. Then, the correlation result of English phoneme identification skill toward word processing is .462 degree with its significance .000. By the result, awareness to identify phoneme by initial, medial, and final sound correlates to the blending and segmenting skills which influence the comprehension of word. The more the students are able to identify phoneme based on its sound, the more the students will be able to blend and segment phoneme. Lastly, the ability to identify English phonemes is proven to be a skill that supports EFL learners on their productive and receptive skills. Then being able to identify its phonemes will assist on recognizing and processing English words appropriately so that English language teaching can be associated with the use of phoneme-based instruction on its teaching process.

Keywords: English Phoneme, Phonemic Awareness, Phoneme Identification Skill, Word Processing, EFL Learners

INTRODUCTION

Segmental level of phonological awareness can be characterized as the combination of phonetic and phonemic awareness. Phonetic awareness demonstrates EFL learner's ability to characterize English consonants in points and manner of articulation aspect, English vowels in tongue height, tongue position, lip rounding, diphthongs and triphthongs aspect, in English words, it is certain aspects of English consonants and vowels (Hismanoglu, 2012). Furthermore, having a good level of phonological awareness c an increase foreign language learners' accuracy level on word reading and spelling. Specifically speaking, phono lo gical awareness has an impact on literacy acquisition as Zhao et al. (2017) states that metalinguistic skills have an impact on literacy acquisition.

Then, phonemic awareness strengthens the prediction by segmenting the word, so the listener will recognize the exact word being heard. Afterward, when it comes to literacy acquisition, with the help of the phonological and phonemic awareness, it will increase the vocabulary knowledge. Kalia et al. (2018) states that states that children' early development of phonolo-

gical awareness presents as their ability to differentiate between large segments of sounds (i.e. words, rimes) in their language and proceeds to their ability to manipulate phonemes (i.e. distinct units of sound that distinguish one word from another) in their language. Consequently, children begin recognizing large segments of sound and eventually they can manipulate phonemes. Then, by able to manipulate phoneme, it enables them to create new words so that their vocabulary will elevate.

According to Venkatagiri and Levis (2009), Phonemic awareness enables EFL learner's ability to mix phonemes into syllables, and syllables into words, add, remove, change, or rearrange phonemes or groups of phonemes within a word or a phrase, segmenting a word into phonemes and syllables, recognize the position of a specified phoneme or a sequence of phonemes within a word, identify rhyming and alliterating words and produce rhyming and alliterating words.

In early development of phonological awareness, it presents as children's ability to distinguish between large segment of sound (i.e. words, rhymes) and progresses ability to manipulate phoneme (i.e. units of sound distinguishing one word to another) in their language (Kalia et al., 2018). Some researcher believes that the development of phonemic awareness should be started from childhood. This can be reasoned because giving children exposure of letter names and sounds in earlier stage can give them a concrete way understanding phoneme simultaneously while they learn to read and write. Phoneme awareness tends to develop quickly when children learn to read and write in alphabetic languages. On its process, children learn phonemic awareness gradually. By 3 or 4 years of age, their syllable awareness is usually developed, and it is followed by onset-rime awareness by the ages of 4 or 5. Nevertheless, their phoneme awareness is often delayed until they learn to read and write first. By the time they grow older, the level of sensitivity and awareness of phoneme will be better until they come to the level of understanding word processing.

Additionally, having a good understanding of phoneme since children, English foreign language learners can do word processing faster and better. The more the students are able to identify English phoneme based on its sound, the more the students will be able to blend and segment phoneme which influence the word processing skill. It is also important that phonemic awareness can enhance EFL learners' skill on processing word through identification of sound, blending, and segmentation skill.

Optimal speech processing and efficient word recognition in the L2 is dependent on the development of a complete L2 phonological system that will effectively limit the influence of the L1 knowledge during processing (Darcy et al., 2015). Gaining a thorough knowledge of foreign language phonological system can be a measurement that EFL have a capability to do a word processing and recognition. While listening to someone speaking, it is a process in which listeners try to discover lexical form that the speaker intended to produce (Zellou and Dahan, 2019).

Discovering this lexical form is based on the phonetic information spoken by the speaker. In the process of decoding the phonetic information, subconsciously listeners do a word processing. The spoken utterances will be decoded into its smallest part, so the listener will try to understand the conveyed meaning by their understanding of phonological knowledge and awareness. When it comes to writing area, ability to decode spoken word is also required. Performing writing requires ability to form letters into words, to spell words, and to use proper punctuation. Consequently, having a good phonological awareness is necessary to do those writing requirements. Possible pathway to learn writing skills including learning to write words in oral vocabulary, memorizing spelling of whole words, or analyzing sounds of words is through the understanding of phonological awareness and its used to map sounds into symbols (Dixon, 2011).

As a non-native speaker, Indonesian EFL learners may face problems recognizing English phoneme. The first can be reasoned because phonemic system of a language can be different from one to another language. Difficulties occur for the non-native learner, however, because there are always important differences between the phoneme system of one language and that of another (Collins and Mees, 2013). When it comes study of sound, exposure of phonemic awareness needs to be risen up and given more. EFL learners' sensitivity to the sound structure of English words is relatively underdeveloped due to their inadequate exposure to oral English (Lee and Man, 2011). The second is due to the lack of ability to segment words. As in a process of listening, listener grabs the conveyed meaning by segmenting each word uttered by the speaker to its smallest part which is phoneme. Then, by being able to do this segmentation, the listener will be able to understand words being heard, and the conveyed meaning will be understood precisely. At this point, phonemic awareness influences listening skill.

Sawyer and Fox (1991) states that when comprehending or producing an utterance, mature language users normally are unaware of the individual phonemes and words comprising the utterance and the grouping relationships among the utterance's constituent words, unless they deliberately think about it. Without enough exposure given, foreign language learners will not have adequate knowledge of phonemic awareness. The exposure itself can be gained through formal situation like classroom, or EFL learners can find online resources to study by themselves.

Some previous studies have been a useful references while conducting this research. The results of those show interesting findings. The first previous study has been done by Yurianto (2019) on a state owned university in Indonesia 2019. Lintar's research focused on finding awareness of the participants, who are third semester students of English Language Education Program of a state owned university in Indonesia, on their phonemic awareness level. It aimed to know English phonemic awareness of the English Language Education Program students through three skills: identification, blending, and segmentation skill. The result showed that English Language Education Program students' phonemic awareness was poor.

The second previous study was conducted in 2016 by Alhumsi and Affendi (2016). Focus of the study was to review some literatures regard to the topic with the aim to research relationship between phonemic segmentation toward word recognition on the beginner readers. Its result is concluded that phonemic segmentation represents as a must-have bridge in the development of word recognition. The third previous study was done by de Graaff et al. (2011). The focus of the research was to provide more insight on the use of phonemic awareness task including blending, segmentation, isolation, and deletion that was meant to find the level of difficulties of each phonemic task. The participants were 141 students at kindergartners (74 boys & 67 girls). Instruments used were in form of task with four different focus (blending task, segmenting task, isolation task, and deletion task). The result showed that children performed better on phoneme blending and phoneme isolation compared to phoneme segmentation and phoneme deletion. It was also said that phoneme blending was easier than phoneme segmentation. Four linguistic factors mentioned above was provenly said that each performance of doing the task is dependent on the phoneme position which is initial and final position.

To summarize all the previous studies above, the second previous study shows that phonemic awareness influences word processing. By having the previous studies, it can be seen that effect of phonemic awareness on word processing has ever been researched in the level kindergartners. Although there is research on how phonemic awareness influences word processing skill, the research are done kindergartners level, but less is done in higher education level. Moreover, according to the result of the first previous study focusing to find phonemic awareness level on English Language Education Program, it is revealed that the level of phonemic awareness on higher education level is still poor. It means that there is something that needs to be done on why the level of phonemic awareness is still poor, but the level of education is high. By the result of this previous study, it can be said that there is an issue on how phonemic awareness level relates to word processing skill, and how they correlate to each other.

METHODS

Participants

The participants used to take the data were 100 students of 3rd semester in English Language Education Program of a state owned university in Indonesia. The participants were students who took Introduction to English Linguistic subject. The researcher assumes that the more the data used, the better the result it will be. Likewise, Creswell (2012) explains that correlational design should have an sufficient size for use of sample such as N = 30; more numbers will contribute to less error and better claims of representativeness. Additionally, to make the number of participants even, the researcher only uses 100 ELEP students.

Research Design

The present study focuses to find the correlation between students' English phoneme identification skill and word processing skill measured by blending and segmentation skill. In this present study, the research data are in the form of statistical data which later are used to find the relationship of the variables. In correlational research designs, researchers make a use of the correlation statistical test to elaborate and measure the degree of association (or relationship) among two or more variables Creswell (2012). It also applies a quantitative approach since correlational design is under the scope of quantitative approach. Furthermore, the data is expected to have linear relationship for the result. Through the data, the correlation used is bivariate correlation. The result that explains a correlation statistic as a linear relationship is the result of variables correlation coefficient. It is also called bivariate correlation, zero order correlation, or simply r, and it can be characterized by an "r" for its notation (Creswell, 2012).

Instruments and Data Collection

This research used the Phonemic Awareness test instrument that was adopted from Heggerty and Van Hekken (2003).

1. Phonemic awareness test

Based on Heggerty and Van Hekken (2003) instrument, there are 5 skills to be measured. Those are:

a. Identification skill
- Onset fluency: focusing on identifying initial sound in words
- Identifying final sound in words
- Identifying medial sound in words

b. Blending skill: focusing on the blending phoneme into words

c. Segmentation skill: focusing on the segmenting words into phonemes.

While doing the Phonemic Awareness test, participants were asked to finish five skills on the test. Skill 1 to 3 were measured for the identification skill. Participants were given time to identify onset fluency, final sound, and medial sound. Whereas, skill 4 was assessed to look at the skill of the participants to blend phoneme into words. Skill 5 was concerned about the of the participants in segmenting words into phonemes. Lastly, after all of the data were gained and scored, the correlation between variables will be calculated in SPSS using bivariate correlation.

Furthermore, the procedures of the research are as follows: Select the participant, and collect data. While selecting the participants in which the 3rd semester ELEP students taking Introduction to English Linguistic subject, it is assumed that students taking this subject have been given exposure about phoneme. So, they will be able to do the phonemic awareness test. In the process of collecting data, it was taken in the

form of quiz of phonemic awareness test instrument adopted from Heggerty and Van Hekken (2003). Its process is done through audio test.

Data Analysis

The data were analyzed as follows:

1. Examining

Researcher examines the data based on the test that has been administered before. The correct answers will be calculated on average.

2. Calculating

The Phonemic Awareness test is calculated on its average by giving score 1 for each correct answer and the total score for each skill is 10.

a. Calculating the English phoneme identification skill score

$$\frac{Onset\ fluency + Final\ sound + Medial\ sound\ correct\ answer}{30}x100$$

b. Calculating the blending skill score

$$\frac{Correct\ answers}{10}x\ 100$$

c. Calculating the segmentation skill score

$$\frac{Correct\ answers}{10}x\ 100$$

*d. Calculating the word processing skill score*

$$\frac{Blending + Segmentation\ skill\ correct\ asnwer}{20}x100$$

3. Analyzing data

The collected data is calculated firstly through Ms. Excel then to see the correlation result, the data were analyzed through IBM SPSS. The first is to find the correlation between English phoneme identification skill toward blending skill. The English phoneme identification skill score and blending score are put on the SPSS table then the correlation result is analyzed. Then, to find the correlation between English phoneme identification skill toward segmentation skill. The English phoneme identification skill score and segmenting score are put on the SPSS table then the correlation result is analyzed. Lastly, to see the correlation of English phoneme identification skill toward the word processing skill, both scores that have been calculated previously are put on the SPSS and analyzed.

RESULTS AND DISCUSSION

FIGURE 1 | Correlation coefficient between English phoneme identification skill (X) to phoneme blending skill

FIGURE 2 | Correlation coefficient between English phoneme identification skill (X) to phoneme segmentation skill (Y)
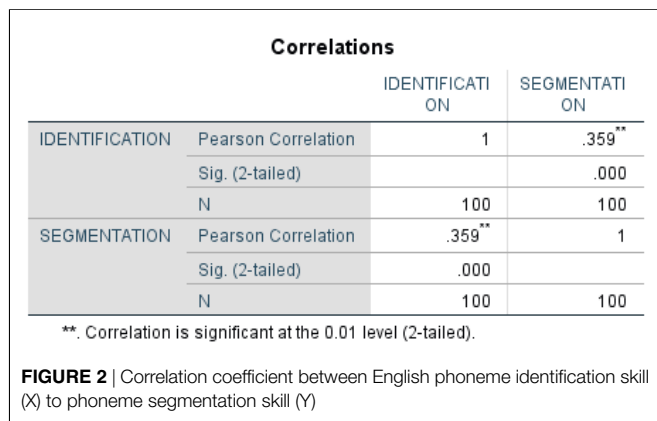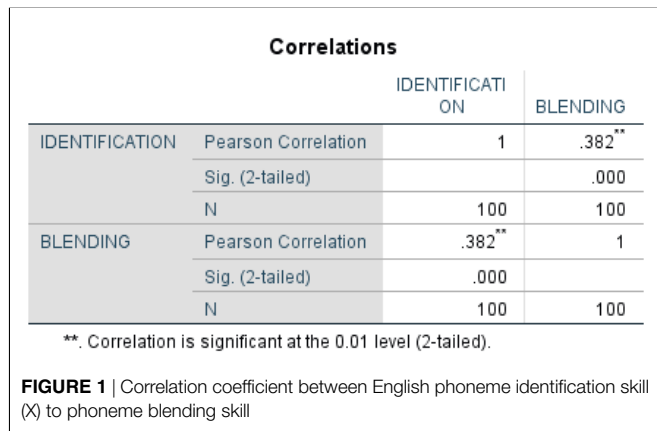
As can be seen on the $, it can be concluded that correlation coefficient between English phoneme identification skill (X) to phoneme blending skill (Y) is .382 which is categorized having medium correlation as the correlation is considered significant at the level 0.05. The P value is .000 < 0.05 which shows that the two variables show significant correlation.

On the **Figure 2**, it can be concluded that the correlation coefficient between English phoneme identification skill (X) to phoneme segmentation skill (Y) is .359 that is categorized having medium correlation as the correlation is considered significant at level 0.05. While the P value is .000 < 0.05 which shows that the two variables show significant correlation.

Correlations

		IDENT	BLENDSEGM
IDENT	Pearson Correlation	1	.462**
	Sig. (2-tailed)		.000
	N	100	100
BLENDSEGM	Pearson Correlation	.462**	1
	Sig. (2-tailed)	.000	
	N	100	100

**. Correlation is significant at the 0.01 level (2-tailed).

FIGURE 3 | Correlation coefficient between English phoneme identification skill (X) to word processing skill (Y)

Figure 3 shows that correlation coefficient between English phoneme identification skill (X) to word processing skill (Y) is .462 that is also categorized having medium correlation as the correlation is considered significant at level 0.05. While the P value is .000 < 0.05 which shows that the two variables show significant correlation.

DISCUSSION

Different characteristics of English and Indonesian phonemes can be a problem for students in understanding phonemic awareness. Some study explicates that pronunciation error or mistake is considered as typical for English speaker in Indonesia, and most of them are due to negative transfer of their mother tongue, Bahasa Indonesia, to English (Gozali, 2019). It indicates that first language phoneme may influence English phoneme acquisition. Therefore, English phonemic awareness is fundamental to equip students mastering English skills. Likewise, EFL learners are supposed to be aware of English phonemes and are supposed to have a good phonemic awareness level, yet their phonemic awareness is shown poor. Additionally, English phonemic awareness is contributing to word processing skills. Moreover, Alhumsi and Affendi (2016) explains that the ability to thoroughly use sound manipulation by blending and segmenting sounds in words may result in a higher word knowledge and processing.

This research tried to validate ELEP students' awareness of identifying phonemes in isolation that may help them in processing words by blending and segmenting English phonemes. It reveals that there is a significant correlation between English phoneme identification skill toward blending skill (r = .382) and segmentation skill (r = .359) with both P values are significant in .000. These findings indicate that phoneme identification skill contributes to blending and segmentation skill since phonemic awareness provides both decoding and encoding skill. Terry (2019) states that phonemic awareness is necessary for reading and spelling since it provides decoding and encoding skills. Decoding is a process of breaking down or separating spoken or written words into its smallest part. In other words, it is the ability to segment words. Ehri (2005) as cited

in (Haft et al., 2019) states that word decoding refers to simple mapping printed words to sound, but in reality, it involves numbers of lexical and sublexical processes including phonological and orthographic processes. On the other hand, Encoding is a process of using the decoded information to create new words. For instance, after decoding words into its smallest part and understanding the phoneme, then learners will be able to blend different phonemes to make a new word.

Also, phoneme identification skill has a significant correlation with blending and segmentation skill, it can be seen here that there is also a significant correlation between English phoneme identification skill toward word processing skill by combining blending and segmentation score. It reveals that the correlation coefficient is .462 with the P value is significant in .000. Recalling that mastering English should have a good understanding of phonemes and having awareness on it will make EFL learners easy to understand English words. Then, combined with the knowledge of phoneme identification skills, it will be easier to understand the word correctly. By being able to understand the word and its phoneme correctly, it will help to manipulate phoneme in word, make up word from phoneme, and break down word into phoneme easier. Moreover, it can be said that the higher level of ELEP students phoneme identification skill, the higher it will contribute to word processing skills as it is measured by phoneme blending and segmentation skill. In addition, Alhumsi and Affendi (2016) states the representation of phoneme in letter can be used to identify sound letter that is beneficial to understand spoken words correctly and grasp its meaning so that being able to recognize and identify the phonemes will assist on processing words.

In English language learning, being able to do word processing is necessary. Blending skill will help learners to form up correct new words that later their vocabulary knowledge will increase, and it will help leveling up speaking proficiency by avoiding mispronunciation since learners already know how to pronounce words with its correct English phoneme. As EFL learners can identify phonemes in isolation and understand its sound representation, it will assist them in matching spoken word into its phonemes. Consequently, when it comes to writing, learners can write a spoken word properly by matching its sound representation to its letter. According to Frost (2001) letter competence seems to emerge from the basis of phonemic awareness through word production. It can be said that the ability to produce spoken or written word comes from awareness of phoneme and its letter representation.

Phoneme segmentation skill that provides decoding skill will assist EFL learners in comprehending words while listening by identifying its sound that has been simultaneously segmented to its smallest part. In a reading process, it is a thinking process which is initially begun by words understanding, if the reader is not able to understand the words, they will not be able to comprehend the whole passage of text. On its process, it requires the phonemic awareness that will assist them understanding words properly. In addition, every letter that has a

particular sound will help recognize words while reading. By being able to segment words to phonemes, EFL learners can perform reading better by knowing its sound representation that can be used to avoid mistakes when understanding words. Furthermore, it can also be said that phonemic awareness has a causal relationship with reading comprehension. As described by National Reading Panel's study (2000) as cited in Pohlman (2013) not being able to recognize individual sounds in words, a reader is unable to sound out words. When the reader cannot decode to sound out words, they will not be able to understand the words in the text. If the reader does not know the words in text, they will not be able to create meaning or comprehend what he or she is reading.

Since the correlation coefficient is shown higher on the blending skill, it can be said that ability to identify phoneme correlates to the phoneme blending more significant rather than in phoneme segmentation. Being able to blend phoneme which provides encoding skill contributes on ELEP productive skills better. Burgoyne et al. (2013) explains that the ability to sound out words and blend phonemes is essential strategy for language learners to overcome new and unfamiliar words, and this strategy is helpful for speaking. Students performing a good blending skill are assumed to be able to perform speaking and writing better. It is assisted by the ability to use and understand phonemes used to form up words, so when it comes to productive skills, ELEP students can pronounce and write words appropriately.

It also seems that blending skill is easier to do than segmentation skill. Inline with de Graaff et al. (2011), it is found that phoneme blending and phoneme isolation is easier compared to phoneme segmentation. In phoneme blending task, English phonemes transcription are provided in which the students are asked to form up words from the English phonemes provided. While in phoneme segmentation task, English phonemes transcription are not provided, and the students are asked to segment word to its phonemes depend on their knowledge. In that case, students having less awareness and understanding of English phonemes cannot do the segmentation task as easy as the blending task.

In conclusion, knowing the fact that ELEP students have a struggle and their phonemic awareness level is categorized poor, there must be some causing factors. The factors might be having less intensity of learning phonemes or thought that phoneme does not really matter when mastering English. However, learning phonemes have proven that it can be a starting point when learning English. Kasim et al. (2017) also states that the problem faced by EFL learners during learning English comes from linguistic factors.

Meanwhile, phonemic awareness is considered important since it also contributes to both English receptive and productive skill. It will help EFL learners to comprehend spoken words precisely by correctly identifying its sound, improve vocabularies by understanding words correctly, pronounce words accu-

rately, and avoid mistyping words. By the result of this study phoneme knowledge and understanding how to identify it contributes to word processing skills. The more the students are able to identify the phoneme based on its initial, medial, and final sound, the more the students will be able to blend and segment the phoneme. Likewise, de Graaff et al. (2011) shows that phoneme blending, segmentation, and deletion is dependent on the ability to recognize phoneme position in which initial and final position. Furthermore, phoneme identification skill enables EFL learners to do phoneme blending and segmentation in word processing since it functions as an anchor to recognize phoneme position. Then, phonemic awareness promotes skills to identify, blend, and segment phoneme in word processing as the basic knowledge and understanding.

CONCLUSION

Phonemic awareness is an essential skill to be considered when EFL learners are eager to master English well. Since phonemic awareness can be measured through some sub skills, this study focuses on 3 skills: phoneme identification, phoneme blending, and phoneme segmentation. It is found that ELEP students' word processing skill measured through blending and segmentation skill is influenced by their ability to identify phonemes in isolation. This research validates the hypothesis that the skills of identifying phonemes in isolation correlate to the skills of word processing. Therefore, the awareness of a single phoneme of English is necessary for EFL learners since it presumably contributes to word processing skills. By knowing this, the association of English phoneme identification skill toward word processing skill can be assumed as an anchor to measure the word processing skill level.

Lastly, it can be concluded that awareness to identify phonemes in isolation contributes to the word processing skill that influences ELEP students comprehension and production of words. The ability to identify English phonemes is proven to be a skill that supports EFL learners on their productive and receptive skills since the ability to comprehend English word comes from the ability to identify the word firstly. Then, being able to identify its phonemes will assist on recognizing and processing English words appropriately so that English language teaching can be associated with the use of phoneme-based instruction on its teaching process. Moreover, in a future research, it is suggested that next researcher conducts a deeper inquiry on how English phoneme identification skill can be a use for English skills.

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"I can rise up from my adversity": Situational language learning strategies

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Deriving from the postulation that learning strategies are shaped from a learning situation, which is inseparable from its socio-cultural context. A paradigm has shifted language learning strategies (LLSs) studies in the new perspective of situational-based research. Using a narrative approach, this study examined one female pre-service teacher of an English education major in occupying strategies to fulfill the learning needs. To meet with the data, semi-structured interviews were carried out for the participant through a series of interconnected questions. The results marked that the use of learning strategies varied in a distinct learning situation, including the strategies to achieve the learning goal as well as to encounter the obstacles in English learning. Thus, this study has emphasized the feasibility of LLSs in context. Suggestions were also presented at the end of this paper.

Keywords: language learning strategies, situational approach, student's strategies

INTRODUCTION

Attention to language learning strategies (LLSs) has been geared because these occupy a prominent role in English as a second and foreign language education (ESL and EFL). Also, trends in this field have already bloomed into phases from time to time. Before all else, Rubin (1975) published seven characteristics owned by successful language learners, which became a spearhead of LLSs studies. Henceforth, Oxford (1992) Leaver et al. (2009) elaborated this field into the analysis of strategy use and the categorization of LLSs. Afterward, LLS theories were developed in training of strategy-based instruction (Coskun, 2010; Mistar et al., 2016; Nguyen and Gu, 2013; Rahimi, 2012; Weston, 2015). Until the past few years, research documenting this area has been enacted in English education among myriad teachers and researchers from various countries (Bai and Guo, 2019; Chon and Shin, 2019; Robinson et al., 2016; Teng and Zhang, 2019).

Conceiving the dynamism of LLS is noteworthy to promote the students' awareness on the strategies preferences, so teachers must be able to assist students with strategy instruction in the process of learning. Dao (2020) elucidated that students who were performed in interaction strategy instruction showed favorable engagement in the peer interaction. This strategy concerned with boosting the students' awareness on interaction strategy, construing the strategy, practicing the strategy, self-evaluating the strategy and continuity. Previously, Machili et al. (2020) examined strategy instruction (SI) on the integrated writing through video and intended SI for one semester in English for Academic Purposes (EAP) course. The result highlighted that SI impacted positively to the students' integrated performance through mediated-video.

From the aforementioned-view, it unveiled that LLSs studies should be carried out based on a learning situational approach by means of studying the subject of research intensely instead of employing a quantitative approach. This shift of paradigm contends that little attention on LLSs studies is undertaken in a more situational context, especially in Indonesia. The contextual approach is considered most appropriate in this current era of language learning because it focuses on the student's cognitive interaction with the environment that influences the use of the strategy itself. As an impact, the previous LLS approaches are ignored and recently shed some light on using strategy according to the context, experience, and function (Han, 2015; Pazooki et al., 2018).

This present study was designed to construe how an Indonesian EFL student upheld learning by employing strategies to meet with the needs. The participant was chosen based on the assumption that she was a strategic student after rising up from adversity in English learning. She is currently attending an English education major in the fourth semester and experiencing an interesting story to study since she left campus in the early second semester. The underlying reason for her deferral was the inability to follow the process of English learning that thoroughly underrated her mental to continue study. For her, English was a problematic and high demanding task. However, she eventually returned to college with more positive attitudes and minds. This situation is in accordance with a research held by Clark and Lappin (2013) & Révész et al. (2017), they asserted that language learning is a complex process for EFL student's behavior so that the implementation of strategies based on the situation is recommended for them. Thereby, this present study is worth-conducting Fekri (2016); Rubin (1975).

METHODS

This study engaged a narrative approach, which focused on the efforts of one female pre-service teacher in employing strategies to fulfill the learning needs. The open-ended interviews were done to the participant by means of eliciting narratives with regard to the context of her EFL learning in a complex situation. It was carried out intentionally once a week for an hour from January to March in 2020. To acquire the communicative and informative data, Bahasa Indonesia was used during interview process. The questionnaire was also designed by the researcher to obtain information that was appropriate to the context of study. The interviews were embarked with these sample questions: 1) After coming back to college from taking the deferral period, is there any different objective in studying English major? 2) Would you please tell me the differences? 3) Do you meet problems in learning English with this changing situation? 4) Do the problems hinder your motivation to learn and reach the objective of your study? 5)What do the strategies work well to cope with the English learning problems? Could you please narrate in particular the problem and the strate-

gies respectively?. The results of the interviews were then transcribed and translated into English.

In addition, the narrative analysis was applied by the following series of procedure: (1) listening to the talking interview data, (2) transcribing and classifying the talking data, (3) translating and interpreting the talking data, and (4) (re)checking the data interpretation with the subject of research in order to search out verification (Pazooki et al., 2018).

RESULTS AND DISCUSSION

The findings illustrated how an Indonesian student applied strategies to fulfill her EFL learning needs. During the English learning process, the use of strategies varied in a different learning situation, and it has emerged in two sets of a theme: student's learning goal in changing situations and strategies to encounter the obstacles in English learning.

Student's learning goal in a changing situation

Learning goal before the deferral period
At the beginning of the study at college, the participant narrated the goal of learning, which was passing exams as well as expecting high scores at the time when she undertook the quizzes in English learning. Passing exams turned out to be necessary as a goal of her study at the English education major, and it affected the language learning process in the classroom, such as focused on following the teacher's instruction and completing assignments. She occupied memorizing vocabulary and structure of English, memorizing the text before talking, completing structure exercises, and fulfilling blank answers on reading passage. It is depicted in the interview:

> "When I learned English in the classroom, my lecturers gave me and my friends many practical materials. Everyday, I practiced reading, writing, speaking, and listening. To have good scores, I must do grammar exercise twice a week, read texts and answer questions, memorize pattern and text before present it in the class. Then, once in a month, my lecturers administered quizzes or exams. So, **I must learn English so hard to pass my exams**."

Then, she continued telling:

> "When I learned English in the classroom, my lecturers gave me and my friends many practical materials. Everyday, I practiced reading, writing, speaking, and listening. To have good scores, I must do grammar exercise twice a week, read texts and answer questions, memorize pattern and text before

present it in the class. Then, once in a month, my lecturers administered quizzes or exams. So, **I must learn English so hard to pass my exams**."

Learning goal after the deferral period

At the end of semester one, the situation changed rapidly since she obtained low scores on writing and grammar course. Then, this situation has definitely wrecked her motivation to study further. Shortly after, she decided to take a semester off from college.

Followed by six months after her deferral period, the learning goals shifted along with the changing of current condition and environment. She reported an English learning for distinct reasons such as pursuing a scholarship abroad and being a professional English teacher. They were chased to prepare self-fulfillment on her field.

> "I never forget the time when I got low scores on writing and grammar course in my academic report. I felt that I failed on passing my exams including my English learning. Besides, I had no friends to share with in the classroom, they just cared for themselves and I left behind. At the end of semester one, I felt upset and told to my mom that I wanted to take a semester off."

Then:

> "In early of semester three, I returned campus with a new hope. I wanted to continue my study in English-speaking country so that I can be a good English teacher in the future. I thought that studying English for passing exams is not enough because it directed me to be a score-oriented student. **Therefore, I must reset my goals and focus on the process.**"

The problems and the applied strategies
Problem and strategy 1

Attending college came to be challenging for the participated student since she passed a gender segregation model at the Islamic boarding school, which was different from the situation of her present study at college. The definite impact of this situation was over anxiety across English learning in the classroom. Subsequently, she tended to be unconfident and less contribution to English learning practice. To solve the obstacle, she embarked by practicing English conversation frequently with several international students who existed at college, which was likely to be cognitively oriented. She thought that international

students did not concern with fluency, but they focused on the meaning of communication rather than correcting grammar and pronunciation.

> "In the early semester, I still unable to adapt to the classroom environment because when I was in the senior school, between male and female students were separated each other. **This situation made me nervous in following the new learning situation**. Even more, when I found out that many of my classmates had better abilities, I increasingly felt left behind, even though it was still semester one. Fortunately, I found the way to solve my own problem in the third semester, after coming back here to campus and **it was by always getting communication with several of international students at college**. Being able to talk with them reduced my anxiety that I used to feel at class because they really paid more attention to my talks than my grammar. They also didn't teach how to use vocabulary, but they produced more vocabularies to be imitated"

Problem and strategy 2

In a foreign language setting, it is reasonable that students are tricky to find people to communicate with non-native speakers. As a result, the problem aroused was a lack of opportunities to interact with friends at college, which automatically affected the reduced section of academic discussion.

> "Even though I study in English department, **I felt that it's hard for me to invite friends to speak English**. They were shy and felt a hesitation to practice English inside and outside the classroom. Sometimes, I need to discuss with them about my problem, especially in grammar and writing. Yet, their responses are not well. **This condition encourages me to be more independent** by exercising grammar and writing through internet sources because I don't want to limit myself to learn English like the previous semester."

Problem and strategy 3

Furthermore, the problem on the writing course was described more detail by the student participant:

> "Specifically, I have problem in composing the argumentative essay. It is the most complex subjects for me because the knowledge of grammar is implemented in the writing task. To deal with challenge, **I used to**

plan what I am going to study about grammar, because when **I learn grammar consistently**, I will write my argumentative text better. Writing argumentative essay doesn't only discuss grammar, more than that matter, I should be able to write paragraph composing introduction, body, counterargument, and conclusion. And the most difficult part is making the counterargument paragraph. I preferred to write from the easiest topic of argumentative essay. After that, **I asked my international friends to correct my work** in order to get feedback to write my argumentative text better. I did the activities repeatedly, so **I could know my weaknesses** in writing argumentative essay."

Student's learning goal in a changing situation

The student's narration informed the use of strategies to pass exams by learning repeated practice, which drove her to be a cognitively oriented student.

> "…I must learn English so hard to pass my exams…"

> "…I often use my feeling to choose the correct answer…"

Such activities are believed in improving the students' understanding and more self-consciousness of knowledge (Qian and Sun, 2019). Thereunto, cognitive strategies applied by the student also provided opportunities to organize information and memories more critically and complexly (Ferdinand et al., 2019). In a similar context, the repeated practices assisted a student to be acquainted with the rules of knowledge, understood of how to practice with the knowledge itself, improved the written production, and decreased the use of L1 (Amiryousefi, 2016; Azkarai and del Pilar García Mayo, 2017). Moreover, the aim of passing the exams in language learning encouraged a student to emerge test-taking strategies, mainly test-wiseness strategy. This strategy is used to complete the test without going through the knowledge of linguistic form and the cognitive process. Also, on certain occasions, test-wiseness accommodates the student's academic success when she tackles the problem of cognitive knowledge. Pazooki et al. (2018) unfolded that promoting students with test-wiseness contributed positively to the students' listening skill.

In fact, pressure on the result of exams has already shifted cognitive orientation to be metacognitively oriented. The student participant limited the strategies into setting up the learning objectives and counting heavily on the process.

> "… Therefore, I must reset my goals and focus on process."

Without an objective, learning is not strategic (Gu, 2012). This notion endorses Bai and Guo (2019) research; they administered how metacognitive strategies were employed by six Chinese doctoral students and it uncovered that metacognitive strategies played a significant role in the completion of students' doctoral degrees in Australian universities. It was because those strategies developed the learning efficiency and facilitated the improvement of their competence. Thereupon, a student's confession reflected a metacognitive knowledge that automatically encouraged her metacognitive strategies. This knowledge enabled a student to use appropriate strategies in language learning and influenced the goal orientation in academic achievement (Pazooki et al., 2018), both integrative and experimental orientation (Dörnyei, 2003). This was confirmed by Dörnyei (2003), Movahed (2014); Vandergrift (2005); they demonstrated that students' integrative orientation to complete academic tasks has a positive correlation with their metacognitive strategy.

The problems and the applied strategies

At this early stage, students are aware of their shortcomings in learning and try to foster initiative in the learning process that shaped character into an independent learner (Kusey, 2010), especially in the communication aspect. It was analyzed from the narration that student who participated in this study tried to apply cooperative learning strategies frequently by interacting and discussing with native speakers and it certainly encouraged her to work together, initiated the active talks in an educational environment, and developed her vocabulary mastery in English learning (Fekri, 2016). Of course, this practice also involves the cognitive strategy of student through activities that are carried out repeatedly.

> "… This situation made me nervous in following the new learning situation…"

> "…it was by always getting communication with several of international students at college…"

> "…I felt that it's hard for me to invite friends to speak English…"

> "…This condition encourages me to be more independent…"

Secondly, the student's strategies were deemed in context by connecting the strategies and the current learning situation. Fitting the strategies with the student's learning preferences, including the use of strategies to solve the learning problems, were suitable for effective learning (Dawson, 2019), and it characterized a good language learner (Wahyudi, 2014). Such characters were postulated by Hakan et al. (2015), they argued that taking a chance on the strategies implementation facilitated students to be responsible for their learning.

> "…I have problem in composing the argumentative essay…"
> "…I used to plan what I am going to study…"

"...I learn grammar consistently..."

"...I asked my international friends to correct my work..."

"...so I could know my weaknesses..."

The above-mentioned highlighted how the student participant accounted for varying strategies to cope with the complexity of the writing task. In this learning context, she tended to apply cognitive and metacognitive strategies through disciplined process orientation.

The implementation of grammar knowledge, which tends to be cognitively used, on writing tasks accommodates students to better writing, such as selecting the correct form and tense-aspect in the narrative (Comajoan, 2019). Teng (2019) also postulated that metacognition strategies have correlated positively with the students' EFL writing. The strategies comprised declarative knowledge, procedural knowledge, conditional knowledge, planning, monitoring, and evaluation. From the explanation, it can be inferred that the student's excellent control of learning facilitated the appropriate learning strategies, and then the use of cognitive and metacognitive strategies in EFL learning assisted the student's competence to improve writing.

CONCLUSION

The findings have underlined how the use of strategies varied in changing learning situation and accounted for the appropriate strategies to face the learning problems which were undertaken to fulfill the English learning needs. For example, in a test-oriented, student tended to apply cognitive strategy to assist knowledge in an academic test as well as a test-wiseness strategy to use knowledge without going through the linguistic structure and cognitive development. At another stage, to deal with the challenge, the student applied cooperative strategies to put into practice English in daily communication. Further, metacognitive strategies of planning, monitoring, and evaluating were exercised frequently to shape a good writing argumentative essay. At the same time, she implemented grammar knowledge as a part of the cognitive process to complete the essay.

Then, the application of strategy training in EFL classroom is highly recommended for EFL teachers because it is teachable (Griffiths, 2015) and will equip the student's ability with the learning need. Thus, students can use the strategies appropriately based on the shift of learning orientation. In addition, cooperative learning must be greater integrated into the social work curriculum because EFL setting needs the students to demonstrate English learning rather than study a theory. Foreclosing, the future researchers are able to execute the similar study by implementing strategies to the larger group of participants. This aims at investigating the impact of strategy training to the participants' certain skills. A mixed-method approach is recommended to elicit more comprehensive and objective data.

ACKNOWLEDGMENTS

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Video subtitle to teach listening skill of junior high school students

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A considerable interest on Information and Communication Technology (ICT) has been growing in the field of English language teaching within a very short period of time. Indeed, ICT is such an essential part in the respective field, in the sense that its progress allows the development of language teaching and learning process through its innovations. This study proposes using video caption as a medium to teach listening skill through integrating the use of ICT with the teaching process. An example of the innovation is the creation of teaching media supported by a software or application called. A well-known subtitle editing program, offers source tools for creating and modifying subtitle in a video. This paper presents the procedures and steps to design video subtitle by using application. Teachers can use it as a reference in designing a teaching medium using a video subtitling application which is aimed to make the students more motivated to learn English instructions. Last but not least, it is expected that learning with video caption can be an alternative and beneficial media for teaching, in particular, listening skill.

Keywords: Listening, Aegisub Application, Video Subtitle

INTRODUCTION

Most research on media and communication science in the field of English Language Teaching (ELT) tends to focus on the effects of media in teaching and on different learners. In fact, it is more crucial to pay attention to media literacy and applicability and the process of designing the media for teaching and learning. On a different note, it is also undeniable that the integration of Information and Communication Technology (ICT) into ELT has brought advantages. Sari and Sukma (2018) explained that ICT is more than capable of meeting the needs of the students through its dynamic and interactive nature, which in turn provides opportunities to direct their learning. Dang (2011) supported this statement by suggesting that this technology instantly provides information when required and it is readily accessible for educational purposes. Therefore, an ICT rich environment can help motivate and reengage students, as well as, capture their attention and develop their skills. As stated by Knezek and Christensen (2002), an integration of ICT into an English Language classroom can assist both the teachers and learners in attaining the deliberate teaching objectives since tasks will become simpler and information will be readily available and accessible.

As far as teaching receptive is particularly concerned, listening skill has been neglected despite its importance for L2 learning. However, teachers and academics should bear in mind that devoting to any of the two receptive skills may result in such a serious effect for a learner's overall proficiency in which it can affect the development of any two productive skills, namely speaking and writing skills. As an example, L2 learners are incapable of gaining the speaking and writing skills without gaining the skills of reading and listening.

To this, Bordonaro (2014) claimed that even though listening is, or is often claimed as, a passive language skill, it can also be considered an active skill. Listening in L2 can be deemed as active skill when the listeners are given the target to succeed with complicated tasks, namely interpreting stress and intonation, and distinguishing phonemes Ghoneim (2013).

In view of the foregone, this study proposes integrating ICT with teaching by using video captions to teach listening skill. Using video in giving a learning instruction in foreign language classroom can beneficially help students perceive the message of the story more easily (Baltova, 1999). Video caption which is also well-known as same-language subtitle benefits everyone who watches video (children, adolescent, college students, and adults). This research employs a subtitling software or application called Aegisub. Aegisub is well-known as a subtitle editing program which is developed by Niels Martin Hansen and Rodrigo Monteiro. A previous study by Gernsbacher (2015) revealed that closed captioning a video can step up the comprehension of, attention to, and memory of the video as it helps learners who watch videos with the non-native language. This paper also come up with the procedures to design video caption by using Aegisub. Last but not least, it is expected that subtitled video as a teaching medium can be a beneficial alternative to teach listening skill.

METHOD

This recent study used research and development (R&D), which, as documented by Borg et al. (2003), can be defined as one of the research designs which purpose is to develop educational product through evaluation and investigation in a real education field. To this, Latief (2015) added that "educational research & development is a research design aimed at developing educational products, like curriculum, syllabus, text books, instructional media, modules, assessment instruments, etc."

This research was carried out at a junior high school in Mojokerto, East Java, Indonesia. The subject of this study was twenty (20) ninth grade students in this junior high school. The instrument applied was a questionnaire designed to identify the students' problems in learning English, especially the listening skill. Then, the results from a need analysis was utilized as a guidance in developing an appropriate media for teaching listening. The questionnaire contained close-ended questions in the form of Likert scale with descriptions — strongly agree, agree, disagree, strongly disagree.

To carry out the research, several procedures were applied. First, a need analysis was conducted to know the students' problem in listening. Subsequently, the writer studied the theories related to the problems and listening. Then, the media for teaching listening based on the result of the needs analysis was designed. An expert validation was obtained to know the quality of the media used. The writers then conducted a try out in order to know the appropriateness, usefulness, and effectiveness of the media for teaching listening. Lastly, the final prod-

uct in the form of the media was completed.

**FIGURE 1** | Step of development
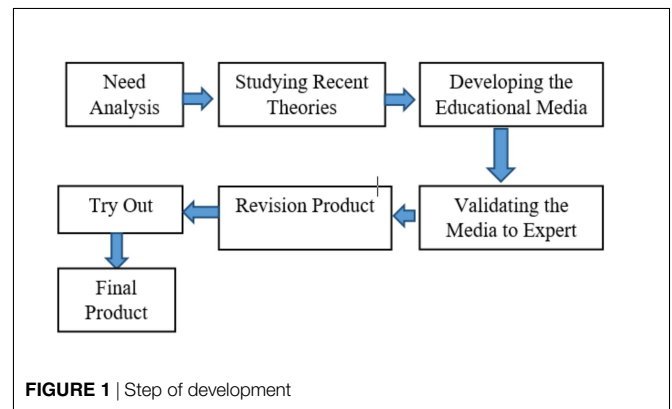
RESULTS

Media Development

The development of an ICT-based teaching media using video captions is purposed to help students in listening. For this reason, an application for editing subtitle named Aegisub is used in this research. Since interactive media is known to help the students learn listening interestingly, as confirmed by the results of a need analysis, the research chose to use an application for creating video subtitle to develop an innovative teaching media.

In the need analysis phase, there were several problems related to listening skill which students often face, such as the difficulty in understanding the fundamental content of what they are listening. Most of them stated that listening to an audio to understand the message or the conversation, which is a very common practice in a listening class, is less interesting. To this, the research intended to design a teaching medium in the form of video subtitle in order to help the students to easily understand the content of what they are listening.

This research proposed a teaching medium which employs video subtitling application. The detailed procedures to create closed caption the selected video are attached in Appendix 1. The research used a video of a traditional narrative story (fable) entitled "the Ant and the Dove". It is worth noting that, as suggested by Bruner (1991), a traditional narrative may serve as a valuable educational tool. In this sense, using subtitle can make the video more memorable. Additionally, Gernsbacher (2015) stated that video subtitle can help listener to process a spoken language easier through a written language. This allows students to comprehend the content of the video, and find out the meaning of the story. Last but not least, the research is designed to provide a guidance to compose video subtitle and implement it as an alternative media to teach listening skill.

Appendix describes the steps and the procedures in creating video subtitle using Aegisub application. It includes nineteen steps to create video subtitle using Aegisub application. One of the steps during the process is shown in **Figure 2** .

FIGURE 2 | The layout of the homebar used to move to the next subtitle line
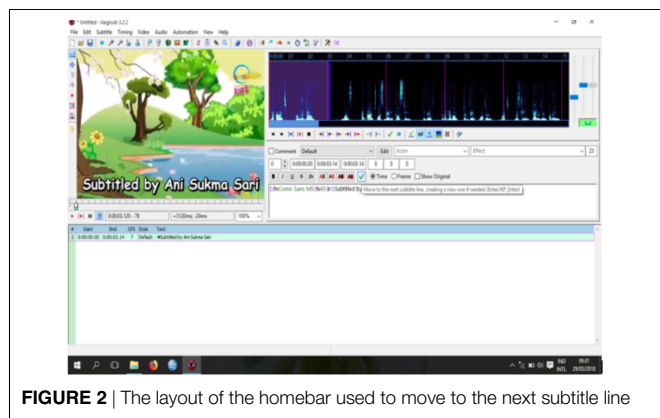
The Result of Expert Validation

The proposed design of teaching media using video subtitle application was first consulted to an expert to test the validation. Having the expertise in Information and Communication Technologies (ICT), the expert was asked to give comments, feedback, and suggestion which are presented in the following discussion.

The expert stated that the application used to create video subtitle was relatively easy to work with since it only needs several procedures to successfully embed the subtitle into a video. Additionally, she also added that the application was readily accessible for the teachers. Overall, the expert stated that the application was helpful for beginners or teachers who wish to use video subtitle application.

Try Out

This ICT-based media development is created as a teaching medium to help teach listening skill to a prive junior high school in Indonesia. The video chosen as the medium for subtitling was a video of a fable. Fable was chosen because the research considered that it fits with the lesson plan. Closed captioning the video helps the students easily understand the story in the video and the structures of narrative text — orientation, complication, and resolution. This medium was developed by deploying two learning techniques; individual activity and group work. The steps in teaching the listening skill using subtitled video as the teaching media are as follows:

Individual activity (Warming up)

1. The teacher gives a paper containing a word to every student. The words are taken from the video,
2. The teacher asks the students to stand up and listen carefully to the video of a fable "the Ant and the Dove",
3. The students are allowed to sit down after they hear the word on their piece of paper,
4. After finishing hearing the story, the teacher shows the video of the fable (teacher need to prepare LCD in advance).

5. The students are then asked to check their words,
6. Lastly, the teacher asks the students to make a sentence from the word they have.

Group work

1. The teacher divides the students into several groups,
2. The teacher shows the chosen fable video "The Ant and the Dove" with the subtitle and ask the students to listen carefully and take important notes from the video,
3. After the video ends, the teacher gives an envelope to each group which contains some pictures and jumbled sentences related to the video,
4. The students are asked to arrange the pictures and jumbled sentences into a correct chronological order,
5. Finally, the teacher asks each group to correct the other groups' work together.

In the end, after giving individual activity and group discussion, the teacher shows slide presentation which contains explanation about the generic structure of narrative text (fable).

Result of Implementation of Video Caption as the Alternative Media to Teach Listening

Upon implementing the procedures in a listening class, findings are formulated as follows:

1. Students were more motivated in learning English especially listening skill. It was observed that the students really enjoyed the listening class and followed the lesson enthusiastically.
2. The teaching media allowed students to learn in an attractive way. It was shown by an improvement in memorization of new vocabularies supplied by the video.
3. This alternative media required the students to work both individually and in a group. As a result, they could experience a supportive learning atmosphere. It can be concluded that this alternative teaching media could really help teachers to build students' interaction.
4. Lastly, since the students were asked to correct their friends' work, it was found that students learned autonomy through the activities.

The Final Product

The research aimed to find an alternative teaching media which can help students learn English, especially the listening skill. Upon completing the experiment, the final product proposed is video subtitle embedded in a fable video. It is also important to note that integrating ICT into English learning by using an application to provide video subtitle is a very feasible alternative teachers can use to vary their teaching media. Teachers can design their own subtitle creatively with application such as Aegisub which is readily accessible and easy to operate.

DISCUSSION

Upon concluding the experiment, this study found some beneficial results. First, the students are more enthusiastic in following and enjoying listening class. According to Danan (2004), subtitling can build learner's comprehension and lead to additional cognitive benefits such as greater depth of processing and understanding. It is because during listening class, they are watching the video while paying attention to the English subtitle.

It has been stated before that English video with subtitle helps students to develop their memorization of unknown or new words. As an example, learners can easily learn English vocabulary through watching a TV program with an English soundtrack and subtitles (Koolstra and Beentjes, 1999). In line with this, Wang (2012) showed that video materials with subtitles can serve as an effective alternative tool in teaching new L2 vocabulary since they combine visual and audio aids to develop the capacity of learner' working memory. To this, it can be firmly stated that video subtitle can potentially facilitate learners vocabulary acquisition without distraction since it also helps learners to notice new vocabularies (Wilson, 2002). To put it simply, subtitled videos visually and orally represent words and pictures and thus help students to activate their coding skill when processing pictures or words.

Next, it was also found that subtitled video may also boost students' active interaction during learning when it is combined with interactive teaching method. For instance, teachers are able to prepare variety of learning methods such as individual and group works. Following these, teachers can give learners exercise related to the subtitled video that the students can do independently or with their group members.

Last but not the least, the use of subtitled videos in listening class also encourages learners' autonomy. As an example, in the learning process, the teacher can ask learners to closely look into a friend's work (for example, exercises to put jumbled sentences or pictures in logical or chronological order). The benefit of using subtitled video in learning English is that it helps the teachers creatively design and prepare various teaching methods with an innovative teaching media.

CONCLUSION

Innovation in teaching have yet reached its height. Teachers are truly recommended to be able to design their teaching media to be as creative as possible. Moreover, information and communication technology (ICT) is one of the best options in creating innovative teaching media since it provides teachers with novel and innovative ways of teaching.

This paper proposes an innovative teaching media employing video subtitle application Aegisub. Aegisub application provides an easy way to attach subtitle into a video. Hence, this paper proposes the procedures to prepare teaching media using Aegisub and also the steps to implement this teaching media in teaching listening.

It is expected that the students will be more motivated to learn English, especially listening skill. Last but not least, through this teaching media, it is hoped that students will be more active and engaged with the teaching and learning instructions.

ACKNOWLEDGMENT

APPENDIX 1

The Steps for operating Aegisub application for subtitling video:

1. Firstly, install this Aegisub application version 3-2-1 in your computer.
2. If you succeed to install this application. Then, it will appear in your window screen.
3. Click Aegisub icon twice, and then you will see this home screen.
4. In the home bar, click video and open video.
5. Choose your video that will be subtitled by using "Aegisub", and click open.
6. If the screen looks like this, it means your video is ready to be subtitled.
7. Clik this button, and set your font style and font size. Then, click OK.
8. Set the start of selected subtitles to current video frame by clicking this button.
9. Type the subtitle in the box provided.
10. Play video starting on the position you want to add subtitle.
11. Pause the video playback where you want to end the subtitle.
12. Then, click this button to set end of selected subtitles.
13. Click this button in the home bar to move to the next subtitle line.
14. Repeat the same steps from 8 to 13 for adding subtitle until you arrive at the end of the subtitle.
15. Click file and save subtitle or you can use alternative button by clicking CTRL+S.
16. Save the subtitle file in the same folder where you save the video. Then, click save.
17. Then, make sure that the subtitle file and the video are in the same name in a folder.
18. Click open with the video player application you have such as GOM PLAYER or VLC.
19. Finally, you can play and enjoy the subtitled video to teach listening skill.

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Synchronous online discussion: Teaching English in higher education amidst the covid-19 pandemic

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During the outbreak of Covid-19 pandemic, many educational institutions have adapted various online teaching modes. However, studies exploring the employment of synchronous online discussion for teaching English in higher education context is still limited. This study aimed at investigating EFL university students' perceptions and challenges on the use of synchronous online discussions. Employing virtual observations and semi-structured interviews, five Master students of English education study program of a public university in Bandung participated in this study. Data were based on three domains of communication types for e-learning; content-related, planning of tasks and social supports. The findings showed that the students had positive response to the employment of synchronous online discussion. They believed that synchronous online discussion was a good online teaching mode where task negotiation, task planning, opinions, questions and answers can be done easily. In addition, they could improve critical thinking and writing skills as well as get social supports. Meanwhile, poor internet connection and misunderstanding of tasks became the challenge.

Keywords: Synchronous online learning, Teaching English, Higher education

INTRODUCTION

Looking ahead to the decision of closing face-to-face interactions, most of the universities in Indonesia employed online learning to cope this challenge. Online learning refers to the new format of learning delivery which allows the technological tools such as computer and internet bridging the transfer of learning materials (Carliner, 2004). In recent years, technological development has allowed universities to conduct innovative instructions with the involvement of online learning either fully or partially. However, Covid-19 caused emergency situation has forced universities to massively employ online learning in order to maintain instructions. Generally, online learning can be categorized into three learning environments, namely synchronous learning environment, asynchronous learning environment, and hybrid learning environment (Perveen, 2016).

Synchronous learning environment refers to the real-time online learning which facilitates students and teachers to interact at the same time or live (Salmon, 2013; Shahabadi and Uplane, 2015). Some examples of synchronous learning environment include video conferencing, tele-conferencing, live chatting, and live-streaming lectures. The benefits of synchronous online learning relate to the increase of students' engagement and motivation because teachers can directly monitor the learners' responses during the learning process (Hrastinski, 2008). This is confirmed by a study which proved that synchronous learning environment can promote and

enhance students' engagement levels as well as the quality of the learning process (Wdowik, 2014). Conversely, asynchronous learning environment provides more flexible time for students and teachers to conduct the learning process since it is not limited by time, place and classroom (Mayadas, 1997). In this case, asynchronous learning environment facilitates the learners and teachers that cannot be online at the same time (Hrastinski, 2008). Email, online modules, virtual libraries, lecturers' online notes, lecturers' blogs, online discussions boards or social media platforms are the examples of asynchronous learning environment. The hybrid learning environment is the combination of synchronous and asynchronous learning environment in order to get the most preferable learning environment (Perveen, 2016).

The changes of learning modes from face-to-face interaction to online interaction demands English lecturers to adapt to this situation. They have to find any appropriate teaching methods that suit to the online learning mode. One of the most common method is online discussion. Online discussion provides some benefits such as real-life audience, current information and increased topic focus Sutherland-Smith (2002). Through online discussions, lecturers and students can be connected directly and easily without worrying about their distances. In addition, through internet access, students can browse the most updated information and this will encourage the students to give the best opinion in the discussions. As a result, the students will be more focused and engaged with the topic available in the discussions. Likewise, online discussions also encourage students to share experiences and learn from them each other (Parra, 2000). This helps the lecturers to provide live and constructive learning environment for developing the students' knowledge. As explained in the previous paragraph, online learning can be conducted within three modes of learning environment namely synchronous, asynchronous, and hybrid learning environment. Hence, the current study focuses on online discussions done in synchronous learning environment or simply called synchronous online discussions. This mode of learning environment is considered in this study since synchronous online discussion are increasingly becoming trends in higher education lately (Duemer et al., 2002).

As online discussion becomes alternative way for today's language teaching, we could define discussions as the process of interaction for sharing ideas and opinions within a group of people Arends (1997). Moreover, people do discussions because of some reasons. In line with this idea, Gulley (1968) argued that discussions aim for enlightenment and policy determination. When the aim is enlightenment, the group members systematically define, analyze and exchange information. Meanwhile, the group members will systematically define, evaluate possible solutions and come up with an agreement if the aim is for policy-determination. In English language learning context, discussion is likely aiming for enlightenment as well as improving students' English proficiency.

There are four categories of approaches in learning through discussions. The first is to check students' ideas. This aims to make sure that the students were in the right track for doing their learning process as well as understanding learning materials. The second is to acquire ideas. It means that through the discussions, both teachers and the students can gather ideas on a certain topic that they discuss. The third is to develop ideas. When students do the discussions, they share ideas each other and from this they can start to improve their own thinking. Lastly, discussions allow students to challenge their ideas and beliefs. Through this way, the students will get more complete understanding on a topic that they discuss (Ellis et al., 2006). In short, teachers can use discussions for teaching English based on various approaches.

Online discussions can also be aligned to Bloom's Taxonomy (Ragupathi, 2018). In the stage of remembering, students recall facts and key concepts. Then, in understanding stage, they will explain ideas or concepts which is followed by discussing and summarizing the key concepts. In applying stage, students will use knowledge/information in new ways through manipulating, experimenting and problem solving. Meanwhile, drawing connections among ideas as well as organizing ideas refer to analyzing stage. Next, students will come to the stage of evaluating by justifying, contrasting, comparing and reframing the ideas. In the stage of creating, they will produce new ideas based on their own prior knowledge and thoughts. This shows that online discussions support the process of students' cognitive development.

Using online discussions for teaching English is the best choice. Lots of benefits are offered by online discussions. They are (1) demonstrating knowledge of key concepts, (2) stimulating higher order critical thinking skills, (3) encouraging peer interaction and team work, (4) promoting thoughtful reflection, (5) achieving social interaction and community building, and (6) encouraging student-generated discussion topics (Ragupathi, 2018). Those benefits will elevate students' English proficiency, cognitive aspect and social skills. Likewise, online discussions could boost students' learning performances Sutherland-Smith (2002) as they tend to have better preparation of choosing appropriate vocabulary and completing reading tasks in online discussions rather than in face-to-face classroom discussions.

Furthermore, some studies have already been conducted under the issue of online discussions. The first study explored how online forum discussions can promote writing skill pedagogically Jose and Abidin (2016). The findings reveal that through online forum discussions learners can improve their writing skills by sharing ideas and checking grammatical/spelling errors each other. In addition, it was suggested for the English teachers to make clear ground rules for the discussions including the strict use of L2 (English) as well as the prohibition for jokes and insulting issues. The second study investigated ESL learners' interaction in an online discussion via Facebook Omar et al. (2012). The results showed that the ESL learners had positive responses towards the use of Facebook for online discussions and it was believed that conducting online discussions in Facebook could boost learners' confidence and

collaboration during the learning process. Lastly, a study confirmed that online discussions can enhance students' critical thinking (Williams and Lahman, 2011). The study found that through online discussions students were more engaged with the lesson. Even some students who often reluctant to speak in face-to-face class would be seen more active in online class. The higher engagement resulted on the better way of students' thinking and this led to the enhancement of critical thinking.

Given these points, we can see that online discussions are beneficial for language teaching. Thus, the current study tried to take another focus by exploring EFL university students' perceptions and their challenges on the use of synchronous online discussion for their instructions. By focusing on this issue, the present study led to a basic consideration for language teachers in adopting synchronous online discussions in their teaching practices. Two research questions were administered in this study.

1. What are the EFL university students' perceptions on the employment of synchronous online discussions?
2. What are the challenges faced by EFL university students during the synchronous online discussions?

METHODS

Since this study tries to explore how EFL university students perceive the application of synchronous online discussions, a qualitative case study was employed to be the procedure for conducting this research. Many scholars (Saldana, 2011; Mackey and Gass, 2005; Merriam and Tisdell, 2016) have confirmed that qualitative study including a case study (Creswell and Poth, 2016; Yin, 2016) aims at uncovering humans' life including activities, experiences and phenomena where descriptive data are dominantly used, rich and very detailed. Typically, case study puts a person, community or organization as a single case for its focus of the study (Creswell and Poth, 2016). Here, the study captured a class functioning synchronous online discussions as its mode of learning to be the case.

Moreover, five postgraduate (master program) EFL university students of a public university in Bandung, Indonesia, participated in this study. Prior to the study, the students had joined a course which employed synchronous online discussions. The discussions in the course were in form of live chat through WhatsApp Groups (WAG). As qualitative research tends to employ purposive sampling to meet its goal of inquiry (Hamied, 2017), the selection of the participants was conducted purposively in regards with some reasons including class participation and willingness. All of the five participants joined more than 80% of the total meetings (16 meetings), followed the class sessions till end, and welcomed to be invited as the participants of this study. Next, data were collected through virtual observations (participatory) and virtual interviews (semi-structured). In this case, the researchers did

the observations by joining into the online group discussions directly. Meanwhile, the researchers interviewed the participants virtually through WhatsApp in order to maintain the physical distancing. The interviews lasted for around 15-20 minutes for each participant and the participants' responses were sent via WhatsApp voice notes. The process of collecting the data was conducted during March – May 2020.

The collected data were analyzed thematically following the process of familiarizing data, coding, memoing, generating themes, relating themes and writing them up. Here, the codes and themes were evolved in regards with the dimensions of e-learning namely content-related, planning of tasks and social supports, further explained in next the paragraph. The analysis also corresponds to the general stages of qualitative data analysis suggested by Miles and Huberman (1994), Miles et al. (2014) namely data, data display, and drawing and verifying conclusions. Talking about researchers' positionality, the main researcher did not have power over the participants as he was the part of the cohort, sharing similar authority with the participants. While the second researcher might have power as he was the instructor, the fact, the second researcher was only involved in data analysis process after data collection. Here, the participants were positioned to deal with the main researcher only, and they did not know about their instructor's involvement on this study. Likewise, the researchers stayed to maintain objective relationship with the participants throughout this study.

A model of communication types for e-learning suggested by Hrastinski (2008) and Haythornthwaite (2002) was employed as the basis of the observation and interview guideline constructions. The model consists of three types of communication exchange, namely (1) content-related, (2) planning of tasks, and (3) social supports. Content-related refers to the exchange of information about the learning materials discussed such as asking-answering questions, sharing information, and expressing ideas. Secondly, planning of tasks deal with the task management activities including planning work, allocating tasks, and reviewing drafts. Meanwhile, social supports consist of learners' emotional expressions such as using emoticon, giving advice and expressing feelings.

RESULTS AND DISCUSSION

This study deals with an investigation on how EFL university students perceived synchronous online discussion used in their instructions during the Covid-19 pandemic. The researchers invited five master students majoring English language education study program to participate in this study. They were in the second semester and taking a course which employed synchronous online discussion (live-chat discussions through WhatsApp Group). The course has 16 meetings where the first 4 meetings were conducted in face-to-face classroom (before school closure policy administered in Indonesia) and the rest was done online through live-chat discussions in WhatsApp

Group. In terms of the schedule, the course was held every Wednesday at 10.00 A.M. In addition, this course has 3 credits and focuses on discussing issues about analyzing data in qualitative research. Lastly, English was used as the medium instruction during the class sessions.

The researchers did virtual observation during the last 12 meetings which were conducted online via live-chat WhatsApp Group (WAG). From the observation, the researchers gained rich data related to the instructional situations. As mentioned in the previous section, this study adopts a model of communication types for e-learning consisting of content-related, planning of tasks, and social supports. Therefore, a number of activities during the online class were recorded on the basis of those three types of communication. **Table 1** shows the summary of the online class activities.

Firstly, content-related belongs to the lecturer and students' interactions with learning materials. The lecturer opened class by greeting the students. At the same time, he also checked students' attendance or participation by listing students' names in the WAG. Reviewing previous materials was also done by the lecturer to check the students' memory. In terms of materials delivery, mostly, the lecturer used screenshot (pictures) of power point slides, charts, tables and texts. To check students' understanding as well as students' attention, the lecturer asked every student by mentioning the students' name. This was an effective teaching strategy to cope the lack of attention in online learning since some students during the online learning might only open the WAG without following the discussions. To train the students' critical thinking, the lecturer also served analytical questions such as "what is your understanding about…?", "how do you categorize/confirm/clarify/justify…?", "why do you think that…?".

Secondly, activities that are related to the management of assignments refer to the planning of tasks. In this case, there were two main activities done by the students in planning their tasks, namely task confirmation and task negotiation. In task confirmation, the students tried to clarify about the assignments given by the lecturer. For example, they asked about citation/reference style, the layout of journal article, and instrument validation. This happens when some students were still unsure about their understanding on the tasks' guideline/rules. Meanwhile, task negotiation happens when the students need dispensation. For example, they negotiate for the tasks' complexity and submission deadline.

Lastly, social supports reflect on how the emotional expressions and engagement can be maintained during the discussions. The majority of the students showed active participation during the class sessions. They looked responsive for responding to the lecturer's questions as well as asking questions to the lecturer when they were still unsure about certain materials. In every closing discussions session, the lecturer said thanks for joining and participating in the class. Meanwhile, the students responded it by saying thanks and giving hopes. They also added emoticon, mostly the thanking emoticon (folded hands).

Perception on the Employment of Synchronous Online Discussion

To gain deeper data related to the participants' perceptions on the use of synchronous online discussion in their instructions, the researcher did virtual interviews. The information gathered from the interviews was based on the model of communication types for e-learning, including content-related, planning tasks social supports (Hrastinski, 2008; Haythornthwaite, 2002). **Table 2** shows the summary of data gathered from the virtual interviews. A number of key issues are presented based on the three types of communication for e-learning. This section focuses on key issues related to the participants' perceptions while the participant's challenges are discussed in the next section.

Talking about the effectiveness of using synchronous online discussions, most of the participants believed that this way of teaching was quite effective to be conducted in this pandemic situation. Obviously, online discussions allow students and the lecturer to interact with, discuss materials as well as maintain physical distancing at the same time as this mode of learning does not require close-range physical interaction. Next, live-chat discussions through WAG was easily to be conducted since all students were already familiar with WhatsApp. This application also does not require the use of big data. Thus, it is light and simple application. Additionally, live-chat discussions allow students to get feedback directly from the lecturer.

In the same way, some studies (Murphy and Collins, 1998; Lee, 2002) discussed benefits of live-chat discussions. The benefits provide a sense of immediacy where learners and teachers can share opinions, viewpoints as well as clarify misconceptions in a real time. Moreover, they are allowed to fully use the target language to negotiate both meaning and form in a social context, in regards with topics being discussed. However, some participants argued that the lecturer also played an important role for succeeding the teaching process using synchronous online discussions. In this case, the lecturer is demanded to be active for leading the beginning until the end of the discussions. Social interaction should also be maintained in order to produce live interaction during the class.

> "The lecturer can lead the discussions interactively. Therefore, the discussions are quite effective and every student get involved in the discussions"

During the discussions, students have opportunities for giving opinions, asking and answering questions. Likewise, this supports the idea of learner-centered approach in teaching English (Nunan, 2012; Liu et al., 2006; Li et al., 2005). In fact, at the same time, live-chat discussions operate teacher-centered approach as the lecturer had to manage and direct the discussions. Yet, the discussions were essentially performed by the students. The lecturer only acted as a facilitator. Initially, the lecturer guided the students to open class discussions. He

TABLE 1 | The Result of Virtual Observation

Communication types	Class Activities
Content-related	The lecturer starts discussions by reviewing previous materials. The lecturer explains materials by showing pictures/graph/texts. The lecturer asks students by mentioning students' name. The students respond to the lecturer questions. The students ask questions to the lecturer.
Planning of tasks	The students confirm/clarify tasks given by the lecturer. The students negotiate the tasks such as the tasks complexity and submission date.
Social supports	Students participate actively during the discussions. Students show emotional expressions such as emoticon, supports or hopes. Students look responsive during the discussions.

TABLE 2 | The Summary of Virtual Interviews

Communication types	Key Issues	Category
Content-related	The use of synchronous online discussions Opinions, Question and Answer (Q & A) delivery Critical thinking Language skill (writing, grammar and spelling)	Perception
	Problems in Q & A	Challenge
Planning of tasks	Tasks negotiation and planning	Perception
	Problems in planning tasks	Challenge
Social supports	Emotional expressions Psychological effects	Perception

asked every student by mentioning students' name and gave the students opportunity to respond to the questions. After each topic had been discussed, the lecturer gave students opportunity to ask some questions, give opinions or confirming statements. Mostly, the participants respond to the lecturer's questions when the questions were addressed to them. However, sometimes, the lecturer asked questions addressed for all students. In this case, everyone can freely answer the questions or add their opinions related to the questions. This situation was almost similar to face-to-face classroom where each student gets opportunity to deliver questions and opinions.

> "When answering or asking questions and giving opinions, I tend to wait for the lecturer giving me questions. Oh ya, sometimes I give opinions when the questions are addressed for all students"

Live-chat discussions allow students to enhance their critical thinking. This happens when the lecturer gave analytical questions such as how and why. With these kinds of questions, students tried to answer the questions based on some facts, data, theories which were combined with their perspective or understanding. In this case, live-chat discussions play an important role in fostering students' comprehension and knowledge of the discussed topics as well as training them to express their ideas into meaningful way (Macknight, 2000). The participants respond positively about the way their lecturer gave critical questions during the discussions. In addition, the students were not only answering analytical questions from the lecturer but also analyzing their friends' answers. As a result, all students

always stay focused on following the whole discussions. Correspondingly, this result reinforced the findings of previous study (Williams and Lahman, 2011) where students had opportunities to think more critically beyond others as they could read others' responses, ideas or opinions.

> "Yes of course. It is because the lecturer stimulates us with critical questions"

> "I think it trains our critical thinking. For example, when we tried to analyze other students' answers"

Live-chat discussions which demand students to type answers/responses quickly can improve their writing skills including the accuracy of using grammar and spelling. This correspond to what previous study Jose and Abidin (2016) claimed where online discussions potentially encourage participants to perform better grammar checking and awareness. Although the participants were master students where the language skills were not the main focus of the teaching, they have to perform high quality of writing via live-chat discussions. Some of the participants checked their spelling by electronic dictionary and third-party application in keyboard. The participants also re-read their writing before sending it to the WAG. In terms of language style, the participants admitted that they can improve it by observing other friends writing. The lecturer also reminded the students when they had mistaken in their writing. In line with this, a study conducted by Liang (2010) found that synchronous online peer response group supports the teaching of writing. It enables students to collaboratively brainstorm, share and review texts.

"Yes. It improves my writing. I often look at other friends writing and it motivates me to improve my language style"

Moreover, tasks also become interesting issue to be discussed in the last discussions. Usually, the lecturer announced the tasks in the last session of the discussions. The tasks were about writing introduction of a paper, writing literature review, coding interview data, and writing a thesis proposal. Most of the participants agreed that they can negotiate the task submission deadline to the lecturer. Then, commonly the lecturer gave extra time for finishing the tasks. In this case, task negotiation can enhance students' achievement, motivation, and involvement as well as build close interaction between the lecturer and students (Tuan, 2011). Meanwhile, they planned the tasks with their friends in another group consisting of students only. In this group, they discussed how they would execute the task. Precisely, this supported the previous study Omar et al. (2012) claiming that online discussions facilitate students to collaborate positively in executing tasks given by teachers. Likewise, online discussions became the best way for conducting tasks collaboration in this pandemic as students could freely talk and plan about their tasks without gathering physically.

"Yes. Sometimes, we ask for submission deadline extension"

"Usually, I discuss the tasks with my friends in another group"

Lastly, synchronous online discussion enables social supports during the instructional process (Hrastinski, 2008). Likewise, establishing social supports can be done through some ways like encouraging social interactions, affirming individuals' comments and developing use of informal language (Burnett, 2003). In the last session of the live-chat discussions, usually, the lecturer said thanks to students for joining and participating in the class. Hence, the students also responded by saying thanks and hopes. They also put thanking emoticon (folded hands) to show their emotional expressions. The participants believed that this situation makes students more engaged, active and motivated for joining the class. However, they argued that it also depends on the lecturer' attitudes and social interaction during the class. When the lecturer is able to make the lesson joyful and attractive, the students will be motivated to follow the lesson.

"Yes. But it depends on how the lecturer manages the class."

Challenges in Synchronous Online Discussion

Based on the virtual interviews, the researchers also found some problems faced by the students during the live-chat discussions. The problems were related to content and planning of tasks. As shown in **Table 3**, the problems appeared in Q & A and in planning of tasks.

TABLE 3 | Challenges Found during Synchronous Online Discussion

Communication types	Key Issues
Content-related	Problems in Q & A
Planning of tasks	Problems in planning tasks

Poor internet connection becomes the problem in delivering questions and answers. The participants claimed that sometimes their chats (questions or answers) were pending because of poor internet access at their homes. Likewise, this is a common problem in developing countries where technological devices and internet access are still limited (Owusu-Fordjour et al., 2020). In add, lots of chats in WAG often piled up and it made students to always scroll up the chats. In this case, the students have to find good internet access and use laptop/PC to make the scroll up process easier. Problems related to technical issue frequently appeared in technological-based learning. These findings supported previous study Jose and Abidin (2016) who discovered that some of their participants had to deal with slow internet network, system failure (computers or smartphones stopped working) and difficulty for locating other participants' posts. Hence, slow internet network and system failure obstructed them to perform speed/responsive writing as their chats were pending.

"I cannot follow the discussions completely when my internet access is getting worse. Only Edge (E) signal that I can find"

"Sometimes it is related to my understanding of the tasks. If I'm still unsure I ask my friends"

Then, a single displayed thread which led to difficulty in locating others' posts made the participants hard to always keep up with the discussions. Meanwhile, in planning of tasks the participants stated that sometimes they had different understanding about tasks given by the lecturer. To face this problem, they need to ask the class leader or the lecturer directly.

CONCLUSION

This study deals with exploration on how EFL university students perceived the employment of synchronous online discussion as a way of instructions. The findings of this study confirms that the students showed positive responses towards the employment of synchronous online discussion in their online class. The perceptions relate to some issues namely content-related, planning of tasks and social supports. In the issue of content-related, the students believed that synchronous online discussion (in form of live-chat discussions through WAG) was effective to teach their class. Synchronous online discussion facilitates them to deliver opinions, questions and answers as

well as to get responses from the lecturer directly. Besides, critical thinking and writing skills including grammar and spelling can be improved through this way of teaching. For planning of tasks, synchronous online discussion allows students to negotiate tasks with the lecturer as well as planning tasks with their classmates. Lastly, the students agreed that synchronous online discussion provide live learning environment because they share emotional expressions in form of thanking emoticon, supports and hopes to WAG. This condition gives good psychological effects to the students. As a result, they will be more engaged, active and motivated to follow the discussions. However, the students also found some problems. Poor internet connection, lots of piled up chats, and misunderstanding of the tasks become challenges during the employment of synchronous online discussion (live-chat discussions).

Furthermore, the pedagogical implication of this study relates to the issue of maintaining language teaching process during the pandemic of Covid-19. Synchronous online discussion offers some benefits that support the process of teaching English during this pandemic situation. In addition, postpandemic situation demands students, teachers, and lecturers to adapt with the changes of teaching modes from face-to-face classroom to online learning (Moorhouse, 2020). Therefore, we have to prepare for this challenge. Last of all the researchers suggested for further research to explore more about online learning in English language teaching. Asynchronous online learning and e-learning during this pandemic situation can be interesting topics to be discussed.

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Collaborative writing and process writing approach: the effect and students perception

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Over the last few years, the researchers and practitioners have acknowledged the potential benefits attained from collaborative writing activity which was based on the well-known theories of social constructivist and output hypothesis. Grounding from these theories, this study examined the collaborative writing combined with writing process approach to find out the effect of the task on students' ability in writing an explanation essay and students perception about the task. Two intact classes involving 30 students in each class participated in this study. One class as the experimental group completed the writing task using process writing in pairs while the other class completed the task individually. The students in experimental group were given a questionnaire right after the treatment to pool their views on the task. Post-test by administering the writing test was conducted to see the effect of the treatment. Data analysis revealed that students employing collaborative writing using process writing had better writing ability than students working individually. It was also found that most students felt that they gained many benefits from doing collaborative writing. These findings suggested that collaborative writing combined with process writing can be implemented in EFL writing pedagogy to improve students' writing ability.

Keywords: Collaborative writing, Process Writing Approach, Writing Ability

INTRODUCTION

Communicative language teaching has viewed that collaborative learning between or among students is a substantial activity to provide students with an opportunity to use the language they have learned in meaningful context. So, collaborative learning increases the opportunities students have to use the target language, solve the language problems together, thereby develop their skills in target language. Collaborative learning has theoretical and pedagogical supports which have claimed the importance of interaction to promote language learning. From theoretical perspective, the use of collaborative learning is supported by two major theories of language learning: the social constructivist view of learning which was built on the work of Vygotsky (1980), and the output hypothesis theory from Swain (1995). On the pedagogical side, several previous studies have emphasized the multiple benefits of collaborative learning in language learning Baleghizadeh (2009); Chen and Hird (2006); Dobao (2012); Fung (2010); Neumann and McDonough (2015); Storch (2005); Storch and Aldosari (2013); Wigglesworth and Storch (2009).

According to social constructivist theory proposed by well-known psychologist Vygotsky (1980), learning happens in a socially situated activity. It means that social interaction between

students during language learning will influence students' cognitive development. In addition, novice students' cognitive development is developed in social interaction with more able students. The more able students (expert) provide the novice students with the appropriate help by stretching the novice students their current level toward their potential level of development Shehadeh (2011). The kind of assistance is commonly referred to scaffolding. The scaffolding can be in the form of giving valuable input, correcting mistakes, and giving feedback. Therefore, from the social constructivist perspective, students should be encouraged to participate in activities which foster interaction and co-construction of knowledge such as collaborative activity.

Furthermore, working together with other students to solve language problems in collaborative learning is also supported by the output hypothesis theory from Swain (1995). This theory has highlighted the importance of language production in which students need to be pushed to produce the language both spoken and written. According to Swain, it is not enough to expose students with valuable input to develop their language skill; however, they need to produce the language that they have already learned in real communication both spoken and written language. It is asserted that the production of the language triggers students to notice "the gap" in their knowledge, that is, the gaps between what they want to say and what they are able to say. These gaps will foster students to re-examine their linguistic knowledge they have and consider the input from their friends more closely which consequently leads to language learning. This process is assumed to be substantial element in second/foreign language development. Hence, by collaboration with others, students are able to get valuable language input and have opportunities to experiment through language production and to obtain feedback from their friends, so all those language activities will facilitate second/foreign language development.

On the pedagogical side, both literature and empirical studies have shown quite convincingly the learning gains obtained through collaborative learning. Collaborative learning, according to Johnson and Johnson (1987), has four defining characteristics: (a) positive interdependence, in which all group members participate to achieve the group goal; (b) individual accountability, in which each member of the group is held responsible for his or her own learning, which naturally contributes to group learning; (c) cooperation, in which students are expected to discuss, solve problems, and collaborate together; and (d) evaluation, in which members of the group review, evaluate, and reflect upon their work together to make the necessary changes. Harmer (2007) highlights the benefits of group interaction in promoting (1) language use opportunities, (2) positive interdependence and (3) individual accountability.

Collaborative learning can be applied to improve students' writing skill. Collaborative writing is a type of communicative tasks characterized by Swain and Lapkin (2001) as a task involving learners to comprehend, manipulate, produce, and interact in the target language they use. Not only that, it requires students to work together with their partner to produce language. According to Dobao (2012) collaborative writing is a task which involves two students or more who work together to produce a joint written text. Based on the previous definitions, the final requirement of the task is the joint written product in which students share the ownership of the text. However, producing shared text is one of activities in collaborative writing. Saunders (1989) proposed other activities in collaborative writing. These activities are different from one another on two factors, namely the tasks assigned and the interactive structures. The collaborative writing activities are co-writer, co-publisher, co-responders, co-editor, and writer-helper.

In light of the above theoretical arguments, a substantial amount of research has been empirically examined the effect of collaborative writing on L2 performance and learning. A study comparing the pair and individual work performing the edited task was conducted by Storch (2007). The study involved four intact classes which were assigned to correct the text to make the text have better accuracy. Students in one class was assigned to work in pair, whereas another class required the students to perform the task individually. The other two classes had opportunity to complete the task either in pair or individually. The analysis of edited text produced by the student working both in pairs and individually showed that the text edited by pair was not significantly different from the one edited by student working individually. However, the analysis of students talk during the interaction reported different result in which the pairs were able to resolve language problem interactively. It means that students had the opportunity to engage in using and reflecting the language which facilitated the language learning.

Another exploration of the role of collaborative writing on language learning was investigated by Wigglesworth and Storch (2009) and Storch (2005). The study compared the performance in writing argumentative text which completed by students working in pairs and individually. The students working in pairs had responsibility to complete the task together and produced one joint written text. The text produced by pairs and individuals were compared to see the effect of the collaborative writing on the fluency, complexity, and accuracy. The results of the study showed that students working in pairs did not produce a longer text compared to working individually. In term of complexity, there was no significantly different between the texts produced by students working in pairs and individual meaning that working collaboratively was not likely to give impact on grammatical complexity. However, the positive result on the accuracy of the text could be found when students working in pairs in which the students were able to produce the more accurate text.

A different study to examine the effect of collaborative writing was carried out by Shehadeh (2011). This study lasted for 16 weeks by assigning student to work collaboratively particularly in pairs and individually in writing several paragraphs. The post test was administered to compare the quality of the text produced which was determined by five elements of good

writing namely content, organization, grammar, vocabulary, mechanics. The analysis of written text revealed that collaborative writing influence significantly the overall students writing ability. However, the areas of grammar and mechanics were not affected by collaborative writing as the texts produced by pairs was not significantly different from the texts produced individually.

The majority of previous studies investigating the role of collaborative learning on students writing ability focused on examining the text produced by students during completing the task as the measure of the effectiveness of collaborative writing, study by Shehadeh (2011) being an exception. In fact, the writing instruction is aimed to prepare students to produce the English text done individually. Therefore, further investigation involving pre-test and post-test was needed to be conducted to see the effect of collaborative writing after the treatment.

In process approach, writing is seen as recursive activity and do not occur in linear sequence and it requires cognitive process emphasizing on the importance of a recursive procedure of pre-writing, drafting, evaluating, and revising Hyland (2019). The writing activity starts with pre-writing in which students generate idea related to the topic and organize those ideas into correct structure as the text requires. The following activities were proceeded by asking students to have multiple drafts of written work as students revise and edit the draft to produce the final product. Discussion and feedback from teachers or other students will help students to revise the drafts. Since students get valuable input from others during completing multiple process, process approach is characterized as learner-centered approach Rusinovci (2015). As the consequences, the long processes done by students will develop students' metacognitive awareness, that is the ability to employ a certain strategy to write a piece of written text Hyland (2019).

Concerning process approach implemented in collaborative writing, several previous studies have attempted to investigate the effect on the improvement of students writing ability. A study involving 74 first year-preschool teaching students revealed that the writing success was affected by assigning the participant of the study to write the essay through the steps in the writing process Bayat (2014). Another study investigating the effect of scaffolding on EFL students' writing ability through the writing process found that the students writing ability has improved significantly and positively due to giving the scaffolding through process writing treatment and students felt that they could express the idea confidently on their writings Faraj (2015). This positive effect of process writing on students writing performance was also confirmed by other studies (Kolade (2012); Alodwan and Ibnian (2014); Alodwan and Ibnian (2014); Pour-Mohammadi et al. (2012).

Although a substantial amount of research has provided insight regarding how the process writing approach affect student writing performance, a little attention has been given to process writing performed collaboratively. The previous research only focused on assigning students to write through the steps of writing process done individually. However, the question arose whether the combined two writing activities led significantly to the improvement of students writing ability. Therefore, the purpose of the current study was to compare the impact of the collaborative and individual task using process writing approach. In addition, it also tried to investigate students' perception regarding their preference on collaborative learning using process writing.

METHODS

The present study was conducted to examine how students engaged in collaborative writing task particularly done in pairs through process writing affect Indonesia EFL students' ability in writing the explanation essay. Referring to the objectives of the present study, experimental research was employed since it enabled the researcher to estimate the effect of experimental treatment. To be more specific, this study used a quasi-experimental since it was impossible to randomly assign subjects to either experimental and control group due to the university system. In such a case, it was necessary to use subjects of study who were already organized into classes (intact class). 60 students in the fourth semester from Mathematic Department in one of public universities in Malang, East Java Indonesia participated in this study. The students were divided into 2 classes consisting of 30 students in each class. Students from class A were assigned to do collaborative writing in pairs, and those from class B were given a writing task done individually.

To see the effect of collaborative writing 10 meetings, including pre-test and post-test, were carried out by both experimental and control group. Prior to the treatment, the students in two classes were given a pre-test to make sure that there was no significant difference between the experimental and control groups with regard to students' writing ability. The students in each class had to write an explanation essay individually in the classroom as it was instructed in a writing prompt. The writing prompt demanded students to compose the explanation essay relevant to their context of the field in approximately 300-400 words. The students were given 90 minutes to finish their essay. The second meeting to the fourth meeting was administered to write the first explanation essay through process writing starting from pre-writing, drafting, giving feedback, revising/editing, and publishing. All students also obtained feedback from the lectured performed outside of the classroom. In the experimental group, all the activities done in pairs whereas in control group student wrote the essay individually. Writing the second explanation essay was executed from fifth meeting to ninth meeting. The activities were a repeat of the previous activities with different topic.

The last meeting that was tenth meeting was used to conduct post-test to measure the effect of collaborative writing combined with process writing on students' writing ability. The students from both in experimental and control groups were given a writing prompt containing some instructions that the

students had to follow. It is worth noting that slightly different prompts were chosen for the pre-test and post-test. The similarity was lied on the type of text that they had to write, the length of words, and time allotment that was provided to complete the test. Meanwhile, the post-test prompt used different topic from the pre-test prompt to avoid them from learning previous topic in pretest. In addition, the new topic in post-test was believed to make the test more challenging, and they would not consider it as routine assignment, so the different result on posttest could be attributed to the effect of collaborative writing.

Furthermore, after the treatment 30 students in the experimental group were given a set of questions to reveal their views on the activity and experience of completing the task. All the questions given to the students were the combination of closed-ended and open-ended questions in which they were provided with the choices of answer, and they needed to elaborate their answer for open-ended questions. They were encouraged to express their views freely by jotting down their answers on a piece of paper. There were 6 questions ranging from asking their preference to work collaboratively and their reason, their views on the activity, the problems they encountered during the process of collaborative writing, and what aspect of writing they discussed most and their reason. The data from the survey were analyzed manually by reading the sheet one by one and writing the answers on the table based on the order of questions and common answers.

The students' essays were rated by two raters using analytical scoring rubric. The scoring rubric consisted of five components, namely: content, organization, grammar, vocabulary, and mechanics. The content and organization got the highest weight (6) because the knowledge of the topic and the development of the ideas were essential in explanation essay for the sake of academic purposes. grammar and vocabulary were weight 5, and mechanics was weight 3. The reliability of the two raters was .885, and it was considered good reliability according to Koo and Li (2016). The final score used as the score of students' writing was the average of the two raters' scores.

RESULTS AND DISCUSSION

Result

This section is intended to present the results of the study according to the order of research questions. It begins with the result of pre-test to examine the homogeneity of experimental and control group. Then, it proceeds to the presentation of the results of post-test to answer the research problem dealing with the effect of collaborative writing combined with process writing on students' writing ability. The last part is presenting the result of questionnaire to reveal students' perception on the task.

From the results of homogeneity test for pre-test score, it was found that the means from the two groups were homogeneous (see Table 1). It can be seen from the test of homogeneity of variance showing that the p value was .102 which was higher than the level of significance .05. As the means from two groups showed the level of homogeneity, further analysis employing t-test was conducted to compare the means. The result showed that the means from the two groups were not statistically different given that the p value was higher than the level of significance (.177>.005). Based on the result of pre-test, it can be concluded that the two groups had homogeneous writing ability so that the treatment assigning the students to write collaboratively combined with process writing could be undertaken.

Referring to the first question, Table 2 summarizes the results of statistical analysis showing that the mean of overall writing ability for experimental group was higher than mean for control group. The mean for experimental group was 77.467 whereas the control group obtained mean of 60.787. It also revealed that the means of students score working collaboratively for each element of writing quality were higher than that of working individually. The means from experimental group for five elements of writing quality were 21.1, 19.6, 13.6, 14.8, and 8.35 for content, organization, grammar, vocabulary, and mechanics respectively. Based on the descriptive analysis, the experimental group appeared to have better writing ability compared to the control group for either overall writing ability and each element of writing. However, it was needed a further analysis whether the effect was significantly different or not.

From the results of the comparison of means between experimental and control groups, it was found that means for overall writing ability and for each element of writing were significantly different as the p values were smaller than the level of significance .05. It could be concluded that students engaging in collaborative writing had better writing ability than students working individually.

As stated earlier that 30 students in experimental groups were requested to answer some questions regarding their perception about the task. Students responses on the question asking their preference for collaborative writing showed that 10 students chose to do the task individually due to time efficiency and conflict between the students. One student wrote *"When working alone I don't need to wait for my friend idea in developing my draft and I don't need to consider my friend idea because sometime it is difficult to accept the idea from our partner"*. They also stated that working together created conflict since there would be many various ideas and to get one idea for the draft was not easy job to be done. Some students felt that working together was time-consuming because they needed to discuss and had long argument to determine the best idea used in the draft. Some students stated *"we have freedom to express our ideas on the draft if we write individually, and we can write right away the idea which come into our mind without waiting for our friends agreement."*

Students who favored for collaborative writing asserted that the activity provided them with considerable benefits for learning English language. The activity enabled them to exchange the ideas as every member generated the idea of the assigned topic. One student wrote: *"when working alone, we cannot exchange the idea so that our draft cannot be developed prop-*

TABLE 1 | The results of analysis for pretest score

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means			
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference
Score	Equal variances assumed	2.758	.102	-1.366	58	.177	-5.4167
	Equal variances not assumed			-1.366	54.873	.178	-5.4167

TABLE 2 | The results of analysis for post-test

	Max score	Experimental		Control		Sig. (2-tailed)
		Mean	SD	Mean	SD	
Total score	100	77.467	10.3424	60.787	12.6136	.000
Content	24	21.100	2.8929	17.100	3.8716	.000
Organization	24	19.600	3.0240	14.300	3.2179	.000
Grammar	20	13.583	2.8378	9.917	3.4418	.000
Vocabulary	20	14.833	1.8492	12.667	2.7016	.001
Mechanics	9	8.350	1.4571	6.800	1.6588	.000

erly. We can have a lot of ideas coming to our mind because we discuss and find the best idea for our draft". The activity also offered the students with the experience of how to express the idea and accept the idea as it forced them to discuss everything that needed in completing the draft starting from generating the ideas, drafting, revising and editing. Finally, by working together they could help each other. One student stated that they learned a lot from their partner especially vocabulary and grammar because they could ask questions dealing with vocabulary or grammar problem, and they could solve the problem together. By working together, they could share the knowledge, discus the material, give feedback, solve the problem together. One student wrote the following paragraph.

> "There will be several debates about how to put the ideas into the draft as every member had his/her own strong idea but working together makes us close each other and when we are making mistake or confused about the subject matter, we can ask our partner. When we do the activity alone, we don't have much opportunity to ask questions to our friend because they are busy doing their own task".

Discussion

With the respect to the last question asking which element of writing they discussed most during collaborative writing. Most of the students revealed that content was the most discussed element followed by vocabulary, grammar, organization and mechanics respectively. They argued that content was the most important element in writing a draft. One student wrote *"Content is the most important one because the idea should be in line with the topic. If the idea is wrong our draft is useless although it has good vocabulary and grammar".* Another student stated *"it is content because it is the most difficult one to master the knowledge of topic and developed it using supporting ideas. When content is already fix, other elements seem to be easy".* The other added "Because we need to generate interesting ideas to be put on our draft so that it can be developed into good essay".

The results of statistical analysis from the texts written by the students in the post test after the treatments revealed that the collaborative writing task assigning them to write an explanation essay had a positive effect on students' writing ability. It can be elaborated that the students who were exposed to a writing activity which involved more than one student working together to compose a jointly written essay proved to have a better ability in writing the essay than those who were assigned the writing activity done individually. Thus, the result of the study supported the preceding theories and studies which asserted that working together in composing a draft was believed to be beneficial for students in the process of learning the second or foreign language Dobao (2012); Mirzaei and Eslami (2015); Nassaji and Tian (2010); Shehadeh (2011); Storch (2005).

Collaborative writing not only had the positive effect on the overall writing ability, but also on each element of writing skill. With respect to content of the essay, the mean score from work-

ing in pairs was significantly different from the mean of working individually meaning that working in pairs affected the content of essay better than working individually. The students in pairs were able to state general statement which explained the process relating to the scientific phenomenon. They also had a better ability to develop the general statement into relevant explanations using connective words. This ability was gained by having greater opportunity pairs had to engage in the task or interact with the other member since working in pairs forced each member to contribute to complete the task. This finding supports the finding of the previous study conducted by Shehadeh (2011) and Neumann and McDonough (2015) which claimed that collaborative writing offered opportunity for the students to discuss and elicit students' talk about the content which influenced the ability of students writing.

Regarding to the organization of essay, the students were required to organize the ideas into a good order of explanation essay. The students in pairs had better ability in this area in which the essays were skillfully organized to contain an introductory paragraph that identified the scientific phenomenon; body paragraph consisted of sequenced statements to explain how the scientific phenomenon happened and each sequenced statement was clearly elaborated with detailed and accurate illustrations; the concluding paragraph tied up the explanations in an interesting and creative way.

In term of grammar, working in pairs enabled the students to have better ability to use English structure effectively. Their drafts showed that simple present tense was used accurately to express the facts or theories which are categorized into general truths. Also, they concerned greatly with the use of subject-verb agreement as the result of simple present tense usage. It is worth noticing that the students' awareness regarding the aspect of grammar was gained through working in pairs. The students working in pairs were forced to fully participate and help each other in solving language related problems. They learned together how to arrange the words to express the ideas into good sentences using correct structure. This activity could help the students reaching higher level of understanding the form, function, and meaning of grammar rules that might not be obtained if they worked individually. The result on this area in this study is in line with the result of study investigated by Wigglesworth and Storch (2009) which reported that the accuracy of written text produced by students was affected by working collaboratively.

Referring to the aspect of vocabulary, working in pairs seemed to affect the effective use of technical words on the students' essay. The students were able to develop their ideas using effective and accurate words and most of their essays showed few misuses of vocabulary. The following is the example of vocabulary usage from the student' draft in pair work.

> "First, you have to remember the formula of volume of cone. The formula is 1/3 multiplied by the area of the base of cone multiplied by the height of cone. The shape of base of cone is circle and you have to use the area of circle to help you calculate the volume cone. The formula of area of circle is pr2. p is phi that has value of 22/7 or 3,14. r2 is the square radius of circle."

Based on the result of questionnaire given after the treatment, it was found that the most of the students felt that collaborative writing offered positive outcomes compared to working individually. They stated that working collaboratively during the completion of writing draft enabled them to share the ideas of the topic assigned. Sometimes, while working alone hindered them from expressing the ideas and made them think aloud to find the appropriate ideas. In addition, the activity facilitated them to develop the ideas well because there were available knowledge resources found in pairs that could be used to elaborate the ideas so that the draft they developed consisted of more detail information.

The second benefit of collaborative writing unveiled by the students is that they could divide the job of writing essay between the member or on the other words they could share the strength and weakness with others. For example, the strong one who had better knowledge of English could help the weak one to improve their skill while the weak one got valuable knowledge input. The last benefit the students got from the task is that they had a chance to give feedback each other to make a better quality of draft since they produced the jointly written draft so every member of the pair had the same responsibility for completing the assigned task. The same result was also found in the previous study investigating students' perception on collaborative writing Shehadeh (2011); Storch (2005) which revealed that the majority of students engaging in collaborative writing enjoyed the experience offered by a collaborative task and received many valuable benefit from it. As the conclusion, collaborative writing not only encouraged the students to share the knowledge they had to other members but also it gave them remarkable input they needed in improving the writing skill.

Aside from the benefits obtained by working together, collaborative writing also created some potential problems which could be detrimental to the positive features of collaborative writing. According to students' response, one of the problems arising during the completion of the task was a conflict between students as they had different ideas and often negotiated the best idea which should be put in the draft. Conflicts between or among the members are natural phenomena in collaborative learning and could be either positive or negative effect to the effectiveness of collaborative learning Fung (2010).

Conflict could be categorized into three types, namely cognitive, motivational, and socio-emotional conflict Näykki et al. (2014). The most conflict faced by pairs dealt with the cognitive problem given that they found difficulty in understanding the other members' thinking or negotiating multiple perspectives. Some students stated that their partner defended the ideas and enforced the other to accept the idea to be used in the draft. Other revealed that the conflict made them stand in solidarity

between the member as they solved the problem together. The other problem that should be handled properly was humors. Humor could be a challenge for the collaborative learning as they often regarded as off task which influence the efficiency of completion the task. However, Humor actually could maintain the relationship of the member Fung (2010) and to handle negative emotion such as anxiety, frustration, boredom Lamminpää and Vesterinen (2018).

CONCLUSION

This present study attempted to investigate the effect of collaborative writing by comparing the writing ability completed after working in pairs and individuals through some steps in process writing starting from prewriting, drafting, revising/editing, and publishing. The results could add to the further supportive evidence that yielded the fundamental role of collaborative writing combined with process genre approach. More precisely, this study found that the combination of collaborative learning and process writing approach allowed students to share and discuss the knowledge needed in completing the task together.

Further, the activity eventually improved the students' writing ability which could be seen from the result of means for the posttest in which students working in collaborative writing had better mean significantly than those working individually. Thus, it is suggested that the task could be applied in teaching writing as pedagogical tool to improve students' writing ability and create conducive social atmosphere of learning English. In addition, some challenges might be found during the implementation of the task, and they could influence the effectiveness of the collaborative and teachers needed to handle those challenges by explaining the benefit provided by collaborative and rules that should be obeyed during collaborative writing.

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Self-directed learning in spoken grammar activities using poster presentation

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Looking for opportunities to let learners take charge of their learning autonomously is a pivotal responsibility for the teacher. This study aims at visualizing learners' self-directed learning in grammar in spoken discourse classroom through poster presentation. Poster presentations which are given to a small group repeatedly has contribution to cultivate not only their speaking opportunities but also self-directed learning, decision making, critical reflection, and independent action. A small group poster presenter consisting of 4 members is recruited as participants of the study. Learners' journals and a 45 minute-video observation are analyzed using thematic analysis dealing with learners' self-directed learning. The findings reveal that through poster presentation, the learners' self-directed learning is portrayed as they select appropriate activities and strategies to present the material by searching from a number of resources, prepare their performance when they want to present, and handle questions or arguments from visitors. Those findings represents learners' self-motivation, self- responsibility, and also self-management in learning. This study provides information that the learners should be given opportunities to experience learning meaningfully that fosters their learning autonomy to achieve meaningful learning success.

Keywords: self-directed learning, grammar, poster presentation

INTRODUCTION

Teaching grammar in an oral context has received more attention nowadays. Unfortunately, there are still many teachers teach grammar which focus more on written language. They have less attention on how grammar is used in spoken language. Although grammar in written and spoken language share a common core, there are significance differences regarding the structures among them. Grammar in spoken language has some specific characteristics such as that it is usually spontaneous and unplanned and produced in real time with no opportunity for editing (Cullen and chun Vicky Kuo, 2007). By looking at those specific characteristics, the appearance of fillers, backchannels, ellipsis, repetition, etc. could not be ignored.

The use of poster presentations was first introduced at scientific meetings in the 1970s and has since become a means popular for displaying information at conferences (Gosling, 1999) and currently, poster presentation has been proposed as a useful alternative strategy for class presentations (Lane, 2001; Lynch and Maclean, 1994; Tanner and Chapman, 2012). The benefits of poster presentations as learning strategies have been demonstrated in many studies, especially in teaching that facilitates learning. It has several contributions to learning achievement as an excellent alternative media for developing communication skills, involving learners in the

assessment process, encouraging learners to investigate a topic thoroughly, providing opportunities for collaborative learning, promoting positive attitudes in learners, promoting creative thinking skills, critical, and reflective, as well as fostering learners' experience in solving problems and their independence.

Prichard and Ferreira (2014) found that poster presentations, which were given repeatedly to small groups, had several advantages, including increased speaking opportunities, increased interaction between speakers and audience, and reduced speaker anxiety. Furthermore, because of repetition, this can improve language skills. Research shows that repetition can help improve fluency and retention of new vocabulary and grammatical structures.

Previous research has shown that the use of poster presentations has many benefits for language learners to practice the language they are learning while presenting topics. Tanner and Chapman (2012) argue that people learn language not by making language the object of study, but rather "experience it as a medium of communication" in the context of "real operating conditions". Using poster presentations, learners are encouraged to use language especially spoken English grammar that they learn while presenting material to the audience. In line with Tanner and Chapman (2012) Ozturk (2017) states that poster presentations help learners work collaboratively in groups, overcome anxiety and gain more confidence during presentations. As well as increasing creativity, promoting self-directed learning, and inspiring learners for their future teaching careers.

As previously stated, poster presentations have many benefits not only to improve the learners' cognitive skills, but it also promotes learners' self-directed learning (Ozturk, 2017). Self-directed learning is one of the key factors that support student success in the learning process. In self-learning (SDL), learners take the initiative and responsibility for what happens, they choose, manage, and assess their own learning activities, which can be done anytime, anywhere, in any way, at any age. Self-directed learning describes a process in which individuals take the initiative, without the help of others, in diagnosing their learning needs, formulating learning goals, identifying human resources and materials for learning, choosing and implementing appropriate learning strategies, and evaluating learning outcomes Knowles (1975).

Poster presentations facilitate learners to encourage their self-directed learning in learning grammar in spoken discourse through assignments where they must plan, find, and select evidence, monitor their progress, assess the quality of their own work, work effectively with others, use evidence to reach conclusions, and present information. In addition, poster presentations that were given repeatedly to small groups gave them several advantages to improve their speaking skills, improve their performance and interaction with the audience, and overcome the anxiety they felt during the presentation (Prichard and Ferreira, 2014). In learning oral grammar, poster presentations are assumed to provide opportunities for learners to practice oral grammar features in real situations to become more

aware of the nature of spoken language and to improve their speaking abilities. This activity suggested meaningful interaction and show high quality of learning performances which is appropriate higher education learners (Dewi et al., 2019).

The purpose of this paper is to explain the potentials associated with using poster presentations in Grammar in Spoken Discourse class focusing on the learners' self-directed learning. The following research question in this study is: "How is the learners' self-directed learning in spoken grammar activities using poster presentation?".

METHOD

This study adopted a case study to investigate the learners' self-directed learning in a Grammar in Spoken Discourse subject when they utilized poster to convey the materials they had to present to audience/visitors. The process of investigating learners' self-directed learning was not seen only when they presented in the classroom, but also when they got themselves to prepare the materials and the poster. The process of spoken grammar learning through poster presentation is depicted in **Figure 1**.

FIGURE 1 | The process of spoken grammar learning through poster presentation
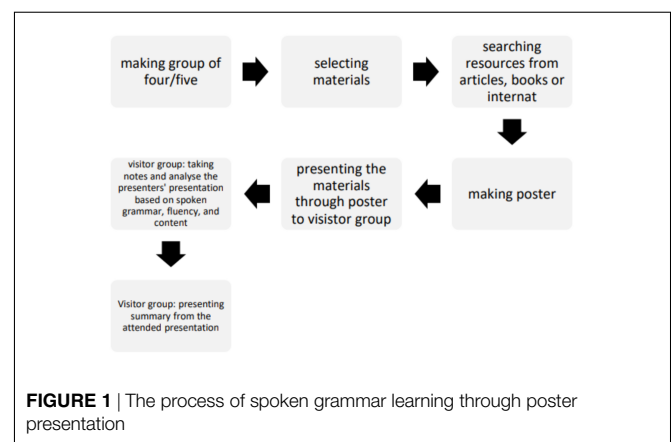
Participants and Setting

This study involved four learners from a small group poster presenter consisting of two members in Spoken Grammar classroom and other two members from them who were as visitors. The participants of this study were the second semester of English education learners in the average age of 19 years old. They joined Grammar in Spoken Discourse subject as one of the subjects as the continuation of Grammar in Written Discourse subject which intended to facilitate them to learn grammar not only in written context but also in spoken context to build their knowledge and awareness of the difference of written and spoken grammar.

Spoken Grammar classroom facilitates the learners to learn characteristics and features of spoken grammar which are different from the written grammar. This subject serves the learn-

ers to learn spoken grammar as much as three credits in a week. The participants learned grammar in spoken discourse through poster presentation in which they were divided into small groups consisting four members. They had to present the materials using posters with difference topic to present to the audience or visitors. The difference between presentation using poster and without is that the learners in poster presentation should present the materials to each small group/visitors. Once presentation had four groups to present the materials.

Data Collection and Procedure

To gain data to investigate the learners' self-directed learning, this study used learners' journals of spoken grammar and observation. After conducting poster presentation, the learners were asked to write their daily journal to express their learning experience through poster presentation. They described what and how they learned, experienced and felt, what obstacles they found, how they coped their obstacles and how the project helped them improve their speaking ability. Meanwhile, observation was used to investigate their process they presented the materials through poster presentation.

The observation was done through a 45-minute video recording to generate how their self-directed learning during conducting poster presentation emerged. This recording described the participants who were conducting the materials through poster presentation to three groups of visitors. They had to present their materials related to the subject of spoken grammar as long as fifteen minutes to each visitor. The stages of learning process through poster presentation is explained in **Table 1**.

FIGURE 2 | Students' presentation through poster

Data Analysis

The data gained from learners' journals and a 45-video recording were analysed by using thematic analysis consisting of six steps; familiarizing with the data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the report. Thematic analysis is defined as to determine, analyze, and report the themes within the data (Braun and Clarke, 2006). This analysis instrument helped

the researchers to analyse the data and to find the answer of this research. Before analysing the data, the researchers needed to transcribe the spoken data from video recording into a written one to ease the researchers to identify the findings.

FINDINGS AND DISCUSSION

Data from learners' journals and their video recording reveal that the use of poster presentation has emerged the learners' self-directed learning in learning spoken grammar. This section goes on to look at the learners' self- directed learning when they learned spoken grammar using poster presentation. Poster presentation has already facilitated the learners to learn independently. Each member of the group of poster presenters received responsibility to fulfill their learning standard. There are some findings when the learners experienced themselves in learning Spoken grammar through poster presentation.

Learners' Learning Motivation

Learners' Self-directed learning when learning Grammar in Spoken Discourse using poster presentations is illustrated from their learning motivation during attending this course, especially when they make presentations through posters. Learners seemed enthusiastic about participating in the activity because they experienced learning that was different from normal learning. The learners' motivation appears through from their enthusiasm of those who were as presenters (presenter) in the form of looking for information/materials that would be delivered to the audience by looking for it from various sources such as the internet, books, and choosing the right strategy to deliver the materials. Besides, the learners read literature and discussed to understand the material that would be delivered with the group member.

From the audience (visitors) who visited the group presentations, they were enthusiastic listening to the presentations of the presenters. They also did not hesitate to ask if there were things they did not understand about the topic presented. They also did not hesitate to provide input or add information to their friends who were presenting if there was anything they knew about the topic.

> "I searched many references on the internet and I also asked my lecturer about the references that would be presented by my group. There were some difficulties and confusing materials that we faced, but we discussed and made summary. After understanding the material, we made a unique poster to attract the audience to the topic presented"
>
> *student 1*

> "I prepare myself by reading references from several sources. To understand this, I read

TABLE 1 | **Stages of learning through poster presentation**

Stages	Activities
1	The students are divided into 12 groups consisting of 4-5 students each. In this stage each group chooses one topic to be presented in the next weeks.
2	Each group should search the resources from the articles, journals, books, or any other resources. After getting the materials, they present it in poster.
3	Each week, there will be three groups presenting different materials. Each group will present the materials for three times to different visitor groups during the meeting. (see **Figure 2**)
4	Each visitor group during attending the presentation is divided to be note takers and analysts. Note takers are responsible to take notes during presentation, and analysts examine the presenters' spoken grammar, fluency, and presentation content. Visitor groups are not only listen to what the presenters present, but also they evaluate their partners during their presentation.
5	After presentation, visitor groups report what they have already obtained and compare information they got from each visitor group.

and outlined to make it easier for me to remember for longer periods of time."

<div align="right">student 2</div>

"Today I as a visitor saw the groups who presented their materials through posters. We listened to their presentation even though there were some things that were confusing and did not understand, but because the presenters are our friends, so I dared to try asking questions to clarify the materials presented until I understood what was said."

<div align="right">student 3</div>

From the data, learners' activities by looking for sources, conducting discussion with their group members or classmates, trying to understand the materials by making a summary, showing the willingness of learners to learn which is indicated as learning motivation. Motivation is one indicator that is very important for the learners' success in learning. Motivation is a complex psychological social influence that sets to accelerate the will of a person towards a desire. In this case, the use of poster presentations in the learning process motivates learners to complete assignments through a series of activities mentioned above. Sunumların et al. (2017) states that poster presentations have many benefits in addition to improving language skills as well as increasing motivation, self-confidence, and the ability to work together. Furthermore, if posters can generate learners' interest, then it fosters learners' self-directed learning Cetin and Flamand (2013).

Learners' Self-Responsibility

The form of other self-directed learning shown by learners in Grammar in Spoken discourse is through the existence of

their self-responsibility or individual/personal responsibility. The following data were obtained from learners' reflective journals.

"The first thing I did was look for and discuss the material to be delivered on the poster with my group. I try to understand hard about the topic and when there are things I don't know I ask friends in my group."

<div align="right">student 1</div>

"As a visitor, I tried hard to pay attention to the materials delivered by my friends who were presenting. Sometimes the explanation was not very clear because it was noisy with other group presentations, but we could ask the presenters to repeat their explanation."

<div align="right">student 4</div>

Even from observational data, the form of their responsibilities is seen. They helped each other, such as, when one of their friends was doing presentation, and he was confused to explain or answer questions. This shows that they had an awareness of their responsibilities as individuals and as a team that should contribute or support for the success of their team so that by recognizing the responsibilities they carry, they can recognize their learning needs, choose better ways of learning, and evaluate the learning results (Lai et al., 2013).

Learners' Self-Management

The third finding from this study is that the use of posters has really helped learners develop their learning potential well. Self-management or self-organizing to learn is a form of self-directed learning for learners who took part in learning with

posters. How to prepare the necessary resources, understand the material to be delivered, plan and make posters that meet the established criteria and be able to attract visitors to listen to their presentations, handle all obstacles that occur before and when making presentations is a form of their self-management during learning with a poster.

> "I prepared myself by reading references from several sources. To understand this, I read and outlined to make it easier for me to remember for longer periods of time. I handled my difficulties when I had to present materials by trying to be confident."
>
> *student 4*

> "I tried to get audience's attention by giving jokes during the presentation. I also tried not to be nervous by holding my hands and taking deep breath before and during the presentation."
>
> *student 5*

> "To practice presenting the material, I learned from my friend's presentation (the presentation of other groups) how to speak clearly, control our volume, and how to make other people understand our explanations easily."
>
> *student 6*

> "I saw my audience. If they had good mood or listened carefully, I presented my topic in detail and added a few points. If my audience looked boring, I would speed up my presentation and made it simpler. To manage time well, I also asked the videographer to warn me if the time had run out, so we know when to stop explaining the material."
>
> *student 7*

The data explained that they tried to organize themselves to be able to overcome all the circumstances that occurred during the presentation with the poster. They tried to understand the materials in various ways that they thought those would be appropriate, prepared themselves to present the material, overcame all obstacles such as worry or nervousness, as well as circumvent the presentation to be more effective and efficient, a form of self- management that learners have done. In this case the poster presentation contributes not only to their achievements but to their positive attitude. (Tanner and Chapman, 2012). They have a way to solve their own problems so it gives them an opportunity to be able to determine their learning styles.

The three findings show that the use of poster presentations in the language classroom, especially in Grammar in Spoken Discourse subject provides many contributions such as the learning process that emphasizes student- centered learning, learning by doing experience where learners apply the principles of grammar in the spoken discourse directly through the presentation process, and most importantly in the focus of this research learners' self-directed learning emerges through this activity.

CONCLUSIONS AND SUGGESTIONS

The results of this study have identified the forms and how self-directed learning of learners when learning grammar in spoken discourse using poster presentations. The results of reflective journals and observations show that poster presentations have fostered learners' self-directed learning during learning that is seen from their learning motivation, individual responsibility for completing assignments as well as possible, and their self-management process in dealing with each obstacle also determines how to learn the right one according to their needs.

This research has shown that facilitating learners to learn more independently is a requirement for every lecturer so that they can experience learning and achieve more meaningful learning success. This research only focuses on the picture of learners' self-directed learning when learning, there are still many aspects that need to be explored besides self-directed learning. The authors suggest the use of poster presentations should continue to be used and developed in order to provide many benefits for learners. In addition, as mentioned previously, the use of poster presentations not only contributes to the growth of self-directed learning, so researchers are further advised to explore the opportunities and challenges that arise from the use of poster presentations.

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Critical thinking in cognitive domain: Exploring assessment of English teaching at pandemic period of covid-19

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Assessment is an evaluation tool in learning adjusted to the times. The criteria that must be included in the assessment are indicators in the cognitive domain and critical thinking. Therefore, this study intends to explore teaching assessments prepared by lecturers in assessing students' cognitive shutter and critical thinking abilities. The data taken in the pandemic period of Covid-19. The subjects of this study were 269 lecturers who were teaching in English education departments in some private universities in South Sulawesi, Indonesia. There were 25 items of questionnaires arranged to analyze the teacher assessment in cognitive aspects. The results showed the dominant lecturer measured the ability of students on the C1-C2 scale even though some lecturers had been on the C5-C6 scale. The lecturers' assessment of teaching has implemented indicators of critical thinking skills. This study recommends future researchers to develop assessment of teaching, especially for English Department and assessment mapping in facing the fourth industrial revolution era.

Keywords: Assessment, Teaching, Cognitive, Critical Thinking

INTRODUCTION

The 21st century learning requires everyone to learn and think, focusing on developing intellectual abilities so that they can adapt to changing and changing times. The outcome in 21st-century learning is to have life and career skills. These skills are the ability to synthesize information, work as a team, to manage broadly and complexly, and be responsible to the community and the environment Balasubramanian et al. (2014). Expertise in technology, media and knowledge is the ability to recognize, discover and see all information with technology and media so that they can be meaningful Kietzmann et al. (2011). In contrast, critical learning skills and innovation are the ability to clarify understanding of a problem to produce logical decisions.

There are some previews study of cognitive domain in teaching assessment, the first was carried out by Bennett et al. (2016). The research explained how cognitive theory and principles are used in the design of scenario-based summative assessments for argumentation in the English arts. The results of the psychometric approach are used to evaluate the propositions suggested by domain theory, thus the use of learning development scenarios in the assessment design is interrelated. The study was continued by Boers (2013), collectively, the reported experiments were still starting to become a body of evidence supporting Cognitive Linguistic-informed instruction is hard to ignore. The next study is from Zareian et al. (2015) concluded that textbooks failed to engage students in questions that required a higher cognitive level.

The other study was done by Setiawan and Bharati (2018), they concluded that the implementation of the project-based-speaking assessment succeeded in stimulating students' critical thinking and creativity in learning English. Although several researchers have revealed the role of the cognitive domain in assessment, no one has explored the ability of lecturers to prepare critical thinking assessments in the cognitive realm, especially in Indonesia. The authenticity of this study aims to explore the assessments prepared by English lecturers as a second language during the pandemic of Covid-19.

Global competition in the digital age requires more than mastery of science, but also the acquisition of a variety of skills including critical thinking skills, problem-solving, communicating, collaborating, creating, literacy, and awareness of global issues Turiman et al. (2012) Voogt et al. (2013). The 21st century requires a generation of critical thinkers who can solve problems and participate actively in making decisions on local and global issues that formed through thought processes Ampuero et al. (2015). The ability to think critically can be trained through learning that prioritizes the thought process.

The thinking process is an activity that involves the work of the brain, feelings and human will that can be seen through learning that focuses on student activities, whether visual, audio, kinesthetic, or verbal actions. In the process of thinking, individuals make connections between objects that are the main problem with the parts of knowledge they already have. Role of knowledge is everything that has obtained in the form of understandings. According to Bloom (1959), the thought process is divided into two, namely: Low Order Thinking Skills, namely the low order thinking in the C1-C2, middle in the C3-C4, and High Order Thinking Skills, namely the ability to think about the realm of C4-C6. This thought process made in the form of a taxonomy consisting of knowledge (C1), understanding (C2), application (C3), analysis (C4), evaluation (C5), and creating (C6).

Implementing assessment of teaching in a pandemic situation compels all educators did through a virtual system. Lecturers constructed their assessment base on their department program Nilson (2016). They made in the last semester by applying the cognitive approach combined with teaching materials. Akib and Arief (2019)stated that assessment is a data collection process in teaching focused on making decisions of students' ability in a subject. Assessment of teaching arranged to join government instruction in a pandemic situation.

Performance assessments are very well-used to assess reasoning. We can use an issue to both individual and group students and then assess their critical thinking skills Kennedy (2007) Birgili (2015). In addition to performance assessments, we can also investigate student reasoning through personal communication by asking strategic questions. Or we can include students to design essay scoring criteria, performance assessment scoring criteria, or a list of essential stages in the thought process. In that way, the teacher can at least assess student responses and how each student's reasoning Russ et al.

(2009). Because they internalize their vision and reflect on their work, they will become critical thinkers.

This study was structured to describe the preparation of teaching assessments in the cognitive realm, especially to see the ability of the test to reveal students' critical thinking in English. Good assessment is an assessment that emphasizes the ability of logic and reasoning students Sibbald (2011). Good assessment must fulfill cognitive elements which synchronized with critical thinking aspects Putri and Istiyono (2017). Assessment is a tool used to measure students' cognitive abilities that are developed based on the progress of the times. Assessments developed to meet the needs of the education unit, including the curriculum. This study aimed to determine the implementation of learning assessments based on critical thinking.

Assessment is the process of gathering information about students and classes for instructional decision-making purposes. Assessment means the process of gathering information. For teachers, the assessment carried out as a goal of deciding teaching skills Oakleaf (2009). Assessment is the process of gathering information by using appropriate tools and techniques, to make educated decisions regarding the placement and educational programs for certain students Nieto (2000). Assessment or appraisal interpreted as an activity of interpreting measurement data based on specific criteria or rules Sadler (2005). Assessment is the process of gathering information about objects (students) using appropriate tools and techniques to make judgments or decisions about the object. It is necessary to have a tool or instrument and method to gather information and evaluate reports about objects to conduct an assessment.

Instruments for assessment are called tests. The test used is a measuring instrument and information about the object. The test is one way to estimate the size of a person's ability indirectly, namely through one's response to stimuli or questions von Borell et al. (2007). A test is a tool or procedure used to find out or measure something in an atmosphere, by means and rules have determined Sadler (2009). The test is one tool for measuring, which is a tool for gathering information on the characteristics of an object Casler et al. (2013) Chawla and Orso (2004). It concluded that the test is a method or tool (instrument) and the technique used to obtain object information (students) in the form of an assignment with specific rules. The function of the test is as a measurement and information collector for assessment and evaluation.

Harlen (2013)stated purpose of assessment is keeping track, checking-up, finding-out, and summing-up". Keeping track, which is to trace and track the learning process of students following the planned learning implementation. For this reason, the teacher must collect data and information in a certain period through various types and assessment techniques to obtain a picture of the achievement of student learning progress. Checking-up, which is to check the achievement of students' abilities in the learning process and the shortcomings of students during the learning process. In other words, the teacher needs to assess to find out which parts of the material students have mastered and which sections of the material

have not been mastered. Finding-out, which is to search for, find and detect the lack of mistakes or weaknesses of students in the learning process, so that teachers can quickly find alternative solutions. Summing-up, which is to conclude the level of mastery of students of the competencies that have been determined. The results of this conclusion can be used by teachers to compile reports on learning progress to various interested parties.

Assessment is an evidence-gathering activity that is carried out intentionally, systematically, and continuously and is used to assess student competencies. The reasoning is the process of thinking ability of a person to gain new knowledge by way of the logic of the concepts he knows based on the available evidence and contradicts it with previous expertise Handayati and Ritme (2014). The reasoning also has the relationships between experience and knowledge that a person uses to explain what is seen, thought and concluded. Reasoning is a thinking process in drawing conclusions in the form of knowledge, it produces knowledge associated with thinking activities. It can be said that reasoning assessment is a deliberate collection of evidence to make connections between experience and knowledge to explain what is seen, thought and concluded.

Norris and Ennis (1989) and Ennis (1993) reveal a set of stages that includes the process of critical thinking. The first is larify the issue by asking critical questions, the second is gather information about the issue, the third is starting the reasoning through various sides or different points of view, the fourth is gathering information and conduct further analysis, if needed, and the fifth is making and communicating decisions

In additio to developing critical thinking related to the cognitive domain, Norris and Ennis also developed a disposition which is a "critical soul". The following will describe the abilities and critical dispositions of Harlen (2013). Ennis (2001) stated that critical thinking is reasonable and reflective thinking that is focused on making decisions about what is done or believed. Reasonable means thinking based on facts to produce the best decision, reflective means to search consciously and decisively the best possible solution. Thus, critical thinking, according to Norris and Ennis is thinking directed to the goal. The purpose of critical thinking is to evaluate the best actions or beliefs. Norris and Ennis focus their framework on the thought process that involves gathering information and applying criteria to consider a different set of actions or views. This corresponds to the level of evaluation thinking in Bloom's taxonomy.

As Ennis view, the conceptual framework offered by Marzano (1250) includes cognitive and affective components. The cognitive dimension (of Marzano's relatively complex arrangement) describes the reasoning process. The affective dimension states that students must develop and maintain positive attitudes and perceptions about learning and understanding personal responsibility for wise thinking. If this affective dimension is not possessed, then it seems that the skills they have been in vain.

The advantage of this framework is each type of thinking specified naturally translated into questions that seem to apply to all material areas. Furthermore, each question seems unique and relevant to the real world based on critical thinking aspects. The assessment of teaching must show essential elements of thinking in the pandemic period.

METHOD

The study conducted in English Education Department of Muhammadiya's university and academy in South Sulawesi. There are five universities and six academies belonging to Muhammadiyah which are located in eleven cities and districts. There were eleven English Departments as the object of the study including in Makassar with 51 lecturers, Bulukumba with 33 lecturers, Sinjai with 32 lecturers, Bone with 34 lecturers, Barru with 10 lecturers, Enrekang with 11 lecturers, Sidrap 20 lecturers, Pare-Pare with 53 lecturers, Luwu with 8 lecturers, Palopo with 9 lecturers, and Jeneponto with 8 lecturers. There were 269 lecturers as respondents of the study by same background education in English.

The study used 25 number of the questionnaire. The questionnaire used has been validated by a team of experts at the University of Muhammadiyah Makassar. Valid questionnaires are used to collect data in this study. The questionnaires included cognitive skill based on Bloom (1959) and aspects of critical thinking like 1) able to provide simple explanations such as, focusing questions, analyze arguments, ask and answer about an explanation or challenge. 2) able to conclude, 3) able to interpret facts or conclusions or logical statement based on information provided; and 4) evaluation, distinguish between strong and relevant arguments and Weak or irrelevant arguments.

Google form was used as questionnaires tool to collect the data in a pandemic of Covid-19 situation. Questionnaire created by closed and a combination of open and closed questionnaires. The main purpose this questionnaire is to obtain relevant information with the aim of investigating and obtaining information with road reliability and validity as possible. The survey of questionnaire used to assess the lecturers' performance applying critical thinking in their assessment.

RESULT AND DISCUSSION

Assessment of Teaching in Cognitive Domain

In designing learning assessments during the pandemic, lecturers required to adjust the conditions and according to the times. The results of data analysis showed that the lecturer had made an assessment with Bloom (1959) scale in the cognitive domain.
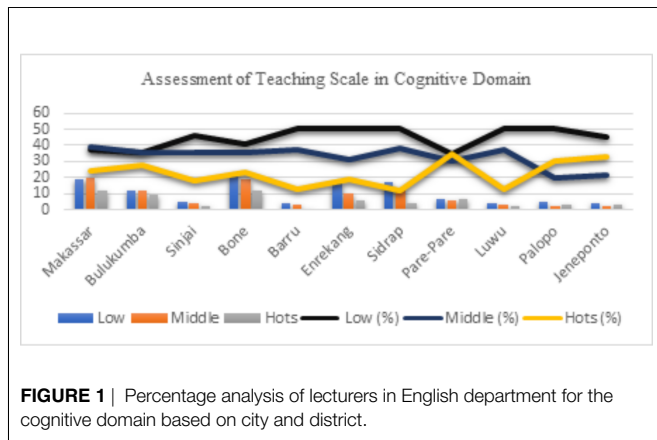
FIGURE 1 | Percentage analysis of lecturers in English department for the cognitive domain based on city and district.
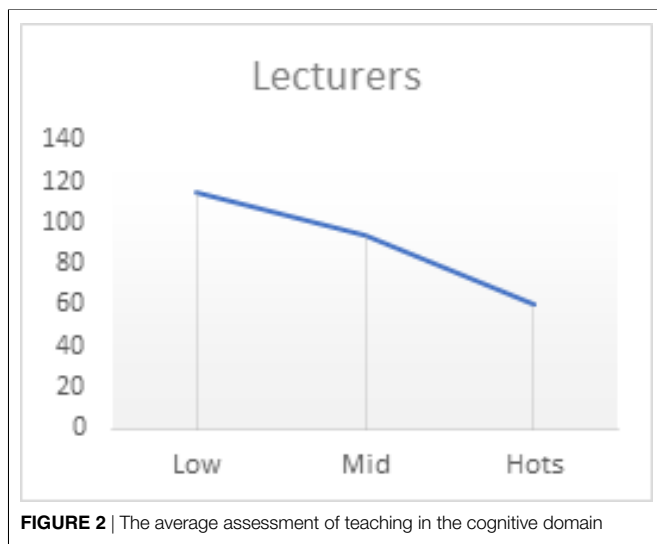

FIGURE 2 | The average assessment of teaching in the cognitive domain
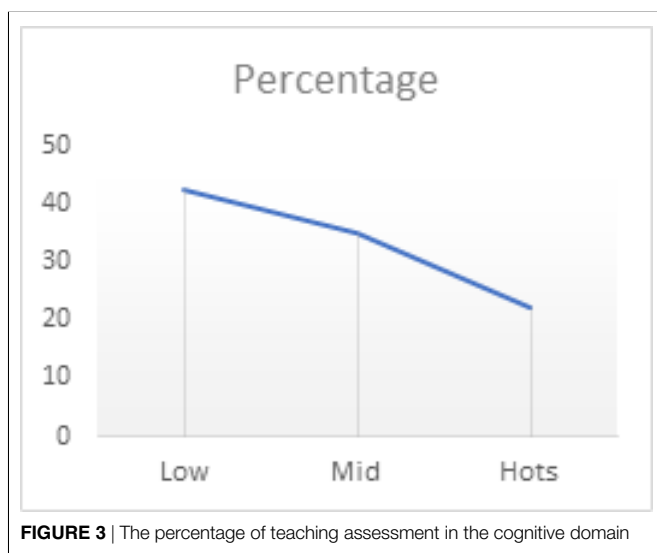

FIGURE 3 | The percentage of teaching assessment in the cognitive domain

In creating the assessment of teaching, lecturers used some verbs which can be classified in C1-C6. Operational verbs in

the cognitive domains widely used from survey results are shown in the following **Table 1**.

TABLE 1 | Operational verbs used in the assessment of teaching for the cognitive domain

Cognitive domain	Operational verbs
C1	Identifying, writing, and Mentioning
C2	Example, characterize and describe
C3	Expressing and sorting
C4	Concluding, studying, and analyzing
C5	Arranging dan Explaining
C6	Clarifying and creating

Table 1 shows some of the operational verbs used in preparing the assessment by the lecturers. The verb is the most familiar in the evaluation sentences in education. Learning assessment can be classified based on Bloom's taxonomy, which starts at C1-C6.

Assessment of Teaching based Critical Thinking

Assessment of teaching based on critical thinking skills, the lecturers have used the indicators of critical thinking criteria. The assessment is compiled process, examines the material and provides criticism. The results of a learning assessment survey based on critical thinking skills are shown in the **Table 2**.

TABLE 2 | Indicators of critical thinking applied in the assessment of teaching.

	Indicators	Yes	No	(%)	(%)
1.	Simple explanation	217	52	80.7	19.3
2.	Reviewing Questions	174	95	64.7	35.3
3.	Analyzing arguments	114	155	42.4	57.6
4.	Ask and answer an explanation	235	34	87.4	12.6
5.	Analyze and conclude	128	141	47.6	52.4
6.	Make statements accompanied by scientific facts	239	30	88.8	11.2
7.	Read and give criticism	158	111	58.7	41.3
8.	Evaluating arguments	134	135	49.8	50.2
9.	Compare arguments between hoax facts	127	142	47.2	52.8
10.	Reviewing the work that has been made	219	50	81.4	18.6

Table 2 showed the indicators that have been used by lecturers in developing learning assessments. There are ten indicators used as benchmarks to determine the implementation of critical thinking in the assessment.

Based on the data obtained, there are four indicators of critical thinking that are most often used by lecturers. The first indicator of explaining simply in the assessment, there were 217 or 80.7% of lecturers who used it, and only 52 or 19.3 did

not use it. The second indicator is asking and answering an explanation, 235 or 87.4% of lecturers use it as an indicator, and only 34 or 12.6% do not use the indicator. The third indicator is making a statement accompanied by scientific facts, 239 or 88% of the lecturers apply this indicator in the assessment, and only 30 or 12% do not use it in the assessment. The fourth indicator is examining the work created, 219 or 81.4% who use it and 50 or 18.6% who do not use it as a criterion

Assessment in learning is a tool to measure student ability and as a reflection of learning outcomes. The cognitive shutter is an absolute element that must be present in the assessment, which includes low, medium and high-level capabilities based on bloom taxonomy Nilson (2016). In addition, indicators of critical thinking are also one aspect that must be present in the assessment as a 21st-century skill. The assessment instrument that is widely used by lecturers is an instrument in the form of written test questions. The preparation of questions is not easy, there are rules and procedures that are followed by lecturers.

The ability of lecturers to develop critical learning-based learning assessments has been implemented in learning. This is erased from the results of the analysis conducted on the lecturer. They have included components of lower-order thinking, middle-order thinking, and higher-order thinking. In the cognitive domain, the lecturer uses several verbs that describe levels C1-C6. They also include indicators of critical thinking in the assessment. According to Alfindasari et al. (2016), the cognitive domain in assessment is a tool to measure the students' skill in learning. In the preparation of questions, the first thing to prepare is to make a question grid. In this question grid, the lecturer must determine the question indicators. This question indicator must be arranged correctly because it will reflect the questions to be made. In determining and making indicators of this question, there is something that needs to be considered by the teacher, namely the cognitive level as a note that must be achieved by students after learning.

Critical thinking is a 21st-century skill that must be implemented in learning. Students will have a high sense of responsibility and skill that is needed by the world of work. By learning critical thinking in students, assessment tools must be adjusted to the indicators used in the classroom. Thus, there is harmony between the cognitive abilities of students and the assessment used in assessing. The strength of lecturers to arrange critical thinking assessments is quite high. This can be proven by the use of critical thinking theory which is widely used as a reference source. The research is supported by Birgili (2015); Handayati and Ritme (2014). They said critical thinking is finding relationships, connecting cause-effect, transforming, classifying and giving qualifications to build creative of students.

CONCLUSION

The results showed the lecturers' skill to compile learning assessment instruments was satisfactory in cognitive domain. It covered low order thinking, medium order thinking, and higher order thinking. The lecturers have considered the cognitive domain in the assessment by using operational verbs that indicate levels of C1-C6. Furthermore, the lecturers have used critical thinking indicators in compiling the assessment. Although they have considered cognitive factors and aspects of critical thinking, their abilities must still be developed because they tend to measure the low-order thinking level of students' abilities. The further research is expected to develop assessment mapping in the industrial revolution era. The main focus is correlated the assessment of English teaching with 4C skills (critical thinking, creativity, collaboration, and communication) and TPACK (technological, pedagogical, and knowledge content).

ACKNOWLEDGMENTS

Appendix
Direction: Choose two operational verbs sometime you use in constructing assessment of English department students.

1. The operational two verbs used for simple explanation are…….

- Match
- Explain
- Express
- Correct
- Arrange
- Classified

2. The operational verbs used in for complex explanation are…….

- Match
- Explain
- Classified
- Arrange
- Express
- Correct

3. The operational verbs used for examining the questions are…….

- Describe
- Classify
- Explain
- Conclude
- Choose
- Connect

4. The operational verbs used in asking the students to make argumentation next are…….

- Create
- Write
- Specify
- Describe
- Find out
- Choose

5. The operational verbs used in analyzing an argumentative text are…….

- Show
- Write
- Classify
- Analyze
- Explain
- Connect

6. The operational verbs used in asking students explain the questions are……

- Develop
- Critic
- Find out
- Classify
- Explain
- Show

7. The operational verb used for explaining the answer are…….

- Explain
- Describe
- Classify
- Conclude
- Critic
- Develop

8. The operational verb used for concluding the materials are…….

- Identify
- Describe
- Determine
- Conclude
- Choose
- Create

9. The operational verb used for analyzing the essay are…….

- Write
- Describe
- Classify
- Analyze
- Compare
- Connect

10. The operational verb used for making statement are…….

- Explain
- Describe
- Classify
- Analyze
- Critic
- Create

11. The operational verb used for making statement accompanied scientific are…….

- Explain
- Describe
- Classify
- Analyze
- Critic
- Create

12. The operational verb used for critical reading are…….

- Write
- Tell
- Classify
- Correct
- Critic
- Combine

13. The operational verb used for reading and criticize are…….

- Describe
- Explain
- Classify
- Correct
- Critic
- Create

14. The operational verb used for exalting the text are…….

- Explain
- Giving Example
- Determine
- Conclude
- Critic
- Create

15. The operational verb used for evaluating an argument are…….

- Write
- Describe
- Conclude
- Determine
- Critic
- Create

16. The operational verb used for identifying argumentation text……

- Identify
- Describe
- Classify
- Conclude
- Choose
- Create

17. The operational verb used for evaluating argumentation are…….

- Write
- Express
- Classify
- Analyze
- Critic
- Combine

18. The operational verb used for criticize argumentation are…….

- Write
- Express
- Apply
- Correct
- Critic
- Combine

19. The operational verb used for expressing opinion are…….
   Write

- Describe
- Express
- Analyze
- Choose
- Connect

20. The operational verb used for explaining narration are…….

- Describe
- Explain
- Determine
- Analyze
- Compare
- Create

21. The operational verb or used for examining the news are…….

- Describe
- Explain
- Express
- Analyze
- Compare
- Connect

22. The operational verb used for describing event are…….

- Describe
- Explain
- Express
- Connect
- Compare
- Create

23. The operational verb used for examining scientific paper are…….

- Connect
- Compare
- Analyze
- Classify
- Describe
- Show

24. The operational verb used for criticize hoax are…….

- Write
- Show
- Describe
- Correct
- Compare
- Evaluate

25. The operational verb used for measuring argumentation are…….

- Write
- Explain
- Express
- Analyze
- Compare
- Connect

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Effect of teacher and peer written corrective feedback on writing components in EFL classrooms

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This study aimed to investigate the impact of teacher and peer written corrective feedback (WCF) on Indonesian senior high school students' writing performance. A total of 71 Indonesian senior high school students from Grade X participated in this study; 36 were provided teacher WCF and 35 peers WCF. To collect pre and posttest data, the participants were asked to write a legend essay. Using qualitative data analysis, we aimed to reveal the effectiveness of teacher and peer WCF in improving students' writing performance. Adapted scoring rubric was employed to measure students' overall writing performance, and competencies in relation to writing components such as content, organization, grammar, vocabulary, and mechanics. The results revealed that peer WCF can better enhance students' writing abilities compared to teacher WCF. Furthermore, students who received teacher WCF showed substantial improvement in performance relating to all writing components except mechanics. In contrast, peer WCF enhanced students' organization and vocabulary related performance.

Keywords: Teacher WCF, Peer WCF, Writing performance, Writing components, EFL

INTRODUCTION

In Indonesia, senior high school students have to master all four language skills (reading, writing, speaking, and listening) as prescribed in the Curriculum 2013 (K-13). Based on the curriculum, senior high school students in Grade X are required to learn different types of writing styles, such as recount, narrative, analytical exposition, expository, procedure, and news items (Kemendikbud, 2013). Though writing is considered a daunting skill to be mastered by students compared to other language skills, it is most important for educational success (Tillema, 2012). Ariyanti and Fitriana (2017) also confirm that writing is a challenging skill for Indonesian students to master.

Nunan (2001) says that writing is the process of thinking to invent ideas and organize them into various written forms. Additionally, learning writing entails basic familiarity with higher-level subskills of planning and organizing and lower subskills of spelling, word choice, and mechanics (Richards and Renandya, 2002).

The focus of teaching writing is on students' cognitive development: how to write what they know. It also deals with their low motivation in writing. If the teaching–learning process lacks a variety of methodologies, it will affect students' writing achievement. Myles (2002) states that writing practice encourages the development of writing skills; consequently, students need lots of practice to improve their ability to compose written texts.

As a result, many techniques have been adopted to help Indonesian senior high school students improve their writing skills as learners of English as a foreign language (EFL). One such

technique is to provide written corrective feedback (WCF) to students. Many studies have investigated the nature of WCF and its role, especially in second language (L2) and EFL contexts. There have been debates on whether WCF is beneficial for L2 and EFL students' writing ability (Ferris, 1999; Truscott, 1996). However, there are studies that show WCF could have a powerful impact on enhancing students' writing abilities (Hattie and Timperley, 2007).

To help students improve their writing abilities, providing teacher and peer WCF could be an alternative technique that can be adopted in the classroom. Therefore, this study aims to determine whether teacher and peer WCF can improve Indonesian senior high school students' performance in writing narrative texts, especially legends, and competencies in relation to writing components (content, organization, vocabulary, language, and mechanics).

Written Corrective Feedback in Writing

Bitchener and Storch (2016) define WCF as a written response to a linguistic error that has been made in the writing of a text by L2 students. WCF attempts to either fix the incorrect usage or provide information about where the error has occurred, the cause of the error, and how it may be corrected. According to Williams (2003), the goal of WCF is to teach skills that help students improve their writing proficiency and produce written texts with minimal errors and maximum clarity.

Hattie and Timperley (2007) conceptualize WCF as information given by an agent (teacher, peer, parents, self-experience) concerning aspects of one's writing performance. According to Saville-Troike and Barto (2016), WCF is a type of interaction that can enhance L2 acquisition by making non-native speakers aware that their usage is not acceptable in some way, and provides a model for "correctness."

Teacher Written Corrective Feedback

A teacher plays an essential role in contributing feedback to students, establishing realistic goals, and evaluating students' development during teaching and learning activities in a classroom. Teacher provides guidance and support to students to generate and apply evaluation criteria, reflect on their learning, set goals, and organize samples of their work in their portfolios. A teacher periodically evaluates students' work by making corrections, and giving ideas, suggestions, and feedback concerning the strengths and weaknesses of their work. According to Bitchener and Ferris (2012), teachers' WCF such as edge comments, request for clarification, and comments on grammatical issues has proven to help EFL writers. Students require their teachers to give feedback and feel unsatisfied when they do not receive comments about their writing. In addition, students also wish for their teachers to provide feedback on global issues (i.e., content, organization, and purposes) as well as local issues (i.e., sentence structure, word choice, and grammar) (Straub, 1997).

In her study on teacher WCF, Zamel (1985) found that teachers mostly concentrated on language errors in student writing. She believed that it is because writing is mainly seen as a product. As a result, teachers tend to regard themselves as language teachers rather than writing instructors. In particular, when the process approach is applied to teaching writing, many teachers shift their focus from form to other issues such as content and organization (Conrad and Goldstein, 1999). Additionally, Ferris (1997) found that 85% of teachers' comments focus on ideas and rhetorical development, while the rest discuss grammar and mechanics. It is advised that teachers give equal attention to writing components (content, structure, organization, language, and style) in their WCF (Ferris, 2003; Hyland and Hyland, 2006).

Peer Written Corrective Feedback

Peer WCF is one way to help students improve their writing by providing comments, corrections, opinions, ideas, and suggestions. It provides students with more opportunities to learn from each other. Peer WCF is a form of assessment made by learners of similar status. Peer feedback is not concerned with the assessor's final score and has a qualitative output. The assessor examines the strengths and weaknesses of a particular performance at length and recommends further enhancement (Gielen et al., 2010). Double et al. (2020) found that peer feedback, that is, assessment, evaluation, or grading by peers could improve students' academic performance. According to Elfiyanto (2020), peer assessment or peer feedback can enhance Indonesian students' ability to write narrative essays. In addition, he found that peer feedback can make students become more active during teaching and learning.

Prior research on teacher and peer WCF identifies the valuable impacts of peer feedback. Peterson (2013) emphasized that peer feedback benefits not only the students who receive suggestions for improving their writing but also the feedback providers. The students become more aware of good writing qualities by assessing and commenting on peers' writing. Furthermore, peer WCF also develops students' self-assessment abilities as they gain experience using the criteria to evaluate their own writing (Lundstrom and Baker, 2009). Tsui and Ng (2000) found that peer feedback convinces them to have a more prominent impact than teacher feedback.

Applying peer WCF in classroom is beneficial for many reasons. First, according to Gielen et al. (2010), peer WCF can increase social pressure on students to perform well on an assignment. Instead of the actual output of peer WCF, even an announcement that it will occur might boost students' performance. Second, higher education studies indicate that students frequently recognize peer WCF as understandable and helpful because they feel that their fellow students are in the same situation and condition. Lastly, peer WCF is faster to reach the students. As teacher WCF is often delayed after submitting a task or test, and sometimes is not provided until the topic has changed, imperfect feedback from a fellow student presented

almost directly may have much more influence than perfect feedback from a tutor four weeks later (Gibbs and Simpson, 2004).

Legend as Genre

A legend is a very old story or set of stories from ancient times. The stories are not always true that people tell about a famous event or person. Legendary stories in Indonesia, such as Malin Kundang and Sangkuriang, are a tantalizing mix of realism and fantasy. Since the legend genre belongs to narrative text, Hartono (2005) states that a legend's social function is to amuse, entertain, and deal with the actual or vicarious experience in different ways. Legend deals with problematic events that lead to a crisis or turning point of some kind, which in turn finds a resolution. He also says that language features of a legend focus on specific participants and use past tense, temporal conjunctions, and temporal circumstances. Besides, the legend is one of the text types that need to be taught to senior high school students in Indonesia (Kemendikbud, 2013).

Widiati et al. (2017) states that a legend's generic structure consists of orientation (gives the reader information about who was involved, what happened, where it happened, and when it happened) — complication (shows the beginning of the conflict) — a sequence of events (tells how the story develops after the conflict) — resolution (provides the solution to the conflict) — coda (explains how the characters have changed and what they learned from the experience or the moral message of the story). Therefore, learning how to compose a legend could help the students practice simple past tense and indirect speech, as they are needed to be mastered by the students. Also, the students could gain the moral messages of the story to be implemented in real life.

Conflicting findings on teacher and peer WCF indicate that existing research in this area has been inadequate. Therefore, it is meaningful to examine the effect of teacher and peer WCF on Indonesian senior high school students. In addition, this study takes Indonesian senior high school students' writing proficiency into account. The study results will provide other insights into enhancing Indonesian senior high school students' writing skills and improving their competencies related to writing components by applying WCF. With these goals in mind, the study attempted to answer the following questions:

1. Is teacher WCF more effective than peer WCF in improving Indonesian senior high school students essay writing skills?

2. What is the effect of teacher and peer WCF on Indonesian senior high school students' writing performance concerning components of writing competence (content, organization, vocabulary, language, and mechanics)?

METHODS

Participants

This study was conducted at a public senior high school in East Java, Indonesia. Seventy-one senior high school students participated in this study; 36 students were provided teacher WCF and 35 students were assisted by peer WCF. The reason behind selecting Grade X students as participants was that they were learning how to write a narrative text (legend) in English class.

First, a pretest was conducted to compare the two student groups in terms of language proficiency. The Shapiro-Wilk test found no significant differences between Teacher WCF group (0.310) and Peer WCF group (0.092), as both had p-value higher than 0.05. Furthermore, the pretest results showed that the total mean scores for both groups were equal. Teacher WCF group had mean 53.00, while the peer WCF group scored 54.26.

In Tribble (1996) scoring rubric, if a student scores 80 or above, he/she gets an A. One gets a B for scores between 60-79, C for scores between 40-59, D for scores between 20-39, and F for scores between 0-19. The pretest results of both groups were determined to belong to the C level.

Moreover, to ensure reliability, two scorers who were teachers from two different schools scored the pre and posttest papers separately. The analysis showed a high agreement rate (88%) between the two scorers.

Procedure

This study employed a quasi-experimental study approach of pretest treatment and posttest design. To answer the research questions, data related to students' written essays were gathered through pre and posttest. The two student groups received WCF from two different sources: One group received peer WCF and the other teacher WCF.

The data were collected over five meetings conducted during three weeks. In the first meeting, a pretest was conducted and participants were asked to compose a 100-word essay in 30 minutes. In the next three meetings, the treatment process was performed. Teachers trained the students on composing suitable compositions, especially a legend, and how to receive and provide WCF by explaining the usage of the feedback checklist. During the meetings, both student groups learned how to edit and revise their drafts. The difference between the two groups only differed in terms of the feedback source. It took 90 minutes per meeting to conduct the treatment process.

Finally, in the fifth meeting, a posttest was conducted. Students were asked to revise their drafts prepared during the pretest. For the teacher WCF group, students revised their drafts based on the feedback provided by their teacher. For the peer WCF group, the teacher distributed the pretests randomly among the students with a peer feedback checklist attached. The peer WCF process lasted for 20 minutes, after which the peers returned their friends' compositions along with their feedback. Students were given 15 minutes to read and understand the feedback provided by the two feedback sources, and

were asked to revise their drafts in 30 minutes.

Data Collection and Analysis

The researchers applied statistical analysis methods to analyze quantitative data, including the comparison of teacher and peer WCF groups and systematic measurement of quantities, such as the numerical values assigned to participants' writing ability and its different components.

The pre and posttests were analyzed to prove whether there was a significant difference in the writing abilities of the students. Here, the writing components being scored were content, organization, vocabulary, language, and mechanics, before and after applying treatment in the classroom. The students' writing skills were considered as dependent variable, while the independent variable was the WCF sources (teacher and peer). The data analysis was conducted using SPSS Version 23 to measure the descriptive and inferential statistics. Descriptive statistics analyzed the pre and posttests by measuring the mean, standard deviation, and percentage for each component. Inferential statistics analyzed the writing components in both the pre and posttests by using independent sample tests.

Furthermore, Tribble (1996) scoring rubric was used to assess students' writing tests. This scoring rubric was chosen because it provides detailed information about the criteria for each writing component: content (0-20), organization (0-20), vocabulary (0-20), language (0-30), and mechanics (0-10). Thus, the total score for each writing assignment is 100.

FINDINGS AND DISCUSSION

To answer the first research question (RQ1) regarding the differences in the effectiveness between teacher and peer WCF in improving Indonesian senior high school students' essay writing skills, descriptive statistics analysis was conducted. **Table 1** provides pre and posttest results for the two groups (teacher and peer).

Based on **Table 1**, the lowest score of the pretest for the teacher WCF group is 26, while that of the posttest is 34. Furthermore, the highest score of the pretest is 80 and that of the posttest is 81. For the peer WCF group, the pretest's lowest score is 25 and the highest is 80. For the posttest, the lowest score is 42 and the highest is 81. Additionally, the mean score of the teacher WCF group is 53.00 in the pretest and 57.64 in the posttest. For the peer WCF group, the man score is 54.26 in the pretest and 62.31 in the posttest. Though the highest scores for both groups are equal, there are differences in lowest and mean scores. Moreover, both groups make some improvement from pre to posttest. However, the posttest result of the peer WCF group is more significant in terms of improving students' performance in writing narrative essays, especially Legend, than the teacher WCF group.

This result corroborates with Hedgcock and Lefkowitz (1994) study which reported that peer feedback had more pos-

itive effect on improving students' essay writing skills. The finding was also supported by Ruegg (2015) who said that peer WCF was useful in improving the global aspects of writing. Homayounzadeh et al. (2016) stated that peer WCF effectively enhances students' long-term acquisition of linguistic structures, writing accuracy, and recognition of grammatical errors.

The second research question (RQ2) investigated the effect of teacher and peer WCF on the writing components (content, organization, vocabulary, language, and mechanics) of Indonesian senior high school students. Here, the researchers compared the results of the posttest of teacher and peer WCF groups using an independent sample t-test. The results are shown in**Table 2**.

Teacher Written Corrective Feedback

The homogeneity test is performed to determine whether the sample groups from the population have similar variance. The data are homogeneous if the significance value (2-tailed) is higher than 0.05.

Based on **Table 2**, teacher WCF had significant impact on content, organization, vocabulary, and language, since the significance values are higher than 0.05. Thus, the data gathered from the pre and posttest are considered homogeneous. Furthermore, the significance values (2-tailed) are also higher than 0.05. Thus, it can be concluded that the data are normally distributed. Additionally, the mean difference between pre and posttest is 0.50 for content, 1.14 for organization, 1.67 for vocabulary, and 0.89 for language.

As for the writing component mechanics, Levene's test significance score is 0.003 which is less than 0.05. Consequently, the data obtained from the pre and posttest are considered in homogeneous. Furthermore, the significance value (2-tailed) is 0.008, which is also less than 0.05. Thus, it can be said that there is a significant difference in the average score between pre and posttest. Additionally, there is a mean difference of 1.14 between the pre and posttest.

It is thus concluded that teacher WCF increased students' competencies relating to four writing components: content, organization, vocabulary, and language. However, it did not have any effect on mechanics component. This result is supported by other studies (Biber et al., 2011; Paulus, 1999) which stated that teacher WCF led to an improvement in content writing. Furthermore, it was found that teacher WCF had greater impact on improving content, grammar, and language components of writing than peer WCF. This implies that teacher WCF mainly focuses on content, which leads to an increase in grammatical accuracy in student writing.

Peer Written Corrective Feedback

As for Peer WCF, the significance values for content, language, and mechanics are lower than 0.05. Thus, the data gathered from pre and posttest are not considered homogeneous. Fur-

TABLE 1 | **Pretest and Posttest results**

Group	N	Min.	Max.	M	SD
Pretest Teacher WCF	36	26	80	53.00	13.69
Posttest Teacher WCF	36	34	81	57.64	11.60
Pretest Peer WCF	35	25	80	54.26	16.91
Posttest Peer WCF	35	42	81	62.31	11.77

TABLE 2 | **Independent sample t-test of writing components**

Group	Writing Component	Levene's Test for Equality of Variances		t-test for Equality of Means							
		F	Sig.	t	df	Sig. (2-tailed)	MD	SED	95% Confidence Interval of the Difference		
									Lower	Upper	
Teacher WCF	Content	1.020	.316	.85	70.00	.401	.50	.59	-.679	1.679	
				.85	67.08	.401	.50	.59	-.680	1.680	
	Organization	2.014	.160	-1.99	70.00	.051	-1.44	.73	-2.893	.004	
				-1.99	65.70	.051	-1.44	.73	-2.894	.006	
	Vocabulary	.256	.614	-2.29	70.00	.025	-1.67	.73	-3.117	-.216	
				-2.29	69.13	.025	-1.67	.73	-3.117	-.216	
	Language/ Grammar	.653	.422	-.64	70.00	.521	-.89	1.38	-3.640	1.862	
				-.64	69.15	.521	-.89	1.38	-3.640	1.863	
	Mechanics	9.229	.003	-2.73	70.00	.008	-1.14	.42	-1.970	-.307	
				-2.73	62.66	.008	-1.14	.42	-1.972	-.306	
Peer WCF	Content	11.438	.001	-3.14	68.00	.003	-2.00	.64	-3.271	-.729	
				-3.14	58.22	.003	-2.00	.64	-3.275	-.725	
	Organization	1.172	.283	-1.33	68.00	.187	-1.11	.84	-2.783	.554	
				-1.33	63.84	.187	-1.11	.84	-2.785	.556	
	Vocabulary	.041	.839	-1.19	68.00	.236	-.94	.79	-2.518	.632	
				-1.19	66.88	.237	-.94	.79	-2.518	.633	
	Language/ Grammar	11.796	.001	-2.01	68.00	.049	-2.69	1.34	-5.358	-.014	
				-2.01	59.54	.049	-2.69	1.34	-5.365	-.007	
	Mechanics	15.551	.000	-2.88	68.00	.005	-1.31	.46	-2.224	-.405	
				-2.88	56.01	.006	-1.31	.46	-2.227	-.401	

thermore, the significance value (2-tailed) for content is 0.003, which is also lower than 0.05. Thus, it can be concluded that there is a significant difference in the average score between pre and posttest. Additionally, the mean difference between pre and posttest is 2.00 for content, 2.69 for language, and 1.31 for mechanics.

In contrast, Levene's test significance value for organization and vocabulary components is higher than 0.05. Thus, the data from pre and posttest are considered homogeneous. Furthermore, the significance value (2-tailed) for the two components is also higher than 0.05. Thus, it can be assumed that the data are normally distributed. Additionally, the mean differ-

ence between pre and posttest is 1.11 for organization and 0.94 for vocabulary.

The findings show that peer WCF could not improve students' competencies relating to three writing components: content, language, and mechanics. However, it did increase students' writing skills relating to organization and vocabulary components. This finding was supported by Paulus (1999) which stated that peer WCF generated more comments on organization and vocabulary.

However, benefit of peer WCF mainly depends on how this kind of feedback is provided in the classroom. If it is not delivered efficiently, peer WCF can be neglected. Moreover, it is

not to be said that peer WCF is not a beneficial activity. Holt (1992) agrees that the problem is not the peer WCF itself, but its application in the classroom. Peer WCF can be more beneficial if students provide more positive opinions than just assessing their peers' written compositions. Moreover, many studies agree that students require training on how to provide WCF, making peer WCF more effective (Berg, 1999; Min, 2006). As teachers recognize the advantages of peer WCF, their beliefs regarding peer WCF also develop positively.

CONCLUSIONS

This study's findings highlight that peer WCF is more effective than teacher WCF in enhancing Indonesian senior high school students' writing performance, especially in writing legend texts. This is evident from the mean scores of peer WCF group being higher than those of teacher WCF group. Moreover, it was also recognized that several components of writing competence (content, organization, vocabulary, and language) improved significantly among the Indonesian senior high school students after receiving teacher WCF, while peer WCF had a positive impact on organization and vocabulary components.

This study recommends combining teacher and peer WCF techniques as the two complement each other in enhancing students' writing performance. Moreover, rather than only relying on teacher WCF, combining both feedback sources could provide additional benefits, for instance, making students more confident in their own writing and deciding the revision options. In addition, it could decrease their writing anxiety and enhance their writing abilities (Kurt and Atay, 2007).

Furthermore, the present study suggests that it may be useful to allow the use of L1 in EFL writing classrooms, especially when peer WCF is involved. L1 could help students face difficulties in writing tasks (Saeli and Cheng, 2019). Thus, L1 could be used in peer response training programs. Additionally, writing teachers could consider encouraging students to apply L1 to enhance their feedback practices.

For future research, it would be appropriate to assign more time to the treatment process to help the students better understand how to receive and provide feedback to their peers, comprehend the feedback given by their teacher, and check their own writing before submitting it to the teacher. Moreover, further studies could examine how L1 can be employed to boost the efficacy of peer WCF in EFL writing classrooms.

This study also has some limitations. First, the study only used a quantitative method to gather the data, which may be inadequate to respond to the research questions and interpret the findings. Since the number of participants in this study was limited, the results could not be generalized. However, the findings provided us with more in-depth understanding of the application of teacher and peer WCF in EFL classrooms. If these two kinds of feedback techniques are employed in schools, a detailed picture of WCF usage could be drawn. Finally, this study did not include the students' perception of the teacher and peer WCF; if it could be included, the results would be more comprehensive.

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Brain-based learning and high order thinking skills effect on students' writing ability

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In this study, the researchers implemented brain-based learning (BBL) model and the use of the students' high order thinking skills (HOTS) in the teaching and learning of writing. The aim of this study was to know whether or not there was an interaction effect between teaching models and students' HOTS on the students' writing ability. This experimental research used a 2x2 factorial design. Two classes of the fourth semester of English Language Department became the population and the sample in this study. The students in both of the classes were divided into the students with high and low HOTS. Then, the experimental class was taught writing by using BBL and the control class used guided writing. Next, the data got from the writing test were calculated by using a two-way ANOVA. The result showed that F_o interaction (10.160) was higher than F_t (4.15) at the level of significance α=0.05. It means that there was an interaction effect between teaching models and students' HOTS on the students' writing ability. The mean score of the students with high HOTS taught by using BBL (82.44) was the highest. This brings to the conclusion that BBL and HOTS had significant interaction effect on the students' writing ability.

Keywords: Writing Ability, Brain-based Learning, High Order Thining Skill

INTRODUCTION

As EFL learners, most of Indonesian students still fail to master English well (Marlina, 2013). These difficulties can happen because there are some differences between Indonesian language and English language. The first difference is that those two languages have different ways in arranging the sentences. Rahayu (2015) stated that the structure of Indonesian language is totally different from English. The second is that there is no difference of how to pronounce and how to spell the words in Indonesian language. In line with this, Donal (2016) explains that in general, the spelling and the pronunciation of the words of Indonesian language are the same. But the differences in the sounds and the spellings of the words do happen to English language. These differences often confuse the EFL learners very much.

Furthermore, the phenomenon of English teaching and learning in Indonesia tells that writing becomes the most complicated English skill for almost all the English department students. The students find many difficulties when doing English writing. They often do misspelling of some words that are actually very familiar in their speaking practice. Their grammatical struc tures on their sentences are often incorrect. Moreover, they get difficulty to collect the ideas for their writing. Because of those, they consider that writing is very difficult. Their lack of vocabulary, understanding of grammar, motivation and confidence cause them difficult in creating writing (Yulianti, 2018).

However, it is very important for them to be able to communicate with others through written text because there will be some occasions in which they cannot tell or say what they want, feel and need orally or through face to face directly. Then, they need to learn writing indeed. They have to learn how to make the readers of their writing understand the messages on their writing well. They must transfer their willingness appropriately into the text.

Writing is a communication way through the written texts. Writing expresses the feelings, the thoughts, the ideas and the opinions of the writers. These writers' messages must be expressed correctly and appropriately in the texts. Indrilla and Ciptaningrum (2018) argue that writing is the people's way to communicate their thoughts or feelings by visible signs which are understandable for both themselves and for all other people. In order to avoid the miss-understanding of the readers, the writers must write the messages as clearly as possible. The clear and understandable writing can be reached by pouring the messages in the correct indicators of writing. There are some writing indicators that must be followed by the writers. The indicators meant consist of content, organization of the text, vocabulary, mechanics and grammatical structure. It is strengthened by Hughes as cited in Sianna and Syawal (2017) who states that there are five writing components of writing in analytic scale, such as content, organization, vocabulary, language use and mechanics.

Preliminary study which was held by the researchers told that the students' writing ability in the fourth semester of English department at a private university was low. It was known from the documents of the writing scores of the students in the previous semester. Most of the students (24 students from 36 students) still got the score under 70. Additionally, the information got from the previous lecturer of writing also said the same fact. They still had low ability in writing.

The questionnaire results explained that there were internal factors and external factors that made their writing ability become low. The internal factors were that they got difficulties in reaching the indicators of good writing and did not have high motivation in class of writing. The teaching model of writing that did not lead the students to be more active in writing was the external factor. Considering those, the researchers decided to focus on their study by implementing brain-based learning (BBL) in the teaching of writing. Brain-based learning (BBL) is a teaching model that can make the students become active in learning and maximize the use of their brains' functions in the process of teaching and learning. According to Uzezi and Jonah (2017), brain-based learning makes use of the different aspects of brain function to learn, assimilate, think and remember. Moreover, the researchers also invited the students to actively involve their high order thinking skills (HOTS) in the teaching and learning process of writing. High order thinking skill is a level of thinking which is based on Bloom's revised cognitive domain which consists of analyzing, evaluating and creating Tarwiyah et al. (2018).

There were many previous studies which applied brain-

based learning in the English as foreign language classroom. Oghyanous (2017) found that the effect of brain-based teaching approach toward self-efficacy of EFL students in Iran was significant. Brain-based learning was also proven to be effective in developing listening skills of the students and consolidating the recalling and the retention of the students' vocabulary as well as maximizing the motivation of the students in learning the skills of language (Salem, 2017). This was followed by Khalil et al. (2019) whose research result showed that some speaking skills of EFL students were developed because of the effect of the implementation of brain-based learning in the speaking class. Additionally, Khalil (2019) found that critical writing skills of EFL students could be significantly developed by implementing program based on brain-based learning and emotional intelligence.

Then some studies about the use of HOTS in English language classroom had also been conducted. Purnama and Nurdianingsih (2019) found that HOTS instruction became an effective strategy for teaching speaking viewed from the students' motivation. A study by Indriyana and Kuswandono (2019) showed that in developing students' HOTS in reading skills, the teachers used some strategies, such as giving the students the divergent questions, creating groups of discussions, showing the objectives of the learning to the students, giving the students the feedback of the materials having been studied, and motivating them to use their critical thinking. Next, Sianturi et al. (2020) explained their study result that the ability of the students in writing descriptive text could be developed by using HOTS questions. However, among those previous studies, no research studied brain-based learning (BBL) and high order thinking skills (HOTS) in the language classroom especially in the writing class. Therefore, this study was conducted with the purpose to know whether or not there was an interaction effect between teaching models and students' high order thinking skill on the students' writing ability.

METHODS

This was an experimental research which used the design of a 2x2 factorial design. This factorial design required the formation of four treatment groups. Those four groups in this study comprised of:

1. The students who had high HOTS and taught writing by using BBL
2. The students with low HOTS and taught writing by using BBL
3. The students whose HOTS were high and taught writing by using guided writing
4. The students who had low HOTS and taught writing by using guided writing

This research was conducted in the fourth semester of English language education department of UNHASY (University of Hasyim Asy'ari). Almost all of the students of this English

department comprise the students of Islamic boarding schools which are located near to this campus. There were two classes of the that became the population in this study. Because this research used total sampling, those two classes automatically became the sample. Each class consisted of 18 students.

By using the lottery, the researchers decided which class to be an experimental class and which class to be the control class. The students of each class were classified into the students with high and low high order thinking skill (HOTS) based on the scores of HOTS test. Then class A as the experimental class was taught writing by using BBL. Guided writing was used to teach writing in the control class which was class B. After getting the treatment for three times, each class got the posttest of essay writing. The data on this study was collected from this kind of writing test. Then data which were in the form of the writing scores of class A and class B were calculated by using a two-way ANOVA test. This kind of test was done after knowing that the data obtained were in the normal distribution and homogeneous.

RESULTS AND DISCUSSION

Because the data distribution was already normal and its homogeneity was tested, then, a two-way ANOVA test was applied. The researchers found that result of this study completed the results of the previous studies about brain-based learning (BBL) in the language classroom conducted by the former researchers. **Table 1** explains the different things from this study and the former studies, and **Table 2** presents the summary of a two-way ANOVA test result.

Based on the result of the calculations of a two-way ANOVA test above, it can be known that F_o columns by rows (interaction) was 10.160 which was higher than F_t (4.15) at the level of significance α=0.05. The sig. 0.000 was also lower than significance α=0.05. Those mean that there was an interaction effect between teaching models which were Brain-based learning and guided writing and students' high order thinking skills (HOTS) on the students' writing ability. In other words, it can be said that the ability of the students in writing was influenced by the teaching models used by the lecturer in the class and the high order thinking skills that they had. This result could become a proof that the models of teaching had significant impact toward the students' success in gaining the goals of teaching and learning especially in writing class. That was why the teaching models chosen by the lecturer was expected to create comfortable atmosphere of teaching and learning so that the students could feel enjoy and relaxed in following the process of learning writing. This could raise their spirit to do the best writing. It automatically improved the students' ability in writing. Moreover, this ability was also interfered by the use of the students' high order thinking skills. This HOTS completed the effort of students in having the good writing results.

In addition, the other fact also tells that the students who had high HOTS and were taught by using BBL had the highest

mean score of writing. From **Table 3**, the highest average score of writing which was got by the students with high HOTS in the class of experiment was mostly caused by the model of teaching used in that class. It was Brain-based learning which gave many differences in the ways of teaching and learning to write from guided writing. Brain-based learning (BBL) makes the students use their brain actively. Students were not challenged to memorize in BBL class, but they were demanded to think. Besides that, BBL stimulated the students to become curious, innovative and inventive because the information which was served was only the stimulus. These, of course, were followed by the use of the high order thinking skills that they owned.

TABLE 3 | **The Writing Mean Scores of Four Groups**

Class	HOTS	Mean	SD	N
Brain-Based Learning (BBL)	Low	61.22	4.410	9
	High	82.44	3.575	9
	Total	71.83	11.592	18
Guided Writing (GW)	Low	62.44	4.003	9
	High	74.67	4.848	9
	Total	68.56	7.625	18

The students in an experimental class which was taught writing by using BBL were actively using their brains to think about what the lecturer was demanding. Their lecturer did not explain more about the material but the students had to find more information in order that they could reach the goal of the writing teaching and learning process. They used their brains to understand what their lecturer meant and intended to do when giving the materials of writing. Before being in groups, they got the chance to drink first, then, think and create their own questions to explore information so that they could add and extend their opinions related to the topics of writing delivered by their lecturer. This made them feel relaxed without any forcing in expressing their opinions. Flor et al. (2013) state that relaxation can wide the attention scope and increase concentration on the task. So that the students' relaxed feelings in this case could help them to get information about what to be written in their texts more and more by having discussions in their groups. Every member of the group had the same opportunity to have ideas to be poured in the writing. The students automatically used their HOTS on this writing phase.

The information which was not in detail yet made the students observe and search everything that had relations to the topic of writing. When searching the ideas, they also got the freedom to use the creativity that they had as much as possible so that they could create an idea that seemed new. Their HOTS also took a part in this session to use many original ideas from their own ideas because they were forbidden to look for the writing from the internet. It made them become innovative. In line with this, Girotra et al. (2010) argue that the process of innovation involves generating ideas, selecting ideas and opportunity. By combining all of the ideas of all the members of the discussion groups, the students could innovate from the

TABLE 1 | The Differences of This Study from the Previous Sstudies

The Differences	Oghyanous (2017)	Salem (2017)	Khalil et al. (2019)	Khalil (2019)	This study
1. Research focus	The effect of BBL toward young EFL learners' self-efficacy	BBL to improve EFL leaners' listening skills, retention of vocabulary and motivation	The BBL effect to develop EFL learners' speaking skills	A program based on brain-based learning and emotional intelligence to develop EFL students' critical writing skill	The effect of BBL and HOTS toward students' writing ability
2. Research subjects	Young EFL learners in the age of 13-16 years old	EFL students of English for Specific Purposes (ESP)	EFL secondary school students	EFL students of secondary school	EFL students of English department
3. Research location	Iran	Egypt	Egypt	Egypt	Indonesia

TABLE 2 | Summary of ANOVA Test Result

Source of Variance	Type III Sum of Squares	df	Mean Square	F_o	F_t	Sig.
Columns by rows (interaction)	182.250	1	182.250	10.160	4.15	.000
Between groups	2795.639^a	3	931.880			
Within groups	574.000	32	17.937			
Total	3369.639	35				

ideas of their friend in their groups. They made the best content of writing based on their groups' opinions which had been collected. When they were presenting the writing, absolutely all the groups had the different writing even though the lecturer gave the same topic to them. Every group had their own unique thinking about the topic which was delivered by the lecturer.

The students in the experimental class were accustomed to finding and gathering the unique ideas for their writing. They were also used to using the correct grammar and the appropriate diction. When discussion, they did corrections for the writing they made based on the suggestions and the explanations of their friends in the groups. Their knowledge of grammatical structure unconsciously increased because of it. The skill of selecting the most suitable vocabulary in expressing their ideas also got improvement because of the activity that they always did when discussing their writing. The skills of analyzing, evaluating and creating that the students whose HOTS was high worked well in this discussion. They could distinguish the right and wrong grammatical structure. They were able to differentiate the correct vocabulary. To sum up, it can be said that the peer corrections in this discussion could help the students to develop their writing. It is supported by Behin and Hamidi (2011) who explain that peer correction is beneficial in increasing the writing skill of the students.

They actively used their brain and HOTS in composing the best essay. They could define what the lecturer asked to do well. They were able to classify and identify the structures of the essay writing from the example which was given by their lecturer well. In the groups of discussion, this kind of knowledge

was always discussed, and they also talked about the organization of this essay in the presentation time when they had to present the writing that had been made in their groups. In addition, the ways of the lecturer on asking them to create part by part of the organization of the essay writing in every discussion meeting help them to recognize every part of this essay organization more easily. They spoke more about every single part of this organization and also did more in creating the writing as well as thought more by activating their brains in getting the good content. Thus, all the conditions that happened to the students in the experimental class who learnt essay writing by using brain-based BBL model were the factors that made their writing ability become higher than that of the control class.

Meanwhile, the students in the control class who were taught writing of the essay by using guided writing acted differently from the experimental students. They looked to always wait the guidance from their lecturer. Most of them tended to be passive in the class of writing. They also seemed not to have high motivation to do the writing assignment. They also did not have high confidence of their ability because they always felt afraid of making many mistakes on their writing. All of these conditions of the students in this control class made their ability in essay writing get lower than those of experimental class. Besides, they seldom used their HOTS.

In the guided writing class, the lecturer gave the examples of every part of her explanations about essay writing. It was always followed by some instructions to be done by the students in doing the writing assignment in every meeting. The instructions were meant to make the students create the writ-

ing more easily. The lecturer guided them with some leading questions when they were in the process of gathering ideas. Although they were already divided into groups, the lecturer still guided them. Anggrainy et al. (2016) state that in guided writing, the students collaborate with the teachers and other students before they write individually. Actually, the lecturer's purpose in giving the students' instructions in this guided writing was to make the students easy to get the ideas for their writing. But, the facts talked the different things. These instructions made them reluctant to use their brains more in getting and finding some new ideas which were related to the topics of writing which was asked by their lecturer. They seemed rare to use their HOTS as maximally as possible because they knew that their lecturer must have been going to help them in creating ideas. That was why the writing which they had presented often contained the same ideas from all of the groups.

When they had discussion time in the groups, only one student who dominated the discussion in every group. The other members of the groups only kept silent and listened to what their friends in the groups who were admitted the most capable talked about. They often agreed with everything that the leader of their group decided. They did not want to add the ideas by their own ideas. Their writing result when being presented was often still in disorder. It really showed that only one student who had done the writing. It was because meeting by meeting the mistakes that were often found in their writing were always various. The students who often asked and answered the questions in the discussion among groups were also the same students. The other students just followed the flow of the discussions without having any comments and suggestions as well as questions for the writing of other groups which had been presented. The students often had contributions in the discussions if the lecturer directly called their names and asked them to say something that could be in the form of comment, suggestion or question to the owner of the writing. Only in this time the students in this class seemed to use their HOTS in order to be ready if their names were called. Because of the demand of their lecturer, the students wanted to give their opinions or ideas in the discussion forum.

When the lecturer asked them whether they had already understood the materials of writing that was being learned or not, they also always told that they already understood. Moreover, the students whom the lecturer did not point to give ideas did not say anything even though they had already prepared their ideas. This situation made them have poor writing scores. To sum up, it could be said that most of the students were less in practicing all the stages of the writing process so that their writing ability became poor. Tuan (2010) emphasizes that the better writing ability can be got by practicing writing more.

The students in the guided writing class often appeared not spiritful to join the class. It caused them not to motivate to create the writing text as what their lecturer wanted. They were not motivated to finish their writing assignment as soon as possible. When the time for creating the text was already over, one or two groups only who could finish writing. Many of them always

asked the extended time to do the writing. Some of them also asked whether it was permitted or not if they submitted their group writing in the following day. In the next day that they had promised, they did not collect or even send their writing if the lecturer pretended to forget or did not ask to submit their writing. This made them not know what was wrong and what was already correct and appropriate in their writing. In short, this low motivation led them to have low writing ability. Aryanika (2016) supports this by explaining that the students will face difficulties in writing without having strong writing motivation.

The students often showed that they were not confident about what they knew related to the essay writing. It could be known when they were pointed to give comments to their friends' writing. They were in doubt to tell their ideas about that writing. They were afraid of making mistakes in their comments that they would give to their friends. They did not have such kind of thinking that they could learn more by having some mistakes. They did not want to use their HOTS. What they had was only they would feel ashamed if their ideas in the comments or suggestions were not correct. They did not realize that they actually were learning to think critically when they tried to give their opinions based on the writing that had been written by their friends. Feeling afraid of the mistakes led them not to have confidence about writing. Mardiansyah (2018) argues that there are significant correlation and influence between students' self-confidence and their writing performance. It means that when the students have low self-confidence, their performance of writing will become poor.

What the students in the control class had done made their knowledge of writing not increase well. Their knowledge about the structures of the essay writing was not as good as the knowledge of the students in the BBL class. The quality of the content of the writing that they created was also standard and not as inventive as the writing content that had been composed by the students of experimental class. Their mastery of the grammatical structure was also lower. The ability in using the appropriate vocabulary for expressing the ideas that they had was not good. They often used the words that they know the words well. Their mastery on writing indicators was not so good that it brought them to have writing ability in essay writing that was lower than the students of BBL class. Alrabah and hua Wu (2017) argue that writing ability covers the ability of writing both beyond sentence such as ideas, organization of the text and vocabulary and within sentence such as grammar.

CONCLUSION

Teaching models especially BBL and the use of HOTS had a significant interaction effect in the teaching and learning of writing. Since the implementation of brain-based learning (BBL) combined with high order thinking skill in teaching and learning process of writing is still rare, this study gives the new insight for all English teachers to use BBL and HOTS in the

class of writing. The result of this research becomes the proof that BBL and students' HOTS had significant influence toward students' writing ability. BBL and HOTS can also be implemented in English language classroom such as teaching speaking, listening, and reading. It is also highly recommended being applied in many other courses in the teaching and learning process. Many specific areas of writing, for instance what writing indicator gets most effect of the use of BBL and HOTS in the teaching and learning to write, had not been explored yet in this research so that the other researchers can do the research in the same area as this research deeply.

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Self-organized learning environment teaching strategy for ELT in *Merdeka Belajar* concept for high school students in Indonesia

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As the development of the industrial revolution takes place, disruptions are happening constantly in almost every major sector of the current industries. Companies and organizations complained about the competencies of the graduates entering the work force. This matter questions the readiness of the education system in preparing the students for the real world. Problems in education such as the regulations, strict policies and instructions from the government are undermining the role of the teachers to do what they think best for their students. This standardization has harmed the motivation and enthusiasm to learn, especially in English language class. Lack of motivation and English Language competency could harm students' opportunity in accessing the vast global network of knowledge. *Merdeka Belajar* and SOLE are the promising alternatives in improving ELT. This article is somewhat a position paper trying to clear one side of a debatable opinion about a hot issue. It aims to persuade the reader that our opinion is valid and defensible. In doing so, we then separate the discussion into several parts regarding the analysis of concepts of *Merdeka Belajar* and SOLE (Self-Organized Learning Environment) related to ELT and motivation in language learning, as well as innovation in education.

Keywords: SOLE teaching strategy, Freedom to Learn, TEFL, Merdeka Belajar

INTRODUCTION

The need for a country to develop and to be sustainable depends on the quality of the human resources available and their ability to innovate. Hence, the quality of human resources depends on the quality of education as well as their motivation to learn and develop. In this fast-paced changing unpredictable globalized world, education must be comprehensive, sustainable and must continuously evolve to meet the challenges in the present and the future. Henceforth, lifelong learning should always be the main values that should be taught in schools. However, learning has become more formalized as humanity has developed the systematic way of thinking and problem-solving (Farenga and Ness, 2005). As learning is becoming more formalized and institutionalized, society often forgot that learning is not only confined in a room or space. It can be done outside of schools or other informal institution, organization or programs. As this mindset grows within the society, they often neglect the soft skills that enable humanity to survive, the skills that help human to work, to learn and to live better. The average main focus of the society is on the hard skills that re required for their dream job. For example, accounting, law, business, medicine, and etc. Henceforth, lifelong learn ing was basically misunderstood. Implicitly, Toffler (1970) has implied that lifelong learning is essen tial for humans

to adapt to different times and environment. It is what helps humans to survive, innovate and to accommodate to changes. This is also why it is constituted in the Republic Indonesian Law No. 2, 1989, which is to prepare individuals to face the challenges of the present and the future.

The problem with today's education system is that it has already been standardized, rigid, and it has not been effective in preparing individuals for the competencies of the future nor the current status quo. Big companies such as Cisco, Intel and Microsoft are concerned with the graduates that are entering the workforce with the skills that did not prepare them for employment in the digital age (Griffin and Care, 2015). Moreover, modern artificial intelligence has become extremely sophisticated that it has already automated the manufacturing industry and now it is slowly taking over the service industry (Salomons and Salomons, 2018; Bartodziej, 2017). It is a matter of time where labor work or even services could be replaced by machines. In addition to that, Andrew Wycoff (the director of OECD's directorate for science, technology and innovation) and Karine Perset (Economist in OECD's digital economy policy division) has stated in Anderson et al. (2018) that in twelve years from now, disruptions are happening in every sector of all major industries due to automation. To be able to constantly develop and evolve the way we perform will help anticipate the problems that will arise in the future. Therefore, identifying the skills of the future is pertinent for people to sustain in the present and the future. The skills for the future are what is defined as the 21st Century Skills. These skills comprise the life and career skills; information, media and technology skills; and the learning and innovation skills. These skills are identified and formulated from a collective result of surveys conducted by various organizations in companies and institutions to find out the demand of skills that are needed for the future (Griffin et al., 2012; Larson and Miller, 2011; Rotherham and Willingham, 2010).

From the explanation above, the mismatch between the work and life condition with the education taught in schools are not relevant to this time and thus it is costing the efficiency of time and energy for companies or individuals to adapt to the current status quo. Therefore, there is an urgency to improve the quality of education to be able to cater the needs and demand of the current industry and the future. If what the students are learning is obsolete, it will not allow them to develop and keep up with the current times. And thus, there will be a generation that is left behind in the development of the industry. This could pose a major threat towards a nation's economic development. This is related to Mitra (2014) statement that it is the development of the needs in the industries that changes the way of schooling. Therefore, new teaching strategies should be formulated to get the students to be prepared for the real-life experience in the present time as well as the future. This research was solely based upon the concern that could jeopardize the economic and social level of the education system in the future and the social demography in Indonesia. Therefore, Indonesia made a new initiative to tackle on the issue of the future and present employment as well as problems that might arise in the future by fixing the mindset of the teachers and the schools through the *Merdeka Belajar* concept in Indonesia's education system.

In order that Indonesia are able to compete globally, the skills for the future must be intensively nurtured. As motivation being one of the most determining factor in increasing a student's willingness to learn, lifelong learning will not be able to thrive within the students if there is no motivation McCombs (1991); Yilmaz and Kaygin (2018); Al Rifai (2010). Language learning and intercultural communication is also part of lifelong learning, since people always need to improve their language skills and communication skills in this globalized world. In addition to that, English is the lingua franca for communication to acquire or exchange new knowledge or experiences in most parts of the world. English language education should also be improved to be able to scale and impact effectively to create students who are globally competent. Motivation is also the significant driving factor in language learning. The role of motivation in inciting positive affective factors in accommodating language learning is arguably indisputable (Bley-Vroman, 1990).

Research shows that motivation drives the affective motors of the learners in language acquisition which will give the learners the drive in acquiring the language (Gardner, 1988; Wimolmas, 2012). Therefore, teachers should instill motivation towards the learners in learning the English language. The practice of *Merdeka Belajar* by Najelaa Shihab and the Teachers Learning Community (*Komunitas Guru Belajar*) has proven to increase a student's motivation in learning (Shihab and Belajar, 2017). The practices of *Merdeka Belajar* can be useful in the English Language Teaching as a means of an approach to improve the students' motivation in learning the English Language. Therefore, the author wishes to highlight the *Merdeka Belajar* Concept advocated by Najelaa Shihab — as the conceiver of this idea in an educator's perspective — to be brought into a conceptual study on how this concept could be implemented into the SOLE teaching strategy in English Language Teaching (ELT) for high school students in Indonesia.

Here, the author suggest alternative solutions in tackling the problem of the education in Indonesia in preparing the students for the present and the future, particularly in suggesting a different approach to English Language Teaching through the Self-Organized Learning Environment (SOLE) Teaching Strategy. The concept of SOLE has successfully been experimented in India by the developer of this idea, Sugata Mitra, and has ensued in positive results in academic achievement, English Pronunciation, Education objectives and self-organizing behavior (Mitra et al., 2016). This then led Sugata Mitra to be entitled as the Innovator of Education and the TED Prize Winner (Ted, 2013). This review article will be discussing on how *Merdeka Belajar* and SOLE synergize in improving English language teaching.

METHOD

This review article acts almost similarly as a position paper where it tries to represent an arguable opinion about an issue in a manner of a situation like a debate. Researchers may be familiarly recognized this in the term as 'conceptual analyses in methodology'. This article intends to elaborate a conceptual study on the possibility of the implementation of SOLE in ELT through the *Merdeka Belajar* approach as an alternative solution to create future-ready students in a valid and defensible way of persuasion. This article adopts the method in writing a position paper from Abidah et al. (2020) while maintaining the systematic review Suprapto et al. (2017). The following is the step in writing a position paper: (1) Selecting a topic for the paper; (2) Conducting preliminary research; (3) Challenging the topic; (4) Continuing to collect supporting evidences; and (5) Creating an outline (Fleming, 2019).

DISCUSSION

In this section, the researchers group the discussion into several parts regarding the analysis of concepts of *Merdeka Belajar* and SOLE (Self-Organized Learning Environment) related to ELT and motivation in language learning, as well as innovation in education.

Merdeka Belajar

Merdeka Belajar (Freedom to Learn) is a new concept that needs to be tread carefully to direct the discussion objectively. Recent issues of *Merdeka Belajar* in Indonesia are heating up an argument that this concept is not fit to be implemented in Indonesia based on public views on the execution of the new education policy — in the implementation of *Merdeka Belajar* — by the new appointed minister of education, Nadiem Makarim. However, the concept of *Merdeka Belajar* is not a very recent phenomenon. Najelaa Shihab has coined this term earlier in 2017 along with the publication of her book '*Merdeka Belajar di Ruang Kelas*'. This book was also co-authored by the members of the Teachers Learning Community (*Komunitas Guru Belajar*) that Najelaa Shihab has founded on 2014. Unexpectedly, this concept of *Merdeka Belajar* has some connection with what has Ki Hajar Dewantara envisioned in his concept of *Taman Siswa* since around the 1920's. Upon the complexity of this *Merdeka Belajar* concept, the authors will discuss this concept into two parts: (1) the emergence of *Merdeka Belajar*; (2) the general concept of *Merdeka Belajar*.

The emergence of *Merdeka Belajar*

The progression of Indonesia's education system is very dynamic. Almost every new appointed minister of education would tend to reform the education curriculum and bring new ideas and policies towards the education system, while its pattern remains stagnant (Shihab and Belajar, 2017). It is mostly a top-down approach towards the education institutions, from the primary years up to the university education. Any government's policy on education, schools are obliged to comply with the regulations and practices that are imposed upon them in order to be recognized. The reason as to why the government are dictating how education institutions should work in every single detail is to reach the national goal in education. This top-down approach in enforcing regulations, policies and instructions to reach the national standard of learning has forced the teachers to rush the learning process of the students. Students that gets left behind are then unmotivated to learn as this rushed learning process are making learning less enjoyable (Shihab and Belajar, 2017). However, recently the education system in Indonesia is experiencing a liberation towards this top-down approach by the government's own initiative through their *Merdeka Belajar* Education Policy.

The concept of *Merdeka belajar* was initially pioneered by Najelaa Shihab along with the formation of the Teachers Learning Community (*Komunitas Guru Belajar*) since 2014 and she officially launched her book "*Merdeka belajar di Ruang Kelas*" on 2017, which was also co-authored by her members of the Teachers Learning Community (*Komunitas Guru Belajar*). The idea of *Merdeka belajar* was later on popularized by Indonesia's new minister of Education, Nadiem Makarim, on 2019 to be implemented into Indonesia's education system as a new national education policy. This *Merdeka Belajar* Education Policy by Nadiem Makarim revolves around 4 pillars that are foundational for the breakthrough of the "*Merdeka belajar*" Concept, which are; the replacement of National Standard School Examinations with the decentralized individual school assessment, the termination of National Examinations, the simplification of the Lesson Plan (RPP), and the Zoning Regulations for New Students Acceptance.

On the other hand, the *Merdeka Belajar* Concept by Najelaa Shihab and the Teachers Learning Community (*Komunitas Guru Belajar*) are initially more towards the bottom-up approach, outreaching community of teachers and empowering them to be accepting of their vulnerabilities and motivating them to learn as well as innovate teaching practices that are more suited towards the learning style of their own students. The implication of the concept of *Merdeka Belajar* is very versatile as it focuses on innovation and peer-to-peer sharing of their teaching practices among teachers. However, this versatility cannot compromise the three principles for the *Merdeka Belajar* Concept that was brought by Najelaa Shihab and the Teachers Learning Community, which are; Commitment, Independence, and Reflection. These three essential principles in the *Merdeka Belajar* concept are the key for teachers in unlocking the student's enthusiasm and desire to learn by giving them the freedom and the courage to dream as well as inspiring them to explore the world (Shihab and Belajar, 2017).

Here we can understand that there are differences in perspective on the *Merdeka Belajar* concept between Najelaa Shihab and Nadiem Makarim. The *Merdeka Belajar* Concept that was pioneered by Najelaa Shihab and the Teachers Learning

Community is more towards the emancipation of teachers to be freed of the strict regulation of the government, while the *Merdeka Belajar* which was advocated by Nadiem Makarim is more towards educational policy to empower educators and teachers the freedom to teach as how they deem fit for their school and their students. Even though there are differences in perspective on the *Merdeka Belajar* Concept between these two public figures, their ideas are complimentary to one another. Further research should be made to analyze these two differences in perspective of *Merdeka Belajar*.

Self-Organized Learning Environment (SOLE)

It has been a norm in assuming that children need major guidance from an adult. However, today there has been a paradigm shift in learning. Learning is no longer seen as a process of the transfer of knowledge from a teacher to the students (Esteban and Peart, 2014; Sholichah, 2019). Nevertheless, it is the teachers who help the students to learn by providing facilities and situations that support them in order to build concepts and understanding of the topic independently and actively. Sugata Mitra has proven that children can teach themselves through his Hole-in-the-Wall project in India, which was presented in the 2013 TED Talk (Ted, 2013). From his Hole-in-the-Wall project, he formulated the SOLE concept which is integrated in his dream of building a School in the Cloud. His SOLE concept has given him the title as the Innovator of Education and the TED Prize winner (Ted, 2013). This then inspired teachers around the globe to create their own SOLE sessions in their respective countries or districts as part of the teachers of the School in the Cloud project. The School in the Cloud is learning and teaching platform that acts like an online school. This platform was launched at the 2014 TED conference with an objective to help accelerate the SOLE research globally to teachers or educators and share their teaching and learning experiences together.

SOLE is a concept which was developed by Sugata Mitra and the researchers at the SOLE Centre in Newcastle University. This concept was initially based upon Sugata Mitra's Hole-in-the-Wall project in which he examined the impact of a free-to-use computer, connected to the internet, which is embedded into a wall in a village with a height where it will be convenient to use by 8-13 year old. In this experiment, which was conducted for more than 5 years in India, native Indian children are able to operate a computer, which operates in English, in a short amount of time while learning the English language at the same time. This experiment was conducted in the rural villages of India which resulted in a significant improvement on the children's academic achievement. Some of the results of the following research are from several different studies quoted by Mitra et al. (2016) regarding the 'Hole-in-the-Wall' experiment. The result of the first research was done by Mitra (2005) himself — and later on experimented by DeBoer (2009) — who found out that children can learn to use computers and the internet independently, regardless of

the children's language and origins. Secondly, the results of research by Inamdar and Kulkarni (2007) proved that children can achieve their educational objectives independently related to standard school examination in computer science and mathematics; improvement in English pronunciations Mitra et al. (2003); and increase in school performance (Dangwal et al., 2014). Third, children are able to show self-organizing behavior as a result of learning in a minimally invasive environment (Dangwal and Kapur, 2008).Finally, children can show understanding related to advanced content of knowledge that is far beyond the expectations for groups of children aged from 8-13 years old (Inamdar, 2004; Mitra, 2012).

SOLE with its highly influenced Constructivism approach, this learning and teaching concept of letting the learners to take steer of their learning process gives them the ability to make meaning of the subject on their own. The teacher's role as a facilitator will only observe and supervises the students in the learning process. The students are encouraged to work together to answer questions using the internet. During the process, the students will be preoccupied by self-discovery, sharing their knowledge in a community, and spontaneity in trying to learn in the edge of chaos (Mitra, 2012). The introduction of SOLE in India's rural villages improved the comprehension of the children's English language. The children explored the contraption provided by Sugata Mitra in his Hole-in-the-Wall project as a mystery device that performs magnificent tricks which intrigued the student's curiosity. In doing so, the students are also trying to control the chaotic learning environment where all of the children want to try the little contraption while trying to solve the question given by Sugata Mitra himself (Mitra, 2014). This type of engagement proved to be effective to activate the learning mode of the students through this project.

Upon the significant improvement, there is a possibility to implement the SOLE concept in Indonesia to shift its teaching paradigm from a teacher-centered learning towards a student-centered learning effectively. Since modern day technology is becoming more accessible, it would benefit the children of the rural areas in Indonesia to positively explore the encyclopedia of knowledge from the internet in a regulated manner that is facilitated by a teacher. The process of teaching and learning in this SOLE concept can be applied as a teaching approach to accomodate the theoretical knowledge into an experience in English Learning and Teaching. Through this approach, the learners are being immersed into the problem at hand with access to the sea of information on the internet — that is relevant to the subject — to solve that problem. Thus, the learners are directly engaged and exposed towards resources in English and try to break the language barrier. Moreover, this can increase the children's immersive engagement in technologies as a learning media for their investment in the future.

One example of learning that applies *Merdeka Belajar* and SOLE model is the flipped classroom (Anwar and Pratama, 2016; Anwar, 2017). This kind of learning leads students to find as much information as possible about learning materials not only in the classroom but also outside the classroom,

especially by using technology. In addition, students can also practice learning English with their friends and teachers more freely. The teacher only needs to make sure that students enjoy it, learning process runs smoothly and as well as related to the current topic of discussion.

CONCLUSION

The results of this article reveal that *Merdeka Belajar* and SOLE both have noble goals which lead to the formation of a strong character for students, especially high school students. Students at this age need to have high self-confidence, independence, freedom in learning, and responsiveness to the surrounding environment. If the students do not have them, then they will not be ready enough for facing the real world as well as the future. This also will impact the sustainable develop-

ment aspects of our nation and country. In learning English, *Merdeka Belajar* and SOLE are appropriate to be used as strategies to boost students' skills in English. Students who have strong self-confidence, independence and freedom in learning, and understand the situation and conditions of their environment as well as are able to manage and utilize the potential of their environment will find it very easy to learn English.

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Professional development as viewed by EFL teachers at lower secondary schools

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In the developed world, teachers are compelled to be professional in handling instructional process for students' optimum learning. There are many ways for teacher professionalism. This study deals with an exploratory survey to probe EFL teachers' views of teacher professionalism on the areas for professional development or learning. A number of 302 EFL teachers of the lower secondary level of education are conveniently drawn from a number of cities/regencies as samples of the present study representing EFL teachers with diverse teaching experiences in East Java. A questionnaire was developed to collect data on teachers' ideas connected with aspects of developing themselves professionally. The results of the present study are discussed pertaining to EFL teacher normative responsibilities and concepts on professional development/learning. Pedagogical and theoretical implications of the findings are drawn with reference to the context of English instruction.

Keywords: professional development, EFL teachers' views, public and private schools

INTRODUCTION

Being professional teachers are undeniably of utmost importance for students' optimum learning. Harrison and Killion (2007) conceptually outline a various number of ways teachers may contribute to effectiveness of their instructional process. Professional teachers are indispensably required in order to change education- for better or worse as exclaimed by Jones (2003). It is always and has been in the hands of teachers the education relies on despite the emergence of technology. Henceforth, there are some roles teachers are possessed Keller (2011) describes teachers' attributes in the classroom in a more operational level. They may play roles as a class controller, learning assessor, class manager, management stylist, resource person, participant, investigator, and a role model. Another expert roles for a teacher to play as follows substitute parent, class disciplinarian, mentor, counselor, bookkeeper, and a planner. Henceforth, teachers may have lots of essential tasks to tackle during the instructional process the ultimate goal of which is students' optimum learning. Therefore, teachers' role has become a hot topic among those concerned with education quality elsewhere

However, in different countries, professional standards and the assessment work of teachers are set up diversely depending on one country's education policy landscapes and cultural context. In the Republic of Ireland, for instance, the standards are underpinned by core values like respect, care, integrity, trust, and the complexity of teaching (Council, 2012). In Indonesian context, the importance of teachers' role is vividly reflected in the law about teachers and lec-

turers-the Law no. 14 year 2005-that has mandated the government to qualify teachers and lecturers alike academically in terms of their competences the achievement of the goal of the national education.

Pertinent to the essential roles teachers have, upon the completion of their formal education and throughout their teaching career, teachers need to update and qualify further their skills to impact students' learning better, that is to say, to boost their educating capacities for students' successful learning, they have to always develop themselves professionally. The medium within which teachers can qualify themselves is commonly called professional development – PD (Darling-Hammond et al., 2017; Calvert, 2016), or it also refers to continuous professional development – CPD since they are expected to have the development throughout their career. Other terms such as staff development, in-service, training, professional learning, or continuing education are also commonly applied Mizell (2010). Recently, however, scholars have distinguished between the terms 'professional development' and 'professional learning' (PL for short) – a more recent term that essentially has a similar underlying concept which has been widely accepted and practiced.

According to Calvert (2016), and Labone and Long (2016), PL is associated with more modernized conducts with interactive nature being evidenced during the process. The latter is more proliferated by technology advancement in which teachers are provided by options for learning by themselves online any time beyond the set-up-school-based professional development program (Loughran, 2010; Stevenson et al., 2016). According to Ambler (2016), online professional learning caters for teachers to fulfill their self-interest or what they think they need. In other words, teachers as a matter of fact can professionalize themselves by synergizing school-based professional development program and personal online learning Beltran and Peercy (2014); Campana (2014). The term professional learning is used throughout in the rest part of the article to mean any attempts made purposefully by teachers, be they individually or in group, in a formal or informal context, to always qualify themselves so as to make meaningful impacts on students' learning achievement. There exist two questions in this study:

1. How is a professional English teacher?

2. What attempts have the teachers done to be professional?

METHOD

As the study intended to investigate EFL teachers' views on their professional development/learning, an exploratory survey was adopted aiming at examining their perceptions on professionalism. To do so, a convenience sampling technique was employed in this study Gall et al. (2007). As the samples of this study, 302 English teachers were randomly selected from 5 (five) cities/regencies in East Java, i.e. the Regency of Kediri,

Kediri City, the Regency of Trenggalek, the Regency of Tulungagung, and the Regency of Nganjuk. The English teachers as the respondents of this study mostly teach at public lower secondary schools.

The instrument used to collect data in this study is an open-ended questionnaire giving opportunities for English teachers to openly state their opinions and perspectives. The questionnaire focuses on 2 major variables: perceptions and attempts on the continuous development program. Moreover, the questionnaire also collected data on the English teachers' backgrounds such as teaching experience, teaching certification status, as well as their highest education. After being collected, the data were coded and descriptively analyzed. First, descriptive statistical analyses were utilized to examine the data on respondents' background by using frequency count. Next, the collected data on respondents' perceptions and attempts were statistically analyzed with frequency count.

The characteristics of the samples in this study were elaborated in **Table 1** up to **Table 4**. As evidence, 50 out of 302 respondents (16.5%) did not fill any information on their backgrounds, but they still elaborated their ideas on perceptions about professional teacher and some attempts that they committed on having sustainable professional development. Possibly, the respondents who do not provide their teaching backgrounds in the questionnaire would like to provide objective opinions on the issues without being related to their current status. **Table 1** contains information on the respondents' background of education.

TABLE 1 | The Respondents' Educational Background

Levels of Education	F	(%)
Bachelor degree	217	72
Master Degree	35	11.5
Not mentioned	50	16.5

Based on the results of descriptive statistical analysis displayed in **Table 1**, it reveals that out of 302 respondents, only 11.5% percent of them hold the master degree, whereas, the majority of the respondents (72%) have got the bachelor degree. Unfortunately, 16.5% of the respondents did not mention their educational background. Next, in **Table 2**, the lengths of respondents' teaching experiences are justified.

TABLE 2 | Teaching Experience

Length of Teaching Experience	F	(%)
<5 years	28	9
5-10 years	48	16
11-15 years	83	27.5
>15 years	93	31
Not mentioned	50	16.5

As depicted in **Table 2** , viewed from work experience, the respondents of this study have different lengths of teaching

experiences. As evidence, most of them (> 50%) are catego-rized as senior and expert teachers with more than 10 years of teaching experience. However, 16.5% of them did not state the teaching period. With regard to certification, **Table 3** elabo-rates the detailed results of descriptive analysis of respondents' certification status.

TABLE 3 | The Respondents' Certification Status

Certification Status	F	(%)
Bachelor degree	195	65
Master Degree	57	19
Not mentioned	50	16.5

As displayed in **Table 3**, the majority of respondents (cumulatively 84% in which 65% holding the Master degree)are certified English teachers in which they receive professional allowance from the government. The professional allowance is granted to teachers to financially facilitate them to sustain-ably improve their professionalism such as studying further to a higher level of education, presenting scientific electronic books/references professional support engagements.

In brief, the majority of the respondents in this study were considered academically competent as most of them achieved the minimum standard of education (Bachelor degree holders) as stipulated in the Law of Republic of Indonesia Number 14 Year 2005 and were legitimately certified, and even sufficiently experienced with more than 10 (ten) years of teaching experi-ence.

RESULTS AND DISCUSSION

The respondents in this study filled an open-ended question-naire on two major questions: how a professional EFL teacher is and what attempts they have done to be professional. Based on the results of the analyses of the survey data from the question-naire, the findings are categorized into 2 (two) domains afore-mentioned. After scrutinizing the questionnaire, it comes up with data in 2 (two) tables that is **Table 4** contains the sum-mary of the EFL teachers' responses to the first question, and **Table 5** discusses their attempts to be professional.

The results in **Table 4** indicates that based on the respon-dents' perceptions, there are 23 (twenty-three) criteria of a pro-fessional English teacher in total with a wide range of percent-age, ranging from the lowest, 0.3% for being professional in the dimension of collaborating and sharing teaching knowledge and experience with other teachers up to the highest, 16.9% for being professional in mastering the teaching materials.

According to the respondents' perceptions, a professional EFL teacher should have such following attributes as being up to date with current trends in ELT and Curriculum (15.6%), communicating in English (12.6%), having good personality, i.e., being punctual, responsible (10.3%), recognizing students' characters, and being pedagogically, professionally, person-ally and socially competent(9.9%), teaching by using suitable

strategies and methods (8.9%), being able to transfer knowl-edge and skills to students(7.3%), being creative and innovative in designing classroom activities (6.6%), applying pedagogical theories into practices, and having a good classroom manage-ment (5%), mastering technology and implementing it to sup-port during the teaching learning activities and asssessing stu-dents' competences (4.3%), planning teaching learning activ-ities and designing a good lesson plan (4%), making students master the English skills (3.9%), being able to be a facilitator in the teaching learning process (2.6%), being professionally cer-tified teachers (2%), creating fun learning atmosphere, being a model for the students and the source of information for the students, and applying student-active learning (1.6%), under-standing and applying the 8 Standards of National Education in the 2013 Curriculum, and utilizing various teaching media (1%).

Referring to the roles of teacher in the classroom as pro-posed in Harmer (2009), these 23 (twenty-three) aspects actu-ally cover holistic qualities that should be possessed by a pro-fessional EFL teacher, namely:

Teacher as a controller

As the controller in the classroom, teacher is expected to be able to control the classroom by telling students what they should and should not do and in charge to lead all teaching learn-ing activities as well as knowledge transmission process during teaching learning activities Regarding teachers' role as a con-troller, the qualities mentioned the respondents are as follows: having good classroom management, being able to make stu-dents mastering English skills, being able to transfer knowledge and skill to students, being able to master the teaching materi-als, being able to be a model for the students and the source of information for the students, and being able to create fun learning atmosphere.

Teacher as an organizer

As an organizer, teacher is expected to be able to arrange set of learning activities and the instructions on how to complete the tasks as well as time allotment to do it and the instruction to do it individually, in groups, or in pairs, including to give models and feedback towards students' works. Regarding teachers' role as an organizer, the qualities mentioned the respondents are as follows:being able to master technology and use it to support teaching learning activities, creative and innovative in design-ing classroom activities, and being able to plan teaching learn-ing activities and construct good lesson plan

Teacher as an assessor

Teacher is responsible to assess students' achievement to find out whether the learning objectives have been accomplished or not and also in charge to provide corrections and grading. Regarding teachers' role as the assessor, the quality mentioned

TABLE 4 | EFL Teachers' Perceptions on Being Professional

No.	Dimensions	f	(%)
1.	Making students master the English skills	12	3.9
2.	Being able to transfer knowledge and skills to students	22	7.3
3.	Being creative and innovative in designing classroom activities	20	6.6
4.	Teaching by using suitable strategies and methods	27	8.9
5.	Applying student-active learning	5	1.6
6.	Recognizing students' characters	30	9.9
7.	Being able to be a facilitator in the teaching learning process	8	2.6
8.	Being pedagogically, professionally, personally and socially competent	30	9.9
9.	Mastering technology and implementing it to support during the teaching learning activities	13	4.3
10.	Understanding and applying the 8 Standards of National Education in the 2013 Curriculum	3	**1**
11.	Mastering the teaching materials	51	16.9
12.	Being up to date with current trends in ELT and Curriculum	47	15.6
13.	Communicating in English	38	12.6
14.	Assessing students' competences	13	4.3
15.	Planning teaching learning activities and designinga good lesson plan	12	4
16.	Creating fun learning atmosphere	5	1.6
17.	Being a model for the students and the source of information for the students	5	1.6
18.	Collaborating and sharing teaching knowledge and experience with other teachers	1	0.3
19.	Applying pedagogical theories into practices	15	5
20.	Having good personality, i.e., being punctual, responsible	31	10.3
21.	Having a good classroom management	15	5
22.	Utilizing various teaching media	3	1
23.	Being professionally certified teachers	6	2

the respondents is as follows: being able to assess students' competences.

Teacher as a prompter

Teacher, as a prompter, is required to provide learning stimuli to enhance students' mastery on the target language (English in this case). Regarding teachers' role as a prompter, the quality mentioned the respondents is as follows: utilizing various teaching media.

Teacher as a participant

To create more student-centered learning atmosphere, teacher and students may share ideas and thoughts in classroom discussions or question answer sessions. Thus, teacher would not dominate the teaching learning activities in the classroom. Regarding to teachers' role as a participant, the quality mentioned the respondents is as follows: being able to apply student-active learning.

Teacher as a resource

As resource, teacher needs to guide students and to confirm what the students have learnt through learning sources or in discussion. Regarding teachers' role as a resource, the quality mentioned the respondents is as follows: being able to be facilitator in teaching learning activity.

Teacher as a tutor

As tutor, teacher should be able to help students completing their projects. Harmer (2009) refers teacher's role tutor as the combination of roles of teacher as prompter and resource.

Teacher as an observer

As an observer, teacher is in charge to observe classroom issues such as what their students' need, what their characters are, what their problems are, what strategies and methods to overcome the learning problems, and whether their students have some difficulties in mastering particular topic, etc. Regarding teachers' role as an observer, the quality mentioned the respondents is as follows: being able to teach by using suitable strategies and methods, being able to understand students' characters.

Teacher as a teaching aid: Language model

Teacher also has the role as language model in which teacher should expose the students to target language environment. In this case, English is the target language. Regarding teachers' role as language model, the quality mentioned the respondents is as follows: being able to communicate in English.

In addition to the professional roles of teachers in the classroom, the perceptions of EFL teachers on the qualities possessed by professional teachers based on the respondents' perceptions are also affected by Indonesian educational policy. There are 3 (three) respondents (1%) stating that "A professional teacher must be able to understand and apply the 8 standards of education in Indonesian curriculum (K-13)." The Decree of Minister of Education no.16 year 2007 mentions that professional teacher should master 4 (four) competences, namely: pedagogic competence, professional competence, social competence, and personal competence. The respondents in the present study mention that "A professional teacher should be able to master and apply teacher competences such as pedagogic competence, professional competence, assessment competence, and personal competence." As the implementation of pedagogic competence, the respondents justify that "A professional teacher should be able to apply pedagogical theories into practices."

Further, as part of the professional competence, some respondents mention that "A professional teacher must be up to date with current trends in ELT and Curriculum." Still, others justify that "A professional teacher should be professionally certified." Regarding the social competence, several respondents say that "A professional teacher should be able to collaborate and to share teaching knowledge and experience with other teachers." Moreover, a professional teacher must possess personal competence. The respondents mention that "A professional teacher must have good personality i.e. punctual, responsible, etc."

In fact, despite the complete images of a professional teacher based on EFL teachers' responses, it needs to be highlighted that the percentages of all qualities and ideas on professional teacher are less than 20%. It implies that even though the respondents are mostly senior teachers, each respondent might only focus without paying much attention to the prerequisite and the holistic instructional process. Meanwhile, as Harmer (2009) stated, the roles of teacher as stated above are dependent one another containing the respondents' attempts as parts of their continuous professional development

As displayed in Table 5, there are 10(ten) attempts made by the respondents to sustainably improve their professionalism, ranging from the least percentage (0.3%) for writing classroom experiences in research articles until the highest (37.7%) for joining workshop, seminars, or conferences. Pertinent to the respondents' points of views on being professional, they have put some efforts into work as joining Teachers Forum (MGMP) (16.2%), reading current updates of ELT theories (13.2%), sharing experiences and discussing classroom issues with other teachers(11.3%), improving abilities to use technol-ogy and interactive media (7.6%), watching English movies/listening to English radio/other sources i.e. internet to improve English proficiency (4.9%), teaching reflection (3%), continuing studies to a higher level of education (1%), and having an English program to improve teachers' and students' speaking skills(0.7%).

To sum up, based on the results of the analysis in Table 5, joining workshops, seminars, and conferences is assumed to be the most popular way to improve the respondents' professionalism (37.7%). What comes next are joining Teachers Forum (MGMP) reaching the percentage of 16.2%, reading current updates of ELT theories (13.2%), sharing experiences and discussing classroom issues with other teachers (11.3%), and improving abilities to use technology and interactive media (7.6%). In reverse, such efforts as watching English movies/ listening to English radio/other sources i.e. internet to improve English proficiency (4.9%), doing reflection (3%), continuing studies to a higher level of education (1%), having an English program to improve teachers' and students' speaking skills (0.7%), and writing classroom experiences in research articles (0.3%) are not up to the respondents' view points for professional learning or development.

Our observations as presented in the previous sections indicate that EFL teachers are as a matter of fact aware of learning or developing themselves to be more professional, especially due to the life dynamic in the global era, the enhancement of digital era, and the most importantly for the sake of the students' academic and non- academic achievements for the future life. Snoek (2009) opines that teachers are considered the most important in-school impact factor on the quality of students'achievement. They have great opportunities to elevate knowledge and skills on conducting research, writing articles in journals, and sharing ideas based on their research. This is theoretically reinforced by Barber and Mourshed (2007) providing evidence that the primary driver variation in student learning at school is the teachers' credentials.

Another study carried out by Rahman et al. (2011) verifying that there existed a relationship between teachers' joining training and their students' learning achievement. The study was addressed to a number of 80 female teachers and their corresponding 180 girl students of Grade X. The teachers' data were collected from questionnaires, whereas, the students' performance was gained from examination scores. It was then found out that teachers' training was positively correlated with students' learning achievement. Another similar study conducted by Rozati (2017) examined the relationships between EFL teachers' professional identity as well as EFL teachers' institutional identity and their teaching efficacy with professional identity. It was concluded that EFL teachers' teaching efficacy was verified as the best predictor.In other words, quality EFL teachers are pedagogically required which can be boosted through many pedagogical ways, particularly for those who feel that they still belong to the novice. As evidence, a study by Nurichsania and Rachmajanti (2017) revealed that the low achiever teachers(categorized as early

TABLE 5 | EFL Teachers' Attempts for Having Continuous Professional Development (CPD)

No.	Attempts for CPD	f	(%)
1.	Reading current updates of ELT theories	40	13.2
2.	Joining workshop, seminars, or conferences	114	37.7
3	Joining Teachers Forum (MGMP)	49	16.2
4.	Sharing experiences and discussing classroom issueswith other teachers	34	11.3
5.	Watching English movies/ listening to English radio/other sources i.e. internet to improve English proficiency	15	4.9
6.	Having an English program to improve teachers' and students' speaking skills	2	0.7
7.	Improving abilities to use technology and interactive media	23	7.6
8.	Teaching reflection	9	3
9.	Writing classroom experiences in research articles	1	0.3
10	Continuing studies to a higher level of education	3	1

career teachers)engaging in the SM-3T program, one of the Indonesian government programs for teachers' professional learning by experiencing teaching practices in underprivileged areas, accomplished improvement in their pedagogical competences. Effective teaching is in some extent influenced by putting the pedagogical competences into classroom practices. Moreover, classroom practice provides a condition for creative professional learning, and in reverse. Through active participation in professional discussions with students and colleagues may stimulate the teachers' thinking skills about the work and professional identities Syahruddin et al. (2013); Doecke et al. (2014).

Surprisingly, with the emergence of the latest paradigms of teaching incorporating the notion of student active learning, the many roles of a teacher, and the application of the 21st attributes in the instructional process, some of the respondents have had low perceptions on these millennial phenomena (shown by quite low percentages). It might be influenced by one's personal disposition in being pedagogically professional. A case study by Utami and Prestridge (2018) examined 4 (four) Indonesian EFL teachers discovering that professional enthusiasm plays a vital role in whether or not teachers will improve themselves professionally. According to them, self-driven professional learning is more beneficial on the part of the teachers than policy-driven one.

Based on the data in Tables 4 and 5, it is identified that what the teachers perceived as being professional does not go congruent with what they attempt to accomplish, that is, firstly, it seems that the EFL teachers regard reflective teaching by means of conducting action research is not worth doing as it would be a burden for them. This is empirically evidenced by a study disclosing that writing a research-based article for publicizing their professional experience in a journal, and presenting their professional experience in a seminar posed them with some hurdles. Most of the subjects felt that they did not have sufficient confidence in performing these two academic endeavors (Rachmajanti et al., 2018). Secondly, most

EFL teachers (37.7%) rely on workshops, seminars, and conferences to enhance their professionalism, in which, according to Bissonnette and Caprino (2015); Caprino (2015) are not always effective to develop teachers' professionalism due to limited teacher-centered activities where teachers are able to apply the theory. Even if each participant in the workshops has plenty of time to practice, the lack of follow-up stages after the workshop is the main reason on why teachers rarely apply what they have learnt in actual classroom.

Other popular attempts to improve EFL teachers' professionalism are joining teachers regional forum/MGMP (16.2%) and discussing pedagogical issues with other teachers (11.7%). Both of them could be effective ways on solving locally contextualized classroom issues (Kent, 2009). However, it requires teachers' self-awareness and self-motivation to learn to make them fully advantaged for EFL teachers. A study on the involvement degree of EFL teachers' CPD demonstrates that teachers having high participation in CPD do not necessarily have high professional enthusiasm, in which factors such as motivation and government regulation also affect the teachers' professional behavior (Utami et al., 2017).

Surprisingly, although the percentage of discussing and sharing classroom issues with other teachers is considerably high, collaborative teaching as the application of 21st education attributes is not mentioned as one of the possible solutions to improve teachers' professionalism and to enhance students' learning at the same time. Lesson study allowing teachers to set the learning objectives, to develop teaching aids, to design the teaching learning activities collaboratively, and to foster students-active learning and critical thinking skill is one the ways to improve teaching quality as well as teachers' professionalism by applying the 21st education attributes (Cerbin, 2011). Lesson study has been empirically supported to bring such positive effect for both teachers and students Cheung et al. (2014); Godfrey et al. (2019). Unfortunately, it seems to be not popular among the EFL teachers.

Moreover, watching English movies and other sources i.e.

internet, YouTube has unexpectedly gained high popularity among EFL teachers to improve their English proficiency. It might be beneficial for teachers; however, it might not be effective to learn English for teaching contexts. Teachers need to specifically learn how to deliver instructions and how to ask critical questions. In fact, lesson study is empirically evidenced to be more effective to improve teachers' ability to deliver instructions and critical questions Lewis and Hurd (2011).

CONCLUSION

Viewed from two diverse angles- the teachers' perceptions of being professional and their attempts to be a professional, it can be concluded that in one hand, they are sub conciously aware that professionalism is undeniable for the sake of students' betterment in learning English; however, on the other hand, the attempts to do so are not congruent with their perceptions. Again, it all depends on much one's own internal drive, the so-called "enthusiasm" – no matter from which kind of school (state or private) a teacher is dedicating her/his life for.

To know howa professional English teacher is and the attempts the teachers have done to be professional can be explored more through deep investigation across different area of teaching English such as the teachers who teach in remote area and not. Another interesting chance is that future studies are recommended to carry out the related study qualitatively through in-depth interview and observation. Additionally, there is a call for the next investigation on the issue about factors and attitude of teachers in joining workshops, seminars, and conferences including getting involved in online professional learning communities to facilitate teacher research competence.

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Using reading while listening to develop students' receptive skills: a review literature

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The benefits of reading while listening for English as a Foreign Language (EFL) learners have been investigated in EFL learning contexts, particularly in teaching reading and listening. Some studies found that simultaneous reading while listening promotes positive impacts on students' reading and listening skills. It also helps L2 learners' fluency and comprehension of reading and listening. Moreover, it can assist L2 learners in acquiring new language input in a new learning environment. Hence, this article reviews some research papers related to the implementation of reading while listening (RWL) program in EFL learning context. Furthermore, to answer the research questions: 1) What is reading while listening?; 2) What are the effects of using reading while listening for EFL learners? How to apply the reading while listening program within the EFL classroom? To answer these questions, this article examines the use of RWL for EFL learners based on the research methodology, subject, instrument used, result and suggestion, including the principles of implementing simultaneous reading and listening within the EFL classroom.

Keywords: reading while listening, reading skill, listening skill, receptive skills, English skill

INTRODUCTION

As English as a Foreign Language (EFL) learners, sometimes, we find it is difficult to acquire a second or foreign language. There some conditions or situations that cause learners to acquire input-poor language, for example, EFL teaching situations (Gobel and Kano, 2014). It might be caused by the L2 learners' native language more dominant when they attempt to communicate in L2 situation (Chang, 2009). Whereas, "input" is believed as the key to learning a language (Renandya and Jacobs, 2016). Many studies proved that language input has a significant role in students' language exposure. For instance, if the EFL learners are frequently exposed to the language input, they will recognize words more that causes the expansion of their vocabularies, and all language proficiency also will increase.

To be more exposed to the language input, EFL learners need to be involved in a good learning environment that provides more language input. Day and Bamford (1998) propose an excellent way to acquire more language input through reading, or widely known as extensive reading (ER). Extensive reading promotes joyful reading that the readers or L2 learners can freely choose what they want to read without emphasized detailed comprehension of the text. Some researchers suggest that ER is beneficial for gaining language in the area of vocabulary and improving general reading skill (Nuttal, 1982), increase learners' reading speed, and promotes reading fluency and (Day and Bamford, 2002; Samuels, 2006; Blevins, 2005), foster learners' linguistic and grammar competence (Rodrigo et al., 2004; Yang, 2001), writing, (Hafiz and Tudor, 1989; Mason and Krashen, 1997; Robb and Susser, 1989; Smith, 2007) and overall

language proficiency.

With the advent of technology and the demand for era 4.0, it is not difficult to obtain learning material through the internet. Everybody can access and find the appropriate learning material or resources to his/her level anywhere and anytime. Moreover, by using the internet and technology, EFL teachers can provide a new learning environment for the language learners and allows the improvement of learning outcomes. In addition, schools and classrooms need to become intensive resources when digital resources can be readily delivered and accessed specific goals of teachers and students (Hill and Hannafin, 2001).

Reading while listening (RWL) is one of the language learning programs that has been implemented by L2 researchers in the area of reading or listening or even both. This program is used to help L2 learners in acquiring the second language and improving learners' receptive skills, both listening and reading skills. L2 learners often find it difficult to understand what they heard or read, particularly when they do listening or reading tasks. In the listening task, speech speed rate is the most problem faced by lower learners to comprehend the content being delivered by the speaker. Meanwhile, during reading a second-language text, L2 learners find it is difficult to comprehend the whole meaning of the text when they meet unknown words. Furthermore, less reading fluency also limits reading comprehension, particularly to struggling readers. However, if the learners are able to identify and recognize the words automatically and fluently, they do not need to fully concentrate on basic word identification and just comprehend the whole meaning of the text. Brown et al. (2008) adopting a more beneficial technique, L2 learners may realize a higher comprehension level is possibly obtained through the RWL program, particularly when they involved to a larger chunk of text. Therefore, this program is proposed to assist L2 learners with better comprehension and foster their reading and listening.

METHOD

This paper seeks to understand and synthesize some research papers related to the use of the RWL program in the EFL learning context. There are 10 research papers reviewed in this paper which are taken from the reputable publishers from 2009-2019. This review paper focuses on the implementation of the RWL program on second language learners, particularly to improve L2 receptive skills either both reading and listening skills. Furthermore, this paper examines the research methodology and instrument used in the studies, the intended participants, and the result of studies to answer these questions: 1)What is reading while listening?; 2) What are the effects of using reading while listening for EFL learners? How to apply the reading while listening program within the EFL classroom?

DISCUSSION

What is Reading While Listening?

As a form of extensive reading, recently reading while listening has been noticed by the language teachers and researchers in the language learning context, particularly in the EFL context (Brown et al., 2008). Despite the less research in this area, some researchers found positive effects of RWL implementation for L2 learners in the area of listening comprehension and development (Chang, 2008; Vandergift, 2007), and vocabulary acquisition (Brown et al., 2008). Furthermore, RWL also can foster EFL beginners' reading and listening fluency (Milliner, 2019), reading speed rate (Chang and Millet, 2015).

According to McMahon (1983) as cited in Askildson (2011), reading while listening is a practice of developing listening fluency by involving reading. It provides audio recordings within the reading texts. Audiobooks propose an excellent bridge for struggling readers in term of reading decoding and comprehension. In addition, with the inclusion of audio recordings within the reading text, it can foster L2 learners' listening competence and leads to gain higher listening scores Chang and Millet (2015). Practically, reading while listening simultaneously is not a new strategy in the reading or listening area. It has been used in the reading program of L1 and specifically beneficial for learners who have reading disabilities (Gobel and Kano, 2014). Learners who are reluctant to read, especially those who have a low rate fluency, positively will get benefits from hearing to the audio recording along with reading the script. When learners hear the right pronunciation of the words or phrases, they able to identify words more accurately and adopt the appropriate speed and intonation to read the text (Friedland et al., 2017). In addition, Senechal & Cornell (1993) as cited in Gobel and Kano (2014), argue when reading stories is performed in a shared or pleasure reading environment, it yields greater gains of reading and listening skills.

The Use of Reading While Listening for EFL Learners

Although less of empirical studies in the area of reading while listening, language researchers and practitioners believe it can support and helps L2 learners to acquire target language and improve their receptive skills. Practicing simultaneous reading while listening in the EFL class also can help the L2 learners to gain better comprehension both reading and listening. Low proficiency L2 learners tend to break sentences into words that caused low comprehension to them. With the implementation of RWL, it helps to maintain the integrity of sentences by encouraging the students to process larger semantic units that lead to better comprehension (Brown et al., 2008). From a sociocultural perspective, an audio recording provided along the reading text seems like a knowledgeable assistant and more experienced to help the readers decode and achieve a higher level of reading fluency than they do independently

(without assistance) (Woodall, 2010). Furthermore, the existence of written texts along audio recording helps the learners' comprehension by giving them more access to identify letter-sound relationships Askildson (2011). The Aural-written verification stage helps students' form-meaning relationship development (Osada, 2001), develops lower learners' auditory discrimination skills, and develop word recognition skill (Vandergift, 2007; Osada, 2001). In addition, Chang (2009) adds that L2 learners are introduced to the speech rate, rhythm, and natural flow of language through RWL.

Some researchers prove the positive effects of RWL in the EFL classroom. A study conducted by Brown et al. (2008) explored thirty-five L2 learners' vocabulary acquisition by using three modes of input; reading only (RO), reading while listening (RWL), and listening only (LO). These participants were Japanese college students ranged from 18 to 21 years old who learned English for 7.5 years on average. The participants were divided into three experimental groups and they were asked to read and listen at the same time to three graded-reader stories which were approximately 5,000 words for each. At the end of the research, the researchers found the students learned new words incidentally through all modes of input, but the most learned words were in the RWL mode. It was shown in both tests of multiple choice and meaning translation. In addition to students' preferable three modes of input, they preferred RWL mode to others because of the necessity of knowing segment or chunk text of the story when they read and it was done by the narrator on the cassette or audiotape.

Another study was conducted by Chang (2008) which focused on students' listening comprehension. It found that RWL benefits to students' listening comprehension as well as other language competences. Students that received RWL treatment showed a considerable comprehension of spoken narrative English and general vocabulary. A year later, Chang (2009) also conducted an investigation the concept of aural-written verification proposed by RWL can help the L2 learners in developing their low listening skills, improving word recognition, and gaining form-meaning relationship awareness. Similar to a study of Brown et al. (2008), it was done by comparing modes of input: reading while listening and listening only. In this study, Chang took 84 college students to take two tests: 1) 95 items of sequencing and gap filling and 2) a post-perception questionnaire. Overall, the result showed a more considerable gain in the RWL mode. Although it only increased as much as 10%, the majority of students preferred this mode of input in doing listening tasks because it made the tasks easier, duration seem shorter, and the stories more interesting, so that they paid more attention during RWL.

Six years later, in the reading area, Chang and Millet (2015) compared reading fluency gain from two reading programs: RWL and silent reading. The study showed greater improvement in the reading speed of learners in the RWL group. The improvement of reading speed was caused by the audio recording input that acts as a reading speed racer and helps learners to stay on the tasks. In terms of reading comprehension, RWL has a stronger impact on increasing reading comprehension than other reading rates enhancement activities such as timed reading, repeated reading, or silent extensive reading.

The effect of RWL on EFL learners' general proficiency was examined by Gobel (2011). The author measured students' general proficiency by using the TOEFL score. The result revealed that RWL is a significant predictor of gaining a high TOEFL score. In addition, he found that the more students practice RWL, the higher score of TOEFL gains was. However, when Gobel and Kano (2014) investigated the use and evaluation of the MoodleReader module (a program of RWL created by Kyoto Sangyo University) on first-year Japanese university students gain score. This study was conducted for a year-long program by giving the students listening practice to a large volume of spoken English. In evaluating the RWL program, Gobel and Kano used the TOEFL test to measure students' reading rate, vocabulary recognition, and general proficiency, and administered 24 items of the questionnaire to investigate the students' attitudes toward the program. The result of the research showed that the RWL program had a positive effect but there was no significant increase in general proficiency when measured by the TOEFL test. In other words, it does not support the finding of their previous study. In addition, the students' attitude toward the module was less than positive. They preferred doing the RWL program within the classroom than outside the class. It might due to they did not have much free time or lack of explanation on how to do RWL outside the classroom. This result supports the previous study in which the majority of students preferred completing the reading tasks and quizzes in the form of paper-based (as opposed to online) and is administered in the classroom.

A pilot study was conducted by Friedland et al. (2017) on a randomized controlled experiment of forty-six students of third grade in rural Uganda. The authors aimed to investigate the effects of SiMBi, a comprehensive audiobook program developed by The Walking School Bus Literacy, that may potentially improve students' reading comprehension and fluency. There were four steps to implementing this SiMBi software. First, the students' instructional levels were tested by using Florida's Assessment for Instruction in Reading; Ongoing Progress Monitoring Oral Reading Fluency (OPM). Second, assessing students' instructional reading fluency level. Next, the students were divided randomly into 2 groups that received the same treatment; listen and read simultaneously to one audiobook for each school. They had to read for ten minutes per day and after completed their reading, they used the remaining time to learn sight words and sentences. In the last step, both groups' reading fluency was tested by the teacher after 30 days program implementation. Students' fluency was tested for 3 consecutive minutes taking the average WPCM for 3 minutes. The result revealed that SiMBi or RWL software is a promising tool that potentially improves L2 learners' reading comprehension. In addition, students' who received the RWL treatment showed a great improvement in word count per minute (WCPM) which means their reading fluency also

increased.

The positive effect of RWL on L2 beginning learners also had been investigated by Milliner (2019). This study was administered to three groups of beginners (CEFR level A1) from different departments. It was examined L2 learners' reading and listening skills by comparing three groups of low proficiency learners who received 1) simultaneous reading while listening (RWL); 2) extensive reading (ER); and 3) traditional reading treatment. In addition, the author used digital books and audiobooks within the Xreading system (xreading.com) for RWL and extensive reading groups. Xreading is an online library of graded readers and learning management system (LMS) specifically provided for extensive reading that allows the learners to read at their own pace and adjust the speech rate to their reading or listening competencies.

The treatment was held for 15 weeks and the researcher taught all classes for two meetings (100 minutes) in a week. The reading materials and grading procedures used were the same, except for the extensive component. The textbooks used were Successful Key for the TOEIC Test Intro. During 15 weeks, half of each textbook was completed to read by the students. In the first 10 minutes of the class, was dedicated to silent reading, book discussions, and follow-up ER or RWL training in the ER and RWL groups. The students read outside the classroom to reach the monthly reading targets. Meanwhile, the control group (traditional class), ten minutes at the beginning of class were dedicated to five-minute quick writing and connected speaking fluency activity. They were also asked to rewrite their quick writing compositions and a class reflection for homework.

The results revealed that students in the RWL group gained higher TOEIC scores on both the listening and reading sections. However, when it comes to LVLT (Listening Vocabulary Level Test) results, the control group showed a great improvement in vocabulary acquisition while RWL and ER groups could not acquire new vocabulary. Investigation that the RWL group failed to achieve a significant improvement at any level of vocabulary. In addition, Brown et al. (2008) also found low vocabulary acquisition in each of the treatment groups.

Reading while Listening in EFL Classroom

Based on some studies of different language input modes implementation in the EFL classroom, different modes of input will give different effects on L2 learners (Chang, 2009). Moreover, Chang argues that different modes of input may also affect students' performances with different levels of proficiency in different tasks. The mode of input that gives the most impact to L2 learners is reading while the listening mode leads the students to gain greater comprehension and development in the area of reading and listening. Despite some of the studies show adequate satisfactory and medium-size effects on the learners, the majority of students show a high preference for this mode of input to others (reading only or listening only).

Reading while listening acted as language learning support

that can help the learners to acquire language. In the listening area, it supports low-level listeners through written text by matching the aural-written forms. Listening according to the text made the learners feel secure and increase their confidence in comprehension (Chang, 2009). In addition, it also helps to develop learners' oral vocabulary and facilitates them in recalling the meaning of spoken form while listening that solves the problem concerning fast speech rates (Chang and Read, 2006; Goh, 1999). Despite allowing learners to listen to the audio along with reading the text does not enhance gain greatly, RWL has positive influences on L2 listeners, particularly on psychology impact. Thus, if the teacher wants to apply this program into the EFL classroom to develop L2 learners' listening competence, he/she needs to conduct the steps cautiously because the learners may depend more on the text and disregard the aural input (Chang, 2009). When the learners are provided with the script before listening to the audio, they may simply translate what they heard and develop an inefficient approach to listening (Osada, 2001). Therefore, when adopting reading while listening (RWL) into the EFL classroom, particularly in developing students' listening skill, the teacher needs to consider to enhance students' listening skills first then their reading skills. It is because RWL requires two language skills, and if the students are not equipped with both reading and listening skills, they may not obtain the expected outcome.

As a program of extensive reading and extensive listening, the teacher is demanded to plan the program carefully and be a commitment to managing time when implementing reading while listening within the EFL classroom Mason and Krashen (1997). Due to the effects of extensive reading/extensive listening is not instant; it should be done for a period of time which turns giving a stronger effect of the program. Moreover, with more durable of implementing simultaneous reading and listening, it helps the students with better reading comprehension as well as the enhancement of other language competences. However, since the effects of RWL emerge only after the learners spend a long time reading and listening, the students' lack of motivation often cause the failure of the program and gain the expected benefits of simultaneous reading and listening. Hence, there some principles can be used to guide the teacher to succeed in implementing the RWL program within the EFL classroom (Renandya and Jacobs, 2016).

A clear objective of implementing the reading while learning program.

The teacher should determine the objective to succeed in the implementation of simultaneous reading and listening program. A clear objective should describe the expected learning outcomes, resources needed, the timeframe needed, the way the program to be carried out, and the instruments to measure the degree of success of the program.

A large amount of reading and listening

Reading or listening to a large number of audiobooks contribute to L2 learners' language development. However, how much reading and listening text is needed to develop fluency and to acquire the language? General consensus agrees that the more reading and listening, the more advantages the readers and listeners will get. To more specific, Nation and Wang (1999) as cited in Renandya and Jacobs (2016), suggest L2 learners read at least one book a week.

Appropriate reading and listening materials that suit learners' linguistic competence

Reading and listening materials for the RWL program should match the students' level where the listening materials should be at or below their current competence level (Renandya and Jacobs, 2016). It is due to the students' vocabulary they obtain from listening is lower than their vocabulary that is obtained from reading. Hence, to more appropriate with the listening text, the teacher needs to provide an easy text which contains familiar words and grammatical constructions with the normal or low-speed rate.

The teacher should support all of the students, particularly those who need the most assistance with their reading or listening

The teacher plays an important role to succeed in the program by helping struggling readers or listeners who cannot follow other students' pace, particularly those who have a faster pace. For example, the teacher encourages their learning process, helps in choosing the appropriate material that suits their level, or teaches useful strategies for learning new words.

The teacher should be able to maintain students' motivation throughout the program

It is a challenge for EFL teachers to keep students' high motivation doing the simultaneous reading and listening program. In the beginning, they might positively respond to the program, but they may soon lose their interest when there is no innovation of the program or school activities/assignments that keep them busy.

The teacher should encourage students to do reading and listening simultaneously

As mentioned above, reading while listening benefits for L2 learners' language acquisition and foster their comprehension and fluency of reading and listening. However, the teacher should stop the students from over-reliance simultaneous reading and listening when they already developed their language proficiencies at a high level. The teacher can encourage them to do reading or listening separately.

Attractive reading and listening post-activities

The teacher should offer interesting and enjoyable post activities because they can boost students' motivation. Day and Bamford (2004) propose several post-activities can be used in the classroom, for instances, sharing opinions or feelings about the stories they have read or listened, asking students to create the alternative ending of the story, retelling story, or designing a poster that describes the gist of the story.

CONCLUSION

As a program of extensive reading, reading while listening (RWL) can be used in the EFL classroom as learning support, particularly in reading or listening class. It can assist the students to acquire new language input and foster their receptive skills. Despite less empirical researches in this area of learning strategy, it proposes positive effects and promotes a new learning environment for language learners. Moreover, with the audio recording provided along with the reading text, it helps the students to recognize the letter-sound relationship.

With the advent of technology, both teachers and students can access this reading program through the internet, for instance, Xreading (xreader.com) or Mreader (mreader.com) anywhere and anytime. However, language teachers who want to implement this kind of reading program into the classroom need to conduct the steps cautiously to prevent the students from relying on the text and ignore the aural input. In addition, the teacher should be aware of students' receptive skills because RWL emphasizes those two language skills so that the reading program can gain the expected outcomes effectively.

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Automatic speech recognition in computer-assisted language learning for individual learning in speaking

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This study is intended to help English as a Foreign Language (EFL) learners in Indonesia to reduce their anxiety level while speaking in front of other people. This study helps to develop an atmosphere that encourages students to practice speaking independently. The interesting atmosphere can be obtained by using Automatic Speech Recognition (ASR) where every student can practice speaking individually without feeling anxious or pressurized, because he/she can practice independently in front of a computer or a gadget. This study used research and development design as it tried to develop a product which can create an atmosphere that encourages students to practice their speaking. The instrument used is a questionnaire which is used to analyze the students' need of learning English. This study developed a product which utilized ASR technology using C# programming language. This study revealed that the product developed using ASR can make students practice speaking individually without feeling anxious and pressurized.

Keywords: Automatic Speech Recognition, Computer-Asssisted Language Learning, Speaking

INTRODUCTION

The rapid development in technology during the past decades opens the probability to improve many aspects of human life, including on the education field. It also has improved the demand for foreign language education. Muslichatun (2013) says that foreign language students consider speaking ability as their main goals of study, either because they would get some personal satisfactions from being able to speak a foreign language or because they think it would be useful in pursuing other interests or career goals. Moreover, people are considered mastering a language if they can speak the target language well. However, mastering the speaking itself is rather difficult to accomplish. There are many problems that language learners' face while they are mastering speaking. One of the factors that make speaking difficult are stated by Muslichatun (2013) as follows: "Some of the students do not want to practice speaking outside the class because they are not confident due to their incapability of speaking English".

On the contrary, Brown and Douglas (2007) claims that lacks willingness to communicate (self-efficacy and risk-taking) can make speaking more difficult to master than it already is. Therefore, to overcome this problem language student needs an atmosphere that encourages them to try out language Brown and Douglas (2007).

The recent advances of computer hardware and software have provided Computer-Assisted Language Learning (CALL) with limitless resources for foreign language learning. The most up-to-date language teaching and learning using CALL system is state-of-the-art Automatic Speech Recognition (henceforth, ASR) technology which mostly emphasizes on pronunciation. Instead

of practicing speaking in front of instructor or other people, students can practice speaking in front of computer. This situation can reduce students' anxiety in speaking and encourages students to try language and to give a response. In other words, by ASR language students can overcome one of the difficulties in learning to teach, which lacks willingness to communicate.

Computer-Assisted Language Learning (CALL) is described as the search for and study of applications of computer and information technology (ICT) in language teaching and learning. The main purpose of CALL is to find ways for using computers for teaching and learning language. Specifically, CALL is the use of computer that involve educational learning, including word processing, presentation, guided drill and practice, tutor, simulation, and problem solving using various computer-based technologies like games, multimedia, and internet applications such as e-mail, chat and the World Wide Web (WWW) for language learning purposes.

Automatic Speech Recognition (ASR) is a technology which allows students to experiment with the language in a safe, private setting. Levis and Suvorov (2012) describes ASR as "an independent, machine-based process of decoding and transcribing oral speech. A typical ASR system receives acoustic input from the speaker through a microphone, analyzes it using some pattern, model or algorithm, and produces an output, usually in the form of a text". Therefore, ASR is a technology that shows great potential for individual pronunciation work. Stone (2013), Tell Me More Auralog (2013), and English (2014) are examples of a language learning software that based on ASR Mccrocklin (2016).

Individual leaning is a learning where students become self-motivated and self-directed. They are able to set goals, take actions, make decisions, and make use of available resource, both human and non-human, towards their own learning based on their interests, needs and capabilities. Learning independently is not necessarily means learning alone where the student must do everything by themselves, but it is reducing student's exposure of continuous direction and supervision from teachers, parents or others whose acts as guides, motivators, and resources and make them able to identify their own needs and capabilities and know when they needed help (Delong, 2009; White, 2008).

Speaking is one of the important productive skills in learning English. It is unquestionable that speaking is used in most of daily activities such as socializing and working. Writing is also used a lot, but when we compare the frequent uses and the efficiency of the two skills, speaking is more dominant than writing. Moreover, people often show their idea or opinion through speaking instead of writing. The term of speaking itself has several meanings. Speaking is an interactive process of constructing meaning by producing, receiving and processing information.

Some students experience some level of speech anxiety when they have to speak in front of a class. In fact, speaking in public might be most people's greatest fear. Speech anxiety can come in different level; from a slight feeling of worries to a nearly devastating fear. Some of the most common symptoms of speech anxiety are shaking, sweating, dry mouth, rapid heartbeat, and squeaky voice.

Woodrow (2006) assessed the major "stressor" that caused student to have speaking anxiety, those were performing in English in front of classmates, giving an oral presentation, speaking in English to native speakers, speaking in English in classroom activities, speaking in English to strangers, not being able to understand when spoken to, talking about an unfamiliar topic, talking to someone of higher status, and speaking in test situations.

Some previous studies are "*Speech Recognition Bahasa Indonesia untuk Android*" conducted by Wijaya et al. (2013). The result of the study states that the applications are efficient and usable. It made the users feel comfortable to learn Bahasa Indonesia. In addition, the application is very beneficial and useful for the users. The next study is "*Implementasi Speech Recognition pada Aplikasi Pembelajaran dalam Bentuk Permainan Menebak Kata baku Bahasa Indonesia*" conducted by Bahri (2019). The result shows that the application is effective to increase Indonesian vocabularies.

In this study, the writer aimed to compile an application using ASR technology which allows students to practice speaking individually and to find the benefits and limitations of ASR for individual learning in speaking.

METHODS

This study used instructional design (ID) models contain the core element of ADDIE. ADDIE is an acronym for analyze, design, develop, implement, and evaluate and it is based on a systematic product development concept Branch (2009). The researcher used ADDIE model because ADDIE remains one of today's most effective and systematic ID, step by step framework used by interaction designers and training developers is needed to make sure that CALL development occurs in a controlled and structured phase.
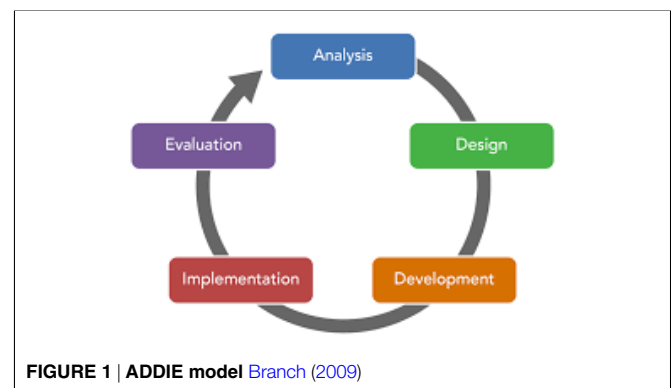

FIGURE 1 | **ADDIE model** Branch (2009)

There were five steps in ADDIE model. The steps were; (1) analyze. It involves identifying and clarifying the problem, the gap, or desired outcomes. Several key components are to be utilized to make sure analysis is thorough; however, in

this study; the researcher collected the course document, syllabic, and questionnaire as primary data collection in December 2019. (2) design. The design stage defines specific learning objectives, subject matter analysis, exercise, lesson planning, assessment instruments used and media selection to fulfill instructional goals. The researcher also determines tools to be used to gauge performance, tests, subject matter analysis, planning, and resources. Here, pinpointing the main idea of the ASR application is determined. (3) develop. The development phase may involve creating and testing the content. Using the data and information collected from previous stages, it allows the researcher to use this ample source to create ASR application. (4) implement. The implementation stage reflects the development of required materials, associated applications or websites, and preparing participants to use any required tools or technology. Here, the researcher tested the ASR application to find out whether the application is working according to the initial objective or not. The researcher tested the product two times using two different ways. (5) evaluate. Evaluation is an essential stage of the ADDIE model as it aims to answer whether the problems are solved or the goals are met. Every stage of ADDIE model deal with continual or formative feedback. The researcher analyzed the implementation process and the participants' questionnaire to come up with the necessary evaluation that has to be made for the product to work better.

RESULTS AND DISCUSSION

The result of this study is divided into Product Analysis, Product Design. Product Development, Product Implementation, and Product Evaluation.

Product Analysis

The initial step of design-based research is need analysis which analyzed the EFL learners' need in speaking. As previously mentioned in the Methods, questionnaires which elaborate the learners' problems in speaking, aspects of difficulties in speaking, the reasons of having the problems and what tools they need in speaking are distributed to the EFL learners. The result of the questionnaires show that they need a particular tool to measure the feedback in speaking. By knowing the need, the instrument for measuring the speaking skills in the form of Automatic Speech Recognition is designed.

Product Design

The design of Automatic Speech Recognition (ASR) product is in the form of application to recognize speech. ASR is a machine to detect voice which is identified by fluctuating symbols of voice. The voice recorded by the machine memory will be selected then identified as correct or not in the computer. The correct voice will be indicated by signals which appeared in

the computer. From this machine design, the correct or incorrect voice on the basis of English pronunciation will be easily detected.

Product Development

In accordance with the objective and research method of this study a product in the form of an application was designed, developed and implemented to equip the students with good English-speaking practice. This application was developed using certain hardware and software. In developing this application, the researcher used hardware with the specifications: 1) Intel® Pentium® CPU B980 @ 2.40GHz 2.40 GHz Processor; 2) 4.00 GB (2.60 GB usable) RAM; and 3) Built-in Microphone. While the software used for developing this application were: 1) Windows 7 Professional with 32-bit Operating System; and 2) Microsoft Visual Studio 2012 Ultimate.

Product Implementation

Before the product was implemented to the participants, the writer tested the product to find out whether the application is working according to the initial objective or not. The product was tested two times using two different ways. The first test was conducted in a proper way, which means properly followed the instruction given by the application. While in the second test, it was not conducted in a proper way in which the application was not said anything at all and taken the practice over the time expected.

The result of the first test showed that the application worked properly based on its objective. The application gave 7 (seven) as a score based on speaker speech. The feedback were "All vowels and consonants are produced in a manner that is easily understood …" and "Speech maybe uneven …". While in the second test the application gave 0 (zero) as a score based on speaker speech. It also gave feedback such as "Pronunciation seems completely characteristic of another language …" and "Speech is slow …" which is understandable considering the speaker stayed silent for the whole practice process.

After the product was tested and confirmed to work properly, the product then was implemented to the participants. The product could give different scores and feedback to the participants according to the speaker's speech input. However, there was a case where the product cannot properly recognized speech input. Thus, it gave inaccurate score and feedback to the speaker's speech.

Participant 4 received 0 (zero) score on accuracy while participant 5 got 0 (zero) both on accuracy and fluency. This problem occurred because the product was used in crowded place. As a consequence, instead of receiving relevant speech input from the speaker it also received other noises from the crowd which made the automatic speech recognition cannot accurately give score and feedback to the speaker's speech.

Participant 1, 2, and 3 received their score and feedback without any problem at all. In this case, the participants used

the product in quiet room with only their speech to be recognized by the product. To summarize, the product only works well while it is used in calm and quiet places without any disturbing noises otherwise it will not recognize the speaker speech because there are many noises to be recognized.

Product Evaluation

The implementation process and the participants' questionnaires were analyzed to evaluate the product implementation. The result of the questionnaire analysis revealed the quality of the visual graphic. It was said that the visual graphic was good yet it is too simple. However, the score and feedback given by the product were helpful for the students' speaking. Four out of the five participants think it reflects their speaking ability accurately. Therefore, there is no evaluation needed regarding the product visual graphic, the scoring rubric and the feedback.

In spite of all the good feedback given by the participants, a problem occurred when implementing the product in crowded place. The microphone did not work properly because there were lots of other people noises in the crowd. The built-in microphone used by the researcher as an input device not only took the speaker speech as an input but also those noises. As a result, the automatic speech recognition engine was unable to recognize the speech given by the speaker. Thus, the product kept giving 0 (zero) as a score.

Considering above problem can really affect how the product work, the researcher decided to change the built-in microphone configuration. At first, the microphone was configured to 100% volume and 0.0 dB boost. After the evaluation, the microphone volume was set to 100% and the microphone boost was enhanced to +36.0 dB boost. In addition, the researcher also used noise suppression sound effect to reduce the background noise with the purpose of improving the microphone performance.

DISCUSSION

The purpose of this study is to describe ASR application which allows EFL learners to practice speaking individually and to find the benefits and limitations of ASR for individual learning in speaking. The analysis of needs explores the learners' problems in speaking, aspects of difficulties in speaking, the reasons of having the problems and what tools they need in speaking are distributed to the EFL learners.

The learners' problems in speaking include feeling afraid of making mistakes, being ashamed of starting to talk and not wanting to start a communication. These problems commonly happened to beginners as what Goodrich and Namkung (2019) claimed that the teachers' challenge in teaching speaking is the learners' low motivation in speaking.

The aspects of difficulties are failure to employ speaking skills in real life communication, linguistic and psychological barriers and insufficient exposure in target language. These

aspects of difficulties are similar to the case of learning speaking difficulties in Libya Diaab (2016). These aspects of difficulties can be overcome by individual learning with tools.

One of the tools EFL learners' need in speaking is developing ASR. The result of questionnaires indicated that EFL learners are happy learning speaking using ASR, and they do not have high anxiety anymore in speaking. From the above discussion, it can be concluded that ASR is effective enough in helping the EFL learners to practice teaching

However, the previous studies have also revealed the research gaps in implementing Automatic Speech Recognition (ASR). Some people said that it was not useful to increase speaking scores. While others state that ASR is beneficial to increase speaking skills because it can reduce the anxiety level of the EFL learners in speaking practice. However, the result of the study shows that ASR indicates positive feedback to increase speaking skills.

In addition, Benk et al. (2019) state that ASR provides a link between humans and machine, the most important is computer, however, machine alone still cannot fulfill the need of human to produce better speaking skills. It is supported by Cook et al. (2014) who emphasized using ASR can help people learn English pronunciation well. However, selecting words or phrases in English needs challenging attempts to be easily understood by the machine. This chance needs hard working skills to implement.

The researcher applied this phenomenon and developed it to become a key branch in human communication with the machine where the sound has helped to facilitate the use of the machine with the user and to make a natural communication. Automatic speech recognition has greatly contributed to the development of artificial intelligence, which seeks to create between very flexible methods of handling the machine, this allows the user to communicate and exchange information without using known input/output modules such as the keyboard. Voice-based input/output techniques are very useful in several areas, such as the care of disabled people, the use of cars, in particular hand driving, distress calls, and many more. Further, Cook et al. (2014) argue that this ASR is commonly used to pronounce words uttered by an individual voice, the voice is typed in the monitor, as a result of the voice uttered. This invention is helpful to learn pronunciation for beginners, to identify the spelling being uttered.

Similar to Cook et al. (2014), Yousem (2008) underlines the other type of ASR as voice recognition dictation. He explains that the role of this product working is by giving voice transcription. The voice is transcribed just like the process of voice dictation.

Kikel (2020) elaborates the differences between speech recognition and voice recognition. Speech recognition and voice recognition are innovations that have rapidly developed over the centuries. With their level of growth, voice and speech recognition have multiple purposes that can enhance usability, boost defense, support law enforcement efforts. Furthermore, learn the difference between voice recognition and speech

recognition as stated in the following.

The Primary Difference

Voice and speech recognition differ in its primary function. Speech recognition can not only detect words that are being uttered, while voice one cannot only be used by language but other common voices. It is not only from the language being uttered but also any sound being heard. From this definition, it is clearly seen that both terms are different in each function.

Speech Recognition

Speech Recognition emphasizes on the use of machine as a tool to identify any speech uttered by human when uttering words or languages being spoken. It has connection with dialect accent to pronounce words or languages. The voice, then, is transformed into graphical symbols indicating the tone of the voice whether it is strong or weak. Two main things to consider in speech recognition are namely accuracy and speed.

Voice Recognition

Voice recognition is a bit different from speech recognition in the way that voice recognition focuses on the voice difference among humans. Besides, it is used to identify the individual voice, it also can be used as a speaker identity.

CONCLUSION

From the result of this study, it can be concluded that the application of ASR is comfortable and can be used for individual learning. The participants can easily navigate from each page to another page. They also did not have any problem in understanding the given instructions by the application. The feedback provided by the application are also very helpful in finding the aspect of speaking the participants need to improve. On the other hand, the application is unfit to be used in crowded places since extraneous voice might come through the microphone. In addition, there is a complaint from the participants that sometimes they had to speak loudly in front of the microphone so that it can be listened well by the device. The trouble of the microphone could reflect to the scores, and sometimes it did not reflect the speakers' speaking ability.

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