ENGLISH TEACHERS' PERCEPTIONS OF THE USE OF TECHNOLOGY IN A RURAL AREA IN INDONESIA

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Abstract: English teachers' perceptions of the use of technology such as interactive multimedia for learning and differentiated learning are important to know, considering that they are part of the *Kurikulum Merdeka* (Indonesia's most recent curriculum in all education). This case study aims to explore English teachers' perceptions of interactive multimedia for learning and to unearth English teachers' perceptions of differentiated learning in a rural area in Indonesia. This case study utilizes 22 junior high school English teachers as the respondents of the interview. The results of this study show that (1) some teachers have not developed any interactive multimedia for learning, (2) some other teachers have not participated in any trainings or workshops on making interactive multimedia for learning, (3) some other teachers have not made any materials based on differentiated learning principles, and (4) some other teachers have not participated in any trainings on making differentiated learning materials. These teachers thus perceived that there is a need for training or workshops on making interactive multimedia for learning and differentiated learning for junior high school English teachers in the district organized by the local ministry of education office, the teachers' forum, and higher education institutions (colleges/universities). Based on the results of this study, it is suggested that there are probably many similar cases in rural areas in Indonesia where the teachers are struggling with modern technology while the curriculum encourages them to use modern technology in the teaching and learning process.

Keywords: Perception, EFL, Technology, Rural Area, *Kurikulum Merdeka*

INTRODUCTION

The development of technology has covered all systems of human life including the education system (Aleksandrov & Levitskaya, 2018). The use of technology in the education system greatly helps the education management process (Susanto et al., 2020). One of the uses of technology in the education system is in the implementation of the teaching and learning process at school. The use of technology in the teaching and learning process is very important to implement because of the development of the industrial revolution 4.0 era which demands the utilization and development of technology in every aspect of life. The era of the industrial revolution 4.0 demands the utilization of technology in the teaching and learning process because of the goals of the education system in Indonesia which must be able to deliver generations who have a variety of skills based on mastery of technology (Rajendra & Sudana, 2018). This is due to the assumption that future generations will face more complex problems that require mastery of technology in problem-solving process.

The use of technology in the teaching and learning process has a good impact on the quality of problem-solving process within the classroom (Yunarti, Wardono, & Suparti, 2023). Other study states that the use of technology in the learning process can improve students learning outcomes (Christina & Ganing, 2021). In addition, the use of technology can improve students' various thinking skills, such as critical thinking, creative thinking, and higher-order thinking skills (Mutiara, Zuhairi, & Kurniati, 2007).

Furthermore, technological integration within the English classroom is considered essential as it plays a key role in enriching the teaching and learning experience and improving learning outcomes. There are several studies that show technological integration within the English classroom is essential. First, Arora & Walia (2018) revealed that technology can facilitate easier and faster access to learning resources. Teachers and students can access relevant subject matters according to learning needs. Second, in "traditional" classroom, educators often have to deal with differences in the level of understanding and speed of learning among students. Technological integration enables adaptive learning, where students can learn at their own pace and style. Through technology-based learning systems, teachers can customize content, difficulty level, and teaching style according to students' individual needs (Idnay, 2020).

Third, the use of interactive and engaging technology within the classroom can increase students' engagement. The use of multimedia, educational games, and simulations can make learning more engaging and help students maintain their interest in the learning material (Rajendra & Sudana, 2018). Fourth, Tong, Irby, & Lara-Alecio (2015) discovered that in this digital age, technology skills have become essential for success in the workplace and everyday life. The integration of technology within the classroom helps students develop necessary technology skills, such as digital literacy, problem solving, creativity, collaboration, and communication. Students can also learn about the responsible and ethical use of technology. Fifth, since technology continues to evolve rapidly, and students need to be prepared for an increasingly connected world, Through the technological integration within the classroom, students are expected to become familiar with the tools and platforms used in various fields. The technological integration is expected to help them develop the adaptability and flexibility skills needed to deal with future technological changes and innovations (Maruf, Rahmawati, Siswantara, & Murwantono, 2020). Thus, technological integration within the classroom is expected to facilitate collaborative learning, online discussions, and technology-based projects that enhance students' motivation and social skills.

One of the technological utilizations that can be applied in the teaching and learning process is by developing multimedia for learning. Multimedia for learning is a means used by teachers to assist students to gain better understanding and learning process (Sukariasih, Erniwati, & Salim, 2019). Based on that understanding, teachers are expected to be able to create and present multimedia materials and provide students with more engaging learning experiences within the language classroom. Multimedia for learning can be educational approach that combines various types of media such as text, sound, graphics, animation, materials, and video to strengthen understanding and enrich the learning experience of learners (Motteram, 2009; Suartama, 2016). Multimedia can provide a learning tool for students where its use can facilitate more effective and enjoyable learning. Nowadays, multimedia for learning has transformed into interactive multimedia for learning. Interactive multimedia is multimedia equipped with features and controllers that can be operated by the user so that the user can choose the content available in the interactive multimedia (Motteram, 2009).

One of the studies that explores the use of interactive multimedia for learning is conducted by Sumardi, Rohman, & Wahyudiati, (2020). The study shows that students and teachers have started to use interactive multimedia for learning as learning media in the classroom and outside the classroom. The principle of interactive multimedia for learning is suitable for the current Indonesia's most recent curriculum in all education namely *Kurikulum Merdeka*, which requires differentiated learning. Thus, to facilitate this differentiated learning, the curriculum encourages educators to create or develop interactive multimedia for learning. However, the above conditions cannot be applied in all areas in Indonesia. In rural areas where technology is hard to reach, many teachers may have been extremely challenged to create and include interactive multimedia tools into the classroom. These teachers may have acknowledged that multimedia is needed as a manipulative tool to explain a concept to students. Therefore, there is an urge of necessity for teachers in rural areas to also be responsible for developing multimedia for learning in accordance with the level of student development similar to the teachers in the city and urban areas in Indonesia.

Based on those studies, the use of technology in the teaching and learning process can improve the quality of the process when the teachers are able to implement it within the English classroom. Then rises the assumption that teachers are responsible for designing learning processes that integrate technology into them. English teachers are encouraged to develop creativity in designing the teaching

and learning process so as to create an innovative, creative, active learning atmosphere and can motivate students to learn by maximizing technology. As mentioned before, not all English teachers in rural areas are able to use interactive multimedia in learning. Based on those assumptions, rises the necessity to explore English teachers' perceptions of the use of interactive multimedia for learning and differentiated learning. The purpose of this study is to find out the perception of English teachers towards interactive multimedia for learning and to find out the perception of English teachers towards differentiated learning and to add a perspective from English teachers in a rural area in Indonesia.

METHOD

As a type of qualitative research, this case study follows the procedure that produces descriptive data in the form of written or spoken words from people and behaviors that can be observed; the approach is directed at holistic settings and individuals (Creswell, 2014). This type of research is descriptive research that describes or analyzes a research result but is not used to make conclusions (Sugiyono, 2018). Additionally, Abdussamad (2021) provides an example on qualitative research which describes the meaning of data or phenomena that can be captured by researchers, by showing evidence. The meaning of the phenomenon depends a lot on the ability and sharpness of the researcher in analyzing it. This case study was conducted to describe English teachers' perceptions of Interactive Multimedia for learning and Differentiated Learning.

The target population of this study were all junior high school English teachers in Dompu, West Nusa Tenggara, Indonesia who are members of the English Teachers Forum (MGMP) WhatsApp group. They were given a questionnaire through a google form link. However, only 22 teachers filled in the questionnaire. So, these 22 teachers were taken by the researcher as the sample.

The instrument in this study was a questionnaire. The questionnaire was filled out online by the teachers. The research data analysis conducted in this study used descriptive analysis. Descriptive analysis was used to describe English teachers' perceptions of Interactive Multimedia for learning and Differentiated Learning. An in-depth interview through WhatsApp chat was also managed to gain more insight to support the results of the questionnaire.

FINDINGS AND DISCUSSION

There were 22 English teachers who filled in the questionnaire distributed by the researchers through the WhatsApp group of junior high school English Teachers Forum (MGMP) Dompu. There were four statements contained in the link about multimedia learning and differentiated learning. The figure below shows the statement points and teachers' responses in a bar chart.

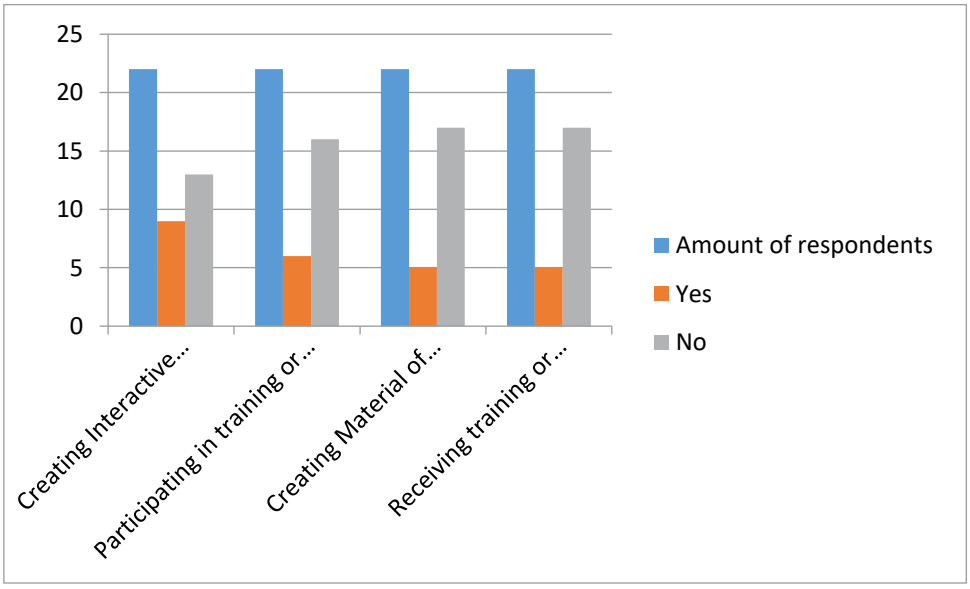

Figure 1. the bar chart of teachers' responses

Based on the figure above, there were four statement points, namely making interactive multimedia for learning, attending training on making interactive multimedia for learning, making differentiated learning materials, and getting training on differentiated learning. The statement about making interactive multimedia for learning received a "Yes" response from 9 teachers, while the "No" response from 13 teachers. The statement about participation in training on making interactive multimedia for learning received a response of "Yes" from 6 teachers, while the response of "No" from 16 teachers. The statement about whether teachers create differentiated learning materials received a "Yes" response from 5 teachers, while the "No" response from 17 teachers. The statement about participation in training on differentiated learning received a response of "Yes" from 5 teachers, while "No" from 17 teachers. From the bar chart above, the number of the junior high school English teachers who provided negative feedback is more than the ones who provided positive feedback.

English Teachers' Perception of Interactive Multimedia for learning

The responses given by the English teachers were then processed and analyzed to answer the research questions raised above. Perception, simply put, is the experience of objects or events. English teachers have given their perceptions in the statements or questions in this study. The perceptions given by the teachers are related to their experiences in making interactive multimedia learning media, and their experiences in attending training or workshops on multimedia learning. It is in line with what Rahmat said that perception is the experience of objects received or relationships obtained by inferring information and interpreting messages (Izlin & Widiyati, 2018).

Based on the findings, not many English language teachers in Dompu had created interactive multimedia-based learning materials. This can be seen from the data shown above that out of the 22 teachers studied, only 9 teachers had created interactive multimedia-based learning materials, even though creating interactive multimedia in this independent curriculum era is highly recommended, especially since multimedia contains various types of text, images, sound, video and animation that can be displayed to students in the learning process. This can increase student interest, motivation, and even achievement in learning (Nachimuthu & Vijayakumari, 2012).

In creating interactive multimedia for learning, the thing that needs to be considered is the text, starting from the layout, color, type and size of the text. Text is a unit of language that has complete components, structure, and interrelated purposes (Tarigan, 2013). In designing interactive multimedia for learning, the language used must be in accordance with the characteristics of students. The language used must be simple, effective and easily understood by students. If the language used in interactive multimedia for learning is not simple and effective then it can make it difficult for students to understand it. In addition, the layout must be considered because the incompatibility of the text layout can make the multimedia look less attractive (Hikmah, 2019). Related to color. The color of the text must match the background or background color of the multimedia created, then, the type of text is adjusted to the character of the students, regarding the size of the text must be seen the adequacy of the multimedia developed. So that there is a good combination of layout, color, type and size of text in the interactive multimedia for learning.

In fact, teachers must have expertise in making learning media, especially interactive multimedia for learning. Suartama (2016) Stating that it is very important for teachers to have additional expertise in making multimedia learning because it is in accordance with the learning characteristics of today's students. Likewise, teachers must always be updated on changes in the learning and teaching paradigm. Until now, it is still relevant what was conveyed by Mulyasa (2014) Mulyasa stated that the paradigm of learning and teaching must change from time to time, therefore teachers must be able to adapt to the changing paradigm. Mulyasa's opinion is indeed based on the fact that currently the tendency of learning in the classroom is more traditional, less using technology-based media or multimedia. Whereas currently technology plays an important role in the world of education (Nafi'a, Degeng, & Soepriyanto, 2020; Yamin & Syahrir, 2020).

Table 1. Teachers' perception of their expectation on the use of interactive multimedia

No	Teachers' perception
1	Teacher knows about interactive multimedia for learning
2	Teacher had made of interactive multimedia for learning
3	Teacher got training of how to make interactive multimedia for learning

However, based on the questionnaire and interview, many English teachers in the district had never participated in training on how to create multimedia for learning and interactive multimedia for learning. This can be seen from the results of the researchers' interviews with some teachers who stated that they had never made interactive multimedia for learning, but there were some teachers who had made interactive multimedia for learning. Through the in-depth interview, some teachers mentioned that the problem was that the Department of Education and Culture in this area had not organized such training. Some of them even had the opportunity to confirm with the Head of the Teachers and Education Personnel Division that there was no budget in the Office to conduct Interactive Multimedia for learning training. This further convinced the researchers that it was not that teachers do not want to take part in training, but there had been no training organized by the office in terms of training in creating interactive multimedia for learning.

English Teachers' Perceptions of Differentiated Learning

Based on the data obtained from the responses of English teachers regarding the creation of differentiated learning materials, there are only 5 teachers who make learning materials that accommodate the different learning needs of students, 17 other teachers never make it and even only use the teacher's book as a teaching resource. This is certainly different from the spirit of independent learning promoted by the Minister of Education, Nadiem Makarim, that teachers must be able to facilitate the learning styles and learning needs of individual students.

Differentiated learning is a way of learning that allows teachers to meet the needs and intelligence of individual students (Shihab & Komunitas Guru, 2016). In the context of English language learning, differentiated learning can help students acquire language skills effectively by taking into account students' learning differences. Therefore, English teachers' perception of English learning is very important, considering that teachers are the main actors who become mentors, sources, and facilitators of learning in the classroom.

English teachers' perceptions of differentiated learning vary greatly, depending on the teacher's experience in using this method and his/her views on education or the current curriculum. Based on the data above, many English teachers have not attended training in creating differentiated learning materials. This reinforces the first finding in this sub-section that teachers do not create differentiated learning materials because they have not received training on it. In fact, the training can improve the competence of anyone who participates in the training (Siswanto, 2021).

Table 2. Teachers' perception of their expectation on differentiated learning

No	Teachers' perception
1	Teacher knows about differentiated learning
2	Teacher had made differentiated learning
3	Teacher got training about differentiated learning

Another finding regarding teachers' perceptions of differentiated learning is that some teachers consider that differentiated learning is difficult to do because they feel unprepared. The unpreparedness was due to this rural area lacking technological advancement that can help the teachers to prepare differentiated learning. Some other teachers consider that they do not have time to organize the

materials since they also have to work outside school. So, in general, these junior high school English teachers teach in the usual way that is done in the classroom, namely generalizing the material for all students in the class. Thus, these teachers considered it necessary to have training on how to develop learning materials to facilitate differentiated learning.

CONCLUSION

This small study provides small evidence that some junior high school English teachers in a rural area in Indonesia have never participated in training on making multimedia for learning, let alone interactive multimedia for learning. Although this study is small, but the findings can be generalized to many rural areas in Indonesia which do not have much access to the technology and trainings. This further convinces the researchers that it is not that teachers do not want to take part in training but there is no training organized by the office in terms of training in making interactive multimedia for learning. Based on the data obtained from the responses of English teachers regarding the making of differentiated learning materials, there are only 5 teachers who make learning materials that accommodate the different learning needs of students, 17 other teachers never make it and even only use the teacher's book as a teaching resource. English teachers' perceptions of differentiated learning vary greatly, depending on the teachers' experience in using this method and their views on education or the current curriculum. With regard to the results and findings of our research above, it is suggested that the Education Office needs to provide continuous training to English teachers in order to increase their understanding and skills in terms of creating interactive multimedia for learning. It is also suggested that school principals can provide workshops and training to teachers related to the use of technology within the classroom. Since this is a small study, further studies are needed to gain deeper and wider exploration and understanding on English teachers' knowledge in digital literacy in rural areas in Indonesia.

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