

Interactive Multimedia Learning and Differentiated Learning: Insights from English Teachers

Mochlis Ekowijayanto

Universitas Negeri Surabaya

mochlis.22044@mhs.unesa.ac.id

Abstract

Research on the perceptions of English teachers regarding interactive multimedia learning and differentiated learning holds significant importance in the context of implementing an independent curriculum. The objective of this study is to analyze English teachers' perceptions of interactive multimedia learning and differentiated learning. The qualitative research method was employed, with the participation of 22 English teachers as respondents. The data were analyzed using descriptive techniques. The findings indicate that: (1) many teachers have not yet created interactive multimedia learning materials, (2) many teachers have not received training or attended workshops on producing interactive multimedia learning materials, (3) many teachers have not developed learning materials based on differentiated learning principles, and (4) many teachers have not participated in training programs on creating differentiated learning materials. Based on these results, the study recommends organizing training sessions or workshops on developing interactive multimedia learning and differentiated learning materials for English teachers in Situbondo Regency. These initiatives can be facilitated by the local Education Office, English Subject Teacher Deliberation (MGMP), or higher education institutions.

Keywords: *Interactive Multimedia Learning; Differentiated Learning; English Teachers Perceptions*

Abstrak

Penelitian mengenai persepsi guru Bahasa Inggris terhadap multimedia pembelajaran interaktif dan pembelajaran diferensiasi sangat penting dalam konteks implementasi kurikulum Merdeka. Studi ini bertujuan untuk menganalisis persepsi guru Bahasa Inggris terhadap multimedia pembelajaran interaktif dan pembelajaran diferensiasi. Metode yang digunakan adalah penelitian kualitatif, dengan partisipasi 22 guru Bahasa Inggris sebagai responden. Data dianalisis menggunakan metode deskriptif. Hasil penelitian menunjukkan bahwa: (1) banyak guru belum mengembangkan media pembelajaran interaktif, (2) banyak guru belum mengikuti pelatihan atau lokakarya tentang pembuatan multimedia pembelajaran interaktif, (3) banyak guru belum menyusun materi pembelajaran berdasarkan prinsip pembelajaran yang berbeda, dan (4) banyak guru belum mengikuti pelatihan dalam pembuatan materi pembelajaran yang berbeda. Berdasarkan temuan ini, studi ini merekomendasikan untuk melakukan pelatihan atau lokakarya tentang pembuatan multimedia pembelajaran interaktif dan diferensiasi bagi guru Bahasa Inggris di Kabupaten Situbondo, yang dapat difasilitasi oleh Dinas Pendidikan setempat, Musyawarah Guru Mata Pelajaran (MGMP) Bahasa Inggris, atau lembaga pendidikan tinggi.

Keywords: *Pembelajaran Multimedia Interaktif; Pembelajaran Diferensiasi; Persepsi Guru Bahasa Inggris*

INTRODUCTION

In recent years, the development of technology has covered all systems of human life including the education system (Collins & Halverson, 2018). The use of technology in the education system greatly helps the education management process (Conde et al., 2014; Malik, 2018). One of the uses of technology in the education system is

in the implementation of the learning process in schools. The use of technology in the learning process is very important to be applied because of the development of the society era 5.0 which demands the use and development of technology in every aspect of life including in the learning process which demands the use and development of technology in every aspect of life including in the learning process (Aulia et al., 2024; Awotunde et al., 2023; Legi et al., 2023).

Current technological developments in the era of society 5.0 demand the use of technology in the learning process because of the challenges that must be achieved in the learning process, namely the education system because of the challenges that must be achieved in the learning process, namely the education system must be able to produce graduates who have a variety of skills that are able to produce graduates who have a variety of skills based on technology mastery (Calp & Bütüner, 2022; Ihsan, 2023; Ismaya et al., 2021). The future graduates will face more complex problems that require mastery of technology in the process of facing more complex problems that require mastery of technology in the process of solving problems (Eliwatis et al., 2022; Rusman et al., 2023). Therefore, it is necessary to integrate the use of technology in the learning process.

The use of technology in the learning process has a good impact on the quality of learning (Jääskelä et al., 2017; McKnight et al., 2016). Many studies state that the use of technology in the learning process can improve student learning outcomes (Isroani et al., 2022; López-Pérez et al., 2013; Naik et al., 2020; Sarkar et al., 2017; White, 2020). In addition, the use of technology can improve a variety of students' thinking skills, such as critical, creative thinking skills, and higher-order thinking skills (Eliyasni et al., 2019; Kim et al., 2020; Kwangmuang et al., 2021). From the results of the study, it can be concluded that the use of technology in the learning process can improve the quality of learning so that teachers are required to be able to implement it. Teachers are responsible for designing learning processes that integrate technology into them. Teacher creativity is needed in designing learning so as to create an innovative, creative, active learning atmosphere and can motivate students to learn by maximizing technology.

One of the uses of technology that can be applied in the learning process is to develop multimedia learning. Multimedia learning is a tool used by teachers to make it easier for students to understand learning (Abdulrahman et al., 2020; Leow & Neo, 2014). Therefore, teachers must be able to present material and relate student experience to the learning to be held. However, the obstacle that is often faced is the inability of all teachers to bring interactive multimedia into the learning process. So multimedia is needed as a manipulative tool to explain a concept to students. Therefore teachers are responsible for developing multimedia learning that is appropriate to the level of student development.

Multimedia is actually a symbol of technological progress in the world of education. Multimedia learning is an educational approach that combines various types of media such as text, sound, graphics, animation, materials, and videos to strengthen understanding and enrich the learning experience of learners (Nicolaou et al., 2019;

Praheto et al., 2020; Winarto et al., 2020). Multimedia can be a learning tool for students where its use can facilitate more effective and enjoyable learning. Currently, multimedia learning has transformed into interactive multimedia learning. Interactive multimedia is multimedia that is equipped with features and controllers that can be operated by users so that users can choose the content available in the interactive multimedia (Cairncross & Mannion, 2001a; Muslimat et al., 2021).

The use of interactive multimedia learning has entered the realm of schools such as research conducted by (Brilian et al., 2020; Humairah et al., 2020; Pulungan, 2021) that students and teachers have begun to use interactive learning multimedia as a learning medium in the classroom and outside the classroom. This multimedia principle of interactive learning is actually compatible with the current independent curriculum, where the independent curriculum wants differentiated learning. So to facilitate differentiated learning, it is necessary to create or develop interactive learning multimedia. Interactive multimedia is a learning strategy that supports a differentiated approach that can be used by teachers. The use of interactive multimedia is considered effective and can make students more active (Cairncross & Mannion, 2001b). To support differentiated learning in teaching English, teachers can adapt to the current trend of using smartphone-based interactive multimedia which can be accessed easily.

Differentiated learning is one type of learning in a new paradigm, which is implemented in the independent curriculum which is currently being implemented in Indonesian education system (Irawati et al., 2022; Marsidin, 2022). The purpose of differentiated learning is to confirm learning by paying attention to students' learning interests, learning readiness, and learning preferences. Differentiated learning provides opportunities for students to be able to learn naturally and efficiently with teachers who are able to collaborate on the methods and approaches needed. Differentiated learning practices are important to implement because they can accommodate the diverse learning needs of students. Differentiated learning allows teachers to frame the classroom with its diversity to address learning obstacles experienced by students (Iqbal et al., 2020).

Teachers in Situbondo regency do not all use interactive multimedia in learning. This can be seen from the results of the researchers' interviews with several teachers who stated that they had never made interactive learning multimedia, but there were some teachers who had made interactive learning multimedia. Thus, the researchers are interested in conducting research related to English Teachers' Perceptions of Multimedia Use, Interactive Learning and Differentiated Learning. The purpose of this study is to determine the perception of English teachers towards interactive multimedia learning and to determine the perception of English teachers towards differentiated learning.

METHODS

Qualitative research is a research procedure that produces descriptive data in the form of written or spoken words of people and observable behavior; the approach is directed at the setting and individuals holistically (Creswell, 2007). This type of research is descriptive research. Descriptive research is research that describes or analyzes a research result but is not used to make conclusions (Lodico, 2010). Otherwise according to Spuck et al., (1975) Qualitative research is describing 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 descriptive research was conducted to describe English teachers' perceptions of Interactive Multimedia Learning and Differentiated Learning.

The population in this study was all junior high school English teachers in Situbondo Regency totaling 65 teachers. From 65 English teachers who are members of the WA MGMP group, they were given links to research instruments in the form of questionnaires. Then, there were 22 teachers who filled in the link, so these 22 teachers were taken by the researcher as a sample.

The instrument used in this research was a questionnaire. The questionnaire was filled out online by the teachers. The analysis of research data conducted in this study used descriptive analysis. Descriptive analysis is used to describe English teachers' perceptions of Interactive Multimedia Learning and Differentiated Learning.

RESULTS AND DISCUSSION

There were 22 English teachers who filled in the online link spread by researchers through the WA group of English teachers (MGMP) SMP in Situbondo Regency. There are several statements contained in the disseminated link about multimedia learning and differentiated learning. Below will be shown in a bar chart about the teacher's statement points and responses.

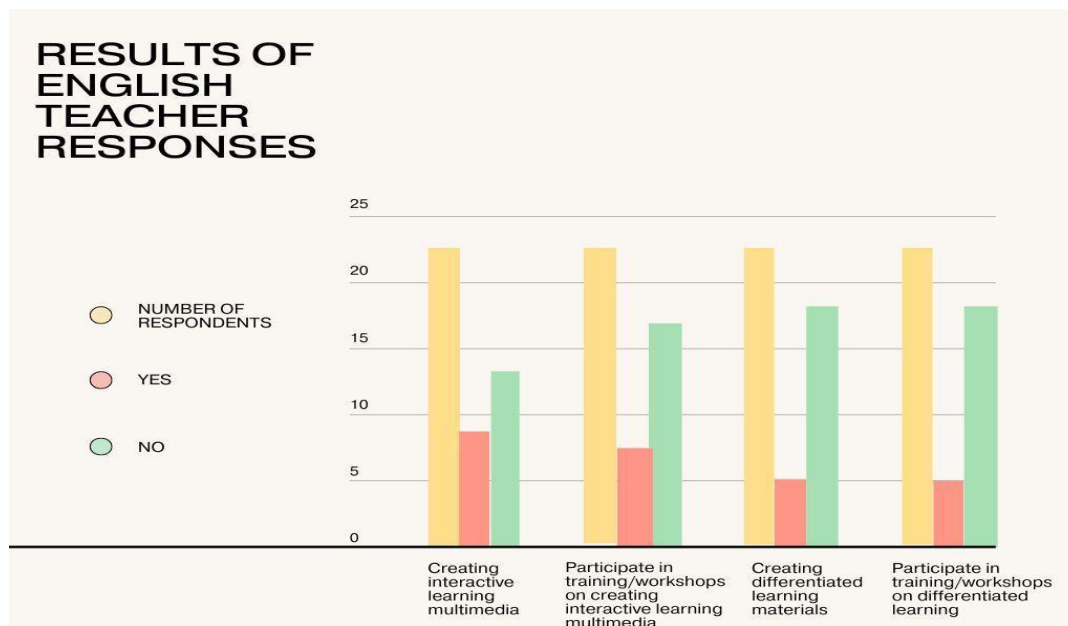


Figure 1. Diagram of Teacher Responses Results

According to the data presented in the diagram, 22 English teachers completed the online forms provided by the researchers via the WA MGMP group. The survey included four statements: creating interactive multimedia learning, attending training on creating interactive multimedia learning, developing differentiated learning materials, and receiving training on differentiated learning. For the statement on creating interactive multimedia learning, 9 teachers responded "Yes" and 13 responded "No." Regarding participation in training for creating interactive multimedia learning, 6 teachers responded "Yes" and 16 responded "No." For the statement on developing differentiated learning materials, 5 teachers responded "Yes" and 17 responded "No." Lastly, for the statement on participating in training for differentiated learning, 5 teachers responded "Yes" and 17 responded "No."

English Teachers' Perceptions of Interactive Multimedia Learning

The responses given by the English teacher are then processed and analyzed which are then used as answers to the research questions that have been developed above. Perception, simply put, is the experience of an object or event. English teachers have given their perceptions in statements or questions in this study. The perception given by teachers is related to their experience in making interactive multimedia learning media, and their experience attending training or workshops on multimedia learning. Perception is the experience of objects received or relationships obtained by inferring information and interpreting messages (Septiana et al., 2023).

English teacher in Situbondo who created the material interactive multimedia-based learning is still very low. This can be seen from the data shown above that of the 22 teachers studied, only 9 teachers had ever created interactive multimedia-based learning materials, even though they created interactive multimedia in the independent curriculum is highly recommended, especially since multimedia contains various types of

text, images, sound, video and animation that can be shown to students in the learning process. This can increase student interest, motivation and even achievement in learning (Halwani, 2017; Kaboocha & Elyas, 2018).

In making interactive multimedia learning things that need to be considered are text, starting from the layout, color, type and size of text. Text is a unified language that has complete components, structures, and purposes that are interrelated (Mesmer et al., 2012). In designing interactive multimedia learning, the language used must be in accordance with the characteristics of students. The language used must be simple, effective and easy to understand by students. When the language used in interactive multimedia learning is not simple and effective, it can make it difficult for students to understand it. In addition, the layout must be considered because the mismatch of the text layout can make the multimedia display less attractive (Yang et al., 2016). Relating 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 student, regarding the size of the text must be seen the adequacy of the multimedia developed. Thereby, is a good combination of layout, color, type and size of text in the interactive multimedia learning.

Many English teachers in Situbondo Regency have not yet participated in training on creating multimedia learning materials, especially interactive ones. A significant obstacle is that the Situbondo Regency Education and Culture Office has not conducted extensive and systematic training sessions. Confirmation from the Head of Teachers and Education Personnel indicated that budget constraints within the Office are responsible for the lack of interactive multimedia learning training. This evidence further convinces researchers that the issue is not a lack of willingness among teachers to attend training but rather the absence of such training programs organized by the educational authorities.

In fact, teachers must have expertise in making learning media, especially interactive multimedia learning. Abdulrahman et al., (2020) state that it is very important that teachers have additional expertise in making multimedia learning because it is in accordance with the current learning characteristics of students. Similarly, teachers must always follow the development of learning and teaching paradigma. Until now, it is still relevant to what was conveyed by Singh & Mishra, (2017) that the paradigm of learning and teaching must change from time to time, therefore teachers must be able to adapt to the paradigm shift. Based on the fact that currently the tendency of learning in the classroom is more traditional, less using technology-based media or multimedia. Even though today technology plays an important role in the world of education (Raja & Nagasubramani, 2018).

English Teachers' Perceptions of Differentiated Learning

Based on data obtained from the responses of English teachers regarding the creation of differentiated learning materials that there are only 5 teachers who make

learning materials that accommodate differences in student learning needs, 17 other teachers have never made even just using 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 (Mills et al., 2014). In the context of English language learning, differentiated learning can help students acquire language skills effectively by paying attention to student learning differences. Therefore, the perception of English teachers towards English learning is very important, considering that teachers are the main actors who become mentors, resources, and facilitators of learning in the classroom.

English teachers' perceptions of differentiated learning vary widely, depending on the teacher's experience in using this method or methods and his or her views on current education or curriculum. Based on the data above, there are still many English teachers who have not attended training to make differentiated learning materials. This corroborates the first finding in this sub-section that teachers do not make learning material differentiated because teachers have not received training on it. In fact, the training can improve the competence of anyone who takes part in the training (Hager, 2004).

Another finding regarding teachers' perceptions of differentiated learning is that they find it challenging due to a lack of preparation and insufficient time to develop materials. Consequently, English teachers typically employ traditional teaching methods, presenting generalized material to all students. This underscores the necessity for training programs focused on developing materials that support differentiated learning.

CONCLUSION

In conclusion, the findings highlight a prevalent lack of participation among English teachers in Situbondo Regency in training sessions focused on multimedia learning, particularly interactive multimedia. This underscores the absence of organized training initiatives by educational authorities in this domain. It is evident from the data that English teachers' perceptions of differentiated learning vary considerably, influenced by their experience with the methodology and their perspectives on contemporary education and curriculum. The data also reveal a notable discrepancy in the creation of differentiated learning materials, with only a minority of teachers accommodating differences in student learning needs. The study underscores the need for targeted interventions and professional development opportunities to address these gaps and enhance teacher capacity in integrating interactive multimedia and differentiated learning effectively.

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