Android-Based Poetry Text Learning Through the Use of Mentimeter Interactive Educational Media

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Abstract. This study aims to: (1) identify the application of poetry teaching materials in Junior High Schools (SMP) with android technology-based learning through the use of mentimeter educational media, (2) describe the response of learners in the application of text-based poetry learning based on mentimeter interactive learning media, (3) describe the teacher's assessment of learning media, and (4) identify the benefits and constraints encountered when applying mentimeter interactive learning media. The method used in this study is a research and development method (Research and Development). This type of research is qualitative research. This research was carried out at SMP Muhammadiyah 2 Karanganyar which was carried out in October 2022. The subjects of this study were junior high school students in class VIII-B with a total of 26 students. The results of this study show: (1) teachers can prepare learning materials using interactive media. The description of educators is done well and carefully along with the presentation of interesting material showing a positive response from students, (2) learners' responses to the use of mentimeter showed good, although in this study mentimeter was only used once during the study process. With the implementation of the application of mentimeter carried out in the classroom, students have been considered able to understand the material provided, (3) the results of the validity of the use of mentimeter found good foresight for the use of mentimeter as a learning medium in schools. This has been confirmed by the results of the validity test to the teacher as an expert. The accuracy and accuracy of the material is well tested by teachers in junior high schools so that it is stated that the use of technology-based learning media through the use of interactive educational media mentimeter on learning poetry texts is well accepted and absorbed by students, and (4) implementing an the application of mentimeter carried out in the classroom shows that students are able to understand the material provided. Mentimeter media is very effective in helping students in learning poetry, namely students are able to make poems. This article meets the needs in the use of interactive education-based learning media by utilizing technology and internet access. The learning media used in this study is mentimeter interactive media.

Keywords: learning poetry texts · interactive educational media · mentimeter

1 Introduction

Education has a responsibility to improve the personality of the nation's children. This is based on one of the tasks of education, which is to pass on the noble values of the nation from the ancestors. [1]. In addition, the purpose of education is to make it easier for students to gain an understanding of the development of their potential in school [2]. Education is an activity carried out by educators and students to exchange knowledge and experience [3]. The presence of the Covid-19 pandemic has projected the continuity of the world of education, especially distance learning through the help of technology. However, technology also cannot take over the role of teachers and learning interactions formed from students and teachers because education is not limited to acquiring knowledge, but also students' values, cooperation, and competencies. Covid-19 has changed the pattern of face-to-face learning to distance learning by utilizing the internet network and/or information and communication technology. This situation is a challenge to develop individual creativity in the use of technology in developing education.

Education is the realization of a dynamic human culture and the conditions for development. Therefore, changes and developments in education are aspects that go hand in hand with the culture of modern society today. Education plays an important role in supporting future development because hammering education can develop the potential of students so that they can face and solve various life problems.

The occurrence of the Covid-19 pandemic has caused impacts in various fields, one of which is in the field of education [4]. The Covid-19 pandemic is a projection of the sustainability of education in the future based on technology [5]. Thus, each student is obliged to prepare facilities and infrastructure independently in the technology-mediated learning process [6]. Online learning is learning that utilizes technology based on information communication, a type of internet that is carried out directly or indirectly [7]. Therefore, online learning must be more creative so that students' learning motivation also increases [8].

Online learning is a link between learners (students) and learning resources (databases, experts/instructors, and libraries), both with physical and non-physical conditions. Nevertheless, interaction, communication and cooperation can be carried out, both synchronously and asynchronously. The learning resources provided to students in learning should be appropriate to the student's level of knowledge [9]. This suitability will make learning resources easy to accept and train students' thinking skills to be better.

In relation to the scope of learning that has been mentioned, an important thing to consider is the online teaching method. Online learning in its implementation tends to be more flexible and more practical than face-to-face learning. One of the online learning media is e-learning which is currently used in the domestic to foreign scope [10]. However, the e-learning method in its application can reduce the intensity of communication interaction between teachers and students. The communication interaction that takes place between the two is only carried out in the network through a device or smartphone [11]. The learning process under such circumstances requires teachers to be more selective and creative in choosing the right learning method to use so that students do not get bored quickly at the time of learning and can complete tasks well [12].

Online learning using e-learning often experiences problems, such as students having difficulty in understanding the subject matter presented by the teacher [13]. In addition, in accessing learning media that is designed not in accordance with student characteristics and tends to distract students. Thus, students' motivation in distance learning with digital educational media will be reduced. Another contributing factor, such as the use of interactive digital educational media that is less attractive, affects the learning motivation of students because students feel bored in following the distance learning process. Therefore, to deal with these problems, solutions are needed to formulate learning methods that are able to increase the effectiveness of distance learning [14]. The formulation of this learning method is tailored to the needs of students so as to increase students' understanding and motivation in following the learning process. This can be done by utilizing e-learning media or asynchronous methods or synchronous methods. The use of digital media (e-learning) developed is a media that is easily accessible to students on a web-based basis, namely through mobile phones/androids. The media developed in this study is mentimeter-based learning media.

Several types of learning media can be applied as well as learning strategies and objectives. One of them, which can be applied in poetry learning is educational media based on android and the web [15]. This android and web-based learning media is one of the interesting learning media because in its use students can access it through smartphones, laptops, and computers. The media also contains various types of interesting image platforms and is in accordance with the presentation of easy-to-understand material. One of the android-based systems that can be applied to learning is mentimeter media.

Mentimeter is a web-based student response system. This system is able to form a direct feedback on the content being described and provide learning information to students that allows students to practice directly [16]. In addition, the Student Response System (SRS) or known as mentimeter is able to provide direct feedback on the content being taught and provide learning information to students and allow students to practice directly so as to encourage students to be more active [17].

One of the media that can encourage students to be active in distance learning is technology-based learning with the use of interactive educational media. Interactive is defined as the way educators use in delivering material by involving their students to be actively involved. Active means responding back to the material provided by the teacher, a light forum with classmates, and actively looking for learning reference sources. Thus, the application of interactive learning media to the teaching material of poetry texts in junior high school becomes a medium that makes students happier and feel less bored in undergoing the learning process in class. In addition, this media is also able to develop students' thinking skills.

In previous studies it has been found that mentimeter is used as a practical application to improve students' writing vocabulary, improve students' communication skills by using six communication theories, and be able to use Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis [18]. Based on this research, it is known that mentimeter has many benefits for learning and can increase student involvement in the learning process.

Based on the background described, there are four problems that will be answered in this study.

(1) How to apply poetry teaching materials in junior high schools with android technology-based learning through the use of mentimeter educational media so that it will make students more understanding and interactive?
(2) How do students respond to the application of poetry text learning based on mentimeter educational media?
(3) How teachers assess mentimeter teaching media?
(4) What are the benefits and obstacles faced when applying mentimeter learning media?

2 Theoretical Review

2.1 Learning Media

Media is taken from Latin, namely the word medium which has an introductory meaning. In terms of media, it is referred to as a means that distributes learning information to the target of information [19]. Learning media is a tool or foundation that exists in the learning process that is carried out in order to develop the minds of students so that they are able to create students' abilities in the learning process [20]. Based on these opinions, it can be concluded that media is important for learning. Learning media also means everything in physical and non-physical form that is used in the learning process and is used to help educators in achieving predetermined learning goals. Thus, learning media is the most important role in learning.

2.2 Interactive Education

Interactive education can be said to be part of interactive learning, which is a learning that involves the role of students to act actively in the learning process in the classroom. The education provided by educators is delivered in an interesting and not monotonous manner so that it can arouse classroom conditions to be more lively and enjoyable. Educators have a big role to play in creating an interactive atmosphere. The use of interactive educational media can make students not easily bored and able to understand learning better because the learning delivery provided by educators is also interesting. Based on this description, it can be said that interactive education is able to evoke the classroom atmosphere to be more efficient and more in line with the learning objectives to be achieved.

2.3 Mentimeter

The Mentimeter app is the key to delivering more enjoyable distance learning. Mentimeter is a web-based, interactive presentation app with more than 30 million users from 120 countries. Mentimeter is an amalgamation of wireless hardware with presentation software [21]. Mentimeter is defined as an interactive design application to increase the attention of those who watch the presentation and to entertain the viewers of the presentation. Mentimeter can also be used to perform quizzes, surveys, word clouds, image

presentations, and graphs. Through Mentimeter, interaction between teachers and students can take place during presentations with a feedback feature using smartphones, tablets, and laptops. Mentimeter's working principle is that if the presenter broadcasts the presentation through www.mentimeter.com, the mentimeter system will provide a pin code that will be used by participants to access the presentation [22]. Furthermore, learners can enter the mentimeter system through the access code that has been given. The system can only be accessed via an access code and no other information is required by the learner to enter the relevant system. Once learners log into the system, the answers they give to the app are immediately reached out and generated in real terms by both the teacher and the pupil. Any personal information from students will not be loaded on the system screen so that students who have passive abilities and shame towards peers in class can actively participate and be motivated to actively participate in learning in class.

Mentimeter media provides opportunities for educators to provide quizzes related to learning materials. Students can answer the quiz given as the understanding gained without worrying that the answers given may be wrong because all answers from students are protected and will not be exposed to privacy [23]. The use of mentimeter is a recommended medium because it has an attractive presentation for students and is easy to use. This media is considered capable of providing easy understanding for students so that material from educators can be absorbed properly [24]. The results showed that mentimeter is also able to increase the pleasure of students through presentations that are not difficult to understand [25].

2.4 Poetry Material

Poetry is a literary work created by man by relying on the beauty of grammar and beautiful meaning. Poetry can express environmental conditions with different renditions and use the creation of beautiful language. Poetry in its making has prose, beautiful art, and has the characteristic of writing beautiful sentences and is able to touch the feelings of readers and listeners. Poetry is described as the oldest form of literary work based on its history. Language in poetry serves as a medium for putting forward ideas arranged in such a way as a poem. Poetry has the power to choose a beautiful and rich diction of meaning, making it have its own charm and beauty value. The beauty of a poem comes from the use of diction, majas, rhymes, and rhythms contained in a literary work. As for the richness of meanings contained in poetry due to the compaction of various languages.

Poetry is one of the literary works that uses beautiful language and has its own meaning. Poetry is a type of literary work that contains various problems around life or humanity [26]. Through poetry, a reader will discover the ideology of society from literature written by poets [27]. Another opinion suggests that a poet is part of society [28]. Poets get amazing ideas usually derived from the influence of the environment of the society in which they live. It was this idea that later produced poems with diverse meanings. Therefore, to know the ideology of the poetic society can be seen through poetry.

3 Method

This type of research uses qualitative research. In this study, researchers applied research and development methods (Research and Development). This research was conducted at SMP Muhammadiyah 2 Karanganyar in October 2022. The subjects of this study were junior high school class VIII students with a total of 26 students. Data collection in this study is in the form of primary data. The model implemented is the analyzing, design, development, implementation, and evaluation (ADDIE) development model. The ADDIE model is the simplest model and is one of the conclusions from the previous models. This model is well organized and programmed with good sequential activity steps. The ADDIE model research can be carried out through the following stages:

(1) Analysis stage

    The analysis stage is carried out by analyzing the problems encountered by students in the process of ongoing learning activities so that a solution to the problem faced can be obtained. There are a number of things that can be conducted, namely a) analysis of the needs of students of SMP Muhammadiyah 2 Karanganyar with questionnaires and b) analysis of the formulation of learning objectives related to teaching materials as the basis for the preparation of learning media used.

(2) Design stage

    This stage starts from determining learning objectives and creating the right learning media after knowing the needs and characteristics of students, namely by using the mentimeter application and seeing student responses.

(3) Development stage (pengembangan)

    This development stage is in the form of creating learning media that has been formulated at the design stage. Products that will be developed into products that are ready to be implemented include the creation of technology-based teaching media through the use of interactive educational media, and the creation of material and media expert validation sheets for teachers. Furthermore, the results are used as a reference to run the next stage. Validation is carried out to declare the learning medium whether it is suitable for use or not.

(4) Implementation stage

    At the implementation stage, namely a product implementation that has been developed by conducting experiments on field tests and evaluating product implementation.

(5) Evaluation stage

    In the evaluation stage, it is carried out by conducting inspections and monitoring to review the success of product development. The data collection carried out includes: a) information on research sources. The collection is carried out through field observations and disseminates questionnaires to model users, namely students of SMP Muhammadiyah 2 Karanganyar, class VIII B, b) product validity data tested to material and media experts by sharing product validation questionnaires developed, and c) student responses.

4   Result and Discussion

The application of the use of the mentimeter application is an innovative and effective effort because basically mentimeter itself is an application that is interactive, has an attractive appearance, and is easy to use by anyone; [29]. Mentimeter is a digital innovation application that is able to make learning in the classroom more lively and enjoyable. The mentimeter application makes educators try to use mentimeter with easy language use so that it makes it easier for students to understand the material presented [30]. The use of mentimeter as a digital tool can motivate students to do their jobs better because the media is able to support the learning process in the classroom and provide great opportunities for educators and students to interact [31]. In addition, based on the use of mentimeter media, an analysis of the completed activities can be carried out to measure the suitability of use in utilizing media in learning activities in the classroom [32].

Relating to the statement that the analysis carried out has been adjusted to the needs of students in understanding the learning of poetry that has been considered to suit the conditions of students [33]. Studies carried out in the field seek to collect a series of information related to the condition of students, learning media applied by educators in learning activities, and student needs for the use of digital-based learning media. The results of the needs analysis showed that out of four teachers had given permission for the use of mentimeter in the learning of poetry texts at SMP Muhammadiyah 2 Karanganyar. The validation of the data that has been obtained indicates that the use of interactive digital-based learning media in the form of mentimeter media is in accordance with the learning process in the classroom.

The learning tools used in the learning process need to be adapted to learning conditions so that mentimeter is considered a capable and appropriate medium to be used as a learning medium [34]. The material used in mentimeter is made by educators to be more unique and specific so that it can reach the understanding of students and can achieve learning goals [35]. The design stage in mentimeter media has many benefits in its use in the learning process, namely it can involve the interaction of all students in the classroom in the learning process and evaluate students' understanding related to the material provided through the quizzes that have been provided [36]. The features available in mentimeter are very easy to understand and can help students to play an active role in the classroom so that the learning environment can be created properly.

4.1   Application of Mentimeter as an Interactive Learning Media in Poetry Text Teaching Materials

4.1.1   Introduction to Mentimeter as a Learning Media

Based on the results of research conducted at SMP Muhammadiyah 2 Karanganyar, it shows that the use of mentimeter as an interactive learning medium in teaching material for poetry texts has proven effective. This is evidenced by the high enthusiasm of students in interacting with learning when applying mentimeter in learning. This is also supported by previous research that shows that mentimeter is effectively used in interactive learning with negotiation text material in class X B SMAN 1 Kintamani [37]. In addition, it is proven that students who take part in the learning get a score above KKM, the average score obtained is 80.00.

Research results that support this research include a journal article entitled *Efektivitas Media Mentimeter pada Pemahaman Materi Bahasa Arab Era Pandemi Covid-19* (The Effectiveness of Mentimeter Media on Understanding Arabic Learning Materials in the Era of the Covid-19 Pandemic) [35]. The results of the study stated that mentimeter is effectively used as a learning media. The results of the study were also proven by the difference in the acquisition of values before and after the use of mentimeter media. The media used before using the teacher's mentimeter media using powerpoint media presented through the zoom application and or distributed via whatsapp group chat, the average score was 7.32 while the results after using the mentimeter media average value increased to 8.50. Another Penelitian with the title *Penerapan Aplikasi Mentimeter sebagai Media Pembelajaran Daring Bahasa Indonesia Kelas X di SMA Negeri 1 Baturiti* (Application of Mentimeter Application as Indonesian Online Learning Media in Class X at SMA Negeri 1 Baturiti) concluded that the use of the mentimeter application as an online learning medium is considered effective to be used in Indonesian lessons for class X students at SMA Negeri 1 Baturiti in the 2020/2021 learning year.

The results of this study and supported by previous research, show that mentimeter media has proven to be effectively used as an interactive learning media that can increase the average score of students. In addition, mentimeter media is effective for increasing student enthusiasm and motivation in participating in learning. This is proven when previously students felt bored, embarrassed, and inferior towards other friends, but by using mentimeter media in the learning process, it provides a separate space for students who have these traits. The use of digital programs can encourage students to do a better job and be able to improve their skills.

Mentimeter is used to conduct student surveys that allow them to provide a view through a smartphone connected to the internet network. Mentimeter is an interaction between educators and students that can be displayed in the form of presentations with various attractive feature displays and generate feedback through smartphones, laptops, and computers [38]. The online media requires its users to display various diagrams of the results of the social interaction of a group of students. For example, through polls that are delivered openly and concisely. Mentimeter has the potential to maintain interaction in the classroom even if it is done indirectly. Mentimeter is a tool that can help implement learning activities that allow teachers and students to interact directly. The app is free, but can be upgraded to get additional features. Mentimeter contains a presentation menu with various models, such as multiple choices, open ended, word cloud, and so on [39]. This application can also be used to upload images, graphs, display reports of student answers when compiled in the form of questions, make quotes, provide answer information, and so on. Students who get high scores and spend a short duration in working on the questions will be immediately known and displayed the results. This can certainly increase students' motivation in competing to get the best score.

4.1.2   Providing Examples in Using Mentimeter Learning Media

After the process of introducing mentimeter media to students, researchers provide examples of instructions in applying interactive learning media to mentimeter correctly. First, researchers share an access code to get to the mentimeter page. Second, researchers told the students to come in and follow the learning of poetry texts through their respective

Fig. 1. Implementation of Mentimeter Interactive Learning Media

androids. To see whether students already understand the application of the use of mentimeter and understand the material of the poetry text, the researcher tells students to do e-lkpd. This effort is made so that students understand the use of mentimeter and understand the material of the poetry text that has been given.

4.1.3 Implementation of Mentimeter as an Interactive Learning Media

After giving examples of the application of mentimeter learning media, 26 students at SMP Muhammadiyah 02 Karanganyar class VIII B tried to apply the learning media in poetry text material through their respective smartphones. Learning poetry texts by using and applying mentimeter media is carried out continuously in accordance with the values produced by students. The application of mentimeter learning media to the teaching material of poetry texts in junior high schools becomes a medium that makes the learning process more interactive and fun. This happens because an interesting and fun learning process can make a positive impression on students.

Hasil implementation of poetry text teaching materials through interactive learning media mentimeter students at SMP Muhammadiyah 02 Karanganyar class VIII B can be accessed through Fig. 1:

4.2 Learning Activities and Responses of Students to the Application of Teaching Materials for Poetry Texts Based on Mentimeter Interactive Education

4.2.1 Student Learning Activities towards the Application of Poetry Text Material Based on Mentimeter Interactive Education

Based on the results of research that has been carried out, it shows that students have an enthusiastic attitude in learning with mentimeter media. This enthusiastic attitude is shown by the response of the students when doing the assignments given by the teacher. The activity, which is where the teacher gives an assignment to create a poetry text to students. Students must work on the assignments given through a Student Worksheet (LKPD) link given by the teacher. Furthermore, students do the assignment through the link that has been given using their respective cellphone devices. This shows that the enthusiasm of the students is greater in making poems.

The activities carried out have the aim that the learning carried out can provide space for some students. As is known in general, students have their own character in the learning process carried out. Students have some characters, such as shy, inferior, and even the opposite they have a strong and confident character. The two conflicting characters make some students feel they have no room to express their work in this case it is a work of poetry.

The existence of a space to express poetry through the medium of mentimeter where students can express their poetry works without other students knowing and only the teachers who give assignments will know about it makes students confident because they no longer have concerns that their poetry works will be made fun of and become the laughing stock of other students. This goal is very good with the right learning media, namely mentimeter. The interaction between the teacher as a presenter and the learners as an audience can be presented in the presentation with the feature of providing live feedback through smartphones, laptops, and computers [38]. In addition, student privacy is also maintained because it is not reflected on the system screen so that when students have passive abilities and shame towards peers in class, they can actively participate and be motivated to participate actively in class.

Learning activities with mentimeter media are carried out in several steps. First for teachers, which must be done before making a presentation using a mentimeter, the teacher must prepare the material in advance carefully so that it can give an interesting and interactive presentation. In addition, teachers must be smarter in choosing features or design models to be used so that the learning process will feel good without reducing the essence of delivering the material.

The steps in accessing mentimeter are directing students to open mentimeter through *google chrome.* Next, follow the steps i.e.:

a. Students enter the keyword "menti.com" or can also go directly to the media mentimeter through the link that has been shared.
b. After successful login, students will be asked to enter an access code from the teacher.
c. Next, a preliminary display of the material being presented will appear.
d. The next step, students have successfully followed the learning by using mentimeter learning media (Fig. 2).

4.2.2   Responses of Learners to the Application of Mentimeter Interactive Education-Based Poetry Text Material

Students' responses to the application of mentimeter interactive education-based poetry text materials showed enthusiastic responses. Based on observations that have been made before the implementation of learning, students state that online or distance learning that has been done only through the whatsapp, google meet, and google classroom applications. Teachers have never used mentimeter media as a learning medium. The task given by the teacher during the learning of poetry texts is in the form of making poems with a predetermined theme.

After learning poetry texts using mentimeter media, students can follow the learning flow interactively. It is based on the daily lives of students who have been surrounded by technological advances especially with the rampant existence of android/smartphones.
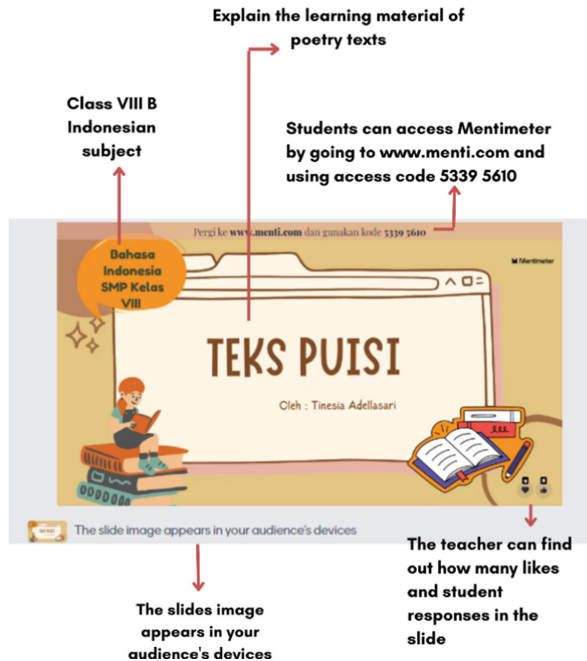
Fig. 2. Mentimeter Interactive Learning Media Display

The ease of internet access and the availability of smartphones are one of the factors that this mentimeter learning media can be applied in learning poetry texts. Based on the questionnaire that has been shared after students have carried out poetry text learning using interactive mentimeter media, it can be concluded that as many as 80% of students who say yes, mean agreeing to use mentimeter learning media and understanding the poetry text material easily. Meanwhile, as many as 20% of students stated no, which means that students could not understand the material presented using mentimeter media (Fig. 3).

4.3 Results of Teacher Research on Mentimeter Interactive Learning Media

4.3.1 Response by Teacher

The effectiveness of mentimeter media in the learning of poetry texts is judged by the responses given by the teachers. Where the results can be known through the questionnaire data that the researchers have given to the teachers to fill in. Here's a Table 1 regarding the teacher's response to the mentimeter learning media in the teaching material of the poetry text.

Based on Table 1, it can be seen that the teacher's response to the interactive learning media on the teaching material of the poetry text is as follows:

1. The learning process uses mentimeter as a medium in learning poetry texts. The results obtained, namely from the questionnaire data on the learning aspect, explained that
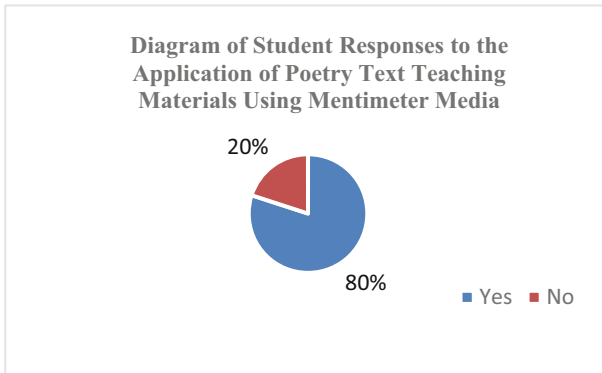
Diagram of Student Responses to the Application of Poetry Text Teaching Materials Using Mentimeter Media

20%

80%

■ Yes ■ No

Fig. 3. Diagram of Student Responses to the Application of Poetry Text Teaching Materials Using Mentimeter Media

Table. 1 Teacher Responses to Mentimeter Learning Media for Poetry Text Teaching Materials

No.	Indikator (Indicator)	Ya (Yes)	Tidak (No)
1.	Pada proses pembelajaran menggunakan mentimeter sebagai media pembelajaran teks puisi apakah menurut pendidik dapat meningkatkan motivasi belajar pada siswa? (In the learning process using mentimeter as a learning medium for poetry texts, do educators think it can increase learning motivation in students?)		
2.	Dalam aspek pembelajaran, apakah menurut pendidik media pembelajaran mentimeter mudah untuk dipahami oleh siswa? (In the aspect of learning, do educators think mentimeter learning media is easy to understand by students?)		
3.	Apakah menurut pendidik, media mentimeter sudah efektif untuk mengatasi alat peraga/ pada materi ajar teks puisi? (Do educators think that mentimeter media has been effective in overcoming props/ in the teaching materials of poetry texts?)		
4.	Apakah menurut pendidik, media mentimeter jika dilihat dari tampilan desain dan komposisi warna cukup menarik? (Do educators think that mentimeter media when viewed from the appearance of design and color composition is quite attractive?)		

the use of mentimeter as a learning medium makes students more interactive and also increases student motivation in learning.

2. The convenience provided in this mentimeter learning media makes students understand what is conveyed by the teachers in the learning process so that it is very effectively used in learning. Understanding is a person's way of maintaining, distinguishing, guessing, explaining, expanding, inferring, generalizing, exemplifying,

rewriting, and also estimating material or things that have been heard. With such understanding, the student can prove that he understands the simple relationship between facts and concepts.

3. Mentimeter media as an interactive learning medium in class VIII of SMP Muhammadiyah 2 Karanganyar has been effective in learning poetry texts. Based on the results of the questionnaire obtained on the media aspect, it also illustrates that successful mentimeter is one of the learning media choices that must be used by teachers. The results explained that the media used in this mentimeter is quite efficient in terms of time. In other words, it does not take as long as other learning which makes students feel bored quickly. In addition, mentimeter media is also easy to use and can be used on several other devices.

4. The design presented in mentimeter as an interactive learning medium in class VIII of SMP Muhammadiyah 2 Karanganyar has been effective in learning poetry texts. The last aspect, namely the design gives the result that the appearance of the design on the mentimeter is quite detailed with the color composition and the balance of the design displayed makes the mentimeter more attractive to use as a learning medium. The user interface (UI) design is easy for users to understand. The design given is also simple with a neat and orderly design layout. Using this platform is easy because it looks similar to powerpoint. Moreover, it does not require any special enhancements to use this platform. Its use is enough to provide a laptop or smart phone that is connected to the internet. However, for an educator, you should access it using a laptop / PC that has a wide display to make it easier during the editing process.

4.4 Validation Results from Media Experts and Material Experts

4.4.1 Validation Results from Material Experts

The media expert validator in this study is a teacher who teaches at SMP Muhammadiyah 2 Karanganyar.

The use of mentimeter has gone through a manufacturing stage that has been designed in such a way as to be attractive and easy to understand [15]. Making concise and efficient learning materials allows students to improve their learning comprehension skills for the better. The development stage in the form of a media mentimeter stage is validated by experts to measure the suitability of the mentimeter media for use in the classroom. The mentimeter validation process is carried out by giving questionnaires to teachers in junior high schools to measure media eligibility so that the average score is known. This stage is an important stage to produce a product that has undergone a validity test. Testing for validity was obtained from a questionnaire given to 4 teachers in junior high schools to test the validity of media and materials. The results of the validity of the media and the material developed can be seen in the assessment table. The questionnaires used in this study were given to the teachers and then several aspects of the assessment were determined to test the validity of the media developed. Some of the aspects in question include: learning aspects, media aspects, and design aspects. Based on some of these aspects, it has several indicators as a determinant of whether the aspects used provide valid results or vice versa. Based on the results of the assessment, the teacher has shown that the teacher approves the use of mentimeter as an interactive medium with the "Very

Valid" criterion at an average of 100%. The data from the validation of media experts are presented in Table 2.

Table 2. Table of Validation Results by Media Experts

Aspek (Aspect)	Indikator (Indicator)	No Butir (Item Number)	Rata-Rata Persentase (Average Percentage)	Kriteria (Criterion)
Pembelajaran (Learning)	Interaktivitas (Interactiveness)	1	100%	Sangat Valid (Highly Valid)
	Penumbuhan motivasi belajar (Growth of learning motivation)	2		
	Fungsi yang diharapkan menunjang pembelajaran (Expected function supports learning)	3		
	Melihat beberapa indera (Seeing some senses)	4		
	Kemudahan untuk dipahami (Ease of understanding)	5		
Media (Media)	Efisiensi penggunaan media dari segi waktu (Efficiency of media use in terms of time)	6	100%	Sangat Valid (Highly Valid)
	Efektivitas untuk mengatasi alat peraga (Effectiveness for coping with props)	7		
	Kemudahan pengoperasian (Usability) (Ease of operation)	8		

Table 2. (*continued*)

Aspek (Aspect)	Indikator (Indicator)	No Butir (Item Number)	Rata-Rata Persentase (Average Percentage)	Kriteria (Criterion)
	Dapat dijalankan beberapa perangkat lain (Compatability) (Can be run by multiple other devices)	9		
	Interaktif tidaknya dengan pembelajaran (Whether or not it's interactive with learning)	10		
Desain (Design)	Tampilan media Mentimeter cukup detail (Mentimeter media display is quite detailed)	11	100%	Sangat Valid (Highly Valid)
	Komposisi warna tampilan media Mentimeter menarik (Mentimeter media display color composition is interesting)	12		
	Keseimbangan (ukuran tampilan Mentimeter yang disajikan) (Balance (Mentimeter display size presented)	13		
	User Interface (UI) yang mudah dipahami pengguna (User Interface that is easy for users to understand)	14		

Table 2. (*continued*)

Aspek (Aspect)	Indikator (Indicator)	No Butir (Item Number)	Rata-Rata Persentase (Average Percentage)	Kriteria (Criterion)
	Kesederhanaan (rapi, teratur, dan tidak tercampur dengan bahan yang tidak perlu). (Simplicity (neat, organized and not mixed with unnecessary ingredients)).	15		

4.4.2   Validation Results from Material Experts

The material expert validators in this study are teachers who teach at SMP Muhammadiyah 2 Karanganyar. Based on the results of the assessment that has been carried out, it shows that teachers approve the use of mentimeter media as interactive media with an income of "Very Valid" criteria with an average of 100%. In this regard, the use of mentimeter can be applied in poetry learning. The data from the validation of material experts can be seen in Table 3.

4.4.3   Product Trial Results on Students

A total of 26 students from SMP Muhammadiyah 2 Karanganyar have been tested by presenting poetry material using mentimeter media as a learning tool in classroom learning. In this section, the results of research that has been carried out at SMP Muhammadiyah 2 Karanganyar are presented. These results show that the students of class VIII B of SMP Muhammadiyah 2 Karanganyar are enthusiastic about the mentimeter media used in learning poetry texts. In addition to showing enthusiasm in learning, students are able to understand the material provided by the teacher well through mentimeter media. This is evident from the results or poems created by students. This shows that learning using mentimeter media is indeed needed to motivate students to always be enthusiastic about learning. Thus, it can be said that mentimeter is effective and successful in its use as a learning media.

Based on the knowledge that has been conveyed by educators, students are then asked to visit the LKPD link that has been given to answer questions related to poetry material. In contrast to giving quizzes which are generally monotonous and uninteresting, in the use of interactive media, the quiz given is more interesting and has questions that are easy to understand so that the average student is able to answer well and correctly (Fig. 4).

Based on the use of mentimeter media in learning, it shows that mentimeter media is an interactive media and can provide formative assessments so that students can

Table 3. Table of Validation Results by Material Experts

Aspek (Aspect)	Indikator (Indicator)	No. Butir (Item Number)	Rata-Rata Persentase (Average Precentage)	Kriteria (Criterion)
Kualitas Isi/ Materi (Content Quality)	Ketelitian materi (Thoroughness of the material)	1	100%	Sangat Valid (Highly Valid)
	Ketepatan materi (Accuracy of the material)	2		
	Keteraturan dalam penyajian (Regularity in presentation)	3		
	Ketepatan dalam tingkatan detail materi (Accuracy in the level of detail of the material)	4		
Tujuan Pembelajaran (Learning Goal Aligment)	Sesuai dengan tujuan pembelajaran (According to the learning objectives)	5	100%	Sangat Valid (Highly Valid)
	Sesuai dengan aktivitas pembelajaran (In accordance with learning activities)	6		
	Sesuai dengan penilaian dalam pembelajaran (According to the assessment in learning)	7		

(continued)

contribute directly by providing the results of understanding that have been obtained [40]. Here students are asked to think creatively to make learning outcomes based on the material and information obtained along with other knowledge they gained during school or out-of-school knowledge [41]. The data obtained by the mentimeter will be

Table 3. (*continued*)

Aspek (Aspect)	Indikator (Indicator)	No. Butir (Item Number)	Rata-Rata Persentase (Average Precentage)	Kriteria (Criterion)
Umpan Balik dan Adaptasi (Feedback and Adaptation)	Konten adaptasi dapat dijalankan oleh siswa dalam menggantikan media (Adapted content can be run by students in replacing media)	8	100%	Sangat Valid (Highly Valid)
	Konten umpan balik dapat dipahami oleh siswa dengan karakteristik yang berbeda (Feedback content can be understood by students with different characteristics)	9		
Motivasi (Motivation)	Kemampuan memotivasi dan menarik perhatian siswa (Ability to motivate and attract students' attention)	10	100%	Sangat Valid (Highly Valid)

stored anonymously for analysis so that all learners can express their poems without being affected by the presence of others in the class [42].

Based on this description, students have been considered able to understand the poetry material given by making poems related to the topic of mothers. The poems that have been made by students in general have been in accordance with the procedure for making poems and in accordance with the material provided. Students in making poems have been able to express their views widely so that the poems made are various. The making of the poem is confidential or only the learners themselves and the educator knows it without worrying about other learners.
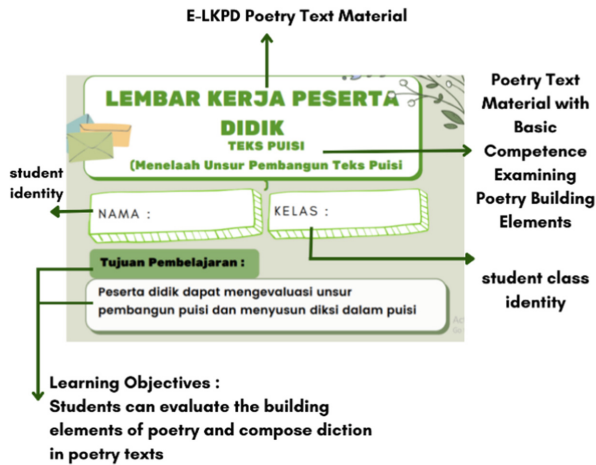
Fig. 4. Display Link E-LKPD Poetry Text

4.5 Benefits and Obstacles Faced when Applying Mentimeter Interactive Learning Media

The benefit of mentimeter is that it provides an effect of student interest during the learning process as a supporting medium in data collection, media expressing opinions, and media for making interactive questions. Applying presentation software-based learning media to the mentimeter application can be used to explain the subject matter in online form. The results of the study have reported that interactive multimedia that has been developed can increase students' understanding and activeness in learning and have a positive impact if used as an interactive learning medium.

The benefits of using Mentimeter media in learning will be more interactive for students so that the learning material can be conveyed properly. Apart from being in the form of quizzes, mentimeter media can also be used as a means of more interesting presentations so as to increase students' understanding of the material being taught. In this case, the teacher has prepared learning materials that have been packaged in the form of powerpoints and use the Mentimeter feature. The material is made as attractive as possible so that students are enthusiastic about learning. If there is material that is not understood, students can ask questions on the portal, Whatsapp group, or personally to the teacher. The features available in the portal are very helpful for students, especially with increasingly flexible online learning policies. Many conveniences are provided from these mentimeter features so that the teaching and learning process takes place properly and effectively. Mentimeter is very effective to use. This media is already accessible for free by teachers and students. The teacher only needs to follow how to operate. Its existing features are very helpful. If the teacher wants to hold a quiz, just look for the quiz menu. So, mentimeter media is very effectively used for online learning. Learning that applies mentimeter media allows educators and students to share knowledge, feedback at any time in the form of presentations or exchange of opinions, and other group activities, especially on poetry practice learning. In addition to the attractive background and backsound of the application, it is very easy to access so that only a smartphone can

use it anywhere and anytime. Another advantage of this media, which is that it will not consume the device's memory because the mentimeter application is based online. So, the device will be saved in those online applications [43].

In addition to the advantages and conveniences provided in the use of mentimeter as an interactive learning medium, of course, there are also factors that hinder its use. The obstacles or obstacles faced in interactive learning in grade VIII students of SMP Muhammadiyah 2 Karanganyar, namely the inability of students to bring communication devices to school. This can be understood because junior high school students are not allowed to bring communication devices, such as cellphones in the school environment. This is done to prevent the split of student concentration in participating in learning. If students are allowed to bring cellphones then they tend to focus on their gadgets rather than focusing on lessons they find boring.

These obstacles hinder the learning process by using mentimeter as a learning medium because as is known, mentimeter is a learning media that basically uses a cellphone. This is certainly something that hinders the process of applying learning methods with mentimeter. Even though technology in learning at this time plays an important role in the learning and teaching process with mentimeter media. In addition to students, another inhibiting factor from the teacher's aspect is the presence of different learning systems when using mentimeters. Teachers are used to teaching face-to-face and hands-on practice in front of the class. However, due to the pandemic, teachers must be faced with the situation of teaching online. In online learning situations, teachers cannot ensure that students learn optimally in their respective homes. However, with the mentimeter, teachers can still monitor their students during learning practices, as well as practice in front of the class.

Researchers in this study have succeeded in obtaining permission from the school so that students are allowed to bring gadgets/cellphones. This is done to support the research process that is being carried out by researchers at SMP Muhammadiyah 2 Karanganyar. This is important to do because gadgets/cellphones are an obstacle. In addition, it can be said that mentimeter for this learning media is not suitable for students who are still in junior high school with rules that do not allow students to bring gadgets / cellphones.

5   Conclusion

Learning media has an important role for the continuity of teaching and learning activities. Interactive media is one of the media that can support learning activities, in this case learning poetry text material. The use of digital-based learning media which is then realized in the form of interactive presentation media is one of the steps that educators can choose. The research that has been carried out has produced several conclusions. The conclusions of the results of this study include: (1) Teachers can prepare learning materials using interactive media. In the learning process, learners give an open view on the use of mentimeters. The elaboration and delivery by educators that is done well and carefully along with the presentation of interesting material shows a positive response from students; (2) The implementation of mentimeter interactive media-based poetry text learning can be used offline or online. Learners showed a good response to the use of mentimeter even though in this study mentimeter was only used once during the

research process. With the implementation of the mentimeter application carried out in the classroom, students have been considered able to understand the material provided; (3) The results of the validity of the use of mentimeter can be found a great foresight for the use of mentimeter as a learning medium in an educational environment [44]. The poetry material presented to students is in accordance with the needs of students. This has been confirmed by the results of the validity test to the teacher as an expert. The accuracy and accuracy of the material are well tested by teachers in junior high schools so that it is stated that the use of technology-based learning media through the use of interactive educational media in learning poetry texts is well accepted and understood by students; (4) Mentimeter media is considered very effective in helping poetry learning for students in terms of their ability to make poems. Mentimeter allows learners to focus on the classes attended and provides motivation for them [45] so as to facilitate learning and create happiness in learning sessions. The use of interactive media is very enthusiastic from all students so that they are very enthusiastic in trying to understand the poetry material provided by educators. The use of interactive media is an alternative way for students to be able to express themselves widely in making poetry. In addition, mentimeter also manages to become a very attractive means for students so that the atmosphere in the classroom becomes more conducive and fun. In other words, this mentimeter media gets positive feedback between learners and educators.

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References

1. A. Roni Hamdani and A. Priatna, "Efektifitas Implementasi Pembelajaran Daring (Full Online) Dimasa Pandemi Covid- 19 pada Jenjang Sekolah Dasar di Kabupaten Subang," *Didakt. J. Ilm. PGSD STKIP Subang*, vol. 6, no. 1, pp. 1–9, 2020, doi: https://doi.org/10.36989/didaktik.v6i1.120.

2. F. N. Khusna, D. Fitriana, N. N. Amalia, F. P. Rahmawati, and R. D. Utami, "Ladies Program: Media Komunikasi Pembelajaran dan Budaya Belajar Antara Orang Tua dan Guru di Sekolah,"

Bul. Literasi Budaya Sekol., vol. 3, no. 1, pp. 77–85, 2021, doi: https://doi.org/10.23917/blbs.v3i1.14161.

3. M. N. Afifudin, M. A. L. Khoiruddin, and M. A. Hamid, "Perbandingan Minat Siswa terhadap Mata Pelajaran Agama dengan Mata Pelajaran Umum di SMP Al Islam Kartasura," *Bul. Pengemb. Perangkat Pembelajaran*, vol. 2, no. 1, pp. 20–24, 2020.

4. J. I. Pichardo *et al.*, "Students and teachers using mentimeter: Technological Innovation to Face The Challenges of The Covid-19 Pandemic and Post-Pandemic in Higher Education," *Educ. Sci.*, vol. 11, no. 11, 2021, doi: https://doi.org/10.3390/educsci11110667.

5. A. Sutopo *et al.*, "Penguatan Sektor Ekonomi dan Pendidikan Karakter Siswa pada Era Pandemi," *Bul. KKN Pendidik.*, vol. 3, no. 2, pp. 175–183, 2021, doi: https://doi.org/10.23917/bkkndik.v3i2.15656.

6. F. R. Octaviani, A. T. Murniasih, D. K. Dewi, and L. Agustina, "Apersepsi Berbasis Lingkungan Sekitar sebagai Pemusatan Fokus Pembelajaran Biologi Selama Pembelajaran Daring," *Bul. Pengemb. Perangkat Pembelajaran*, vol. 2, no. 2, pp. 8–17, 2020.

7. S. Ningsih, "Persepsi Mahasiswa terhadap Pembelajaran Daring pada Masa Pandemi Covid-19," *JINOTEP (Jurnal Inov. dan Teknol. Pembelajaran) Kaji. dan Ris. Dalam Teknol. Pembelajaran*, vol. 7, no. 2, pp. 124–132, 2020, doi: https://doi.org/10.17977/um031v7i22020p124.

8. L. Prihastuti, S. Fitriyani, F. H. Romadhon, D. R. Pratiwi, and H. J. Prayitno, "Pembelajaran Kreatif Guna Meningkatkan Minat Belajar Siswa pada Masa Pandemi Covid-19," *J. Ilm. Kampus Mengajar*, vol. 1, no. 1, pp. 21–30, 2021, doi: https://doi.org/10.56972/jikm.v1i1.3.

9. M. Huda, "Blended Learning: Improvisasi dalam Pembelajaran Menulis Pengalaman," *Lensa Kaji. Kebahasaan, Kesusastraan, dan Budaya*, vol. 8, no. 2, pp. 117–130, 2020, doi: https://doi.org/10.26714/lensa.8.2.2018.117-130.

10. S. Rachmah and M. Huda, "Realisasi Pembelajaran dalam Jaringan pada Pelajaran Bahasa Indonesia di Sekolah Menengah Pertama," *J. Pendidik. Bhs. dan Sastra Indones. Undiksha*, vol. 11, no. 3, pp. 338–345, 2021, doi: https://doi.org/10.23887/jjpbs.v11i3.38003.

11. M. Huda, "Proses Kognitif dalam Legenda Jaka Tingkir," *Salingka Maj. Ilm. Bhs. dan Sastra*, vol. 17, no. 2, pp. 193–205, 2020, doi: https://doi.org/10.26499/salingka.v17i2.423.

12. A. Wilson, "Penerapan Metode Pembelajaran Daring (Online) melalui Aplikasi Berbasis Android saat Pandemi Global," *SAP (Susunan Artik. Pendidikan)*, vol. 5, no. 1, pp. 66–72, 2020, doi: https://doi.org/10.30998/sap.v5i1.6386.

13. V. C. Kuritza, D. P. Cibich, and K. A. Ahmad, "Interactive Presentation Digital Tool Mentimeter Perceived as Accessible and Beneficial for Exam Preparation by Medical Students," vol. 1, no. 2, pp. 63–67, 2020, doi: https://doi.org/10.25082/AERE.2020.02.002.

14. G. Farell, Ambiyar, W. Simatupang, M. Giatman, and Syahril, "Analisis Efektivitas Pembelajaran Daring pada SMK dengan Metode Asynchronous dan Synchronous," *Edukatif J. Ilmu Pendidik.*, vol. 3, no. 4, pp. 1185–1190, 2021, doi: https://doi.org/10.31004/edukatif.v3i4.521.

15. U. Manshur and H. Rosdiana, "Efektifitas Media Mentimeter dalam Meningkatkan Pemahaman Materi Bahasa Arab Era Pandemi Covid-19 di MI Al-Huda Pengastulan Seririt Bali," vol. 04, no. 02, pp. 180–197, 2021.

16. C. Little, "Technological Review: Mentimeter Smartphone Student Response System," *Compass J. Learn. Teach.*, vol. 9, no. 13, 2016.

17. A. R. Trees and M. H. Jackson, "The Learning Environment in Clicker Classrooms: Student Processes of Learning and Involvement in Large University-Level Courses Using Student Response Systems," *Learn. Media Technol.*, vol. 32, no. 1, pp. 21–40, 2007, doi: https://doi.org/10.1080/17439880601141179.

18. A. B. P. Sari, "The Impacts of Mentimeter-Based Activities on EFL Students' Engagement in Indonesia," *LLT J. A J. Lang. Lang. Teach.*, vol. 24, no. 1, 2021, doi: https://https://doi.org/10.24071/llt.v24i1.3025.

19. M. Huda, S. A. Ghazali, W. Siswanto, and M. Hasanah, "Cognitive Level of Characters in the Indonesian Novel As a Source of Learning," *J. Educ. Gift. Young Sci.*, vol. 7, no. 4, pp. 931–952, 2019, doi: https://doi.org/10.17478/jegys.623308.

20. T. Tafonao, "Peranan Media Pembelajaran dalam Meningkatkan Minat Belajar Mahasiswa," *J. Komun. Pendidik.*, vol. 2, no. 2, pp. 103–114, 2018, doi: https://doi.org/10.32585/jkp.v2i2.113.

21. C. W. Harris and S. Fu, "Journal of Applied Learning & Teaching," *Irish J. Psychol.*, vol. 1, no. 1, pp. 25–34, 2018.

22. B. Gokbulut, "The Effect of Mentimeter and Kahoot Applications on University Students' E-learning," *World J. Educ. Technol. Curr. Issues*, vol. 12, no. 2, pp. 107–116, 2020, doi: https://doi.org/10.18844/wjet.v12i2.4814.

23. P. A. C. Dinata, Sakman, and Syarpin, "Pelatihan Blended Learning Berbantuan Webex Meeting dan Mentimeter untuk Mengefektifkan Kegiatan Belajar Mengajar," *Bubungan Tinggi J. Pengabdi. Masy.*, vol. 2, no. 2, pp. 64–72, 2020, doi: https://doi.org/10.20527/btjpm.v2i2.2146.

24. S. S. M. Shokri, S. Salihan, and M. H. A. Hamid, "Inovasi Digital dalam Pengajaran & Pembelajaran Program Tahfiz di Universiti Tenaga Nasional (UNITEN)," *al-Irsyad J. …*, vol. 6, no. 1, pp. 495–507, 2021, doi: https://doi.org/10.53840/alirsyad.v6i1.137.

25. E. Mayhew, M. Davies, A. Millmore, L. Thompson, and A. P. Bizama, "The Impact of Audience Response Platform Mentimeter on the Student and Staff Learning Experience," *Res. Learn. Technol.*, vol. 28, 2020, doi: https://doi.org/10.25304/RLT.V28.2397.

26. A. Zahro, "Perbandingan Ekokritik Pada Puisi 'Pesan Dari Situ' Karya Muhammad Bintang Yanita Putra dengan Cerpen 'Situ Gintung' Karya Putu Wijaya (Kajian Sastra Bandingan)," *CaLLs*, vol. 7, no. 1, pp. 67–78, 2021, doi: https://doi.org/10.30872/calls.v7i1.5126.

27. N. Fisari and Y. Wulandari, "Sosok Ibu dalam Puisi Bunda Airmata Karya M.H. Ainun Najib dan Puisi Ibu Karya Widji Tukul: Suatu Kajian Sastra Bandingan," *J. Genre (Bahasa, Sastra, dan Pembelajarannya)*, vol. 2, no. 1, pp. 36–41, 2020, doi: https://doi.org/10.26555/jg.v2i1.2558.

28. S. Damayanti, "Perempuan dalam Puisi Cinta Shuntaro Tanikawa dan W.S. Rendra: Sebuah Kajian Sastra Bandingan," *J. Trit. Pendidik.*, vol. 1, no. 1, p. 19, 2016, doi: https://doi.org/10.30862/jtp.v1i1.791.

29. L. Kunzwa and S. Patel, "Using Mentimeter to Enhance Learning and Teaching in A Large Class," vol. 9, no. 2, pp. 48–57, 2022, doi: https://doi.org/10.15739/IJEPRR.22.005.

30. A. Puspa and D. Imamyartha, "Experiences of social science students through online application of Mentimeter in English Milieu," *IOP Conf. Ser. Earth Environ. Sci.*, vol. 243, no. 1, 2019, doi: https://doi.org/10.1088/1755-1315/243/1/012063.

31. V. S. Andrini and H. Pratama, "Implementasi Quiz Interaktif dengan Software Mentimeter dalam Meningkatkan Hasil Belajar," *Mimb. Ilmu*, vol. 26, no. 2, 2021, doi: https://doi.org/10.23887/mi.v26i2.36923.

32. N. W. Wardani and I. G. Andika, "Pelatihan Mengaktifkan Pembelajaran Daring dengan Memanfaatkan Aplikasi Mentimeter, Whatsapp dan Pembuatan Video Pembelajaran untuk Inovasi Mengajar dengan Keterbatasan Bandwidth Internet," *JURPIKAT (Jurnal Pengabdi. Kpd. Masyarakat)*, vol. 2, no. 2, pp. 342–352, 2021, doi: https://doi.org/10.37339/jurpikat.v2i2.607.

33. M. Irfan and Ariandi, "Analisis Penggunaan Aplikasi Daring oleh Dosen Program Studi Pendidikan Biologi Universitas Sulawesi Barat selama Pandemi Covid-19," *J. Ilmu Pendidik. STKIP Kusuma Negara*, vol. 12, no. 2, 2021, doi: https://doi.org/10.37640/jip.v12i2.866.

34. M. D. Saputra, "Pembelajaran Ekonomi pada Masa Pandemi Covid-19," *J. Pendidik. Ekon.*, vol. 10, no. 1, pp. 61–69, 2022, doi: https://doi.org/10.26740/jupe.v10n1.p61-69.

35. D. R. Zulfa and N. Huda, "Efektivitas Media Mentimeter Pada Pemahaman Materi Bahasa Arab Era Pandemi Covid-19," *Alibbaa' J. Pendidik. Bhs. Arab*, vol. 2, no. 1, 2021, doi: https://doi.org/10.19105/alb.v2i1.4142.

36. B. L. Moorhouse and L. Kohnke, "Using Mentimeter to Elicit Student Responses in the EAP/ESP Classroom," *RELC J.*, vol. 51, no. 1, 2020, doi: https://doi.org/10.1177/0033688219890350.

37. N. N. Mirayani, I. Y. Nyoman, and I. S. Nyoman, "Efektivitas Mentimeter sebagai Media Pembelajaran Interaktif diKelas X IBB 1 SMAN 1 Kintamani," *J. Penelit. Mhs. Indones.*, vol. 2, no. 2, 2022.

38. Herlawati, F. N. Khasanah, and R. Sari, "Pelatihan Mentimeter sebagai Media Interaksi dalam Pembelajaran Daring pada SMAN 14 Bekasi," *J. Comput. Sci. Contrib.*, vol. 1, no. 1, pp. 42–52, 2021, doi: https://doi.org/10.31599/jucosco.v1i1.1557.

39. S. Mahmashony, "Optimization of Aqidah Teaching with Google Classroom and Interactive Mentimeter in Pharmacy Study Program FMIPA UII," vol. 2, no. 1, pp. 1–8, 2018.

40. S. Musliha and P. Purnawarman, "Using Mentimeter for Eliciting the Students' Responses in Formative Assessment Practice," 2020, doi: https://doi.org/10.2991/assehr.k.201214.255.

41. A. Andriani, I. Dewi, and P. N. Sagala, "Needs Analysis of Blended Learning Media to Improve Students Mathematical Creative Thinking Skills of Mathematics Student by Using the Mentimeter Application," 2018, doi: https://doi.org/10.4108/eai.18-10-2018.2287401.

42. M. Stanciu, "The Lesson of Literature and Ict. The Mentimeter Application," *Rev. Pedagog. - J. Pedagog.*, pp. 139–160, 2019, doi: https://doi.org/10.26755/revped/2019.1/139.

43. S. Sunarti, "Peningkatan Kompetensi Widyaiswara dalam Mengembangkan Presentasi Interaktif Online dengan Aplikasi Mentimeter di Balai Diklat Keagamaan Palembang," *J. Perspekt.*, vol. 14, no. 2, pp. 283–296, 2021, doi: https://doi.org/10.53746/perspektif.v14i2.57.

44. K. S. A. Vallely and P. Gibson, "Engaging students on their devices with Mentimeter," *Compass J. Learn. Teach.*, vol. 11, no. 2, 2018, doi: https://doi.org/10.21100/compass.v11i2.843.

45. C. Demirci, H. Duraklı, and A. Güdücü, "The Use of Audience Response System in English Teaching: The Example of Mentimeter," *Eur. J. Educ. Stud.*, vol. 8, no. 12, pp. 432–446, 2021, doi: https://doi.org/10.46827/ejes.v8i12.4083.