



Analysis of Students' Learning Interest Using E-LKPD Based on Liveworksheet Class VIII Junior High School

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Abstract

The advancements in science and technology in the 21st century have introduced new challenges in the educational landscape, specifically for teachers during the instructional process. Teachers are expected to provide learning experiences that can attract students' interest in learning. This study aims to describe the learning interest of VIII grade students in science learning media assisted by E-LKPD based on liveworksheet. This type of research is descriptive quantitative. The research sample used was class VIII junior high school students consisting of 20 students taken randomly. The instrument used is a non-test questionnaire of students' interest in learning which consists of 20 statements. The utilized methodology for data analysis involves quantitative descriptive analysis, a technique that provides a detailed summary of the data without running statistical inferences. The results of the analysis of students' learning interest using liveworksheet-based E-LKPD learning media on plant structure and function material based on five indicators of students' learning interest obtained an average of 81.12% with a very good category. The results showed that the response of learning interest of class VIII students on the material of plant structure and function assisted by science learning media assisted by E-LKPD based on liveworksheet received a positive response from students and could increase students' learning interest. The findings of this research are intended to serve as a valuable resource and supplementary learning tool for educators in facilitating interactive learning experiences.

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INTRODUCTION

Education is a very valuable investment in the formation of quality human resources. Ki Hadjar Dewantara gave importance to education, with the main objective being to train students in aspects of intelligence, emotion, and willpower to increase brain intelligence, improve thinking skills, and maintain physical health. (Wijayanti & Listiyani, 2019). This is due to the understanding that education is not only about mastering knowledge, but also about developing individual character and abilities holistically (Sanjaya et al., 2021; Suriansyah et al., 2021). In this context, education aims to create generations who are able to think critically, have empathy, have social skills, and have independence to achieve a better life. Therefore, education has a crucial role in shaping individuals who have potential, contribute positively to society, and are able to face future challenges with confidence and courage.

The implementation of science learning in schools cannot be separated from the nature of science itself (Prihatni et al., 2017). This is due to the importance of understanding the essence and purpose of science and technology (Abdurakhmonova et al., 2021; Rozin, 2021; Urmonalievich, 2021). This aims to develop students' deep understanding of natural phenomena and the technology around them, as well as to develop critical, creative, communicative and active thinking skills (Ismailova et al., 2021; Mikhailova et al., 2021). Science learning teaches to understand oneself and the surrounding environment so that it can be applied in everyday life. Learners are required to have an active, creative, critical, and communicative attitude in 21st century science learning. (Gusti & Ratnawulan, 2020). The advancements in science and technology in the 21st century pose new and unique challenges in the realm of education (Wakano et al., 2022).

Based on the findings of the study, it was observed that educators predominantly

utilize conventional textbooks as their main instructional resources, exhibiting minimal incorporation of technology, particularly digital media. Consequently, students tend to remain passive and only engage with the assigned questions. This aligns with previous research conducted by Wiguna et al (2016), which highlighted the low level of student engagement and inquisitiveness during assignments. So that the learning process becomes less interesting and students' interest in the learning process decreases. The results of these observations and interviews are in line with research conducted by Apriadi et al (2020) that learning is monotonous because most teachers still rely on practice questions and textbooks that make students less interested which causes low student interest in learning. According to a study conducted by Sari et al (2020) , it is crucial for the learning media to capture students' interest and be technology-oriented. However, the current situation in educational institutions reveals a noticeable deficiency in the integration of technology during learning processes, both among educators and students. There remains a considerable gap between the ideal learning process, which should be conducted effectively, efficiently, and with great interest, and the current state of affairs. Teachers are expected to design engaging and inventive instructional materials, such as interactive learning media, to enhance student learning experiences (Faradila & Aimah, 2018).

Efforts can be made to overcome these problems by using a digital teaching material that can attract students' interest in learning, such as the use of liveworksheet-based E-LKPD that utilizes technological advances that can be used in the learning process (Luh et al., 2022). The utilization of liveworksheet-based E-LKPD, incorporating technology, enhances students' engagement and motivation in the learning process. (Ladamay et al., 2021; Pham & Da Tran, 2021). Thus, it can create interactive and fun learning activities (Saputra et al., 2021; Sartono et al., 2022; Tisza & Markopoulos, 2023). The use of E-LKPD can be accessed freely and easily

through electronic devices such as smartphones and PCs/laptops (AlSudairy, 2022; Yanbastieva-Petrova, 2023). One of the technological advances that has developed in the field of education is the development of interactive learning media (Zafrullah & Zetriuslita, 2021). By utilizing technology, teachers can interact with students in the classroom and outside the classroom. The quality and effectiveness of the learning process are influenced by various factors that play a crucial role in shaping its outcomes (Saraswati & Mertayasa, 2020). One of these factors is the quality of learning tools used by teachers and students. Learning tools are all materials, equipment, media, tools, instructions and guidelines used in learning activities (Andarwulan et al., 2021; Liono et al., 2021). Based on research results Sele (2022) that liveworksheet can increase students' interest in learning. Furthermore, according to Arianty (2020) that the application of LKPD assisted by live worksheets can increase students' activeness and interest in learning. Liveworksheet can be run online, making it easier for students to access tasks given by the teacher easily and flexibly (Agustina & Cahyono, 2023; Avalos Valverde, 2022; Prabjandee, 2023).

Hence, the objective of this research is to elucidate the students' interest in science learning media supported by E-LKPD based on liveworksheet at the eighth-grade level. The findings of this research are anticipated to serve as a valuable resource or supplementary learning material for educators during interactive instructional sessions.

METHODS

This research method is descriptive quantitative. The purpose of this study is to describe the response of students' interest in learning to the use of science learning media assisted by LKPD based on liveworksheet of plant structure and function material in class VIII junior high school students. The response of students' interest in learning is obtained from the questionnaire data on the response of

students' interest in learning which is then converted into quantitative data. The subjects in this study were 20 students of class VIII junior high school who were taken randomly.

This research employed a non-test instrument, specifically a survey in the form of a questionnaire to assess students' interest in learning. The instrument in the form of a learning interest response questionnaire is constructed based on indicators of learning interest according to the theoretical study to make the items of the student interest questionnaire statement with five indicators that the researcher has modified, namely feelings of pleasure, interest in activities, participation in activities, meaningfulness of activities, and concentration of activities (Alfurqon, 2017). Before the research, the researcher validated the liveworksheet-based LKPD to get suitable and valid learning media with the learning process. Validation was carried out to material experts and media experts, namely science education lecturers and 2 junior high school teachers each. After the validation of the liveworksheet-based LKPD has been corrected according to the suggestions and input from the expert and declared valid, then it will be given to students.

After the liveworksheet-based LKPD was given to students, researchers also distributed questionnaires using google form with 20 questions. Researchers made each criterion into 4 of the 5 indicators of student interest in learning statements with 15 positive statements and 5 negative statements. Researchers used the Likert scale by Widoyoko (2017) to determine the scale contained in the questionnaire, namely strongly disagree (1), disagree (2), agree (3), and strongly agree (4). For negative statements used the opposite of the positive statement assessment score.

The data analysis technique used is descriptive quantitative, namely by using Microsoft Excel as a tool in processing data. Data processing will be done by calculating the total percentage of each indicator. After obtaining the results of data analysis, then the

questionnaire will indicate the interest in learning as in table 1.

Table 1. Criteria for Assessment of Learning Interest Questionnaire

No	Interval	Criteria
1	81-100	Very Good
2	61-80	Good
3	41-60	Simply
4	21-40	Less
5	0-20	Less Than Once

Source: Modification (Arikunto, 2010)

RESULTS AND DISCUSSION

Results

The research was conducted with 4 meetings in the classroom, where students who used liveworksheet-based E-LKPD in the learning process were guided by researchers using smartphones. The appearance of the liveworksheet-based E-LKPD learning media used is in Figure 1 and Figure 2 can be accessed through the following link: <https://www.liveworksheets.com/zz3408583jf>



Figure 1. First Look **Figure 2.** Second Look

After using liveworksheet-based E-LKPD learning media on plant structure and function material. Moreover, students are required to complete a survey on their interest in learning, comprising five distinct indicators, namely feelings of pleasure, interest in activities, participation in activities,

meaningfulness of activities, and concentration of activities. Each indicator contains 4 statements consisting of 15 positive statements and 5 negative statements distributed using google form. To make it easier for researchers to collect data, researchers created a WhatsApp Group (WAG) and then shared the WAG link with 20 students, after students joined the WAG, the researchers shared how to fill out the questionnaire and the google form link containing the questionnaire of students' interest. The research results per indicator are described as follows:

The results of students' responses to the indicator of feeling happy

The results of the percentage of students' responses to the indicator of feeling happy are presented in Figure 3.

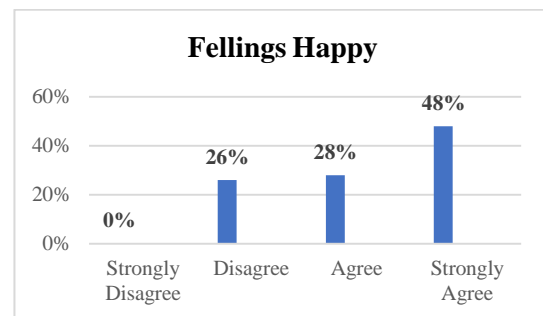


Figure 3. Percentage of Learner Response Indicators of Feeling Happy

Based on the data presented in Figure 3, approximately 48% of students strongly agreed that they felt happy based on the given indicator, on an agree scale of 28%, on a disagree scale of 26% and on a strongly disagree scale of 0%.

The results of students' response to the indicator of interest in the activity

Figure 4 displays the data on students' interest in the activity, represented as a percentage.

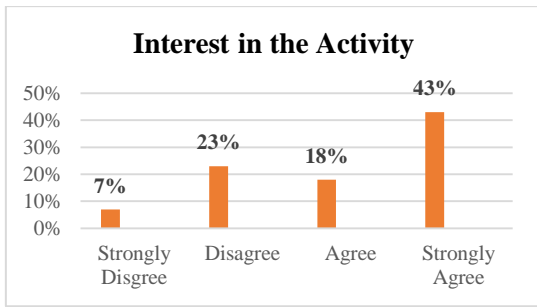


Figure 4. Percentage of Learner Response Indicator of Interest in Activities

Based on the data presented in Figure 4, the analysis shows that 43% of students strongly agreed, 18% agreed, 23% disagreed, and 7% strongly disagreed with the indicator related to their interest in activities.

Results of learner responses to indicators of participation in activities

The findings regarding the students' engagement levels in various activities are depicted in Figure 5, illustrating the percentage distribution of their responses to the respective indicators.

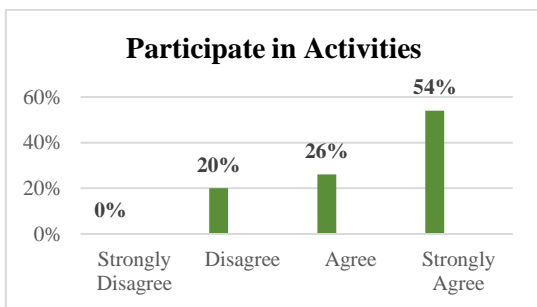


Figure 5. Percentage of Learner Response Indicators for Participation in Activities

Based on the data presented in Figure 5, a significant majority of learners expressed strong agreement 54% and agreement 26% in terms of their participation in activities, while a smaller percentage disagreed 20% and none strongly disagreed 0%.

Results of students' responses to indicators of activity meaningfulness

The findings regarding the indicator of the meaningfulness of students' engagement in the activities are graphically represented in Figure 6.

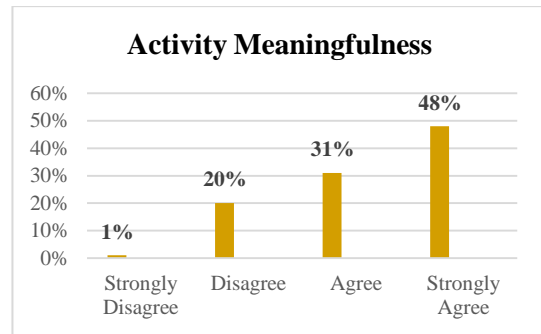


Figure 6. Percentage of Learner Response Indicators of Meaningfulness Activities

Based on the data presented in Figure 5, a significant majority of students expressed strong agreement and agreement with the meaningfulness of activities, comprising 79% of the total responses. Only a small percentage disagreed or strongly disagreed, indicating a positive perception of the activities among the students.

Learner response results for activity centering indicator

The findings regarding the activity concentration indicator are illustrated in Figure 7, displaying the students' response percentages.

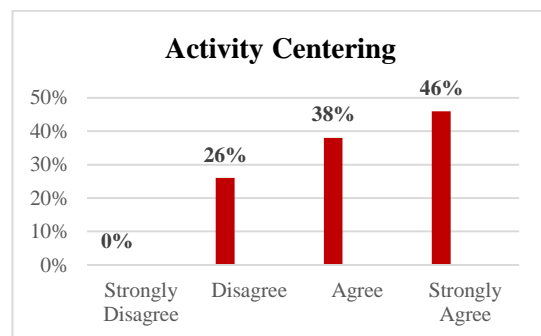


Figure 7. Percentage of Learner Response to Activity Centering Indicator

From Figure 5, it can be seen that the percentage of students' responses to the activity concentration indicator on a strongly agree scale obtained a percentage of 46%, on an agree scale of 38%, on a disagree scale of 26% and on a strongly disagree scale of 0%.

The researchers aggregated the findings from the five indicators of students' interest in learning and calculated the average percentage

based on the questionnaire responses, as presented in Table 2.

Table 2. Summary of Results of Analysis of Learners' Learning Interest 5 Indicators

Indicator	Percentage	Category
Feelings Happy	80.00	Good
Interest in the Activity	73.44	Good
Participate in Activities	83.44	Very Good
Activity Meaningfulness	81.25	Very Good
Activity Centering	82.50	Very Good
Average	81.12	Very Good

Based on the research findings, the data analysis reveals favorable results in various indicators of students' interest in learning. The indicator of pleasure demonstrates a significant percentage of 80.00% in the good category, followed by the indicators of interest in activities, participation in activities, meaningfulness of activities, and activity concentration, which all fall within the very good category with percentages of 73.44%, 83.44%, 81.25%, and 82.50% respectively. These findings indicate a positive response from students towards the implementation of liveworksheet-based E-LKPD. This research outcome highlights the effectiveness and benefits of using liveworksheet as a digital learning tool. The data analysis of students' learning interest using liveworksheet-based E-LKPD learning media for plant structure and function material revealed an average score of 81.12% in the very high category, based on the assessment criteria from the learning interest questionnaire.

Discussion

Students' interest in learning consists of five indicators, namely feelings of pleasure, interest in activities, participation in activities, meaningfulness of activities, and concentration of activities. Each indicator has a different response from students. After class VIII students do learning using liveworksheet-based E-LKPD learning media on plant structure and function material, students are asked to fill out a google form to see the response of students' learning interest after using liveworksheet-based E-LKPD. On the Google form, there are 20 statements

assessing students' interest in learning, including 15 positive statements and 5 negative statements, covering various indicators.

The assessment of students' interest in learning based on their level of happiness revealed a high level of agreement, with 48% strongly agreeing, 28% agreeing, and 26% disagreeing, while no students strongly disagreed with the statement. From the indicator of feeling happy, an average of 80.00% was obtained, so it can be concluded that learning using E-LKPD based on liveworksheet students feel happy and easier to understand learning material.

Indicators of students' interest in learning on the indicator of interest in activities produced on a strongly agree scale obtained a percentage of 43%, on an agree scale of 18%, on a disagree scale of 23% and on a strongly disagree scale of 7%. Based on the analysis of students' interest in activities, it can be inferred that the utilization of liveworksheet-based E-LKPD in learning has generated a notable average of 73.44%, indicating that students exhibit a keen interest and enthusiasm in engaging with the learning activities.

Indicators of students' interest in learning on the indicator of participating in activities resulted in a strongly agreed scale obtained a percentage of 54%, on an agreed scale of 26%, on a disagreed scale of 20% and on a strongly disagreed scale of 0%. From the indicator of participating in activities, an average of 83.44% was obtained, so it can be concluded that the liveworksheet-based E-LKPD provides opportunities for students to

actively participate in learning groups during the learning process.

Indicators of students' interest in learning on the indicator of the meaningfulness of activities produced on a strongly agree scale obtained a percentage of 48%, on an agree scale of 31%, on a disagree scale of 20% and on a strongly disagree scale of 1%. From the indicator of the meaningfulness of activities, an average of 81.25% is obtained, so it can be concluded that learning activities using liveworksheet based E-LKPDs provide meaning or meaning that is important for students' understanding.

Indicators of students' interest in learning on the indicator of activity concentration are generated on a strongly agree scale obtained a percentage of 46%, on an agree scale of 38%, on a disagree scale of 26% and on a strongly disagree scale of 0%. From the activity concentration indicator, an average of 82.50% was obtained, so it can be concluded that the liveworksheet-based E-LKPD can help students focus attention on important aspects of learning activities.

Based on the results of data analysis on each indicator of students' interest in learning, an average of 81.12% was produced in the very good category. Which shows the response of students' learning interest in the use of liveworksheet-based E-LKPD learning media has a positive impact on students. This is supported by the results of a study conducted by Yuliana (2017) which states that the use of LKPD has a positive impact on students and can increase students' interest in learning. This research is in line with Atmojo et al (2022) where the use of liveworksheet interactive LKPD in learning has a significant increase in students' interest in learning. The use of liveworksheet is an implementation of technology in the world of education as a support for interactive learning media (Fitriani et al., 2021). The use of liveworksheet-based LKPD is very interesting for students' learning interest because the features offered are quite diverse such as drop and drag, drop down, short answers, filling in descriptions and many other interesting features. In line with research

conducted by Zahroh & Yuliani (2021) that the liveworksheet platform has several advantages such as, E-LKPD can be accessed via pc/laptop or smartphone which is supported by visualization in the form of images and videos and answers from students can be sent automatically and can be checked immediately by the teacher. As a result, it facilitates teachers in delivering instructional content more effectively and contributes to enhancing students' enthusiasm for learning (Herawati et al., 2020).

The results of this study indicate that the use of liveworksheet-based E-LKPD learning media on plant structure and function material can attract students' interest in learning activities. In line with research Batubara et al (2021) which shows that the application of interactive learning media can attract students' interest in learning. During the learning process using liveworksheet-based E-LKPD learning media, students responded very well. This is supported by the results of a study conducted by Gunawan et al (2020) which shows that the use of E-LKPD has a very good impact on increasing students' learning activities and students' interest in learning. The utilization of E-LKPD learning media based on liveworksheet in education has the potential to yield positive outcomes, fostering a heightened enthusiasm and enhancing students' engagement in the learning process.

The discussion within the E-LKPD is meticulously designed with precision and captivating visual presentation, aiming to ignite the enthusiasm of the learners when working on it. It is crucial for students to feel interested and inspired when tackling the given exercises. Therefore, an appealing design and a well-structured arrangement of steps are of utmost importance. When students are captivated by an attractive visual display, they tend to exhibit greater enthusiasm in facing learning challenges. The systematic structure enables students to easily follow the presented steps for problem-solving within the E-LKPD. Consequently, there is a significant impact observed, namely an

increase in students' interest and motivation to learn. When students feel joy and fascination while working on the exercises, it sparks curiosity and a desire for further learning (Priyanda et al., 2021). Moreover, students' self-reliance in learning is stimulated as they are motivated to complete the tasks presented within the E-LKPD. Hence, the utilization of E-LKPD designed with captivating aesthetics and systematic presentation serves to enhance students' interest, motivation, and self-directed learning capabilities when approaching their educational journey.

CONCLUSION

The results showed that the response of learning interest of class VIII students on the material of the structure and function of plants assisted by science learning media assisted by E-LKPD based on liveworksheet received a positive response from students and could increase students' learning interest. This is evidenced by the average hasisl of each indicator of student interest in learning of 81.12% with a very good category.

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