

An Analysis in Using Learning Media to Increase Student Motivation of Learning Physics

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ABSTRACT

This study aims to determine the effect of using instructional mediaonline on the motivation of learning physics class XI MIPA SMAN 1 Sendang Agung. The type of research used is qualitative research with data collection instruments using questionnaires and interviews with teachers and students. The class sample taken was class IX MIPA two classes with a total of 30 students each. The results showed that the average level of learning motivation was included in the high criteria after using learning mediaonline that is, with a percentage of 80% compared to the use of printed learning media such as books and LKS modules, namely 40% in the low category. Research on the learning motivation of class XI MIPA students of SMAN 1 Sendang Agung shows that the average level of learning motivation is included in the high criteria. Many factors influence the contribution to the achievement of the average student score, one of which is learning motivation. Motivation to learn is very important in the learning process because the learning process requires active interaction and participation from students to succeed.

Keywords : *physics learning media; student motivation; learning physics*

INTRODUCTION

Current learning must follow the era of globalization 4.0 where students are required to be able to think critically, be innovative and produce millennial generations. However, there are still many students who feel less motivated in learning, such as in physical education. For some students, this is a subject that is not liked because it is felt that they do a lot of calculations and are not able to understand the symbols of the Physics formula. The fact is that the contribution of Physics in the development of science and technology is very large, so it is important to learn (Rohman, S., Rusilowati, A., & Sulhadi, 2017). Facilities that support the learning process from home are internet access and various technological tools that can be used to support learning. In this case, the government has helped the community through internet access. However, currently educators are still lacking in the use of learning

media, especially media that are classified as using technological tools. (Hamzah, Sekar, & Zulkarnain, 2019)

Judging from the research conducted by (Nopiyanto et al., that the results reached 81% of teachers who were hampered in the use of learning media. One of the factors for low learning is the lack of motivation to learn and support from friends around. Learning motivation arises due to intrinsic factors, namely the desire and desire to succeed as well as the encouragement of learning needs. The extrinsic factor is the recognition of a conducive, comfortable and interesting learning environment. Motivation to learn is essentially internal and external encouragement to students with supporting indicators. This kind of encouragement has a big role for one's success in learning (Fitria, 2021).

Researchers conducted pre-research at SMAN 1 Sendang Agung to find out students' learning motivation, especially in physics lessons and electromagnetic induction material. The learning motivation of class XI MIPA students of SMAN 1 Sendang Agung can be said to be still low. This is based on interviews that have been conducted with physics teachers. The low learning motivation of these students can be seen from the number of students who do not do their homework, even just copying homework from friends. Many students also lack enthusiasm in the learning process, shown through behavior that is not concentrating in class, such as sleepiness, not paying attention to the teacher when giving material explanations in class. In addition, there are still students who are engrossed in chatting when learning takes place. Furthermore, based on interviews with subject teachers, information was obtained that students' learning motivation looked very low when on electromagnetic induction material. Electromagnetic induction material is considered a difficult material and there are many variations of the formula that must be memorized and understood. Students find it difficult to understand this material and as a result they cannot work on questions related to this trigonometry material. So thus the author feels the need to identify what factors influence the learning motivation of students in class XI MIPA SMAN 1 Sendang Agung, especially in physics lessons (Surahmadi, SMP N 1 Temanggung, & Tengah, 2016).

One of the factors of low student learning motivation is seen from the results of interviews and observations that the use of learning media is monotonous. Based on the results of interviews with the physics teacher at SMAN 1 Sendang Agung, the inhibiting factors and the monotony of the learning media are due to the internet network and not being able to run the computer properly. Another reason that causes deficiencies in providing learning media from technological tools is because there are still many who cannot understand how to use these technological tools carefully. Learning media have their own characteristics according to their functions and needs. These characteristics can be divided into several types. The types of learning media are divided into four parts, namely: (1) audio media which is media in the form of sound presentation such as radio or voice recordings; (2) visual media is media related to the function of the eye such as describing various images related to the material; (3) audio-visual media is media that combines elements of sound and images in one unit such as

learning videos; (4) and multimedia is a medium that allows all human senses to be involved, such as a three-dimensional model. Of these types of media, the choice of using learning media must be adapted to the conditions and achievement of learning objectives. The purpose of the conditions in the selection of media is in accordance with the ongoing situation and in accordance with the abilities possessed by students. So that the media that is broadcast or submitted can process properly and correctly (Rohman & Karimah, 2018).

One way to generate student learning motivation is to use the media. Media in learning can generate new desires and interests, generate motivation and stimulate learning, as well as bring a psychological influence on students. Learning media can convey messages from sources in a planned manner, so that a conducive environment is formed where the recipient can carry out the learning process efficiently and effectively. The media used in learning functions as a bridge or media for transforming lessons towards the goals to be achieved (Puspitasari, Latifah, Wati, & Yana, 2018).

Field findings at SMAN 1 Sendang Agung as much as 40% of students still have learning difficulties, especially in Electromagnetic material because one of the reasons is that in this material there are many formulas and their application media is defined as a tool used to transmit messages or information from sender to receiver message. They also feel bored with the books that are always used for generations and even many parts of the books are torn, so learning is also less effective (Utami, Setiawan, Risdianto, & Viona, 2021). The use of media in learning activities can be defined as something that can convey information and knowledge in the interactions that take place between educators and students. Media in another sense is interpreted as an intermediary such as media is anything that can convey and channel messages from sources in a planned manner so as to create a conducive learning environment where recipients can carry out the learning process efficiently and effectively (Puspitasari, Herlina, & Suyatna, 2020). From the two definitions above, it can be understood that learning media is any tool that can be used as a channel for messages to obtain maximum learning outcomes. The goal to be achieved from this research is to determine the effect of the use of instructional media on the motivation to learn physics at SMAN 1 Sendang Agung.

METODE

The type of research used in this research is qualitative research because the data collection comes from the opinions of the intended subjects. The technique for collecting data used was interviews by giving questionnaires through the Google form. The intended questionnaire is divided into 2 objectives, namely a questionnaire for students and a questionnaire for educators. The intended target in giving questionnaires to students is at least 50 people, while for educators there are at least 3 people. If there are several additions to this amount, it can still be tolerated until the specified time limit. The method used in this research is descriptive analysis. Descriptive analysis research is a type of survey research that aims to increase students' motivation towards learning physics at SMAN 1 Sendang Agung.

The research instrument used a questionnaire which totaled 10 questions with calculations using a Likert scale with values (Strongly Agree), (Agree), (Disagree), (Disagree), While Observation is data collection by direct observation of the object being studied (Suharsimi.2016). An interview is a conversation conducted by two parties, namely the interviewer (interviewer) who asks questions and the interviewee (interviewee) who provides answers to the question, that interview is a meeting of two people to exchange information and ideas through debriefing, so that meaning can be constructed in a certain topic. This technique is used in collecting data in this qualitative research by interviewing and direct observation of the object being addressed (Sudjana, 2016). Descriptive analysis of percentages is used to describe the research phenomenon, namely the use of learning media on the motivation to learn physics in class XI MIPA 1 SMAN 1 Sendang Agung.

RESULTS AND DISCUSSION

Based on the results of the analysis, the level of learning motivation of class XI MIPA students of SMAN 1 Sendang Agung was obtained which is presented in the table below.

Table 1. Questionnaire results on the motivation to learn physics using online media

NO	Student Motivation Indicator	Persentase
1	Independent Learning	60%
2	Use of Online Learning Media	75%
3	Use of Print Learning Media	40%
4	Doing homework at home	60%
5	Teachers Provide Learning Motivation	80%
6	Active Students Ask in Class	67%
7	Students Seek Learning Resources from the Internet	72%
8	Motivated Students use Online Learning Media	80%

In this study using motivational questionnaires and interviews with several students of class XI MIPA 1 SMAN 1 Sendang Agung from the table above it can be seen that learning independence has a high presentation of 60%, The use of Online Learning Media reaches 75% can be stated High, The use of printed learning media has a percentage 40% belong to the low category, Doing homework at home an indicator of student curiosity reaches 60%, on the indicator teachers provide motivation to students reaching 80%, students actively ask questions with a percentage of 67%, students search for teaching resources on the internet with a percentage of 72%, on indicators Motivated Students use Online Learning Media and student learning motivation reaches 80% can be interpreted in the very high category. The value of this percentage indicates that there is an influence of motivation on student learning independence. Based on the table above it is known that the average level of learning motivation is included in the high criteria.

DISCUSSION

Based on table 1 it shows that the percentage of students' learning motivation reaches 80% can be stated in the high category, one of the factors for student success in learning is the use of various learning media, so as to get maximum learning results. Many factors influence the contribution to the achievement of the average student score, one of which is learning motivation. Motivation to learn is very important in the learning process because the learning process requires active interaction and participation from students to succeed. The level of learning motivation of class XI MIPA 1 SMA Titian Teras Muaro Jambi, is included in the moderate criteria indicating that the motivation within them to achieve is quite good. A small number of questionnaires and interviews show a very high level of independence.

Based on the results of interviews with several students of class XI MIPA SMAN 1 Sendang Agung, it was found that students felt bored in studying physics materials, especially material on vector analysis and circular motion. Students' boredom arises because there is no motivation by the teacher during the learning process. Facts were found in the field that there were still teachers who did not make use of the use of media in learning, especially in physics subjects. This statement is proven by the media used in the school consisting of blackboards, worksheets and textbooks. To overcome these problems, the authors analyze that the use of learning media can increase student motivation, especially in physics subjects. There are many factors that make low motivation to learn is the emotional factor of students who.

Some of the symptoms related to student behavior when experiencing emotional problems that can interfere with student learning, include the following. 1. A sudden decline in the quality of student work. 2. Sensitivity to criticism. 3. Feelings of dislike and envy of the success of other students. 4. Extreme variation of feelings from day to day. 5. Low degree of frustration tolerance. 6. Shows poor social relations. 7. There is no effort to do or try something new. 8. Unable to control self-behavior. Emotional problems can be experienced by students or students at any time. Emotional problems in students can really interfere with the learning process that is being carried out (Maharuli & Zulherman, 2021).

Teachers must pay attention to developments for the sake of development and changes in each student. Even a little bit of emotional problems can greatly affect student learning motivation and student learning processes. One of the things that can increase students' learning motivation is when they get awards such as praise or certain prizes for their learning outcomes from the people around them, be it teachers, friends or parents. In addition, feeling embarrassed when getting a bad grade or lower than a classmate will increase student learning motivation. Based on the results of interviews with students, information was obtained that they were not embarrassed when they got bad grades because other students also got bad grades. In addition, the teacher also does not give appreciation to students when they get good grades or can solve the questions given properly. This is what also influences the low motivation of students in physics lessons and results in students easily becoming discouraged when they cannot understand the trigonometry material presented.

The tenth factor that influences low student learning motivation is health with a score of 80%. These two factors are very important factors in determining the spirit of learning and student learning concentration. When students are sick, they will not be able to concentrate fully and be able to receive lessons well. This is supported by the results of interviews that if students are sick but can still go to school, they will still go because they don't want to be left behind in subject matter. According to the teacher, the student's health level was good with indications of student absences and only a few students were absent due to illness. "Peers can influence a child's motivation through social comparison, competence, and social motivation, shared learning and the influence of peer groups." Social function greatly influences adolescent development, students who are accepted by their peers in groups and have good social skills are often good at academic achievement, and conversely students who are rejected by their friends are at risk of having learning problems. Based on the results of interviews with students, information was obtained that the majority of peers had a fairly good effect on students' enthusiasm for learning trigonometry material, but there were also some students who tended to have a negative influence on their other friends, such as inviting them to play instead of studying or going to the canteen instead of the library, and when students cannot do the homework of their other friends tend to invite them to copy their friends' work rather than do it together.

CONCLUSION

Based on the results of the discussion above, it can be concluded that based on the results of the table above, it is known that the average level of learning motivation is included in the high criteria. Motivation to learn is very important in the learning process because the learning process requires active interaction and participation from students to succeed

Students feel bored in learning physics materials, especially electromagnetic induction analysis material. Students' boredom arises because there is no motivation by the teacher during the learning process. Facts were found in the field that there were still teachers who did not take advantage of the monotonous use of print learning media in learning, especially in physics subjects. To overcome these problems, the authors analyze that by using learning media online can increase student motivation, especially in physics subjects.

REFERENCES

- Fitria, E. (2021). Analisis Pemanfaatan Media Online Pada Pembelajaran Daring Fisika Terhadap Motivasi Belajar Siswa. *Journal Of Innovation In Teaching And Instructional Media Vol. 2, No. 1, September 2021 Page: 43-51 E-ISSN:*, 2(1), 43–51.
- Hamzah, Sekar, U. L., & Zulkarnain. (2019). Pengembangan Media Pembelajaran Roda Putar Fisika Untuk. *ORBITA: Jurnal Hasil Kajian, Inovasi, Dan Aplikasi Pendidikan Fisika*, 5(November), 77–81.
- Maharuli, F. M., & Zulherman, Z. (2021). Analisis Penggunaan Media Pembelajaran

- Dalam Muatan Pelajaran IPA Di Sekolah Dasar. *Jurnal EducatioFKIP, UNMA*, 7(2), 265–271.
<https://doi.org/10.31949/Educatio.V7i2.966>
- Puspitasari, R. D., Herlina, K., & Suyatna, A. (2020). A Need Analysis Of STEM-Integrated Flipped Classroom E-Module To Improve Critical Thinking Skills. *Indonesian Journal Of Science And Mathematics Education*, 3(2), 178–184.
<https://doi.org/10.24042/Ijsme.V3i2.6121>
- Puspitasari, R. D., Latifah, S., Wati, W., & Yana, E. T. (2018). Kemandirian Belajar Fisika Pada Peserta Didik Dengan Pembelajaran Berbasis Proyek. *Indonesian Journal Of Science And Mathematics Education*, 01(1), 1–12.
- Rohman, S., Rusilowati, A., & Sulhadi, S. (2017). Analisis Pembelajaran Fisika Kelas X SMA Negeri Di Kota Cirebon Berdasarkan Literasi Sains. *Analisis Pembelajaran Fisika Kelas X SMA Negeri Di Kota Cirebon Berdasarkan Literasi Sains*, 1(2), 12–18.
- Rohman, A. A., & Karimah, S. (2018). Faktor - Faktor Ang Mempengaruhi Rendahnya Motivasi Belajar Siswa Kelas IX. *Faktor-Faktor Yang Mempengaruhi Rendahnya Motivasi Belajar Siswa Kelas Xi*, 10, 95–108.
- Sudjana, N. (2016). *Penilaian Hasil Proses Belajar Mengajar*. Bandung: Rineka Cipta.
- Surahmadi, B., Smp N 1 Temanggung, & Tengah, J. (2016). *Unnes Science Education Journal Pengaruh Media Pembelajaran Virtual Berbasis Quipper School Untuk Meningkatkan Motivasi Belajar Dan Hasil Belajar Peserta Didik Kelas Viii Smp N 1 Temanggung*. 5(17), 1123–1127.
- Utami, M. Z., Setiawan, I., Risdianto, E., & Viona, E. (2021). Analisis Kebutuhan Pengembangan Media Pembelajaran Komik Digital Berbasis Pendekatan Kontekstual Untuk Meningkatkan Motivasi Belajar Pada Materi Alat-Alat Optik. *In Prosiding Seminar Nasional Program Pascasarjana Universitas Pgri Palembang*, 344–350.