

## Student learning interest in online learning of biology with powerpoint as a learning medium

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Informasi artikel	ABSTRAK
<p>Sejarah artikel: Diterima: August 25, 2022 Revisi: Dec 8, 2022 Dipublikasikan: Dec 10, 2022</p> <hr/> <p><b>Kata kunci:</b> Minat belajar siswa Media pembelajaran PowerPoint pandemi</p>	<p>Penelitian ini bertujuan untuk mengetahui minat belajar siswa kelas XI pada mata pelajaran biologi menggunakan powerpoint sebagai media pembelajaran di masa pandemi. Subjek dari penelitian ini adalah siswa-siswi kelas XI MIPA di SMA Muhammadiyah 2 Yogyakarta. Metode penelitian ini adalah survei. Teknik pengambilan data adalah dengan menyebarkan angket (<i>google form</i>). Hasil penelitian menunjukkan respon positif pada penggunaan powerpoint sebagai media pembelajaran biologi saat pandemi. Hal ini dapat diketahui dari beberapa aspek. Pada aspek perasaan senang menunjukkan respon setuju dengan persentase terbesar yaitu 99%, pada aspek ketertarikan menunjukkan respon sangat setuju dengan persentase terbesar 86%, pada aspek penerimaan menunjukkan respon sangat setuju dengan persentase terbesar yaitu 98%, dan pada aspek keterlibatan siswa menunjukkan respon setuju dengan persentase terbesar yaitu 96%. Hasil penelitian ini membawa implikasi pada peran positif dari powerpoint sebagai media pembelajaran terhadap minat belajar siswa.</p>
<p><b>Keywords:</b> Student learning interest Learning medium PowerPoint pandemic</p>	<p><b>ABSTRACT</b> <b>Student learning interest in online learning of biology with powerpoint as a learning medium.</b> This study aimed to determine the learning interest of class XI students in biology using PowerPoint as a learning medium during a pandemic. The subjects of this study were students of class XI MIPA at SMA Muhammadiyah 2 Yogyakarta. This research method was a survey. The data collection technique was by distributing questionnaires (<i>google forms</i>). The study's results showed a positive response to using PowerPoint as a biology learning medium during a pandemic. It could be seen from some aspects. The feeling of pleasure aspect showed the agreed response (as the largest percentage) was 99%. Regarding the interesting aspect, the strongly agreed response (as the largest percentage) was 86%. The aspect of acceptance showed a response that strongly agreed as the largest percentage, 98%. Then, the aspect of student involvement showed an agreed response (as the largest percentage) of 96%. The results of this study had implications for the positive role of PowerPoint as a learning medium for students' learning interests.</p>

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## INTRODUCTION

In 2020, Indonesia was one of the countries affected by Covid-19. This condition not only has an impact on health and the economy but also has an impact on education. According to Amalia and Sa'adah (2020), supporting and educating all parties, including students, teachers, and authorities, is necessary so that they are enthusiastic about continuing teaching and learning activities happily during the COVID-19 pandemic.

Learning activities in class were changed to online learning, causing learning activities to be less than optimal. Online learning provides challenges and obstacles and reduces learning effectiveness (Adnan, 2020). Obstacles that occur can affect student learning outcomes. It is supported by the research results of Fitriani, Harahap, and Safitri (2022) that the percentage of students who lack understanding in implementing the online learning process is higher than students who do not experience these obstacles.

There are several obstacles to online learning. These constraints are related to signal conditions that are sometimes stable and the need for a large quota. Based on Large Dictionary Indonesian, constraints can be interpreted as obstacles to achieving targets (Kementerian Pendidikan dan Kebudayaan, 2016). Every learning activity is definitely expected to achieve goals which can be in the form of learning objectives.

Interest in learning includes feelings of pleasure, attention, concentration, and students' willingness to learn a particular subject (Swastika, Pulungan, and Bariani, 2017). In the research of Swastika, Pulungan, and Bariani (2017), student interest in learning indicators comprised students' pleasure, curiosity, interest, comfort, and enthusiasm. Timeliness in collecting assignments can mean students are enthusiastic about learning activities. The conditions during the pandemic showed that many assignments from each subject eventually piled up (Safitri & Panjaitan, 2021).

Online learning makes students procrastinate in collecting assignments, and some do not submit assignments, so the character of discipline is not formed in students (Suriadi, Firman, & Ahmad, 2021). Some students complained that they could not allocate their time to do assignments (Safitri & Panjaitan, 2021).

As long as online learning takes place during a pandemic, the problems experienced by students are a lack of motivation and concentration in learning, limited supporting facilities, and access to internet networks (Wahyuningsih, 2021). Online learning causes limited interaction in learning activities, so teachers need learning media to deliver material to students. One of the supporting facilities needed in learning activities is learning media.

Learning media has a crucial role in online learning. Teaching and learning activities can not be carried out without learning media. According to Miftah (2014), learning media is important to support teaching and learning with Internet media, computer networks, and standalone computers. The use of learning media needs to be linked to the needs and characteristics of students. Tafonao (2018) argues that learning media can make the teaching and learning process more effective and efficient and establish good relations between teachers and students.

One of the learning media widely used is PowerPoint. PowerPoint is a computer program for presentations developed by Microsoft in an office application package, Microsoft (MS) Office, in addition to Microsoft Word, Excel, Access, and several other programs (Srimaya, 2021). MS PowerPoint is generally used for presentation purposes using slides/templates. For a successful presentation, presentation sheets or slides are needed to be attractively designed so that students will be more focused and motivated (Priyatno, 2010). Learning media using MS Powerpoint allows teachers to include audio and visual elements in the material delivery. Thus, the material will be conveyed more clearly and interestingly.

Interest in learning encourages one to always carry out learning activities (Putri & Adirakasiwi, 2021). It is clarified by the opinion of Syardiansah (2016) that interest in learning can arise on their own accord or without coercion to carry out learning activities which will impact learning outcomes. Interest in learning is vital for students to have in the learning process. According to Asiyah et al. (2020), the high interest in student learning can affect the level of attention to achieve better learning outcomes.

During the pandemic, SMA Muhammadiyah 2 Yogyakarta implemented distance learning. One of the media used in biology subjects is a Powerpoint Presentation. It is necessary to explore students' interest in learning using PowerPoint.

## METHOD

The type of this research was descriptive quantitative with survey research methods. The survey was used to obtain data from specific natural populations (Sugiyono, 2014). The data collection technique used was a questionnaire. The instrument used was a closed questionnaire with 15 statements. The questionnaire was submitted using the Google form. The scale used was a Likert scale with four answer choices. Each statement had a choice of answers in the form of Strongly Agree, Agree, Disagree, and Strongly Disagree.

The subjects in this study were 50 students of class XI MIPA and biology teachers at SMA Muhammadiyah 2 Yogyakarta. Data collection was carried out on January 3, 2021. The formula for calculating aspects of interest in learning towards interest in learning biology using PowerPoint media was as follows.

$$P = \frac{\sum x}{N} \times 100\%$$

Keterangan :

P = Percentage of score

$\sum X$  = Total scores obtained

N = Maximum total score

(Arikunto, 2010)

The results of the percentage aspects of interest in learning biology using PowerPoint learning media were interpreted based on Table 1.

**Table 1.** Percentage of each aspect of interest in learning

Percentage	Category
0%-20%	Very weak
21%-40%	Weak
41%-60%	Enough
61%-80%	Strong
81%-100%	Very Strong

(Putri & Adirakasiwi, 2021)

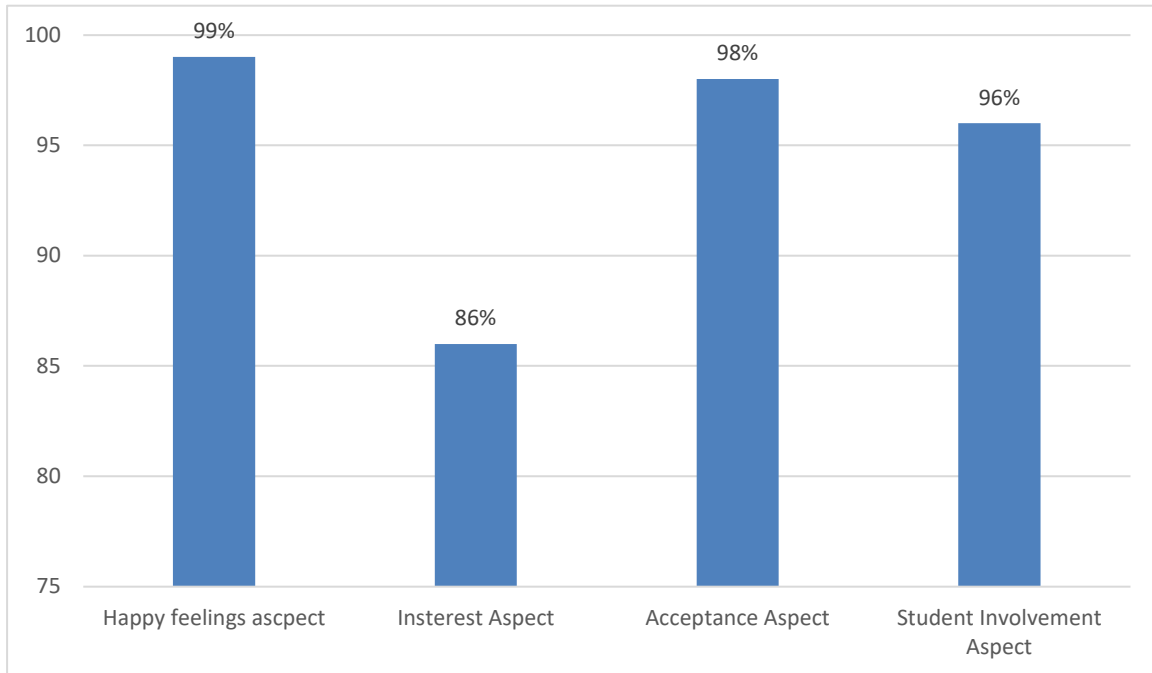
The instrument indicators in this study were in Table 2.

**Table 2.** Instrument indicators

No	Aspects	Number of indicator items
1	Happy feeling	2
2	Interest	7
3	Acceptance by students	2
4	student engagement	4
	<b>Total</b>	15

## RESULTS AND DISCUSSION

Respondents in this study were students of class XI MIPA SMA Muhammadiyah 2 Yogyakarta in the 2021/2022 academic year. From the research results, information was obtained that most students showed an agreeable response to the use of PowerPoint as a medium for learning biology during a pandemic. This study grouped students' interest in learning into four aspects. The percentage results for each aspect are presented in Figure 1.



**Figure 1.** The percentage of aspects of student interest in using PowerPoint while online learning

Based on Figure 1, the "happy feeling" aspect had a percentage of 99%. The results of this percentage were close to 100% and were in the very strong category. It showed that students had a happy feeling when learning biology using the PowerPoint used by the teacher as a learning medium. The aspect of "interest" showed a percentage of 86%. This percentage was in the very strong category. It indicated that students were more interested in learning biology using PowerPoint medium. The aspect of "student response acceptance" had a presentation of 98%. This acquisition showed that students more easily accept learning material using PowerPoint media. In the aspect of "student involvement in learning", 96% was obtained, indicating that student involvement in learning was more active by presenting material using PowerPoint media.

In online learning, teachers are asked to be creative in conveying subject matter to students. Teacher creativity in teaching can be proven by developing teaching materials or subject matter and using learning media that can attract students' interest in learning (Pentury, 2017). It is in accordance with the suggestion submitted by Wahyuningsih (2021) that in online learning related to the Covid-19 pandemic, teachers should look for innovative solutions in delivering learning material so that students can follow along well and reduce student boredom in learning.

The average result for each aspect of interest in learning biology using PowerPoint media shows a percentage of 94.75%. It was included in the very strong category, meaning that students were highly interested in learning when delivering biology material using PowerPoint as media. It was in accordance with the opinion of Asiyah et al. (2020), which explains that high interest in learning will affect the level of student readiness and student attention when participating in learning, so it can be concluded that if students have a high interest in learning, the final results to be obtained can be maximized.

### **Students' Interest in Learning Aspects of Happy Feelings**

The first aspect was the happy feelings. In the aspect of happy feelings, most students chose to strongly agree. The percentage was 99% which was in the very strong category. Students enjoy learning Biology using PowerPoint learning medium. Feelings of happiness arise because of students' interest in learning biology using PowerPoint medium. Students' interest in learning can be aroused by the use of media in each lesson because, with the media, students' interest in learning is more enthusiastic (Supardi et al., 2015). The use of PowerPoint learning medium could increase student learning interest because it could present material in the form of images, animations, and writing so that it was easy for students to see and imitate. It is reinforced by the explanation of other researchers that learning using PowerPoint media could significantly affect student learning outcomes (Elpira & Ghufron, 2015; Warkintin & Mulyadi, 2019).

### **Students' Interest in Learning on Interest Aspects**

The teacher must create a learning process that triggers students' interest in learning so that a sense of interest arises to be actively involved in the ongoing learning process (Srimaya, 2017). In the second aspect, namely the aspect of interest, the percentage of interest obtained was 86% and was in the very strong category. It showed that students were interested when learning biology was presented with PowerPoint medium.

Learning media has an important role in the learning process. Learning media is a means of communication between teachers and students. So it is necessary to ensure students are interested in the learning process presented with PowerPoint media or not. It is in accordance with the opinion of Supriyono (2018) that the principle of learning media is that it can be used as a good communication tool and is considered efficient, especially when the learning process takes place, especially when learning is carried out remotely as it is today, to improve student learning interest. It is in accordance with Srimaya's statement (2017) that PowerPoint, which is maximized with displays or icons, can motivate students to pay attention to the material presented by the teacher.

### **Student Learning Interest on Acceptance Aspects**

In the third aspect, namely the acceptance aspect, most students strongly agreed if biology learning was presented using PowerPoint media. Students agree to use PowerPoint media to present biology material visually more concisely. The teaching material was delivered in the form of PowerPoint accompanied by animation capable of directing an object to make it look alive or to give a moving picture of something that is static (Srimaya, 2017).

The existence of PowerPoint media that provides pictorial features could increase motivation in high school biology subjects. It is in accordance with the opinion of Mufida and Fauziah (2021) that PowerPoint media can display various media, such as pictures and videos so that actual events can be visualized. The ability of PowerPoint media to visualize abstract biology material helps students receive information. PowerPoint learning media could increase student interest, especially when optimized by maximizing creative menus such as inserting pictures, videos, or animations.

Meanwhile, the characteristics of the material presented using PowerPoint media were that the material could be presented more concisely in the form of a slide show. In the opinion of Misbahudin et al. (2018), the material presented more concisely can make learning carried out effectively, and the material is easier for students to understand.

### **Student Learning Interest on Student Involvement Aspects**

In the fourth aspect, namely the aspect of student involvement, many students chose to agree. It showed that with PowerPoint medium, many students were active while studying, discussing, asking, or answering questions from the teacher, which would increase student academic achievement at school. It is in accordance with the opinion of Fikrie and Ariani (2019) that student involvement in school is the quality and quantity of students' psychological states, such as cognitive, emotional, and behavioral reactions to the learning process, as well as academic and social activities in class and outside the classroom to achieve the excellent learning outcomes.

In addition, the results of research conducted by Christanty and Cendana (2021) stated that one of the teacher's efforts to adjust learning to aspects of student development and help students to be involved in class was to use interactive PowerPoint media, which was equipped with many features such as animations and videos in inside. The high learning outcomes of the learning applied in this study were since students who were taught using PowerPoint learning media were more enthusiastic in receiving lessons. It was because Powerpoint was used as a learning medium capable of delivering abstract students' imaginations to become something real (Srimaya, 2017).

## **CONCLUSION**

PowerPoint media in learning biology for class XI SMA Muhammadiyah 2 Yogyakarta during a pandemic could increase interest in learning. It was supported by the results of research showing the categories of happy and very happy on the aspects of feeling happy, interested, accepted, and involved in students. It was because the PowerPoint media provided interesting displays for students, and it could visualize abstract biology material. These media capabilities triggered student learning activities to become more active in paying attention, discussing, and asking questions in learning to increase student learning outcomes.

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