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## Students perception and interest on chemistry: Learning evaluation integrated quizziz media

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**Abstract:** Interest in learning is a passion or a great desire for something that is closely related to personality, motivation, expression and self-concept, identification, heredity, and external factors. Interest in learning affects the cognitive, affective, and psychomotor aspects of students. In this study, analyzed and interpreted student interest in learning through media-based learning Quizizz and students' perceptions of the media. Based on the analysis and interpretation of the data, indicators of student interest in the media Quizizz increased by 0.818 in the high category, indicators of student attention increased by 0.555 in the medium category, indicators of feelings of pleasure increased by 0.684 in the medium category, and indicators of student involvement increased by 0.599 in the medium category. Also, 76.32% of students thought that Quizizz media were very interesting, 50% thought that Quizizz media were easily applied, 86.84% thought that Quizizz media accommodate students to compete fairly, and 44.74% thought that Quizizz media were practically applied. Thus, students have a good perception of the Quizizz media accompanied by increased interest in learning.

**Keywords:** Learning evaluation, Students' perceptions, Students' interest, Quizizz media

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### 1. Introduction

Interest in learning is a passion or a great desire for something that is closely related to personality, motivation, expression and self-concept, identification, heredity, and external factors (Sugiyono, 2017; Silaban, 2017). Thus, interest in learning is one important element in the learning process, learning interest must be grown by students who are stimulated by the teacher so that the learning process can be effective and efficient so that learning can be meaningful. Interest in learning affects the cognitive, affective, and psychomotor aspects of students. Student

learning interest is directly proportional to learning outcomes (Nurhasanah and Sobandi, 2016). Generally, students who have high learning interest will have good learning outcomes.

Student learning interest influences learning achievement (Rusmiati, 2017; Rozikin et al. 2018), the majority of students who have a high interest in learning will have good learning achievements. Also, interest in learning can affect student motivation. In general, students who have high learning interest will have high motivation to learn and vice versa (Fauziah et al. 2017; Putri and Isnaini, 2015). Meanwhile, students who have a high interest in learning will have a high attachment to learning in the classroom (Ainley, 2012). Students with high learning interested, are generally able to motivate themselves to learned (Otoo et al. 2018). Therefore, it is important to make efforts to increase student interest in learning so that learning can be optimal, effective, and efficient.

The use of online media has been widely implemented in the learning process (Harefa, 2020), media in general in the form of applications have widely collaborated with the management of online and blended learning systems. Implementing online media such as exe-media can improve students' generic science skills (Harefa and Suyanti, 2019). Likewise, with the use of Sway media, students' learning motivation increases significantly with the implementation of the media (Harefa et al. 2019). In addition to the two media, Quizziz is one of the recommended media to be applied to the learning process.

Quizziz media significantly stimulates the cognitive, affective, and psychomotor aspects of students, Quizziz media can increase student motivation (Mintarsih, 2020). Through the use of these media, student motivation increases significantly which can stimulate other aspects such as cognitive and psychomotor (Mulyati and Evendi, 2018). In addition to motivation, the use of media quizziz can influence the increase in student concentration (Purba, 2019).

Besides, through the use of Quizziz media, student creativity is significantly increased (Aini, 2019). Students who are taught with Quizziz media have better creativity than students who are taught with conventional media. Student learning experiences can be developed through the use of Quizziz media (Göksün and Gürsoy, 2019) so that students gain meaningful learning and influence on increasing interest in learning (Rahman et al. 2018). In addition to the affective and psychomotor aspects, cognitive aspects of students can be stimulated through increased learning outcomes by utilizing and integrating Quizziz media (Citra and Rosy, 2020; Adianto, 2020).

## 2. Methods

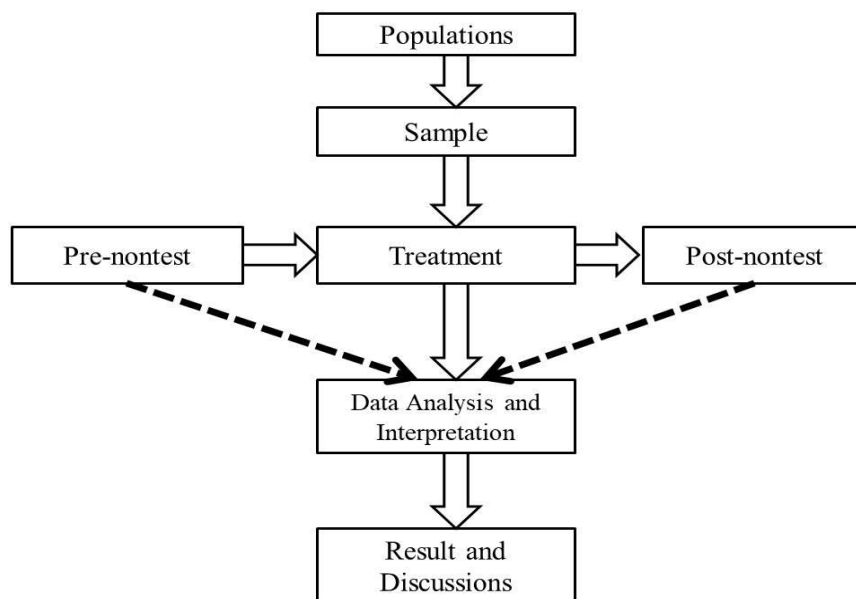
This research was conducted at Abdi Siswa Bintaro High School, Tangerang in March - April 2020. The research sample was 38 students who were selected using the purposive sampling technique. The research sample evaluates Quizziz-assisted

learning. After implementing Quizziz, a questionnaire was given to determine students' interests and perceptions. The interest in learning questionnaire consists of 4 indicators, each indicator is given 5 statements accompanied by 4 optional options arranged according to the Linkert scale. Indicators of interest in learning as in Table 1.

**Table 1**  
Students' Interest Indicators

Indicators	Item's Number
Student's Feeling	1, 7, 9, 16, 17
Student's Interest	3, 6, 10, 15, 18
Student's Attention	4, 5, 11, 13, 19
Student's Involvement	2, 8, 12, 14, 20

The research sample was given a questionnaire of learning interest before and after the Quizziz media implemented. Then, the questionnaire data before and after is processed in stages it show in Fig 1.



**Fig 1.** Research Procedure

Research instrument data were analyzed and interpreted as well as a discussion related to the use of Quizziz on student learning interests. Increased interest in learning is interpreted by measuring the pre-nontest and post-non-test gain values with the conditions as in Table 2.

**Table 2**  
Interpretation of Gain Test Values

Gain Score	Interpretation
0.71 – 1.00	High
0.31 – 0.70	Moderate
0 – 0.30	Low

Besides to interest in learning, students are given a questionnaire to see their perceptions of the use of Quizziz media. The perception questionnaire consisted of 16 statements accompanied by 5 choices.

### 3. Results and Discussion

The student interest questionnaire consisted of 20 statements accompanied by 4 elective choices. The maximum score of learning interest is 80 and the minimum score is 20. The average pre-test and post-test interest in student learning for each indicator is as in Table 3.

**Table 3**  
Pre-nontest and Post-nontest Average Score

Indicators	Pre-nontest	Post-nontest
Student's Feeling	2.016	3.374
Student's Interest	2.174	3.668
Student's Attention	2.284	3.237
Student's Involvement	2.305	3.321

Based on Table 3, the average pre-test score of the highest learning interest in the indicator of student involvement is 2.305 (scale 4) and the lowest on the feeling of pleasure indicator is 2.016 (scale 4). The average post-test score of the highest learning interest in the student interest indicator was 3.668 (scale 4) and the lowest was the student attention indicator. Comparison of the average pre-test and post-test scores of students' interest in learning as shown in Fig 2.

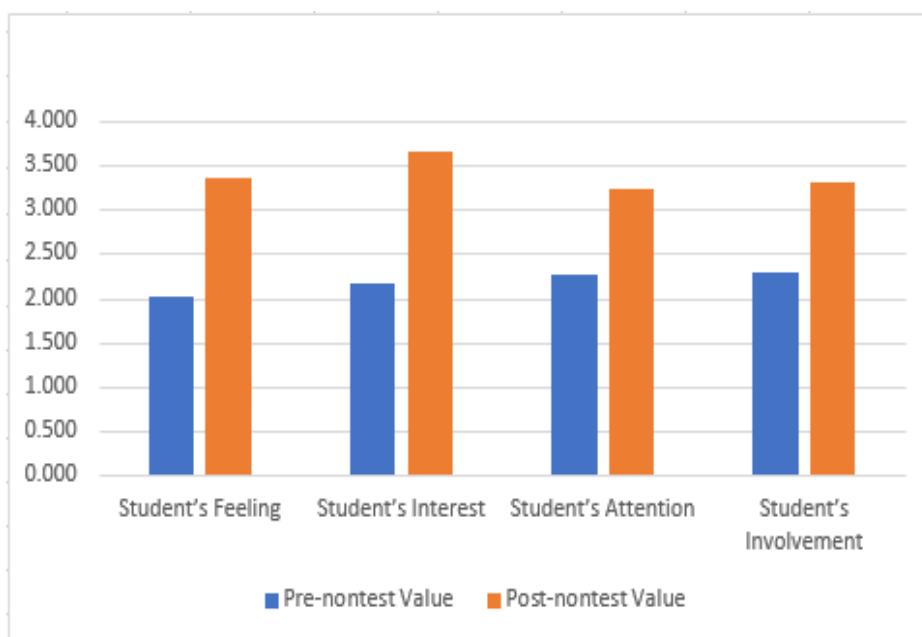


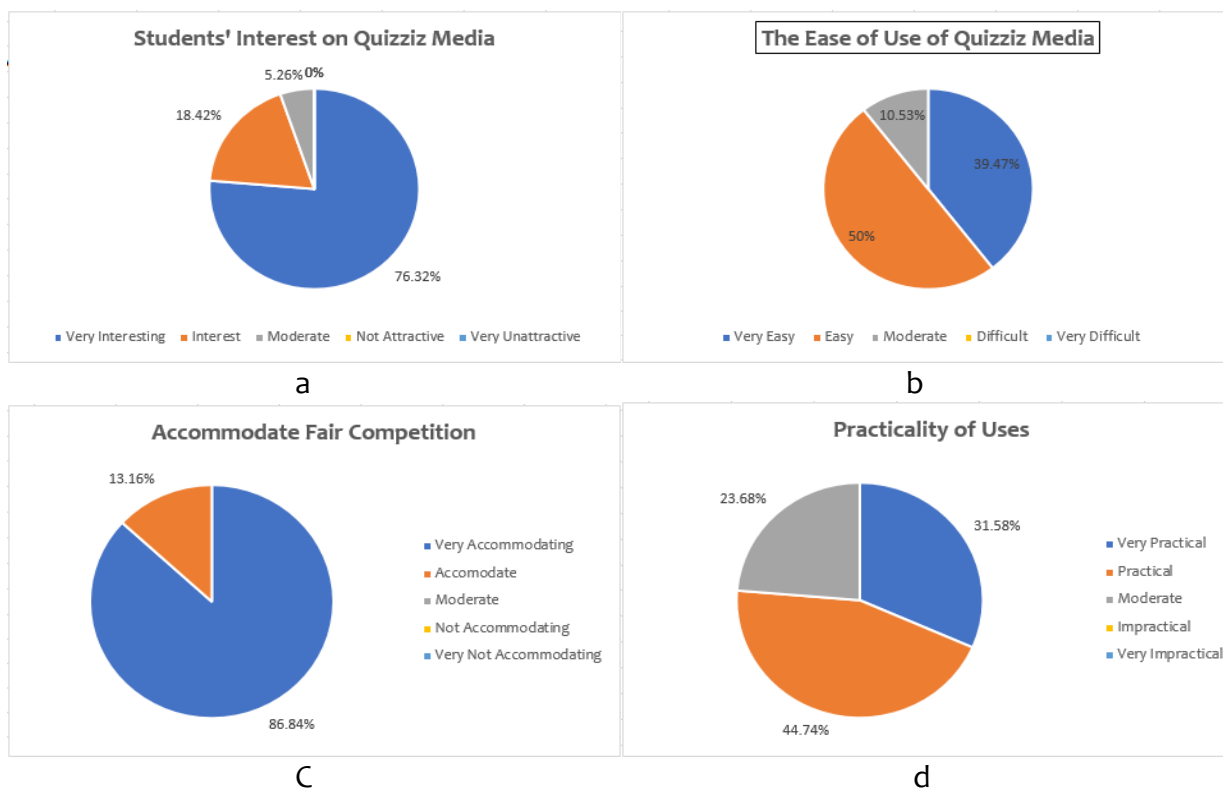
Fig 2. Comparison of Average Pre-nontest and Post-nontest Student Interest

Based on Fig 2, there are differences in students' interest in learning before and after the implementation of Quizziz media in terms of the average difference in pre-test and post-test scores of students. Research data were analyzed and interpreted to see an increase in student interest in using the media Quizziz. The increase in learning interest is interpreted by calculating the gain value as in Table 4.

**Table 4**  
Students' Interest Gain Value

Indicators	Gain Value	Interpretation
Student's Feeling	0.684	Moderate
Student's Interest	0.818	High
Student's Attention	0.555	Moderate
Student's Involvement	0.599	Moderate

Based on Table 4, the interpretation of the indicator of students' highest learning interest in students' interest is 0.818 in the high category. Thus, the use of Quizziz media can increase student interest in learning. In addition to interest, students' perceptions of the application of Quizziz media are shown in Fig 3a, 3b, 3c, and 3d.



**Fig 3.** a. Students' Interest on Quizziz Media; b. Students' Perceptions of The Ease of Uses of Quizziz Media; c. Students' Perceptions of Accommodating Fair Competition; d. Students' Perceptions of the Practicality of Using Media Quizziz.

Based on Fig 3a, 76.32% of students think that Quizziz media is very interesting to be implemented in the learning process, 18.42% find it interesting and 5.26% think

neutral. Meanwhile, 39.47% of students thought that Quizziz media was very easy to implement, 50% thought it was easy, and 10.53% thought it was neutral (Fig 3b). In addition, 86.84% of students thought that Quizziz media was very accommodating to fair competition and 13.16% thought it was accommodating (Fig 3c). And, 31.58% of students thought that Quizziz media was very practical to be implemented in the learning process, 44.74% students thought it was practical, and 23.68% thought it was neutral (Fig 3d).

Quizziz media is an online learning media that can be accessed via smartphones (Wibawa et al. 2019). The ease of access accommodates students in learning ease, students can use it without limited space and time. Quizizz media is an interactive and interesting media that can be utilized in game-based learning (Ju and Adam, 2018). Through the use of these media, student class activities can increase (Sormin et al. 2019), (Zhao, 2019), students are given the opportunity to self-efficate so that students' understanding of concepts and learning experiences can increase (Yana et al. 2019), (Göksün and Gürsoy, 2019). In addition, students' critical thinking skills can be improved through the use of this media (Wihartanti et al. 2019). By utilizing the available features, the evaluation of learning can be done with media quizziz (Noor, 2020; Arif et al. 2019).

#### 4. Conclusion

The use of Quizizz media is one solution to increase student interest in learning. Based on the results of research, student interest in learning increases with the use of Quizizz media in the medium and high categories in terms of learning interest indicators. Student interest in the media Quizizz in the evaluation of learning is an indicator with the highest increase of 0.818 in the high category, while indicators of student attention became an indicator with the lowest increase of 0.555 in the medium category. In addition to increasing interest in learning, students have diverse perceptions of the application of Quizizz media, 76.32% of students think that Quizizz media is very interesting, 50% think that Quizizz media is easily applied, 86.84% think that Quizizz media accommodate students to compete fairly, and 44.74% assume that Quizizz media is practically applied.

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