



Google Form or Quizizz, which is Better?

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Article Info	Abstract
Article History Received: 2023-08-12 Revised: 2023-09-15 Published: 2023-10-01 Keywords: <i>Learning Model; Based on Social Media; Education.</i>	Conventional face-to-face learning has always been used as the primary teaching method, including in medical studies. With large-scale social restrictions enforced due to the COVID-19 pandemic, the medical education system needs to be able to optimize remote learning, while maintaining its target achievement to produce high-quality medical students. The shift in learning methods is accompanied by a change to remote testing methods. Google Forms and Quizizz are two platforms that are often used as a method for remote testing. However, the two platforms have not yet been compared in relation to medical student outcomes. This study uses a semi-quantitative approach. Sources of data utilized in the study are the topical test scores and the grades of 20 semester-two UHAMKA medical students. The students utilized remote learning methods, with testing conducted via Quizizz and Google Forms. Using distance learning, there was a significant difference in the topical tests scores when students used Quizizz as a method of testing, compared to when using Google Forms (paired t test, $p=0,002$). The majority of students preferred to use Google Forms as a testing method (90%) than Quizizz (10%). In conclusion, as a testing method, Google Forms showed higher learning outcome scores than Quizizz.
Artikel Info	Abstrak
Sejarah Artikel Diterima: 2023-08-12 Direvisi: 2023-09-15 Dipublikasi: 2023-10-01 Kata kunci: <i>Model pembelajaran; Berdasarkan Media Sosial; Pendidikan.</i>	Pembelajaran tatap muka konvensional selalu dijadikan metode pengajaran utama, termasuk dalam bidang kedokteran. Dengan diberlakukannya pembatasan sosial berskala besar akibat pandemi COVID-19, sistem pendidikan kedokteran harus mampu mengoptimalkan pembelajaran jarak jauh, dengan tetap menjaga pencapaian target untuk menghasilkan mahasiswa kedokteran yang berkualitas. Pergeseran metode pembelajaran dibarengi dengan perubahan metode pengujian jarak jauh. Google Forms dan Quizizz adalah dua platform yang sering digunakan sebagai metode pengujian jarak jauh. Namun, kedua platform tersebut belum dibandingkan dalam kaitannya dengan hasil mahasiswa kedokteran. Penelitian ini menggunakan pendekatan semi kuantitatif. Sumber data yang digunakan dalam penelitian adalah nilai tes topikal dan nilai mahasiswa kedokteran UHAMKA semester dua 20. Para siswa menggunakan metode pembelajaran jarak jauh, dengan pengujian dilakukan melalui Quizizz dan Google Forms. Dengan menggunakan pembelajaran jarak jauh, terdapat perbedaan yang signifikan pada nilai tes topik ketika siswa menggunakan Quizizz sebagai metode pengujian, dibandingkan ketika menggunakan Google Formulir (uji t berpasangan, $p=0,002$). Mayoritas siswa lebih suka menggunakan Google Formulir sebagai metode pengujian (90%) dibandingkan Quizizz (10%). Kesimpulannya, sebagai metode pengujian, Google Forms menunjukkan skor hasil belajar yang lebih tinggi dibandingkan Quizizz.

I. INTRODUCTION

The use of digital technology is becoming increasingly widespread in all sectors, including in education through remote learning. Remote learning is an educational and learning process or system in which teachers and instructors are separated from their students in terms of either physical location or time; or in which students are separated from other students or from educational resources. The implementation of remote learning methods has many benefits for

students and lecturers in that it eliminates all time and spatial limitations, and is a solution for the continuation of education during the era of large-scale social restrictions due to the COVID-19 pandemic.

Online learning methods have been implemented on a mass-scale since 2012, but still require improvement. Problem Based Learning divides the curriculum into system blocks, with each block covering a different topic each week. Topical examinations examine student learning

outcomes from public lectures. This research aims to compare student learning outcomes using two different platforms: Google Forms and Quizizz. By determining these outcomes, we can identify the best testing method for medical students undertaking remote learning.

II. METHOD

This research was undertaken in the classroom, with students participating in four weeks of topical exams; two weeks using the Google Forms platform, and two weeks using the Quizizz platform. The success of this research method is indicated by the ability to identify which remote learning method is able to improve student learning outcomes. Research results were analyzed using a paired sample t-test.

Students were also asked to fill out a questionnaire to determine the correlation between students' concentration, enjoyment, engagement, perception, motivation, and satisfaction when using Google Forms and Quizizz for remote testing. Students were also given an open question on which platform they believe is better able to achieve their desired learning outcomes.



Figure 1. Display of exams using Quizizz

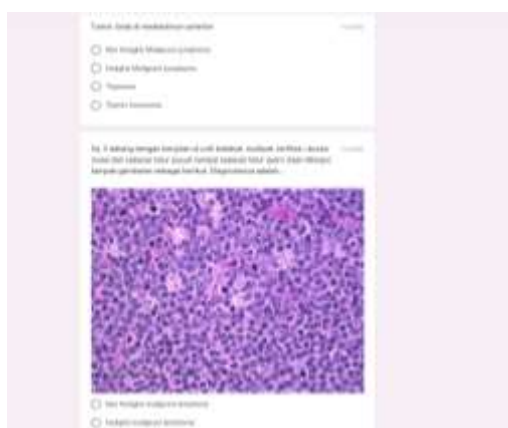


Figure 2. Display of topical exams using Google Forms

III. RESULT AND DISCUSSION

From the results of students who participated in the Haemato-Immunology system block, 80 sets of data were processed. The testing method

used for the topical exams in week 1 and week 4 was Google Forms, while for week 2 and week 3 Quizizz was used as the testing method.

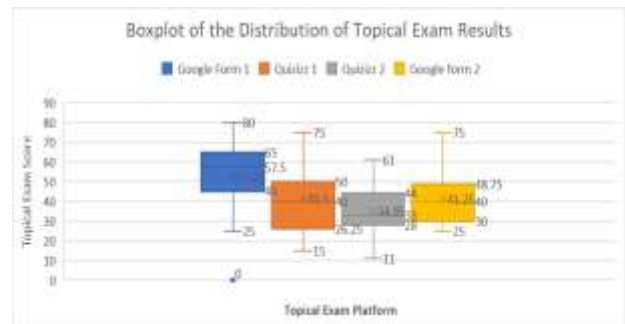


Figure 3. Boxplot of the Distribution of Topical Exam Result

Table 1. Comparison of the differences in remote learning testing using Google Forms and Quizizz testing methods

	Average Score	P Value
Google Form Topical Exam 1	57.25	0.002
Quizizz Topical Exam 1	41.5	

Table 1 reveals a P Value of 0.002, meaning it can be concluded that there was a significant difference in the topical test scores when using Google Forms compared to using Quizizz.

Table 2. Comparison of the differences in remote learning testing using Quizizz as the testing method and topical examinations that also used the Quizizz method

	Average Score	P Value
Google Form Topical Exam 1	41.5	0.094
Quizizz Topical Exam 1	34.95	

Table 2 shows a P value of 0.094, where $P > 0,05$. It can, therefore, be concluded that there is no significant difference in the results of the first topical test using Quizizz compared to using Quizizz.

Table 3. Testing differences in remote learning using the Quizizz testing method compared to topical examinations using the Google Forms method

	Average Score	P Value
Google Form Topical Exam 1	34.95	0.0495
Quizizz Topical Exam 1	41.25	

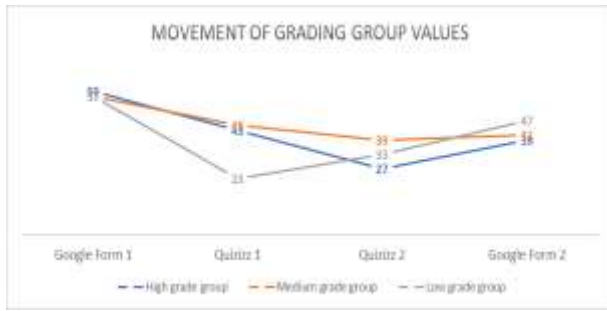


Figure 4. Graph of movement of group score values

In the first week's topical examination, students were divided into three groups based on their grades. The above graph reveals that the scores for the high, medium, and low-grade groups were fairly similar when using Google Forms. The value for the low-grade group fell drastically when using the Quizizz platform for the first time, slightly increased when using Quizizz for the second time, then improved again when returning to using Google Forms.

Table 4. Results of the student survey on the use of Quizizz and Google Forms as a testing method

Research Question	Agree	Neutral	Disagree
How is the students' concentration affected by quizizz, and google forms?	63.3%	36.7%	0%
How is the students' engagement affected by quizizz, and google forms?	46.7%	43.3%	10%
How is the students' enjoyment affected by quizizz, and google forms?	60%	30%	10%
How is the students' perceived learning affected by quizizz, and google forms?	20%	46.7%	33.3%
How is the students' motivation affected by quizizz, and google forms?	20%	60%	20%
How is the students' satisfaction affected by kahoot, quizizz, and google forms?	36.7%	50%	13.3%

It is evident that the majority of students agree that the use of either Quizizz or Google Forms affected their concentration and enjoyment in completing the exam. The results of the last question on the questionnaire reveal that

90% of students prefer to use Google Forms over Quizizz.

I prefer Google Forms because it is easier to fill out the exam questions, because it is more interesting and challenging, because if you are using Quizizz, you can't go back to previous questions, which makes it frustrating to fill out. With Google Forms you can see the previous page once or twice if you need to get the clear picture, but I have been halfway through a question and then go back again and repeat it. That's where I feel like I lose concentration if the time starts to catch up with me. When using Quizizz, the time to fill in the questions is too fast. You can't see the previous questions. Because it is more effective, Quizizz displays a fast countdown time, so I could not focus on completing the questions. I felt rushed by the time and could not fully understand the questions. As a result, my results were unsatisfactory, because when we use Google Forms, our concentration is not broken because of the limited time given by Quizizz to complete each question, because it's not too rushed and the questions are not cut off, because Google Forms does not have time limits, while Quizizz limits the time, meaning you lose concentration and are rushed when working on the exam, because when using Google Forms, you can go back to questions you are not sure about and are not limited by time and are not rushed. But when you are using Quizizz it is like we are being chased by the time on top of having to understand the questions given. So, I think it is unpleasant to use Quizizz, because Quizizz uses time, which sometimes makes you more nervous.

The implementation of remote learning methods has many benefits for students and lecturers or instructors, in that it eliminates all time and spatial limitations, and is a solution for the continuation of education during the era of large-scale social restrictions due to the COVID-19 pandemic. Appropriate methods for remote testing are required to optimize student outcomes during remote learning. The results of the analysis conducted during this study show that there are significant differences in topical test scores when using Google Forms compared to Quizizz, with a higher average for Google Forms. On the graph detailing the movement of values, it can be seen that the high, medium, and low-grade groups all experienced a decline in scores when using the Quizizz method.

Several findings from the Google Form and Quizizz display analysis were supported by the individual feedback, including:

1. Students prefer Google Forms, due to its simpler layout, meaning they can focus more on completing the questions
2. The questions are displayed on one page, meaning the students can choose which questions they wish to complete first; while Quizizz displays the questions individually, meaning students cannot choose which questions they wish to complete first.
3. Quizizz has a time bar display, or tracks the time in the form of a countdown, reducing students' concentration.
4. Google Form is preferred by students due to the ability to re-read questions that they are unsure of; while in Quizizz, it is not possible to repeat questions.

A study conducted by Joaquin et al. suggested the use of Google Forms for OSCE evaluations due to its simplicity, while producing fast results, and being free. This research produced similar findings to a study conducted by Hans and Fox, which concluded that classes that used boardgame-based applications lacked motivation, showed less development, and produced lower results than classes that did not use game-based applications. In a study conducted by Zhao, Quizizz was found to have a positive impact on learning outcomes in accounting classes. However, the results were not compared with other testing methods. Research conducted by Hamari, Koivisto and Sarsa found that learning using game-based applications produces positive results. However, the study did not evaluate the use of different applications, including Code academy.

IV. CONCLUSION AND SUGGESTION

A. Conclusion

For remote learning, the recommended remote testing method is Google Forms, as it is easier to use, thereby increasing the learning achievement rate of medical students.

B. Suggestion

The discussion regarding this research is still very limited and requires a lot of input. The suggestion for future authors is to study it more deeply and comprehensively the Google Form or Quizizz.

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