Using Quizizz to Increase Student Satisfaction Levels in Civic Education Courses

Hamdani Hamdani[(✉)], and Feti Fahmimroah

Business Administration, Samarinda State Polytechnic, Samarinda, Indonesia
hamdani@polnes.ac.id

Abstract. The use of information technology in learning increases student involvement and enjoyment to be more effective. In reality, many assessment activities still use conventional assessments. So, digital-based assessments such as Quizizz need to be carried out. The aim of this research is to analyze student satisfaction with the use of the Quizizz application during the final semester exam in civic education courses. This research uses the method survey. The population in this study was all Students of Civic Education, Samarinda State Polytechnic. Meanwhile sample selected using techniques random sampling amounted to 44 students used is a questionnaire. The results of the research show that students' satisfaction scores using Quizizz are in the high category. Based on the results of the research that has been carried out, it can be concluded that students are satisfied using the Quizizz application in civic education courses. Assessment with Quizizz can be an alternative for lecturers in providing assessments to students in the digital era in theoretical courses such as civic education, citizenship education, religious education, Indonesian language so that students are more motivated, creative, independent, active through adaptation to developments in science and technology.

Keywords: Quizizz, Civic Education Statistics, Satisfaction Rate.

1   Introduction

A key component of society and individual growth is education. Students' intrinsic drive to participate in the learning process and gain a deeper comprehension of the material is known as interest in learning, and it is one of the most important components of education. A strong desire to study can help students succeed academically and grow personally [1] [2]. In the digital age, various online learning platforms have been developed to promote learner engagement and interaction [3] [4] [5].

According to this study, according to this research, innovative assessment with Quizizz, Teachers can encourage their students to participate in fun activities. A good assessment or assessment system will influence learning outcomes (Gonzalez, 2019) its research used Kahoot! Plicker, and Quizizz as assessment systems. The results prove how promising this application is for increasing students' grades and satisfaction with learning and understanding subjects. Quizizz is one of the most widely used platforms for assessing student abilities. Online interactive tests are available on the game-based

learning platform Quizizz [6]. Quizizz attracts learners with features like leaderboards, fast feedback, and interactive questions in line with research conducted by (Zainuddin et al., 2020).

The innovative electronic quiz app Quizizz helps determine how effectively pupils have mastered a subject, particularly when used as a formative assessment after each session. Teachers can encourage their pupils to participate in enjoyable competitions and creative learning activities by incorporating games or gaming themes into the classroom. This strategy is creative and promising [8]. The use of quizizz in several courses has been researched, as has been researched by ([9], [10], [11], [12], [13].

However, research on Quizizz use in civic education courses has yet to be done. The quality of learning is reflected in student satisfaction with Quizizz. The best learning outcomes will come from high-quality instruction. A high degree of satisfaction may indicate success on the online test. The Quizizz for civic education courses will be used in this study's analysis of student satisfaction. Based on this, the study intends to examine how satisfied students were with using the Quizizz for their final semester civic education exam.

2   Method

In this study, a survey method is employed. Primary and secondary data sources were used to collect the data [14]. This study's main source of information was a survey examining how satisfied students were with Quizizz's use in citizenship education classes. Secondary data can be found in journals, photos, scientific publications, and related research pieces. All Samarinda State Polytechnic first-semester students majoring in digital business for 2023–2024 made up the study's population. A random selection procedure was used to choose 44 students as the sample. The research was conducted in November. The tool utilized was a Quizizz questionnaire intended to collect responses from students regarding their satisfaction with their final semester civic education exam.

Ten questions are used to gauge how satisfied students are with their work. Final semester exam questions are uploaded to the Quizizz platform. The appearance of the Quizizz platform is as follows (Fig 1):
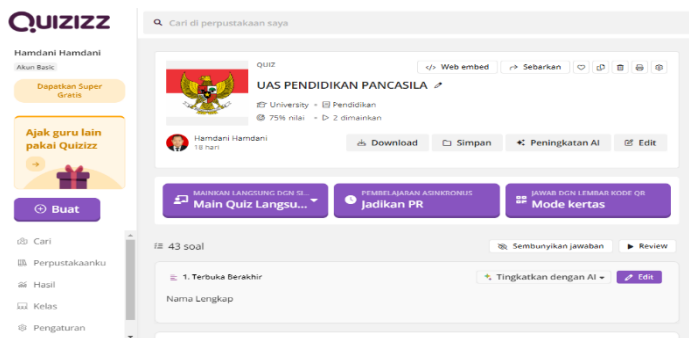

Fig. 1. Quizizz platform display

There were ten statements on the questionnaire that the pupils were given. Students use Likert scale to provide replies to questions. There is little testing done on the supplied questionnaires and assessments. With the aid of the data processing program SPSS version 24, the instrument's validity and reliability were examined.

The results of the validity testing were carried out using the Pearson Product Moment correlation technique with the criterion that if the r count was ≥ 0.297 then the item was categorized as valid. If the calculated r <0.297 then the item is categorized as invalid [15]. Meanwhile, the reliability test is carried out using the Cronbach's Alpha technique with the following criteria: If the Cronbach's Alpha coefficient is ≥ 0.6, then the instrument is reliable. If Cronbach's Alpha coefficient <0.6, then the instrument is not reliable [14]. A recapitulation of the results of the validity and reliability analysis of the survey instrument (questionnaire) is presented in Table 1.

Table 1. Recapitulation of Instrument Validity and Reliability Analysis Results

Item	Corrected Item Total Correlation	Information	Alpha Cronbach's	Information
1	0,689	Valid		
2	0,870	Valid		
3	0,591	Valid		
4	0,744	Valid		
5	0,744	Valid	0,919	Reliabel
6.	0,779	Valid		
7.	0,720	Valid		
8.	0,889	Valid		
9.	0,793	Valid		

The results of the recapitulation of the validity and reliability analysis of the survey instrument (questionnaire) were declared valid and had a high level of reliability, thus the questionnaire could be used as an instrument in collecting data on student satisfaction with the use of the Quizizz platform.

After the questionnaire is ready, its results are analyzed using the satisfaction index formula. Categorization is then carried out from the index results by converting the satisfaction index that has been obtained. Because there are 5 answer categories on the questionnaire [14], the categorization of satisfaction can use the criteria in Table 2; the index results will show how satisfied students are in using the Quizizz application for online assessment.

Table 2. Categorization of Satisfaction Index Values [9]

Perceived Value	Index Interval	Category
1	1,0 - 1,8	Very Dissatisfied
2	1,9 – 2,6	Not satisfied
3	2,7 – 3,4	Quite satisfied
4	3,5 – 4,2	Satisfied

Perceived Value	Index Interval	Category
5	4,3 – 5,0	Very satisfied

3   Result and Discussion

This Ten items made up the summary of the questionnaire that was presented to students in their first semester. In order to learn how students felt about using the Quizizz platform, they responded to questions by selecting the options for very satisfied, satisfied, quite satisfied, dissatisfied, and very dissatisfied. The following are the research results from the use of the questionnaire instrument that was distributed:

Table 3. Responses obtained from students

No.	Questions related to parameter	Very satisfied	Satisfied	Quite satisfied	Not satisfied	Very dissatisfied
	Weightage	5	4	3	2	1
1	Increased enthusiasm in working on questions	36%,	39%	25%	0%	0%
2	Digital assessment	20%	55%	25%	0%	0%
3	Attractive animated design	32%,	43%	25%	0%	0%
4	Involvement of participants in learning	16%,	57%	27%	0%	0%
5	Digital-based practice questions	23%,	48%	29%	0%	0%
6	Immediate grade feedback	34%	39%	27%	0%	0%
7	Prevention of cheating in exams	48%,	32%	20%	0%	0%
8	Enabling innovative assessments	20%	57%	23%	0%	0%
9	Objective assessment	32%	50%	18%	0%	0%

From the results obtained through questionnaires, each student has a different opinion regarding the level of satisfaction with using Quizizz that students feel satisfied in civic education courses with an average score of 4.0 because the use of quizzes is interesting, which can stimulate enthusiasm for working on questions. On the other hand, Quizizz provides satisfactory facilities by displaying the results of earning points and

rankings live so that Quizizz system can reduce exam taker cheating. Besides that, Quizizz has a very objective assessment system for student work results. In line with his opinion [16] that students feel satisfied and consider Quizizz an interesting tool because it is easy to use with an attractive appearance. This is in accordance with the opinion of [10] that Quizizz is an interesting tool. In line with the views of [17] that participants are interested in using digital media in preparing assessments. [18] believes that the advantages of the Quizzizz platform make Quizzizz an effective tool for providing direct assessments.

From the findings above, it can also be understood that students have a high level of satisfaction, and usage parameters can be used for digital assessments. Apart from that, Quizizz involves student activities in digital classes. So, it is not surprising that students agree that Quizzizz can be used to practice questions in class. Quizizz can be used as an innovative assessment tool in assessing students' cognitive abilities by increasing student participation in online classes. With these advantages, students agree that the Quizizz platform can be applied to online assessments in the MBKM curriculum based on student-centred learning. In line with opinion [19] that the new demands of the younger generation are to foster critical thinking and teamwork and incorporate engaging and interactive digital content. Additionally consistent with [16] that It enhances the enjoyment of the teaching and learning process, improves subject mastery, and boosts students' motivation and engagement in grammar classes. Even though students utilizing Quizizz face several restrictions and challenges, such as a slow internet connection, this does not stop them from learning and feeling enthusiastic.

Teachers are pleased with Quizizz because of its efficacy, viability, user-friendliness, and ability to motivate students [20]. So, using Quizizz as a platform is practical, feasible, easy to use, and motivates students, making it an online learning platform that can facilitate academic achievement and the development of students' knowledge. The nature of Quizizz helps create a fun learning environment, and it cannot be denied that this will affect students' performance at school, where they will be more motivated to learn and be better than before [21].

4   Conclusion

The new demands of the younger generation are to foster critical thinking and teamwork and incorporate exciting and interactive digital content in learning in the digital era. Using the quizizz platform in civic education courses increases student satisfaction to a high level in participating in learning by taking digital assessments, attractive animation designs, and participant involvement in learning. Digital-based practice questions, immediate grade feedback, preventing cheating in exams, digitally innovative and objective assessments and supporting the program MBKM. For teachers who teach theoretical courses such as citizenship education, citizenship education, religious education, and Indonesian, Quizizz assessments can be an alternative for providing assessments to students in the digital era. This will help students become more motivated, creative, independent and engaged learners who can adapt to advances in science and technology.

References

1. D. Grey and C. Osborne, "Perceptions and principles of personal tutoring," Journal of Further and Higher Education, vol. 44, no. 3, pp. 285–299, Mar. 2020, doi: 10.1080/0309877X.2018.1536258.

2. H. Hamdani, "Konsep Pendidikan Karakter dalam Kitab Shahih Bukhari," Al Qalam: Jurnal Ilmiah Keagamaan dan Kemasyarakatan, vol. 16, no. 6, pp. 2351–2365, 2023.

3. R. Ab Rahman, S. Ahmad, and U. R. Hashim, "A Study on Gamification for Higher Education Students' Engagement Towards Education 4.0," in Intelligent and Interactive Computing, vol. 67, V. Piuri, V. E. Balas, S. Borah, and S. S. Syed Ahmad, Eds., in Lecture Notes in Networks and Systems, vol. 67. , Singapore: Springer Singapore, 2019, pp. 491–502. doi: 10.1007/978-981-13-6031-2_5.

4. R. V. Roque-Hernández, J. L. Díaz-Roldán, A. López-Mendoza, and R. Salazar-Hernández, "Instructor presence, interactive tools, student engagement, and satisfaction in online education during the COVID-19 Mexican lockdown," Interactive Learning Environments, vol. 31, no. 5, pp. 2841–2854, Jul. 2023, doi: 10.1080/10494820.2021.1912112.

5. H. Hamdani, "Peningkatan Motivasi Belajar dan Pengetahuan Peserta Didik: Penerapan Mobile Learning pada Mata Pelajaran Pendidikan Agama Islam," al-thariqah, vol. 6, no. 2, Art. no. 2, Dec. 2021, doi: 10.25299/al-thariqah.2021.vol6(2).7970.

6. M. S. Darmawan, F. Daeni, and P. Listiaji, "The Use of Quizizz As An Online Assessment Application for Science Learning in The Pandemic Era," Unnes Sci Edu J, vol. 9, no. 3, pp. 144–150, Nov. 2020, doi: 10.15294/usej.v9i3.41541.

7. Z. Zainuddin, M. Shujahat, H. Haruna, and S. K. W. Chu, "The role of gamified e-quizzes on student learning and engagement: An interactive gamification solution for a formative assessment system," Computers & Education, vol. 145, p. 103729, Feb. 2020, doi: 10.1016/j.compedu.2019.103729.

8. L. Margallo et al., "Effectiveness of Quizizz on Students' Learning Motivation and Engagement in a Filipino Class," EAJMR, vol. 2, no. 9, pp. 3719–3734, Oct. 2023, doi: 10.55927/eajmr.v2i9.5560.

9. A. Asma, "Analysis of student satisfaction levels on the use of quizizz in educational statistics courses," Math Didactic, vol. 8, no. 3, pp. 249–259, Dec. 2022, doi: 10.33654/math.v8i3.1972.

10. S. Zuhriyah and B. W. Pratolo, "Exploring Students' Views in the Use of Quizizz as an Assessment Tool in English as a Foreign Language (EFL) Class," ujer, vol. 8, no. 11, pp. 5312–5317, Oct. 2020, doi: 10.13189/ujer.2020.081132.

11.   N. Razali, N. A. Nasir, M. E. Ismail, N. M. Sari, and K. M. Salleh, "Gamification Elements in Quizizz Applications: Evaluating the Impact on Intrinsic and Extrinsic Student's Motivation," IOP Conf. Ser.: Mater. Sci. Eng., vol. 917, no. 1, p. 012024, Sep. 2020, doi: 10.1088/1757-899X/917/1/012024.

12.   S. Y. Mei, S. Y. Ju, and Z. Adam, "Implementing Quizizz as Game Based Learning in the Arabic Classroom," Eur. j. soc. sci. educ. res., vol. 12, no. 1, p. 208, Mar. 2018, doi: 10.26417/ejser.v12i1.p208-212.

13.   N. Safarati and R. Rahma, "The Effectiveness of Online Learning Using Quizizz Education Game Media During the Covid-19 Pandemic in Applied Physics Courses," Indones. Rev. Phys., vol. 3, no. 2, p. 52, Dec. 2020, doi: 10.12928/irip.v3i2.3049.

14.   N. S. Sukmadinata, Metode Penelitian Pendidikan, 12th ed. Bandung: PT Remaja Rosdakarya, 2017.

15.   V. A. Haq, "MENGUJI VALIDITAS DAN RELIABILITAS PADA MATA PELAJARAN AL QUR'AN HADITS MENGGUNAKAN KORELASI PRODUK MOMENSPEARMAN BROWN," An-Nawa, vol. 4, no. 1, Jun. 2022, doi: 10.37758/annawa.v4i1.419.

16.   N. Rahmadani, F. Rahman, and L. Swastina, "Students' Satisfaction and Motivation in Learning Grammar mediated by Quizizz," IJCER, vol. 1, no. 2, pp. 104–112, Nov. 2022, doi: 10.54012/ijcer.v1i2.100.

17.   M. Muliani, "Pelatihan Asesmen Hasil Belajar Digital Terintegrasi Quizizz Dan Google Form Sebagai Solusi Pembelajaran Di Masa New Normal," JPMPI, vol. 5, no. 1, pp. 316–322, Mar. 2022, doi: 10.29303/jpmpi.v5i1.1165.

18.   N. Jiemsak and R. Jiemsak, "The Effectiveness of the Quizizz Interactive Quiz Media as an Online Self-Assessment of Undergraduate Students to Improve Students' Learning Outcomes," in 2020 5th International STEM Education Conference (iSTEM-Ed), Hua Hin, Thailand: IEEE, Nov. 2020, pp. 51–54. doi: 10.1109/iSTEM-Ed50324.2020.9332675.

19.   A. M. Mendoza Batista, "Quizlet, Quizizz, Kahoot & Lyricstraining: aprendizaje lúdico digital de una segunda lengua.," lc, vol. 1, no. 2, pp. 72–76, May 2020, doi: 10.29057/lc.v1i2.5438.

20.   T. M. Lim and M. M. Yunus, "Teachers' Perception towards the Use of Quizizz in the Teaching and Learning of English: A Systematic Review," Sustainability, vol. 13, no. 11, p. 6436, Jun. 2021, doi: 10.3390/su13116436.

21.   H. Hamdani and A. Rahman, "SUNNAH PERSPECTIVE CHARACTER EDUCATION METHODS IN SHAHIH BUKHARI," International Journal of Educational Review, Law And Social Sciences (IJERLAS), vol. 3, no. 1, pp. 177–188, 2023.