

The Use Of Quizizz And Youtube To Improve The Accounting Literacy Of Vocational Students During Industrial Work Practices

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| Article Information | Abstract |
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| Submission date 9 December 2023 | Research aim: The purpose of this study is to identify resistance to change and recommend one or more methods to manage that resistance. |
| Revised date 22 January 2024 | Group and Google Classroom media, making financial accounting subjects easy for students to understand. |
| Accepted date 7 March 2024 | Design/Method/Approach: This research used quantitative methods through descriptive data analysis techniques and experimental approaches. Conducted experimental research in the form of Pre-Experimental Designs with One-Group Pretest-Posttest. The sample used in this research was 27 students from class XI AK 1, using a purposive sampling technique. Data analysis was carried out using the Wilcoxon test and N-Gain test. Conducted online learning during fieldwork practices of second-year vocational high school. |
| | Research Finding: Important research results found that the use of Quizizz media was quite effective in learning accounting material. Wilcoxon test data concluded that the H_0 result was declared correct and H_a was rejected with Asymp. Sig. (2-tailed) $0.001 < 0.05$. The N-gain test found that the N-gain analysis results were at 58.4921% which was concluded to be quite effective. Statically the findings showed that Quizizz and YouTube keep students motivated, and make them pay attention during online learning. |
| | Theoretical contribution/Originality : |
| | The study adds to the discourse on the usefulness of social platforms in vocational education learning. |
| | Practitioner / Policy implication : |
| | The study adds to the discourse on the usefulness of Quizizz and YouTube platforms in vocational education settings during fieldwork practices. |
| | Research limitation : |
| | As this paper focuses on one school, the findings may not be generalizable. In addition, the relatively small sample size could be another limitation. |
| | Keywords: Quizizz, YouTube, Vocational Education |

1. Introduction

Various studies have explored measuring and improving accounting literacy among vocational students. Hartati (2022) found that cooperative learning in accounting subjects can improve students' skill competencies. However, Larres (2003) cautions against relying solely

on self-assessment to measure computer literacy and suggests it as a complementary tool. Friday (2018) proposed a work readiness model for vocational school accounting programs, which has the potential to include components to measure accounting literacy. Finally, Seldüz (2016) highlighted the need for improved curricula and internship programs to increase students' understanding of accounting standards and financial reporting.

The challenge of learning in the 4.0 era is dealing with the millennial generation as digital natives. There is a new need for educators and prospective educators to develop new forms of literacy, namely data literacy, technological literacy, and resource literacy Li, Sisi & Baocun, Liu. (2018), Fitriani, Y., & Aziz, IA (2019). Data literacy can be taught by a teacher to students so that they are skilled at reading, analyzing, and utilizing information and applying it to the use of technology. Likewise, educators with technological skills (technological literacy) mean that prospective teachers must be able to understand how technological applications/instruments work (Rules of Coding, Artificial Intelligence Principles, and Engineering Codes). Prospective teachers must also have resource literacy to enable them to work and adapt to different environments (Nastiti, 2018).

Student learning motivation also influences the learning process and learning outcomes of teachers and students. Motivation is the provision of certain circumstances through a series of efforts that will cause someone to act like it or not. Motivation can be stimulated from outside but develops from within a person (Pratama & Irwandi, 2021). Learning motivation is classified into two types: intrinsic (from within) and extrinsic (from outside), both of which depend on each other in learning (Emda, 2018). Teachers must be able to stimulate students' learning motivation, especially by organizing learning via the Internet (Chandra, 2017). Looking at the reality of research conducted by Cambridge International in 2018 within the framework of the Global Education Census shows that up to 67% of Indonesian students use smartphones in class and up to 81% use smartphones in class. However, in reality, very few teachers use internet-based learning media (Daryanto, 2010).

Minister of Education Regulation Number: 50 of 2020 states that industrial (field) work practices (PKL) or internships for SMK/MAK, SMALB, and LKP students are carried out based on partnerships between educational units and companies, industry, and employment institutions (DUDIKA) with the same qualifications. The collaboration aims to coordinate the curriculum of educational units, especially vocational schools, with the need for a qualified workforce under DUDIKA's expertise. The suitability of learning methods allows teachers to guide, monitor, and evaluate the competency of PKL students at DUDIKA. Collaboration and communication between DUDIKA teachers and supervisors is very important. The combined learning method is a learning method that can be used to support communication between teachers and DUDIKA assistants to students who take care of street vendors.

The learning concept (blended learning) is a combination of traditional face-to-face learning methods with learning using technological devices/applications (Setyowati, 2020). Facial classes take place not only at school but also practical classes at DUDIKA, through the PKL program. Technology-based learning is learning that uses technical media in teaching and learning activities (CBM), namely electronic media and learning applications such as WhatsApp, Google Classroom, Zoom, Edmodo, Microsoft Office 365, Cisco Webex or other applications supported by these applications. online, internet, and what we usually call online learning. Especially when the condition of students is on the agenda of street vendors in industrial areas. Considering that Field Work Practices (PKL) based on Minister of Education and Culture Regulation No. 50 of 2020 concerning Field Work Practices for Students is learning for Polytechnic (SMK)/Vocational Madrasah Aliyah (MAK) Students through Internships which are carried out from certain times in the world. work by the curriculum and job requirements. Space and time limitations require educators to use technology applications to facilitate the achievement of learning goals.

Online distance learning presents unique challenges for working industry classes. Distance learning carried out using technology applications (online) presents a challenging atmosphere for students who are doing practical work (Class XI AK 1). They said that they encountered many obstacles as well as difficulties when the PKL had to take part in learning, the demand was to be able to adapt quickly (adjust) to new problems including, especially, how to establish good communication and consultation with students and teachers online. The results of observations made by the teacher found, that (1) distance learning using the WhatsApp group application and Google Classroom went according to plan but was less effective. (2) Students are less active in the online learning process and student achievement in taking quizzes in the middle of the lesson has decreased. (3) The target for students to submit assignments using the Google Classroom application is low, they come very little and are often late.

One of the causes of this situation is the change from a face-to-face learning model to an online learning model which now requires calculations to be explained directly in the learning environment. The teacher summarizes the financial accounting material and sends it to Google Classroom. The existence of accounting calculations makes it possible for students to experience difficulty simply understanding the subject matter. Students who attend and are interested do not attend lessons regularly, according to the G-form attendance form in Google Classroom Learning.

Students during the week did not participate 100%. Of the supposed 29 students, only 15 were present at most, and even worse, students were not present. How few students attend online classes, this information comes from attendance data from the Google Classroom application. At the beginning of the even semester, only 2 students participated. This shows that students do not pay attention when teachers post their attendance on Google Classroom. In this case,

researchers conducted research using a quiz-based application, namely the Quizizz Application, to restore teaching and learning activities with students and present new, different, and fun learning.

The current problem is the learning outcomes of class This condition of less than optimal learning outcomes is known from the results of the previous daily accounting practice exam which showed that only 12 out of 27 students, namely. 63% of students, achieved perfection of at least 75 points. The school expects $\geq 80\%$ of students to achieve the grade set for the subject. This is contrary to the expected goals of the school.

The research results used as a reference are that it will be easier for teachers or teachers to use Quizizz as a learning medium to distribute to students a large amount of learning material that is already in the application involve students in learning, and increase students' desire and motivation to learn (Hidayati and Aslam, 2021). For students, Quizizz has several features that increase student motivation, create a new atmosphere, and make it easier for students to understand learning material, making Quizizz an interesting online learning media (Mulyati & Evendi, 2020; Wahyudi, et al., 2020). Quizizz is a game-based application that presents multi-game activities in the classroom, making the class a more fun and interactive exercise, allowing students to compete with each other and increasing learning motivation (Hidayati and Aslam., 2021). Quiz media also helps students increase their appreciation of quizzes, learning efforts, learning motivation, activity participation, and academic achievement, thereby enabling students to experience good cognitive development (Basuki & Hidayat., 2019; Wibawa et al., 2019; Salsabila, et al. ., 2020).

2. Method

The research used quantitative experimental methods, with descriptive data analysis techniques and an experimental approach. The type of experiment used is a pre-experimental design, a group pretest-posttest design. This experimental method was chosen because the researcher was involved in research during the research period and knows the effectiveness of using the Quizizz learning media in the field of financial accounting. The sample used in this research consisted of 27 students of class XI AK 1 (one group pre-test and post-test). The data obtained was processed using the SPSS 25.0 for Windows program.

The research was carried out by providing treatment to the subjects, learning how to use YouTube, recording quiz material about rights and responsibilities, and at the same time looking for reference videos. Quiz Media is used to conduct timed quizzes in groups using information obtained via YouTube. The quiz uses questions posted on the quiz application. The quiz used in therapy can be accessed via the link <https://quizizz.com/admin/quiz/5f58578c994a76001be632cd/akuntansi-keuangan-besar-xi>. For YouTube channels, use content from <https://www.youtube.com/@RuangBelajar46>.

The tools used in this research are observation, interviews, and questionnaires. The student learning motivation survey consists of five indicators, namely persistence in completing assignments, determination to overcome learning difficulties, interest in learning, enjoyment of learning, and trustworthy opinions. The Likert scale was used to collect data in this research to measure the attitude scale, opinion scale, and perception scale. The use of the Likert scale in this case by researchers consists of alternative answers to questions in the form of always (4), often (3), sometimes (2), and never (1). Multiple regression analysis was used for data analysis. Regression analysis is used to solve problems related to the relationship between two or more independent variables.

3. Results and Discussion /Hasil dan Pembahasan

This research used three questionnaires that were validated by two experts. Validator One is a learning and media strategist. Other validators are learning technology experts. After each questionnaire was validated by an expert, the data collection questionnaires were distributed and the validity and reliability of the data obtained was tested using Microsoft Excel. The survey test results are shown in Table 1 below.

Table 1 Validity Test of Questionnaire Instruments

| angket media youtube | | | angket media quizizz | | |
|--------------------------|---------------------------|-----------------|--------------------------|---------------------------|-----------------|
| r_{tabel} | r_{hitung} | simpulan | r_{tabel} | r_{hitung} | simpulan |
| 0,444 | 0,7413 | valid | 0,444 | 0,626981 | valid |
| 0,444 | 0,7413 | valid | 0,444 | 0,643025 | valid |
| 0,444 | 0,4945 | valid | 0,444 | 0,711996 | valid |
| 0,444 | 0,7308 | valid | 0,444 | 0,66509 | valid |
| 0,444 | 0,7019 | valid | 0,444 | 0,812269 | valid |
| 0,444 | 0,5835 | valid | 0,444 | 0,643025 | valid |
| 0,444 | 0,7019 | valid | 0,444 | 0,765366 | valid |
| 0,444 | 0,5925 | valid | 0,444 | 0,626981 | valid |
| 0,444 | 0,5519 | valid | 0,444 | 0,66509 | valid |
| 0,444 | 0,5925 | valid | 0,444 | 0,454236 | valid |
| 0,444 | 0,5835 | valid | 0,444 | 0,658195 | valid |
| 0,444 | 0,5519 | valid | 0,444 | 0,581082 | valid |
| 0,444 | 0,7413 | valid | 0,444 | 0,644005 | valid |
| 0,444 | 0,4945 | valid | 0,444 | 0,645634 | valid |
| 0,444 | 0,5905 | valid | 0,444 | 0,454236 | valid |
| 0,444 | 0,7308 | valid | 0,444 | 0,812269 | valid |
| 0,444 | 0,5925 | valid | 0,444 | 0,658195 | valid |
| 0,444 | 0,5925 | valid | 0,444 | 0,711996 | valid |
| 0,444 | 0,7019 | valid | 0,444 | 0,658195 | valid |

Looking at the validity test in table 1 above, it can be seen that the YouTube Survey media and Quiz media each have 20 question items (surveys) which are declared valid based on the $r_{hitung} > r_{tabel}$ value. After verifying validity, we check the reliability of the data. The

YouTube media study is considered reliable because it has a Cronbach alpha score of 0.921 (>0.70) when tested. Furthermore, the post-test research quiz media was validated with a Cronbach alpha score of 3.263 (>0.70).

Find out whether the use of Quizizz learning media in the Financial Accounting subject is effective or not and find out what the percentage of effectiveness of using this learning media is. The respondents were twenty-seven students with a minimum pretest score of 0, a maximum score of 100, and an initial average of 62.22. In the data above it can also be seen that the pretest standard deviation produces a value of 31.050. After the process was carried out, the post-test results showed the lowest value was 0, the highest value was 100, and the average was 84.44, and this value was also obtained from the post-test standard deviation. From 22,418 results. We can conclude that the use of Quizizz has a great impact in learning financial accounting and effectively improves the results. The average pre-test score was 62.22 < post-test 84.44.

Table 2 Pretest-Posttest Descriptive Statistical Analysis

| Descriptive Statistics | | | | | |
|------------------------|------|-------------|-------------|-------|-------------------|
| | N | Minimu m | Maximu m | Mean | Std. Deviation |
| Pretest | 27 | 0 | 100 | 62.22 | 31.050 |
| Posttest | 27 | 0 | 100 | 84.44 | 22.418 |
| Valid (listwise) | N 27 | | | | |

In testing the value of the Wilcoxon test and Ngain test, the use of Quizizz learning media had a significant influence after the treatment was implemented on the students learning outcomes. In the Wilcoxon test, Asymp results were found. Sig. (2-tailed) is 0.001, which means the value is smaller than 0.05 or can be symbolized by Asymp. Sig. (2-tailed) 0.001 <0.05.

Table 3 Pretest-Posttest Wilcoxon Test Table

| | N | Mean Rank | Sum of Ranks |
|-----------------------------------|-----------------|-----------|--------------|
| Posttest - Pretest Negative Ranks | 1 ^a | 4.00 | 4.00 |
| Positive Ranks | 16 ^b | 9.31 | 149.00 |
| Ties | 10 ^c | | |
| Total | 27 | | |

Table 4 Results of N-Gain Score for Experimental and Control Classes with SPSS

| | N | Minimum | Maximum | Mean | Std. Deviation |
|--------------------|----|---------|---------|---------|----------------|
| Ngain_Persen | 21 | -25.00 | 100.00 | 58.4921 | 41.75293 |
| Ngain_Score | 21 | -.25 | 1.00 | .5849 | .41753 |
| Valid N (listwise) | 21 | | | | |

This shows that Ho's statement that using the quiz application "Quizizz" as a learning medium does not produce a significant influence on financial accounting learning is rejected. On the other hand, for Mrs. Ha, the use of Quizizz learning media had a big influence on the learning of Financial Accounting Education and was declared acceptable. In the Ngain test, the results of the Ngain percentage analysis were 58.4921%, which was stated to be very effective. And we conclude that the level of effectiveness of using the Quizizz learning media is considered effective enough to be implemented effectively with a Ngain score of 58% and has a positive impact on the learning process. The success of previous research can support the results of current research which shows that the use of Quizizz learning media is effective in improving student learning outcomes, especially in financial accounting subjects. As can be seen in the data above, after the treatment was implemented there was an increase in pre-test and post-test scores which shows that the use of Quizizz learning media provided significant results. The results of this research show that the use of Quizizz learning media during learning increases students' interest in learning by 25.5 % , and the better the learning media used, the more motivated students are to learn. This is also supported by previous research (Delviana, 2021). This shows that the use of Quizizz learning media improves student learning outcomes. The use of Quizizz learning media in the Financial Accounting class, especially in the Class XI AK 1 research sample, has a very positive influence on learning effectiveness.

In learning, motivation has a very big influence on students' desire to learn. Motivation comes from the word motive which means encouragement. Motivation can be defined as an internal drive to do something based on an achievable goal. Everyone needs motivation to learn more every day (Muawanah & Muhid, 2021). To better understand motivation, you should also understand the indicators of learning motivation from previous research, such as There are eight indicators of learning motivation, including focus, determination, self-confidence, never giving up, curiosity, ambition, independence, and enthusiasm (Suryanti, Padmavati). & Muhid, 2021).

Through this learning, the importance of motivation for learning participants, indicators, and factors will be explained by providing therapy to students in the form of YouTube media and quizzes during the learning process. This research investigates changes in learning from online to offline learning and the situations students face when participating in learning activities. This is in line with the results of previous research which aims to determine the effectiveness of YouTube and Quizizz media on the learning motivation of online learning participants

through G-forms and quiz applications. Based on the analysis of research material, it is known that YouTube and Quizizz media have a positive and significant influence on student learning motivation, and the results of this research show that this analysis is under previous research. For example, Latifah and Prastowo's research (Latifah & Prastowo, 2020) investigated online learning using YouTube M-Learning as a learning tool for second-year MI students. The research results show that online learning is a boring web-based learning model and M-learning via YouTube is a learning model that can overcome these problems because it suits the characteristics of elementary school or Madrasah Ibtidaiyah children. The application of previous research can also be seen in Septyaningtyas and Hafidzah's research (Septantiningtyas & Hafidzah, 2022) which examined the application of YouTube media learning to improve the learning outcomes of learning participants. The research results show that learning via YouTube broadens teachers' insight into online learning, appropriate learning methods, teacher creativity, and appropriate equipment. Another research conducted by Mukharomah (Mukharomah, 2021) investigated the use of quiz applications for web-based assessments in elementary schools. This research shows that teachers can use quiz applications to assess students' knowledge about distance learning.

Based on the research results obtained, it can be concluded that the use of learning media with quiz applications such as "Quizizz" in the financial accounting class has produced results in the form of a positive impact. The research results show that the use of Quizizz learning media improves student learning outcomes. The use of Quizizz learning media in Class XI AK 1 Accounting as a research example has had a very positive impact on learning effectiveness. The Wilcoxon test shows the results of Asymp. signature. (two-sided) is 0.001. This means the value is less than 0.05 or can be symbolized by Asymp. Sig (Two-sided) If $0.001 < 0.05$ then H_0 is declared accepted and H_a is declared rejected. Meanwhile, the Ngain test shows that it is very effective with the results of the N-gain percentage analysis being 58.4921%. Suggestions for further research are as follows: (1) How do teachers balance learning time and student PKL schedules appropriately so that learning activities using online learning are effective and learning objectives are achieved? themselves and pay more attention to learning syntax. (2) It is hoped that students will be able to explore and understand the subject matter more deeply. Therefore, teachers often need to give group assignments to further improve the desired learning outcomes. (3) This is when you recommend to other researchers the opportunity to study various accounting materials using a quiz application such as Quizizz.

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