

Utilization of Interactive Platform "Quizizz" to Develop Competitive Spirit and Data Literacy at SDN Sondakan 11

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Abstract. The Covid-19 pandemic became a world problem in early 2020, which then became the beginning of changes in various spheres of life, one of which was the field of education. In order to break the chain of the spread of Covid-19, all educational activities are carried out online. This is a challenge for educators to find new alternatives so that they can still have fun learning online. Then, this SDN 1 Sondakan teacher conducted data literacy and founded Quizizz as an online quiz platform to promote students' competitive spirit. This research is a descriptive qualitative research through interviews and observations. The results obtained were that the competitive spirit of students successfully emerged after the teacher used Quizizz as a quiz platform with the highest percentage of improvement was the competitive spirit of students in increasing learning seriousness, as well as data literacy in teachers who always have an increase over time.

Keyword: Competitive Spirit, Data Literacy, Quizizz

INTRODUCTION

In the learning process that takes place in education, students are not only taught to develop their academic performance, but other aspects must also develop along with academic performance, for example, developing a competitive spirit. In accordance with the view that the competence that students must possess is to have a competitive spirit and to be able to think critically well (Purnama et al., 2022). A competitive spirit and critical thinking skills that go hand in hand will be a champion for students. Students who have a competitive spirit accompanied by good critical thinking skills will understand and be able to improvise so that they do not only complete work according to their duties and responsibilities. (Nurhayanto et al., 2021). Learners and teachers work together and have their respective roles in the success or failure of a learning process. Where teachers are required to be creative and innovative in order to create motivated students who have a competitive spirit but still produce the expected results (Anggraeni, 2019).

The change in the era of the industrial revolution 4.0 which will soon change to Society 5.0 is one of the characteristics that the times are changing and changing so fast. All aspects and components in it must also adjust to the existing changes. Including aspects of education and educators in it. SD/MI level education is the basic foundation that instills spiritual, intellectual and emotional intelligence. Therefore, teachers are required to be able to follow the flow of the current era by answering all the challenges that exist (Muliastri, 2019b). There are several skills and abilities that educators must have in order to answer the challenges of this era. One of the most needed by educators is literacy, by maintaining old literacy and learning and implementing new literacy (Kusmiarti & Hamzah, 2019). New literacy is all the efforts made to obtain information and knowledge and to respond to the challenges of the times in the form of aspects of data literacy, human resources/humanism and technological literacy. New literacy does not exist to replace, but to strengthen, the old literacy of reading, writing and arithmetic (Ibda, 2019).

To face and respond to challenges that go hand in hand with the times, teachers are required to have digital competence. Because in the future the challenges of digital-based learning will be more advanced along with the development of technology and information in Indonesia (Salsabila et al., 2020). Besides being driven by the challenges of technological and information advances, digital-based learning has been implemented during the implementation of distance learning due to the Covid-19 pandemic throughout Indonesia, because online learning is arguably one of the most appropriate solutions during the pandemic (Gunawan et al., online learning makes it easier for conditions (Herliandry et al., 2020).

Educators and learners are forced by circumstances to be able to adjust and get closer to digital-based learning. In distance learning some time ago, educators were asked to still be able to conduct evaluations and assessments even though the situation turned digital (Supartini & Susanti, 2021). This distance learning is implemented to support the social distancing program initiated by the government to stop the spread of Covid-19 (Aini, 2021; Suhendro, 2020). Some educators have to adapt to this situation because, as Salmia and Yusri said, this change makes educators seem to be forced to adapt to the digital world, which is one of the solutions (Salmia & Yusri, 2021).

One solution is to conduct evaluation and assessment with existing digital platforms. Evaluation is an integral and inseparable part of the learning process (Maftuhin, 2021; Setemen, 2017). One of the interactive quiz platforms that can be an alternative is Quizizz. This interactive quiz is multiplayer in nature and is usually accessed through digital devices, either smartphones, personal computers or tablets (Amomchewin, 2018). This interactive quiz is considered effective and interesting for students because it is technology-based and competitive between participants with an attractive and appealing display (Mulyati & Evendi, 2020).

Although maybe for some educators this Quizizz interactive quiz is something new, because the use of Quizizz is relatively easy to understand and implement. Quizizz participants are classified into two, namely hosts who are educators and can create questions and users who are students and can answer questions created by the host (Agustina & Rusmana, 2019). Teachers don't have to worry, the question numbers on each user's gadget will always be different from each other, this will prevent the cheating that can take place between the students (Yanawut, 2017). In this study, the authors want to know how the implementation of the Quizizz interactive quiz platform as an implementation of data literacy at SDN Sondakan 11, the underlying reasons for choosing Quizizz as the platform used, how effective Quizizz is on improving student achievement, and how to habituate students to be able to coexist with the digital world. This study aims to determine the effectiveness of using Quizizz to improve student achievement and data literacy of SDN Sondakan 11 teachers. The research objectives must of course be consistent with the problems to be discussed (Wibawa, 2003)

METHOD

This research is qualitative research where the results and findings found are qualitative data. In line with what Creswell said that qualitative research is research whose results and findings cannot be found when applying statistical procedures or other procedures that are quantified (John W. Creswell, 2010). In addition, the purpose of qualitative research is to provide an understanding of a phenomenon holistically through language and words with scientific methods (Moleong, 2010).

This research uses a descriptive approach. This approach serves to find results that are answers to who, where, what and how an experience occurs (Yuliani, 2018). The data source in this study is the subject from which the research data is obtained (Sutopo, 2006). This research was conducted at SDN Sondakan 11 from September to October 2022. The subjects in this study were educators and students at SDN Sondakan 11. Data were obtained through interviews and observations conducted directly at SDN Sondakan 11.

The data analysis technique used is a qualitative data analysis technique which has the following steps: (1) Data collection carried out by interviews and observations, (2) Data condensation, namely selecting, simplifying and transforming the data obtained, (3) Data presentation, (4) Conclusion drawing (Saldana, 2011).

RESULT AND DISCUSSION

In the era of Industry 4.0, which will soon evolve into society 5.0, the dissemination and exchange of information or data in the digital world is becoming increasingly widespread. Every era has its own challenges that need to be overcome by different levels of humanity. There are 4 challenges in this industrial era 4.0, the first is the security of technology and information, which needs to be strengthened to keep up with the growing ability to obtain information. The second challenge is the stability and

reliability of production machinery to create products that are certainly more innovative than the previous era. The third challenge is skills, which need to be constantly honed and improved according to the era. The fourth

challenge is to increase the motivation to change and develop (Muliastri, 2019). Of all the challenges that must be passed, of course, certain abilities are needed. That is the ability to read, then analyze and implement the information. Then these abilities are combined to deepen data literacy, namely the ability to utilize, process, and obtain information or big data (Pramana, 2020). Apart from the conditions of technology and information that are increasingly showing rapid progress, the creativity of an educator must also be further developed since the outbreak of the Covid-19 pandemic. This pandemic makes all layers of education must be carried out in a limited manner even without face-to-face at all for some time (Sitorus & Santoso, 2022).

If face-to-face learning is eliminated, then education across Indonesia is carried out online. This is one step for Indonesian educators to adapt to digital education. Educators are starting to look for what learning media is suitable for online learning. Because in essence, the use of media is very influential on the learning process, the learning media used can help teachers to create learning that emphasizes interactive visuals, attracts the attention of students, and makes the material to be conveyed easy to understand (Nurfadhilah et al., 2021). Over time, various learning media have been used by educators, such as Google Classroom, Zoom, Ruangguru, WhatsApp Group, Zenius, and Google Suite for Education (Atsani, 2020). In addition to these material provider applications, some educators also use gamification media such as Quizizz, Socratives, Kahoot, etc. (Solviana, 2020).

The use of game-based media can increase students' interest in learning, which may begin to decline because learning is only done at home without any interaction between teachers and students or among students. This interactive quiz and game-based media not only attracts students' interest, but is also able to inspire students to continue learning (Jusuf, 2016). One of the interactive games used as learning media is Quizizz. Quizizz itself is one of the educational game applications that research and observation can be an effective and significant supporting tool for the learning process (Anggia & Musfiroh, 2014). Quizizz is also one of the game-based educational applications that contains multiplayer activities in a classroom and changes saturated learning to be more interesting and fun for student (Citra & Rosy, 2020).

Basically, Quizizz is an application that provides questions that contain interactions between teachers and students and among students. There are several benefits of learning using interactive quiz games used as learning media, (1) Involving and motivating all students to be able to engage during the learning process, (2) Improving literacy and numeracy skills in students, (3) Helping students who have learning difficulties, (4) Practicing certain professions or roles in everyday life, (5) Increasing the creativity of all students (Setiawan, 2021).

From the various benefits mentioned above, there are enough reasons for the teachers of grade 5 at SDN 11 Sondakan to use the Quizizz platform as a digital learning media, which is an alternative solution for teachers in facing the industrial revolution 4.0. Basically, the industrial revolution 4.0 requires educators to be willing to learn and be able to adapt to existing developments so that the quality of education can improve and keep pace with existing developments (Supandi et al., 2020). Therefore, teachers are self-taught to adapt and learn to use Quizizz digital media to answer existing challenges. Because a teacher can be said to be great if he is able to produce students who are superior to the teacher himself (Right, 2018).

The world of education has been feeling the effects of the Covid-19 pandemic for some time now; this has had an impact on the level of student motivation to learn, which has dropped dramatically. Again, this is a challenge for the teachers so that the motivation of the students can be increased. And one of the efforts that can be made by teachers is the selection of interactive media that are interesting and in accordance with the situation of students' conditions. The use of appropriate interactive media helps teachers to improve student performance, increase learning motivation by reducing boredom, and improve the quality of learning (A., 2017). Students' reactions when the teacher introduced the Quizizz interactive quiz were positive. Most of the students' curiosity increased, so their motivation to learn also increased. This digital media includes that has a complete package that has an interactive nature by playing with communication and cooperation among students and creating positive interactions that increase learning motivation because of the fun atmosphere with the competitive spirit of each student that is full of challenges, imagination, and student curiosity (Irwan, 2019). In addition, this interactive quiz platform invites all students actively participate in learning from the very beginning (Noor, 2020).

According to the 5th grade teacher of SDN 11 Sondakan, the Quizizz platform is considered to be an effective digital media in improving student achievement. Game-based learning and the use of digital game media like this creates the potential to significantly increase student achievement to be used as effective digital media because it is able to stimulate verbal and visual components (Dewi, 2018). And also this interactive quiz application is expected to be one of the alternatives that can be used by educators to answer existing challenges by prioritizing student creativity, time management skills, cooperation between students, as one of the student evaluation tools and the resulting value output can be used as a progress report to parents of students (Hastuti, 2021).

TABEL 1 Description of the increase in students' competitive spirit in learning sincerity, self-confidence, and problem solving after the use of Quizizz as a learning media.

Ability Aspect	Description	Percentage	Number of Students
Learning Intentions	<ul style="list-style-type: none"> - Students observe the teacher's explanation when the teacher explains the material or how to work on quizzes in Quizizz. - Understand how to work on quiz questions in Quizizz well and carefully. - Have a desire to learn independently in class if the teacher does not explain too much, for example opening the material book and understanding. - Focus when understanding the material or types of quiz questions in Quizizz that are presented. - Increased learning concentration, both in class and at home. 	44%	12
Confidence	<ul style="list-style-type: none"> - Confidently raises hand to answer quiz questions in Quizizz. - Confident to answer with answers that he knows and believes in. - Confident to teach or correct other students' incorrect answers. - Confident to express an opinion when appointed by the teacher. 	33%	9
Problem Solving	<ul style="list-style-type: none"> - Finding the solution to the given story problem. - Use problem-solving skills with knowledge and logic. - Not giving up when unable to solve a HOTS problem. 	23%	7

The seriousness of learning in this class has a percentage of 44% or 12 students out of a total of 28 students. The seriousness of learning itself consists of two words, seriousness and also learning (Dewantoro, 2019). Earnestness when standing alone means trying your best. (WJS, 2007), while learning itself has the meaning of a practice process carried out by someone to get the desired intelligence. The seriousness of this learning can be seen from students who are serious in paying attention to question after question on the Quizizz platform that the teacher displays. Students are serious in observing the types of problems and thinking about how to solve them. Because each problem, may have a different solution. In this case, students are very visible how they pay attention to the type of problem and begin to analyze how to solve it.

Students who have seriousness in learning, usually will bring up important characters that will support their learning process. Students will be more likely to discuss with peers or those they think they can discuss with, then they will not easily despair if they get a problem that seems difficult, and students will have the courage to express their opinions from the results of discussing and solving difficult problems. (Mulyasana, 2019). One of the things that encourages students to have seriousness in learning is student interest. From the observations that have been made, students who have serious learning after the teacher uses Quizizz media, students seem to have an interest in the appearance and interesting way of completing quizzes in Quizizz. Because basically, students who have an interest in the learning media used, they will have an impetus that makes them learn more seriously. (Heriyati, 2017).

In addition to the interest that encourages students to study seriously, the motivation to learn that is embedded in students is also one of the drivers of student achievement. (Dimiyati & Mudjiono, 2009). The seriousness of learning possessed by students after the teacher teaches using Quizizz media is a learning achievement achieved by students. Because in addition to changes in knowledge that increase, learning achievement is also a change in skills and mastery in the personality of students who have carried out the learning process. (Nasution, 2010). Students' seriousness is shown by their enthusiasm in understanding the questions in Quizizz, students compete in answering and solving questions, when questions are not easy, students work together to find a solution.

Self-confidence in this class has a percentage of 33% or as many as 9 students out of a total of 28 students. This self-confidence has the meaning of a person's belief in himself, as stated by (Rakhmat, 2000) in (Heris Hendriana, 2012) that self-confidence is also a view of how an individual views himself as a whole.

Self-confidence appeared in some students when the teacher displayed the questions in Quizizz. This is analyzed through several characteristics of self-confidence possessed by an individual according to Lauster in (Fasikhah, 1994), That is (1) Students have confidence in their abilities, shown when students will answer quizzes in Quizizz, students look confident when answering them, it proves that these students know and believe in their abilities, (2) Students have confidence in themselves to dare to make decisions, it can be seen from how students answer quiz questions confidently and dare to determine the answer according to their own beliefs, (3) Students have the courage to express their opinions, namely when students have different answers from their friends, they will express their opinions if the teacher gives time to express their opinions.

One of the attitudes that is at the root of student achievement is self-confidence. A student who has self-confidence, tends to be able to see the self-concept he has well, this self-confidence can also lead to motivation for learning achievement which will have an impact on learning outcomes in accordance with expectations. (Tresnawati et al., 2017). The greater the self-confidence that a student has in his abilities, the more enthusiastic and motivated the student will be to continue to outcomes. (H. Hendriana, 2014; H. Hendriana et al., 2016).

Self-confidence owned by students has a positive influence on the learning process and results. The positive influences that arise when students have confidence in their abilities are (1) Students will be more courageous in answering questions, more confident in their answers and dare to be held accountable, (2) Ideas will appear a lot if students have confidence in their abilities. (Tresnawati et al., 2017). Conversely, if the confidence possessed by students tends to be lacking or even absent, then students will not make decisions with confidence, or hesitate, and will rely more on memorization than understanding a material concept (H. Hendriana, 2012; Hidayat, 2017; Rahmi et al., 2017).

Self-confidence can bring out critical thinking skills in students. Because students have high self-confidence in themselves, it will create a belief in solving the problems given by the teacher, so students will never give up and be serious in thinking about how to solve the questions given. (Hidayat, 2017)(Leonard & Amanah, 2014). Basically, this self-confidence is very important for students, because embedded self-confidence will help optimize other abilities possessed (Novtiar & Aripin, 2017). A student's confidence in answering questions written on Quizizz can arise due to many factors. Some of the factors that most influence the emergence of self-confidence in students are both parents or close family, playmates and peers, the community environment, and also the self-concept that each student (Mastuti, 2008)

Apart from being an aspect that a student must have for now, self-confidence is very important to be used as a provision for the future. Because the self-confidence that is embedded in students has a significant influence on the development of students in the future, and of course refers to learning outcomes that are in accordance with what is expected (Korriyah & Harta, 2015). Self-confidence in students can be used as the most basic and most important capital for students to be able to actualize themselves. (Komara, 2016). Because trust itself is one of the many personalities that contain beliefs in the strengths, skills, and abilities possessed by each student. (Risnawati et al., 2010).

In addition to the seriousness of learning and student confidence, there is one aspect that is also very prominent among students when working on quizzes on the Quizizz platform, namely problem solving. Problem Solving in this class has a percentage of 23% or as many as 7 students out of a total of 28 students. Problem solving itself is one of the most important skills in life which has a process of analysis, interpretation, reasoning, prediction, evaluation and reflection. (Anderson, 2009; Ulya, 2016). This problem solving skill is one of the most important provisions in life, because humans will always have problems and are required to solve these problems properly and as expected (Ristiasari et al., 2012). Several students have been seen to have quite good problem solving skills, as evidenced by the way they answer the questions given on the Quizizz platform. They are able to answer the given problems because problem solving helps students improve their critical thinking by asking, answering, and solving a problem. (Afcariono, 2008).

From the above abilities, the most dominant competitive spirit is the seriousness of learning, learning is a series of processes carried out by students in order to get a change in overall behavior, this change is the result of the experience of the students themselves with their environment (Slameto, 2010) (Dimiyati & Mudjiono, 2006). From this statement, the level of seriousness of student learning can be seen from how much change occurs in the students themselves. Quizizz can develop students' self-confidence by answering questions confidently and confidently. Self-confidence is a sense of confidence in one's own ability to fulfill one's hopes and desires. (Salirawati, 2012). Self-confidence that is embedded in students can encourage them to achieve success in learning (Fitri et al., 2017). Self-confidence is very important for every student to have so that they can realize their potential. (Tanjung & Amelia, 2017).

Students' ability to answer interactive questions on Quizizz must be very concerned. Because in the 21st century, individuals are required to have 3 important skills, such as critical thinking, creative thinking, dan problem solving (Pratiwi et al., 2019). In a problem-solving process, it requires important abilities that must also be possessed, namely critical thinking and creative thinking in understanding the interactive problems presented (Driana & Ernawati, 2019).

In addition to students who are required to have the above abilities, teachers are also encouraged to understand data literacy in order to answer the challenges of the 21st century. According to Gilster & Watson in (Nahdi & Jatisunda, 2020) It will not be enough for a teacher to be able to find information on the web, they will also need to be able to understand and find information from different print and digital sources. Teachers in grade 5 at SDN Sondakan 11 also look for information about educational media from different sources and are not fixated on one source.

After teachers get the necessary information through various trusted sources, the next step is to process the information itself by adjusting the learning environment and situation. Before implementation, teachers must prepare relevant materials, modules and operations in learning, and the most important thing is to make an e-learning guide for students (Marta, 2018). After going through the process of processing information that will be adapted to the circumstances and situation of learning, the teacher will implement the information that has been processed into learning with relevant material. Because teachers have demands to advance their abilities, knowledge and expertise in mastering technology that continues to develop in order to create effective and efficient learning (Rusyan, 2014).

TABEL 2 Description of teachers' ability to understand data literacy

Aspect	Description	Yes		No	
		Total	Percentage	Total	Percentage
Data or information search	Teachers are able to find data or information from various sources, both digital and print, as long as all data or information obtained can be accounted for.	18	81%	4	19%
Data processing	After the teacher obtains the necessary data or information, the teacher processes the data or information by modifying it according to the situation and conditions of the class.	11	50%	11	50%
Data implementation	After being processed and deemed suitable for the existing situation and conditions, the teacher implements it into the learning process.	9	40%	13	60%

Based on the data above, it is known that the highest percentage is the search for information or data through various trusted sources. Like the research conducted by Badrun Kartowagiran, most teachers have an awareness to continue to seek information or data from various sources to keep up with the current times. (Kartowagiran, 2011). At SDN 1 Sondakan, some teachers have realized that data literacy skills are very important to create learning that can keep up with the times. Because the ability to find data is very important for teachers, new information is very important to continue to create a learning process that attracts students' attention. (Sujana et al., 2014). In addition, someone who has good data literacy skills will form a

After searching for data from various trusted sources, the data must then be processed by the teacher, the teacher processes the data obtained by adjusting the situation and conditions of the class and the students being taught, because indeed a good teacher is a teacher who is able to adapt. (Utomo, 2019). In the data I obtained above, it is known that half of the teachers have been able to process data according to the situation and conditions, and the other half still do not have this ability, because the teachers themselves are less familiar with the situation and conditions of the class and their students, tend to be ignorant of the existing situations and conditions so that they do not understand more deeply. (Masruri, 2020). Then the last is how teachers mindset, behavior and form a

good human nature (Ashri & Hasanah, 2015). implement the data and information that has been obtained and processed, to then be implemented to their students. However, from the data I obtained, at SDN 1 Sondakan only 40% of the teachers can implement it into the learning process. This implementation from the teacher is very important to develop student achievement to achieve the goals that have been designed. (Mulyanto, 2022).

CONCLUSION

The Quizizz interactive quiz competitive spirit in seriousness Students' self-confidence began application is effective in developing students' of learning which has the highest presentation. to gradually appear and ranked second under seriousness of learning. And problem solving ability has the smallest percentage. Students are proven to compete with each other in terms of seriousness of learning, with quizzes that are packaged with an interesting and fresh look, students are increasingly curious and compete to continue to be serious in learning.

The data literacy developed by the grade 5 teachers at SDN Sondakan 11 has several stages. The first stage is that the teacher finds information about digital learning media to be used through different trusted sources, in this stage it has the highest percentage, 18 out of 22 teachers. Then, processing the information obtained by adapting the digital media to the conditions and learning situations, in this stage it is in second place, namely 11 teachers out of 22 existing teachers. And finally, the use of the information obtained by implementing digital media in the learning process, at this stage it has the lowest percentage, namely 9 teachers out of 22 existing teachers.

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