

## DEVELOPMENT DIGITAL LEARNING MODEL WITH QUIZZ ON SCHOOL INTERMEDIATE TO IMPROVE STUDENTS' LEARNING INTEREST

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**Abstract:** This articles seeks to examine the mathematics comprehension of seventh grade students at MTsS ' Aisyiyah North Sumatra through the use of the Quizizz application during mathematics instruction. The research adoption a qualitative descriptive approach, collect data via interviews with educators, observation sheets, and documentation. The analysis of the data is performed interactively, involving data collection, reduction, presentation, and the drawing of conclusions. The results indicate that students successfully meet four indicators of mathematics understanding, which encompasses articulating the concepts of the material, applying concepts algorithmically, identifying and providing examples of concepts, and linking mathematical concepts with both external and internal mathematics ideas. Furthermore, the study highlights a notable increase in students' interest in learning, as demonstrated by their enthusiasm while engaging with the problems presented in Quizizz. In conclusion, seventh-grade students at MTs' Aisyiyah North Sumatra exhibit a solid understanding of mathematical concepts in alignment with the established indicators of mathematical comprehension.

**Keywords:** Quizizz, Interest In Learning, Digital media, Mathematics.

### Introduction

Education can interpreted as a process that aims For to obtain knowledge as well as increase quality self, which in essence capable give impact positive for other people. Education works as effort For create activity learning. The purpose of education is For expand insight and develop potential individuals to be able to contribute in Society (Annisa & Erwin, 2021). Learning process naturally is communication Which intertwined between teacher And student, Which influential on values participant educate in reach objective learning.

Level School Intermediate First (JUNIOR HIGH SCHOOL) very important for generation Z, Which born between 1995 to 2010 And known as generation digital. They grow in era technology information and rapid communication (ICT) , so that skilled utilizing the internet. One of characteristics typical generation Z is ability multitasking, Which make it easier they access information and collaborate through digital platforms, influencing method learning and interacting (Apriyani et al., 2024). The Role of Technology Information and Communication (ICT) in education the more important For increase quality learning and creating atmosphere interactive learning . ICT provides various tools, such as e-learning apps and platforms, which help student understand material with method Which interesting . Student generation Z, although familiar with technology , no always own skills Which The same in take advantage of it For Study . By Because that , educator need give guidance for students can using ICT in a effective . Generation Z has opportunity big For utilise technology in learning , such as access information with fast and collaborative online , which can increase motivation and results study . Important for educators and institutions education For support use of ICT, providing access devices and the internet, as well as integrate technology in curriculum . (Christiani & Ikasari , 2020). Adjusting learning with characteristics participant educate can create a meaningful learning process so that objective learning achieved . Learning media is something that can used For convey message in learning so that can stimulate attention , interest , thoughts and feelings participant educate For reach objective learning ( Daniyati) et al ., 2023).

Learning in time front very need learning Which innovative so that process Study pleasant For reach objective learning . Language Indonesia is Wrong One eye compulsory subjects implemented every level start from Elementary School up to Higher Education . (Putri Noviatami , Hikmah Lestari, Yessi Fitriani, 2024).

Interest in learning is factor key success participant educate in learning , reflecting desire deep For understand knowledge knowledge . Participant educate with interest tall more motivated And committed For reach performance optimal (Daughter Noviatami , Wisdom Lestari, Yessi Fitriani, 2024). Therefore That importance emphasize relevance the material taught with interest participant educate ; incompatibility can cause lost focus And boredom . Therefore that , educator need understand interest participant educate For compile interesting material . Highlighting matter the naturally the need activity consistent and enjoyable learning For to cultivate interest learning . Use digital technologies , such as application learning interactive , can increase involvement participant educate . Wrong One media interactive that effective is Quizizz, platform Which allow Teacher make quiz on line with feature gamification ( Apriyani et al., 2024)

Quizizz is application innovative that allows teachers to design quiz interactive , where students can participate in a way direct through digital devices . Applications This own feature interesting that enhances experience learning , such as attractive interface , system evaluation competitive , and bait come back instant , all of which This increase involvement students ( Ningsi) et et al., 2024). Observation in Class VII Plus MTsS ' Aisyiyah Sumatra North show that method learning that teachers still use limited to books packages and lectures , making learning feel monotonous and degrading interest students . Therefore that 's important For look for solution For increase interest study . Researcher interested For increase interest Study student in class in Class VII Plus with focus on application Quizizz, inspired by research Zamzam Nur (2022) Which show impact positive instructional Media interactive . Research This titled “ Development Model Learning Digital With Quizizz On School Intermediate For Increase Interest Study Student .” With utilise digital technology , it is expected involvement student can increase .

## Literature Review

### Model Learning

Model interpreted as framework conceptual Which used as guidelines or reference in do a activities. According to expert opinion education in (( Tibahary , 2018) explains that learning model is :

1. Syaiful Sagala (2005) stated that learning model is framework conceptual depiction systematic procedure in organize experience Study participant educate For reach objective Study certain, and functional as guidelines learning and for design teachers in plan and implement activity Study teach

2. In general broad , Joyce and Weil (2000:13) Learning model is description from environment learning that describes planning curriculum , courses, course unit design learning , equipment study , books lessons , multimedia programs, and assistance Study through program computer. The essence teach according to Joyce And Weil is help learner ( participant educate ) to obtain information , idea, skills , values , method think and learn How method Study .

Learning model is element important in the educational process in the classroom . Explained in (Albina et al., 2022) that a number of reasons that explain importance Application of learning models in class , namely : 1) Selection of the right learning model can support smooth learning process teach so that objective education can achieved , 2) Learning model Which effective can give information Which useful for student , 3) Variation in learning models required For increase motivation Study students and prevent boredom , 4) Remembering existence difference in habit learning , characteristics , and personality students , development various learning models becomes very important .

### Digital Media

Digital media is a fusion between data and purposeful media For convey information with method Which more interesting . Technology This operate through digital system and can read directly by computer . There are two components main in digital media terms , namely media and

digital. Media can interpreted as tools used For make it easier various activities . While digital refers to the use of system computer or electronics that are not need operation manually (Dewi & Korompis, 2023).

Digital media is combination from various media types , including text , image ( both vector or bitmap), graphics , sound , animation , video, and interaction , which have been converted to in digital format for spread message to public . Digital media works as connector between data or media with objective For convey information with a better way interesting . ( Rhamadhan , 2024). Therefore that , digital learning media can understood as means learning Which based on digital, Which use system For facilitate the education process .

### **Quizizz**

In terms of effectiveness , respondents who use Android devices have a number of advantages that can be support educators and participants educate in utilizing Android, one of them with install Quizizz application . In addition , Android also makes it easier search information and communication . Quizizz is application based on quizzes that make the process Study student more interesting . Application This equipped with various feature Which support teachers and students in activity Study teaching ( ZA Rahmawati & Hasanudin , 2022).

According to Rusdian In ( Ningsi et al., 2024) the Quizizz game has feature game such as avatars, themes , memes, and entertaining music in the learning process . Quizizz also allows student compete One The same other, so that Motivate they For Study and improve results Study . This matter become challenge for for Teacher For create atmosphere learning Which interesting And fun . ( Fauziah) et et al., 2024). Learning Which interesting can created through use various interesting models, methods , or learning media , so that student will feel enthusiastic For learn and more easy understand the material taught . ( Ponjowulan HIA, 2024)

Quizizz is application education based on games that allow teachers to do evaluation without location physique . Application This offer experience Study interesting And push participation student through competition with score directly ( Candrasari & Munandar, 2023). Students can answer quiz with a time limit , at the same time practice ability think critical . Quizizz also provides 332 statistics and performance data student in Excel format for help educator analyze answer students , making it tool interactive and fun evaluation . ( Kusuma et al., 2023 )

### **Interest in Learning**

Interest in Study is the motivation possessed by the participants educate For understand knowledge knowledge , which can push they For Study with active and trying reach optimal performance . A study show that If material delivered by the teacher No in line with interest student , they tend No Serious in process Study , Because lack of element trigger Which interesting for they . By Because That , interest hold the role that very vital in activity learning Which based on consistency And flavor Like . (Princess Noviatami , Hikmah Lestari, Yessi Fitriani, 2024).

According to (Yeap & Chew, 2024) Interest in learning is one of the internal factors that play a role important in determine success Study participant educate . Interest This reflect seriousness participant educate For more focus on the learning process. With existence interest , someone will pushed For get experience Study , in where Teacher functioning as befits magnet which are interesting attention participant educate to the material being taught . Student interests in the learning process become strength the driving force they For Study more active . Students who have interest high learning tend can centralize attention and concentration with Good during learning . Need noted that interest Study every student different , influenced by various existing factors

### **Method**

In research this , is used approach qualitative which provides explanation deep about the object that researched , Good in a way direct and also No . Sugiyono in ( Zamidar , 2022) explain a number of characteristics study qualitative , that is : (1) implemented in situation the natural , (2) nature descriptive with data Which consists of from words or picture , without focus on numbers , (3) focus

on the process compared results , (4) data analysis is of a nature inductive , and (5) emphasis on the meaning contained in results observation .

Study This utilise method descriptive , where the data collected used For describe How the influence of Quizizz learning media on interest Study students in the eye lesson Mathematics at MTsS ' Aisiyiah North Sumatra. Activities study covers collection , processing and presentation description that reflects conditions that occur in a way actual and objective . Study This use type study descriptive qualitative . Study descriptive

Study This implemented at MTsS ' Aisiyiah North Sumatra. Data collected moment learning takes place on the material Addition and Subtraction Number Fractions . Assessment summative given at the end learning with utilizing interactive media that is quizizz . Implementation learning paradigm new in learning differentiate This use model learning based on problem (Problem Based Learning). PBL is a learning model yes centralize learning in solving problems and thinking critical Implementation of learning models based on problem this (PBL) is done in group small consisting of 6-9 participants educate with syntax learning as following namely : 1) orientation participant educate on problems , 2) organize participant educate For learning , 3) accompanying individual investigation or group , 4) develop and present results works , 5) analyze and evaluate ( Candrasari & Munandar, 2023).

In Research This is the instrument used as tool collect data through a number of technique , namely observation , interviews , and studies literature . Observation done in a way directly in the environment school For observe activity Study teaching and interaction between teachers and students (Dewi & Korompis , 2023). Interview done with teachers and students Class VII Plus for get perspective they about the learning process and the factors that influence it quality education in schools . In addition , studies literature used For get better understanding wide about issues relevant education . Research This involving 9 respondents who were students class VII Plus. Collected data will analyzed in a way descriptive For identify , Observation done For to obtain information about behavior student moment learning done For see response student as form interest Study students and use Quizizz application .

## Results and Discussion

### 1. Implementation Quizizz on Learning

In his capacity as a teacher, specifically in study this is what is emphasized in mathematics , Which is eye lesson Which often time not enough interesting for student , teachers need create environment fun learning in class . Learning must organized to be as active as possible maybe, one of them the way that can done is with using Quizizz as a learning medium interactive . Quizizz is application game Which own character narrative And flexible , Which allow its use as means delivery material and also as tool evaluation .

In studies This , Quizizz functioning as means evaluation . Application This keep information and do calculation results Work students . The results obtained describe level understanding student to material that has been taught by the previous teacher . (DN Rahmawati et al., 2022). With use description said , the teacher can evaluate results Study student as base For plan future learning . This is allows teachers For serve method new and interesting learning for students .

During use Quizizz, student show enthusiasm Which outside normal . They feel challenged For finish the questions given . Use of this media functioning For practice concentration students , so that they must focus completely so as not to out of stock time . From the results observation, students can mention draft material addition and subtraction number fractions . According to with procedure or algorithm , students can also apply it in written form .

Based on interviews conducted in a way direct with students , they disclose that learning Which use Quizizz feel more challenge and improve focus they to questions given . In context learning addition and subtraction number fractions , students can serve the result with accurate in form written . Student Also show ability For to hook concepts mathematics with appropriate .

In line with matter the , Teacher state that student capable give answer correct For questions Which related with summation And subtraction number fractions . Students No experience difficulty in use Quizizz application , which turns out can increase motivation Study they . Application This

equipped with feature interesting , like color , picture , And music moment operated . Although thus , Teacher face a number of constraint , including problem network And use Quizizz, Which require Teacher For accompany student .

The description above reinforced by the statement from the teacher who expressed that student can understand draft mathematics after explanation delivered . Teacher give explanation in a way detailed to students , so that student No experience confusion when faced with several question . During the learning process , students looks very excited , which shows that they motivated moment use quizizz or learning media interactive .

## 2. Understanding Mathematical

Based on results from research , obtained understanding data mathematical student class VII Plus according to with indicators used as following :

a. Student expected can repeat and explain return the concept that has been they learn . Indicator This require student For No only memorize formula mathematics , but also For capable explain definition from material Which taught . Based on observation , when the teacher explains about addition and subtraction number fractions , students listen with carefully . When Teacher give question , student can with accurate mention the concept that has been they learn ..

b. Student expected own ability For apply draft the in form algorithm .

Indicator This expect student For can apply draft in form algorithm . Interview results with the teacher showing that student can carry out implementation draft algorithm because the teacher explained material in a way repetitive and systematic . Parental statement students also support matter this , where are they state that student can finish questions given with the right order . In addition , the results observation show that all over student capable apply draft in form algorithm .

c. Student expected capable recognize as well as give relevant examples from the concept that has been studied .

Through interview with teachers and parents , obtained information that student capable recognize and provide example from existing concept in material comparison Lots object . Results observation more carry on show that from 9 student , 7 student can finish question addition and subtraction number fraction very well , without existence error .

## 3. Evaluation Learning Mathematics on Application Quizizz

Evaluation learning is methods used by teachers to evaluate success student in process Study . Activity evaluation This is part integral from activity Study teaching . According to with Minister of Education and Culture Regulation No. 22 of 2016, teacher activities in the learning process covering planning , implementation and evaluation results study . In research Here , the Quizizz media is used as means support assessment . Its use is very practical and easy , because results from every student will displayed at the end game . With method this , teachers can with fast and precise evaluate understanding mathematical student on material summation And subtraction number fractions . On study this , quizizz media used as a supporting media assessment . Its use is very practical. And easy , Because end from game will shown results each students . So that teachers can know in a way fast and precise understanding mathematical students on the material comparison Lots object .

## Discussion

Mathematics is one of eye lessons that are often lacking in demand and considered challenged by students . Therefore that , as educators , teachers need create environment Study Which pleasant And capable interesting attention student . Moment This , education No can separated from progress knowledge knowledge and technology . According to Hastaruddin , mathematics is knowledge supporting basis development knowledge knowledge and technology ( Fadillah et al., 2023). Given importance mastery mathematics , eye lesson This taught in all level education . learning mathematics will different in every level . Mursalin explained that in level school base , focus learning mathematics is on concepts And material base ( Goodness) et et al., 2023). By Because That , important For apply the right and interesting method in the learning process . At MTsS ' Aisyiyah , learning mathematics about addition and subtraction number fraction done with emphasis on understanding draft base .

Teacher open session learning with write example question summation number fraction. He Then request student For try equalize denominator . Through example said , students can with fast finish question , Which prove that they has fulfil indicator understanding mathematical number 1. Next , students can look for numerator after denominator equated and do operations on fractions . After done checking , answer student on indicator This show ability they in determine numerator and denominator of numbers fractions .

In accordance with indicator understanding mathematical , students expected capable recognize and provide example from the concept that has been studied on the indicators third . In the learning process , Teacher use quizizz For submit question Which must answered by students . Example question Which given is . " A bottle containing  $1\frac{1}{2}$  liter oil fry. Oil That used For fry egg as much as  $\frac{2}{5}$  liter And For fry fish as much as  $\frac{3}{10}$  liter. Remaining oil entered to in 7 plastics . Fill each plastic is ...liter." Student choose correct answer based on available options which is "48/10". The final result from quizizz show satisfying achievement . This proves that student class VII can give the right answer .

Based on explanation above , researcher obtain data that shows understanding mathematical student through a number of indicators that have been determined . The results obtained from interview with teacher, interview with students , as well as observation to student show that use Quizizz application in lesson mathematics , especially in the material addition and subtraction number fractions , has help student fulfil third indicator understanding mathematical . Student can equalize denominator , finish question with look for numerator after denominator equalized , and able to finish question fraction in form story. In addition , study this also found existence improvement interest Study students , who are seen from enthusiasm they moment do questions given via Quizizz. In line with research (Putri Noviatami et al, 2024) which explains that mark student experience improvement every indicator use application quizizz on every evaluation learning .

## Conclusion

Based on a number of study Which has done , can concluded a number of points as following :

1. In general Overall , the use of Quizizz Media in the learning process give substantial benefits. Research indicates that this platform No only support student in understand concepts complicated economics , but also makes experience Study more interesting . With existence Features interactive available , student can more active involved in material Which delivered , so that understanding they to lesson become more comprehensive .
2. Quizizz Media plays a role as means very efficient learning , because its implementation in the world of education can increase interest and power competition students . With existence element games and competitions , students become more motivated For participate in a way active in activity class . In addition , Quizizz encourage the learning process teach with innovative approach , so student No only functioning as listener passive , but Also involved in a way active in process learning . Platform This also makes it easier student in understand material lesson with a better way interactive . On the other hand , for teachers, Quizizz provides useful tool For evaluate results Study student in a way direct , so that they can quick identify area Which need fixed .
3. The advantages of Quizizz Media as tool learning lies in its ability For increase effectiveness and efficiency in the learning process . With Attractive appearance and features interactive , learning become more interesting for students . The interactivity offered by Quizizz can increase participation students , who in turn can push motivation Study them . In addition , the use of this platform also saves time for Teacher And student , Because learning can done in various location And time . Flexibility This allow student For Study in accordance with speed they alone , so that can increase quality learning in a way overall . Therefore that , Media Quizizz does not only functioning as tool help , but also as innovation in education that can give impact positive for the learning process teach .

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