



Exploration of Tellu Sipa's value in improving online-based abstract sequential thinking ability

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ABSTRACT

One of the thinking skills that is the main thing in developing critical, analytical, and creative thinking skills is the ability to think abstractly. Abstract sequential thinking is abstract thinking that likes to think in the form of concepts, analyzes information and tends to think logically, rationally, intellectually and likes to think using a strong role of reason in concepts and generalizations. The purpose of the study was to determine the improvement of students' abstract sequential thinking skills through the application of a pro learning creative learning model assisted by android-based mabelle media. In the typical Bugis Mabelle game, you will directly explore the value of Tellu Sipa (sipatokkong, siparappe, sipakinge). The research method used is a quantitative method with a quasi-experimental design of the nonequivalent control group design type, the design instrument used is a sequential abstract thinking ability test conducted on class VIII students. The results showed an increase from 60% to 78.3%, which indicates that the application of a creative pro learning model assisted by android-based Mabelle media can improve abstract sequential thinking skills.

INTRODUCTION

Education in the 21st century places great emphasis on critical, analytical, and creative thinking skills in solving a problem faced in the industrial world. One of the thinking skills that is the main thing in developing critical, analytical, and creative thinking skills is the ability to think abstractly. Abstract sequential thinking is abstract thinking that likes to think in the form of concepts, analyzes information and tends to think logically, rationally, intellectually and likes to think in concepts and analyze information and in processing information tends to use the role of strong reason (logic) in addition to mastery of principles, concepts and generalizations (Setyaningrum & Widiyastuti, 2021:147).

Abstract sequential thinking can increase students' understanding of concepts in learning to process information, for that students need ways of thinking called thinking styles, if students who have a high thinking style will be able to solve problems given by the teacher well so that they can improve their understanding of the concept. Through the ability to think abstractly, students will be accustomed to solving problems that require analysis and be able to think critically and creatively. Seeing the importance of abstract sequential thinking skills is not in line with the facts on the ground. This can be seen in the research of Firdaus, Nisa & Nadifa, (2019:70). where the ability to think abstractly sequentially becomes the lowest thinking ability among other thinking abilities. In this study, students were only able to classify data and were constrained in providing the basis for a decision, concluding, and making assumptions and good integration. Halim, Suriana and Mustal (2017:5). explain that students' low abstract sequential thinking skills can affect students' ability to solve problems.

The low ability of students' abstract sequential thinking can be caused by the learning process that does not relate students' real-life concepts to the material they are studying. Students are used to only solving problems according to the concepts contained in the textbook and less exploring their own experiences. This of course hinders students in thinking critically, analytically, and creatively. Whereas learning by linking real-life concepts will teach students to think logically that the theories they learn are useful and can be linked to everyday life. In addition, students can think deeply and compare real-life concepts with the material being studied so that the truth of a theory can be proven.

This is also very much needed in the industrial world, where someone not only says a concept without proof but, is able to think deeply about what the right solution is in solving a problem at hand.

Students' low abstract sequential ability can be overcome by creating a more interesting learning process and being able to connect the students' own experiences in teaching and learning activities, one of which is by applying a learning model. The learning model is a learning plan (instructional design) that is used in determining the goals and objectives of each topic/subject (goals topics, and purposes), analyzing the characteristics of learning citizens (learning characteristics), setting specific instructional objectives (learning objectives), selecting content learning (subject content), conducting pre-assessment, carrying out teaching and learning activities/learning resources (teaching learning/resources), providing support services (support services), conducting evaluations (evaluation), and making revisions (revise) (Nurlaelah & Sakkir, 2020:117). The learning model that can improve students' abstract sequential thinking skills is the Creative Problem Solving learning model. Creative Problem Solving learning model is a problem-centered learning model that emphasizes the balance between divergent thinking and convergent thinking besides Creative Problem Solving learning models can also increase students' activities and creative thinking and think critically in the learning process (Asmawati, Rosidin & Abdurrahman, 2018:139). Creative Problem Solving learning model will teach students to think creatively in solving problems. However, the Creative Problem Solving learning model is not able to adjust the different levels of understanding and intelligence of students in dealing with problems. Students who are used to being active in learning will dominate, while students who are less active only monitor and are not involved in the learning process. Therefore, the researchers modified the Creative Problem Solving learning model by combining it with the Blended Learning model. Blended Learning is part of e-learning by combining online and offline (face-to-face) learning. Online learning in Blended Learning seeks learning by integrating technology so that it can improve the quality of learning (Riantika & Mukminan, 2019:1724). The Blended Learning learning model is able to diversify learning and meet the learning characteristics of different students. So that active students will become peer tutors for other students. This can activate the overall learning process.

This research was conducted online as a form of concern for the learning system in the midst of the Covid-19 pandemic, so several supporting applications were used in the learning process. The applications in question are applications that students can access online, including telegram, zoom, google meet applications. This study was conducted to analyze students' abstract sequential thinking skills based online by exploring the value of Tellu Sipa (sipatokkong, siparappe, sipapale) in the online-based mabbelle game.

METHOD

This research is a quantitative descriptive study with a quasi-experimental design of nonequivalent control group design which aims to describe and analyze students' abstract thinking skills towards online-based learning processes with integration of traditional game media with Bugis cultural values Tellu sipa (Sipatokkong, Siparappe, Sipakainge). Respondents in the study were class VIII A MTs Tanah Gunung which collected 23 students as the experimental class and class VIII B of MTs Tanah Gunung which collected 23 students as the control class. The data collection technique used is by giving pretest and post to students in the form of a questionnaire. Pretest is an activity to test the level of knowledge of the material to be delivered, while posting is a final evaluation when the material given on that day has been given in which a teacher gives a post with the intention of whether the participants have understood and understood the material that was just given. The process of giving pretests and postings in this study was carried out online using a google form.

RESULTS AND DISCUSSION

This study was conducted to determine student responses to online-based Educational and Communication Technology learning with the exploration of Tellu Sipa Values (Sipatokkong, Siparappe, Sipapale). To find out student responses in this case, a questionnaire (Questionnaire) was used which contained statements related to the learning process. Student response questionnaires were given after the learning process was carried out by implementing the exploration of Tellu Sipa Values (Sipatokkong, Siparappe, Sipapale).

Exploration of the Values of Tellu Sipa (Sipatokkong, Siparappe, Sipapale) means that humans must help each other not to bring each other down but instead support each other and remind each other fellow human beings because towards success there must be challenges (Syahril, 2018:107). The engklek game (Mabbelle) is a lesson carried out by the teacher with the help of a poster to develop students' visual imagination (Munawaroh, 2017:90). While in the learning process, each group of

students must support each other, remind and cooperate with their group friends. In addition, in supporting the learning process, it is necessary to have media and learning models used in the learning process so that learning runs effectively and efficiently. The media that researchers use is the typical Bugis-based mabelle game media which aims to support the learning process. While the learning model used by the researcher is the Creative pro learning learning model which is the result of a combination of Creative Problem Solving and Blended Learning models. Putri, Zulyadaini & Relawati (2019:93) suggest that the Creative Problem Solving (CPS) learning model is a variation of learning with problem solving through systematic techniques in organizing creative ideas to solve a problem while the learning model Blended learning learning model is a flexible approach to design programs that support a mix of different times and places for learning and learning that combines face-to-face with online learning (Fadlioli, Kusuma & Kasmui, 2019:2).

Based on the observations of researchers during the learning process, the application of the Creative pro learning learning model is a new thing for students because the model has never been applied before by teachers, especially at Mts Tanah Gunung. Creative pro learning learning model is a new thing for students because the model has never been applied before it can improve students' abstract sequential thinking skills through this model in the learning process students are trained on how students have better analytical, critical and creative skills

From several stages in the steps of the Creative pro learning learning model, students are required to form a learning condition with a class discussion atmosphere that involves all students to play an active role in expressing their ideas and thoughts about the material being studied online.

Based on student learning outcomes related to students' abstract sequential thinking skills in the experimental class as the class that received treatment through several tests, the comparison results were quite significant.

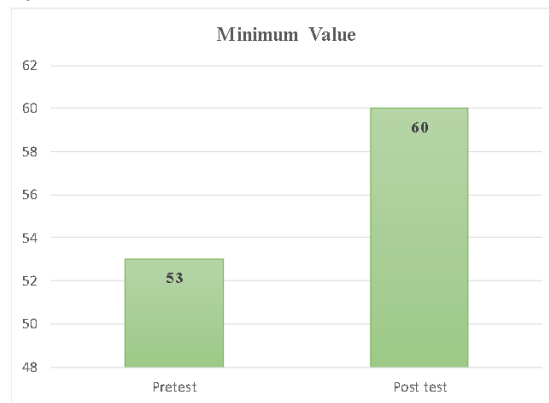


Figure 1. Comparison of the lowest scores of Pretest and Posttest Experiment class

From the bar chart image of the comparison of student test scores above, it shows that the ability to think abstractly sequentially has increased after the application of the Creative pro learning model. The lowest score of students in the pretest was 52 while the posttest obtained the lowest score of 60. This means that the Creative pro learning learning model has a great influence on abstract sequential thinking skills and has increased.

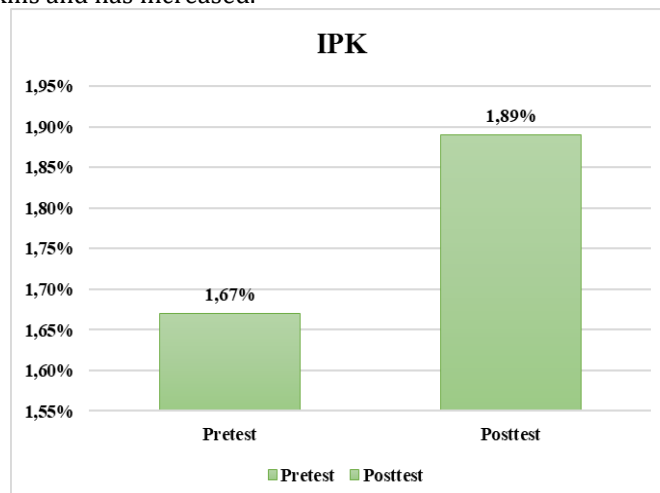


Figure 2. Picture of Comparison of Pretest and Posttest GPA scores for Experiment class

Based on the bar chart, it shows that the effectiveness of student learning achievement in groups has increased when the application of the Creative pro learning learning model with mabelle learning media. This is evidenced by the GPA test on the pretest obtained a value of 1.67% which means that the activeness of students in the learning process is quite high. In the posttest, the result was 1.89%, which means that the achievement of the group of students increased.

The improvement of students' abstract sequential thinking skills can also be tested for improvement through the gain test, the results obtained are $g = 0.261$. This means that the increase in students' abstract sequential thinking skills if based on normalized gain testing is still in the low category.

From the results of hypothesis testing with a t-test at a significance level of $= 0.05$, the t-count value is 3.097. Meanwhile, from the calculation of the value of t table $= 2.002$. This shows that there is an influence of the Creative pro learning learning model with the mabelle learning media on the students' abstract sequential thinking skills in learning information and communication technology at MTs Tanah Gunung.

The effect of the Creative pro learning learning model can also be seen from the test results of the experimental class which reached the highest score (maximum value) of 95, while the test results in the control class obtained the highest result of only 80. From the comparison of the results obtained by students in the experimental class and control class This reinforces that the application of the Creative pro learning learning model with the mabelle learning media is more effective than the conventional learning model. This is in line with opinion Firmadani, (2020: 94), that learning media is one of the teaching aids for teachers to deliver teaching materials, increase student creativity and increase student attention in the learning process. With media students will be more motivated to learn, encouraging students to write, speak and imagine getting stimulated. Thus, through learning media can make the teaching and learning process more effective and efficient and establish good relations between teachers and students.

Based on the description of the discussion above, the researcher can conclude that the application of the Creative pro learning learning model with the Mabelle learning media in the experimental class is successful. This can be seen from the number of students who got the results on the posttest above the KKM score of 75. The average value of the students' written communication ability test results in the pretest (early meeting) was 66.6 and for the control class an average value was obtained. of 68.06667 while the average posttest results in the experimental class obtained a value of 75.333 and in the control class obtained an average result of 73.6 so that the experimental class has increased compared to the control class which is a class VIII B student, which class is considered more capable and have better communication skills than the class that was used as the experimental class, namely VIII A

CONCLUSION

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