
Application of The Problem Solving Learning Model Assisted by Roulette Media in Student History Subjects in Aceh Besar District

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ABSTRACT

This study aims to find out how the application and response of class XI IPS 1 students in the application of problem solving learning models assisted by roulette media in history learning at SMA Negeri 1 Kuta Cot Glie, Aceh Besar District. This research uses a qualitative approach with descriptive research type and the sampling purposive sampling. The subjects in this study were students of class XI IPS 1, totaling 24 students. Based on the results of the research, it is known that (1) The application of the problem solving learning model assisted by roulette media in history learning in class XI IPS 1 has been carried out well according to the problem solving syntax. This can be seen from the results of the analysis of the application of the learning model, an average score of 78,3% is included in the good criteria and the results of the learning mastery analysis show that 21 people scored above the minimum criteria of mastery learning or equivalent to 87,5%, while 3 people scored below the minimum criteria of mastery learning or equivalent to 12,5%. (2) The response of class XI IPS 1 students in the application of learning with problem solving models assisted by roulette media is good. This can be seen from the activities and behavior of students shown in learning activities, students listen and follow the teacher's directions in accordance with the learning syntax. Students solve the problems given by the teacher carefully and keep the class organized.

Keywords: *Problem Solving Learning Model, Roulette Media, History Learning*

ABSTRAK

Penelitian ini bertujuan untuk mengetahui bagaimana penerapan dan respon siswa kelas XI IPS 1 dalam penerapan model pembelajaran *problem solving* berbantuan media *roulette* pada pembelajaran sejarah di SMA Negeri 1 Kuta Cot Glie Kabupaten Aceh Besar. Penelitian ini menggunakan pendekatan kualitatif dengan jenis penelitian deskriptif dan teknik pengambilan sampel adalah *purposive sampling*. Subjek penelitian ini adalah siswa kelas XI IPS 1 yang berjumlah 24 siswa. Berdasarkan hasil penelitian diketahui bahwa (1) Penerapan model pembelajaran *problem solving* berbantuan media *roulette* pada pembelajaran sejarah dikelas XI IPS 1 telah dilaksanakan dengan baik sesuai sintaks *problem solving*. Hal ini terlihat dari hasil analisis penerapan model pembelajaran diperoleh nilai rata-rata sebesar 78,3% termasuk dalam kriteria baik dan hasil analisis ketuntasan belajar menunjukkan 21 orang memperoleh nilai di atas KKM atau setara dengan 87,5%, sedangkan sebanyak 3 orang memperoleh nilai di bawah KKM atau setara dengan 12,5%. (2) Respon siswa kelas XI IPS 1 dalam penerapan pembelajaran dengan model *problem solving* berbantuan media *roulette* sudah baik. Hal ini terlihat dari aktivitas dan perilaku siswa yang ditunjukkan dalam kegiatan pembelajaran, siswa mendengarkan dan mengikuti arahan guru sesuai dengan sintaks pembelajaran. Siswa memecahkan masalah yang diberikan guru dengan teliti dan tetap menjaga ketenangan kelas.

Kata kunci: Model Pembelajaran *Problem Solving*, Media *Roulette*, Pembelajaran Sejarah

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INDRODUCTION

Education with education is something that cannot be separated in human life. Education plays an important role in various things or activities that humans undergo in social life. To achieve a success, a person needs education that has the potential to be meaningful and useful in his life. Education plays an important role in preparing qualified human resources and capable of being competent in the best possible development of science and technology. gain knowledge, understanding, and ways of behaving in accordance with their needs (Syah, 2020:10).

The high and low quality of learning depends on the components, including students, student responses to learning, curriculum, teachers, methods, good communicative processes, infrastructure and environment. The teaching and learning process can run effectively if all influential components support each other in order to achieve goals. For example, student interest, the communicative process runs smoothly, the teacher's technique of teaching varies, and the teacher's methods of teaching will influence the learning process. in the classroom. The process of learning history, the teacher should involve students to participate in learning. Good teaching includes teaching students how to learn, remember, and think. The use of models and media is the most important thing that influences the learning process. According to Nisdar & Magfirah

20:14) teachers must use appropriate teaching methods, master good material, use teaching aids in the teaching and learning process and be able to manage classes well. So that every material taught by the teacher can attract students' interest and motivation to learn.

The use of the same learning model

and media repeatedly in each learning process makes students bored and does not give a good response to learning. Learning models

is a conceptual framework that is used as a foothold in carrying out an activity (Priansa, 2017: 188). The learning media is as a liaison message from the teacher to students to obtain more adequate learning outcomes, while the form can be in print or non-printed (Mudlofir & Evi Fatimatur, 2016:124).

Based on the results of interviews with teachers of history subjects at SMA Negeri 1 Kuta Cot Glie, Aceh Besar District, researchers obtained information that students in class XIIPS 1 when the teacher explained the material there were still people who did not pay attention, and students tend to be passive in learning. The teacher's history learning process was more dominant using methods such as lectures and question and answer using blackboard media. With regard to the phenomenon at SMA Negeri 1 Kuta Cot Glie, Aceh Besar District, researchers will conduct research with a problem solving learning model assisted by media roulette in history learning to understand the material taught by the teacher, so that students feel more fun during the history learning process.

Problem solving learning model is a learning process that accustoms students to think thoroughly in dealing with a given problem. Problem solving encourages students to try to be skilled and more flexible in solving problems with a strong curiosity in understanding and mastering the information provided by the teacher. Problem solving learning models are very suitable if combined with media that invites students to develop thinking skills in order to help solve problem solving students.

Roulette as one of the most popular media will make students more interested.

Roulette is a game that uses bullets. Small bullets on a round board accompanied by numbers (Sugono, 2008:13-14). The material presented in the roulette media is easy to understand because it involves students directly in the game. Based on the description above, the researchers are interested in conducting a study entitled "Application of the Problem Solving Learning Model Assisted by Roulette Media in History Learning for Class XI Social Sciences Students at SMA Negeri 1 Kuta Cot Glie, Aceh Besar District".

Theoretical Study

Learning is a process of interaction between students and their environment to behave in a better direction. Learning is all the ways that are done by students so that the learning process occurs in students. Implicitly, in learning there are activities to select, define and develop unique methods to achieve the expected learning outcomes (Khuluqo, 2017:52).

According to Ibrahim and Nur, the problem solving learning model is a very effective way to teach higher-order thinking processes, help students process the information they already have, and help students build their own knowledge of the social and physical world in their environment. A good way to present a problem is to use an astonishing event that creates a mystery and a desire to solve the problem (Priansa, 2017:227).

The steps of the problem solving model are as follows: 1. There is a clear problem to solve. 2. Looking for data or information that can be used to solve the problem. For example, by reading books or materials that have been prepared by the teacher. 3. Establish a tentative answer to the problem. This alleged answer is, of course, based on the data that has been obtained. 4. Test the correctness of the temporary answer. In this step students must try to solve the problem so that they really believe that the answer really fits. To test the correctness of this answer, of course, other methods are needed such as

demonstrations, discussion assignments, and others. 5. Drawing conclusions, meaning that students must come to the final conclusion about the answer to the problem (Djamarah & Aswan, 2013: 91-92).

Problem solving learning model start from the teacher preparing the problem, then students look for data from books or materials prepared by the teacher, students establish hypotheses on the answers found, discuss with group friends and draw conclusions on the answers that have been provided. considered correct based on the data obtained.

Roulette is the development of a smart wheel game. This learning medium is a board game that is very well known in the world, especially in the world of gambling which is commonly called a small wheel game. Roulette consists of a directional needle and a number, the contents of roulette are adjusted to the problems that will be discussed in each number. So that the roulette game is a tool that is round, can move and rotate which is used as a learning tool and learning evaluation (Andoko, 2018:177).

The steps of the roulette learning media based on the modification results from Widyastuti are as follows: 1. Roulette is played by the teacher. 2. After the teacher spins the roulette, then waits for the roulette to stop on the arrow and shows one of the available number choices. 3. When the arrow stops, the number is the handle for students to take the flag containing the problem to be solved (Widyastuti, 2015:60).

Based on the steps that have been modified by the researcher with expert opinion, the roulette learning media is used to determine the number of problem flags that students get to solve the problems in the flag. The problem solving learning model is combined with the media roulette, so the syntax of the problem solving learning model will be slightly modified but still guided by the rules in the learning

model. The steps of the media roulette assisted problem solving learning model.

METHODS

The method used in this research is a qualitative approach. A qualitative approach is a research method that is based on post-positivism, which is used to examine the state of a natural object where the researcher is the key instrument (Sugiyono, 2017:15). The type of research that will be used in this research is descriptive qualitative.

Subjects in this study were determined using a purposive sampling technique. Purposive sampling is a way of determining samples with certain considerations (Sugiyono, 2017: 300). Subjects in this study were taken based on the lack of desire of students in the learning process of history. So the model subjects in this study were all students of class XIIPS1 students who were in the class XII students of this study.

RESEARCH RESULTS AND DISCUSSION

Data analysis technique is a technique used to process data generated from field research in order to obtain a conclusion. Data analysis in qualitative research is carried out during data collection and after data collection is completed within a certain period (Sugiyono, 2017: 337). Qualitative data analysis according to Miles and Huberman stated that activities in qualitative data analysis are carried out interactively and take place continuously until they are completed so that the data is saturated. Activities in data analysis are divided into three stages (Sugiyono, 2017: 337-345), namely data reduction (Data reduction), data presentation (Data display), and conclusions (Data verification).

DISCUSSION

This research was conducted in one face-to-face meeting. The learning process includes several stages, namely:

a. Planning

The planning stage of the researcher prepares everything needed during implementation, such as compiling a learning implementation plan (RPP), compiling history learning materials, preparing media, determining problems that students must solve, compiling observation sheets, compiling a list of questions to be asked during interviews, and compiling questions for evaluation.

b. Implementation

The implementation stage is the application of learning starting with introductory activities, core activities and closing. All learning activities are observed by the observer from the start of learning to the end of learning using observation sheets.

c. Evaluation

The evaluation is carried out after the learning is completed. The evaluation consists of 4 item questions with category C4 in the form of an essay given to 24 students with a KKM score for history lessons of 67. The results of the students' scores through evaluation can be seen in the following table:

Table 1

Evaluation result	
No	Name Test Value Description
Complete	Not Complete
1	MA 95 Completed
2	MN 95 Complete
3	RA 95 Complete
4	JW 90 Complete
5	KH 90 Complete
6	ME 90 Complete
7	MA 90 Completed
8	AT 85 Complete
9	MU 85 Complete
10	RF 85 Complete

11 SK 85 Complete
 12 SN 85 Complete
 13 NA 80 Complete
 14 NA 80 Complete
 15 NU 80 Completed
 16 RR 80 Complete
 17 SI 80 Completed
 18 ZZ 80 Complete
 19 JU 75 Complete
 20 KN 75 Complete
 21 RH 75 Complete
 22 MA 65 Unfinished
 23 MM 65 Incomplete
 24 UA 65 Incomplete

Number 1970 21 3

Application of Problem Solving Learning Model Assisted by Roulette Media in History Learning. Application of problem solving learning model assisted by media roulette has been implemented for students of class XI IPS 1 which was passed in three stages, namely the planning stage, implementation stage and evaluation. At the planning stage the researcher compiled the materials needed for preparation for entering the classroom so as to facilitate implementation, all the plans that had been prepared were carried out well according to the researchers' expectations.

The implementation stage begins with introductory activities, core activities and closing. All learning activities are observed by observers to assess student activity in the application of the problem solving learning model assisted by roulette media in the history learning of class XI IPS1 students. These observations are carried out from the beginning of learning to the end of learning using observation sheets.

To measure learning activities, use the following formula:

$$P = (\text{Score of Student Observation Results}) / (\text{Maximum Score}) \times 100\%$$

$$= 47/60 \times 100\%$$

$$= 78.3\% \text{ (Good)}$$

Based on the results of the analysis of the application of the learning model,

an average value of 78.3% was obtained, referring to the scoring criteria table from Purwanto 78.3% was included in the good criteria. This opinion is in line with the opinion of once that the implementation of learning using the problem solving learning model has good criteria (Sekali, 2018:122).

This shows that learning has run smoothly and students follow the teacher's directions according to the syntax of the problem solving learning model. According to Saridkk, the syntax of problem solving is to understand problems, plan problems, and carry out checks (Sari, Ashadi, & Budi, 2020: 99).

Problem solving learning can be referred to as learning-oriented

to solve problems, determine hypotheses, search for data, check hypotheses and draw conclusions. Therefore, it can be concluded that the application of problem solving learning models assisted by media roulette is able to make students easier to understand historical learning. to improve student understanding (Wartini, Hilman, & Cecep, 2018: 7).

In the evaluation stage, students work on essay-shaped questions as many as 4 questions according to the material that has been studied. According to Arisandi, Azis & Sakdiyah (2020:25) the essay test is one type of test that has its characteristics in the form of questions whose answers are quite long, require explanations, comments, compare, differentiate and so on and the number of questions is limited. To see the percentage of student learning mastery is calculated using the following formula:

Percentage of students who completed

$$P = (\text{Number of Students Completed}) / (\text{Number of Students}) \times 100\%$$

$$= 21/24 \times 100\%$$

$$= 87.5\%$$

Percentage of students who did not complete

$$\begin{aligned} P &= (\text{Number of Students Not Complete}) / (\text{Number of Students}) \times 100\% \\ &= 3/24 \times 100\% \\ &= 12.5\% \end{aligned}$$

Based on the analysis of the evaluation data, it can be concluded that as many as 21 people scored above the KKM or equivalent to 87.5%, while 3 people scored below the KKM or equivalent to 12.5%. This proves that most students have scored above the KKM. In line with research by Juniarti et al, it shows that if the class average and learning proficiency are more than 80%, it is categorized as good (Juniarti & Tangu Ndara, 2018: 155).

Based on this, it can be concluded that the application of the problem solving learning model assisted by media roulette in history learning in class XIIPS 1 SMA Negeri 1 Kuta Cot Glie, Aceh Besar District has been in accordance with the syntax of the problem solving learning model.

Student Response to Problem Solving Learning Model Assisted by Roulette Media in History Learning

Interviews were conducted to find out student responses to the application of problem solving learning model assisted by roulette in history learning. Interviews were conducted by researchers by interviewing one student per group after the application of learning. Researchers asked ten questions related to the process of applying problem solving learning models assisted by roulette in history learning which was carried out face-to-face directly.

Based on interviews in this study, students with the initials AT, MM, SI, RA, and JU said that "the teacher prepares problems for students to solve" and "the teacher gives problems according to the topic of each group". additional answers", in contrast to students with the initials SI

who said that "don't know what to give additional suggestions or answers about". Even though students with the initials SI did not give additional suggestions or answers, SI said the same thing with students with the initials AT, MM, RA, and JU that "I determined the temporary answers carefully".

When checking the data again to strengthen the hypothesis given by each group member when testing the truth of the hypothesis, the students with the initials AT, MM, SI, RA, and JU said that "We checked the data together again". But in concluding the answer, the student with the initials RA said that "Sometimes our group has different opinions", in contrast to students with the initials AT, MM, SI, and JU who said that "we are compact and accept each other's goals". When determining the provisional answers (hypotheses) in the problem solving process, students with the initials AT and RA said that "there are some materials that are still difficult to understand."

Collecting data to solve problems, students not only use books as a source but also using the internet, as stated by students with the initials AT, MM, SI, RA, and JU that "Yes, sourced from the internet." However, students with the initials AT and JU said that "they had problems because the internet network was not good" in contrast to MM, SI and RA who said that "there were no problems".

If the roulette media shows the numbers obtained at the beginning of the learning process for making presentations, students with the initials AT, MM and SI say that "yes, I want to go forward for the presentation" in contrast to RA which says "no, because we did not advance first" and JU who say "no, let my friend go ahead" .

Based on the results of interviews conducted with students after the application of the problem solving learning model assisted by media roulette, in general, the average student has the same answers to the questions posed and

gave a good response. It was found that students were thorough in determining the temporary answers (hypotheses) of the problems obtained. Students also checked the data again so that the students did not check the results.

When making presentations, most students are willing to present the results of their group discussions even though some do not want to because they prefer other members to present them. In addition, students are also cohesive and willing to accept suggestions or additions from group members even though some do not want to give suggestions because they have different opinions.).

Some students had difficulty in determining the temporary answer (hypothesis) in the problem-solving process because some material was still difficult to understand even though most did not have significant difficulties.

The student's response was to be careful and check the data again in determining a provisional answer (hypothesis). When making presentations, most students were willing to present the results of their group discussions and were willing to accept and give suggestions even though some did not want to because they had differences of opinion. In addition, some students had difficulties in the problem solving process because some material was still difficult to understand and some students also had poor data collection constraints.

This study is also in accordance with research with the title of increasing student learning outcomes by applying problem solving learning models assisted by teaching aids. The results show that the average percentage of student learning outcomes is 81%, the average student learning activity is 73.6% and the average percentage of positive student responses is 79.8% (Astriyani, 2016: 6).

CONCLUSION

Based on the results of research and discussions that have been carried out

by researchers, it can be concluded that the application of the problem solving learning model assisted by media roulette in history learning in class XIIPS 1 SMA Negeri 1 Kuta Cot Glie, Aceh Besar Regency has been carried out properly according to problem solving syntax.

This can be seen from the results of the analysis of the application of the learning model that an average score of 78.3% was included in the good criteria and the results of the learning completeness analysis showed that 21 people scored above the KKM or equivalent to 87.5%, while 3 people scored below the KKM or equal to 12.5%. The response of class XIIPS 1 students at SMA Negeri 1 Kuta Cot Glie in applying learning with problem solving models assisted by media roulette is good. This can be seen from the activities and behavior of students that are shown in learning activities, students listen and follow the teacher's directions according to the learning syntax. Students solve problems given by the teacher carefully and keep the class calm.

BIBLIOGRAPHY

- Andoko, P. A. S. (2018). Pengembangan Alat Evaluasi Pembelajaran Media Roulette Pada Mata Pelajaran Perencanaan Bisnis Materi Modal Usaha Kelas X Pemasaran 2 SMK Negeri 2 Kediri. *Jurnal Pendidikan Tata Niaga*, 06(04), 175–179.
- Aprilia, K., Hepsi, N., & Yani, S. (2020). Matematis Siswa Smp Dengan Pembelajaran Daring. *Inovasi dan Riset Pendidikan Matematika*, X(X), 199–214.
- Arikunto, S. (2009). *Dasar-Dasar Evaluasi Pendidikan* (10th ed.). Jakarta: Bumi Aksara.
- Dewi, M, S., & Suharta. (2019). Peningkatan Kemampuan Pemecahan Masalah Matematika Siswa Kelas VIII-A SMP Negeri 1 Sawan Melalui Penerapan Model Pembelajaran Creative Problem Solving Berbantuan

- Portofolio. *Jurnal Pendidikan dan Pembelajaran Matematika Indonesia*, 8(1), 61–70.
- Djamarah, S. bahri, & Aswan, Z. (2013). *Strategi Belajar Mengajar* (5th ed.). Jakarta: PT Rineka Cipta.
- Juniarti, N. D., & Tanggu Ndara, R. (2018). Penerapan Model Problem Solving Untuk Meningkatkan Hasil Belajar Matematika. *Jurnal Ilmiah Pendidikan Profesi Guru*, 1(2), 155–163.
- Khuluqo, E. I. (2017). *Belajar dan Pembelajaran: Konsep Dasar, Metode dan Aplikasi Nilai-Nilai Spiritualitas dalam Proses Pembelajaran*. (A. F. U. Albab, W. Waluyo, & R. Ind, Eds.) (1st ed.). Yogyakarta: Pustaka Pelajar.
- Mudlofir, A., & Evi Fatimatur, R. (2016). *Desain Pembelajaran Inovatif dari Teori Ke Praktik* (1st ed.). Jakarta.
- Mulyadi, M. (2011). Penelitian Kuantitatif Dan Kualitatif Serta Pemikiran Dasar Menggabungkannya. *Jurnal Studi Komunikasi dan Media*, 15(1), 127–138.
- Priansa, D. J. (2017). *Pengembangan Strategi & Model Pembelajaran: Inovatif, Kreatif, dan Prestatif dalam Memahami Peserta Didik* (1st ed.). Bandung: CV. Pustaka Setia.
- Purwanto, N. (2004). *Prinsip-Prinsip dan Teknik Evaluasi Pengajaran*. (T. Surjaman, Ed.) (12th ed.). Bandung: PT Remaja Rosdakarya.
- Rukajat, A. (2018). *Penelitian Tindakan Kelas*. (D. Novidiantoko & N. F. Subekti, Eds.) (1st ed.). Yogyakarta: CV. Budi Utama.
- Sari, A. Y., Ashadi, & Budi, U. (2020). Penerapan Model Pembelajaran Problem Solving Berbantuan Animasi Multimedia Interaktif dan Handout untuk Meningkatkan Kemampuan Berpikir Kritis dan Prestasi Belajar Siswa pada Materi Reaksi Redoks Kelas X MIPA 5 SMA N 5 Surakarta Tahun Pelajaran 2018/ 2019. *Jurnal Pendidikan Kimia*, 9(1), 98–104.
- Sekali, P. B. K. (2018). Implementasi Model Pembelajaran Problem Solving dalam Meningkatkan Hasil Belajar Siswa Mata Pelajaran IPS Pokok Bahasan Globalisasi Kelas VI SD Negeri 047175 Desa Simacem Bekerah Tahun Pelajaran 2017/2018. *Jurnal Curere*, 2(2), 122–132.
- Sugiyono. (2017). *Metode Penelitian Pendidikan: Pendekatan Kuantitatif, Kualitatif dan R&D* (12th ed.). Bandung: Alfabeta.
- Sugono, D. (2008). *Kamus Bahasa Indonesia*. Jakarta: Pusat Bahasa Departemen Pendidikan Nasional.
- Syah, M. (2020). *Psikologi Pendidikan dengan Pendekatan Baru*. (A. S. Wardan, Ed.) (19th ed.). Bandung: PT Remaja Rosdakarya.
- Wartini, I., Hilman, M., & Cecep, A. (2018). Penerapan Metode Problem Solving Untuk Meningkatkan Pemahaman Matematika. *al-Aulad: Journal of Islamic Primary Education*, 1(2), 1–9.
- Widyastuti, E. (2015). Penggunaan Media “Ropita” (Roulette Pintar) untuk Meningkatkan Kemampuan Menceritakan Pengalaman pada Siswa Tuna Rungu. *Jurnal Lingkar Widyaiswara*, 2(3), 51–63.
- Zulfikar, R. N. (2019). Analisis Strategi Metakognitif Siswa Dalam Memecahkan Masalah Matematika Pendahuluan Masalah dalam matematika yang umum dijumpai oleh siswa adalah soal- Hasil survei tiga tahunan Program for International Student Assessment (PISA) mengungkapkan bahwa In. *Jurnal Ilmiah Iqra'*, 13(1), 64–71.