

IMPLEMENTATION OF THE PROBLEM-BASED LEARNING MODEL ASSISTED BY QUIZIZZ APPLICATION TO IMPROVE STUDENT'S LEARNING OUTCOMES

PENERAPAN MODEL PEMBELAJARAN PROBLEM-BASED LEARNING BERBANTU APLIKASI QUIZIZZ UNTUK MENINGKATKAN HASIL BELAJAR SISWA

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Abstract

This study aims to improve the learning outcomes of Trading Company Accounting material in economics class XII IPS 1 SMA Negeri 7 Yogyakarta in the 2021/2022 academic year through the Problem-Based Learning model assisted by the Quizizz Application. This research is a type of classroom action research with the research subjects being 36 students. Data collection techniques used tests, field notes, and documentation. The data analysis technique used descriptive qualitative and quantitative descriptive analysis. The results showed that the average value in the cycle I increased from 56 to 79. In the cycle II, the average value also increased 6.7% from 85.33 to 91.33. Another indicator of success is that at least 75% of the total number of students reach the KKM. In the cycle I, the number of students who got the KKM score in the Pre-Test was 4 out of 30 students or 13.4%, while in the Post-Test 19 out of 30 students or 63.4%. In the cycle II, the number of students who got the KKM score in the Pre-Test was 25 out of 30 students or 83.3%, while in the Post-Test it was 27 out of 30 students or 90%.

Keywords: CAR, Problem-Based Learning, Quizizz, Learning Outcomes Accounting

Abstrak

Penelitian ini bertujuan untuk meningkatkan hasil belajar materi Akuntansi Perusahaan Dagang pada mata pelajaran ekonomi kelas XII IPS 1 SMA Negeri 7 Yogyakarta tahun ajaran 2021/2022 melalui model pembelajaran Problem-Based Learning berbantu Aplikasi Quizizz. Penelitian ini termasuk jenis penelitian tindakan kelas dengan subjek penelitian 36 siswa. Teknik pengumpulan data menggunakan tes, catatan lapangan, dan dokumentasi. Teknik analisis data menggunakan analisis deskriptif kualitatif dan deskriptif kuantitatif. Hasil penelitian menunjukkan bahwa nilai rata-rata pada siklus I mengalami peningkatan dari 56 menjadi 79. Pada siklus II nilai rata-rata juga mengalami peningkatan 6,7% yakni dari 85,33 menjadi 91,33. Indikator lain keberhasilan adalah minimal 75% dari jumlah siswa mencapai KKM. Pada siklus I jumlah siswa yang mendapatkan nilai KKM pada Pre-Test sejumlah 4 dari 30 siswa atau sebesar 13,4%, sedangkan pada Post-Test sejumlah 19 dari 30 siswa atau sebesar 63,4%. Pada siklus II jumlah siswa yang mendapatkan nilai KKM pada Pre-Test sejumlah 25 dari 30 siswa atau sebesar 83,3%, sedangkan pada Post-Test sejumlah 27 dari 30 siswa atau sebesar 90%.

Kata Kunci: PTK, Problem-Based Learning (PBL), Quizizz, Hasil Belajar Akuntansi

INTRODUCTION

Learning outcomes are abilities possessed by students after following a learning process. Learning outcomes can be seen from changes in a person's behavior which is measured in the form of knowledge, attitudes, and skills (Hamalik, 2007). Learning outcomes are obtained through evaluation activities of a learning activity that aims to obtain evidence data from the level of students' ability to understand the learning material. The main purpose of learning outcomes is to determine the level of success achieved by students after participating in teaching and learning activities in schools, these achievements are presented on a value scale in the form of numbers or letters (Dimiyati & Mudjiono, 2009).

In the learning process, good learning outcomes can be obtained when students have a good understanding of the material presented by a teacher. But, based on observations made at SMA Negeri 7 Yogyakarta class XII IPS 1, it is known that student learning outcomes are still low, this is indicated by the number of students who get learning outcomes below the Minimum

Completeness Criteria (KKM) on accounting material. Based on the opinion of Syaiful Bahri Djamarah (2008); Sugihartono, et al. (2007); Suharsimi Arikunto (1993); and Baharuddin & Esa (2010) learning outcomes are influenced by two factors, namely factors (internal) from within the student and factors (external) from outside the student. Internal factors consist of physical and psychological factors, while external factors consist of the family, community, and school environment. Concerning external factors from the school environment, the learning model is included in the factors that affect learning outcomes.

Based on the results of observations made by researchers at SMA Negeri 7 Yogyakarta class XII IPS 1, the researchers obtained information that student learning outcomes, especially in economics, accounting material were still low as evidenced by the value of students who still got scores below the KKM that had been set by the school of 75 for economic subjects. The following is the data on the results of the Daily Test scores (UH) 1 and 2 on accounting material in class XII IPS 1.

Table 1. The Value of Student Learning Outcomes of Class XII IPS 1 SMA Negeri 7 Yogyakarta

Value	Completeness		Percentage		Average Value
	Complete	Not Complete	Complete	Not Complete	
UH 1	19	17	52%	48%	73,07
UH 2	10	26	27%	72%	58,05

Source: Processed Primary Data

Based on the table above, it can be seen that the recap of the learning outcomes of class XII IPS 1 student in the application of the Taecher-Centered Learning (TCL) approach is as follows, the number of students who get scores above the KKM is less than 75% for Daily Tests 1 and 2. who get a score below the KKM of more than 25% for both Daily 1 and 2 Tests. So it can be concluded that there are still many students who get scores below the KKM which are quite high. In the process of teaching and learning activities, it is also seen that there are students' difficulties in understanding accounting material where this material is a new material that has never been received by students before. By the 2013 curriculum syllabus applied by the school, high school students majoring in social studies receive accounting materials starting in class XII. This causes students difficulty in understanding the accounting material taught in class.

In addition, it is also known by researchers that the learning approach used in the learning process is by using the TCL learning approach with the Direct Instruction model where the teacher carries out the learning process on the core activities by explaining in detail the material being studied then students are given instructions to do student worksheet (LKPD) or practice questions that are in the package or exercise books that have been prepared by the teacher. The TCL learning

approach is an old paradigm that is incompatible with the development of industry 4.0 because teachers are no longer the only source of information, given that students can easily get information from other sources such as the internet (Helmiati, 2012). TCL is not suitable to be applied in accounting material where the material is new and is material that requires a lot of practical training, and varied learning resources. In addition, the material does not only contain theoretical concepts but also contains material that requires reasoning to solve them (Novalinda, Kantun & Widodo, 2018).

Based on these problems, the thing that must be done by a teacher is to improve student learning outcomes in accounting material. To get good learning outcomes, there must be an effort to improve learning outcomes, one of these efforts is to use a learning model that is adapted to the learning material. One of the efforts that can be done by teachers is to choose the right learning model according to the needs of their students. The selection of the right learning model by a teacher in the process of teaching and learning activities in schools to improve learning outcomes (Nasution, 2018). The selection of the application of the appropriate learning model will be more effective and maximal in improving learning outcomes (Wulandari & Sujorno, 2013). The learning model is the whole series of learning activities carried

out by a teacher and all related components. In this regard, the researcher wishes to conduct classroom action research, by applying the Problem-Based Learning model.

The Problem-Based Learning model is one type of learning model that emphasizes an active progressive learning attitude in solving a real problem that exists in everyday life as the focus of learning to be studied (Maggi Savin and Claire Howell, 2004). The Problem-Based Learning model prepares students to understand, think critically and analyze the problems presented (Gunantara, Suarjana & Riastini, 2014). The Problem-Based Learning model is a learning model that can be used to develop students' ability to understand the subject matter studied more broadly. This is because through this learning model students are asked to take advantage of varied sources of knowledge, not from only one source.

In addition, the Problem-Based Learning model can also be used to equip students in training 21st-century learning skills (Edens, 2020). 21st-century learning skills are a learning paradigm that emphasizes students' ability to think critically, be able to connect knowledge with the real world, master information and communication technology, and collaborate. The Problem-Based Learning model is one way that a teacher or educator can use to help students become more

competent in solving problems and facing future challenges (Mayasari, 2016). The Problem-Based Learning model can be used to develop 21st-century learning skills for students, this is because the Problem-Based Learning model can connect theory and practice and develop competencies such as problem-solving, communication, and collaboration skills (Graham, 2012).

By conducting classroom action research, teachers can improve the learning process through a study of what is happening in the classroom (Widayati, 2008). Based on this, in conducting this research, researchers will also utilize existing information technology, namely by using the Quizizz application which is used for Pre-Test and Post-Test activities. The selection of the quizizz application in this study was based on previous research by (Fitria, 2020) entitled "Implementation of a Problem-Based Learning Model Assisted by Quiziz Media to Increase Student Activity in Online Learning for Class XI IPS 1 SMA Islam Al Azhar 7 Solo New Academic Year 2020/2021 "In the research, it was also said that the learning outcomes of students in class XI IPS 1 Islamic High School Al Azhar 7 Solo Baru for the 2020/2021 academic year. In addition, the basis of researchers using the quizizz application is because previous students have also known and used the application so that it is not foreign to students in accessing the quizizz application in learning.

With the help of the quizizz application, researchers can carry out learning activities to find out whether the application of the Problem-Based Learning model can improve student learning outcomes for trading company accounting materials which are proven by increasing student learning outcomes through the acquisition of Pre-Test and Post-Test scores by students through quizizz application.

METHODS

The research design used in this study was classroom action research (CAR). Rochman Natawijaya (Muslich 2009: 9) CAR is a reflective form of research by carrying out certain actions to improve and improve learning practices in class professionally. This research was conducted in 3 stages, namely preparation, research, and reporting. The preparation stage was held in November-December 2021, the research stage was carried out in January 2022, the reporting stage was held at the end of January 2022. The research site was held in class XII IPS 1 Yogyakarta N 7 High School in the school year 2021/2022, which referred to Jl. MT. Haryono No.47, Kelurahan Suryodiningratan, Kecamatan Mantrijeron, Kota Yogyakarta, Daerah Istimewa Yogyakarta, 55141. This study uses the subject of students of class XII IPS 1 SMA Negeri 7 Yogyakarta 2021/2022 school year which amounts to 36 people.

Research that uses instruments in

the form of tests is proven or tested through the validity of instruments using content validity (content validity). In this research, the expert panel that assessed the validity of the contents of the test was a lecturer in the Accounting Educational Study Program and Economic Education Teacher in SMA Negeri 7 Yogyakarta. Test instruments are used to determine student learning outcomes. To search the classically from a set of values that the students have obtained, can use the Mean formula (Suharsimi Arikunto, 2002: 240), namely as follows:

$$\bar{X} = \frac{\Sigma X}{N}$$

Description:

\bar{X} = Mean

ΣX = Total Score

N = Number of Assessment Aspects

While to calculate the percentage of students who graduated are as follows:

$$P = \frac{F}{N} \times 100\%$$

Description:

P = Presentage Number

F = The frequency that is being searched for by the percentage (in this case is the number of students who reached the value of \geq KKM)

N = The number of frequencies or the number of individuals in the research subject (in this case is the number of students as research subjects, namely students of class XII IPS 1 SMA Negeri 7 Yogyakarta).

FINDINGS AND DISCUSSION

A. Findings

1. Cycle I

This research was conducted by implementing the Problem Based Learning model of the Quizizz application that was carried out in two meetings (2x30 minutes).

The First Meeting:

The first meeting was held on Monday, January 10, 2022, to face to face at 1-2 hours at 07.30-08.30 WIB.

a. Planning

- 1) Developing a Learning Implementation Plan (RPP) Basic Competency Analyzing the Preparation of the Accounting Cycle In Trading Companies With Indicators of Competency Achievement Designing and Benefits of Special Journals, identifying various special journals, analyzing special purchasing journal transactions, and calculating transactions that occur in a special purchase journal By applying the Problem Based Learning model of the Quizizz application.
- 2) Develop special journal material in the form of PowerPoint used to deliver

material to students during the learning process in the form of a case.

- 3) Make a matter of pre-test and post-test as an instrument measuring accounting learning outcomes in cognitive areas. The test questions consist of 10 items of multiple-choice questions served using the Quizizz application.
- 4) Make a list of groups divided into 12 small groups consisting of 3 people in each group.
- 5) Make a matter of LKPD case studies 1 to be discussed by groups by utilizing information sources from various sources.

b. Action Execution

1) Introduction

The teacher prepares teaching tools and materials used in the learning process such as laptops, LCD projectors, markers, erasers, student presence books, class progress books, and LKPD case studies 1. After all ready teachers accompany students in imtaq activities and continue to be loyal to Indonesia.

After that, the teacher starts opening learning by saying greetings and leading to prayer. The teacher checks the presence of students and is proud of providing apperception and motivation to students. Furthermore, the teacher conveyed basic competencies and the learning objectives to be achieved and then divided students into small groups of 12 groups.

2) Core Activities

a) Share the Pre-Test issue code using the Quizizz App application to be done by students independently and individually. The teacher oversees the course of the process of pre-test by maintaining the calm of the class.

b) Orientation of students on the problem
Displays the PowerPoint slide containing the problems to be investigated, which is in the form of a matter of case studies related to the importance of a special purchase journal.

Students pay attention to teachers who are explaining the problems that will later be broken by each group discussing together.

c) Coordinate students on the problem

The teacher gives LKPD case study 1 which is done in group discussions, then the teacher oversees the course of the discussion process to keep the calm and health protocol such as reminding participants when someone uses a mask in an incorrect mask.

d) Guiding individual and group investigations

The teacher directs students in the focus of problem-solving by utilizing the learning resources and literature studies that exist such as books and e-modules that have been distributed by teachers in the class group. In addition, students are also welcome to ask friends and teachers if

anyone wants to be asked regarding the purchase of journal material.

- e) Develop and share results

The teacher invites groups who want to present the results of the discussion in front of the class and the teacher straightens the results of the discussion together. In group presentations there are two advanced groups to present the results of the group discussion, then other groups pay attention to groups that are presenting the results of the discussion in front of the class.

- f) Analyze and evaluate the results of problem-solving

Together with the teacher guided students to conclude the results of the discussion and collect the results of the discussion.

- 3) Closing

Teachers with students concluded the

Special Journal of Purchases, then the teacher reminded students to remain reluctant to re-study the special purchasing journal material at home. The teacher submits the learning activities that will be carried out in the future and close by saying greetings and prayers.

The Second Meeting:

The second meeting was held on Tuesday, January 11, 2022, online using a zoom meeting at 3-4 hours at 13.30-14.30 WIB, learning was carried out online because the school was not fully implemented face-to-face learning on Sunday.

- a. Planning

- 1) Develop a Learning Implementation Plan (RPP) Basic Competency Analyzing the preparation of the accounting cycle in a trading company with indicators of the achievement of competencies analyzing special journal transactions and calculating transactions that occur in special cash expenditure journals by applying the Problem Based

Learning model for the Quizizz application.

- 2) Develop a special journal of cash expenditure in the form of PowerPoint which is used to deliver material to students during the learning process in the form of a case.
- 3) Make a matter of pre-test and post-test as an instrument measuring accounting learning outcomes in cognitive areas. The test questions consist of 10 grains of multiple-choice questions presented using the Quizizz Application.
- 4) Make a group WA group divided into 12 small groups consisting of 3 people in each group.
- 5) Make the LKPD case 2 to be discussed by groups by utilizing information sources from various sources.
- 6) Make a room zoom meeting for the second meeting

b. Action Execution

1) Introduction

The teacher distributes the Zoom Meeting link to WA Group XII IPS 1 for students joining online learning.

After that, the teacher starts opening learning by saying greetings and leading to prayer. The teacher checks the presence of students by asking students to write (Name_Student Number) at WA Group. Then the teacher gives apperception, motivation to students and teachers deliver basic competencies and learning goals to be achieved.

2) Core Activities

a) Orientation of students on the problem

Showing Share Screen Slide PowerPoint contains the problems that will be investigated, namely in the form of a matter of case studies related to the importance of a special journal of cash expenditure. The teacher explained related to the problems that would be discussed by students with the study group.

b) Coordinate students on the problem

The teacher assigned students to work on LKPD case study 2 on

the answer sheet that had been distributed at the previous meeting. The teacher invited students to work in group discussions, then the teacher oversees the course of the discussion process through the Group WA group.

c) Guiding individual and group investigations

The teacher directs students in the focus of problem-solving by utilizing existing literature learning resources and studies such as books and e-modules that have been distributed by teachers in the class group. In addition, students are also welcome to ask friends and teachers if some want to be asked regarding the Journal of Cash Expenditure Journal via WA Group.

d) Develop and share results

The teacher invited groups that wanted to present the results of the discussion at the WA

Group class and the teacher straightened the results of the discussion together.

e) Analyze and evaluate the results of problem-solving

The teacher-guided students to conclude the results of the discussion and collect the results of discussions at the Group WA

f) Share the post-test issue code using the Quizizz application to be done by students independently and individually.

3) Closing

Teachers and students concluded the Special Journal of Cash Expenditures, then the teacher reminded students to remain reluctant to re-study the special journal of cash expenditure at home. The teacher delivered the learning activities that will be carried out in the future and closed by saying greetings and prayers of WA Group Class.

Observation Cycle 1

Based on the results of the test using the Quizizz application obtained accounting learning outcomes in the cognitive field, data obtained from the pre-test and post-test results in the cycle I The planned, although there are still several stages of activities carried out which are not by the target previously planned. However, at the time of the implementation of the cycle I of 36 class XII IPS 1 students, there were only 30 students who could follow the pre-test and post-test.

In the learning process, some students can take good and enthusiastic learning. The teacher started learning by saying greetings and leading praying, followed by the attendance of students. Then, students were asked to form a small group with several members of 3 people who had been randomly chosen by the teacher. After the formation of the group and still in the position of the same sit participants were asked to work on the pre-test problem with the problem code that had been distributed by the teacher at the WA Group. After working on the Pre-Test question, the teacher began to give action with the first step, namely to display the problems that must be solved by students, the teacher explains the main issues that

occur in a case study. Students are quite active in carrying out the learning process because they can answer every question that the teacher gives. After the teacher explained the issue, the teacher distributed LKPD sheets of case studies 1 and 2 for each group, but at the time of the meeting, 1 student was asked to discuss the LKPD case 1 study first. Then the teacher invited students to discuss and present the results of the discussion and then concluded the results of the discussion.

The cycle I carried out two tests which included pre-test and post-test using the help of the Quizizz application. The Pre-Test aims to determine the initial ability of students before the action is carried out, while the post-test aims to determine the increase in learning outcomes after action. The results obtained in the learning process in the cycle I are several 63.4% of students or as many as 19 students have completed the learning material of special purchasing journals and cash expenditures. The results of the cycle I average class value at the time of pre-test 56 and at the time of post-test 79. For learning outcomes in cycles, I related to student completeness can be seen in the following table:

Table 2. Accounting learning results cycle I

CYCLE I				
Value Category	Pre-Test		Post-Test	
	Frequency	%	Frequency	%
N < 75	26	86,6%	11	36,6%
N ≥ 75	4	13,4%	19	63,4%
Total	30	100%	30	100%

Source: Processed Primary Data

Based on data from Table 4 know that the pre-test and post-test values of the results of class XII IPS 1 accounting learning are increasing. Judging from the number of students who have reached the KKM, at the pre-test value of 4 students (13.4%) whose value reached KKM, 26 students (86.6%) have not reached the Pre-test. While the results of learning from post-test as many as 19 students (63.4%) have reached the KKM while 11 students (36.6%) have not reached the KKM. When viewed from the percentage of the number of students who have reached the KKM, this in the cycle I increased, namely from 13.4% in the pre-test to 63.4% in the post-test. The difference in the increase in the percentage of students who have reached the KKM in this cycle I is 23%.

2. Cycle II

This research was conducted by implementing the Problem Based Learning model of the Quizizz application that was carried out in two meetings (2x30 minutes).

The First Meeting:

The first meeting was held on Monday, January 17, 2022, to face at 1-2 hours at 07.30-08.30 WIB.

a. Planning

- 1) Develop a Learning Implementation Plan (RPP) for basic competencies to analyze the preparation of the accounting cycle in trading companies with indicators of competency achievement. Counting Transactions that occur in the Special Sales Journal by applying the Quizizz Application-Assisted Problem Based Learning model.
- 2) Prepare materials for the Special Sales Journal in the form of powerpoints that are used to convey material to students during the learning process in the form of a case study.
- 3) Make pre-test and post-test questions as instruments to

measure accounting learning outcomes in the cognitive field. The test questions consist of 10 multiple choice questions which are presented using the Quizizz application.

- 4) Make a list of groups that are divided into 12 small groups consisting of 3 people in each group.
- 5) Make LKPD Case Study 3 questions to be discussed by the group by utilizing information sources from various sources.

b. Action Execution

1) Introduction

The teacher prepares teaching tools and materials used in the learning process such as laptops, LCD projectors, markers, erasers, student attendance books, class progress books, and LKPD Case Studies 3. After everything is ready the teacher begins to open the lesson by greeting and leading to prayer. The teacher checks student attendance and continues to give apperception and motivation to students. Next, the teacher conveys the basic

competencies and learning objectives to be achieved and then divides students into small groups of 12 groups.

2) Core Activities

a) Distributing Pre-Test question codes using the Quizizz application for students to work on independently and individually. The teacher supervises the work on the Pre-Test questions while maintaining the calm of the class.

b) Student Orientation on Problems

Showing PowerPoint slides containing the problems to be investigated, namely in the form of case study questions related to the importance of special sales journals. Students pay attention to the teacher who is explaining the problems that will be solved by their respective groups by discussing them together.

c) Coordinate Students on Problems

The teacher gives LKPD Case Study 3 which is done in group discussions, then the teacher supervises the discussion process to maintain calm and health protocols such as reminding students if someone uses a mask incorrectly and reprimanding students if there are people who are busy during learning.

d) Guiding Individual and Group Investigations

The teacher directs students to focus on problem-solving by utilizing existing learning resources and literature studies such as books and e-modules that have been distributed by teachers in class groups. In addition, students are also welcome to ask friends and teachers if they have any questions related to the sales journal material.

e) Develop and Share Results

The teacher invites groups who want to present the results of their discussions in front of the class and the teacher straightens the results of the discussion together. In group presentations two groups come forward to present the results of their group discussions, then the other groups pay attention to the group that is presenting the results of the discussion in front of the class.

f) Analyze and Evaluate Problem Solving Results Together, the teacher guides students to conclude the results of the discussion and collect the results of the discussion.

3) Closing

The teacher and students make conclusions about the special sales journal, then the teacher reminds the students to keep studying the Special Sales Journal material at home. The teacher conveys the learning activities that will

be carried out at the upcoming meeting and closes by saying greetings and prayers.

The Second Meeting:

The second meeting will be held on Tuesday, January 18, 2022, face to face at 2-3 hours of class at 08.00-09.00 WIB.

a. Planning

- 1) Develop a Learning Implementation Plan (RPP) for basic competencies to analyze the preparation of the accounting cycle in trading companies with indicators of competency achievement. Analyzing Transactions in the Special Journal of Cash Receipts and Counting Transactions that occur in the Special Journal of Cash Receipts by applying the Problem Based Learning model with the help of the Quizizz Application.
- 2) Prepare materials for the Special Journal of Cash Receipts in the form of PowerPoint that are used to convey material to students during the learning process in the form of a case study.

- 3) Make pre-test and post-test questions as instruments to measure accounting learning outcomes in the cognitive field. The test questions consist of 10 multiple choice questions which are presented using the Quizizz application.
- 4) Make a list of groups that are divided into 12 small groups consisting of 3 people in each group.
- 5) Create LKPD Case Study 4 questions to be discussed by the group by utilizing information sources from various sources.

b. Action Execution

1) Introduction

The teacher prepares tools and teaching materials used in the learning process such as laptops, LCD projectors, markers, erasers, student attendance books, class progress books, and LKPD Case Studies 4. After everything is ready the teacher begins to open the lesson by greeting and leading to prayer. The teacher checks student attendance and continues to give apperception and

motivation to students. Next, the teacher conveys the basic competencies and learning objectives to be achieved and then divides students into small groups of 12 groups.

2) Core Activities

a) Student Orientation on Problems

Showing PowerPoint slides containing the problems to be investigated, namely in the form of case study questions related to the importance of special cash receipts journals. Students pay attention to the teacher who is explaining the problems that will be solved by their respective groups by discussing them together.

b) Coordinate Students on Problems

The teacher gives LKPD Case Study 4 which is carried out in group discussions, then the teacher supervises the discussion process to maintain calm and health protocols such as

reminding students if someone uses a mask incorrectly and reprimanding students if there are people who are busy during learning.

c) Guiding Individual and Group Investigations

The teacher directs students to focus on problem-solving by utilizing existing learning resources and literature studies such as books and e-modules that have been distributed by teachers in class groups. In addition, students are also welcome to ask friends and teachers if they have any questions related to the sales journal material.

d) Develop and Share Results

The teacher invites groups who want to present the results of their discussions in front of the class and the teacher straightens the results of the discussion together. In group presentations two groups

come forward to present the results of their group discussions, then the other groups pay attention to the group that is presenting the results of the discussion in front of the class.

e) Analyze and Evaluate Problem Solving Results Together, the teacher guides students to conclude the results of the discussion and collect the results of the discussion.

3) Closing

The teacher and students make conclusions about the special sales journal, then the teacher reminds students to keep studying the material for the Special Journal of Cash Receipts at home. The teacher conveys the learning activities that will be carried out at the upcoming meeting and closes by saying greetings and prayers.

Observation Cycle 2

Based on the test results using the Quizizz application, the data obtained from Accounting Learning Outcomes in the cognitive field, data obtained from the Pre-Test and Post-Test results in cycle II. The

learning process by applying the Problem-Based Learning model assisted by the Quizizz application in cycle II was carried out with procedures that had been planned and had been running with results by what was expected. However, at the time of the implementation of the cycle II of the 36 students of class XII IPS 1, there were only 30 students who could take the Pre-Test and Post-Test.

In the learning process, students can follow the lesson better and more enthusiastically than learning in cycle I. The teacher begins the lesson by greeting and leading the prayer, followed by student attendance. Then, students are asked to form small groups with 3 members who have been randomly selected by the teacher which is equated with the group in cycle I. After forming groups and still in the same sitting position, students are asked to work on Pre-Test questions with a question code which has been shared by the teacher in the WA Group Class. After working on the Pre-Test questions, the teacher begins to take action with the first step, namely showing the problems that must be solved by students, the teacher explains the main problems that occur in a case study. Students are quite active in carrying out the learning process because they can answer every question that the teacher gives. After the teacher explains the problem, the teacher distributes LKPD Case Study 3 sheets at meeting 1, and at meeting 2 the

teacher distributes LKPD Case Study 4 sheets to each group. Then the teacher invites students to discuss and present the results of the discussion and then conclude the results of the discussion.

In cycle II, two tests were carried out which included Pre-Test and Post-Test using the quizizz application. The Pre-Test aims to determine the students' initial abilities before the action is carried out, while the Post-Test aims to determine the

increase in Learning Outcomes after the action. The results obtained in the learning process in the cycle II are 90% of students or 27 students have completed studying the Special Journal of Sales and Cash Receipts. In the results of the cycle II the average value of the class at the time of the Pre-Test was 85.33 and at the time of the Post-Test was 91.33. For learning outcomes in cycle II related to student mastery, it can be seen in the following table:

Table 3. Accounting learning results cycle II

CYCLE II				
Value Category	Pre-Test		Post-Test	
	Frequency	%	Frequency	%
N < 75	5	16,7%	3	10%
N ≥ 75	25	83,3%	27	90%
Total	30	100%	30	100%

Source: Processed Primary Data

Based on the data from Table 5, it is known that the Pre-Test and Post-Test scores of accounting learning outcomes for class XII IPS 1 have increased. Judging from the number of students who reached the KKM, in the Pre-Test score there were 25 students (83.3%) whose scores reached the KKM, while 5 students (16.7%) had not reached the KKM in the Pre-Test. While the Learning Outcomes from the Post-Test as many as 27 students (90%) have reached the KKM while 3 students (10%) have not reached the KKM. When viewed from the percentage of students who have reached the KKM, the cycle II has increased from 83.3% in the Pre-Test to 90% in the Post-

Test. The difference in the percentage increase in the number of students who have reached the KKM in the cycle II is 6.7%.

B. Discussion

This study discusses the problem of Accounting Learning Outcomes for Class XII IPS 1 Students at SMA Negeri 7 Yogyakarta in the 2021/2022 Academic Year in the cognitive field which is still low. This is due to the lack of variation in the application of the teaching and learning process, seen when teaching teachers always use the TCL (Teacher Center Learning) method and only source from textbooks. Based on previous research by (Fitria, 2020) the use of the Problem-Based

Learning model with the help of the Quizizz application is one of the learning models that can be used to add variety in the teaching and learning process. This will create a new experience for both teachers and students because the Problem-Based Learning model can be used to develop 21st-century learning skills for students, where the Problem-Based Learning model can connect theory and practice and develop competencies such as problem-solving skills, problems, communication, and collaboration (Graham, 2012).

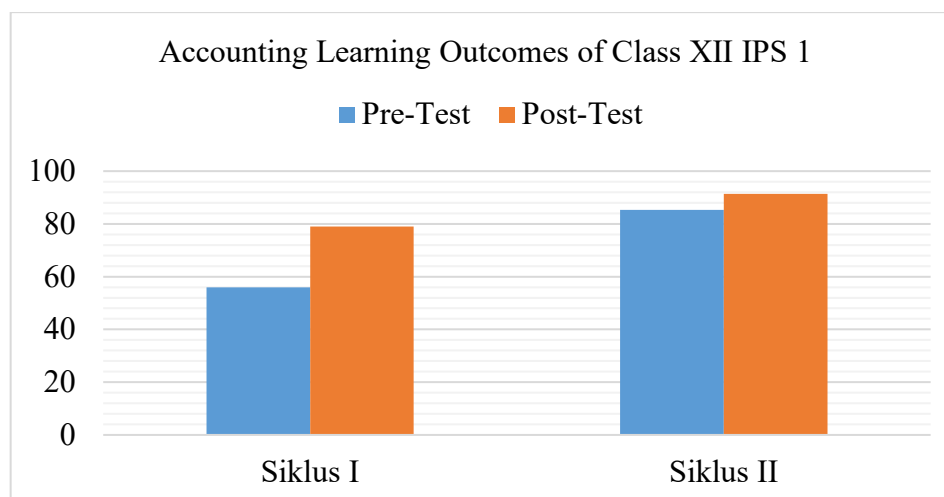
In addition, this was also discussed in previous research by (Zahrawati, 2020) who also said that the use of Problem-Based Learning models can improve student learning outcomes wherein the learning process students must be able to learn to find solutions to the problems presented, namely real problems that exist in the classroom. in everyday life (Amir, 2009). In addition, based on previous research by (Dewi, 2019) it is known that the use of the Problem-Based Learning model by using the Quizizz application learning evaluation media can increase student activity in the learning process. The Problem-Based Learning model is one type of learning model that emphasizes an active progressive learning attitude in solving a real problem that exists in everyday life as the focus of learning to be studied (Maggi Savin and Claire Howell, 2004). Based on previous research and supported by theory,

this research can improve learning outcomes in the cognitive field, especially in accounting learning outcomes.

This research was conducted in 2 cycles with two meetings in each cycle. Cycle I, the first meeting was held on Monday, January 10, 2022, at 07.30-08.00 WIB, then the second meeting was held on Tuesday, January 11, 2022, at 13.30-14.30 WIB. Cycle II, the first meeting was held on Monday, January 17, 2022, at 07.30-08.30 WIB, then the second meeting was held on Tuesday, January 18, 2022, at 08.00-09.00 WIB. The stages in this research include planning, implementing actions, observing, and reflecting. The increase in Accounting Learning Outcomes is measured using instruments in the form of Pre-Test and Post-Test questions assisted by the Quizizz application related to Accounting Learning Outcomes. The Pre-Test and Post-Test questions in the form of multiple-choice consist of 10 questions used in cycle I and cycle II according to the learning material in each cycle.

The results showed that the application of the Quizizz Application Assisted Problem-Based Learning model was able to improve Accounting Learning Outcomes. This increase can be seen in the comparison of the average Post-Test scores in each cycle. Increasing Accounting Learning Outcomes the average value can be seen in the following diagram.

Chart 1. Accounting Learning Outcomes of Class XII IPS 1



Source: Processed Primary Data

Based on Diagram 3, Accounting Learning Outcomes in the cognitive field of the cycle I and cycle II in Pre-Test and Post-Test always increase. The results of the average value of Pre-Test cycle I of 56 and Post-Test of 79 increased by 23 while the average value of Pre-Test cycle II was 81.33 and Post-Test was 91.33 increased by 10. Percentage completeness can be seen in Tables 4 and 5, the Pre-Test of students in the first cycle was 13.4%, or 4 out of 30 students had reached the KKM, while in the second cycle 14.29% or 3 of the 21 students had reached the KKM. The results of the Post-Test students in the first cycle were 83.3% or 25 of 30 students had reached the KKM, while in the second cycle for the Post-Test 90% or 27 of 30 students had reached the KKM.

The success of the research is seen from the Post-Test of Accounting Learning Outcomes. The average value of the Post-Test cycle I was 79 while the average value

of the Post-Test cycle II was 91.33 so it can be seen that the increase in Accounting Learning Outcomes was 12.33. Another indicator of success is that at least 75% of students in one class have reached the KKM that has been set by the school, which is 75. In the second cycle, the post-test results showed that 27 out of 30 students, or 90% had reached the KKM, which was 75. This proves that the application of the Problem-Based Learning Model Assisted by the Quizizz Application, can improve the Accounting Learning Outcomes of Class XII IPS 1 Student of SMA Negeri 7 Yogyakarta Academic Year 2021/2022.

CONCLUSION

Based on the results of the research and discussion in the previous chapter, it can be concluded that the application of the Problem-Based Learning Model Assisted by the Quizizz Application can improve the Accounting Learning Outcomes of Class

XII Social Sciences 1 SMA Negeri 7 Yogyakarta Academic Year 2021/2022. This is evidenced by an increase in the percentage of the average score and the percentage of completeness of accounting learning outcomes. The results showed that the success of the study was seen from the difference between the Pre-Test and Post-Test scores for accounting learning outcomes. The average value in the first cycle increased from 56 to 79. In the second cycle, the average value also increased 6.7% from 85.33 to 91.33.

Another indicator of success is that at least 75% of the total number of students reach the KKM. In the first cycle, the number of students who got the KKM score in the Pre-Test was 4 out of 30 students or 13.4%, while in the Post-Test 19 out of 30 students or 63.4%. In the second cycle, the number of students who got the KKM score in the Pre-Test was 25 out of 30 students or 83.3%, while in the Post-Test it was 27 out of 30 students or 90%.

REFERENCES

- Amir, M. Taufiq. (2009). Inovasi Pendidikan Melalui *Problem Based learning*. Jakarta: Kencana Prenada Media Group.
- Baharuddin & Esa Nur Wahyuni. (2010). Teori Belajar dan pembelajaran. Yogyakarta: Ar-Ruzz Media.
- Edens, K. M. (2000). Preparing problem-solvers for the 21st century through problem-based learning. *College Teaching*, 48(2), 55-60.
- Graham, R. (2012). Achieving excellence in engineering education: the ingredients of successful change. London: The Royal Academy of Engineering.
- Gunantara, G., Suarjana, I. M., & Riastini, P. N. (2014). Penerapan model pembelajaran *Problem Based Learning* untuk meningkatkan kemampuan pemecahan masalah matematika siswa kelas V. *Mimbar PGSD Undiksha*, 2(1).
- Hamalik, Oemar. (2007). Proses Belajar Mengajar. Jakarta: PT. Bumi Aksara.
- Helmiati,. (2012). Model Pembelajaran. Jogjakarta: Aswaja Pressindo.
- Maggi, S. & Claire H.M. (2004). Foundations of problem-based learning. New York: Open University Press.
- Masnur Muslich. (2009). Melaksanakan PTK Penelitian Tindakan Kelas Itu Mudah. Jakarta: Bumi Aksara.

- Mayasari, T., Kadarohman, A., Rusdiana, D., & Kaniawati, I. (2016). Apakah model pembelajaran *Problem-Based Learning* dan project based learning mampu melatih keterampilan abad 21?. *Jurnal Pendidikan Fisika Dan Keilmuan (JPFK)*, 2(1), 48-55.
- Nasution, M. K. (2018). Penggunaan metode pembelajaran dalam peningkatan hasil belajar siswa. *Studia Didaktika*, 11(01), 9-16.
- Novalinda, E., Kantun, S., & Widodo, J. (2018). Pengaruh motivasi belajar terhadap hasil belajar mata pelajaran akuntansi siswa kelas x jurusan akuntansi semester ganjil smk pgri 5 jember tahun pelajaran 2016/2017. *JURNAL PENDIDIKAN EKONOMI: Jurnal Ilmiah Ilmu Pendidikan, Ilmu Ekonomi Dan Ilmu Sosial*, 11(2), 115-119.
- Suharsimi Arikunto. (1993). Manajemen pengajaran, secara manusiawi. Jakarta: PT.Rineka Cipta.
- Suharsimi Arikunto. (2002). Prosedur Penelitian, Suatu Pendekatan Praktik. Jakarta: Rineka Cipta.
- Widayati, A. (2008). Penelitian tindakan kelas. *Jurnal Pendidikan Akuntansi Indonesia*, 6(1).
- Wulandari, B., & Surjono, H. D. (2013). Pengaruh problem-based learning terhadap hasil belajar ditinjau dari motivasi belajar PLC di SMK. *Jurnal Pendidikan Vokasi*, 3(2).
- Wulandari, M., & Djaja, S. (2014). Analisis Kesulitan Belajar Akuntansi Pada Materi Jurnal Penyesuaian (Studi Kasus Pada Siswa Kelas XI IPS di SMA Negeri 1 Pakusari Tahun Ajaran 2013-2014). *Jurnal Edukasi*, 23-27.
- Dimiyati & Mudjiono. (2009). Belajar Dan Pembelajaran. Jakarta: Rineka Cipta Tahun.
- Fakhriyah, F. (2014). Penerapan *Problem Based Learning* dalam upaya mengembangkan kemampuan berpikir kritis mahasiswa. *Jurnal Pendidikan IPA Indonesia*, 3(1).
- Sugihartono, dkk. (2007). Psikologi pendidikan. Yogyakarta: UNY Press.
- Zahrawati, F. (2020). Penerapan model problem based learning untuk

meningkatkan hasil belajar
sosiologi siswa. *Indonesian Journal
of Teacher Education*, 1(2), 71-79.

Syaiful Bahri Djamarah. (2008). Psikologi
belajar. Jakarta: Rineka Cipta.