

# IMPROVING ACCOUNTING LEARNING OUTCOMES THROUGH IMPLEMENTATION OF TEAMS GAMES TOURNAMENT ASSISTED WITH ANDROID-BASED SMART ACCOUNTING

## *PENINGKATAN HASIL BELAJAR AKUNTANSI MELALUI IMPLEMENTASI TEAMS GAMES TOURNAMENT BERBANTU SMART ACCOUNTING BERBASIS ANDROID*

**Nandita Apriliasari**

*Prodi Pendidikan Akuntansi, Universitas Negeri Yogyakarta*  
[nanditaapriliasari@gmail.com](mailto:nanditaapriliasari@gmail.com)

**Ani Widayati, S.Pd., M.Pd., Ed.D.**

*Staff Pengajar Jurusan P. Akuntansi, Universitas Negeri Yogyakarta*  
[ani\\_widayati@uny.ac.id](mailto:ani_widayati@uny.ac.id)

**Abstract: Improving Accounting Learning Outcomes through Implementation of Teams Games Tournament assisted with Android-based Smart Accounting.** This study aims to improve Accounting Learning Outcomes of class X AK 3 SMK Negeri 1 Bantul Academic Year of 2019/2020 through the implementation of Teams Games Tournament assisted with Android-based Smart Accounting. This is a classroom action research with two cycles. The data analysis technique used is a quantitative descriptive analysis. The results showed that the implementation of Teams Games Tournament assisted with Android-based Smart Accounting could improve the Accounting Learning Outcomes of Class X AK 3 SMK Negeri 1 Bantul Academic Year of 2019/2020. This is evidenced by the increase in the learning achievement of students from pre-test to post-test in each cycle. In the first cycle, the learning achievement of students has increased by 56.3, while in the second cycle there was an increase of 16.5. Besides this research has been said to be successful because in the second cycle, amounting to 97.1% of the number of students in the class had reached the minimum criteria of mastery learning.

**Keywords:** Classroom Action Research, Teams Games Tournament, Smart Accounting, Accounting Learning Outcomes

**Abstrak: Peningkatan Hasil Belajar Akuntansi melalui Implementasi Teams Games Tournament berbantu Smart Accounting berbasis Android.** Penelitian ini bertujuan untuk meningkatkan Hasil Belajar Akuntansi siswa kelas X AK 3 SMK Negeri 1 Bantul Tahun Ajaran 2019/2020 melalui implementasi Teams Games Tournament berbantu Smart Accounting berbasis android. Penelitian ini merupakan penelitian tindakan kelas yang dilaksanakan dalam 2 siklus. Teknik analisis data yang digunakan adalah analisis deskriptif kuantitatif. Hasil penelitian menunjukkan bahwa implementasi Teams Games Tournament berbantu Smart Accounting berbasis android dapat meningkatkan Hasil Belajar Akuntansi siswa kelas AK 3 SMK Negeri 1 Bantul Tahun Ajaran 2019/2020. Ini dibuktikan dengan adanya peningkatan nilai rata-rata siswa dari pre-test ke post-test setiap siklus. Pada siklus I nilai rata-rata siswa mengalami peningkatan sebesar 56,3, sedangkan pada siklus II terdapat peningkatan sebesar 16,5. Selain itu, penelitian ini telah dikatakan berhasil karena pada siklus II, sebesar 97,1% dari jumlah siswa di kelas telah mencapai nilai KKM.

**Kata Kunci:** Penelitian Tindakan Kelas, Teams Games Tournament, Smart Accounting, Hasil Belajar Akuntansi

## INTRODUCTION

Education is an essential tool for humans to improve their abilities, both knowledge, skills, and attitudes so that they are able to survive. Education as according to the Law of the Republic of Indonesia Number 20 the Year 2003 Concerning the National Education System, that

Education is a conscious and planned effort to create an atmosphere of learning and learning process so that students actively develop their potential to have spiritual strength, self-control, personality, intelligence, noble character, and the skills needed by themselves, society, nation and state.

With education, the Indonesian people are expected to master the science and technology that are needed to survive and compete with other countries amid an increasingly advanced civilization. Thus, education is needed for creating quality resources.

Based on study by Saat (2015), the one of the determinant factors in the implementation of education is educator, or known as teacher. Teacher as an instructor and a facilitator in learning activities must be able to choose and use the appropriate learning model and media. The use of the appropriate learning model and media will create pleasant atmosphere and increase student learning motivation.

Student motivation in education will affect student learning outcomes. As in research conducted by Nurmala (2014), that student motivation affects the learning outcomes of class X Accounting students at SMK Negeri 1 Singaraja. Learning motivation has also been proven to affect the learning outcomes of Accounting students in a study conducted by Novalinda (2017) at SMK PGRI 5 Jember. It means that the selection of learning models and appropriate learning media will increase student motivation so that student learning outcomes will also increase.

When observing the learning process in class, teachers more often only use lecture model and ppt to deliver material. researcher encountered many students who did not listen when the teacher delivered the learning material. Not a few students choose to chat with their classmates, play mobile phones, even sleep while learning is ongoing. These things are a form of decreased student motivation in class. Students are more difficult to understand the learning material because they are more interested in doing other activities than listening to the material presented by the teacher. Also, based on students grade list, as many as 94% of 36 students of class X AK 3 have not yet

completed the Final Examination Semester 1 Introduction to Accounting.

Based on the explanation above, the researcher links the learning model used by the teacher and student learning outcomes. As stated earlier, choosing the right learning model will create pleasant learning conditions and increase student motivation so that student learning outcomes improve. Of the many learning models available, researcher determined the Teams Games Tournament (TGT) Learning Model in this study with the following considerations.

1. Teams Games Tournament (TGT) Learning Model is proven to increase student motivation (Hani, 2019) and student learning activities (Mardiana, 2015).
2. The TGT Learning Model involves all learners without any difference in status, involves the role of students as peer tutors and contains elements of play and reinforcement, giving students opportunities to learn more relax while fostering responsibility, cooperation, fair competition and learning involvement (Mulyatiningsih, 2012: 244 in Hani, 2019).
3. In the TGT Learning Model, some games and tournaments will provide a

pleasant atmosphere in the learning process.

4. Students will work on the questions repeatedly, both during games and tournaments, so that it will attach the subject matter in students' memories..
5. There is a team recognize (group award) based on the scores collected by the group, so students will be more motivated to be serious in understanding the material to become a winning group.

Also, in the implementation of the Teams Games Tournament (TGT) Learning Model, researcher used Android-based Smart Accounting games as learning media. The consideration of researcher using the Android-based Smart Accounting learning media to help implement the TGT learning model is to see that most students are android users. Android is familiar to the students. Not a few students, both men and women install and play android-based games. For this reason, Android-based Smart Accounting is deemed suitable to give a pleasant impression in learning Introduction to Accounting.

Of the 4 Accounting X classes at SMK Negeri 1 Bantul and currently studying Introduction to Accounting, the researcher will conduct this research in class X AK 3. This is based on recommendations from the

Introduction to Accounting teacher at SMK Negeri 1 Bantul, certainly with consideration of learning outcomes and lack of activity compared to the other three classes. Accounting Learning Outcomes are measured through the Adjustment Journal competence because the Adjustment Journal requires more analogy to think than other competencies, and students often have difficulty understanding it.

Researcher choses Classroom Action Research in solving these Accounting Learning Outcomes problems. With this Classroom Action Research (CAR), students are expected to be more motivated and more comfortable to understand in learning Introduction to Accounting, so that students' learning outcomes in Accounting can improve. Therefore, researcher will conduct Classroom Action Research (CAR), namely the Implementation of Teams Games Tournament Learning Model (TGT) Assisted with Android-based Smart Accounting to Improve Accounting Learning Outcomes in Class X Students of SMK Negeri 1 Bantul Academic Year of 2019/2020.

## **LITERATURE REVIEW**

Introduction to Accounting subjects are the initial semester material that will be obtained by Accounting students. As the

name suggests, Introduction to Accounting becomes the fundamental basis in learning accounting. One of the competencies taught in Introduction to Accounting subjects is the Service Company Accounting Cycle, which will be delivered in semester 1 and semester 2. The Service Company Accounting Cycle is the steps that must be taken in preparing financial statements in service companies. This accounting cycle forms the basis for students for the next accounting stage. For this reason, students are expected to truly understand in these Introduction to Accounting subjects, especially in the Service Company Accounting Cycle.

The success of students in understanding the primary material certainly does not only come from the students themselves but also other factors. In this case, the teacher as a teacher and learning facilitator indeed participates in the success of student learning, related to how the teacher delivers learning material. The lecture model that most teachers use is not the only way to provide subject matter. The teacher needs to choose an attractive learning model and media following the material to be delivered and following the ability of students. The appropriate and interesting learning model and media will be fun for students and make it easier for students to understand the

material presented. Therefore, researcher will apply the Teams Games Tournament (TGT) Learning Model assisted with Android-based Smart Accounting Learning Media in the Adjustment Journal competencies. This application is carried out on the Adjustment Journal competencies because the Adjustment Journal requires more analogy to think than the other stages, and students often have difficulty understanding it. It is hoped that the application of this learning model and media can facilitate students in understanding the adjusting journal competencies so that student learning outcomes improve.

Based on this framework, the hypothesis of this research can be formulated, that the implementation of the Teams Games Tournament (TGT) Learning Model Assisted with Android-Based Smart Accounting can improve Accounting Learning Outcomes for class X students of SMK Negeri 1 Bantul Academic Year of 2019/2020.

## **RESEARCH METHOD**

### **Research Types and Design**

This type of research is Classroom Action Research. Classroom Action Research is one type of action research conducted while learning in class to overcome problems that arise in learning. This research consist of a study of the

problems in learning process, action planning, implementation of action plan, observation, and reflection.

### **Place and Time of Research**

This research was conducted at SMK Negeri 1 Bantul, located at Jalan Parangtritis KM. 11 Sabdodadi Bantul Special Region of Yogyakarta. The observations was carried out in January-February 2020, while the study was carried out in March 2020.

### **Research Subjects and Objects**

The subjects of this study were students of class X AK 3 of SMK Negeri 1 Bantul Academic Year of 2019/2020 consisting of 36 students. The object of this research is the Accounting Learning Outcomes of class X AK 3 SMK Negeri 1 Bantul in the subject of Introduction to Accounting Competency Journal Adjustment.

### **Data Collection Technique**

The research data were collected through test (pre-test and post test), and field notes. Pre-test and post-test are compared to determine whether there are an increase in students' understanding and learning outcomes in the Adjustment Journal competencies after the implementation of the

TGT Learning Model assisted with Android-based Smart Accounting. This field note contains a variety of observations during learning in the classroom, such as classroom atmosphere, classroom management, etc. that can be used as a source of classroom action research data.

### Instrument Validation

Valid instruments are needed to obtain valid classroom action research results. In this study, the validation of the research instrument used expert judgment, that is, the validation carried out by the expert. This validation required expert judgment to be systematically examined and evaluated.

### Data Analysis Technique

Researcher used descriptive analysis techniques. This data analysis is carried out in the following way.

#### 1. Processing Pre-Test and Post-Test Scores

##### a. Student score

$$\text{Score} = \frac{\sum X}{\sum S} \times 100$$

Information:

$\sum X$ : the number of scores answered correctly

$\sum S$  : maximum score

##### b. The average grade of the class

$$\text{Mean} = \frac{\sum x_i}{n}$$

Information:

Me: Mean (average)

$\sum x_i$ : Total score of all students

(Sugiyono, 2017)

##### c. The percentage of students who have finished learning

$$\text{KB} (\%) = \frac{T}{T_t} \times 100\%$$

Information:

KM (%): Percentage of mastery learning

T : The frequency at which the percentage is sought in this case is the number of students reaching the value  $\geq$  KKM

Tt : Number of frequencies or many individuals in the research subject

(Trianto, 2009: 241 in Puspitasari, 2018)

#### 2. Presentation of Data

#### 3. Draw Conclusions

This research is successful if a minimum of 75% of the total number of students achieves minimum criteria of

mastery learning (in Indonesian *Kriteria Ketuntasan Minimum*, KKM=75) (Mulyasa, 2016).

## RESEARCH RESULTS AND DISCUSSION

The research on the implementation of the Teams Games Tournament (TGT) Learning Model assisted with Android-based Smart Accounting was carried out in 2 cycles to improve Accounting Learning Outcomes of class X AK 3 students of SMK Negeri 1 Bantul. The results show that the implementation of the Teams Games Tournament (TGT) Learning Model assisted with Android-based Smart Accounting could improve Accounting Learning Outcomes. This increase can be seen from the comparison of the average value of pre-test and post-test each cycle. The following is a summary of the results of the calculation of the average pre-test and post-test.

Table 1. Increase in The Average Value of Cycle I and Cycle II

| Criteria | Value            |                   | Improved Accounting Learning Outcomes |
|----------|------------------|-------------------|---------------------------------------|
|          | Pre-test average | Post-test average |                                       |
| Cycle I  | 19,6             | 75,9              | 56,3                                  |
| Cycle II | 76,6             | 93,1              | 16,5                                  |

Source: Primary data processed

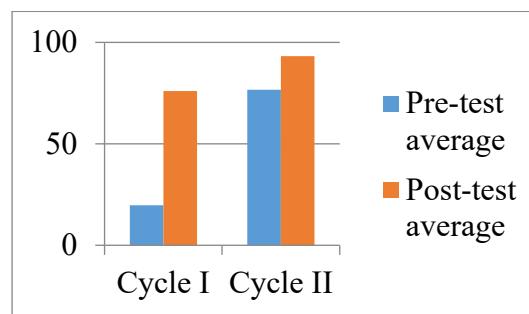


Figure 1. Diagram of The Increase in The Average Pre-Test and Post-Test of Cycles I and II

In addition to an increase in the average between pre-test and post-test, the number of students who achieved KKM also increased from pre-test to post-test each cycle. KKM, which is a complete requirement of Accounting Learning Outcomes, is 75. Following is a summary of the calculation of the percentage of students who have reached the minimum criteria of mastery learning in each cycle.

Table 2. Percentage of Students Reaching KKM in Cycles I and II

| Criteria | Value $\geq 75$ |           | Increase |
|----------|-----------------|-----------|----------|
|          | Pre-test        | Post-test |          |
| Cycle I  | 0%              | 61,3%     | 61,3%    |
| Cycle II | 67,6%           | 97,1%     | 29,5%    |

Source: Primary data processed

The percentage of students who get the completeness of Accounting Learning Outcomes in the the first cycle post-test is 61.3%. This percentage has not reached 75% of the total number of students, so the study continued to the second cycle. The percentage of the second post-test is 97.1, that is 33 out of 34 students have reached KKM. The percentage has met the indicators of research success, where  $97.1\% > 75\%$  of the total number of students present. Based on the description above, it can be proven that the implementation of the Teams Games Tournament (TGT) Learning Model assisted with Android-based Smart Accounting can improve the Accounting Learning Outcomes in class X AK 3 at SMK Negeri 1 Bantul academic year of 2019/2020.

The results of the study are in line with the theory presented by Taniredja et al. (2012), that the strength of the TGT Learning Model is to increase students' self-esteem, motivation, and understanding. In this study, the implementation of the TGT Learning Model has increased students' confidence and motivation to understand the material in-depth, so that students' Accounting Learning Outcomes have increased. Besides, the results of this study also reinforce previous research conducted by Wahyu Lestari (2019) entitled "Implementation of the Teams

Games Tournament (TGT) Cooperative Learning Model to Increase Accounting Activities and Learning Outcomes for Class X AKL 4 Students of SMK Negeri 1 Wonosari Academic Year 2018/2019 "In that study, the results of the analysis show that the implementation of the TGT Learning Model can improve Accounting Learning Activities and Accounting Learning Outcomes.

## **CONCLUSIONS AND RECOMMENDATIONS**

### **Conclusion**

Based on the results of research and discussion in Chapter IV, it can be concluded that the implementation of the Teams Games Tournament (TGT) Learning Model assisted with Android-based Smart Accounting can improve Accounting Learning Outcomes of class X AK 3 students at SMK Negeri 1 Bantul academic year of 2019/2020. It is evidenced by an increase in the average grade of the class and the percentage of students who reach the KKM value of 75. The improvement is seen from the comparison between the pre-test and post-test average scores in each cycle. The average Accounting Learning Outcomes in the first cycle post-test is 75.9, while in the second cycle, it is 93.1. Thus, Accounting Learning Outcomes have increased by 17.2.



The indicator of the success of this study is if a minimum of 75% of the number of students reaches KKM. The research can be said to be successful because the percentage of students who have reached KKM is more than 75% of the total number of students, which is 97.1%. The percentage shows that 33 out of 34 students have reached the KKM Introduction to Accounting determined by the school.

### **Suggestions**

1. For Teachers
  - a. Teachers should use appropriate and varied learning models and learning media so students will not be bored and are more interested in learning Accounting.
  - b. Teachers sometimes need to use a reward and punishment system for students to increase student motivation in learning Accounting.
2. For Students
  - a. Students need to build positive thinking, enthusiasm, and self-motivation in learning Accounting.
  - b. Students should try to be more confident and more active in learning Accounting.
  - c. Students should often practice independently to work on Accounting

problems so students will try to solve a similar problem and become accustomed.

3. For further researchers
  - a. Researchers can apply other learning models to action research by adjusting the subject matter taught, time, and student conditions.
  - b. In conducting action research, researchers should calculate the exact time and discipline in its implementation.
  - c. With the limitations of this study, the next researchers can discuss further the factors that cause some students not to reach the KKM.

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