
Team Games Tournament (TGT) Learning Model with a Medium Box Instrument to Improve Student' Learning Outcomes

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Abstract

This research aims to improve the learning outcomes of the students in class VIII-B at *SMP Plus Taruna Andalan Pangkalan Kerinci* in the Traditional Musical Instrument Classification subject through the Team Games Tournament (TGT) learning model supported by media box instrument. This research uses the Classroom Action Research (CAR) method with four stages: planning, action, observation, and reflection. The research results show that the Team Games Tournament (TGT) learning model with a media box instrument can improve students' learning outcomes. In cycle I, 50% of students achieved the Minimum Completeness Criteria (*KKM*) score, with an average class score of 74.68. This result shows a significant improvement compared to the learning outcomes before the action (pre-cycle), which only reached 25% of students achieving the *KKM*. This research concludes that the Team Games Tournament (TGT) learning model with the media box instrument is effective in enhancing student understanding and learning outcomes in the Traditional Musical Instrument Classification subject. This learning model encourages students to participate actively, improves learning motivation, and creates a fun and engaging learning environment.

Keywords

Cultural art, learning outcomes, media box instrument, minimum completeness criteria (*KKM*), team games tournament (*tgt*), traditional musical instrument classification

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Introduction

Education is the primary pillar in the development of a nation, and its success depends on the quality of the learning process in schools (Vasile, 2018). The learning process is a fundamental element in education that can create quality graduates. In this case, the role of students' active participation in the learning process determines the achievement of educational goals. Various factors influence the learning experiences at school to achieve optimal educational goals. These factors include planning, educator abilities, learning models, available learning assets, and media (Shernoff & Csikszentmihalyi, 2009). Additionally, elements of the learning process also play a role in the educational process. Factors that influence the learning process can be divided into individual factors, which are related to student characteristics, and social factors to the social environment outside the individual. Classroom learning is the core of education. Meanwhile, the quality of classroom learning has a primary impact on the final educational outcomes (Teodorovic, 2011). Teachers play a central role in managing classes and designing quality learning. Thorough learning preparation is the first step in creating an effective learning design. Especially in learning arts and culture, the main goal is to develop multiple intelligences and create a harmonious personality. Learning arts and culture allows students to explore their potential, recognize cultural heritage, and expand social awareness (Gadsden, 2008). In this context, it is paramount for students to actively participate in the learning environment so that their learning experience is effective. Teachers have the primary responsibility for creating a learning environment that arouses interest and engages students' various senses (Wang & Reeves, 2006). They must understand student development and design learning that suits their learning styles.

From initial observations carried out by researchers at SMP *Plus Taruna Andalan Pangkalan Kerinci* in two separate classes (VIII-A and VIII-B), the teacher conveyed the learning subject that was presented referring to the cultural arts (music arts) syllabus for class VIII of the 2013 curriculum, namely Ensemble Music. Basic competency (*KD*) knowledge aspect 3.3 is understanding the techniques and styles of playing simple traditional music individually and in groups. In addition, basic competency skill aspect 4.3 is playing simple musical instruments individually and in groups. The learning objectives here are: (1) Students can understand the traditional musical instrument classification based on sound sources, (2) Students can differentiate ways (techniques) of playing traditional musical instruments, (3) Students can distinguish styles of playing traditional musical instruments, (4) Students can get to know traditional musical instruments. The Minimum Completeness Criteria (*KKM*) for class VIII in arts and culture subjects is 76. The meeting time is 3 lesson hours (120 minutes). With the same treatment by teachers in both classes, the results of the learning evaluation are in the following table.

Table 1. *Initial observation learning results*

Class	Number of Students Who Have Reached the <i>KKM</i>	Number of Students Who Have Not Reached the <i>KKM</i>	Percentage of Students Who Have Reached the <i>KKM</i>	Percentage of Students Who Have Not Reached the <i>KKM</i>
VIII-A	20 students	12 murid	71%	29%
VIII-B	8 students	24 murid	25%	75%

Class VIII-A has a total of 32 students. Of this number, 20 students (71%) have reached the *KKM*, while 12 students (29%) are still below the standard, but a small number still requires more attention to the set standards. It is necessary to take supporting and corrective steps to help students who have not yet reached the *KKM* improve their achievements. The *KKM* achievement level in this class is relatively high, meaning that most students have fulfilled the classical requirements. It is to the criteria for student learning success levels (Aqib, 2006), which is in the table below:

Table 2. *Criteria for student learning success levels in %*

Success rate	Descriptions
>80%	Very high
60 – 79%	High
40 – 59%	Moderate
20 – 39%	Low
<20%	Very low

In class VIII B, out of 32 students, only eight students managed to reach the *KKM*, while 24 other students did not meet the graduation standards. The percentage of success in achieving the *KKM* is 25%, while 75% of students still need additional efforts to achieve the completeness target. The classical success rate for *KKM* in this class is relatively low.

Based on the learning results of the two classes, the researchers saw a problem with the learning method used. The teacher still used lectures as a learning model. It means that the learning is only centered on the teacher, and students do not get space and opportunity to explore their insights regarding the subject. Students only rely on the explanation given by the teacher, so they do not seem enthusiastic about asking and answering questions from the teacher, learning is very monotonous, and there is very little interaction between the teacher and students and vice versa, while the students remain passive, the teacher continues to explain the subject in front of the class. Student participation is low, teaching and learning activities are ineffective, and ultimately an evaluation is carried out. Student learning outcomes show a lack of students' ability to understand learning subjects, resulting in student learning outcomes based on predetermined *KKM* standards not being met.

To overcome the low learning outcomes of students in class VIII-B, researchers propose a solution through the Team Games Tournament (TGT) learning method supported by a

media box instrument. This solution can improve student learning outcomes in arts and culture (music) subjects, especially the Traditional Musical Instrument Classification subject. Team Games Tournament (TGT) is classified as a cooperative learning model because of cooperation and dialogue in a group. Students gather, discuss, and draw conclusions in games/tournaments. At the Team Games Tournament (TGT), students are separated into groups of 5 to 6 with heterogeneous talents, academic abilities, gender, ethnicity, and social backgrounds. In this Team Games Tournament (TGT) learning, students will carry out dynamic and creative learning to improve their sense of responsibility.

Methodology

This research used Classroom Action Research (CAR) research design. In this research, the researchers not only focus on solving problems in the classroom but also carry out critical and collaborative reflection related to learning planning. The collaboration involves cooperation between researchers, arts and culture teachers, and homeroom teachers in designing, implementing, and reflecting on actions to improve the quality of learning in the classroom (Battersby, 2019). This research design was developed by Kurt Lewin. Lewin presents four stages that must be followed in the action research process, which are planning, acting, observing, and reflecting. The steps are in the following figure (Adelman, 1993).

Figure 1. Steps to Classroom Action Research



Planning

Planning is very important in the early stages of research. The purpose of learning media is to perfect a particular situation. At the planning stage, various scenarios have been created for the cycle in question, especially regarding the technical aspects of implementing learning and achieving the expected learning indicators at the end of the cycle. In the planning stage of Classroom Action Research (CAR), researchers take structured steps to ensure effective implementation. Researchers conducted a content standard analysis to identify Competency standards and basic competencies (*SKKD*) that will be taught to students. Furthermore, the Learning Implementation Plan (*RPP*) is developed carefully and pays attention to relevant learning outcome indicators. To improve the quality of learning, researchers also produce teaching aids, tools, or learning media that support the formation of basic competency and competency standards (*SKKD*). The next step involves analyzing various alternative problem solutions that are appropriate to the existing learning context. In addition, researchers created student worksheets (*LKPD*) as a practical guide to support student learning activities. The creation of guidelines or instruments and the preparation of learning evaluation tools are

paramount aspects in ensuring that evaluations can be carried out effectively by the learning outcome indicators that have been determined. Through this series of planning steps, researchers aim to create a solid foundation for the CAR with a focus on improving and enhancing the quality of learning in the classroom.

Acting, observing, and reflecting

In the implementation stage, the implementation of the action plan that has been prepared previously is carried out. During these implementation activities, it is paramount to ensure that the plans that have been prepared can be implemented effectively. The thing that must be considered at this stage is that the learning process runs naturally, without seeming stiff or artificial. Researchers make objective observations by previously planned learning conditions. With this approach, the implementation process can reflect the actual situation in the classroom, ensuring that the action plan can be adapted well in the learning context.

At the observation stage, two activities are the focus of observation, namely student learning activities and learning activities. The student learning process is directly observed by the implementing teacher (researcher) during the implementation of the lesson. Meanwhile, observing the learning process involves collaboration with colleagues, who act as collaborators. Collaborators carry out learning observations based on instruments that have been prepared by researchers. The results of observations from collaborators will be a beneficial source of information for researchers as material for reflection to improve the quality of learning at the next opportunity. This observation process is carried out using various methods, including video recording, taking photos, and taking notes during the learning process. These diverse observation methods allow researchers to get a comprehensive picture of learning dynamics, assist in evaluation, and formulate appropriate improvement steps.

Reflection activities are carried out after the collaborator has completed monitoring the researcher during the learning process. At this stage, a discussion takes place between the collaborator and the implementing teacher (researcher) regarding the results of the observations that have been made. The success of the reflection stage is essential in Classroom Action Research, where collaborators provide an appreciation for aspects that are going well, as well as providing input regarding things that need to be improved in the implementation of learning. The output from the reflection becomes the basis for consideration for the design of the next cycle. In other words, reflection is a series of evaluations, analyses, interpretations, explanations, conclusions, and identification of steps to be taken in the next planning cycle. In the research framework, reflection activities include recording observation results, assessing observation results, analyzing student learning outcomes during the learning process, and correcting deficiencies from cycle I in implementing cycle II learning.

The CAR procedure in this research used two cycles, namely cycle I and cycle II. The flow of cycle I and cycle II use the Kemmis and Taggart model (Altrichter et al., 2002). In this context, the research aims to improve the learning outcomes of class VIII-B students at SMP Plus Taruna Andalan Pangkalan Kerinci, especially in the Traditional Musical Instrument Classification subject with the Team Games Tournament (TGT) learning model with the

media box instrument. This Classroom Action Research was carried out in collaboration with the arts and culture teacher and class VIII-B homeroom teacher to observe, accompany, provide input, and discuss related matters during this research.

This research used data collection techniques, which included observation, tests, game scores, interviews, documents, and field notes. Observation is a process where observations and recording are carried out systematically, logically, objectively, and rationally regarding various phenomena. A test is a series of questions or exercises, along with other tools to measure skills, knowledge, intelligence, ability, or talent possessed by an individual or group. The game score is a display of the performance of each team through four different game sessions in the form of numbers. Interviews are a data collection method used to obtain information related to opinions, aspirations, suggestions, perceptions, desires, and other matters relating to respondents. Documents are all objects in the form of goods, images, or writing that function as evidence and provide important and valid information. Field Notes are notes made carefully, in detail, extensively, and in-depth because of interviews and observations by researchers.

Data analysis was carried out using a quantitative approach. Mohajan (2020) explained that quantitative research is a form of research that uses data in the form of numbers to process information in a structured manner. This data analysis process refers to the following guidelines. To determine individual completeness (Purwanto, 2012), use the following formula:

$$S = \frac{R}{N} \times 100$$

Information:

S: Expected score

R: The number of raw scores obtained by students

N: Ideal maximum score from the test

100: Fixed number

To evaluate the achievement of student learning outcomes in Arts and Culture subjects at SMP *Plus Taruna Andalan Pangkalan Kerinci*, an individual completeness standard is used, which is measured by a *KKM* of ≥ 76 . Students are considered to have achieved completeness if the scores obtained reach or exceed the *KKM*. If a student's score is below the *KKM*, the student has not achieved completeness and requires improvement efforts. On the other hand, classical completeness is measured based on the number of students in one class. A class is considered to have achieved classical completeness if 75% of the total students have obtained a score \geq *KKM*. Evaluation of learning success, whether it has been completed or not, is calculated using the formula.

Table 3. *Guidelines for classical completeness provisions*

Completeness (%)	Information
≥ 75	Complete
< 75	Incomplete

Classical completeness is achieved if 75% of the total students have reached *KKM*76, then the class is said to be completed (Mulyasa, 2002). Below is the formula used to determine classical completeness (Purwanto, 2011).

$$KK = \frac{ST}{N} \times 100$$

Information

KK: Classical completeness

ST: Number of students who completed

N: Total number of students

The success of completeness classical learning is when the percentage of students who reach or exceed the *KKM* score. The results of this analysis become the basis for reflection for further planning at the next meeting and cycle. Apart from that, the analysis results also become a basis for improving learning or even as a consideration in determining the most appropriate learning method.

Table 4. *Classical KKM*

Level of mastery	Predicate
86-100%	Very Good
71-85%	Good
56-70%	Moderate
41-55%	Poor
<40%	Very Poor

To see an improvement in learning outcomes before and after being given action, the research uses the formula below (Aqib et al., 2011).

Information

P : Improvement percentage

Posrate : Score after treatment

Baserate : Score before treatment

To find the average score use the following formula.

$$M = \frac{X}{N}$$

Information

M: The average score

X: Total score

N: Number of test participants

Source: [Thoha \(1993\)](#)

Results and Discussion

The results of this research aim to explore the impact of the Team Games Tournament (TGT) learning model with a media box instruments on students' understanding and learning outcomes in the Traditional Musical Instrument Classification subject at SMP *Plus Taruna Andalan Pangkalan Kerinci*. The research results were obtained through observation, interviews, and documentation. This research was carried out in several stages, which are:

- a. Pre-cycle
- b. Application of the Team Games Tournament (TGT) model
 - Cycle I
 - Cycle II

Pre-cycle

The pre-cycle was held on September 11, 2023. The teacher used the lecture method as the primary approach, with little active interaction. The evaluation results before implementing the Team Games Tournament (TGT) Model showed that around 25% of the 32 students in class VIII-B reached the level of completeness in the traditional musical instruments classification subject. Meanwhile, around 75% of students have not reached the level of completeness. In addition, the average student score is 61.68, indicating an inadequate understanding of the subject. There is variation in scores, with some students scoring high and others scoring low. Therefore, action is needed to improve student learning outcomes.

Cycle I

Cycle I in learning the traditional musical instrument classification at SMP *Plus Taruna Andalan Pangkalan Kerinci* was carried out on September 18, 2023. This cycle is the initial stage in implementing the Team Games Tournament (TGT) method using a media box instrument. Cycle I lasted for 3 hours of lessons. The duration of 1 hour of lessons is 40 minutes (3 JP or Lesson Hours). The steps taken are the division of students into teams, subject explanation, first team discussion, tournament, explanation of advanced material, and evaluation. The tournament results in session 1 are in the following table.

Table 5. Results of the cycle I instrument box tournament

No	Team Name	Session I		Session II		Session III		Session IV		Total		Winner
		Correct Card	Wroton g Card	Correct Card	Incorrec t Card	Correct Card	Incorrec t Card	Correct Card	Incorrec t Card	Correct Card	Incorrec t Card	
1	<i>Psaltery</i>	11	9	9	11	13	7	8	12	41	39	II
2	<i>Kompang</i>	13	7	12	8	8	12	11	9	44	36	I
3	<i>Ketipung</i>	6	14	8	12	10	10	7	13	31	49	V
4	<i>Marwas</i>	9	11	9	11	10	10	12	8	40	40	III
5	<i>Gendang</i>	5	15	7	13	9	11	11	9	32	48	IV

Based on the number of correct cards in this contest, the winners are as follows: the *Kompang* team won with 44 correct cards (44%). They showed a stable and strong performance throughout the match, with the best results in the first quarter. The *Kompang* team excelled in collecting the correct number of cards and was declared overall champions. The *Marwas* team finished second with 40 correct cards (40%). They succeeded in improving their session IV performance until they became session winners even though the results were the same as the *Ketipung* team, the *Marwas* team was declared the winner of session III because the number of incorrect cards was lower.

The *Ketipung* team finished third with a total of 31 correct cards (31%). The team was mixed throughout the game, with its best performance coming in the third quarter. Even though they had more incorrect cards, they had more correct cards than the *Gendang* team. The *Gendang* team was in fourth place with 32 correct cards (32%). They struggled in some quarters, especially in the first, but continued to improve as the game progressed. The *Gambus* team finished fifth with a total of 41 correct cards (41%). Although they were declared winners in the second game, they collected a lower total number of correct cards than the other teams.

The winner in this competition was determined based on the total number of correct cards, and the *Kompang* team became the overall winner with consistent performance and scoring the highest number of correct cards. These results highlight the importance of learning methods that allow students to actively participate in understanding the subject, as implemented in the instrument box tournament. In addition to healthy competition, the Team Games Tournament (TGT) method creates a dynamic and meaningful learning experience, allowing students to test their understanding in a fun way. In addition, these percentage results provide a clear description of each team's performance in understanding the traditional musical instrument classification, which is the main objective of this activity.

After the evaluation is complete, the teacher will assess the results to understand the extent to which the student has achieved the expected understanding. The results of this evaluation will provide an overview of the development of student understanding and will be used to design the next learning steps. This evaluation can also help teachers provide feedback to students to help them improve their understanding of the Traditional Musical Instrument

Classification subject. Thus, evaluation becomes a paramount tool in supporting student learning success. The evaluation results in cycle I can be seen in the following table.

Table 6. *Evaluation results of the cycle I*

No	Names	Scores	Completeness
1	Aleya Febrina	80	Complete
2	Alvianda Federico Simamora	50	Incomplete
3	Ana Ayudia Fitriani	60	Incomplete
4	Anggun Patricia Br Hutaauruk	58	Incomplete
5	Bagus Daffa Riskianto	82	Complete
6	Bela Lestari Silaban	86	Complete
7	Charly Frans William Pardede	90	Complete
8	Damian Timothy	70	Incomplete
9	David Brooklyn Sitohang	86	Complete
10	Dhea Adelia Nainggolan	58	Incomplete
11	Eunike Rehuel Pakpahan	60	Incomplete
12	Febrianto Prima Harianja	86	Complete
13	Feyza Chalita Khairunnisa Harahap	82	Complete
14	Fristita Ingrid Lumbantoruan	58	Incomplete
15	Gabriel Reyhan Putra Sitorus	92	Complete
16	Gabriel Zevayona Surbakti	58	Incomplete
17	Gea Alensky Elias	60	Incomplete
18	Guinabigail Priscilla Judikaezya Simanjuntak	54	Incomplete
19	Haycel Christian Hagai Sinaga	90	Complete
20	Jones Ian B.Batubara	56	Incomplete
21	Josua Aldri Rizar	68	Incomplete
22	Khafid Indopal	90	Complete
23	Kristian Jeremi Siregar	72	Incomplete
24	Nadhira Azqia Putri	84	Complete
25	Nathania	70	Incomplete
26	Radot Samuel Manurung	86	Complete
27	Rathy Nayla Azzahra	62	Incomplete
28	Ribka Adelia Manurung	68	Incomplete
29	Syifa Nur Halida	90	Complete
30	Tuluser Septian	88	Complete
31	Yasmine Sava Elisya	96	Complete
32	Yoel Crist Michael Longkey Simatupang	100	Complete
	Total Score	2390	
	Average	74.68	

The first conclusion is that most students have achieved a sufficient completeness level in understanding the traditional musical instrument classification. Of the total 32 students, 16 students succeeded in achieving a score that met the Minimum Completeness Criteria (*KKM*) standard of 76. These students demonstrated their ability to apply classification concepts well, a positive result of using the Team Games Tournament (TGT) method in learning. However,

several students have not reached the completeness level. It highlights the potential for improvement in understanding the traditional musical instrument classification. With deeper understanding and more intensive practice, incomplete students can improve their understanding. The overall average score was 74.68, indicating that overall, students were at an adequately good level of understanding of the subject. This adequate average reflects the success of the Team Games Tournament (TGT) method in creating an interactive and student-centered learning environment.

The percentage of class completeness in the results of this evaluation reached around 50%. Of the total 32 students, 16 students managed to achieve scores that met the specified completeness standards, while the other students had not yet reached the completeness level. It reflects variations in students' understanding of the traditional musical instrument classification. Although not all students reached the level of completeness, the overall class average score was 74.68, indicating that overall, students were at an adequately good level of understanding of the subject. This percentage illustrates the teacher's commitment to helping students achieve good understanding through the Team Games Tournament (TGT) method in learning.

Cycle II

Cycle II, held on September 25, 2023, has similar objectives and steps to cycle I to continue to deepen students' understanding of the traditional musical instrument classification. The tournament results in cycle II are in the following table.

Table 7. *Results of the cycle II instrument box tournament*

No	Team Name	Session I		Session II		Session III		Session IV		Total		Winners
		Correct card	Incorrect card	Correct card	Incorrect card	Correct card	Incorrect card	Correct card	Incorrect card	Correct card	Incorrect card	
1	<i>Psaltery</i>	11	9	9	11	13	7	8	12	41	39	II
2	<i>Kompang</i>	13	7	12	8	8	12	11	9	44	36	I
3	<i>Ketipung</i>	6	14	8	12	10	10	7	13	31	49	V
4	<i>Marwas</i>	9	11	9	11	10	10	12	8	40	40	III
5	<i>Gendang</i>	5	15	7	13	9	11	11	9	32	48	IV

In cycle II, an instrument box tournament, five teams competed to prove their skills in classifying regional musical instruments according to their types. Below are the tournament results and explanations. In this instrument box tournament, five teams were competing fiercely. The winner of this tournament is determined based on the total number of correct cards they collect. Each session of this tournament plays a paramount role in determining the final winner. After calculating the number of correct and incorrect cards in each session, the

following are the results: the *psaltery* team collected 71 correct cards and only nine incorrect cards. Although they were leading in section I, in the further section they were overtaken by other teams and ended up in 4th position. The *Kompang* team showed extraordinary performance by collecting 78 correct cards from the 80 cards played, so the percentage was 97.5%. They consistently maintain their leading position in every session, and with this brilliant achievement, they have the right to hold the title of champion of this tournament.

The *Ketipung* team collected 72 correct cards from the 80 cards played, so it has a percentage of 90%. They got third place in this tournament, with quite strong results. The *Marwas* team collected 75 correct cards from the 80 cards played, so they have a percentage of 93.75%. Their achievements put them in second place, close to the championship position. The *Gendang* team collected 67 correct cards from the 80 cards played, so it has a percentage of 83.75%. Even though they ranked last, they still gave their maximum effort in this tournament. From the tournament results, the *Kompang* team was the winner with a perfect performance without errors, while the *Gendang* team needed to improve the accuracy of their answers. The psaltery team, *Ketipung* team, and *Marwas* team have the potential to perform better in the next tournament by improving their understanding of traditional musical instruments.

In the final stage, an evaluation is carried out. Teachers provide feedback about student achievement, and it is used as a basis for improvement in subsequent learning. This evaluation is paramount to ensure that students achieve the expected understanding. The teacher gives written questions in the form of essays totalling the questions, encouraging students to apply their understanding. The evaluation results in cycle II are in the following table.

Table 8. *The results of cycle II evaluation*

No	Students' Name	Score	Completeness
1	Aleya Febrina	92	Complete
2	Alvianda Federico Simamora	90	Complete
3	Ana Ayudia Fitriani	100	Complete
4	Anggun Patricia Br Hutaaruk	92	Complete
5	Bagus Daffa Riskianto	90	Complete
6	Bela Lestari Silaban	92	Complete
7	Charly Frans William Pardede	100	Complete
8	Damian Timothy	80	Complete
9	David Brooklyn Sitohang	96	Complete
10	Dhea Adelia Nainggolan	76	Complete
11	Eunike Rehuel Pakpahan	80	Complete
12	Febrianto Prima Harianja	90	Complete
13	Feyza Chalita Khairunnisa Harahap	82	Complete
14	Fristita Ingrid Lumbantoruan	76	Complete
15	Gabriel Reyhan Putra Sitorus	96	Complete
16	Gabriel Zevayona Surbakti	84	Complete
17	Gea Alensky Elias	76	Complete
18	Guinabigail Priscilla Judikaezya Simanjuntak	76	Complete
19	Haycel Christian Hagai Sinaga	96	Complete

No	Students' Name	Score	Completeness
20	Jones Ian B.Batubara	88	Complete
21	Josua Aldri Rizar	76	Complete
22	Khafid Indopal	100	Complete
23	Kristian Jeremi Siregar	188	Complete
24	Nadhira Azqia Putri	96	Complete
25	Nathania	76	Complete
26	Radot Samuel Manurung	100	Complete
27	Rathy Nayla Azzahra	100	Complete
28	Ribka Adelia Manurung	100	Complete
29	Syifa Nur Halida	100	Complete
30	Tuluser Septian	100	Complete
31	Yasmine Sava Elisya	100	Complete
32	Yoel Crist Michael Longkey Simatupang	100	Complete
Total Score		2988	
Average		93.37	

Average score

The average score of students in class VIII-B is 93.37. It shows that most students have achieved high scores. An average close to the maximum score (100) indicates that their level of achievement in lessons is very good. The students have demonstrated their dedication to learning efforts. The data show that 100% of students achieved completeness in the lesson, with a high average score (93.37), and most students achieved high scores above 90. All students on the list have achieved the specified level of completeness. It means that all students have succeeded in achieving scores by the standards given. This success reflects that students have understood the subject matter well and can answer learning challenges successfully.

In this discussion, the researchers comprehensively reviewed the improvement in the average score of the evaluation results from pre-cycle, cycle I, and cycle II. These data were beneficial in providing an overview of students' understanding and achievement before implementing the Team Games Tournament (TGT) learning model with a media box instrument until the end of cycle II. The following table shows the improvement in student evaluation results starting from pre-cycle, cycle I, and cycle II.

Table 9. *The improvement of score results from pre-cycle to cycle I*

No	Students Name	Pre-Cycle	Cycle I	The Improvement
1	Aleya Febrina	53	80	51%
2	Alvianda Federico Simamora	46	50	9%
3	Ana Ayudia Fitriani	63	60	-5%
4	Anggun Fatricia Br Hutauruk	55	58	5%

No	Students Name	Pre-Cycle	Cycle I	The Improvement
5	Bagus Daffa Riskianto	64	82	28%
6	Bela Lestari Silaban	77	86	12%
7	Charly Frans William Pardede	80	90	13%
8	Damian Timothy	70	70	0%
9	David Broklyn Sitohang	77	86	12%
10	Dhea Adelia Nainggolan	52	58	12%
11	Eunike Rehuel Pakpahan	50	60	20%
12	Febrianto Prima Harianja	78	86	10%
13	Feyza Chalita Khairunnisa Harahap	82	82	0%
14	Fristita Inggrid Lumbantoruan	30	58	93%
15	Gabriel Reyhan Putra Sitorus	26	92	254%
16	Gabriel Zevayona Surbakti	50	58	16%
17	Gea Alensky Elias	64	60	-6%
18	Guinabigail Priscilla Judikaezya Simanjuntak	47	54	15%
19	Haycel Christian Hagai Sinaga	60	90	50%
20	Jones Ian B.Batubara	52	56	8%
21	Josua Aldri Rizar	42	68	62%
22	Khafid Indopal	80	90	13%
23	Kristian Jeremi Siregar	70	72	3%
24	Nadhira Azqia Putri	68	84	24%
25	Nathania	56	70	25%
26	Radot Samuel Manurung	76	86	13%
27	Rathy Nayla Azzahra	40	62	55%
28	Ribka Adelia Manurung	40	68	70%
29	Syifa Nur Halida	76	90	18%
30	Tuluser Septian	76	88	16%
31	Yasmine Sava Elisya	90	96	7%
32	Yoel Crist Michael Longkey Simatupang	88	100	14%
Total Score		1974	2390	21%
Average		61.68	74.68	21%

Based on the table data on the results of the improvement in value from pre-cycle to cycle I, it is obtained, the improvement in the average learning outcome score for all students by 21% from pre-cycle (61.68) to cycle I (74.68). It shows a significant improvement in understanding the subject in this group of students, the range of improvement in grades varies among students. Some students get quite high improvements, even reaching 254%, while others get lower improvements or even declines, the improvement results also show that the initial (pre-cycle) level of understanding varies between students. Therefore, some students require special attention to understand the subject, data shows the potential to continue to improve students' learning outcomes with the Team Games Tournament (TGT) learning model.

Table 10. *The improvement in score results from cycle I to cycle II*

No	Students Name	Cycle I	Cycle II	The improvement
1	Aleya Febrina	80	92	15%
2	Alvianda Federico Simamora	50	90	80%
3	Ana Ayudia Fitriani	60	100	67%
4	Anggun Patricia Br Hutauruk	58	92	59%
5	Bagus Daffa Riskianto	82	90	10%
6	Bela Lestari Silaban	86	92	7%
7	Charly Frans William Pardede	90	100	11%
8	Damian Timothy	70	80	14%
9	David Brooklyn Sitohang	86	96	12%
10	Dhea Adelia Nainggolan	58	76	31%
11	Eunike Rehuel Pakpahan	60	80	33%
12	Febrianto Prima Harianja	86	90	5%
13	Feyza Chalita Khairunnisa Harahap	82	82	0%
14	Fristita Ingrid Lumbantoran	58	76	31%
15	Gabriel Reyhan Putra Sitorus	92	96	4%
16	Gabriel Zevayona Surbakti	58	84	45%
17	Gea Alensky Elias	60	76	27%
18	Guinabigail Priscilla Judikaezya Simanjuntak	54	76	41%
19	Haycel Christian Hagai Sinaga	90	96	7%
20	Jones Ian B.Batubara	56	88	57%
21	Josua Aldri Rizar	68	76	12%
22	Khafid Indopal	90	100	11%
23	Kristian Jeremi Siregar	72	188	161%
24	Nadhira Azqia Putri	84	96	14%
25	Nathania	70	76	9%
26	Radot Samuel Manurung	86	100	16%
27	Rathy Nayla Azzahra	62	100	61%
28	Ribka Adelia Manurung	68	100	47%
29	Syifa Nur Halida	90	100	11%
30	Tuluser Septian	88	100	14%
31	Yasmine Sava Elisya	96	100	4%
32	Yoel Crist Michael Longkey Simatupang	100	100	0%
Total Score		2390	2988	25%
Average		74.68	93.37	25%

Based on the table data on the results of increasing values from cycle I to cycle II, it is obtained that student learning outcomes have a significant improvement from cycle I to cycle II, with an average improvement of 25%. It shows that the Team Games Tournament (TGT) learning model with a media box instrument is effective in increasing students' understanding of Traditional Musical Instrument Classification subjects.

Although the average improvement is 25%, there is variation in the rate of improvement among students. Some students get very significant improvements (more than 50%), while others get lower improvements. It shows that this learning model can respond to differences in student needs and abilities. Several students achieved very good learning results in cycle II,

with scores reaching 100%. It shows that the Team Games Tournament (TGT) learning model with a media box instrument can stimulate students to achieve maximum scores.

All students listed in this table achieved higher learning outcomes in cycle II compared to cycle I, which shows a good level of participation in the Team Games Tournament (TGT) learning model. The average grade per class improves from 74.68 in cycle I to 93.37 in cycle II. It confirms the success of the learning model in increasing the average understanding of the entire class.

These data illustrate the effectiveness of the Team Games Tournament (TGT) learning model using a media box instrument in increasing students' understanding of Traditional Musical Instrument Classification subjects. The average initial pre-cycle value was recorded at around 61.68. However, after participating in learning using the Team Games Tournament (TGT) learning model with a media box instrument, there was quite a significant improvement.

Student learning outcomes reached an average of around 74.68 at the end of cycle I, showing an improvement of 13 points from the pre-cycle. This improvement shows the effectiveness of the learning model used in improving their understanding of the traditional musical instrument classification. A more significant improvement was seen in cycle II, where the average student learning outcome improved to 93.37. It indicates that the Team Games Tournament (TGT) learning model using a media box instrument is very effective in improving their understanding and mastery of the subject. Students could achieve much better learning outcomes at the end of cycle II, which was around 31 points higher than the pre-cycle score.

Therefore, the results of this graph show that the Team Games Tournament (TGT) learning model with a media box instrument significantly improves student learning outcomes from the beginning of pre-cycle to cycle II, depicting a very positive improvement in students' understanding of the traditional musical instrument classification.

Conclusions

Based on the analysis and discussion above, the conclusions are the Team Games Tournament (TGT) learning model using a media box instrument is an effective approach to improving learning outcomes in the material on the classification of traditional musical instruments for class VIII-B students at SMP *Plus Taruna Andalan Pangkalan Kerinci*. Based on the results of the pre-cycle evaluation on September 11, 2023, most students have not reached the level of completeness in the material on the classification of traditional musical instruments. Of the total 32 students, only eight students (25%) completed the *KKM*, while the other 24 students (75%) did not complete it because they were below the set *KKM* standards. It shows that there are challenges in the learning process that need to be overcome. The average student score is 61.68.

Student learning results in the cycle I evaluation on September 18, 2023, show that most students have achieved a sufficient completeness level in understanding the traditional musical instrument classification. Of the 32 students, 16 (50%) achieved a score that met the Minimum Completeness Criteria (*KKM*) standard of 76. However, 16 students (50%) have not finished. The overall average score was 74.68. Student learning results in the cycle II evaluation on

September 25, 2023, showed that 32 students (100%) achieved completeness with a high average score (93.37).

References

- Adelman, C. (1993). Kurt Lewin and the origins of action research. *Educational Action Research*, 1(1), 7-24.
- Altrichter, H., Kemmis, S., McTaggart, R., & Zuber-Skerritt, O. (2002). The concept of action research. *The Learning Organization*, 9(3), 125-131.
- Aqib, Z. (2006). *Penelitian tindakan kelas (Classroom action research)*. Bandung: Yrama Widya.
- Battersby, S. L. (2019). Reimagining music teacher collaboration: The culture of professional learning communities as professional development within schools and districts. *General Music Today*, 33(1), 15-23.
- Gadsden, V. L. (2008). The arts and education: Knowledge generation, pedagogy, and the discourse of learning. *Review of Research in Education*, 32(1), 29-61.
- Mohajan, H. K. (2020). Quantitative research: A successful investigation in natural and social sciences. *Journal of Economic Development, Environment and People*, 9(4), 50-79.
- Mulyasa. (2002). *Kurikulum berbasis kompetensi (Competency-based curriculum)*. Bandung: Rosda-karya.
- Shernoff, D. J., & Csikszentmihalyi, M. (2009). *Flow in schools: Cultivating engaged learners and optimal learning environments*. Routledge.
- Teodorović, J. (2011). Classroom and school factors related to student achievement: What works for students?. *School Effectiveness and School Improvement*, 22(2), 215-236.
- Toha, M. (1993). *Kepemimpinan dalam manajemen suatu pendekatan perilaku (Leadership in management a behavioral approach)*. Jakarta: Raja Grafindo Pustaka.
- Vasile, E. (2018). Education-a pillar of support for national unity and freedom of conscience. *Journal for Freedom of Conscience (Jurnalul Libertății de Conștiință)*, 6(2), 295-308.
- Wang, S. K., & Reeves, T. C. (2006). The effects of a web-based learning environment on student motivation in a high school earth science course. *Educational Technology Research and Development*, 54, 597-621.
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