



**THE EFFECT OF STUDENT TEAM ACHIEVEMENT DIVISIONS (STAD)
ASSISTED WITH AUDIO VISUAL MEDIA ON THE AFFECTIVE
COMPETENCY OF STUDENTS ON SCIENCE LEARNING IN CLASS VII
JUNIOR HIGH SCHOOL**

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Abstract

Affective is one of the competencies that must be measured as part of successful learning. The achievement of this competency is influenced by several factors, such as the use of learning models and media. This study tries to reveal the effect of the STAD model assisted by audio-visual media on the attitude competence of students in science subjects in class VII junior high school. The method used is quasi experiment with purposive sampling. Data were collected through observation sheets and analysed using the Mann-Whitney U Test. The results revealed that learning in the experimental class showed better affective than the control class. So, it is concluded that the STAD model assisted by audio-visual media has a significant effect on the affective competence of students in science subjects.

Keywords: Learning, Science, STAD, Learning Media, Audio Visual, Affective, Junior High School

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INTRODUCTION

Literally, education has an important role in the life of the nation. Because education serves to shape the character of the nation in the future (Trianto, 2012). Furthermore, it is said that educational attainment will also affect a person's cognitive function and ultimately affect their life skills (Lövdén, et al., 2020). If it does, then there should be efforts to optimise the implementation of education.

Optimisation of this implementation must be carried out at every level of education, including improving the quality of learning (Suryana, 2020). Efforts to improve the quality of learning can be done by applying active learning models in the classroom. This is known to have a good impact on the competence of students (Lufri, et al., 2018).

Based on the results of the observation, it was found that active learning has not been fully implemented, especially in science subjects. Whereas learning models can help improve the quality of learning (Djalal, 2017), especially science which requires the activeness of students. In addition, initial observations also revealed that 90% of students like group learning. If it does, then active learning can be applied to accommodate the needs of students. In addition, the assessment of students' attitudes has not been well observed, even though it is an important point besides cognitive. This will also support behaviouristic learning.

There are various types of active learning models. One of them is student team achievement divisions (STAD). It is often thought that active learning models have a difficult syntax, but this is not the case. STAD is an active learning model that has an easy syntax to implement. Because the model is relatively simple and good enough for the first step of active learning (Slavin, 2016; Pulungan, 2018).

The student team achievement divisions model also has a good effect on learning. The findings of Wahyuni (2019) revealed that the application of STAD has an influence on student learning outcomes. In addition, Ghufro's (2023) findings explain that STAD also has a positive effect on students' critical thinking skills.

This simple active learning model also has a good impact on learning outcomes. Andyana (2020) found that this model has a positive influence on learning outcomes and learner motivation. This model also has a positive contribution in terms of learner cooperation (Eminarto, et al., 2016). Student team achievement divisions has 5 syntaxes, namely presentation, team, quiz, progress score, and recognition (Slavin, 2016).

The application of STAD in the classroom can also be combined with audio-visual media. The

combination is known to have positive results from learning outcomes (A'yun, et al., 2021; Permatasari, et al., 2022), as well as student activeness (Brame, 2016). In this study, it is planned that the audio-visual media used will be in the form of videos that contain explanations of material about environmental pollution and climate change.

Seeing the positive trend of the application of this model, the researchers tried to explore the application of the student team achievement divisions model in science learning in the classroom. The model is applied with the help of audio-visual media in the form of learning videos. This research wants to see how the effect of STAD assisted by audio-visual media on the affective competence of students. Hopefully the results of the study can provide empirical contributions in the development of learning in the classroom.

METHOD

This research uses the quasi experiment method. Lufri and Ardi (2017) explained that quasi (pseudo) indicates that the object of research is not possible to be strictly controlled. The research design used the static group comparison design (Figure 1).

Class	Treatment	Competence
Experiment	X	H
Control	-	H

Description:
 X = STAD with audio visual media
 H = Affective

Figure 1. Design of research

The research was conducted at SMP Negeri 32 Padang, Sumatera Barat. Subjects are seventh grade students with science subjects and are taken by purposive random sampling. Data was collected through an affective observation sheet and observed by 3 observers who had been given clear instructions. The results of the observation will be interpreted with the attitude skills assessment criteria (table 1).

Table 1. Criteria of affective assessment

Range	Predicate	Mode
3,51 - 4,00	Verry Good	4,00
2,51 - 3,50	Good	3,00
1,51 - 2,50	Fair	2,00
1 - 1,50	Less	1,00

Permendikbud (2014)

Data analysis was conducted using the Mann-Whitney U-test. If the significance value is less

than 0.05, it indicates an effect, while if it is greater than 0.05, it indicates no significant effect

RESULTS AND DISCUSSION

This research has measured curiosity, responsibility, co-operation, confidence, and politeness. These affective components were carefully observed by the observer. Observations were made in the experimental and control classes. The analysis results are presented in table 2.

Table 2. Result of affective assessment

Class	Average	Predicate	Sig.	A
Experiment	3.32	Good	0.00	0.05
Control	2.50	Fair		

Based on table 2, the experimental class showed more positive results. The average values of the classes also show a difference, the experiment is 3.32 with the predicate "good" and the control is 2.50 with the predicate "sufficient". The test results show that the significance is smaller than 0.05. This means that the STAD model assisted by audio-visual media has a significant effect on students' affective competence.

Based on the research findings, it is known that curiosity, co-operation, and confidence have better results. This finding certainly provides a good indication for the application of STAD in science learning in the classroom with the addition of audio-visual media. And it also indicates a positive factor on students' affective. In line with Casey and Fernandez (2019) who recommended STAD to improve students' affective. This model is also considered as one of the options to increase learners' curiosity (Sabrina and Nabila, 2023). The findings of this study are also in line with other findings which say that the model has a good impact on students' self-confidence (Istiqlal and Hijrihani, 2020; Rahmawati, *et al.*, 2023) and responsibility (Amelia, *et al.*, 2021; Maherni, *et al.*, 2020).

Science is actually a form of subject that can provide a fun learning experience (Asmarizar, 2018). This subject is also expected to be a place to introduce students to the surrounding environment (Nurdyansyah, 2018). In addition, when meaningful learning in science is achieved, it will hone students' problem-solving skills (Wisudawati and Sulistyowati, 2022). Thus, science is actually not something difficult, but rather a material that is fun to learn, and this needs to be fostered in the classroom. And it will also help us to develop the potential of students, such as creativity (Azhar and Rahayu, 2021).

Science learning with the STAD model is a good combination. Because Student team achievement devisions (STAD) is a learning

model that focuses on group cooperation (Hoba and Bunga, 2020). This will certainly make interaction between students more intense. The use of the STAD learning model is also able to make students more active (Kaharudin and Liasambu, 2019). Meanwhile, we know that active students are one of the indicators of successful learning in the classroom.

The positive influence of this model is also inseparable from the use of audio-visual media. Learning media has an important role in creating a pleasant learning atmosphere (Jaiz, 2019). Collaboration between STAD and learning media is also considered better than conventional learning models (Dewi *et al.*, 2019). In addition, the use of appropriate media in the learning process can also support student learning independence (Ikhsan *et al.*, 2019).

CONCLUSION

Based on the research results, it is concluded that the STAD learning model with audio-visual media has a positive effect on students' affective competence in science learning in the classroom. The suggestions are variety of learning models and media also needed to realize a more interesting learning condition. It is hoped that these results can be an initiation to cultivate active learning in the classroom.

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