Efforts To Improve Teacher's Ability in Applying Student Teams Achievement Divisions (Stad) Learning Model Through Clinical Supervision in Smk Negeri 1 Tanah Jambo Aye District North Aceh

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***Abstract:** This study aims to improve the ability of the teachers in preparing the RPP model of Student Teams Achievement Divisions (STAD), the ability of the cooling technique, teachers and aircraft implement the learning model of Student Teams Achievement Divisions through academic supervision of clinical models at SMK Negeri 1 Tanah Jambo Aye North Aceh district. The subjects of this research are the subjects of Cooling and Aircraft Technique at SMK Negeri 1 Tanah Jambo Aye North Aceh district, the which are five people, with the focus of research is the ability of cooling technique teacher and aircraft to arrange RPP learning models Student Teams Achievement Divisions (STAD) and apply the Student Teams Achievement Divisions (STAD) learning models. The research design used is a school action research that Carried out two cycles. Each cycle consists of four stages: planning, execution, observation, and reflection. In the first cycle the average ability of teachers to prepare a learning implementation plan of 81.25% with good category, and the ability of teachers to apply for Student Teams Achievement Divisions (STAD) learning models of 74.64% with sufficient category. In the second cycle the average ability of teachers in preparing the RPP of 94.31% with excellent category, and the ability of teachers to apply for Student Teams Achievement Division (STAD) learning models of 87.50% with good category. Thus Spake the results of this study indicate that the application of academic models of clinical supervision can improve the ability of teachers Cooling Water System Technique and apply learning models Student Teams Achievement Divisions (STAD) in SMK Negeri 1 Tanah Jambo Aye North Aceh District*

***Keywords:** Clinical Supervision, Improving Ability, Student Teams Achievement Divisions (STAD)*

I. Introduction

Education is an important aspect of human life. The level of success in their own education is largely determined by the quality of the learning process. According Budiningsih (2008: 27-28), the main thing that should always be considered is how to create a quality learning process. Quality learning is learning that can create a learning environment that is challenging, fun, encourage exploration, given the successful experience and develop thinking skills. This will be achieved when teachers are competent in carrying out learning activities. Competencies expected in the implementation of vocational learning is more emphasis on practical activities rather than cognitive ability. This is in accordance with the opinion of Winarno (2009: 2) that the quality of the learning process that includes teachers, methods of teaching, learning behavior of learners, conditions and atmosphere for learning, and learning media, one of the factors that influence the quality of the learning process is the learning method used ,Productive competence of teachers who teach at SMK Negeri 1 Tanah Jambo Aye North Aceh district is generally derived from non-education background. Resulting in the lack of pedagogical competence of teachers who teach subjects majors / productive, it is very influential on the Traffic teachers in preparing the action plan the learning process. It is very important pedagogical competence dominated by teachers, in order to prepare a plan for learning activities to understand the syntax of learning activities, learners' character, the character of the subject matter, and methods suited to the subject matter.The problems mentioned above are a reflection of the lack of supervision. this is the opposite of the Traffic cognitively teacher has mastered the material taught, but did not understand the give / teach the subject matter on learners. As a result, the material being taught is very difficult to be understood by students so that learning activities take place unattractive. Another tendency of teachers' understanding of SMK Negeri 1 Tanah Jambo Aye toward mastery of models in any material taught is also caused by a lack of guidance from the school superintendent. Preparation activities of the learning process is generally easy to do. But the problem of teachers of SMK Negeri 1 Tanah Jambo Aye, they do not understand that every character has its own subject matter. The model used in the learning activities adapted to the material being taught. The teachers never know (learn specifically) about the character of the subject matter to be taught. The process of learning activities not

only teach the material alone but need special understanding that the students can understand the material being taught. Lack of knowledge and skills that teachers have in preparing the process of learning activities, impact on the use of the wrong model in the learning activities. So that the material should be easily understood to be very difficult. Meanwhile, according to Hasan (1996: 8), the learning model used by the teacher should always take into account the learner as a subject of study, individual differences in learning classical, all learners have different needs, abilities are not the same, and make space for each learner in study groups. The same thing by Johnson (2011: 5) is a competition between individuals was limited to that system, while the system had more success in providing opportunities and will guarantee the success of the individual and its members.

Meanwhile, according to Slavin (2005: 11), a cooperative learning model that is most easily applied is STAD, the model is intended for teachers who do not understand / novice teachers on the use of models in learning activities. STAD model is a learning method that interact among learners (provide opportunities for teachers to know the material that has not been controlled by learners), in the learning activities will be a social process among learners in study groups that interact with each other between individuals. Learning is a personal process, but also a social process that occurs when each person relates to another to establish communication and build knowledge together. Cooperative learning STAD model a learning activity with the placement of some of the students in small groups and give them a task or multiple tasks. Posamentier (1999: 12) argues that the cooperative learning model is a model in which the learning condition of the learners work together in small groups to help each other in learning. In line with these opinions according Krismanto (2003: 14), STAD approach in learning activities in particular will make extensive cooperative learning, in theory learners will be easier to find and understand concepts that are difficult if they are able to discuss it with friends. Cooperative learning is learning that promotes cooperation among learners to achieve the learning objectives. Using cooperative learning to change the role of the teacher of the role of the teacher-centered management to students in small groups. Election learning STAD model due to individual differences of learners in understanding the material taught by the teacher, the learning method STAD an easy learning model implementation, especially for teachers who have not been applying the model in the learning process. Learners are actively involved (model STAD) in the implementation of PBM so grows the attitude of cooperation in solving problems and raised confidence among the members of the group. So that learning into active learning techniques, innovatively, creatively, effectively and fun (PAIKEM), do through a variety of ways. One way is through the implementation of cooperative learning model of STAD*(Student Teams Achievement* Divisions).To assure that the Slavin (2005: 12) stated that the main idea of STAD is to motivate the learners in order to support and assist each other in mastering the skills taught by the teacher. In connection with the above description of the problem, teachers have a responsibility to help improve the quality of learning. Teachers also must be able to create an atmosphere of class so that learners comfortable being and learning in the classroom. The learning activities are implemented in the classroom is teacher accountability. Success or failure is determined by the ability of the learning activities of teachers in presenting the material, using the medium of learning and teaching skills varies.

Law (Law) of the Republic of Indonesia Number 20 Year 2003 on National Education System (Education) of article 39 paragraph (2), states that educators are professionals in charge of planning and implementing the learning process, assessing the results of learning, coaching and training and doing research and dedication to the community, especially for educators at the college. Meanwhile in Law Number 14 Year 2005 on Teachers and Lecturers in Chapter IV, Article 20 (a) states that the standard of work performance of teachers in carrying out duties professionalism, that teachers are obliged to plan learning, implementing the learning process quality as well as assess and evaluate learning outcomes. The key task of the teacher is embodied in teaching and learning is a form of teacher performance. Efforts to improve the quality of teachers have been conducted, one of which is coaching / training of teachers. But in reality shows that are still largely underqualified teachers, the level of competency of teachers is still very low. The data is reinforced by the findings of North Aceh district school superintendent dated January 30, 2017 that the results of supervision performed in the second semester of the 2016/2017 school year engineering teacher at SMK Negeri 1 Tanah Jambo Aye North Aceh district. The ability of teachers in general is very low, especially in the context of learning plan. Lesson plan (RPP) has been prepared teachers are yet apparent, especially methods (models and approaches) used teaching and learning media used. The data is reinforced by the results of the initial interviews and observations conducted by researchers of the five teachers in the techniques of SMK Negeri 1 Tanah Jambo Aye North Aceh district on 03 May to May 8, 2017. From the results of these interviews can be concluded that the fifth (100%) engineering teachers already understand the learning model *Student Teams Achievement* Divisions. Of these, as many as two people (40%) teachers have been applying the learning model *Student Teams Achievement* Divisions, while three people (60%) of teachers have never been applying the learning model *Student Teams Achievement Divisions* in the learning process. This data is supported with a description of the steps of learning activities in the lesson plan (RPP) have made teachers, where the teaching methods teachers included learning model *Student Teams Achievement* Divisions, but on the steps of learning activities that are arranged yet included learning steps in accordance with the model syntax *Student Teams Achievement* Divisions.

The initial survey researchers get results from the RPP study that has researchers conducted in SMK Negeri 1 Tanah Jambo Aye. Here researchers conducted a study lesson plan (RPP) have made teachers techniques, obtained the following data:

Table 1.1   Capability Teachers Prepare RPP Pre Cycle

No.	Aspect Assessed	Code Teacher / Score					Average	
		KH	AB	MS	SB	ZF		Score%
1	Identity RPP	3	3	3	4	4	3.40	85.00
2	Component RPP	4	4	4	4	4	4.00	100.00
3	Competency Achievement Indicators	3	3	3	3	2	2.80	70.00
4	Learning Objective	2	2	2	2	2	2 , 00	50.00
5	Learning Materials	3	3	2	3	3	2.80	70.00
6	time Allocation	4	3	4	4	4	3.80	95.00
7	Learning method	2	1	1	4	4	2.40	60.00
8	Step Step Teaching and Learning							
	a. Activities Introduction	3	1	1	2	3	2.00	50.00
	b. Core Activities	2	2	2	2	2	2.00	50.00
	c. Closing Activities	2	1	1	2	2	1.60	40.00
9	Source Learning	2	2	2	2	3	2.20	55.00
10	Rate	2	2	2	2	2	2.00	50.00
Total Score		**32.00**	**27.00**	**27.00**	**34.00**	**35.00**	**31.00**	
Final Score		**66.67**	**56.25**	**56.25**	**70.83**	**72.92**	**64.58**	
Category Value		**C**	**D**	**D**	**C**	**C**	**D**	

Source: RPP Assessing Prasiklus

the data above illustrates that in general the ability teachers in preparing a lesson plan in general is still relatively low. It is seen mainly in the aspect of competence achievement indicator amounted to 70.00%, the formulation aspects of learning objectives by 50.00%, aspects of learning materials by 70.00%, aspects of learning methods by 60.00%, preliminary activity aspects of 50.00 %, aspects of the core activities amounted to 50.00%, closing activity aspects of 40.00%, 55.00% aspects of learning resources, and assessment aspects of 50.00%. But there are also lesson plans that have been prepared teacher is good and complete, but on the steps of learning activities not load stages in accordance with the chosen learning model. Based on the problems described above, it is necessary to the implementation of the assistance and guidance in the form of academic supervision, so that will provide opportunities for teachers to develop learning abilities are more collaborative, reflective, and implemented on an ongoing basis. In this case, coaching is done on teachers to apply the learning model *Student Teams Achievement Divisions.* Conceptually academic supervision as proposed Glickman (1981) in Sudjana (2012: 54), a series of activities to help teachers develop the ability to manage the learning process in order to achieve the learning objectives. Arikunto (2006: 5) explains that the academic supervision is supervision, which focuses observation on academic issues, which are directly within the scope of learning undertaken by teachers to help students when it is in the process of learning. According Sagala (2012: 171), a supervisor can use various techniques of supervision in an effort to overcome the problems and challenges faced by teachers, supervision techniques are used based on the fundamental problems faced by teachers in teaching should be improved. Academic supervision technique consists of two kinds, namely the technique of individual supervision and group supervision techniques. With regard to the implementation of supervision, Sahertian (2010: 10) states that in practice the academic supervision is also known for several models of supervision, each of which has different characteristics. Meanwhile Kemdikbud (2014: 5) mentions a model of supervision, among others: (1) The conventional model of supervision; (2) model of artistic supervision; (3) scientific supervision models; and (4) a model of clinical supervision.

Meanwhile, according to Mustafa (2013: 97), a model of clinical supervision is a process of coaching in education aimed at helping the professional development of teachers in the introduction of teaching through observation and analysis of the data objectively and accurately as a basis for altering the behavior of teachers to teach. In accordance with the opinion of Makawimbang (2013: 3) states that clinical supervision is a form of professional help is given systematically to teachers based on need concerned with the purpose of developing their teaching skills. Based on some of the above opinion can be concluded that the implementation of the academic supervision clinical model believed capable of helping teachers to enhance its capabilities. Teachers or educators who have never knowing and using the model in the learning activities will be guided in particular (clinical). Tutoring is done by introducing models of cooperative learning that is easily understood and implemented in PBM activities. This initial knowledge is required in order that these teachers are slowly want to learn to use the model in learning activities, so that each of the subject matter can be taught with the model that suits his character. Characters vocational learners is like to cooperate, assist, teach, show the results of the work. Other studies supervision of clinical models, namely "Improving Teacher Competence in Applying Accounting Cooperative Learning Model NHT Through Clinical Supervision In SMK 1 Kutacane. The results showed that

through clinical supervision can improve the ability of accounting teachers in implementing cooperative learning model NHT. It can be seen from the results of the analysis of the ability of teachers to implement cooperative learning model NHT, where prior to the action (pre-cycle) the average ability of teachers amounted to only 70.45% in the low category, after the action on the first cycle increased to 75 , 57% to the category enough. After sikjlus II continues to increase teachers' ability to be 82.67%, with both categories. Based on these successes can be concluded that the clinical supervision can improve the ability of teachers at SMK Negeri 1 Kutacane implement cooperative learning model NHT (Lopez, 2014),supervision of academic clinical model is believed to improve the ability of teachers, because the academic supervision clinical model only focused on improving learning through a systematic cycle, and providing objective feedback to teachers about the learning undertaken. In addition, in clinical supervision, assistance given to the teacher not be instruction or command, but create a collegial relationship that teachers have a sense of security. Based on the background described above, the formulation of the problem in this research are: 1) Does the application of academic supervision clinical model can improve the ability of teachers cooling techniques and procedures for air in preparing the lesson plan (RPP) model of *Student Teams Achievement Divisions (STAD)* in SMK Negeri 1 Tanah Jambo Aye North Aceh Regency? ; 2) Does the application of the academic supervision of clinical models may improve the ability of teachers and HVAC cooling technique in applying the learning model *Student Teams Achievement Divisions (STAD)* in SMK Negeri 1 Tanah Jambo Aye North Aceh District ?.This study aims to: 1) Improve the ability of teachers and HVAC cooling technique in preparing the lesson plan (RPP) model of *Student Teams Achievement Divisions (STAD)* in SMK Negeri 1 Tanah Jambo Aye North Aceh district. 2) Improving the ability of teachers and HVAC cooling technique in applying the learning model *Student Teams Achievement Divisions (STAD)* in SMK Negeri 1 Tanah Jambo Aye North Aceh district. The benefits of this research are as follows: 1) The theoretical benefits that can enrich and strengthen the theory of conceptual knowledge about the academic supervision of clinical models and learning models of type *Student Teams Achievement Divisions* (STAD) in order to develop the professionalism of teachers. 2) the practical benefits that a) for teachers, providing knowledge about how to determine the right model for the material taught. Knowing the syntax of STAD model in learning activities. b) for school inspectors and may be considered an alternative in order to solving the issues facing the clinical teacher. c) for further research for consideration and subsequent references in research related to the academic supervision of a clinical model for the perfection of achieving quality development of the professionalism of teachers.

II. Methods

The implementation of school action research was conducted at SMK Negeri 1 Tanah Jambo Aye in North Aceh district. The research activities carried out during the three months from July to September 2017. Subjects in this study were teachers refrigeration and HVAC engineering SMK Negeri 1 Tanah Jambo Aye in North Aceh district, amounting to 5 people. This is in accordance with the opinion Sugiono (2008: 85) that the determination of the subject of research can be conducted with a purposive, namely the technique of determining the sample with certain considerations.. Research design used here is school action research referring to Kemmis research models and is designed with two cycle processes. Each cycle consists of four phases of activities: planning, execution, observation and reflection. Data collection techniques used in this study are as follows: 1) interviews; 2) observation; 3) documentation. Data were analyzed using quantitative methods with techniques percentage. Before the data analysis is done, the first value obtained every teacher through the study and the observation of the final value determined by the formula Score = Total Cost / Total Score Maximum x 100. Further, the value is analyzed to see the success of teachers in planning and implementing learning model Student Teams Achievement Divisions in the learning process at each cycle. To determine the percentage of achievement of the ability of teachers in each cycle, use the formula:% Achievement = Amount Earned Value Master / Teacher x 100. The number of action research is considered complete and successful if it meets the following performance indicators: 1) the ability of teachers to prepare lesson plan (RPP) model of Student Teams achievement Divisions conformity with the level of achievement reached at least 80%; 2) the ability of teachers in implementing the learning model Student Teams Achievement Divisions with the achievement level of compliance with learning syntax reach at least 80%; 3) 80% of the teachers have the ability to item (1) and (2).

III. Results And Discussion
3.1 Description Initial Condition

Results of preliminary studies or pre-cycle conducted by researchers at the date of May 3, 2017 until May 8, 2017, showed the study of the RPP has been prepared teachers cooling techniques and procedures for air at SMK Negeri 1 Tanah Jambo Aye Aceh north can be concluded that the average ability of teachers to prepare lesson plans in the pre-cycle only reached 64.58% with less category. From these results it can be concluded that the ability of teachers cooling and ventilation techniques in preparing lesson plans are still lacking. It is seen

mainly in the aspect of the RPP identity of 85.00%, aspects of competence achievement indicator amounted to 70.00%, the formulation aspects of learning objectives by 50.00%, aspects of learning materials by 70.00%, amounting to 60.00 aspects of learning methods %, aspects of the preliminary activities amounted to 50.00%, aspects of the core activities amounted to 50.00%, closing activity aspects of 40.00%, 55.00% aspects of learning resources, and assessment aspects of 50.00%.Furthermore, based on the observation of teaching carried out by researchers on the ability of teachers applying the learning model Student Teams Achievement Divisions in the pre-cycle data obtained that the average teacher's ability to apply learning model Student Teams Achievement Divisions in the pre-cycle only reached 29.29% by category very less). This is evident at all stages, including stage student orientation at issue only reached 30.00%, the stage of organizing students to learn by 24.00%, the stage of the investigation guiding individuals and groups by 36.00%, stage develop and present work 33,33%, and the stage of analyzing and evaluating the troubleshooting process only reached 20.00%.

3.2 Description Results Cycle I
Cycle I is held from July 15, 2017 until August 15, 2017, with a series of activities carried out systematically from planning (planning), implementation (action), observations (observation) and reflection (reflection).
1. Preparing Teachers capability RPP
2. RPP study results have been prepared teachers in the first cycle can be concluded that the average ability of teachers to prepare lesson plans in the first cycle reaches 81.25% in both categories. From these results it can be concluded that the ability of teachers write lesson plans in the first cycle there is an increase compared to pre-cycle stage. This is evidenced by the average ability of teachers write lesson plans in the pre-cycle amounted to 64.58%, to 81.25% in cycle I.
3. Capability Teachers Applying Learning Model STAD
4. Observations teachers' ability to apply learning model Student Teams Achievement Divisions in the first cycle can concluded that the average teacher's ability to apply learning model Student Teams Achievement Divisions in the first cycle only reaches 74.64% to the category enough. From these results it can be concluded that the ability of teachers to implement learning model Student Teams Achievement Divisions in the first cycle there is an increase compared to pre-cycle stages. This is evidenced by the average ability of teachers applying the learning model Student Teams Achievement Divisions in the pre-cycle of 29.29% to 74.640% in cycle I.

3.2 Description of Research Cycle II
Cycle II is held from August 20 2017 until 20 September 2017 , with a series of activities carried out systematically from planning (planning), implementation (action), observations (observation) and reflection (reflection). The result of the second cycle can be described as follows:
1. The ability of Master Plan for Education (Developing RPP)
2. RPP study results have been prepared teachers in the second cycle it can be concluded that the average ability of teachers to prepare lesson plans in cycle II reached 94.31% in both categories once. These results suggest that the ability of teachers write lesson plans on the second cycle a significant increase from the first cycle of 81.25% to 94.31% in the second cycle. From these results it can be concluded that the ability of teachers write lesson plans on the second cycle have achieved success indicators predefined actions, which amounted to 80.00%, so it does not need to be continued to the next cycle:
3. the ability Teachers Applying Learning Model STAD
4. observations ability of teachers to apply learning model Student Teams Achievement Divisions in the second cycle it can be concluded that the average teacher's ability to apply learning model Student Teams Achievement Divisions in cycle II reached 87.50%, with both categories. These results suggest that the ability of teachers to implement learning model Student Teams Achievement Divisions in cycle II, a significant increase from the first cycle of 74.64% to 87.50% in the second cycle. From these results it can be concluded that the ability of teachers to implement learning model Student Teams Achievement Divisions in the second cycle have achieved success indicators predefined actions, which amounted to 80.00%, so it does not need to be continued to the next cycle.

IV. Conclusion
Based on the research is conducted and discussions outlined in the previous section, it can be concluded among other things: 1) the application of the academic supervision clinical model can improve the ability of teachers cooling techniques and procedures for air in preparing the lesson plan (RPP) model of Student Teams Achievement Divisions in vocational Negeri 1 Tanah Jambo Aye North Aceh district. This is evident from the results of research, where the percentage of average achievement ability of teachers in preparing lesson plans Student Teams Achievement Divisions models in pre-cycle only reaches 64.58% in category D (poor), the first cycle increased to 81.25% by category B (good), and the second cycle a significant increase, amounting to

94.31% in category A (excellent). 2) the application of the academic supervision of clinical models may improve the ability of teachers and HVAC cooling technique in applying the learning model Student Teams Achievement Divisions in SMK Negeri 1 Tanah Jambo Aye North Aceh district. This is evident from the results of research, where the percentage of average achievement in a teacher's ability to apply learning model Student Teams Achievement Divisions in the pre-cycle only reaches 29.29% in category E (very poor), the first cycle increased to 74.64% by category C (enough), and the second cycle a significant increase, amounting to 87.50% in category B (good).

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