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# Effectiveness of Student-Team Achievement Division (STAD) to the Task Performance of The Grade 7 Students in Technology and Livelihood Education Subject: Basis for Instructional Supervisory Plan

**MAYLEEN S. BARILLANO**
Teacher II
Western Leyte College
Master of Arts in Education
Major in School Administration and Supervision
mayleen.barillano@deped.gov.ph

## ABSTRACT

This study aimed to Determine effectiveness of Student-Team Achievement Division (STAD) to the Task performance of the Grade 7 Learners in Technology and Livelihood Education Subject. The findings of the study served as a basis of a proposed Instructional Supervision plan. The method used to gather relevant data was Quasi Experimental Research Design for Grade 7 Learners to complete in the 2nd grading period and the performance of the respondents was based on their test scores before and after the Student-Team Achievement Division (STAD) has been introduced and delivered in the classroom during the teaching and teaching and learning process. The output of this study is to provide instructional supervisory plan to help the teachers to create a more effective learning processes that would help the learners to improve their skills or Task performance. The test of the difference between the pre- and post-test scores of the Grade 7 students who are the study's respondents. The responses to the pre- and post-validation questions, both before and after the integration of the Student-Team Achievement Division (STAD) during the teaching and learning reading based on the various most important learning competencies in teaching, particularly during the second grading period which lasted for 4 weeks or 1 month, are shown in this table. The study's conclusions regarding the integration of the intervention with the Student-Team Achievement Division (STAD) indicate that there were favorable outcomes or noteworthy effects brought about by the intervention.

The test of the difference between the pre- and post-test scores of the Grade 7 students who are the respondents of the study is presented in the table above. The results are coming from the pretest and posttest performance of the learners before and after the integration of the student-teams achievement division during the delivery of the lessons in the second grading period based from the identified learning competencies that were delivered for the entire 4 weeks or 1 month on the implementation.

Based on the findings, The Test of Difference Between the Scores in the Pre-test and Post-test of Grade 7 Students in Technology Livelihood Education (TLE) results provide important information about how well the Student-Teams Achievement Division (STAD) method works to enhance task performance. The baseline pre-test mean represents the first level of TLE proficiency achieved by Grade 7 students prior to the integration of STAD. The mean score obtained from the post-test indicates a noteworthy rise, indicating a better comprehension and utilization of TLE concepts overall. The null hypothesis (Ho) is rejected because the computed t-value is greater than the critical t-value, indicating that there is a statistically significant difference between the pre- and post-test scores.

The significant rise in the mean score indicates that STAD's cooperative and collaborative learning techniques have helped students become more proficient in TLE material. The confidence in directly attributing this improvement to the intervention is strengthened by the rejection of the null hypothesis. The choice to reject the null hypothesis suggests that the pre-test and post-test scores actually differ from one another and are not the result of chance. As a result, it offers empirical proof that the STAD approach influences Grade 7 learners' task performance in TLE in a noticeable way. This study highlights the effectiveness of collaborative learning strategies in raising student outcomes, which has practical implications for educators.

***Keywords — Effectiveness Student-Team Achievement Division Performance Grade 7 Learners TLE***

## I. INTRODUCTION

Technology and Livelihood Education or TLE is vital in becoming a productive member in society. Choosing a career path in the future, learning the technology and livelihood are skills needed most especially since we are embracing in modern world that both need livelihood and skills. It can also be an excellent way to improve the chances of succeeding in a career endeavor. TLE subject is essential that every student must learn the need knowledge and skills, for these skills are lifelong learning for every student. Teaching this subject must have the competence and equip with different strategies and methods of teaching, to effectively produce a competitive student.

STAD is one kind of cooperative learning, where team works in learning TLE; it provides students with the team opportunity to express and to communicate with each other. They can share the knowledge with one other by dividing the class into several team works or groups. This situation may result in more interaction between the members of group. Using STAD teaching method, students are involved in discussing problems together, sharing the difficulties in writing and providing them with knowledge. STAD method in teaching writing begins with presentation. To teach writing using presentation makes it clear to the students about what they should write and easy to be understood by the students.

According to Ferguson- Patrick, 2007; Johnson & Johnson, 1999 et. al. Cooperative learning methods influence students' academic achievement when compared with the traditional method, increase the level of retaining information, and improve students' communication and problem-solving skills and creativity. That is why TLE teachers must know if there should be an effective approach that I can use in my teaching to help my students and hope for a positive outcome.

The Researcher is teaching TLE subject for 6 years of service in the Department of Education and it was her baccalaureate degree. Most of the students think of this subject as an easy subject and don’t take lessons seriously. Students show lack of interest in it. That is why teaching TLE is more of a challenge for her. The researcher find an easiest possible way to deliver the important skills to the students since Grade 7 are expected to have exploratory skills to be use when they reach in higher grade level and to their career chosen path.

Grade 7 students are expected to have exploratory skills that will be used in studying more about their career chosen path. TLE program is designed especially for the first-year students to hone their skills as early as it is. It aims to reinforce the work skill training and value orientation of the first-year students. It exposes the learner to a variety of experiences which are meaningful and relevant to his development.

It also requires knowledge that they process to be more ready in higher grade level which requires mastery of skills. It may be a bit common but T.L.E. can be a difficult subject at times. For this reason, teachers struggle in finding the easiest possible way in delivering the skills to the students. Moreover, TLE subjects often lack contingencies for instructional facilities and teaching strategies and methods in teaching. Other problems are cultural and linguistic diversity, class size, lack of randomization during the test, time constraints, teacher variability, external factors and parental involvement. These are some problems that encountered and hopefully can be addressed through study.

This study to be conducted would be great help for her for it is about. These reasons will allow the researcher to fill the gap through proper use of this intervention "The Effectiveness of STAD (Students Teams Achievement Division ) to the test performance of the Grade 7 Students in TLE subjects" , in which it is more a cooperative learning methods, where team works in learning are needed, provides students with the team opportunity to express and to communicate with each other.

This study aimed to determine the Effectiveness of STAD (Student-Team Achievement Division) to the task performance of the Grade 7 students in Technology and Livelihood Education subject. The findings of the study served as a basis of Instructional Supervision Plan

Specifically, this study sought to answer the following questions.

1. What is the task performance of the grade 7 students in Technology and Livelihood Economics subject before the integration of STAD( Students Teams Achievement Division)?

2. What is the task performance of the grade 7 students in Technology and Livelihood Education subject after the integration of STAD( Students Teams Achievement Division)?

3. Is there a significant difference in the task performances of the grade 7 students in Technology and Livelihood Education subject before and after the integration of STAD(Students Teams Achievement Division)?

4. What instructional supervision plan can be proposed based on the findings of the study?

Null Hypothesis

There is no significant difference in the task performances of the grade 7 students in Technology and Livelihood Education subject before and after the integration of STAD( Student-Team Achievement Division)

## II. METHODOLOGY

***Design.*** This study used the Quasi-Experimental Research Design to evaluate the Effectiveness of STAD (Students Teams Achievement Division) to the task performance of the Grade 7 students in Technology and Livelihood Education subject. The findings of the study served as a basis of a proposed Instructional Supervisory plan. The researcher utilized random Sampling in identifying the respondents of the study. The findings of the study were the bases for the proposed Instructional Supervisory Plan. Quantitative analysis was used to determine the significant difference between the pre-test and post-test mean scores. In this study, the researcher was used the Self-Learning Modules summative test questions.

The study was conducted for one month period in which there were at least 4 learning competencies which were divided per week. The research respondents of the study were the Grade 7 Junior High School Students in TLE. The respondents will be chosen using the universal sampling technique. There are 23 males and 15 females with a total of 38 respondents handled by the researcher. The main local of the study is in Ipil National High School in the Schools Division of Ormoc City. The assessment given to the respondents was carefully validated by the teacher-researcher himself which are the pretest and posttest test performances of the Grade 7 learners, the different steps in conducting the identified approach were undertaken in order to validate their performances before and after the implementation of the STAD (Students Teams Achievement Division) to the respondents. This study is mainly focus on the results of the different test validation to gather data: The pretest scores performance of the Grade 7 learners before the implementation of the STAD (Students Teams Achievement Division), The Posttest scores performance of the Grade 7 learners after the implementation of the STAD (Students Teams Achievement Division) was also conducted as well as the significant difference of t the STAD (Students Teams Achievement Division) he pretest and posttest performances before and after the implementation of the STAD (Students Teams Achievement Division) in the delivery of the most essential learning competencies in teaching TLE. In the Quasi- experimental research design, the researcher prepared the different materials which integrating the STAD (Students Teams Achievement Division). The proposed instructional supervisory Plan was taken based on the findings of the study.

***Sampling***. The research respondents of the study were the Grade 7 Junior High School Students in TLE. The respondents will be chosen using the universal sampling technique. There are 23 males and 15 females with a total of 38 respondents. The respondents or the grade 7 learners were being identified and the primary means of reach is during the actual conduct of the study as well as during the gathering of data in the school where the study was conducted.. Another way of contacting them are through cell phones of their respective parents.

***Research Procedure***. The researcher is formulated the following procedures as guide in gathering of data:

The researcher asked permission from the Schools Division Superintendent as well as to the Public School District Supervisor (PSDS) to conduct a research study in the school.The researcher conducted an orientation to the teachers who will conduct the survey. The research instrument was administered to the identified respondents. Then the researcher used the tool of the teachers based different learning competencies in TLE. Another used in the study was the summative test questionnaires particularly in the TLE subject that focuses on the delivery of the most essential learning competencies in TLE. The Approval and recommendation from the Office of the Schools Division Superintendent, as well as to the Assistant Schools Division Superintendent in Ormoc City Division being the Chairman of the Schools Division Research Committee through the Senior Education Program Specialist in Planning and Research. After the Approval of the Schools Division Research Committee, the Approved or endorsement letter from the body together with the approved letter of intent were forwarded to the Office of the Public School District Supervisor as well as to the office of the School principal in order to get full support on the conduct of the study. The proposed title and design was submitted to the School Division Office for approval. Upon approval, the Division released endorsement to the District Office where the school is located. When the research was approved by the Schools Division Office and District Office, the researcher began the process of data gathering. Validation of the instruments through Experts such as the Master Teacher in TLE and in coordination with the school head and lastly to the Education Program Supervisor in Learning Resource was sought. Orientation of the participants was done. Answering and retrieval of the research tool followed. Tallying of results and treatment of data. Analysis and Interpretation of Data. The study was bases for a proposed instructional supervisory plan.

***Ethical Issues***. The right to conduct the study was strictly adhere through the approval of the Schools Division Superintendent, Public School District Supervisor as well as the approval of the School Principal where the study were conducted. Orientation of the respondents both the learners and the teachers including the School Principal was also

done. In the orientation, specially to the parents and or guardian, the process of the study was discussed in order for them to know how and why the study will be done and to reiterate that this study is purely focus on the improvement of the performance of the Grade 7 learners. The need for other data that was needed in the study such as the performance of the school in general based on the different performance indicators, a written permission was sought to the principal confidentiality and anonymity and will be discussed requiring them not to write names on the tools and have to writer pseudonym instead.

***Treatment of Data***. The following statistical formulas were used in this study:

The quantitative responses were tallied and tabulated. The data was treated statistically using the following statistical tool.

Weighted Mean. This was utilized to assess the task performance of the Grade 7 learners.

T-Test For Mean Difference- This tool was used to calculate the significant difference of the test performance of the Grade 7 learners in Technology and Livelihood Education.

## III. RESULTS AND DISCUSSION

**TABLE 1**

**PRE-TEST PERFORMANCE OF GRADE 7 LEARNERS IN TLE**

| Score Range | Description | PRETEST | |
|---|---|---|---|
| | | Frequency | % |
| 41-50 | Excellent | 0 | 10 |
| 31-40 | Very Good | 0 | 0 |
| 21-30 | Good | 11 | 29 |
| 11-20 | Fair | 25 | 66 |
| 1-10 | Poor | 2 | 5 |
| Total | | 38 | 100 |
| **Weighted Mean** | | **17.76** | **Fair** |

Table 1 above shows the results of the Technology & Livelihood Education pretest performance for learners in Grade 7. The results of the respondents were coming from the learners' learning gained from the different learning competencies for the first grading period maybe or some ideas on what are the different things that they have learned from the different discussions that the teacher made prior to the implementation of the intervention.

Table 1 presents the results of the validation of skills of the grade 7 learners following the integration of the Student-Teams Achievement Division (STAD) approach. This results was the pre-test results of Grade 7 students in Technology Livelihood Education (TLE) which shows how the learners learned in terms of test performance prior to the implementation of the lessons.

First, the distribution of students by proficiency level indicates that the Fair category, which includes 66 percent

of all identified participants, is heavily represented. While the lowest one is in the poor level of performance. This further explains that the TLE competency threshold that is in the middle of the range. The lack of students in the Excellent and Very Good categories can suggest that in order to raise students' proficiency levels, specific instructional strategies and improvement are required. The noteworthy proportion of pupils falling into the Fair category emphasizes how crucial it is to cater to the various learning requirements of the students in the class. The STAD method, which encourages peer interaction and cooperative learning, might be especially useful for improving the knowledge and abilities of students in the Fair category. This cooperative learning approach promotes shared accountability for learning goals, which may enhance understanding and application of TLE concepts.

On the other hand, the weighted mean of 17.76, which represents the results before the integration of STAD, puts the overall pre-test performance in the Fair category. Although the average points to a moderate degree of proficiency, the effect of STAD may be more clearly seen in the growth of specific students within their teams. It is expected that this team-based approach will promote cooperation and support among team members, enhancing the learning process' overall efficacy. Students who fall into the Poor category represent a subset of students who might need more support and focused interventions. With its emphasis on peer-assisted learning. The STAD approach may help students who are less proficient. Teachers can utilize this data to customize their lesson plans, making sure the STAD approach is adjusted to address the specific needs of students in the Poor category.

Based from the results table 1 based from the pre-test results of Grade 7 Technology Livelihood Education (TLE) students prior to the implementation of the Student-Teams Achievement Division (STAD) approach implied that the comprehension level of the students' proficiency are the possible effects that the students really need to have intervention in the teacher and learning process. This mean provides a standard by which the effectiveness of the STAD approach can be measured in later analyses. The STAD approach, which promotes cooperation and peer-assisted learning, may provide a useful way to accomplish the improvement that the Fair categorization suggests is necessary. Moreover, the collaborative and supportive environment that the STAD approach fosters is especially beneficial for these students. It's possible that the intervention will give them the support and encouragement they need from their peers, which will make the classroom more inclusive.

**TABLE 2**

**POST TEST PERFORMANCE OF GRADE 7 LEARNERS IN TLE**

| Score Range | Description | POST TEST | |
|---|---|---|---|
| | | Frequency | % |
| 41-50 | Excellent | 24 | 63 |
| 31-40 | Very Good | 14 | 37 |
| 21-30 | Good | 0 | 8 |
| 11-20 | Fair | 0 | 0 |
| 1-10 | Poor | 0 | 0 |
| Total | | 38 | 100 |
| **Weighted Mean** | | **42.82** | **Very Good** |

Table 2 above shows the results of the Technology & Livelihood Education based from the posttest performance of the Grade 7 learners. The results of the respondents were coming from the learners' learning that they have gained from the different learning competencies for the 2nd grading period after the teacher was already implemented or

integrated the chosen intervention in the delivery of the learning competencies in TLE. The integration of the intervention was done during delivery of the lessons that were lasted for 4 weeks or 1 month of the implementation.

Table 2 presents the results, After integrating the Student-Teams Achievement Division (STAD) approach, the post-test results which shows a significant improvement in the technology livelihood education (TLE) performance of Grade 7 students. As we noticed, There has been a noticeable improvement in the way students are distributed across proficiency levels. Remarkably, 37 percent of students or 14 total number of learners out from the 38 total number of respondents being tested and experience the new intervention given by the teachers to the learners received a Very Good level of performance while the portion of the percentage which reached to 63 percent of students received an Excellent score. This noticeable improvement shows that the STAD approach's cooperative and collaborative learning strategies have successfully raised the overall TLE performance of Grade 7 students. The disappearance of students classified as Fair and Poor indicates a significant decline in lower proficiency levels, highlighting the effectiveness of the intervention in meeting the needs of each individual student.

On the other hand, the post-test performance was classified as Very Good with a weighted mean of 42.82, indicating that the STAD approach was successful in improving the group's comprehension and application of TLE concepts. This significant improvement over the pre-test weighted mean of 17.76 shows a significant improvement and demonstrates the beneficial effects of STAD on the class's overall proficiency levels. The transition from Fair to Very Good denotes a paradigmatic shift, suggesting that students' mastery of TLE content has been greatly enhanced by the collaborative learning environment supported by STAD. The post-test results show that STAD was successful in mitigating learning gaps and meeting the needs of students who were struggling, as evidenced by the lack of students in the Fair and Poor categories. All students have experienced better results as a result of the intervention, which has produced a supportive learning environment for peers. The post-test results' positive outcomes highlight the STAD approach's potential for scaling up and adapting to different educational contexts. When deciding whether to adopt cooperative and collaborative learning strategies in TLE. The substantial upward shift in the proficiency levels, the high weighted mean, and the lack of students in the lower proficiency categories all point to the effective contribution of STAD to the improvement of TLE learning outcomes..

The results in table 2 which focuses on the integration of the intervention implied that there has been a notable improvement in the distribution of students across proficiency levels. Sixty-three percent of students received an Excellent score, and thirty-seven percent received a Very Good score. The majority of students in the pre-test results fell into the Fair category; this change from the results shows how effective the STAD approach is in improving the overall task performance of Grade 7 students in TLE. A significant decline in lower proficiency levels is indicated by the absence of students in the Fair and Poor categories, suggesting that STAD has effectively met each student's unique learning needs. Furthermore, this growth demonstrates how well STAD promotes a cooperative learning environment that leads to a thorough comprehension and application of TLE concepts. The class's overall proficiency levels appear to have changed significantly from Fair to Very Good, indicating the significant influence of STAD on students' comprehension of TLE material. Moreover, the fact that no students in the Fair or Poor categories were found in the post-test results highlights how effective STAD has been in closing learning gaps and meeting the needs of students who may have had difficulty at first. All students' results have improved as a result of the inclusive learning environment that the cooperative learning techniques incorporated into STAD have created, which encourages peer support and engagement. This result is especially important for educators and legislators who are looking for inclusive education strategies that work for a range of learning needs. The post-test results indicate positive outcomes that have implications that extend beyond the confines of this particular study. The STAD approach's success indicates that it can be scaled up or down to fit different subject areas and educational environments. These findings can be used by educators and policymakers to support the implementation of cooperative and collaborative learning strategies that raise student achievement in a variety of subject areas. The significant increase in skill levels, the higher weighted mean, and the lack of students in lower skill categories

all support the idea that STAD is effective in promoting improved learning outcomes.

**TABLE 3**

**TEST OF DIFFERENCE BETWEEN THE SCORES IN THE PRE-TEST AND POST-TEST OF GRADE 7 LEARNERS IN TLE**

| Aspects | Test Scores | | Computed T | Critical T | Decision | Interpretation |
|---|---|---|---|---|---|---|
| **GRADE 7 Students in TLE subject** | Pre<br>Post | 8.93<br>21.00 | 1.221 | 0.426 | Reject $H_o$ | Significant |

The test of the difference between the pre- and post-test scores of the Grade 7 students who are the respondents of the study is presented in the table above. The results are coming from the pretest and posttest performance of the learners before and after the integration of the student-teams achievement division during the delivery of the lessons in the second grading period based from the identified learning competencies that were delivered for the entire 4 weeks or 1 month on the implementation.

Based on the findings, The Test of Difference Between the Scores in the Pre-test and Post-test of Grade 7 Students in Technology Livelihood Education (TLE) results provide important information about how well the Student-Teams Achievement Division (STAD) method works to enhance task performance. The baseline pre-test mean of 17.76 represents the first level of TLE proficiency achieved by Grade 7 students prior to the integration of STAD. The mean score of 42.82 obtained from the post-test indicates a noteworthy rise, indicating a better comprehension and utilization of TLE concepts overall. The null hypothesis (Ho) is rejected because the computed t-value of 3.952 is greater than the critical t-value of 1.261, indicating that there is a statistically significant difference between the pre- and post-test scores.

The significant rise in the mean score indicates that STAD's cooperative and collaborative learning techniques have helped students become more proficient in TLE material. The confidence in directly attributing this improvement to the intervention is strengthened by the rejection of the null hypothesis. The choice to reject the null hypothesis suggests that the pre-test and post-test scores actually differ from one another and are not the result of chance. As a result, it offers empirical proof that the STAD approach influences Grade 7 learners' task performance in TLE in a noticeable way. This study highlights the effectiveness of collaborative learning strategies in raising student outcomes, which has practical implications for educators.

## IV. CONCLUSIONS

Based from the findings this study, the integration of the Students-team Achievement Division is significantly effective specially in improving the test performance of the Grade 7 students in Technology and Livelihood Education subject. Furthermore, the integration of the aforesaid intervention really helps those learners who are struggling in learning the different competencies in the sense that they will be getting support from their classmates who are knowledgeable enough or those learners that can easily grasp the idea of every competency that will be delivered by the teacher. Furthermore, it will make those aforementioned learners in the fair and poor level to increase their self-stem considering that this particular strategy will improve their cooperation towards their classmates.

## V. RECOMMENDATIONS

1. The Instructional Supervisory plan should be implemented by Grade 7 teachers in the delivery of the most essential learning competencies in Technology and livelihood education.

2. The School Heads should acquaint TLE teachers with the tenets and tactics of STAD, thus she or he should hold workshops and training sessions as well as give teachers the tools and resources they need to successfully integrate STAD into their lesson plans and encourage them to share their knowledge by organizing peer observations and collaborative learning sessions.

3. The School Heads should conduct a routine observation schedule to evaluate the ways in which educators are incorporating STAD into their lessons to find out how well students are understanding STAD and how well it is improving their practical skills, conduct formative assessments and gather input on the integration of STAD from educators and students in order to determine its successes and shortcomings.

4. The Public School District Supervisor should give students who might struggle in collaborative learning environments extra help and resources to meet the diverse learning needs of your STAD team, thus, it should be nice and fitting to use differentiated instruction strategies and work together with specialists to guarantee that STAD activities are inclusive and available to every student.

5. The Education Program Supervisor should work together with curriculum developers to make sure that the goals of the TLE curriculum are in line with the practical and collaborative elements that STAD emphasizes.

6. The Education Program Supervisor should also examine and adjust current lesson plans to include STAD activities that address particular TLE topics and abilities as well as provide a resource of easily accessible and implementable STAD-aligned teaching materials for educators.

7. In relation to the abovementioned, the researcher is giving the authority to those future researchers to conduct the same study to test the veracity of the results using the STAD in improving the test performance of the Students in Technology and livelihood Education.

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## REFERENCES

[1] DepEd Order no. 39 s. 2012 Enclosure no. 1 "Policy Guidelines on Addressing Learning Gaps". Retrieved: February 13, 2015http://www.deped.gov.ph/sites/

[2] Dep.Ed. Order No. 34 s. 2022 "School Calendar and Activities for the School year 2022-2023."

[3] Dep.Ed. Order no. 31 s. 20201"Interem Guidelines for Assessment and Grading in the light of the basic education Learning continuity Plan."

[4] Regional Memorandum No. 367 s. 2020. Enhancement of the Monitoring and Supervision Tools for Curriculum Implementation Division (CID) Chiefs, Education Program Supervisors (EPSs), Public School District Supervisors (PSDSs) School Heads (SHs) and Teachers.