

## The Effect of Implementing two Stay two Stray Model on Indonesian Accounting Vocational Students' Achievement and Character

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**Abstract:** This research focused on the enhancement of Indonesian accounting vocational students' achievement and character taught by applying Two Stay Two Stray model. This model was derived from cooperative learning model that provided the opportunities for students who were divided into some groups to share and to exchange both knowledge and information with other groups. To achieve the aims of the research, quantitative method was used with 2 x 2 ANAVA research design. By applying random purposive sampling grade X vocational students of SMK Al Washliyah Medan were chosen as the sample of research. There were 32 students for each experimental class I and II. The instruments used for students' achievement was test, while, questionnaire with Likert scale was used as the instrument of students' character. Then, all data found were analyzed by using general linear model with SPSS 22 IBM to identify both the score achieved and each indicator of questionnaire related to students' character and achievement on accounting subject. Based on data analysis, through Kolmogorov – Smirnov with Sig 0.325 < 0.05, it showed that all the data were distributed normally and the data were distributed homogeneously as well by applying Levene's test with  $F_{\text{observed}} > F_{\text{table}}$  ( $0.639 > 0.05$ ). Furthermore, by applying general linear model with Sig < 0,05 ( $0,000 < 0,05$ ), it is found that students' character were not affected by implementing Two Stay Two Stray Model with Sig > 0,05 ( $0,791 > 0,05$ ).  $H_0$  was accepted with Sig 0.491 > 0.05 which showed that there was no interaction occurred between students' achievement and character taught by Two Stay Two Stray Model. However, students' character in experiment class 1 was higher than experimental class 2 with some characters' value built, namely; religious, respectful, honest, discipline, creative, independent, communicative, and responsible.

**Keywords:** Two Stay Two Stray, accounting students, students' achievement, students' character.

### INTRODUCTION

Teaching and learning process was the core of educational activity in the classroom as it was generally determined by the roles of teachers and students who directly involved in each of activity planned in its learning process. Moreover, The purpose of successful teaching and learning process resulted the higher students' achievement in which it depended on how the teachers convey and deliver the subjects to the students. In this case, teachers were expected to have both basic teaching skill and attitude since the teachers is very responsible for designing, and delivering the lessons appropriately to the students. Some basic teaching skills needed by the teachers namely; mastering the curriculum, designing the materials, implementing methods and comprehending the techniques of evaluation. Besides, teachers' character also affect on how they implement teaching skill in the classroom. Some characters affecting teachers' skill

were; being discipline, and commitment in the implementation of teaching skills. There was obviously a relationship between teachers' teaching skills and characters that was needed by accounting students for achieving the learning purposes.

Recently, accounting has been chosen as the preference by high school students because accountant staff in Indonesia were constantly needed by departments and companies. Due to this fact, accounting teachers were expected to fulfill the students' preparedness in which they did not only need the theoretical knowledge but they also needed both skill and characters since most students would be working as soon as they graduate. Unfortunately, the students' score recapitulation taken from students' summative score did not meet the expectation as most grade XI accounting students of Vocational school SMK Al-

Washliyah Medan 3 did not achieve the learning outcomes expected as shown in Table-1.

**Table-1: The Students' Score Recapitulation**

No	Test	Score minimum	score above standard	score under standard
1	Test	75	34,375% 11 students	65,625% 21 students

Source: list of grade XI students of SMK Al-Washliyah 3 Medan

The table above clearly showed that there was only 33.3% students who got score above standard, while 66.3% students with score under the standard. Based on this observation and interview carried out to the students, this fact occurred since the obstacle that were often faced by teachers in the process of teaching and learning on Accounting subjects was student's characters such as; sluggishness, tediousness, and drowsiness. In order to overcome this problem, accounting teachers were asked to have the capability for making students understand and comprehend the subjects given. One of the teacher's attempts to overcome the problem was developing the teacher's potential in implementing the appropriate models of teaching since teaching with conventional models which tend to focus on the teachers led to monotonous learning process and less attractive to students. This current situation would obviously cause a lack of students' understanding on the material taught and resulted to the lower students' achievement. Based on the fact above, this research attempted to implement Two Stay Two Stray model which was the appropriate teaching model that could be applied in accounting class because this model generates the encouragement of improving students' activities and learning outcomes.

Two Stay Two Stray required the students to be more active in the learning process in which this model employed the question sheets which contained the tasks that must be completed through group discussion. Then, its task also might be accountable for the discussion result. In addition, the implementation of Two Stay Two Stray also could build up the students' characters affected by several factors, namely; social and technological factors. Firstly, The social factors directly affected to the students' character which would be innegative and positive ways. In the positive way, it could be achieved through the interaction among students during group discussion. On the other side, the negative factors would arise when students were not be able to adapt to the environment. Similarly, technological factors also had a positive impact that could facilitate teaching learning process, while, incapability of accessing the technology led to negative impacts during its progress. Based on the background of the research, the aims of the research were to investigate the students' achievement and character taught by using Two Stay Two Stray model on Accounting subject of grade XI for students of vocational school at SMK Al-Washliyah Medan, to investigate whether there was an interaction between Two Stay Two Stray model and students' character and

to investigate whether there was an interaction between Two Stay Two Stray model and students' achievement.

## LITERATURE REVIEW

Two Stay Two Stray model is a learning model that provides an opportunity for groups divided to share knowledge, information, and discussions with other groups through visiting each other. Group work is an essential part in this model which started from completing the task, visiting another group, sharing the result, and reporting the final discussion. According to Anam [1] Two Stay Two Stray is a cooperative learning model that encourages group members to gain an in-depth concept through playing their own roles to be interacting with other members of group. Moreover, Zulirfan [2] stated that Two Stay Two Stray is a model that does not only allows the students to think critically, creatively and effectively but also let the students to assist each other in solving the problems, and to encourage mutual aims of learning among other groups. According to Lie [3] there are seven stages implementing in Two Stay Two Stray model as the following:

- The teacher divided the students into groups consisting of four students for each group
- The teacher gave the sub-topics to each group to discuss with members of the respective groups
- Students worked in groups that aimed to provide the opportunities for students to be actively involved in the process of thinking
- Two representative students from each group left the group, then, they visited other groups to share what they have learned with their own group.
- Two students who stayed in groups were assigned to share their works and informations with their guests.
- Two representative students returned to their own groups, and reported their final findings from other groups.
- Each group presented their works.

Besides, the students were also being raised through the character education. It is expected that learners can experience both psychological and social processes as stated by Ministry of National Education 2010 in Aqid and Sujak [4] where psychological, social, and cultural entities absolutely build up the students' character which can be grouped into four matters, namely: heart, mind, kinesthetic and feeling. Character education was aimed to create learners in order to

become morally human being and to make decision wisely. In this case, accounting subject was expected not only providing the cognitive aspects but also building up the values of characters. Thus, the teachers need to design the lesson plan and materials to encounter both hard and soft skills. The soft skill needed such as; self-discipline, responsibility, curiosity, being independent, logical, critical, creative, innovative, polite, obedient, respectful, and open.

In addition, Purwanto [5] said that students' achievement is behavioral change that come up after following the teaching and learning process in accordance with educational goals. It means that students' achievement could be interpreted as behavioral changes obtained by students after experiencing learning activities. Most of the activities or behaviors that tuned up the students was the students' achievement. For instance, the students' achievement could be indicated from the mastery of learning materials that had been studied. Essentially, learning process could not be separated from doing an action since it caused the changes students' achievement. Ibrahim [6] argued that "Accounting is the recording, classifying, and summarizing both transactions and financial events that were efficient way

in earning money and interpreting its effects on economic activity". Accounting learning results could not be separated from the assessment because it would be determining the high or low learning outcomes in that assessment. Therefore, discussing the assessment related to evaluation was known as an action to determine the values of learning process experienced.

## RESEARCH METHOD

Quantitative research method was used to achieve the aims of the research that was based on the philosophy of positivism and with factorial design  $2 \times 2$  which took the possibility of the variables affecting in which dependent variables were students' character (Y) and students' achievement (Z). On the other side, independent variable was Two Stay Two Stray Model (O) Independent variable was used as treatment variable and moderator variable [7]. This research was undertaken in vocational school of SMK Al-Washliyah 3 Medan consisting of 32 students. Samples were chosen by applying random purposive sampling technique, in which there were experiment I class taught by using Two Stay Two Stray model, while experiment class II taught with conventional model. In short, the research design was visualized in table-2.

Table-2: Factorial Design  $2 \times 2$

SE ↓	Models (X)	
	Two Stay Two Stray Model	Conventional Model
Character Values (Y)	$X_1Y$	$X_2Y$
Students' Achievement (Z)	$X_1Z$	$X_2Z$

Then, the instrument of the research used were a test that was used to determine the success of students after the learning process being held. Both classes would be given pre-test and post-test to investigate accounting vocational students' achievement. Test was an instrument designed by the researcher. Therefore, validation of instrument should be achieved in order to know the appropriate instruments used in this research. In addition, a questionnaire with Likert scale was used to investigate students' character. Furthermore, data analysis used was the test of normality (one sample Kolmogorov Smirnov) and homogeneity data (One way

Anova). The hypothesis test was used by two-lane variance General Linear Model and SPSS 22 IBM for Windows and using MS. Excel to investigate the effect and the interaction occurred among variables.

## FINDING AND DISCUSSION

After data analysis, the research found that the normality test, which is aimed to determine the analysis between dependent variable and independent variable, was distributed normally. To normality test of the research, Kolmogorov-Smirnov test was implemented as seen in table-3.

**Table-3: Normality Test One-Sample Kolmogorov-Smirnov Test**

		achievements	character values
N		64	64
Normal Parameters <sup>a, b</sup>	Mean	39,6094	18,3125
	Std. Deviation	22,85608	1,86764
Most Extreme Differences	Absolute	,279	,169
	Positive	,279	,169
	Negative	,221	,137
Test Statistic		,279	,169
Asymp. Sig. (2-tailed)		,275c	,325

a. Test distribution was Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

Based on table-3 above, regression model was normally distributed with Sig > 0.05, it could be seen from the data obtained Sig 0.325 > 0.05. It showed that

all the data were distributed normally. Furthermore, the homogeneity was homogenous with states sig > 0.05, thus the homogeneity of the data was shown in table-4.

**Table-4: Homogeneity test Levene's Test of Equality of Error Variances<sup>a</sup>**

	F	df1	df2	Sig.
Students' achievement	37,153	1	62	,125
character values,	222	1	62	,639

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.a. Design: Intercept + class

The table above showed that all the data were distributed homogeneously with  $F_{\text{observed}} > F_{\text{table}}$ . For the data of students' achievement, it obtained that  $F_{\text{observed}} > F_{\text{table}}$  ( $0.125 > 0.05$ ). Similarly, the data of character values showed that  $F_{\text{observed}} > F_{\text{table}}$  ( $0.639 > 0.05$ ). After

normality and homogeneity test, it could be continued hypothesis test I using ANAVA with SPSS 22 analysis for windows and with sig < 0.05. It was clearly shown in table 5 as follows:

**Table-5: General linear test on Hypothesis I and Hypothesis I Tests of Between-Subjects Effects**

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig
Corrected Model	Students' achievement	32085,766 <sup>a</sup>	1	32085,766	2409,925	,000
	Characters values	,250 <sup>b</sup>	1	,250	,071	,791
Intercept	Students' achievement	100409,766	1	100409,766	7541,661	,000
	Characters values	21462,250	1	21462,250	6062,230	,000
Class	Students' achievement	32085,766	1	32085,766	2409,925	,000
	Characters values	,250	1	,250	,071	,791
Error	Students' achievement	825,469	62	13,314		
	Characters values	219,500	62	3,540		
Total	Students' achievement	133321,000	64			
	Characters values	21682,000	64			
Corrected Total	Students' achievement	32911,234	63			
	Character value	219,750	63			

a. R Squared = ,975 (Adjusted R Squared = ,975)

b. R Squared = ,001 (Adjusted R Squared = -,015)

Based on table 5, it showed that students' achievement was significantly affected by Two Stay Two Stay Model with Sig < 0,05 ( $0,000 < 0,05$ ). Yet students' character values were not affected by implementing Two Stay Two Stay Model with Sig > 0,05 ( $0,791 > 0,05$ ). It could be concluded that Two Stay

Two Stay Model only focused on improving hard skill rather than soft skill. Then, hypothesis II was carried out by General linear model as by using the same test data with test of hypothesis I and II. The results obtained in Table 6:

**Table-6: Test General Linear Model Hypothesis II Tests of Between-Subjects Effects Dependent Variable: Students' achievement**

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	32307, 207 <sup>a</sup>	16	2019,200	157,116	,000
Intercept	50611,275	1	50611,275	3938,114	,000
Class	16015,786	1	16015,786	1246,204	,000
Characters	136,379	9	15,153	1,179	,330
Class * Characters	70,738	6	11,790	,917	,491
Error	604,028	47	12,852		
Total	133321,000	64			
Corrected Total	32911,234	63			

a. R Squared = , 982 (Adjusted R Squared = , 975)

From table-6 above with Sig < 0.05, it showed that Ho was accepted with Sig 0.491 > 0.05 in which there no interaction between students' achievement and character values taught by Two Stay Two Stray Model. However, students' character in experiment class 1 was higher than experimental class 2.

After analyzing the data, this research pointed out that students' achievement in accounting subject significantly was being higher taught by implementing Two Stay Two Stray Model than students' achievement taught by conventional teaching model. It is because Two Stay Two Stray Model allowed the students to work in group discussion, to interact with other students so that the students were being more active and critical in comprehending the accounting materials given. A research conducted by Zulirfan [2] stated that Two Stay Two Stray was a teaching model that gave more opportunities to the students to assist each other, and to think critically, creatively and effectively. Constantly, a research conducted by Anam [1] which found that the students played their own roles in group discussion so that the students showed an active participation during the discussion. It could be assumed that student were freely active studying with other students in group discussion in which they were not reluctant to express their idea, to ask question or to criticize the disapproval with the teacher. Yet, the implementation of Two Stay Two Stray Model had not affected on students' character values entirely that was clearly revealed by the finding of the research in which the students with higher achievement did not always come along with students' character. It indicated that the crowdedness of classroom activities were not being able to be controlled since the students' excitement during discussing the materials with other members of group was quite overwhelming. In other words, the student did not improve their character values socially as Ministry of National Education 2010 in Aqid and Sujak [4] mentioned that there were three aspects of character values, namely: psychological, social, and cultural.

## CONCLUSIONS

Relating to the finding of the research, this research concluded that the students' accounting achievement who were taught by using Two Stay Two

Stray model was higher than students who were taught by using convention model with Sig < 0,05 (0,000 < 0,05). Yet, students' character were not affected by implementing Two Stay Two Stray Model with Sig > 0,05 (0,791 > 0,05). Besides, there was no interaction between students' achievement and character values taught by Two Stay Two Stray Model that Ho was accepted with Sig 0.491 > 0.05. The research showed that students with higher achievement would not automatically be able to build up their characters. However, students' character in experimental class I was higher than experimental class II with some characters' value built, namely; religious, tolerance, honest, discipline, creative, independent, communicative, and responsible.

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## REFERENCES

1. Anam, K. (2008). Cooperative Learning Implementation and Learning Model in Geography Learning. *Journal of Education Sciences. Agency for Research and Development of the Ministry of Education*, 2(36), 0216-0847
2. Zulirfan, D., & Irianti, M. (2009). Hasil Belajar Keterampilan Psikomotor Fisika Melalui Penerapan Model Pembelajaran Kooperatif TPS dan TSTS pada Siswa Kelas X MA Dar El Hikmah Pekanbaru. *Jurnal Geliga Sains Universitas Riau*, 3(1), 43-47.
3. Lie, A. (2010). Cooperative Learning. Jakarta: PT Grasindo
4. Aqib, S. (2011). Character Education Guide and Applications. Bandung. Publisher Yrama Widya.
5. Purwanto. (2011). Evaluation of Learning Outcomes. Yogyakarta: Pustaka Belajar.
6. Ibrahim, N. (2008). Relationship Between Readability Module and Achievement motivation with Accounting Study Outcomes at open high school. *Journal of Education and*

- culture*, 14(72), 4. Malang. Secretary General of Ministry of National Education.
7. Sugiono. (2009). Educational Research Methods Quantitative Approach, Qualitative and R & D. Bandung. Publisher Alfabeta.