

# The Improvement Competence of Vocational High School Students Through Cooperative Learning in Accounting Practicum Subjects

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## ABSTRACT

Skill competence is the main requirement for achieving vocational high school learning objectives. As one of the subjects, accounting practicum has severe difficulties because of the various topics and the skill requirements for completing accounting calculations. This study describes the effectiveness of the implementation of cooperative learning in accounting subjects to improve student competency skills. The performance of the trial involved 36 students in learning five topics. The learning syntax took place in five stages: literacy, organizing, review, practice, and evaluation. The results showed that learning activities were suitable by assessing learning readiness, interaction, initiative, and cooperation. Furthermore, learning outcomes are based on content, neatness, and punctuality.

**Keywords:** *Learning activity, Learning Achievement, Cooperative Learning*

## 1. INTRODUCTION

The vocational education program aims to produce human resources as professional workers. The education system in Indonesia also develops vocational schools under vocational high schools (SMK). The national policy, namely Law Number 20 of 2003 concerning the National Education System, includes Vocational High School as an educational institution that produces a productive workforce and has independence in work. These abilities are based on their skills and readiness to compete under their expertise competencies. Therefore, the curriculum of vocational high schools develops professional competencies and attitudes following industry standards.

A vocational school generally develops a technical or practical learning process. The Indonesian government state that vocational school graduates can work in the industry. However, this expectation is not following reality. The percentage of vocational high schools graduates who do not have a job is 8.49% or higher than high school graduates, as much as 6.77%. This data worried the government and tried to design a learning model to develop students' competence in their chosen industry.

One of the areas of expertise developed with the vocational education system is business and management. Furthermore, accounting practice is one of the subjects that aims to develop students' skills in managing the company's accounting cycle and

implementing the tax system. Teachers use various methods to achieve optimal learning outcomes in accounting practicum. However, the observations at one of the vocational high schools in Makassar City showed that the students did not understand the material entirely. The students could not apply the accounting cycle preparation and tax system application.

Researchers developed a cooperative model in accounting practicum learning to increase learning outcomes. The cooperative learning model can practically provide opportunities for students to work together in exploring teaching materials. The discovery of meanings and concepts together will give a deep impression on students, making it easier to understand the subject matter. With this understanding, students will quickly develop their skills. The suitable method also provides opportunities for students to interact with each other. Students with high abilities must help their groupmates with lower skills because their success determines the final assessment.

This article describes the stages of developing suitable methods in accounting practicum learning. This study analyses past learning achievements problems and then develops a learning model that evaluates learning outcomes. The development process involves teachers and several experts so that the teachers can achieve the learning outcomes properly.

**2. METHOD**

The research used a quantitative descriptive method that describes the characteristics of the cooperative learning model, learning activities, and learning outcomes. Meanwhile, 36 students of grade XI were involved in the trial. The subjects were students of vocational high schools Makassar majoring in Business Economics. The cooperative learning method was applied by dividing 36 students into nine groups. The mean values are grouped into four categories, as shown in Table 1.

**Table 1.** Score and Category

Score	Category
4.20 - 5.00	Very High
3.40 - 4.19	High
2.60 - 3.39	Moderate
1.80 - 2.55	Low
1.00 - 1.79	Very Low

**Table 2.** Description of Cooperative Learning Method

Syntax	Description	Time
Literacy	Provide opportunities for students to understand the material, concepts, and calculation techniques	45 minutes
Organize	Organize the class to form students into working groups	15 minutes
Review	Provide opportunities for groups of students to discuss in the preparation of group reports	75 minutes
Practice	complete the exercise task in groups	90 minutes
Evaluation	provide opportunities for groups of students to present the results of their activities	90 minutes

There are five learning syntaxes to achieve optimal learning outcomes Table 2. The teacher gives examples of cases and their solutions and offers assignments to be done by students. Students' readiness to learn is a determinant of the success of this syntax. Students who already have insight into the topics discussed will have high motivation to know and practice accounting solutions.

Organization means that students make workgroups and together complete assignments. Practically, students are stimulated to organize other students to achieve goals. In this syntax, the teacher can assess the interactions between students.

Syntax Review contains discussion activities between students in groups to complete the teacher's tasks. In discussion activities, the teacher allows all

The implementation of the trial was carried out on five learning topics in the Accounting Practicum Subject. Assessment of learning activity for each student uses indicators of learning readiness, interaction, initiative, and cooperation. At the same time, the assessment of learning outcomes is used to assess group performance and refers to content, neatness, and punctuality. Next is the assessment by giving a score between 1 – 5 according to the assessment rubric.

**3. RESULT AND DISCUSSION**

The cooperative learning model was applied in learning five topics with a length of 7 x 45 minutes for each topic. Therefore, the teacher explains the benefits of the practicum activities carried out. With the emergence of this motivation, the teacher continued to explain the basic concepts of accounting and recording techniques.

students in the group to express their opinions and thoughts. Thus, students can take the initiative to act in completing assignments. Practice syntax is completing accounting tasks according to the lesson's topic. At this stage, students convey ideas and work together in making reports. Furthermore, the evaluation syntax is an examination of learning outcomes.

The effectiveness of the learning model is assessed based on learning activities and learning outcomes. The assessment of learning activities shows that the practicum process went well. The evaluation of learning activities based on observations during learning found that students had a moderate level of readiness to learn. Interaction and cooperation also went well. Furthermore, the study results also showed that students cooperated well in practical activities (Table 3 and Table 4).

**Table 3.** Learning Activities in four indicators

Topic	Learning Activities			
	Learning Readiness	Interaction	Initiative	Cooperative
Fixed Fund Petty Cash System	2.60	2.80	3.20	3.40
Fluctuating Fund Petty Cash System	3.20	3.80	3.80	4.20
Petty Cash Balance	2.40	2.80	3.20	3.20
Bank Cash Accounting	2.60	3.20	3.40	2.40

Topic	Learning Activities			
	Learning Readiness	Interaction	Initiative	Cooperative
Accounts Receivable Accounting	2.80	3.40	3.50	3.20
<b>Average</b>	<b>2.72</b>	<b>3.20</b>	<b>3.42</b>	<b>3.28</b>

**Table 4.** Score of learning activities indicator

Indicator	Score	Category
Learning Readiness	2.72	Moderate
Interaction	3.2	Moderate
Initiative	3.42	High
Cooperative	3.28	Moderate

Learning outcomes were analyzed with three indicators: the completeness of the report content, the neatness of the report, and the accuracy. The assessment of learning outcomes is presented in Tables 5 and 6.

**Table 5.** Learning Achievement in three indicators

Topic	Learning Achievement		
	Content	Neatness	Punctuality
Fixed fund petty cash system	3.33	4.11	4.33
Fluctuating fund petty cash system	3.55	4	4.33
Petty cash balance	3.8	4.11	4.33
Bank cash accounting	3.33	3.89	4.11
Accounts receivable accounting	3.78	4	4.22
<b>Average</b>	<b>3.558</b>	<b>4.022</b>	<b>4.264</b>

**Table 6.** Score of learning Achievement

Indicator	Score	Category
Content	3.56	High
Neatness	4.02	High
Punctuality	4.26	Very High

Student learning outcomes showed good grades, which are indicated by the completeness of the contents of the report and the neatness that meets the assessment standards. Assessment, The punctuality of completing the task gave maximum results with a score of 4.26. Based on table 4 and table 5, it can be seen that students generally have good knowledge and skills in completing accounting practicum assignments.

#### 4. DISCUSSION

The analysis results show that the learning activities planned by the teacher are carried out well. The learning syntax takes place systematically and produces learning

outcomes with high effectiveness. The analysis results also showed that the learning process occurs interactively or there is an exchange of ideas in group activities. Many references revealed that the interaction model formed is promotive or a mutually motivating process between students.

In addition, in the organized syntax, the learning process encourages a sense of responsibility in each student. The characteristic that appears in the learning process is the development of social skills through interactions between students. The cooperative learning method allows the group to find ideas from all members so that active involvement is formed in the group. Individual assessment of learning activities stimulates students to express their opinions because they must be active.

Cooperative learning provides an active learning experience for students. The dynamic learning process is the answer to the weakness of the old pattern that tends to make students passive. The passive learning process makes students silent in class, isolated from others, or controlled by others. It will give the impression of being uncomfortable so that students find it challenging to adopt the subject matter.

Furthermore, the teacher's role as a facilitator determines the Achievement of the cooperative learning model. Teachers must be able to create interactive educational situations. The interaction between students, teachers, and other students is formed in the discussion process in small groups who work together to complete assignments. With this interaction, differences in views and knowledge can be overcome to improve student knowledge homogeneity.

#### 5. CONCLUSION

Accounting practicum learning can be implemented well and produce good learning outcomes. These results were achieved by applying cooperative learning that formed students in small groups. Learning effectiveness is proven by analyzing learning activities and learning outcomes that increase student competency skills.

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