



Comparison of Students' Ability to Work Inventory Questions at SMK Negeri 1 Pulutan

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Abstract

This study aimed to determine whether there is a comparison of students' abilities in working on inventory questions at SMK Negeri 1 Pemulutan. The subjects in this study were students of class XII Accounting at SMK Negeri 1 Pemulutan, from 98 students 66 students were taken to be used as research samples. Data collection techniques were documentation and tests, with the instrument in the form of test questions-the data analysis technique used one-way ANOVA (one-way ANOVA or F test) using SPSS version 22. From the results of the analysis using the F test with SPSS version 22, the F-count was 4.086, and the F-table of 3.15 with a dk of 66 and a significance level of 5%. Because F-count was greater than F-table ($4.086 > 3.15$), H_0 was rejected and H_a was accepted. The average student test results in solving inventory questions using the FIFO method was 85.27, LIFO was 81.10, and AVERAGE was 74.65. This showed that there was a comparison of students' abilities in working on inventory questions at SMK Negeri 1 Pemulutan, as well as in the process of working on the easy method, namely the FIFO method, and the difficult method, the Average method.

How to Cite

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INTRODUCTION

In general, every child has very diverse and different abilities both in terms of intellectual abilities and physical abilities. This intellectual ability is an ability that is usually used in order to carry out various activities such as thinking, mental, and problem-solving.

This intellectual ability is also an ability that includes six dimensions where these dimensions can shape children's intellectual abilities such as intelligence in numbers, verbal comprehension, perceptual speed, inductive reasoning, deductive reasoning, and special visualization. While the ability in terms of physical is the ability used to carry out jobs that lead to skills, stamina, and strength.

Reporting from tirto.id that in 2018 The Organization for Economic Co-operation and Development (OECD) surveyed 600 thousand children aged 15 years from 79 countries. From the results of the Program for International Student Assessment (PISA) survey, Indonesia obtained very unsatisfactory results.

"In the reading category, Indonesia was ranked 74th with an average score of 371, this result is inversely proportional to the 2015 survey where Indonesia was ranked 64th. The Indonesian mathematics category was ranked 73rd with an average score of 379. a decrease where in the previous survey in 2015 Indonesia was ranked 63rd, and in the science performance category Indonesia was ranked 71st with an average score of 396, and this result is also very inversely proportional to the results of the 2015 survey where Indonesia was ranked 62nd."

From the survey results, it can be seen that the ability of each child is very different in each country. Many things can affect the development of children's abilities, especially their learning abilities. In the process of teaching and learning activities in schools, parents, and teachers certainly expect that students can achieve the best results following the objectives of education outlined in the instructional objectives. But in reality, not all students can achieve the desired learning outcomes. This

can be caused because students often experience difficulties in the teaching and learning process where there are external factors and internal factors where the two factors can affect each other's ability to learn.

The subjects that will be tested in this study are financial accounting and talking about accounting, of course, most of us think that accounting is a difficult subject and a frightening specter for most students. Accounting is a subject that studies the methods of recording, classifying, and preparing an account in a certain way that is reported in the financial statements. So we can conclude that accounting is a lesson that in the process there are numbers.

Reflecting on this understanding of accounting, we must immediately think that all accounting students are intelligent students and have different abilities from other majors, especially in terms of calculating. In the process of majoring in SMK Negeri 1 Pemulutan, students are usually seen from the test results when they register for school. From these results, the student's major in accounting is seen from the student's MIPA value, if the math score is high then the child will be included in the accounting and financial department majors, although we cannot immediately conclude that all students who enter the accounting department are students categorized as smart.

However, in the learning process, we can see that there are a lot of different student characters, and the differences in student characters can affect the student learning process which has an impact on the comparison of students' abilities, especially in understanding and working on the questions given by the teacher on accounting subject.

Based on the opinion of Mangkunegara (2011: 67) "psychologically, abilities consist of potential abilities (IQ) and reality (knowledge and skills), meaning that employees have an IQ above average with adequate education for their positions and are skilled in their work. Every day, it is easier to achieve maximum performance".

According to Aunurrahman (2012: 49), the classification or levels of the types of learning abilities consist of three domains or areas, namely the Cognitive Domain, Affective Domain, and Psychomotor domain.

The ability to learn in students is generally influenced by various factors, both coming from themselves (internal) or factors from outside (external). According to Haryati (2017: 95), several factors affect student learning abilities, namely internal factors, and external factors.

According to Ahmad and Hodsay (2020: 92), the Submission of values (learning outcomes) is very important for students because it is a motivation for them to perfect or maintain good learning outcomes.

Meanwhile, according to Moehariono (2014:392) "Ability is a source of strength, ability, and skill both technically and socially, which exceeds that of other members". In addition, according to the opinion of Robbins and Timothy (2015: 35) "Ability means the current capacity of an individual to perform various tasks in a job".

According to Jamil (2014: 15) "Learning is a process of knowledge formation, in which students actively carry out activities, actively think, develop concepts, and give meaning to the things being studied." According to Hamalik (2015: 36) "Learning is the modification or strengthening of behavior through experience". Meanwhile, according to Purwanto (2014:66) "Learning is a student's effort to cause changes in behavior in himself following learning objectives".

"From some of the definitions of learning above, it can be concluded that learning is an activity carried out by a person intentionally in a conscious state to gain a new concept, understanding, or knowledge to allow a relatively permanent change in behavior both in thinking, feeling, and action on a person.

"Stice (2011: 572) defines in general that "inventory is intended for goods owned by trading companies, both in the form of wholesale and retail businesses when these goods have been purchased and are in a condition ready for sale."

According to Donald, et al (2011: 499) "Inventories are asset items owned by the company for sale in normal business activities, or goods that will be used or consumed in the production of goods to be sold". Meanwhile, according to Stevenson and Chuong, (2014: 180) "Inventory is stock or deposits of goods that are kept by the company in inventory related to the business being carried out".

Based on the above definition, it can be concluded that inventory is a current asset in the form of goods or equipment or materials in the form of raw materials either in the form of finished or semi-finished goods that are used to support the company's operational activities, where the goods are stored in a place for further processing.

According to Rudianto (2012:223), several types of inventory valuation methods are commonly used, namely: (1) FIFO (First in First Out), in this method, goods that enter (purchased or produced) will first be issued (sold); (2) LIFO (Last In First Out), in this method, goods that enter (the last purchased/produced will be issued/sold the earliest); (3) Average, in this method, the goods issued/sold and the remaining goods are valued based on the moving average price

"From the description above, it can be concluded that the purpose of this study is to find out whether there is a comparison of the ability of each student to work on the inventory of goods at SMK Negeri 1 Pemulutan.

METHODS

The research method used in this study is a comparative descriptive method with a quantitative approach. According to Sugiyono (2019:331) "Comparative research is research that compares the values of independent variables with different samples". Meanwhile, according to Nazir (2014: 46) "Comparative research is a kind of descriptive research that wants to find answers fundamentally about cause and effect by analyzing the factors that cause the occurrence or emergence of a certain phenomenon."

Population and Sample

According to Sugiyono (2019:145) "Population is a generalization area consisting of objects that have certain quantities and characteristics determined by researchers to be studied and then drawn conclusions". The population and this research are students of class XII. AKL which consists of 5 classes.

According to Sugiyono (2019:146) "The sample is part of the number and characteristics possessed by the population". In this study, the technique used in determining the sample used saturated sampling, where according to "Sugiyono"

(2017:81) all populations are used as samples". Based on this understanding, the researcher determined, from the three classes, the researcher divided the sample into 2 classes (XII.AKL.2 and XII.AKL.3) used as samples to be studied and 1 class (XII.AKL.1) used for validity samples. In addition, the sample selection of class XII (twelve) students is not without reason, this sample selection is because class XII students have studied the material" about the matter of inventory methods FIFO, LIFO, and average.

Table. 1 Research Population and Sample

No	Class	Amount		Total	Information
		LK	PR		
1	XII. AKL.1	13	19	32	Validity Class
2	XII. AKL.2	17	17	34	Test Class
3	XII. AKL.3	16	16	32	Test Class
Total number		46	52	98	

Source: Administration of SMK N 1 Pemulutan

Data collection technique

"In this study, there were 2 (two) data collection techniques used by researchers, namely documentation and tests." According to Sugiyono (2019: 228) "Documentation is a record of events that have passed, documents

can be in the form of writing, pictures, and monumental works of someone". The documentation that was carried out in this research was to find data about the number and names of students, descriptions of the school and the condition of teachers and employees, this data was used as support in the study. According to Arikunto (2014: 53) "Test is a tool or procedure used to find out or measure something in an atmosphere, with predetermined ways and rules." The test used by the researchers in this study was essay questions about the inventory of goods using the FIFO, LIFO, and average methods which were used to determine students' abilities in working on the inventory questions.

Data analysis technique

"In this study, the data analysis technique used for testing the hypothesis was the normality test and the F-test (one-way annova). The range of values used in this study in Table 2.

Table. 2 Test Results Criteria

No	Score	Description
1	85 – 100	Very good
2	71 – 84	Well
3	56 – 70	Enough
4	41 – 55	Not enough
5	0 – 40	Fail

Source: Ministry of Education and Culture, 2016

RESULTS AND DISCUSSION

This research was conducted at SMK Negeri 1 Pemulutan where the samples in this study were class XII students, namely class XII.AKL.2 and class XII.AKL.3. In this study, the test was carried out in 1 meeting for each class and the questions used in this study were 1 package of questions with a total of 7 questions."

"At the first meeting, on Thursday, September 23, 2021, the researchers conducted a

test on class XII.AKL.2 students with a time allocation (3 x 45 minutes) where students had to solve the Inventory Problem using the FIFO, LIFO, and Average methods.”

”At the second meeting, on Friday, September 24, 2021, the researchers conducted tests on class XII.AKL.3 students with the same time allocation (3 x 45 minutes), with an estimated completion time of 45 minutes for each method.”

Descriptive Test Data

”After carrying out the test on September 23 to 24, 2021, the results of the test on the inventory of goods at SMK Negeri 1 Pemulutan in Table 3.

Table. 3 FIFO Method Question Test Results

Score	XII.AKL.2		XII.AKL.3		Note:
	F	%	F	%	
85-100	18	52.94	15	46.87	SB
71-84	15	44.11	16	50	B
56-70	1	2.94	1	3.13	CB
Total	34	100	32	100	

Source: Processed Data, 2021

Based on the Table 3, it can be concluded that in class XII.AKL.2 with 34 students for grades 85 - 100 there were 18 students with a percentage value of 52.94%, for grades 71 - 84 there were 15 students with a percentage value of 44.11%, and for the value of 56 - 70 there was 1 student with a percentage value of 2.94%. While in class XII.AKL.3 with 32 students, for grades 85 - 100 there were 15 students with a percentage value of 46.87% and for grades 71 - 84 there were 16 students with a percentage value of 50%, and for grades 56 - 70 there was 1 student with a percentage value of 3.13%.

From the Table 4, it can be concluded that in class XII.AKL.2 with 34 students for grades 85 - 100 there were 11 students with a percentage value of 32.35%, for grades 71 - 84 there were 21 students with a percentage value of 61.76%, and for the value of 56 - 70

Table. 4 LIFO Method Question Test Results

Score	XII.AKL.2		XII.AKL.3		Note:
	F	%	F	%	
85-100	11	32.35	5	15.62	SB
71-84	21	61.76	26	81.25	B
56-70	2	5.89	1	3.13	CB
Total	34	100	32	100	

Source: Processed Data, 2021

Table. 5 Average Method Question Test Results

Score	XII.AKL.2		XII.AKL.3		Note:
	F	%	F	%	
85-100	6	17.64	2	6.25	SB
71-84	24	70.59	18	56.25	B
56-70	4	11.77	12	37.5	CB
Total	34	100	32	100	

Source: Processed Data, 2021

there were 2 students with a percentage value of 5.89%. While in class XII.AKL.3 with 32 students, for grades 85 - 100 there were 5 students with a percentage score of 15.62%, for grades 71 - 84 there were 26 students with a percentage value of 81.25%, and for grades 56 - 70 there was 1 student with a percentage value of 3.13%.

In the Table 5, it can be concluded that in class XII.AKL.2 with 34 students, for grades 85 - 100 there were 6 students with a percentage value of 17.64%, while for grades 71 - 84 there were 24 students with a percentage value of 70, 59%, and for the value of 56 - 70 there were 4 students with a percentage value of 11.77%. While in class XII.AKL.3 with 32 students, for grades 85 - 100 there were 2 students with a percentage score of 6.25%, for grades 71 - 84 there were 18 students with a percentage value of 56.25%, and for grades 56 - 70 there were 12 students with a percentage value of 37.5%.

Table. 6 Average Value of Test Results

Class	FIFO	LIFO	Average	Average
XII. AKL.2	85.35	81.65	77.74	81.58
XII. AKL.3	85.19	80.56	71.56	79.10
Average	85.27	81.10	74.65	

Source: Processed Data, 2021

The data above displays the average value of student test results in working on inventory questions between the FIFO, LIFO, and Average methods, the following results were obtained, the average value for the FIFO method was 85.27, the average value for the LIFO method was 81.10, the average value for the Average method was 74.65.

In this study, hypothesis testing was calculated by using SPSS version 22 software. Based on the data obtained, the results of hypothesis testing in this study can be described as follows:

$F\text{-count} = 4.086 > F\text{-table} = 3.15$, or $0.045 < 0.05$ then H_a in this study was accepted, it can be concluded that there was a comparison of students' abilities in working on the Inventory Problem between the FIFO, LIFO and Average methods in financial accounting subjects class XII. AKL at SMK Negeri 1 Pemulutan.

When viewed from the scores obtained by students, the comparisons obtained are as follows: (1) In solving the inventory problem, the FIFO method class XII.AKL.2 was superior to class XII.AKL.3 this was evidenced by the average scores, namely XII.AKL.2 (85.35) and XII.AKL.3 (85, 19). Based on the test results criteria according to the Ministry of Education and Culture, (2016: 32) the average workmanship on the FIFO method inventory questions was in the very good category. (2) In solving the inventory problem, the LIFO method class XII.AKL.2 was also superior to class XII.AKL.3 this was evidenced by the average scores, namely XII.AKL.2 (81.65) and XII.AKL.3 (80.56). Based on the test re-

sults criteria according to the Ministry of Education and Culture, (2016: 32), the average workmanship on the LIFO method inventory questions was in the good category. (3) In solving the inventory problem, the Average class XII.AKL.2 method was also superior to class XII.AKL.3 this was evidenced by the average scores, namely XII.AKL.2 (77.74) and XII.AKL.3 (71.56). Based on the test results criteria according to the Ministry of Education and Culture, (2016: 32) the average work on the Average method of inventory questions was in the good category.

"When viewed in terms of the method, the results of the average value in working on inventory questions using the FIFO (85.27), LIFO (81.10) and Average (74.65) methods, it showed that the easiest questions to work on questions were the FIFO and LIFO methods, while the questions that were difficult for students to do were inventory questions using the Average method."

The results of this study were in line with Hajariah's research (2019:29) where the results of student tests in solving inventory questions were 11 students in very high category and 22 students in high category. Likewise, the results of Nivi's research (2021:71) where the results of the completion test of inventory items were very good, good and poor.

The results of further relevant research by Kuncoro (2014: 207) where the results of student tests in solving inventory questions were included in the good category.

From some of the results of the research above, it can be seen that the comparison of students' abilities when viewed from the average score of students in solving inventory problems using the FIFO, LIFO, and AVERAGE methods, students were better at solving inventory problems using the FIFO method compared to the LIFO and AVERAGE methods. And the lowest score of students in solving inventory problems used the AVERAGE method. From the results above, the researcher can put forward the picture that students of SMK Negeri 1 Pemulutan in general had more difficulty in calculating the value of the

ending inventory using the AVERAGE method. From these findings, it can be used as a reference to pay more attention to students' abilities in working on the AVERAGE method.

CONCLUSION

Based on the results of the research that had been carried out, it can be concluded that the results of hypothesis testing where $F\text{-count} = 4.086 > F\text{-table} = 3.15$ or $0.045 < 0.05$ and H_a in this study was accepted, where there was a comparison of students' abilities in working on inventory questions between FIFO, LIFO and Average methods."

"This was also evidenced by the average score of students in working on the FIFO method of inventory questions, which was 85.27 and was included in the very good category. While the average value of students' scores in working on the LIFO method of inventory questions was 81.10, which was included in the good category, and the average value in working on the Average method of inventory questions was 74.65, which was included in the good category."

From the average test scores, it can also be concluded that in working on inventory questions, the easy method to do was the FIFO method, while the method that was quite difficult to do was the Average method.

After conducting such a long research, the researcher has several suggestions as follows: (1) For subject teachers through this research, the teacher will know there is a comparison of students' abilities and the location of errors in working on inventory items that are often done by students as a reference for conducting evaluations, considering the material. The question of inventory is a material that often appears in UK questions (Competency Test). (2) For schools, it can be used as material for the library. (3) For students, it can be used as their benchmark to see their abilities to improve their abilities, especially in working on inventory questions.

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