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Study Of High Level Of Thinking Ability Of Class Xi Students At State Vocational School 4 Gorontalo

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Abstract

The purpose of this study was to describe the level of high-order thinking skills of class XI students in accounting subjects at SMK Negeri 4 Gorontalo. The research method used is a qualitative method. The objects in this study were students of class X1 with a total of 27 students. Data collection was carried out using a description test instrument consisting of 6 question items. The results showed that from the results of the PAP analysis, students' higher order thinking skills showed that from 27 students, 3 students (11%) had high HOTS thinking skills, 14 students (52%) had sufficient HOTS thinking skills, 1 student (4%) have low HOTS thinking ability, and 9 students (33%) have HOTS thinking ability.

Abstrak

Tujuan Penelitian ini adalah untuk mendeskripsikan tingkat kemampuan berpikir tingkat tinggi siswa kelas XI pada mata pelajaran akuntansi di SMK Negeri 4Gorontalo. Metode penelitian yang digunakan adalah metodekualitatif. Objek dalam penelitian ini adalah siswa kelas X1 dengan jumlah 27 siswa. Pengumpulan data dilakukan dengan menggunakan instrumen tes uraian yang terdiri dari 6 butir item soal. Hasil penelitian menunjukan dari hasil analisis PAP kemampuan berpikir tingkat tinggi siswa menunjukan dari 27 orang siswa, diperoleh hasil sebanyak 3 siswa (11%) yang memiliki kemampuan berpikir HOTS tinggi, sebanyak 14 siswa (52%) memiliki kemampuan berpikir HOTS cukup, sebanyak 1 siswa (4%) memiliki kemampuan berpikir HOTS rendah, dan sebanyak 9 siswa (33%) memiliki kemampuan berpikir HOTS.

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Introduction

Along with the development of science and technology, human thoughts also develop towards a better civilization than before. Education is an effort or awareness to prepare the nation's generations through teaching, guidance, and training that aims to improve intelligence, skills, and the formation of the personality development of students physically and psychologically (Narizona, 2017: 775).

The learning process based on the 2013 curriculum is a student-centered learning process or Student Center Learning with a contextual nature of learning (Kemendikbud, 2013). Contextual learning requires students to be more active in class so that students not only have low-level thinking skills but also have higher-order thinking skills. However, in classroom learning, students are less encouraged to develop higher order thinking skills.

Higher order thinking skills are the ability to connect, manipulate, and change the knowledge and experience already possessed critically and creatively in determining decisions to solve problems in new situations (Dinni, 2018: 170). that higher order thinking skills are abilities that require someone to apply new information or previous knowledge and manipulate information to reach possible answers in new situations or problems.

Based on the results of observations made at SMK Negeri 4 Gorontalo City, it was found some facts that the learning carried out especially in accounting subjects did not encourage students to develop higher-order thinking skills. This is evidenced by student learning outcomes in accounting subjects, there are still some students who have difficulty working on accounting questions.

Theoritical review

The Nature of Thinking

Thinking is a mental process. However, thinking skills can be trained, just as an athlete must practice continuously to be able to improve his abilities and achieve higher achievements. Therefore, the ability to think must be instilled in children from an early age. In essence, thinking is a process and ability to gain knowledge and understanding of a concept or information obtained by someone in overcoming various problems faced.

Higher Order Thinking Ability

Higher order thinking ability is a process of thinking at a higher level than just memorizing which includes critical thinking skills, creative thinking skills, and creative thinking skills problem-solving abilities, as well as the use of the mind more broadly to connect a new challenge with information already stored in his memory and then provide conclusions so as to find a solution to a problem that is difficult to solve (Wulan, 2017: 208).

Higher Order Thinking Ability Indicator

The indicators of higher order thinking skills used in this study are indicators proposed by Krathwohl which include the ability to think in analyzing, the ability to think in evaluating, and the ability to think at a higher level in creating.

Method

Research Approach and Procedure

The approach used in this research is a descriptive qualitative research approach.

observation, description test, interview and documentation.

Data Validity Check

Checking the validity of the data in this study was carried out by means of data triangulation, according to Sugiono (2019:431) Triangulation is defined as a data collection technique that combines data from various data collection techniques and existing data sources. Furthermore, researchers use reference materials, namely the existence of supporters to prove the data that has been collected by researchers such as data from description tests, interviews and image data, namely photos in the study.

Data analysis

To be able to provide a description of the level of students' thinking skills on accounting material, then after the test is carried out, the score for each student is obtained. The scores are added up and the final score results are then analyzed using the PAP analysis technique (Banner Reference Assessment), according to the essence of the PAP is a passing standard (pass-fail limit) which has been set as a benchmark since the beginning of the assessment will be carried out, based on the student assessment guide, the PAP score can be obtained (Saraswati: 2020).

Table 3.1 Student Assessment Guide

Interval Value	Category
88-100	Very good
74-87	Well
60-73	Enough
0-59	less/needed

Table 3.2
PAP Category of Higher Order Thinking Ability (HOTS)

Score	Category
53-60	Thinking Ability HOTS Tall
45-52	Ability Thinking HOTS
36-44	Ability Thinking HOTS Enough
0-35	Ability Thinking HOTS Low

Results And Discussion

Research Result

Based on the scores obtained by students who have been described above, to find out the results of the assessment between raters can be seen in the table 4.2 follows.

Appraiser A Thinking Ability	Appraiser B Thinking ability				Total	Shape Desimall	Results Persen
	High Hots	Hots	HOTS enough	HOTS Low			
High HOTS	3	0	0	0	3	0,111	11,11
HOTS	0	8	0	1	9	0,333	33,33
Enough HOTS	0	0	14	0	14	0,518	51,86
Low HOTS	0	0	0	1	1	0,037	3,70
Total	3	8	14	2	27		
Shape Desimall	0,111	0,296	0,518	0,074			
Results Persen	11,11	29,63	51,86	7,40			

In this study, the reliability value of the kappa coefficient was calculated by using SPSS version calculation 23.0 the summary of the calculation results is presented in Figure 4.1 as follows.

	Value	Asymptotic Standardized Error[a]	Approximate T[b]	Approximate Significance
Measure of Agreement Kappa	.429	.204	2.683	.007
N of Valid Cases	4			

a. Not assuming the null hypothesis.
b. Using the asymptotic standard error assumingthe null hypothesis.

Figure 4.1 The results of the kappa . coefficient

The results of the calculation of kappa reliability by including 2 raters as weighers show the reliability between raters, namely kappa of 0.429, asymptotic standardized error. The results were 3 students (11%) had high HOTS thinking skills, 14 students (52%) had sufficient HOTS thinking skills, 1 student (4%) had low HOTS thinking skills, and 9 students (33%) had low HOTS thinking skills.

Teacher interview results

interviews with learning technique accounting teachers who expect students to be more active and able to understand the material presented by the teacher in the online and offline learning process, the teacher said that there were obstacles in the learning process. offline learning there are some students who have learning difficulties. HOTS thinking skills. shows a standardized measurement error of 0.204 where the smaller the more reliable with

a significant value of 0.007 indicating a correlation of the kappa value close to one as an indicator that rater A and rater B are mutually consistent. The final scores of these students were analyzed using a benchmark reference assessment (PAP) of higher order thinking skills that had been made previously. Then the thinking ability of class XI students can be expressed in the picture below:

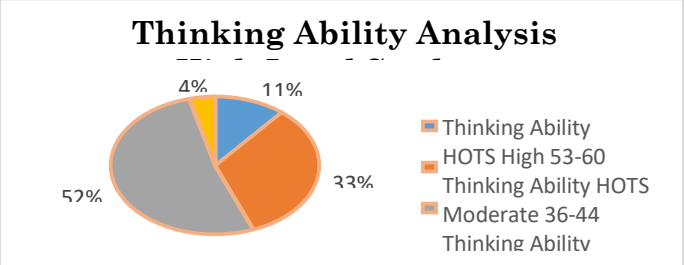

Figure 4.2 Analysis of Students' Higher Order Thinking Ability

Student Interview Results

The results of interviews and problems with students working on higher-order thinking skills, class XI students tend to have difficulty when making or forming accounting sentences, some students stated that they had problems completing trading company financial reports, namely because the explanation given by the teacher was less accurate.

Conclusions And Suggestion

Conclusion

Students' higher order thinking abilities are grouped into three levels, namely the ability to analyze, evaluate, and create. Based on the results of research and discussion in class XI Accounting at SMK Negeri 4 Gorontalo, it can be concluded, namely based on the results of the PAP analysis showing class XI students tend to have sufficient HOTS thinking skills in solving HOTS cognitive problems. And the results of the interview show that class XI students tend to have difficulty when making or forming accounting sentences.

Suggestion

Based on the results and limitations of the study, the researchers provide the following suggestions:

1. It is expected that accounting teachers will always train and improve students' higher-order thinking skills
2. It is expected to be a study material in increasing knowledge for researchers, especially in the study of students' higher-order thinking skills.
3. For other researchers who will conduct the same research as this research, they can add other problems that are more in-depth and viewed from different perspectives so that they can enrich knowledge.

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