

AN ANALYSIS OF READING QUESTIONS IN STUDENTS' WORKSHEET FOR GRADE EIGHT BASED ON BLOOM'S TAXONOMY

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ABSTRACT

This study aims to : (1) to investigate the application of cognitive levels of bloom taxonomy in reading questions in the worksheet, (2) to investigate the dominant cognitive dimension of Revised Bloom Taxonomy in the worksheet and (3) to write sample reading questions in students' worksheet. This research was focused on analysing the students' worksheet which is published by *Permata team*. The data analysed through data analysis table to categorizing the questions based on theory of Bloom Taxonomy .The finding implies that the number of activities of remembering was the highest percentage in this worksheet, 87.8%.The frequency of remembering is 58 of 66questions. The questions that work on the cognitive level of analyzingrank second with percentage of 6.1%. The third frequency is understanding with 3 question or 4.6 % and the last frequency is creating with 1 question or 1.5 %.The distribution of each category of revised Bloom's taxonomy within the reading questions is not balanced. Based on the result, the category of remembering that is considered as the lowest level has the highest portion, while the other categories that are categorized as higher level has the low portion. Referring to this findings, the writer tries to develop the reading question in students' worksheet for grade eight based on Bloom taxonomy to be better by providing some questions that are suitable with low and high order thinking skill.

Keywords: Students' worksheet, Reading questions, Bloom's Taxonomy.

I. Introduction

In the teaching and learning process, it is important to improve the learning and teaching resources of each subject of learning materials. There are so many learning resources that can be used to help teachers and student in the teaching and learning process. The teacher has to develop the students' knowledge. The teacher might able to check which parts of materials that students find their difficulties. Thus, the teacher will helps students to practice their skills in the teaching and learning process to get best result. To find out those things, the teacher has to design the instructional materials and also many activities for the students. There are some instructional materials, such as, prints (textbook, worksheet), visuals (charts, real objects, photographs) and audiovisuals (slides, tapes, video, multimedia).

Worksheet as one of the instructional materials has an important role in teaching and learning process. Student Worksheet (LKS) is a learning tool to support the implementation of the lesson plan. Student worksheet includes at least title, basic competencies to be achieved, time completion, equipment / materials needed to complete the task, information, steps, tasks and reports to be done. Many teachers plan the learning activities in the classroom for the students by using worksheet. Thus, student worksheets are a source of practice and can assist the teacher to develop students' ability.

In the English worksheet, there are four skills that must be learned by students. Among the four language skills, reading is the most crucial skill to master due to several reasons (Pardede, 2013). In English worksheet, reading is an important part that stimulates thinking skills. The worksheet delivers reading materials through kinds of reading texts and equips them with reading questions that aim at checking students' understanding toward the texts. Reading skill should be taught beside all cognitive skills starting from knowledge, comprehension, application, analysis, synthesis, and evaluation. Cognitive skills should be practiced through reading

questions. Unfortunately, based on the preliminary data of reading question in students worksheet which used in SMPN 41 , the most of English worksheets do not include questions that require critical thinking process. Most of questions, emphasize the lower order cognitive levels. The cognitive levels of the worksheet questions should be one of basic criteria to be used to evaluate worksheet.

The fact is also supported by an observation of the researcher on students' worksheets for the first semester used in SMPN 41 Medan written by *Permata team*. Based on the researcher's observation that the result showed the cognitive domain of reading questions are dominated by low level order thinking skills. This is the reference for the researcher to further analyse the students' worksheet used in the junior high school.

II. Theoretical Review

2.1. Reading

Reading is a complex process that requires that active participation of the reader with the purpose of making out the text. Reading is not a passive skill. It requires frequent practice and exercise. During reading a reader accesses mental representations of the words in order to recognize each word in the text (Perfetti, 1985). Thus, reading is considered as an active skill because the reader's eyes and brain is active while reading and after reading.

Richard (2005:61) defined question as an utterance that is addressed to a listener/reader and asks for an expression of fact, opinion, belief, etc. There are four classified forms that comprehension questions may take to stimulate students' understanding of texts :

1) Yes/No Questions

Yes/no questions are simply questions that can be answered with either yes/or. This is a common form of comprehension question, but it has the drawback of allowing the student a 50 % chance of guessing the correct answer.

2) True or False

Questions may also take the form of true or false. As with *yes/no* questions, students have a 50% chance of guessing the correct answer. True or false questions are difficult to prepare.

3) WH Questions

Also known as constituent questions or information questions. It begin with a WH word such as *What, Where, When, Who, Why* and *How*. WH questions are often used to help students to go beyond a literal understanding of the text.

4) Multiple Choice

Multiple choice questions are based on other forms of questions. Generally, this form of question only has one correct answer when dealing with literal comprehension.

Crawley and Merrit in Pratiwi(2014:19) point out that the types of those questions are identifying details or facts, recognizing main ideas, identify cause effect, making inferences, and critical reading.

1. Identifying for details or facts
2. Recognizing the main idea
3. Identifying cause-effect relationship
4. Making inference
5. Critical Reading

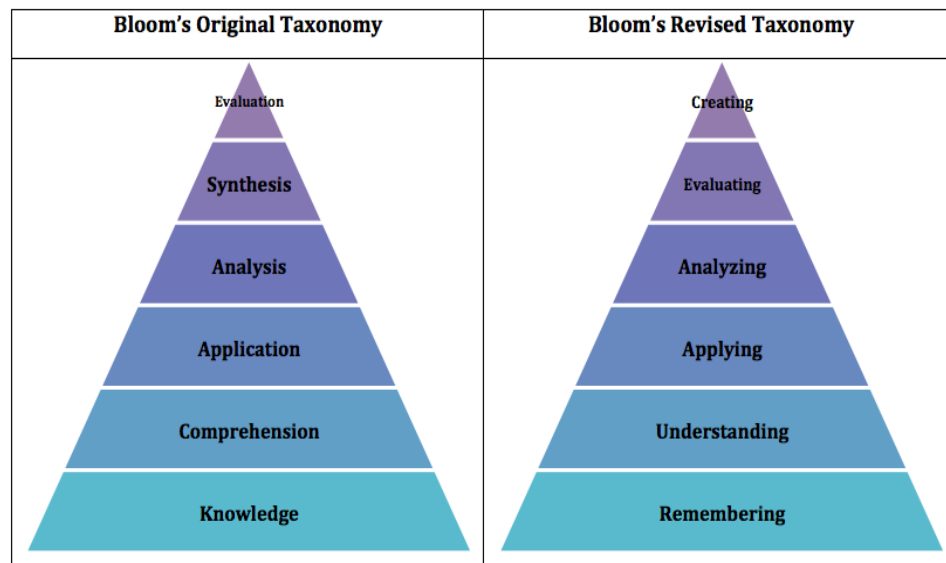
2.2. Worksheet

Worksheet is a papers given by teacher to the students in class as an activity to improve and deepen their knowledge by working every task in the worksheet. This worksheet consists of questions and tasks that must be done by students, also note that worksheet and evaluation are different things, the purpose of worksheet is to make students understand and explore the material more while evaluation is to measure how far the students have understood the material.

A good worksheet has many characteristics such as a worksheet only consists tens of pages, not even reach a hundreds of pages. In a worksheet, it consists of tasks such as questions (multiple choice or essay) that must be answered by students. While according to Prastowo (2011:205-206), there are functions of worksheet like as teaching material that minimalize teacher's role, but making students more active; as teaching material that facilitate students to understand given material; and make learning activity more convenient for students.

2.3. Bloom's Taxonomy

Bloom's Taxonomy is a classification system used to define and distinguish different levels of human cognition such as thinking, learning, and understanding. Educators have typically used Bloom's Taxonomy to inform or guide the development of assessment (test and other evaluations of student learning), curriculum (units, lesson, project, and other learning activities), and instructional methods such as questioning strategies.



In the revised version, three categories were renamed and changed from nouns to verbs. Knowledge changed to remembering, comprehension became understanding and synthesis changed to creating. These new terms of the six categories are proposed by Anderson & Krathwohl in 2001. In the revised taxonomy, evaluation is no longer the highest level of the pyramid. A new category, creating, claims the peak. This category was originally known as synthesis. Another significant change is that category names are no longer nouns, but verbs. For example, knowledge is now understanding. As a consequence, objectives developed using the revised taxonomy now describe learners' thinking processes rather than behaviors.

III. Research Methodology

The research methodology is presented in four headings, they are, the research design, source of the data, techniques of collecting data and techniques of data analysis. This research was conducted by using Qualitative Research. In this study the researcher analyzed the content of the worksheet particularly the reading question in students' worksheet. The data of this research was the reading questions in the student' worksheet for first semester which used for the Eight Grade of Junior High School in SMPN 41 Medan. The worksheet consists of 3 units and 14 tasks is written by *Permata Team* and published by *CV Lima Utama Grafika*.

IV. Results and Discussion

4.1. Research Findings Description

The data analysis covered classifying all reading questions according to the six categories of the cognitive level of Bloom's taxonomy, calculating frequencies, and reporting percentages. As it is clear from the following table, the lower and higher order cognitive thinking skills are presented.

Table 4.1. Cognitive Dimension Distribution in Students' Worksheet

Unit/Chapter	Number of Question	Level of Question					
		C1	C2	C3	C4	C5	C6
1	11	10	-	-	-	-	1
2	30	25	2	-	3	-	-
3	25	23	1	-	1	-	-
Total	66	58	3	-	4	-	1

The result shows the number of activities that call for the cognitive level of remembering is the highest aspect in the worksheet with percentage 87.8 %. The frequency of remembering is 58 of 66 questions. The questions that work on the cognitive level of analyzing rank second with percentage 6.1 % and the frequency is 4 of 66 questions. The third frequency is understanding with 3 question or 4.6 % and the last frequency is creating with 1 question or 1.5 %.

From the analysis above, there are no applying and evaluating questions in every chapter of reading question text in the worksheet. Further, the following table explain the frequencies and percentage the distribution of the cognitive dimension of Revised Bloom Taxonomy for knowing the dominant level in reading questions in students' worksheet.

Table 4.2. Cognitive Dimension Distribution in the Students' Worksheet

No	Cognitive Dimension Level	Frequencies	Percentage	
1.	LOWER ORDER THINKING	Remembering	58	87.8%
2.		Understanding	3	4.6 %
3.	HIGH ORDER THINKING	Applying	-	-
4.		Analyzing	4	6.1%
5.		Evaluating	-	-
6.		Creating	1	1.5%
Total		66	100 %	

Remembering and understanding categorized as the lowest levels reach to 92.4 % with the frequency 61 of 66 questions while for analyzing and creating,

categorized as the higher order thinking reach to 7.6 % with the frequency 5 of 66 question and no question that belongs to the applying and evaluating in the worksheet.

4.2. Discussion of Research Results

There is a tendency that the most dominant dimension of the cognitive level of Revised Bloom's Taxonomy in the Students' Worksheet is Remembering level. It means that recalling previously taught material is dominant in teaching learning process in this worksheet. It can be seen from the analysis result table that has shown 58 questions of 66 reading questions are remembering. It appeared most frequently, 87.8 % questions.

The result implies that the author of the worksheet placed emphasis on the lower thinking process that the most total number is remembering level. This number is contradicting with the higher order thinking. It is not give students to develop their thinking skill.

As demonstrated of the data, the students' worksheet was not appropriate with the cognitive domain theory of Revised Bloom's Taxonomy. It didn't includes all the cognitive domain especially in the three level of higher order thinking skills, analyzing, evaluating and creating. However, it could be better if the author of the worksheet is more concern about the distribution of the higher order thinking level by modifying and enriching some questions into analyzing, evaluating and particularly the creating level.

Finally, the researcher concludes that is important to improve the quality of the reading question to be better , So, the researcher has tried to develop several questions in the text as a model to improving students' cognitive skills. The researcher has created several reading questions where the questions are not only included in the lower order thinking but also included into higher order thinking. Here are the example of the text and questions as follow:

Text 1

Read the following text and then answer the questions!

A Teenage Genius

Ivan Mirsky was born in Russia but now lives in America with his father, Vadim. They live in a one room flat in Brooklyn.

Ivan doesn't go to school and his father doesn't have a job. They practice chess problem all day, every day.

Ivan was different from a very young age. He could ride a bike when he was eighteen months old, and read before he was two. He could play cards at three and piano at four. When he was twelve, he was the under 20 chess champion in Russia.

His father can't speak English and can't play chess either.

Ivan translates for him. Vadim says, "I know that I can't play chess, but I can still help Ivan. We don't like playing sports or watching TV. We live for chess".

Question:

1. Where was Ivan born?
2. Does he live in Russia or America?
3. Who is Vadim?
4. Does Ivan go to school? Does Vadim has a job?
5. What do they do every day?
6. Determine which parts of Ivan as a teenage genius?
7. What do you think about Vadim?
8. Do you think Ivan is a Genius man or not? Why do you think so?

Based on the reading text 1 above, the original questions from the worksheet are number 1 until 5 which are categorized to remembering level. Moreover, Indonesian government applied the proportion for each level of education based on Bloom's taxonomy is surely different based on the guidance for assessment which is regulated by the Ministry of Education and Culture. For Junior High School itself the proportion is Remembering- Understanding 20 %, Applying- Analyzing 55 %, evaluating 15 % and creating 10 %. The frequency of reading question is not distributed in balance.

Based on the explanation above, the writer has tried to design sample question categorized as lower and higher level. For example , in the question number 6 categorized as analyzing level because the learners determining how the parts relate to one another or how they interrelate, or how the parts relate to an overall structure or purpose while for question number 7 and 8 categorized to evaluating level because the question making judgments based on criteria and standards through checking and critiquing. Critiques, recommendations, and reports are some of the products that can be created to demonstrate the processes of evaluation.

V. Conclusions and Suggestions

5.1. Conclusions

After analyzing the data and elaborating the findings, the conclusion of this study has explained as follows :

1. The reading questions in students' worksheet for Eight grade, comprise of 66 questions infers that Remembering level gets 58 questions (87.8%), understanding level gets 3 questions (4.6%), analyzing level gets 4 questions (6.1%) and creating level gets 1 question (1.5%) while for applying and evaluating level doesn't have distribution in the worksheet.
2. Based on the data analysis, Remembering level gets most dominant level in the reading questions. The distribution cognitive domain in the reading question, higher order thinking skill is lower than low order thinking skill. The fact is proven by the result of the data which shows the distribution of cognitive domain in the reading questions.
3. Due to this reason, this worksheet is not proper for the students in the Eight grade. The worksheet is insufficient to achieve the goals of the teaching and learning process in this grade. Therefore, the researcher has created reading questions to develop and fulfill higher order thinking skill in the worksheet.

5.2. Suggestions

After doing this research, the writer would like to offer some suggestions :

1. For the school, it will be better for the school to give more attention to the content compatibility of the cognitive levels of the worksheet. It is need to be selective in choosing the appropriate students' worksheet that can develop students' competence.
2. Through this research, teachers can see which cognitive dimension that has appropriate and which cognitive dimension that should improved with compatible activities. Teachers have to revise the existing questions for supplementing the insufficient aspect.
3. For the students, it will lead them more active in learning process. They have learn to apply their knowledge in their daily life, not only remembering the lessons, but also can create something new to make it useful for many people.

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