



## Do There Any Higher Order Thinking Skills in the Cambridge Primary Mathematics Textbook?

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### Abstrak

Hasil assesmen nasional dan internasional yang konsisten buruk membuat kurikulum nasional menuai kritik. Sementara itu, kurikulum Cambridge diminati sejumlah kalangan karena dianggap lebih berkualitas. Buku teks sebagai manifestasi kurikulum berpengaruh terhadap pembelajaran siswa. Tujuan penelitian ini yaitu mendeskripsikan *Higher Order Thinking Skills* (HOTS) dan dominasi levelnya dalam buku teks *Cambridge Primary Mathematics 4* yang terdiri dari *Teacher's Resources* dan *Learner's Book*. Penelitian ini menggunakan metode analisis isi kualitatif terarah. Hasil penelitian ini menunjukkan bahwa ketiga level HOTS (menganalisis, mengevaluasi, dan mencipta) tersebar dalam keempat tema besar (*number, measure, handling data, dan geometry*) *Teacher's Resource* dan *Learner's Book*. Secara teoretis, HOTS dalam *Teacher's Resource* dan *Learner's Book* dapat membelajarkan *critical thinking, creativity, collaboration, dan communication* karena pembelajaran muatan HOTS dalam buku ini terpusat pada siswa dan guru aktif memberikan scaffolding menggunakan pertanyaan *open-ended*, diskusi, serta aktivitas berkelompok. HOTS dalam *Teacher's Resource* didominasi oleh level mencipta, sedangkan *Learner's Book* didominasi level menganalisis.

### Abstract

*The poor results of national and international assessments make the national curriculum get criticism. Meanwhile, the Cambridge curriculum gets popular because of its quality. Textbooks as curriculum manifestations affect student learning. This study at to describe Higher Order Thinking Skills (HOTS) and the dominance of its level in the Cambridge Primary Mathematics 4 textbooks that are Teacher's Resources and Learner's Book. This study uses a directed qualitative content analysis method. This research shows that all HOTS levels (analyze, evaluate, and create) are spread across four major themes (number, measure, data handling, and geometry) Teacher's Resource and Learner's Book. Theoretically, HOTS in the Teacher's Resource and Learner's Book can teach critical thinking, creativity, collaboration, and communication because the learning content of HOTS in this book uses a student-centered approach and the teacher actively provides scaffolding using open-ended questions, discussions, and group activities. HOTS level creating is dominant in Teacher's Resource and analysis is dominant in Learner's Book.*

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## INTRODUCTION

According to Heong et al. (2012) higher order thinking skills (HOTS) is thinking broadly to find new challenges. In this case, it demands to apply the information or knowledge that has been obtained to answer problems in a new context. Moreover, talking about HOTS is certainly identical with Benjamin Samuel Bloom who carries the concept of categorizing educational goals or what is known as Bloom's taxonomy. Bloom's taxonomy discussed in this study is a revision of Anderson & Krathwohl which consists of analyzing, evaluating, and creating.

*First, analyze.* Analyzing involves the process of breaking down material into smaller parts and determining how the parts are related and between each part and the structure of the whole. This category includes the cognitive process of determining which pieces of information are relevant or important (distinguishing), determining ways to organize those pieces of information (organizing) and determining the purpose behind the information (attributing) (Anderson & Krathwohl, 2010).

*Second, evaluate.* Evaluating is defined as making decisions based on criteria and standards. The most frequently used criteria are quality, effectiveness, efficiency, and consistency. This category includes the cognitive processes of examining (decisions made based on internal criteria) and criticizing (decisions made based on external criteria) (Anderson & Krathwohl, 2010).

*Third, creating.* Creating involves the process of arranging elements into a coherent and functional whole. The purpose of this classification is to create a new product by organizing an element into a pattern or structure that did not exist before. This category consists of three cognitive stages, namely formulating, planning, and producing (Anderson & Krathwohl, 2010).

Moreover, weak mathematical competence was consistently recorded in various assessments. Higher Order Thinking Skills (HOTS) were tested through various assessments such as the Indonesian Student Competency Assessment (AKSI), the Program for International Student Assessment (PISA), and the Trend in International Mathematics and Science Study (TIMSS). It has been noted that since participating in PISA for the first time in 2000 and TIMSS in 1999, Indonesia has consistently been ranked at the bottom with scores below the average of the countries participating in the assessment (Driana, 2012).

The low competence of national HOTS recorded in various assessments has resulted in a wave of criticism of the quality of Indonesian education. The 2013 curriculum, which emphasizes numerical and spatial balance, the ability to formulate problems, to metacognitive and procedural abilities, has not been able to provide good news for Indonesian students' HOTS achievement.

Talking about the curriculum and the quality of learning, of course, it is closely related to textbooks. In this regard, textbooks are a mediator between the curriculum and its implementation. The curriculum, which was originally abstract, was translated into an operational format in the form of a textbook to make it easier to apply by teachers and students (Sievrt et al., 2019). According to Cunningsworth (1995) textbooks are the books used by students in schools as books to support learning activities. In the process, this textbook is used as the main guide for studying the material or practicing questions.

The significant influence of textbooks on learning makes HOTS important to be presented in textbooks. The more HOTS content in the textbook, the greater the opportunity for HOTS to be taught. Moreover, according to Robitaille and Travers mathematics subjects are more dependent on textbooks compared to other subjects. Teachers who use different mathematics textbooks show different teaching strategies (Fan, Zhu, and Miao, 2013). The mathematics textbooks used also affect the objects and cognitive levels that students learn, as well as students' ways of learning (Hadar, 2017).

In order to find out the content of HOTS in mathematics textbooks, textbook analysis is needed. According to Abosalem (2016, p. 6), textbook analysis can be used to see the suitability of the learning objectives with the content provided presented and researched the content in detail. Textbook analysis itself is not actually a goal, but a process to produce quality textbooks.

Based on Mullis' et al. (2012) data, 75% of elementary school teachers use textbooks as the main reference for learning activities. Textbooks can be regarded as curriculum blueprints that contain content as well as learning instructions. Textbooks have implications for the way materials are taught and student achievement (Hadar, 2017). This opinion is reinforced by the results of a research by van den Ham and Heinze (2018) for three years on 2330 students from 40 different schools in Germany. The results showed that,

four titles of textbooks had a different impact on student achievement.

Elementary school mathematics textbooks published by the Ministry of Education and Culture have shortcomings in teaching HOTS. The content of mathematical concepts in the book is superficial. In addition, the questions presented are procedural and only have one answer (Sulistiyani & Deviana, 2019). Furthermore, according to Kiromiah, Asih, and Pamungkas (2020) elementary school mathematics books do not contain coherent stages to find basic concepts. Meanwhile, according to Revina (*"Alasan Guru Indonesia"*, 2019) learning practices in schools are meaningless because textbooks published by book centers or private companies do not provide effective student-centered learning references.

Public distrust of the national curriculum has made schools with international curricula more attractive. One of the international curricula that is quite widely used in Indonesia is the Cambridge curriculum. In 2016, there were 180 schools using the Cambridge curriculum spread across various parts of Indonesia. The number of these schools increased by 21% to 218 in 2018 (*"Babak Baru Kurikulum "Cambridge International"*, 2018).

Semesta elementary school is one of the schools that use the Cambridge curriculum in Semarang city. Learning Mathematics, Science and English at this school uses textbooks suggested under the licence of the Cambridge International Examination. In Mathematics there are two textbooks that are always used, namely the student's book (Learner's Book) and the teacher's book (Teacher's Resource). Every student in the school gets a Learner's Book, while the math teacher has both books.

In this regard, the previous research on the implementation of the Cambridge Curriculum at Khadijah elementary school, Surabaya, conducted by Diocolano and Nafiah (2009), they found that mathematics textbooks only presented basic formulas, so that students were more focused on learning problem solving, reasoning, logic and analysis. The four learning focuses are closely related to HOTS. However, until now there has been no research that specifically examines HOTS in detail in a series of Cambridge textbooks. Therefore, it is important to examine the Cambridge Primary Mathematics 4 textbooks, especially in order to identify whether there are any higher order thinking skills or not

within the text.

In this regard, this article aims to (1) describe the HOTS presented in a series of Cambridge Primary Mathematics 4 textbooks, which include Learner's Book and Teacher's Resource and (2) describe the dominance of the HOTS cognitive level in the Cambridge Primary Mathematics 4 textbook series, which includes the Learner's Book and Teacher's Resource. Moreover, this article will contribute to the current discourse on several field of studies, such as comparative curriculum studies, learning materials, and 21<sup>st</sup> century learning skills.

## METHOD

This study uses the Hsieh & Shannon model of directed qualitative content analysis method. According to Hsieh & Shannon (2005) qualitative content analysis is carried out by subjective interpretation of the text through a systematic coding classification process and identification of themes/patterns. The directed approach is carried out by using the cognitive dimensions of Anderson and Krathwohl's Revised Bloom's Taxonomy as coding guidelines. Elements of analyzing, evaluating, and creating are used as initial guidelines where in the next process there is a possibility that the categories of the theory will expand and be explored more deeply through data findings. The reason for choosing a qualitative approach so that the results obtained are more accurate and in-depth because this study examines the text.

Data collection techniques in this study include analysis, reading and taking notes carefully with reference to the HOTS instrument made by the researcher. The data from this study are in the form of text and images contained in the Teacher's Resource and Learner's Book. The primary data source of this study was obtained from a questionnaire completed by grade IV, V, and VI teachers at SD Semesta Bilingual, Teacher's Resource and Learner's Book compiled by Emma Low published by Cambridge University Press in 2014. While the secondary data source is literature related to HOTS. The Teacher's Resource and Learner's Book books are used at the Semesta Bilingual Elementary School in Semarang in the 2020/2021 academic year. This research was conducted in October 2020-March 2021. The Teacher's Resource and Learner's Book consists of four major themes which are further specified into many sub-themes. Based on the research findings, all major themes contain HOTS, but not all sub-themes contain HOTS.

## RESULT AND DISCUSSION

### A. HOTS in Teacher's Resources

#### 1. Analyze

The HOTS content of the variables analyzed in the Teacher's Resource is taught through discussions and math games. In discussion activities, teachers play a major role in providing stimulus to students, sparking discussions, asking questions, guiding discussions, and helping to synthesize learning. The teacher's role in math games is to guide the game, explain the terms, give examples, and score. Both activities use props in the form of photocopies of masters, articles from newspapers/magazines/websites that discuss certain topics, and objects commonly used daily, such as wall clocks to calculators. The learning context used is relevant to everyday life.

However, it was also found that HOTS content with the sub-theme of organizing and attributing was not contextual in nature. Both are numbers themes. The role of students during learning is to actively answer the teacher's questions, respond to the opinions of friends, work together to solve problems, and work on assignments from the teacher in groups.

#### 2. Evaluate

Evaluating variables in Teacher's Resource are learned through observation, experimentation, and discussion activities. The teacher's role in observation activities is to give instructions to students regarding things to be observed, guide discussions, and help synthesize learning. In the experiment, the teacher asks a number of questions and guides the experiment. While in discussion activities, the teacher provides a stimulus, helps connect the concepts that have been studied previously with the concepts to be studied, guides the discussion, to help synthesize learning.

The teaching aids used by the teacher include photocopies of masters, ropes, bar charts and pictograms in newspapers/magazines/advertising. This evaluating variable generally examines methods or strategies such as the method of calculating the circumference, the multiplication method, and data presentation strategies. Interestingly, the study was discussed in depth for the size of the elementary school level. For example, learning about the broad concept begins with an observation regarding the impor-

tance of standard units as a measuring tool. In addition, learning is also presented contextually and uses concrete objects as teaching aids. Except for learning themed numbers. In evaluating variables, the theme does not use concrete objects and is not presented contextually. Overall learning is carried out in pairs, small groups, and class discussions.

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#### 3. Create

Learning related to creating variables in Teacher's Resource is done through discussion, observation, math games, and assignments. All producing sub-variables are learned through assignment. This is of course in accordance with the output of these sub-variables, namely to produce products. The output is used to reflect what



**Table 1** Sub-themes containing HOTS

Theme		No	Sub Themes & HOTS Content	
			Teacher's Resources	Learner's Book
1a	Number	1	Reading, writing and partitioning numbers	Reading, writing and partitioning numbers
		2	Ordering, comparing and rounding four-digit numbers	Ordering and rounding
		3	Multiplying and dividing by 10 and 100	Multiplying and dividing by 10 and 100
		4	Additions (1)	Additions (1)
		5	Subtraction	Subtraction (1)
		6	Partitioning to add and subtract	Partitioning to add and subtract
		7	Learning and using multiplication fact	Learning multiplication facts Learning multiplication facts Investigating patterns
		8	Using doubles	Doubles
		9	Multiplying a two-digit number by a single digit	Multiplying
1b	Measure	10	Measuring weight	Measuring weight
		11	Telling the time (1)	Telling the time (1)
		12	Using schedules	Using schedules
		13	Areas (1)	Areas (1)
		14	Perimeter (1)	Perimeter (1)
1c	Handling data	15	Tally charts and bar charts	Tally charts and bar charts
		16	Pictograms	Pictograms
		17	Carroll diagrams	Carroll diagrams (1)
		18	Venn diagrams(1)	Venn diagrams
2a	Number	19	Decimal numbers in context	Money
		20	Number sequences and negative numbers	Positive and negative numbers
		21	Odds and even numbers	Odds and even numbers
		22	Adding and subtracting near multiples of 10	Adding and subtracting near multiples of 10
		23	Choosing the most efficient subtraction strategy	Choosing the best methods
		24	More multiplication	More multiplication
		25	Dividing two-digit numbers by single-digit numbers	Division
2b	Geometry	26	Angles and turning	Angles and turning
		27	Position and direction	Position and direction
		28	Shapes and symmetry	Symmetry
		29	2D shapes	2D shapes
		30	3D shapes	3D shapes
2c	Measure	31	Measuring length	Measuring length
		32	Telling the time (2)	Telling the time (2)
		33	Using calendar	Using calendars
		34	Areas (2)	Areas (2)
		35	Perimeter (2)	Perimeter (2)

Theme	No	Sub Themes & HOTS Content	
		Teacher's Resources	Learner's Book
3a Number	36	Special numbers	Special numbers
	37	Exploring fractions	Exploring fractions
	38	Fractions, decimals and mixed numbers	Fractions, decimals, and mixed numbers
	39	Fractions and division	Fractions of....
	40	Ratio and proportion	Ratio and proportion
3b Measure	41	Measuring capacity	Measuring capacity Capacity, length and mass
	42	Measuring time	Measuring time
	43	Calculating time	Calculating time
	44	Areas and perimeters	Areas and perimeters
3c Handling data	45	Tables and bar charts	Bar charts
	46	Frequency tables and tree diagrams	Tree diagrams
	47	Carroll diagrams (2)	Carroll diagrams (2)
	48	Venn diagrams (2)	Venn diagrams (2)
The number of sub-themes with HOTS	24		34
The number of sub themes does not contain HOTS	24		12

has been learned in class. The role of the teacher in this sub-variable only explains the provisions of the product that must be made.

Meanwhile, in the other two sub-variables, the teacher plays a role in providing stimulus, helping to link new knowledge with old knowledge, helping to synthesize learning, guiding discussions, guiding games, demonstrating, and giving instructions. The props used include a master photocopy, rope, dice, and a clock. The variable of creating is learned contextually and using concrete objects. Non-contextual learning is only found in formulating sub variables, as many as four items with the theme of numbers and measure.

Moreover, learning that does not use the help of concrete objects is only found in the numbers theme. Learning activities are carried out individually, in pairs, small groups, and large groups (classes). In this variable, students play an active role in brainstorming, discussing, reasoning, and creating new products. Learning activities are carried out individually, in pairs, small groups, and large groups (classes). In this variable, students play an active role in brainstorming, discussing, reasoning, and creating new products. Learning activities are carried out individually, in pairs, small groups, and large

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## B. HOTS Variables in Learner's Book

### 1. Analyze

The variables analyzed in the Learner's Book do not give the teacher a role. Students must work on the questions independently. However, there are two question items that must be done in groups. One item in the sub-variable is organizing, asking students to discuss the results with their classmates or in groups. Meanwhile, in the attribution sub-variable, there is one question item which in the process must be discussed with a classmate. Not all questions in analyzing variables are contextual, especially on the theme of numbers and data handling. A number of questions in the attribution sub-variables asked students to explain the answers obtained.

### 2. Evaluate

The questions with evaluating variables in the Learner's Book do not provide a role for the teacher. The sub-variable check questions are presented in various ways in the form of games, story questions, ordinary questions, and are ac-

accompanied by illustrated pictures. Problems that must be done in groups only have one item with the theme of geometry. While in the critical sub-variable, all questions are presented in the form of routine algorithms, themed on numbers, are abstract, and question methods. In addition, the stages of criticizing in all the questions are done in groups. Compared to analyzing variables, the questions in evaluating variables emphasize more on the ability to communicate opinions, reasons, and suggestions. The sub-variable evaluates not using contextual questions.

### 3. Create

The variables analyzed in the Learner's Book Like the previous two variables, the Learner's Book does not assign a role to the teacher. The questions presented must be done independently. However, there are also questions that must be done in pairs, namely the number theme in producing sub-variables. The formulating sub variable also presents two question items that must be done in pairs or groups, namely in the theme of measure and data handling. The variable creates presents both contextual and non-contextual questions. There are seven non-contextual questions with the theme of measure, symmetry, data handling, and numbers.

### C. The Delivery of HOTS Materials

The three HOTS variables presented in the Teacher's Resource and Learner's Book in terms of technical learning are generally the same. HOTS learning uses a lot of teaching aids. In the Learner's Book, the teaching aids are only in the form of illustrations to clarify the questions. Meanwhile, in Teacher's Resource, teaching aids can be in the form of illustrations, photocopies of masters, or objects that are easily found around the classroom. The use of this teaching aid is in accordance with Piaget's opinion (in Tuli & Mantri, 2020) that students at the concrete operational stage will find it easier to think if the object can be seen or felt directly.

Not all HOTS learning uses props. As previously explained, there are a number of findings related to HOTS in the theme of numbers which tend to be abstract and non-contextual. One of them is the Fractions and Divisions sub-theme which aims to introduce the concept of 'worth'. The teacher simply writes  $24 \div 3$  and  $1/3$  of 24 on the board, then asks students to find the similarities. Even though it looks very abstract and difficult, learning is not impossible. This is be-

cause, in the concept of division and fractions studied previously, teaching aids have been presented. So that the enactive and symbolic stages have been passed. According to Bruner's theory, the process of introducing the concept of 'worth' is a symbolic stage (Ardana, Ariawan, & Divayana, 2017).

Although teaching aids can help students construct their understanding, the use of teaching aids does not automatically guarantee that students can understand concepts better (O'Meara, Johnson, and Leavy, 2020:5). Teaching aids are only optimally useful if used appropriately by teachers who understand concepts and have pedagogical abilities (Larbi & Mavis, 2016). Teachers experience a number of obstacles in using teaching aids such as limited time in recognizing teaching aids and preparing for learning, as well as lack of training in the use of teaching aids (Golafshani, 2013). Teacher's Resource can be a solution to these problems. The list of required props has been listed in the 'Resource' column which is right under the sub-theme heading. Most of the props are already presented in the attachment of a master photocopy which can be reproduced easily. This can overcome obstacles related to limited preparation time. Instructions for using the teaching aids in the Teacher's Resource are presented clearly in the form of a narrative.

In fact, there are also alternative scenarios related to instructions that must be carried out by teachers if students are in a passive state or meet a deadlock. Moreover, based on the results of the author's analysis, the instructions delivered by the teacher helped students in connecting the material with the concepts being studied. Thus, even for teachers whose pedagogical abilities are not yet qualified, it will be helped by the use of Teacher's Resources. Instructions for using the teaching aids in the Teacher's Resource are presented clearly in the form of a narrative. In fact, there are also alternative scenarios related to instructions that must be carried out by teachers if students are in a passive state or meet a deadlock.

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The teacher's role in HOTS learning presented in the Teacher's Resource is very large. One of them is in helping students associate new knowledge with old knowledge. For example, in teaching the concept of intersecting Venn diagrams, the teacher recalls the concept of independent Venn diagrams that have been studied previously, then asks questions with sub-variables to formulate related Venn Diagrams. This way of learning is in accordance with Ausubel's concept of learning (in Gazali, 2016) where a learning will be meaningful if there is a connection between new knowledge and relevant cognitive structures to produce a new, more complete meaning.

The teacher leads a discussion with all students in the class regarding the approach or solution used by students in solving a problem. Teacher's Resources usually start by asking the teacher to present a case or problem on the board, then ask students to work on it. Furthermore, the teacher provides opportunities for students to express the approach they use. Teachers will usually provide opportunities for those who have a different approach. From a number of heterogeneous responses obtained, the teacher will lead a discussion to discuss the responses that have been collected. On this occasion the teacher will challenge students to analyze and criticize every response.

Apart from discussions, Teacher's Resource provides HOTS learning through various activities such as lectures, discussions, observations, experiments, and games. This is because

students have not been able to achieve independent learning. In these various activities, of course, the teacher plays a significant role in providing scaffolding. Scaffolding is a technique of providing learning support in the early stages of learning and then gradually guiding students towards independent learning (Collins, 2014). The use of scaffolding is in accordance with the research findings of Santo (2011), namely, from the 4 textbooks he studied, scaffolding was found in textbooks that had more HOTS content.

The lessons presented in the Teacher's Resource and Learner's Book are quite in-depth. For example, in data handling material, students do not only learn to count data or simply learn to present simple phenomena into diagrams. Students must learn from very fundamental parts, such as the basic problem of the need for data, to how to present data well.

If so far mathematics in schools is synonymous with the assumption of exact sciences, because the problem only has one correct answer, then the HOTS questions in the Teacher's Resource and Learner's Book actually use an open-ended concept, which has various alternative answers. Problems of this type have a number of benefits. Heddens and Speer (in Ruslan & Santoso, 2013) revealed that giving open-ended questions can stimulate students to improve their thinking, students have the freedom to express the results of their exploration of reasoning power and analysis actively and creatively in an effort to solve a problem.

Open-ended questions provide opportunities for students to provide many problem solving with many problem solving strategies, so that with the variety of answers given by students the teacher can detect students' thinking abilities. In addition to being open-ended because they have various alternative answers, the questions in these two books also present many HOTS questions that do not have a standard algorithm. This makes students have to analyze the problem and then make their own algorithm.

Mathematics in elementary school is more than just counting. This is often found in the sub-variables of attributing, criticizing, and planning. Attributing sub-variables invite students to see an object more deeply. In the critical sub-variable, routine algorithm questions are further developed. Instead of presenting problems to complete calculations, the Learner's Book asks students to criticize the methods used to solve routine algorithmic problems that have



been done. In this sub-variable, in addition to learning procedural knowledge, students also step into metacognitive knowledge.

Through metacognitive knowledge, students learn to understand their own abilities in learning. This is indicated by a question that asks students to criticize the method with 'easy' criteria. This easy concept can differ from one student to another. Meanwhile, in planning sub-variables, students are usually faced with problems that must be investigated. Students are asked to make plans in procedural form. This sub-variable teaches students to put their ideas into easy-to-understand sentences.

Both the Teacher's Resource and the Learner's Book present many activities that involve logical reasoning. This ability can train students to think critically. Interestingly, the form of answers to questions and activities is not only in the form of numbers, but also expressed in sentences. Of course, this will train students' communication skills. The ability of students to communicate ideas is also trained with many activities carried out in pairs, groups, and during class discussions.

The instructional instructions contained in the Teacher's Resource contain more learning activities, so the use of the lecture method is relatively small. The teacher acts as a facilitator, where the teacher provides a stimulus to instill concepts in students. The lessons designed in this book almost leave no room for students to be passive. Because even when the teacher explains while inviting students to think, so that students do not just pay attention to the teacher's explanation.

In addition to classical learning, collaborative learning is also widely presented, both in the form of large groups such as one class divided into two, small groups of five people, to pairs. This learning can enrich knowledge, train reasoning, and hone communication skills because students are trained to express their thoughts on something or provide feedback orally or in writing to their groupmates.

Compared to the Learner's Book, Teacher's Resource is more dominant in presenting HOTS content that is contextual to life. The contextualities presented here are quite diverse, ranging from things as simple as researching the amount of water used to wash students' hands, to complex matters that have become international issues such as bird population decline. This kind

of learning helps students find the meaning of learning, so that the results of learning in class do not end up on the test paper, but will have an impact on students and their environment.

#### D. The Domination of HOTS Materials

The majority of HOTS materials or contents are appear in Learner's Books. The author finds that HOTS appears 51 times in the Teacher's Resource with each variable analyzing, evaluating, and creating as many as 14, 10, and 27. While in the Learner's Book, HOTS appears 68 times. The details of the data findings for the analyzed variables were 39 items, evaluated 10 items, and created 19 items. The researcher's findings are different from the results of the Pratama research (2019) which shows that the most commonly found materials, examples, and HOTS questions to the least consecutive are analyzing (C4), evaluating (C5), and then creating (C6). According to him, this is because the higher the cognitive level, the more difficult it will be to present material, examples, or questions. Thus, the researcher's findings invalidate this argument.

#### CONCLUSION

Based on the results of qualitative content analysis conducted on the Cambridge Primary Mathematics 4 Textbook Series, it can be concluded that theoretically, HOTS in the Teacher's Resource and Learner's Book can teach 21st century skills such as critical thinking, creativity, collaboration, and communication because of the learning content of HOTS in this book. Student-centered and the teacher actively provides scaffolding using open-ended questions, discussions, and group activities. Furthermore, the HOTS in the Teacher's Resource is dominated by the level of creating, while in the Learner's Book it is dominated by the level of analyzing.

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