# Content Analysis of Process Skills in Mathematics Textbook Curriculum 2013 Revised 2018 Grade IV First Semester 

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#### Abstract

This study aims to analyze the content of material in the Mathematics textbook curriculum 2013 even semester odd semester which contains indicators of mathematical process skills in it. This research uses a qualitative approach. The type of research used is content analysis using document studies. The subjects in this study are the researchers themselves. While the object used in this study is the 2013 revised edition of the 2018 curriculum student book, grade IV elementary school students like to learn mathematics. The data obtained will be analyzed descriptively qualitatively with content analysis methods. The results of the analysis in this study showed that the process skills were fulfilled in the mathematics textbook curriculum 2013 grade IV odd semester. The analysis of the content of mathematics teaching materials is expected by educators to be more competitive and innovate in designing mathematics learning to foster process skills in every learning activity in students.


Keywords: Math Learning • Process Skills • Content Analysis

## 1 Introduction

The 2013 curriculum is a curriculum that emphasizes the entire educational process that leads to cognitive, affective, and psychomotor aspects. This can improve the development of learners at primary school age. This development has an impact on curriculum changes, both in a better direction and in a worse direction for the quality of education [1]. One of the qualities of quality education is to improve human resources [2]. Creating it requires students to think critically, structured, creative, able to solve problems, and have process skills in learning [3]. This is closely related to one of the learning resources in the 2013 curriculum.

The 2013 curriculum has many learning resources that can be obtained, one of which is the 2013 curriculum textbook. The textbook in question is a mathematics book which is divided into two, namely student books and teacher books [4]. Textbooks are teaching materials owned by educators that contain various materials at the educational level to achieve basic competencies. The mathematics textbook used in elementary schools is a revised edition of the 2018 curriculum mathematics book. In this book, it has a variety of
material included in each Chapter. In addition, mathematics textbooks contain process skills aimed at developing the abilities of learners.

The ability of learners grown in the 2013 curriculum can be through process skills. Process skills are important in developing psychomotor aspects of students in primary school [6]. This is done to improve the skills and abilities of students to be qualified. The realization of improving process skills can be through in-process activities, be it materials, tasks, or learning practices. One of them is process skills in mathematics.

Mathematics is one of the branches of education. Mathematics is the science of calculations, numbers and symbols [8]. Mathematics is the science that underlies the development of information and communication technology experienced in the modern era [9]. Mathematics is one of the disciplines that can advance human thinking [10]. Learning mathematics is learning by logic through deductive reasoning described with symbols systematically, logically, and critically.

Mathematics learning is intended to develop process, logical, and systematic skills. Learning mathematics has another purpose, which is to train thinking and reasoning in drawing conclusions. In addition, the ability to develop students' skills can be honed by the process of learning mathematics. Students become creative, imaginative, intuitive, increase curiosity, and have predictive abilities [13]. In addition, by learning mathematics students can solve problems in students' daily lives. That's why mathematics needs to be mastered and learned so that students are proficient in solving problems in everyday life using mathematics.

Mathematical process skills are mandatory for every individual. Research that has been conducted [14] focuses on improving student learning outcomes through the Problem Based Learning Model in Grade IV. In this study, a content analysis of process skills was carried out in the mathematics textbook curriculum 2013 revised 2018 grade IV semester one. Mathematical process skills are essential in learning mathematics. By applying students' mathematical process skills in solving a problem. Based on the background above, this study was conducted to describe the results of content analysis of mathematical process skills in grade IV elementary school mathematics books semester 1.

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Mathematics learning is aimed at developing process, logical, and systematic skills. Learning mathematics has another purpose, which is to train thinking and reasoning in drawing conclusions. In addition, the ability to develop students' skills can be honed by the mathematics learning process. Learners become creative, imaginative, intuitive, add curiosity, and have the ability to predict [13]. In addition, by learning mathematics students can solve problems in students' daily lives. That's why mathematics needs to be mastered and learned so that mathematical process skills are mandatory for every individual. Research that has been conducted [14] focuses on improving student learning outcomes through the Problem Based Learning Model in Grade IV. In this study, a content
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Mathematics learning is aimed at developing process, logical, and systematic skills. Learning mathematics has another purpose, which is to train thinking and reasoning in drawing conclusions. In addition, the ability to develop students' skills can be honed by the mathematics learning process. Learners become creative, imaginative, intuitive, add curiosity, and have the ability to predict [13]. In addition, by learning mathematics students can solve problems in students' daily lives.

## 2 Method

This research uses a qualitative approach. The type of research used is content analysis using document studies. Where the observation components contained in Table 1 consist of 10 components. The subjects in this study are the researchers themselves. While the object used in this study is the 2013 revised edition of the 2018 curriculum student book, grade IV elementary school students like to learn mathematics. The data obtained will be analyzed descriptively qualitatively with content analysis methods.

Table 1. Observation Indicators of Mathematical Process Skills

| No | Observation Components | Indicators |
| :--- | :--- | :--- |
| 1. | Observe | Observe |
| 2. | Ask something | Ask something |
| 3. | Count | Count |
| 4. | Drawing | Drawing |
| 5. | Deliver | Deliver |
| 6. | Size | Size |
| 7. | Classification | Classification |
| 8. | Predictions | Predictions |
| 9. | Conclude | Conclude |
| 10. | Applying Concepts/Patterns | Using concepts you've learned in new situations |

[17] The data obtained will be analyzed descriptively qualitatively using content analysis methods. Data collection is carried out in several steps in content analysis, namely (1) the data obtained is collected; (2) determine the source of the data; (3) record the results of the analysis carried out using the data obtained; (4) the data that has been analyzed can be reduced; (5) draw conclusions; (6) The final results of the data analysis obtained can be clearly described [18]. The results of the data analysis were carried out by describing the process skills contained in the content of the material in the 2013 revised edition of the 2018 curriculum mathematics book grade IV elementary school odd semester.

## 3 Results and Discussion

The implementation of the 2013 curriculum learning process in elementary schools emphasizes aspects of knowledge, skills, and attitudes. Mathematics learning in elementary schools in its implementation uses mathematics textbooks in the 2013 curriculum, namely student books. Mathematics textbooks are learning resources and teaching materials used by educators and learners. In this mathematics textbook there are also six chapters consisting of several materials that contain process skills in mathematics that are used to develop students' abilities in solving mathematical problems.

The mathematics textbook curriculum 2013 grade IV in elementary schools consists of several contents of learning materials. This first semester mathematics textbook consists of three chapters, namely chapter 1 fractions, chapter 2 KPK and FPB, and chapter 3 approximation. Each chapter has a focus on developing process skills. The chapters to be analyzed for material content that have process skills are chapter 1 fractions, chapter 2 KPK and FPB, and chapter 3 approximation. The distribution of material for each learning activity varies. The contents of the lesson on theme 7 subtheme 1 of national events of the colonial period can be seen in the following Table 2.

Based on the results of data analysis that has been carried out in this study, it is known that there is a component of process skills contained in every learning activity in the

Table 2. Content in learning material content

| No | Material Chapter | Content of Learning Materials |
| :--- | :--- | :--- |
|  | Fractional | Fractional |
|  |  | Fractional Form |
|  | Foresee |  |
|  | KPK and FPB | Fstimated |
|  |  | Pactors and Multiples of Numbers |
|  | Determination of KPK and FPB |  |

2013 curriculum mathematics textbook revised edition of 2018 class IV first semester. In learning activities in class IV material contains the skills of the 2013 curriculum process that are instilled in students. The following are the results of the analysis of process skills in the mathematics textbook grade IV elementary school semester I curriculum 2013.

### 3.1 Process Skills in Chapter 1 Fractions

Chapter one has four content materials integrated into one learning activity. The content of the learning material is fractional numbers, fraction forms, estimation, and fraction applications (Table 3).

Table 3. Description of Process Skills Indicator

| Aspect | Indicator | Description |
| :--- | :--- | :--- |
| Observe | Gather relevant facts, use as <br> many senses as possible | Students try to observe the <br> yellow part of the book, the part <br> of the stick painted red, the part <br> of the apple eaten. |
| Ask a question | Ask to receive clarity | The educator asks students to <br> answer questions from the <br> questions asked using fraction <br> numbers, how to write <br> fractions, and two fractions of <br> the same value. |
| Count | Calculate, the results of <br> calculations can be <br> communicated with tables, <br> graphs or histograms | Students also ask other <br> questions related to fractions. |
| Size | Measurement with standard <br> measuring instruments | In the observing activity, <br> students are asked to calculate <br> the results of each section on <br> pages 4 through 5. |
| Classification | Add to group | In the trying activity, students <br> answer questions about <br> fractions using a ruler. |
| Conclude | or groups based on specific <br> criteria | In this material, fractions can be <br> grouped into types of fractions, <br> namely fractions of value, <br> simplification fractions, and <br> fraction comparisons. |
| Applying Concepts/Patterns | Give meaning to inference | In this material about numbers, <br> students can infer the results of <br> the numbers they have worked <br> on |

Table 4. Description of Process Skills Indicator

| Aspect | Indicator | Description |
| :--- | :--- | :--- |
| Observe | Gather relevant facts, use as <br> many senses as possible | Students try to observe this part <br> of the material, there are four <br> observations that must be <br> observed. For example <br> observation 1 (observing the <br> number of apples); Observation <br> 2 (observing mothers shopping <br> at traditional markets); <br> Observation 3. (buying passion <br> fruit); Observation 4. (counting <br> shoe discounts) |
| Ask a question | Ask to receive clarity | The teacher asks students <br> questions about the shape of <br> fractions. Then, students can ask <br> questions and make questions <br> about ordinary fractions, mixed <br> fractions, decimal fractions, and <br> percents. |
| Count | Calculate, the results of <br> calculations can be <br> communicated with tables, <br> graphs or histograms | In the observing activity, <br> students are asked to calculate <br> the results of each problem about <br> ordinary fractions, mixed <br> fractions, decimal fractions, and <br> percent that are already available <br> in this mathematics textbook. |
| Deliver | Organize and convey <br> information systematically, <br> explain, results, discuss <br> results. | Students are asked to try to <br> answer questions from each <br> question that has been provided <br> in the book. Then, the results can <br> be discussed with educators. |
| Classification | Add to group | This material has material <br> tailored to the group or class so <br> that students can understand the <br> material. This grouping of |
| numbers consists of, regular |  |  |
| fractions, mixed fractions, |  |  |
| decimal fractions, and percents. |  |  |,

Table 4. (continued)

| Aspect | Indicator | Description |
| :--- | :--- | :--- |
| Conclude | or groups based on specific <br> criteria | In this material about numbers, <br> students can infer the results of <br> each fraction in ordinary <br> fractions, mixed fractions, <br> decimal fractions, and percents. |
| Applying Concepts/Patterns | Give meaning to inference | Students who use fractional <br> forms have been exemplified and <br> explained by educators and in <br> this math textbook. |

### 3.1.1 Fractional Form Learning Material

In this fractional number learning material, there are also several sub-materials including ordinary fractions, mixed fractions, decimal fractions, and percents. Each learning submaterial has learning activities, namely let's observe, let's ask, let's reason, let's example, and let's try. Each learning activity contains values of mathematical process skills that will be developed in students (Table 4).

### 3.2 Process Skills in Chapter 2 KPK and FPB

Chapter two has four content materials integrated in one learning activity. The content of the learning material is factors and multiples of numbers, prime factorization, determination of KPK and GCF, and application of KPK and GCF.

### 3.2.1 Learning Material Factors and Number Multiples

In this learning material, factors and multiples of numbers also have several sub-materials including number factors and number multiples. Each learning sub-material has learning activities, namely let's observe, let's ask, let's reason, let's example, and let's try. Each learning activity contains values of mathematical process skills that will be developed in students (Table 5).

Table 5. Description science processing skills in books
\(\left.$$
\begin{array}{l|l|l}\hline \text { Aspect } & \text { Indicator } & \begin{array}{l}\text { Description } \\
\text { Observe } \\
\text { as many senses as possible }\end{array} \\
\hline \text { Asking question } & \text { Ask to receive clarity } & \begin{array}{l}\text { Students try to observe this part } \\
\text { of the material about the form of } \\
\text { dance formations and the order } \\
\text { of playing tablecloths }\end{array} \\
\hline \text { Count } & \begin{array}{l}\text { The teacher gives questions to } \\
\text { students about the form of } \\
\text { numbers. } \\
\text { Then, students can ask and make }\end{array} \\
\text { Counting, calculation results } \\
\text { can be communicated with } \\
\text { tables, graphs or histograms }\end{array}
$$ \quad \begin{array}{l}questions about number factors <br>
and multiples of numbers. <br>
are asked to calculate the results <br>
of each question about number <br>
factors and multiples of numbers <br>
that are already available in this <br>

mathematics textbook\end{array}\right] .\)| Applying concepts/Patterns |
| :--- |
| Communicate |

### 3.2.2 Prime Factorization Learning Material

In this prime factorization learning material, it also has several sub-materials including prime factors and factorization. Each learning sub-material has learning activities,
namely let's observe, let's ask, let's reason, let's example, and let's try. Each learning activity contains values of mathematical process skills that will be developed in students (Table 6).

Table 6. Description of Process Skills Indicator

| Aspect | Indicator | Description |
| :--- | :--- | :--- |
| Observe | Gather relevant facts, use as <br> many senses as possible | Students try to observe this part <br> of the material, there are two <br> observations, namely calculating <br> prime numbers using candy, and <br> using factor trees |
| Ask a question | Ask to receive clarity | The teacher asks students <br> questions about factors and <br> multiples. Then, students can <br> ask and make questions about <br> prime factors and factorization. |
| Count | Calculate, the results of <br> calculations can be <br> communicated with tables, <br> graphs or histograms | In the observing activity, <br> students are asked to calculate <br> the results of each question <br> about prime factors and <br> factorization that have been <br> available in this mathematics <br> textbook. |
| Deliver | Organize and convey <br> information systematically, <br> explain, results, discuss <br> results. | Students are asked to try to <br> answer questions from each <br> question that has been provided <br> in the material in the book. <br> Then, the results can be <br> discussed with educators. |
| Classification | Add to group | This material has material <br> tailored to the group or class so <br> that students can understand the <br> material. This grouping of <br> numbers consists of prime <br> factors and factorization. |
| Divination | or groups based on specific <br> criteria | The pattern used for <br> factorization material is to use <br> factor trees. Using a factor tree <br> can make it easier to find <br> patterns in each question and <br> question on prime factors and <br> factorization. |
|  |  | and |

Table 6. (continued)

| Aspect | Indicator | Description |
| :--- | :--- | :--- |
| Conclude | Using patterns, tell what <br> happens in circumstances <br> that have not been observed | In this number material, students <br> can infer the results of each <br> factor and multiple, both prime <br> numbers and factorization. |
| Applying Concepts/Patterns | Give meaning to inference | Students using prime factor <br> patterns and factorization in <br> estimates have been exemplified <br> and explained by educators and <br> in this math textbook. |

### 3.2.3 KPK and FPB Learning Materials

In this learning material, KPK and FPB also have several sub-materials, including KPK (Smallest Alliance Multiple) and FPB (Largest Alliance Factor). Each learning submaterial has learning activities, namely let's observe, let's ask, let's reason, let's example, and let's try. Each learning activity contains values of mathematical process skills that will be developed in students (Table 7).

Table 7. Description of Process Skills Indicator
\(\left.$$
\begin{array}{l|l|l}\hline \text { Aspect } & \text { Indicator } & \text { Description } \\
\hline \text { Observe } & \begin{array}{l}\text { Gather relevant facts, use as } \\
\text { many senses as possible }\end{array} & \begin{array}{l}\text { Students try to observe this part } \\
\text { of the material, which is to } \\
\text { observe how many seconds the } \\
\text { red and green light will be on } \\
\text { simultaneously. And observe the } \\
\text { number of oranges and apples in } \\
\text { each plastic bag. }\end{array} \\
\hline \text { Ask a question } & \text { Ask to receive clarity } & \begin{array}{l}\text { Educators ask students questions } \\
\text { about KPK (Smallest Guild }\end{array}
$$ <br>

Factor) and FPB (Largest\end{array}\right\}\)| Federal Factor). Then, students |
| :--- |
| can ask and make questions |
| about KPK (Smallest Union |
| Multiple) and FPB (Largest |
| Union Factor). |

Table 7. (continued)

| Aspect | Indicator | Description |
| :--- | :--- | :--- |
| Count | Calculate, the results of <br> calculations can be <br> communicated with tables, <br> graphs or histograms | In the observing activity, <br> students were asked to calculate <br> the results of each question <br> about KPK and FPB that was <br> already available in this <br> mathematics textbook. |
| Deliver | Organize and convey <br> information systematically, <br> explain, results, discuss <br> results. | Students are asked to try to <br> answer questions from each <br> question that has been provided <br> in the material in the book about |
| KPK and FPB. Then the results |  |  |
| can be discussed with educators |  |  |
| and can be written on the board. |  |  |,$~$| Add to group | This material has material <br> tailored to the group or class so <br> that students can understand the <br> material. The grouping of <br> numbers consists of, KPK <br> (Smallest Common Multiple) <br> and GPB (Largest Common <br> Factor). |
| :--- | :--- |
| Applying Concepts/Patterns | Give meaning to inference |

### 3.3 Process Skills in Chapter 3 Estimates

Chapter three has four content materials integrated in one learning activity. The content of the learning material is rounding the results of length and weight measurements to the nearest unit, rounding the results of measuring length and weight to the nearest tens, rounding the results measurement of length and weight to the nearest hundred.

### 3.3.1 Learning Material for Rounding Length and Weight Measurement Results to the Nearest Unit

In the learning material rounding the results of measuring length and weight to the nearest unit, there are also learning activities, namely let's observe, let's ask, let's reason, examples. Each learning activity contains values of mathematical process skills that will be developed in students (Table 8).

Table 8. Description of Process Skill Indicators

| Aspect | Indicator | Description |
| :--- | :--- | :--- |
| Observe | Gather relevant facts, use as <br> many senses as possible | Students who tried to observe <br> this part of the material <br> observed (1) posyandu <br> activities that contained body <br> weight rounded to kg; (2) <br> height rounded in cm; (3) <br> measure the length of the pencil <br> in cm; (4) Measure the length <br> of the object in cm. |
| Ask a question | Ask to receive clarity | The teacher asks students <br> questions about how to measure <br> rounding up, down, and <br> reverse. Then, students can ask <br> questions and make questions |
| like examples of existing |  |  |
| questions. |  |  |, | In the observing activity, |
| :--- |
| students are asked to calculate |
| the results of each problem |
| about measuring integers up, |
| down, and back that have been |
| available in this mathematics |
| textbook. |

Table 8. (continued)

| Aspect | Indicator | Description |
| :---: | :---: | :---: |
| Deliver | Organize and convey information systematically, explain, results, discuss results. | Students are asked to try to answer questions from each question that has been provided in the material in the book. Then, the results can be discussed with educators. |
| Size | Measurement with standard measuring instruments | This material is related to measuring instruments, usually the measuring instruments used are scales, rulers, and so on which are still in the category of unit counts. |
| Classification | Add to group | This material has material tailored to the group or class so that students can understand the material. This grouping of numbers consists of numbers rounded up, down, and reversed. |
| Divination | or groups based on specific criteria | Of course, this material can still be predicted because the material for rounding numbers can be predicted up, down, and upside down. For example, 8.4 is rounded up to 9 , rounded down to 8 , and preferably rounded to 8 . |
| Conclude | Using patterns, tell what happens in circumstances that have not been observed | In this material about numbers, students can deduce the shape results of each length and weight measurement to the nearest unit. |
| Applying Concepts/Patterns | Give meaning to inference | Students use the pattern of shapes resulting from length and weight measurements to the nearest unit in the estimation that has been exemplified and explained by educators and in this mathematics textbook. |

### 3.3.2 Learning Material Rounding Length and Weight Measurement Results to the Nearest Tens

In the learning material rounding the results of measuring length and weight to the nearest dozen, there are also learning activities, namely let's observe, let's ask, let's reason, give examples, and Let's try. Each learning activity contains values of mathematical process skills that will be developed in students (Table 9).

Table 9. Description of Process Skill Indicators

| Aspect | Indicator | Description |
| :--- | :--- | :--- |
| Observe | Gather relevant facts, use as <br> many senses as possible | Students trying to observe this <br> part of the material are (1) <br> measuring how many <br> centimeters the length of a <br> notebook with reverse rounding; <br> (2) rounding of the piece weight <br> in kg with reverse rounding; (3) <br> round the height in kg with <br> reverse rounding. |
| Ask a question | Ask to receive clarity | Teachers ask students questions <br> about measuring tens from <br> rounding up, down, and upside <br> down. Then, students can ask <br> and make questions like <br> examples of existing questions |
| Count | Calculate, the results of <br> calculations can be <br> communicated with tables, <br> graphs or histograms | In the observing activity, <br> students are asked to calculate <br> the results of each problem <br> about rounding the results of <br> length and weight measurements <br> to the nearest tens that have been <br> available in this mathematics <br> textbook. |
| Deliver | Organize and convey <br> information systematically, <br> explain, results, discuss <br> results. | Students are asked to try to <br> answer questions from each <br> question that has been provided <br> in the material in the book. <br> Then, the results can be <br> discussed with educators. |

Table 9. (continued)

| Aspect | Indicator | Description |
| :--- | :--- | :--- |
| Size | Measurement with standard <br> measuring instruments | This material is related to <br> measuring instruments, usually <br> the measuring instruments used <br> are scales, rulers, meters and so <br> on which are still classified as <br> dozens. |
| Classification | Add to group | This material has material <br> tailored to the group or class so <br> that students can understand the <br> material. Grouping rounding of <br> length and weight measurement <br> results to the nearest ten consists <br> of rounding up, down, and <br> reverse. |
| Divination | or groups based on specific <br> criteria | Of course, this material can still <br> be predicted because the <br> material for rounding numbers <br> can be predicted up, down, and <br> upside down. For example, 21 is <br> rounded to 30, rounded down to <br> 20, and is best rounded to 20. |
| Conclude |  | Using patterns, tell what <br> happens in circumstances <br> that have not been observed |
| In this material about numbers, <br> students can infer the resultt of <br> each rounding of the results of <br> length and weight measurements <br> to the nearest tens. |  |  |
| Applying Concepts/Patterns | Give meaning to inference | Students use the pattern of <br> rounding the results of length <br> and weight measurements to the <br> nearest dozens of rounding <br> down, up, and upside down that <br> has been exemplified and <br> explained by educators and in <br> this math textbook. |

### 3.3.3 Learning Material Rounding Length and Weight Measurement Results to the Nearest Hundreds

In the learning material of rounding the results of measuring length and weight to the nearest unit, there are also learning activities, namely let's observe, let's ask, let's reason, example, and let's Try, let's summarize, let's communicate, project tasks. Each learning activity contains values of mathematical process skills that will be developed in students (Table 10).

Table 10. Description of Process Skills Indicator
$\left.\begin{array}{l|l|l}\hline \text { Aspect } & \text { Indicator } & \text { Description } \\ \hline \text { Observe } & \begin{array}{l}\text { Gather relevant facts, use as } \\ \text { many senses as possible }\end{array} & \begin{array}{l}\text { Students who try to observe this } \\ \text { part of the material are (1) } \\ \text { rewriting the reading with neat } \\ \text { sentences from the observation } \\ \text { text on the transportation of rice; } \\ \text { (2) rewrite the reading with neat } \\ \text { sentences from the observation } \\ \text { drawing of the Jakarta-Surabaya } \\ \text { distance map. }\end{array} \\ \hline \text { Ask a question } & \text { Ask to receive clarity } & \begin{array}{l}\text { Educators ask students questions } \\ \text { about learning to round length } \\ \text { and weight measurements to the } \\ \text { nearest hundreds by rounding } \\ \text { the measure up, down, and } \\ \text { upside down. Then, students can } \\ \text { ask and make questions like } \\ \text { examples of existing questions }\end{array} \\ \hline \text { Count } & \begin{array}{l}\text { Calculate, the results of } \\ \text { calculations can be } \\ \text { communicated with tables, } \\ \text { graphs or histograms }\end{array} & \begin{array}{l}\text { In the observing activity, } \\ \text { students are asked to calculate } \\ \text { the results of each problem about } \\ \text { rounding the results of length } \\ \text { and weight measurements to the } \\ \text { nearest hundreds that are } \\ \text { available in this mathematics } \\ \text { textbook. }\end{array} \\ \hline \text { Deliver } & & \begin{array}{l}\text { Organize and convey } \\ \text { information systematically, } \\ \text { explain, results, discuss } \\ \text { results. }\end{array} \\ \begin{array}{l}\text { Students are asked to try to } \\ \text { answer questions from each } \\ \text { question that has been provided } \\ \text { in the material in the book. Then, } \\ \text { the results can be discussed with } \\ \text { educators. }\end{array} \\ \hline \text { Measurement with standard } \\ \text { measuring instruments }\end{array} \begin{array}{l}\text { This material is related to } \\ \text { measuring instruments, usually } \\ \text { the measuring instruments used } \\ \text { are scales, rulers, meters and so } \\ \text { on which are still in the category } \\ \text { of hundreds. }\end{array}\right\}$
(continued)

Based on the analysis conducted on each learning activity in the mathematics textbook curriculum 2013 grade IV SD semester I revised edition 2013, a component of process skills was found in each learning activity. The mathematical process skill component that emerges from the overall indicators in each chapter consists of several materials.

Table 10. (continued)

| Aspect | Indicator | Description |
| :--- | :--- | :--- |
| Classification | Add to group | This material has material <br> tailored to the group or class so <br> that students can understand the <br> material. Grouping rounding of <br> length and weight measurement <br> results to the nearest hundreds <br> consists of rounding up, down, <br> and reverse. |
| Divination | or groups based on specific <br> criteria | Of course, this material can still <br> be predicted because the <br> material for rounding numbers <br> can be predicted up, down, and <br> upside down. For example, 2,515 <br> is rounded to 2,600, rounded <br> down to 2,500, and the best <br> rounding is 2,500. |
| Conclude | Using patterns, tell what <br> happens in circumstances <br> that have not been observed | In this material about numbers, <br> students can infer the results of <br> each rounding of length and <br> weight measurement results to <br> the nearest hundred. |
| Applying Concepts/Patterns | Give meaning to inference | Students use the pattern of <br> rounding the results of length <br> and weight measurements to the <br> nearest hundreds with rounding <br> down, up, and upside down that <br> has been exemplified and <br> explained by educators and in <br> this math textbook. |

The mathematical process skills contained in chapter 1 are about fractions, which consist of fractional number material, fraction form, and estimation. The first material has the skills of observing, questioning, calculating, measuring, classifying, inferring, and applying concepts/patterns. The second material, mathematical process skills that emerge are observing, questioning, calculating, communicating, classifying, inferring, and applying concepts/ pattern. The third material, the skills of mathematical processes that emerge are observing, questioning, calculating, communicating, classifying, inferring, and applying concepts/pattern.

Mathematical process skills are found in chapter 2 about KPK and FPB which have material, namely factors and multiples of numbers, prime factorization, determining KPK and FPB. The first material of process skills that emerge is observing, questioning, calculating, communicating, classifying, inferring, and applying concepts/patterns. The second material, the skills of mathematical processes that arise are observing, questioning, predicting, calculating, communicating, classifying, inferring, and applying concepts/pattern. The third material, the skills of mathematical processes that emerge, namely observing, questioning, calculating, communicating, classifying, inferring, predicting, and applying concepts/pattern.

The mathematical process skills contained in chapter 3 on approximation have three materials, namely rounding the results of length and weight measurements to the nearest units, tens, and hundreds. The first material, the skills of mathematical processes that emerge are observing, questioning, communicating, calculating, measuring, classifying, predicting, inferring, and apply concepts/patterns. The second material, the skills of mathematical processes that emerge are observing, questioning, communicating, calculating, measuring, classifying, predicting, inferring, and applying concept/pattern. The third material, the skills of mathematical processes that arise are observing, questioning, communicating, calculating, measuring, classifying, predicting, concluding, and apply concepts/patterns.

## 4 Conclusion

The results of the analysis in this study show that the mathematical process skills fulfilled in the mathematics textbook curriculum 2013 grade IV semester one can be concluded that the student book contains Nine appropriate mathematical process skills in the 2013 curriculum. The nine process skills are observing, questioning, communicating, calculating, measuring, classifying, predicting, inferring, and applying concepts/patterns. These mathematical process skills are reflected in the one-semester material in chapter 1 on enumeration; chapter 2 on KPK and FPB; and chapter 3 on forecasting. Each learning material contains activities that can bring out process skills.

These activities include activities, let's observe, let's question, let's reason, example, and let's try, let's summarize, let's communicate, project tasks. The content of mathematical process skills in each learning activity aims to improve and develop skills in elementary school students. That way, the content analysis of this mathematics book material is expected by educators to be more competitive and innovate in designing mathematics learning to grow process skills in every learning activity in students.

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