

A Study on the Question Analysis of *Language and Media* Textbooks

: Focused on the 'Sentence' Unit

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I. Introduction

The unilateral transmission process of knowledge, where teachers speak and students listen, has long been acknowledged as an undesirable form of teaching and learning. Today's pedagogical discussion emphasizes learners' active thinking, not the process of injecting knowledge into them. The learner's status has changed from 'education consumer' to 'education sovereign' (Lee, 2020, p. 245). The 2015 national curriculum also presents critical and creative thinking abilities as core competencies.

The theoretical curriculum is represented in specific textbooks, where they function as a path for planning and practicing teaching and learning. (Nam, 2012, pp. 56-58) That is, textbooks function as concrete objects that mediate between the abstract curriculum and specific actual classes. Consequently, analyzing and evaluating textbooks is important for improving teaching and learning.

Recent discussions on grammar education have also emphasized stimulating learners' thinking. This viewpoint suggests that grammar textbooks should be constructed to stimulate learners' thinking beyond providing faithful educational content. In this context, 'questions' play a key role in stimulating learners to think actively.

The questions in the textbooks are suitable for achieving the pur-

pose of education (Turner, 1989, p. 58) as they induce students to engage in activities and stimulates them to think about special problem situations. Therefore, to improve grammar teaching and learning by enabling learners to actively think, the questions presented in grammar textbooks require special attention.

In this study, QCSS (The Question Category System for Science), an analysis framework suggested by P. E. Blosser, was used to analyze questions included in five types of *Language and Media* textbooks. As will be described later, this study does not consider that the question requiring convergent thinking is a non-educational question and the question requiring open thinking is an educationally more appropriate question. Therefore, the purpose of this study is not simply to classify the questions of textbooks, but to explore how the questions of textbooks are presented by type and how each can be improved. The results of this study are expected to aid in the selection and development of grammar textbooks under the accreditation system in the future and contribute to the revitalization of research related to textbook evaluation.

II. Background

1. Textbook analysis studies from the perspective of grammar education

Textbooks function as concrete objects that mediate the abstract curriculum and the practices of actual classes. In this respect, from the perspective of grammar education, several studies have been conducted to analyze textbooks to improve grammar teaching and learning.

Textbook analysis studies from the perspective of grammar education typically focus on the following topics: ‘principles of textbook development’, ‘textbook selection’, ‘description of grammatical items’,

and ‘materialization’.¹

Table 1. Studies on the analysis of textbooks from the perspective of grammar education

Category	Studies
Principles of textbook development	Joo (2006), Sin (2006), Min (2007), Jeong (2009), Min et al. (2016)
Textbook selection	Nam et al. (2011), Kim et al. (2012), Nam et al. (2012), E. S. Kim et al. (2014)
Description of grammatical items	Lee (2012), J. T. Lee (2015), H. J. Lee (2015), Oh and Jo (2016), Yang (2017)
Materialization	Park (2011), Kim (2016), Noh (2017), Yang (2020), Kim and Choi (2021)

The studies by Joo (2006), Sin (2006), Min (2007), Park (2008), Min et al. (2016), Oh and Jo (2016), and Choi and Lee (2021) in the principles of textbook development studies have discussed various issues related to the principles of grammar textbook development instead of critically analyzing already published textbooks.

‘Textbook selection’ has been discussed in studies by Nam et al. (2011), Kim et al. (2012), Nam et al. (2012), and E. S. Kim et al. (2014). As government-authorized textbooks began to become more commonly used, teachers in the school field gained experience in textbook selection. Therefore, from the perspective of grammar education, research related to textbook selection is continuously being conducted. The common factor in these studies is the necessity to revitalize discussions on textbook evaluations. As pointed out by E. S. Kim et al. (2014, p. 413), the discussion on textbook evaluation

¹ For the convenience of discussion, each study was classified as shown in Table 1, but actual studies are often related to several categories at the same time. For example, Kim and Choi (2021) which analyzed the inquiry tendencies of textbooks is a study that focuses on materialization, but this study is also related to textbook development and textbook selection. The classification result in Table 1 is the result of determining where the main focus of each study is.

began to become active as Korean language government-authorized textbooks began to be published. Since the selection of textbooks is based on textbook evaluation, textbook evaluation studies saw a revitalization on account of the introduction of government-authorized textbooks.

Studies related to the description of selected grammar items in textbooks include Lee (2012), J. T. Lee (2015), H. J. Lee (2015), Oh and Jo (2016), and Yang (2017). These studies typically focus on issues related to the composition and content description of textbooks in relation to sentences (Lee, 2012), honorific category (Lee, 2015), phonological function (Lee, 2015), parts of speech (Oh & Jo, 2016), and word formation (Yang, 2017).

Studies on materialization were interested in “the way the selected educational content is implemented as a textbook” rather than in “what educational content was selected and published in the textbook.” These include Park (2011), Kim (2016), Noh (2017), Yang (2020), and Kim and Choi (2021). Park (2011) studied the way in which an example text is presented in textbooks, Noh (2017) studied the visualization of examples in textbooks based on visual input enhancement theory, and Yang (2020) analyzed aspects of learning activities in texts.

Kim (2016), and Kim and Choi (2021) analyzed the inquiry tendencies of textbooks through the method suggested by W. D. Romey. They attempted to contribute to the process of textbook development and selection by analyzing the inquiry tendencies of the textbooks.

Previous studies have demonstrated the importance of textbooks in the planning and practice of teaching and learning in grammar education. In particular, since the Korean language government-authorized-textbook began to be used, research on textbook evaluation has been active, and discussions on the composition of textbooks necessary to make learners construct meaningful educational experiences have continued. Based on the achievements of these previous studies, this study aims to contribute to the development and improvement of

the textbook selection process by analyzing the questions presented in the textbook.

2. Studies on the analysis of questions in textbook

As the questions in textbooks function as useful devices to stimulate learners’ thinking, research on the question analysis of textbooks in various subjects has been conducted.

In these studies, questions in textbooks were classified and analyzed according to the question-type classification system proposed by Bloom, Moore, and Blosser.

Many studies that analyzed the questions in textbooks used The Question Category System for Science (QCSS) presented by Blosser. The QCSS is a category system that classifies questions into four major types: managerial, rhetorical, closed, and open.

Table 2. Major types of questions (Blosser, 2000, p. 3)

Question type	Question function
Managerial	To keep the classroom operations moving
Rhetorical	To emphasize a point, to reinforce an idea or statement
Closed	To check the retention of previously learned information, to focus thinking on a particular point or commonly-held set of ideas
Open	To promote discussion or student interaction; to stimulate student thinking; to allow freedom to hypothesize, speculate, share ideas about possible activities, etc.

Managerial questions are those used by the teacher to keep the classroom operating to move activities (and students) toward the desired goals for the period, lesson, or unit. These include questions, such as “Will you turn to page 15”, which is a managerial question. Teachers also use rhetorical questions to reinforce a point or for emphasis, such as “The green coloring matter in plants is called chlorophyll, right?” (Blosser, 2000, pp. 3-4). Managerial and rhetorical ques-

tions are mainly uttered orally by teachers, and are often excluded from analysis when analyzing questions in textbooks.

Studies that have analyzed the questions of textbooks using QCSS are as follows.

Table 3. Studies that analyzed the questions of textbooks using QCSS

Subjects	Studies
Science	Choi and Lee (2012), Kim et al. (2014), Kim and Lee (2016), Kim and Kim (2018)
Practical arts	OH et al. (2020)
Moral education	Jang (2017), Lee (2022)

The studies that analyzed the questions of textbooks using QCSS took textbooks of various subjects, such as Science, Practical arts, and Moral education, as the subject of analysis. The need for textbook evaluation studies is increasingly emphasized in grammar education; however, studies that analyze the questions of grammar textbooks using QCSS have not yet been conducted.

Another implication that can be obtained by examining previous studies is that it is necessary not only to look at the ratio by type of questions in textbooks, but also to examine the specific aspects of questions in textbooks when analyzing questions. Previous studies using the QCSS have mainly focused on presenting the ratio of questions by type in textbooks. However, it is difficult to examine in depth the points of discussion related to the questions in textbooks by examining only the number and ratio of questions. With the same point of view, the discussion of Chung and Shin (2021) which the ratio of questions by type itself cannot be an absolute criterion for dividing good and bad classes becomes relevant.² Therefore, this study also

2 Chung and Shin (2021) analyzed the teacher's questions, not the questions of the textbooks. However, Chung and Shin's (2021) argument that only the ratio of questions by type cannot lead to in-depth discussion through question analysis is also valid.

analyzed the questions in detail for each type rather than simply presenting the ratio by question type.

III. Methods

In this study, the ‘sentence’ units of five types of *Language and Media* were analyzed. Of course, the questions of all units in all textbooks are useful as subjects of analysis. However, given that the content and composition of the question are affected by the educational content, additional discussions are needed to consider the contents of each grade and unit to analyze the composition of the question by grade and unit.

In this study, the analysis targets were limited to prevent further discussions from becoming too long and to focusing on question analysis. Therefore, this study selected the ‘sentence’ unit of five types of *Language and Media* as the starting point of the inquiry analysis study of grammar textbooks using QCSS. In this study, the ‘sentence’ unit was judged to be suitable for analysis in that the educational content related to ‘sentence’ is considered the main educational content of grammar education from elementary school to high school.

Table 4 shows the textbooks and units that this study used as the subject of analysis, and the classification codes that were assigned according to the textbooks for the convenience of notation.

Table 4. Chapters of textbooks analyzed

Publisher	Authors	Chapter	Code
Chunjae Education	Min et al. (2019)	IV.1. Construction of sentences and grammatical elements	Ta
Mirae N	Bang et al. (2019)	2.(3) Sentences	Tb

when analyzing questions in textbooks

Visang	K. K. Lee et al. (2019)	2.(2) Construction and utilization of sentences 2.(3) Effects and utilization of grammar elements	Tc
Jihaksa	S. H. Lee et al. (2019)	II.3. Sentences and grammar elements	Td
Changbi	Choi et al. (2019)	II-1.(3) Construction of sentences and grammatical elements	Te

The questions in the textbook were classified and analyzed according to the QCSS presented by Blosser. As mentioned earlier, the QCSS is a category system that classifies questions into four major types: managerial, rhetorical, closed, and open. However, among these, managerial and rhetorical questions are mainly questions uttered orally by teachers, and in previous studies that analyzed textbook questions using QCSS, these two types of questions were not included in the analysis. Therefore, in this study, the questions in the textbooks were first classified into closed and open questions.

Closed questions are those which have a limited number of acceptable responses or “right answers” (Blosser, 2000, p. 4). “What is the capital of South Korea?” fits into this category. Open questions anticipate a wide range of acceptable responses (Blosser, 2000, p. 4). “What are the characteristics of Korean?” fits into this category.

Next, the QCSS classifies closed questions into cognitive-memory questions and convergent thinking questions, and open questions into divergent thinking questions and evaluative thinking questions (Blosser, 1973/1987, p. 16).

Table 5. Question function according to question type

Question type	Question function
Closed question	Cognitive-memory operations Convergent thinking operations
Open question	Divergent thinking operations Evaluative thinking operations

These four types of questions can be described as follows. First, cognitive-memory questions require learners to respond by recalling what they have learned or experienced before. For example, “What is the part of speech for a chair?” and “What are the names of the three types of rocks?”, are cognitive memory questions.

Second, convergent thinking questions require the analysis and integration of data presented to learners or data remembered by learners. Questions that require learners to apply what they have learned to other problems are also convergent thinking questions. The cognitive-memory questions and convergent thinking questions are closed questions, which possess a small number of “right answers”.

Third, divergent thinking questions require a wide range of acceptable responses. This includes questions that do not present sufficient conditions to limit the learners’ responses. Divergent thinking questions stimulate learners’ creative thinking.

Finally, evaluative thinking questions require learners to critically analyze the situation or justify the presented answer with reasonable criteria. Questions, such as “Should the meeting be bound?”, belonged to the evaluative thinking questions category.

According to the discussion above, in this study, questions in the ‘sentence’ unit in the five types of *Language and Media* were classified into ‘cognitive-memory question, convergent thinking question, divergent thinking question, and evaluative thinking question’.³ To accurately understand the learner’s response to each question during question analysis, the teacher’s guidebook was also referenced.

Finally, it is necessary to set specific analysis target ranges and criteria. In this study, the questions in *Language and Media* textbooks

3 In previous studies using QCSS, questions were classified into smaller categories according to additional criteria. However, there is a problem in that it is difficult to deepen the discussion of questions for each category if the categories are excessively subdivided. In this study, it was not only intended to present the ratio of questions by type, but also to discuss questions by type. Therefore, in this study, the analysis was conducted by dividing the questions into only four types as presented in Table 5.

were analyzed under the following criteria.

First, in this study, only interrogative sentences were not included in the scope of questions. In previous studies that analyzed textbook questions using QCSS, only interrogative sentences were not analyzed. In this study, referring to the discussion of Lee (2022, p. 183), questions are viewed as “questions raised to foster students’ learning activities and questions that induces and urges students’ thinking.” Therefore, among the textbook activity tasks, sentences that urge learners to think were included in the questions and analyzed, even if they were request sentences.

When the upper and lower questions were presented together, only the lower questions were analyzed to avoid duplication. In some cases, when only the upper question was presented, it was used as the subject of analysis (See Figure 1). If “Let’s explore the construction of various sentences through the following activities”, “Let’s understand the construction of sentences”, and “Let’s say whether the next sentence is simple sentence or complex sentence”, were presented simultaneously only the lowest question was used for analysis.

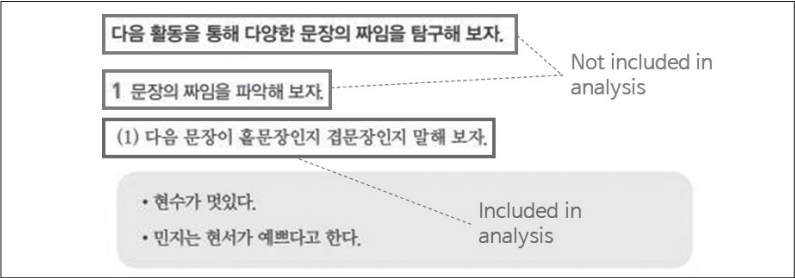


Figure 1. Questions included in the analysis target and questions not included (Min et al., 2019a, p. 160)

In addition, referring to the analysis criteria set by Jang (2017) and Lee (2022), when two types of questions were presented within one sentence, each was considered as one analysis unit.

The following are the additional criteria considered in relation to

the classification of question types. According to Blosser (1973/1987, p. 37), the same question can be classified differently depending on the context. For example, “How does flowing water wear away stones?” can be a cognitive-memory question or a convergent thinking question, depending on previous learning. Therefore, when classifying the types of questions, the context of the textbook was considered together by checking the teacher’s guidebook.

The questions were usually classified according to the criteria presented above, but there were some instances where the classification of question types diverged from this pattern. The first is a classification problem between a convergent thinking question and a divergent thinking question. There are questions that infer that the actual learner’s response will not be diverse, although it is composed of a form that can elicit various responses without the right answers. In this study, even though it is inferred that the majority of learners will respond in one direction, questions for which an acceptably wide range of responses are possible are classified as divergent thinking questions.⁴ For example, in Figure 2, “Let’s think about the expression effect of the passive expression used in the next sentence” was classified as a divergent thinking question.

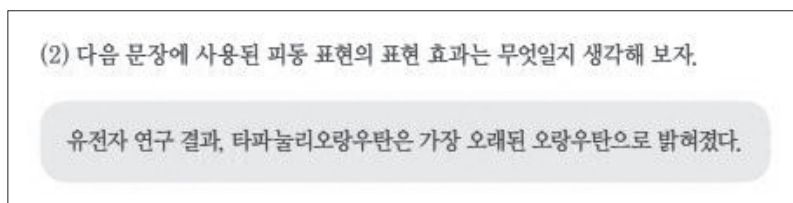


Figure 2. An example of divergent thinking question (Min et al., 2019a, p. 171)

4 These questions can be classified as convergent thinking questions or as divergent thinking questions depending on how the teacher organizes the class in the actual classroom. These questions may even be a cognitive memory question. Discussions related to this were described later in chapter IV. As described above, in this study, the type of question was classified by determining what response the questions require by referring to the teacher's guidebook.

Next, since the distinction between the cognitive-memory question and the convergent thinking question is ambiguous, it was necessary to set the standards for it. In this study, questions that could be answered by looking at the contents of the textbook were classified as cognitive-memory questions, and questions that required the application of the content learned in the textbook to a given material were classified as convergent thinking questions.

For example, in Figure 3, “Let’s write down in the blank what the sentence component corresponds to the following description” is classified as a cognitive-memory question because it can be answered as it is by looking at the contents of the textbook. In Figure 3, “Let’s compare the meaning between the next paired sentences and write down in parentheses what the underlined sentence components are” is a question that requires application to a new problem situation, so it is classified as a convergent thinking question.

1. 다음 설명에 해당하는 문장 성분이 무엇인지 빈칸에 적어 보자.

예시 답

문장을 이루는 데 골격이 되는 문장 성분	주성분
서술어의 동작 대상이 되는 문장 성분	목적어
체언을 수식하는 문장 성분	관형어
주로 용언을 수식하는 문장 성분	부사어
주어의 동작, 상태, 성질 따위를 설명하는 문장 성분	서술어
문장에서 동작 또는 상태나 성질의 주체를 나타내는 문장 성분	주어

An example of cognitive-memory question

2. 다음 짝지어진 문장 간의 의미를 비교하면서 밑줄 친 부분의 문장 성분이 무엇인지 괄호에 적어 보자.

(1) 나는 <u>학교에</u> 갔다.	(부사어)
나는 <u>학교를</u> 갔다.	(목적어)
나는 <u>학교로</u> 갔다.	(부사어)
(2) 나는 선물을 <u>철수에게</u> 주었다.	(부사어)
나는 선물을 <u>철수를</u> 주었다.	(목적어)
(3) 물이 <u>얼음이</u> 되었다.	(보어)
물이 <u>얼음으로</u> 되었다.	(부사어)

필수적 부사어 - '되다'가 두 자리 서술어이기 때문임.

An example of convergent thinking question

Figure 3. Examples of cognitive-memory question and convergent thinking question (S. H. Lee et al., 2019b, p. 101)

Finally, it is necessary to set a criterion for distinguishing between divergent thinking and evaluative thinking questions. Both divergent thinking and evaluative thinking questions may require learners to present their opinions. However, evaluative thinking questions are distinguished from divergent thinking questions in that they require learners to defend their own opinions according to reasonable criteria. The following are examples of divergent thinking and evaluative thinking questions presented by Blosser (1973/1987).

Table 6. Examples of divergent thinking questions and evaluative thinking questions (Blosser, 1973/1987, pp. 26-37)

Question type	Example sentences
Divergent thinking question	<ul style="list-style-type: none"> • What can we do if all the water is contaminated? • When can we send a human spacecraft to Venus?
Evaluative thinking question	<ul style="list-style-type: none"> • Is Abortion Wrong? • Should we implement a birth control policy?

Therefore, in this study, questions that required learners to prac-

tice ‘probable prediction’ or ‘application’ were included in the divergent thinking question. In addition, questions dealing with the problem of value, not the problem of facts, and questions that required learners to defend their arguments were included in the evaluative thinking question.

IV. Results and Discussion

First, the questions in the textbook were divided into closed and open questions, and the frequency of each is shown in Table 7.

Table 7. The ratio of closed questions and open questions in each textbook

Textbooks	Closed questions	Open questions
Ta	15	9
Tb	27	1
Tc	39	15
Td	71	9
Te	15	1

Language and Media textbooks contained fewer open questions than closed questions. In particular, there is only one open question regarding Tb and Te. It is important to note that a high rate of closed questions does not mean that it is a bad textbook, and a high rate of open questions does not suggest that it is a good textbook. Chung and Shin (2021) discussed that higher-level questions (open questions) are not always more effective than lower-level questions (closed questions), and that no judgment can be made based on the frequency of higher-level questions alone.

Next, the questions are divided into ‘cognitive-memory questions’, ‘convergent thinking questions’, ‘divergent thinking questions’, and ‘evaluative thinking questions’, and the frequency of each is shown in Table 8.

Table 8. Frequency of four type of questions by textbook

Text-books	Cognitive-memory questions	Convergent thinking questions	Divergent thinking questions	Evaluative thinking questions
Ta	0	15	9	0
Tb	0	27	1	0
Tc	1	38	14	1
Td	6	65	9	0
Te	0	15	1	0

As shown in Table 8, most of the closed questions were converted thinking questions and most of the open questions were divergent thinking questions. In this study, the characteristics of each type of question were viewed and analyzed by referring to Blosser (1973/1987). To deepen the discussion on the question in the textbook, it is necessary to examine the question in detail by type of question.

First, the characteristics of the cognitive memory question included in the textbook are as follows. Korean textbooks generally start with the introduction stage, go through the learning stage, and comprise the final stage (Song, 2017, p. 164). It can be seen that the cognitive-memory questions, which remind learners of what they have learned, are all presented at the final stage of the last part of the unit.

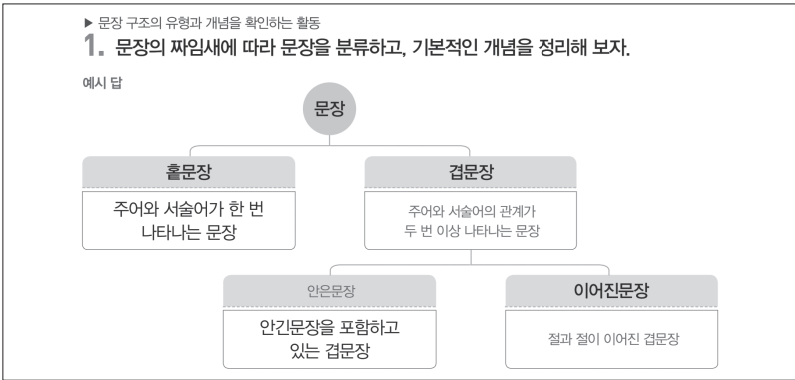


Figure 4. An example of cognitive-memory question (S. H. Lee et al., 2019b, p. 107)

“Let’s classify sentences according to the structure of sentences and organize basic concepts,” presented in Figure 4, is an example of cognitive-memory questions presented at the end of the unit. Cognitive-memory questions were found only in Tc and Td textbooks and not in the remaining three textbooks. In the Ta, Tb, and Te textbooks, questions were constructed at the end of the unit to allow learners to check the content learned through convergent thinking questions.

Although it is necessary to have questions to confirm what has been learned, it is difficult to expect that interaction in the form of question-and-answer will play a significant role in the development of higher-level thinking skills. It can be seen that it is natural that cognitive-memory questions are not included in many textbooks. Of course, convergent thinking questions also belong to closed questions that require a small number of correct answers, but compared to cognitive-memory questions in which the correct answer can be checked directly through the content of the textbook, it can be said that they require a higher level of thinking from learners.

Next, let us look at the convergent thinking questions included in textbooks. Most of the closed questions in *Language and Media* textbooks are convergent thinking questions. Among the convergent thinking questions, many presented data to learners and demanded interpretation of the presented data based on what they had learned.

1. 다음 능동문을 피동문으로 바꾸어 보자.

- 내가 그의 발을 밟았다.
→ 그의 발이 나에게 밟혔다. _____
- 정우는 아름다운 경치를 보았다.
→ 아름다운 경치가 정우에게 보였다. _____
- 동생이 종이를 구겼다.
→ 종이가 동생에 의해 구겨졌다. _____

Figure 5. An example of convergent thinking question 1 (K. K. Lee et al., 2019b, p. 68)

The question “Let’s change the following active sentences into passive sentences” presented in Figure 5 shows an example of a convergent-thinking question. This question is presented immediately after the text description of active and passive sentences, allowing learners to apply what they have learned to other problem situations. Convergent thinking questions are usually presented at the end of the chapter or after explaining the content of the text.

However, it was also possible to find examples of convergent thinking questions presented prior to the explanation in the text. The following are the questions included in the Tc textbook.

다음 문장이 자연스러운 문장이 되도록 괄호 안에 있는 문장을 바꾸어 보자.

- (그 일을 하다)가 어렵다.
→ 그 일을 하기가 어렵다.
- (향이 좋다) 꽃이 예쁘다.
→ 향이 좋은 꽃이 예쁘다.
- 주희는 (머리카락이 휘날리다) 달렸다.
→ 주희는 머리카락이 휘날리게 달렸다.

Figure 6. An example of convergent thinking question 2 (K. K. Lee et al., 2019b, p. 53)

“Let’s change the sentence in parentheses so that the next sentence becomes a natural sentence,” presented in Figure 6 is an example of the convergent thinking questions presented prior to the text of the textbook. Learners can respond to the question by intuition, even if they do not know the grammar terms. Through this question, learners can intuitively understand what “embedded sentence” is, prior to learning about “embedded sentence” in earnest. Therefore, it was judged that this question was suitably constructed to promote the learners’ thinking.

However, not all questions presented before the text explanation were properly constructed. The following question is also included in

Tc textbook and presented before the text description.

독

열기

다음 문장의 구조가 어떠한지 생각해 보자.

(가) 준호가 책을 읽는다. '주어+목적어+서술어'로 구성된 출문장

(나) 물이 얼음이 아니다. '주어+보어+서술어'로 구성된 출문장

(다) 와, 꽃이 예쁘다. '독립어+주어+서술어'로 구성된 출문장

(라) 이것은 장미꽃이고, 저것은 국화꽃이다. '주어+서술어+주어+서술어'로 구성된 접문장

문장은 화자의 생각과 느낌을 완결된 형태로 표현하는 단위이다. 문장은 문장 안에서 일정한 문법적 기능을 하는 부분들로 이루어지는데, 이들을 문장 성분이라고 한다. 문장 성분은 '서술어, 주어, 목적어, 보어'와 같이 문장을 이루는 데 골격이 되는 주성분, '관형어, 부사어'와 같이 다른 것을 꾸미는 부속 성분, '독립어'와 같이 다른 문장 성분과 직접적인 관련이 없는 독립 성분으로 나뉜다. (가)의 서술어 '읽는다'는 목적어 '책을'을, (나)의 서술어 '아니다'는 보어 '얼음이'를 각각 요구한다. (다)의 '와'는 독립어로, 주어 '꽃이'와 서술어 '예쁘다'와는 직접적인 관련이 없다.

문장에서 주어와 서술어의 관계가 한 번 나타나면 출문장, 두 번 이상 나타나면 접문장이다. (가)~(다)는 주어와 서술어가 한 번만 나타나므로 출문장이고, (라)는 주어와 서술어가 두 번 나타나므로 접문장이다.

Figure 7. An example of convergent thinking question 3 (K. K. Lee et al., 2019b, p. 51)

“Let’s think about the structure of the following sentences” in Figure 7 is an example of a convergent thinking question presented before the explanation of the text in a textbook.⁵ Unlike the previous

5 Looking at the sentence of this question alone, this question can be viewed as an open question that requires acceptable responses in a wide range. However, given the

question in Figure 6, this question is difficult to answer when learners have not yet learned the content of the text. Therefore, the question in Figure 7 must be adjusted to be presented below the relevant text in the textbook.

Since the explanatory text of the textbook directly explains the structure of the sentences in Figure 7, it can be said that the sentences in Figure 7 were presented in advance as example sentences for explaining the text. However, if the sentences in Figure 7 are presented for this purpose, it will be necessary to appropriately modify the question. With the current composition, it is difficult for learners to respond appropriately to the question, “Let’s think about the structure of the following sentences.”

Among the convergent thinking questions, cases that required location adjustment were identified. To present the convergent thinking question before the text content, it is necessary to configure the question so that learners can respond without learning the text content.

Next, let us take a look at the divergent thinking questions included in the textbook. The divergent questions are not questions that require a few correct answers, but questions that require a wide range of responses, and most of the open questions included in the textbook were divergent thinking questions. Divergent thinking questions can promote learners’ open thinking. The divergent thinking question could be examined at the introduction, learning, and final stages of the textbook. The following is an example of a divergent thinking question presented in the Ta textbook.

In Figure 8, there is a question that requires learners to answer why impersonal subject honorification is frequently used.

context of the text presented with the question and the example responses presented in the teacher’s guide book, the question can be judged as a closed question that requires a small number of right answers.

질문

높임 표현과 관련한 질문입니다. '이 상품은 신상품입니다.', '이 제품은 라지 사이즈입니다.' 등이 잘못된 표현인 이유를 알고 싶습니다.

답변

이 같은 표현을 사물 존칭 표현이라고 하는데, 이러한 표현은 서비스 업종에서 많이 사용되고 있습니다. 선어말 어미 '-시-'는 주체를 높이는 표현인데 주어로 상품이 제시되면서 상품을 높이는 형국이 된 경우입니다.

(1) 이러한 사물 존칭 표현이 일상 언어생활에서 자주 사용되는 이유가 무엇인지 친구들과 함께 이야기해 보자.

Figure 8. An example of divergent thinking question 1 (Min et al., 2019a, p. 167)

In response to this question, learners will be able to present various opinions based on their experiences in language life and what they have learned. As such, divergent thinking questions induce learners to think in various directions by requiring unrestricted responses to problem situations. However, it is necessary to review whether these divergent thinking questions can be used to stimulate learners' creative thinking in actual classes.

(2) 다음 문장에 사용된 피동 표현의 표현 효과는 무엇일지 생각해 보자.

유전자 연구 결과, 타파놀리오랑우탄은 가장 오래된 오랑우탄으로 밝혀졌다.

Figure 9. An example of divergent thinking question 2 (Min et al., 2019a, p. 171)

Figure 9 presents the divergent thinking question, "Let's think about the effect of passive expression used in the next sentence." The expected response to the question provided in the teacher's guidebook is presented in Figure 10.

(2) 다음 문장에 사용된 피동 표현의 효과는 무엇일지 생각해 보자.

지도 방법

- ① 제시된 문장의 능동 표현을 파악하게 한다.
- ② 피동 표현일 때와 능동 표현일 때 드러나는 의미 차이를 파악하게 한다.
- ③ ①, ②를 바탕으로 피동 표현의 효과를 정리하게 한다.

예시 답안

피동 표현을 사용하여 발화자나 필자와 같은 주체의 판단이 아니라 연구의 결과라는 사실을 드러내 객관적인 사실을 전달하고 있음을 강조하는 효과를 얻고 있다.

Figure 10. An example of learner's expected responses presented in the teacher's guidebook (Min et al., 2019b, p. 356)

As shown in Figure 10, the teacher's guidebook often has only one expected response to a divergent thinking question. As discussed earlier, the same question can also be a convergent thinking question, a divergent thinking question, or even a cognitive memory question, depending on how it is used in class. If a teacher looks at the teacher's guidebook in Figure 8 and presents "right answers" to questions to learners, this question will no longer be able to stimulate students' divergent thinking. Therefore, the teacher's guidebook should present expected responses in various directions as much as possible for divergent thinking questions.

Finally, let us take a look at the evaluative thinking question. The evaluative thinking question deals with the problem of value, not the problem of fact, and requires learners to defend their arguments against one position using reasonable criteria. The following is an example of the evaluative thinking question presented in the Tc textbook.

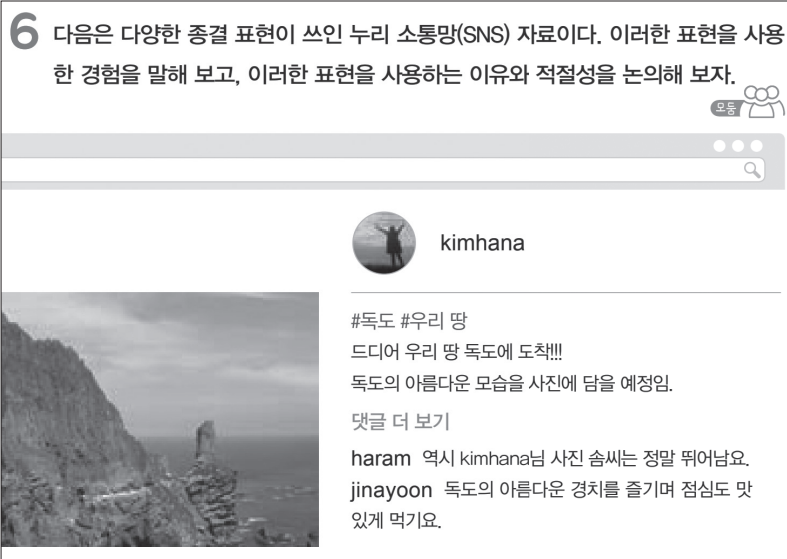


Figure 11. An example of learner's expected responses presented in the teacher's guidebook (K. K. Lee et al., 2019b, p. 77)

Figure 11 presents a question to discuss the appropriateness of expressions used in SNS.⁶ Learners will be able to decide whether the expressions used on SNS are 'appropriate' or 'inappropriate' based on their own language life experience. In addition, based on reasonable grounds for their position, they may have discussions with fellow learners who have a different position.

In the chapters of the textbook subject to the study, only one question belonging to the evaluative thinking category was found. It can be seen that the low proportion of the evaluative thinking question is due to the characteristics of grammar education content.

6 As previously stated in III. Method, in this study, when two or more types of questions were contained in one sentence, each was used as a unit of analysis. Among the questions in Figure 9, "Talk about the experience of using these expressions" was classified as a cognitive-memory question, and "Let's discuss the reason and appropriateness of using these expressions" as an evaluative thinking question.

However, from the perspective of grammar education, there is not without material that can stimulate learners' evaluative thinking. Previous studies have emphasized learners' inquiry into language phenomena in grammar education. Kim (2020), which re-examined 'Issues' as the content of Korean Grammar Education, classified issues related to language phenomena into academic issues and daily issues, and reviewed them as contents of Korean Grammar Education. Issues, such as "Is it right to point out the spelling of strangers in the Internet space?" and "Is the use of abusive language by Korean teenagers a problem or a culture?" can be implemented as a question that can stimulate evaluative thinking in grammar textbooks. To implement a question that can stimulate learners' evaluative thinking in grammar textbooks, the activation of discussions related to this should be prioritized.

V. Conclusion

This study attempted to present a direction for improving grammar textbooks by analyzing the questions included in grammar textbooks. The questions were analyzed using the QCSS presented by P. E. Blosser, and accordingly, the questions included in the 'sentence' unit of five types of *Language and Media* were divided and analyzed by type.

In this study, the questions included in the textbook were examined by type. The implications of this search are as follows.

First, among the questions included in the convergent thinking question, there were questions that needed to be appropriately reconstructed. Questions that learners cannot answer without learning the text should not be located before learning. Therefore, for some convergent thinking questions, the sentence must be modified or the position of the question must be adjusted.

Second, some of the questions in the form of divergent thinking

questions had room to be used as convergent thinking questions or cognitive memory questions in actual classes. The divergent thinking question needs to be reorganized to stimulate learners' wide thinking. It is also necessary to include more learners' expected responses in the teacher's guidebook.

Third, it is necessary to include more evaluative thinking questions in textbooks. Recently, discussions on how to use socio-linguistic issues as the content of grammar education are also being discussed in grammar education, so it is necessary to activate the composition of questions that can stimulate learners' evaluative thinking.

In this study, only the 'sentence' unit of the *Language and Media* textbook was examined. However, it will be necessary to conduct a question analysis for more textbooks in the future. In addition, in this study, the questions of the textbooks were analyzed. It is necessary to conduct a follow-up study that uses learners' responses to questions as an analysis target. It is hoped that this study will serve as the basis for such follow-up research to be actively conducted.

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REFERENCES

- Bang, M. H., Shin, S. I., Oh, H. S., Lee, Y. G., & Kim, T. K. (2019a). *Language and Media*. Mirae N.
- Blosser, P. E. (2000). *How to ask the right questions*. NSTA Press.
- Blosser, P. E. (1987). *Handbook of effective questioning techniques* (Y. E. Song Trans.). Baeyoung Publisher. (Original work published 1973)
- Chang, Y. J. (2017). The analysis on types of questionings in elementary school moral textbooks. *Journal of Korean Ethics Studies*, 114(1), 307-336. 10.15801/je.1.114.201706.307
- Choi, H. Y., Kang, Y. J., Kwon, T. Y., Park, J. Y., Park, J. O., So, S. A., Song, C. W., Oh, S. H., & Lim, Y. H. (2019a). *Language and Media*. Changbi.
- Choi, S. H., & Lee, K. H. (2021). Investigating elementary Korean language textbooks as a viewpoint of textbook development. *The Journal of Korea Elementary Education*, 32(4), 89-112. 10.20972/kjee.32.4.202112.89
- Chung, H. K., & Shin, D. H. (2021). Exploring limitations in applying Blosser's question category system for science. *Journal of the Korean Earth Science Society*, 42(2), 221-244. <https://doi.org/10.5467/JKESS.2021.42.2.221>
- Jeong, J. R. (2009). A Proposal for a new grammar textbook development. *Grammar Education*, 11, 51-77.
- Joo, S. H. (2006). A Research on grammar syllabus development model. *Grammar Education*, 5, 113-136.
- Kim, B. J., & Choi, S. H. (2021). Exploring the inquiry tendencies of 'Sentence' units using Romey analysis method: Focusing on the textbook (Language and Media). *Korean Language Education Research*, 56(2), 31-67. 10.20880/kler.2021.56.2.31
- Kim, E. S. (2020). Re-examination of 'Issues' as content of Korean grammar education. *The Korean Language and Literature*, 191, 107-148.
- Kim, E. S., Kim, H. J., Nam, G. Y., & Park, J. H. (2012). Status of selection criteria for middle school Korean textbook. *The Journal of Curriculum and Evaluation*, 15(3), 1-28.
- Kim, E. S., Kim, H. J., Nam, G. Y., & Park, J. H. (2014). Criteria for selecting Korean textbook through systematic review. *Journal of Korean Language Education*, 33, 391-417. 10.17313/jkorle.2014.33.391
- Kim, G. A., & Lee, H. C. (2016). The analysis on question's patterns in elementary school science teacher's guidebooks of 5, 6th grade under the 2009 revised curriculum. *Journal of Korean Elementary Science Education*, 35(1), 1-12.

10.15267/keses.2016.35.1.001

- Kim, J. A., & Kim, Y. G. (2018). The comparative study of questioning type on the Grade 3 and 4 science textbook in elementary school between the 2009 curriculum and the revised 2015 curriculum. *Journal of Korean Society of Earth Science Education*, 11(2), 116-124. 10.15523/JKSESE.2018.11.2.116
- Kim, J. B. (2019). Type classification of the questions suggested in a history textbook of elementary school. *The Korean History Education Review*, 152, 183-207. 10.18622/kher.2019.12.152.183
- Kim, J. Y. (2016). Exploratory tendency analysis of Korean language textbooks of elementary school by Romey's measures. *The Academy for Korean Language Education*, 107, 67-86. 10.15734/koed.107.201606.67
- Kim, M. J., You, P. K., & Lee, H. C. (2014). Analysis on type of questions in elementary science textbooks and elementary school students' preference types of questions. *Journal of the Korean Society of Earth Science Education*, 7(1), 64-74.
- Lee, H. J. (2015). Some issues in the description of "Phonological Fluctuation" in high school textbook reading and grammar I: Focusing on examples for the explanation. *Korean Language Education Research*, 50(3), 161-192. 10.20880/kler.2015.50.3.161
- Lee, H. J. (2022). Analysis of question type and level of moral textbook activity in elementary school. *Korean Elementary Moral Education Society*, 77, 169-202. 10.17282/ethics.2022.77.169
- Lee, J. T. (2015). The contents and problems of honorific category in Korean grammar textbooks. *Grammar Education*, 25, 133-146.
- Lee, K. K. (2020). Change of educational environment & grammar curriculum. *Grammar Education*, 40, 239-276. 10.21850/kge.2020.40.239
- Lee, K. K., Park, K. H., Shin, H. C., Shin, H. S., Lee, D. S., Jeong, J. H., & Ha, S. W. (2019a). *Language and Media*. Visang.
- Lee, K. K., Park, K. H., Shin, H. C., Shin, H. S., Lee, D. S., Jeong, J. H., & Ha, S. W. (2019b). *Teacher's Guidebook of Language and Media*. Visang.
- Lee, S. H., Kim, C. W., Yang, J. H., Ahn, H., Ha, D. W., & Park, C. Y. (2019a). *Language and Media*. Jihaksa.
- Lee, S. H., Kim, C. W., Yang, J. H., Ahn, H., Ha, D. W., & Park, C. Y. (2019b). *Teacher's Guidebook of Language and Media*. Jihaksa.
- Lee, R. H. (2012). An examination of the sentence unit in the textbook "Reading and Grammar" of the 2009 revised curriculum. *Hanminjok Emunhak*, 60, 291-320.
- Min, H. S. (2007). Reflection on grammar education and direction of development in grammar texts. *Journal of Korean Language Education*, 19, 289-362. 10.17313/

jkorle.2007..19.289

- Min, H. S., Lee, J. S., Lee, J. E., & Jo, J. S. (2016). Theory and practice in development of Korean grammar textbooks: Focus on current grammar achievement standards of the 2009 revised curriculum. *Journal of Korean Language Education*, 37, 311 - 351. 10.17313/jkorle.2016.37.311
- Min, H. S., Shin, M. S., Oh, H. A., Lee, J. E., Ahn, J. H., Jo, J. S., & Bak, J. H. (2019a). *Language and Media*. Chunjae Education.
- Min, H. S., Shin, M. S., Oh, H. A., Lee, J. E., Ahn, J. H., Jo, J. S., & Bak, J. H. (2019b). *Teacher's guidebook of Language and Media*. Chunjae Education.
- Nam, G. Y. (2012). Grammar education and grammar textbooks. *Korean Linguistics*, 57, 1 - 34.
- Nam, G. Y., Kim, H. J., Park, J. H., & Kim, E. S. (2011). A study on Korean teachers' experience of Korean textbook selection. *The Journal of Curriculum and Evaluation*, 14(3), 53-81.
- Noh, H. N. (2017). A study on the visualization of examples in Korean grammar textbooks: Focus on visual input enhancement. *Journal of Korean Language Education*, 39, 1 - 41. 10.17313/jkorle.2017.39.1
- Oh, H. A., & Jo, J. S. (2016). A review on constitution and range of grammar education content in linguistic units for the grammar textbooks: Focusing on issues of parts of speech classification. *The Academy for Korean Language Education*, 109, 219 - 254. 10.15734/koed.109.201612.219
- OH, J. C., Jin, Y. J., Kim, B. C., & Kim, J. H. (2020). Study of types of questions presented in software and robot units of 2015 revised elementary school practical curriculum and development of CT trigger questioning. *Journal of The Korean Association of Information Education*, 24(3), 215 - 223. 10.14352/jkaie.2020.24.3.215
- Park, B. H. (2011). The research of presentation methods of example sentences in Korean grammar textbook. *Korean Literature & Language Education*, 9, 49-76.
- Sin, M. S. (2006). A study on the developing directivity of a grammar curriculum and a grammar textbook. *Grammar education*, 5, 49-80.
- Song, H. J. (2017). A study on materialization of grammar textbook in 2009 revised Korean curriculum. *Journal of Korean Language Education*, 39, 159 - 188. 10.17313/jkorle.2017.39.159
- Turner, T. N. (1989). Using textbook questions intelligently. *Social Education*, 53, 58-60.
- Yang, Y. H. (2017). A discussion on grammar units in Korean language textbooks. *Grammar Education*, 31, 157 - 179. 10.21850/kge.2017.31.157

Yang, S. H. (2020). Analysis on aspects of learning activity by the linguistic unit for 'Language and Media' textbooks in high schools. *Korean Literature & Language Education*, 32, 77-104. 10.24008/klle.2020.32.003

ABSTRACT

A Study on the Question Analysis of *Language and Media* Textbooks

: Focused on the 'Sentence' Unit

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In this study, questions included in the 'sentence' unit of five types of *Language and Media* were divided and analyzed by type using the QCSS presented by P. E. Blosser. The analysis confirmed that the ratio of closed questions was higher than that of open questions, that most of the closed questions were included in the convergent thinking question, and that most of the open questions were included in the divergent thinking question.

The analysis of the questions in the textbook classified by type had the following implications: First, among the questions included in the convergent thinking question, some needed to be modified or positioned. Second, some questions in the form of divergent thinking questions need to be reconstructed to stimulate learners' wide thinking. Third, it is necessary to include more evaluative thinking questions in textbooks.

KEYWORDS Korean grammar education, Textbook analysis, QCSS, Question in textbook, Question analysis