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Analyze Graphic Organizers in China's English Textbooks

– Take "New Senior English for China Students" Books 1-5 as an Example

Rongrong Pei[1,a,*]

[1]*College of Primary Education, Capital Normal University, Beijing, China*
a. rongrong.pei@gecacademy.cn
**corresponding author*

Abstract: As a very useful resource to learn English, English Textbooks play an important role in cultivating students' critical thinking. Learning English is not only learning English words, learning grammar, but also learning culture, cultivating thinking and having good learning strategies. A good textbook should contain many good contents and have good ways to help students master the skills. Graphic Organizer is an effective tool to help organize ideas and enhance students' thinking abilities well. This paper analyzes the number of graphic organizers in one of China's English Textbooks-New Senior English for China Student's Books 1-5. It compares the total number of graphic organizers in each book; compares the number of graphic organizers in each teaching part; and compares the number of different types of graphic organizers in the textbooks. The paper concludes that the number of books in each volume is not balanced; the number in each teaching part is uneven; and the types of graphic organizers are relatively simple. The study suggests that the textbook should add more graphic organizers so as to better cultivate students' thinking abilities.

Keywords: English textbook, graphic organizers, thinking ability

1. Introduction

The new curriculum reform and quality-oriented education emphasize the cultivation of students' innovative abilities. Critical thinking, as an important part of innovative ability, plays an important role in English education [1]. As one of the most direct and important teaching resources, English textbooks carry rich educational content and are the main knowledge carrier for students to learn. Textbooks contain knowledge, skills, thinking and many other aspects of the content, that subtly affect the students' emotions, attitudes and values formation [2]. The language materials of English textbooks serve as the foundation for students to explore knowledge, and promote their truth-seeking, in-depth and critical thinking. The presentation of language knowledge reflects the way that textbooks guide students to explore knowledge and critical thinking, which is an important way to cultivate critical thinking [1]. Graphic organizers are a graphic representation of text concepts. They help students organize information, organize data and ideas to relate to other ideas. They are visual representations or illustrations that describe the relationships between key concepts involved in a course, unit, or task [3]. New Senior English for China Student's Books are widely used in China, and volumes 1-5 are required textbooks. Therefore, this paper will take books 1-5 as the

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research object. It aims to study the number and types of graphic organizers in these 5 books to find out how the graphic organizers are laid out.

2. Graphic Organizer

Graphic organizer is a visual communication tool. It uses some visual symbols to organize ideas and thought and to convey meaning [4]. Graphic organizers are made of lines, arrows and circles to show the relationship between main ideas [5]. In this way, it can help people sort out ideas. It was first proposed by Piccolo in 1987 [4]. Using graphic organizers can improve understanding, organization, and long-term effectiveness of information and highlight significance.

There are many different types of graphic organizers, such as T-charts, bubble maps, tree maps, story maps, Venn diagrams, plot mountains, bridge maps and timelines. Different graphic organizers have different functions, and they are used in different scenarios. T-charts can distinguish two or more different things or situations and makes a comparison list. Bubble Maps are usually used to define the attributes or corresponding connections of things, which can increase the depth and variety of the description of a thing when students write or express it. Tree maps can help students sort out the character relationships and paragraphs of the article, and quickly find relevant arguments under the theme. Venn diagram can summarize and classify multiple transaction groups. They are useful for showing how two things are similar and different. Plot mountains are used to plan and arrange the plot development design of an article in the same way as climbing a mountain. They allow students to connect the main information into a concept map during reading, so as to guide students to master the main characters (characters), plot (plot), background (setting), contradiction (problem) and solutions (solution) and other content, to achieve understanding the purpose of the text. Bridge Map is used to describe the similarity and relationship between things. Timelines can be used to help students keep events in chronological order [6].

Graphic organizers can help the students organize the information of the text differently based on the topic of the text. It can help students organize information in a good way and summarize information easily [7]. It can also increase the comprehension of text patterns. They guide the students to demonstrate the students' thinking process, easy to identify and classify the information as well [8].

3. New Senior English for China Student's Books

There are a total of eleven books in New Senior English for China Student's Books. One to five volumes are compulsory textbooks, which are used by Senior 1 and 2 students; six to eleven volumes are optional textbooks, which are used by Senior 3 students optionally. This paper will analyze the compulsory textbooks, that is volumes 1-5. Volumes 1-5 textbook each has 5 units and contains two parts: a student book and a workbook. The workbook is attached to the back of the student book.

4. Methods

This paper takes 1-5 textbooks as the research object. The author analyses the number of graphic organizers in three steps. The first step is to count the total number of graphic organizers in each textbook: count the total number of student books first, and then count the total number of workbooks. The author compares the number of graphic organizers in volumes 1-5 to see which volume has the most and which has the least. The second step is to count the number of graphic organizers in each teaching part of the textbook first. Then the author compares the number of graphic organizers in each part to see which part has the most and which has the least. The third step is to count the types of graphic organizers in each textbook: count the number of types in each

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student book, and then count the number of types in the workbook. The author analyses which types of the graphic organizers are the most and which types are the least.

5. Results

5.1. Numbers of Graphic Organizers

Altogether there are 148 kinds of Graphic Organizers in these five textbooks (see Figure 1). There are 76 Graphic Organizers in the Students' Book and 72 Graphic Organizers in Workbook.

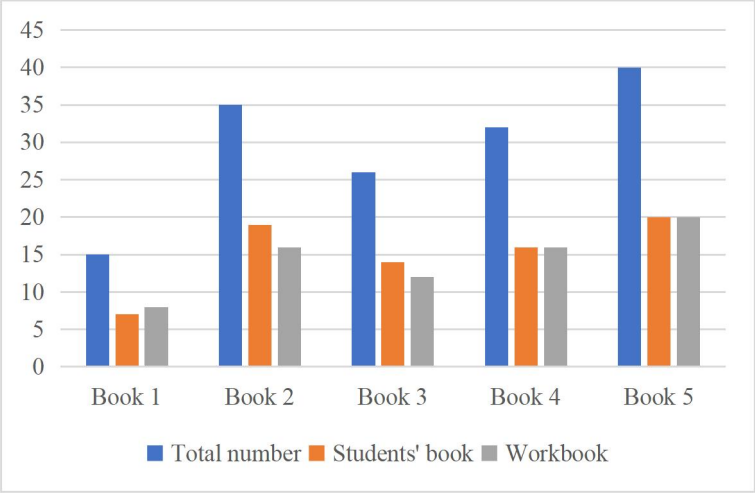


Figure 1: Numbers of graphic organizers.

Of the total number per book, Book 5 has the highest number of graphic organizers, which is 40, followed by Book 2 and the total number is 35. The third one is Book 4 and the total number is 32. The fourth one is Book 3, which has 26 graphic organizers and Book 1 has the least, which has 15 graphic organizers.

The number of student books and activity books were counted respectively, and the Book 5 contained the most graphic organizers, followed by Book 2. Book 3 and Book 4 have almost the same number while Book 1 has the least number.

5.2. Numbers in Each Part

In the Students' Book, each unit has different parts. Some have 8 parts, and some have 9 parts. The name of each part sometimes is different. In order to sum up the same parts numbers, the author divides those parts into 12 parts, which are: Warming up; Pre-reading; Comprehending; Learning about Language; Discovering useful structures; Using Language; Writing; Reading, speaking and writing; Speaking and writing; Reading and Writing; Listening and Speaking; Listening, speaking and writing.

In the Students' book, the "Comprehending" part has the greatest number of graphic organizers, which is 23. The "Using language" part is the second, 15; the third one is the "Discovering Useful Structures", 11. The "Learning about language" part has 10 graphic organizers and the "Warming up" part has 9 graphic organizers (see Figure 2).

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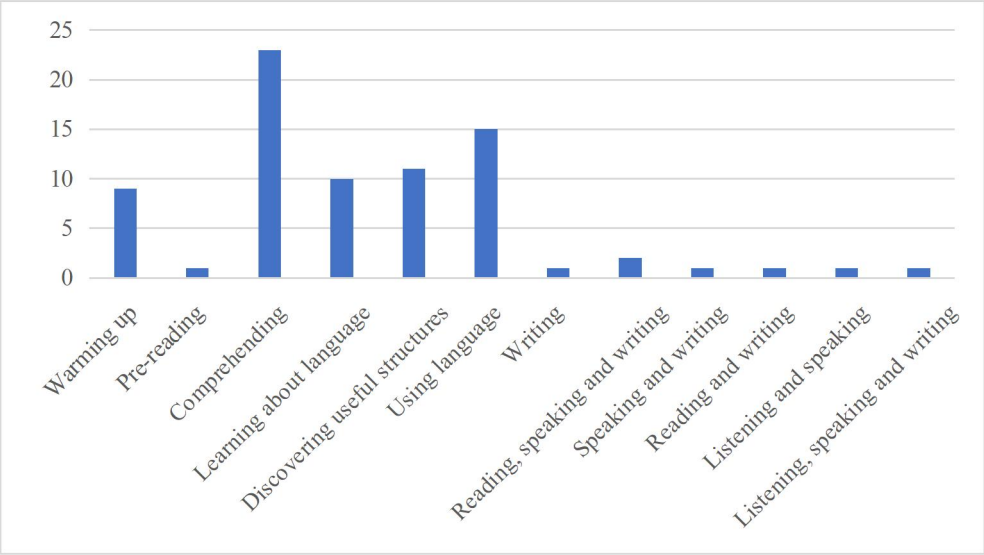


Figure 2: Numbers of graphic organizers in each part of the students' book.

In the Workbook, there are 9 parts, which are Listening Task, Listening, Reading Task, Speaking Task, Talking, Writing Task, Using Words and expressions, Using structures, and Project. Since "Listening task" and "Listening" are all about listening, the author puts the two parts together to count the quantity and the total number is 31. The "Reading task" is the second one, which has 19 graphic organizers. "Talking" and "speaking task" are all about speaking, so the author also puts the two parts together to count the quantity and the total number is 8. The "writing task" is the next and the number is 5. "Using words and expressions" and "Using structures" has 4 and 3 numbers respectively. The last one is the "Project" part, which has 2 graphic organizers (see Figure 3).

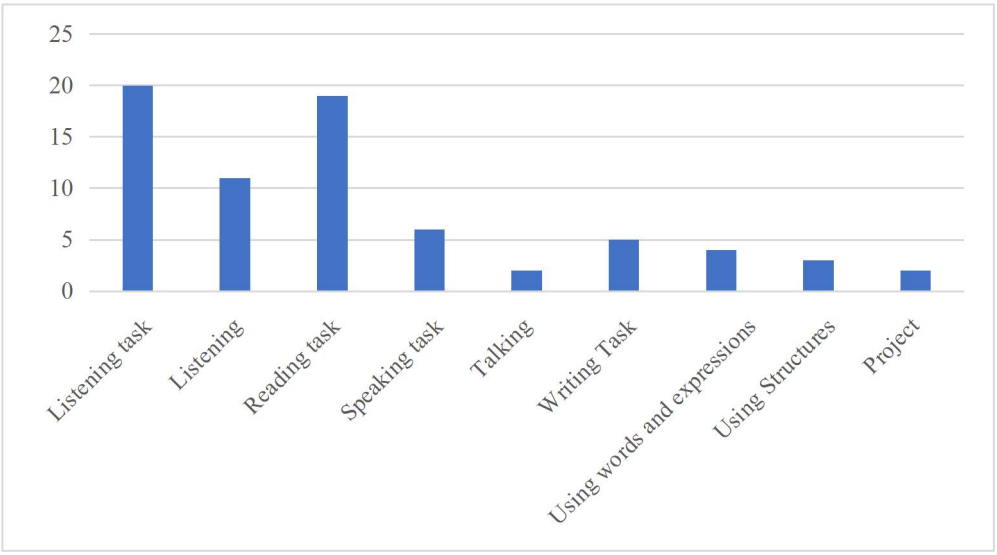


Figure 3: Numbers of graphic organizers in each part of the students' book.

5.3. Numbers of Different Graphic Organizers

In Books 1-5, there are 6 different kinds of Graphic Organizers: T-charts, Bubble Maps, Venn diagrams, Bridge Maps, Timelines and Map. Of all the types, T-charts has the largest proportion, and it has 135 graphic organizers. The other 5 types altogether have 13 graphic organizers (see Figure 4).

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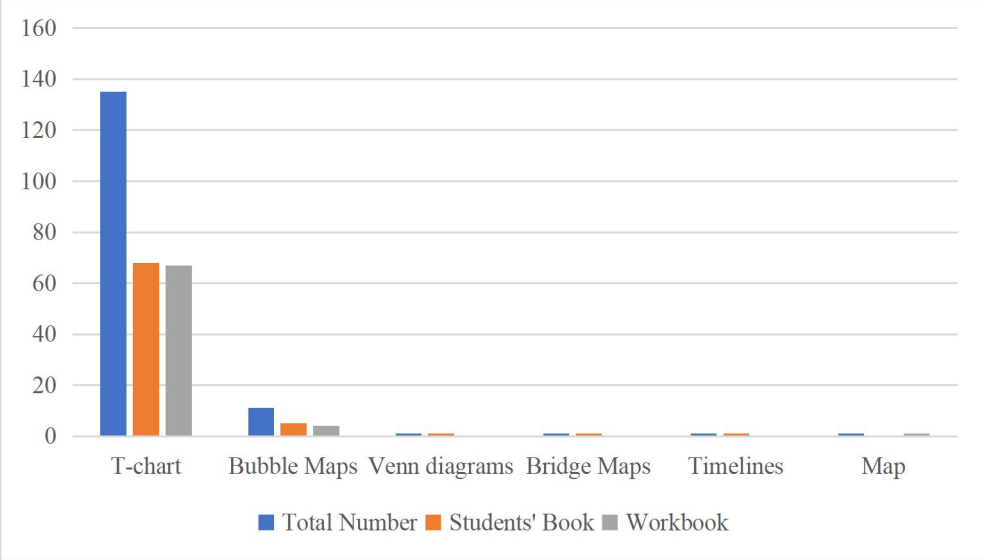


Figure 4: Numbers of different graphic organizers in each book.

6. Discussion

6.1. Numbers of Graphic Organizers

Among the five books, Book 5 has 40 graphic organizers, but Book 1 only has 15 graphic organizers. The numbers vary too much. It is recommended to balance the number of graphic organizers per book. In fact, the earlier students encounter graphic organizers, the sooner they can master skills and develop certain thinking skills. There are already graphic organizers in some textbooks for elementary school students and for junior middle school students. But in high school textbooks, there are only 40 graphic organizers in Book 5. That means, students in the second year of high school can meet more graphic organizers, which may seem a little later. It is recommended that more graphic organizers be added during the first year of high school.

6.2. Graphic Organizers in Each Part

6.2.1. Students' Book

Of the different teaching parts, the "Comprehending" parts has the most graphic organizers. It may be because reading has always been the focus of English teaching. Not only in teaching, teachers will spend a lot of time explaining reading strategies, reading skills, and reading problem-solving ideas, but also in exams, reading also accounts for the largest proportion. Among the exam questions of each grade and each province and city, reading has the highest score. What's more, the research on English textbooks is also more focused on reading. Most studies discuss the cultivation and application of critical thinking in the reading module of English textbooks, and about 81% of the studies focus on the reading module [1]. Because of the importance of reading in people's minds, this is probably one reason why graphic organizers make up the most in reading.

In students' Book, the "listening, speaking and writing" parts have the least graphic organizer. The author thinks that is because listening, speaking and writing skills need students to practice more. So more graphic organizers will be put in Workbooks. From this point, it is reasonable.

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6.2.2. Workbook

In workbooks, the "listening" parts (including listening) have the most graphic organizers. The "Reading task" is the second. As the above mentioned, reading is the most important in every book. Both listening and reading are input. They both belong to receptive and comprehensible language use processes. Most of the listeners and readers use the "top-down" and "bottom-up" modes to carry out positive thinking activities when comprehending the text. In the process of listening comprehension, sometimes a keyword or phrase helps the listener to understand the overall content; sometimes it uses the relevant knowledge that the listener already has to deal with the details, decode the language material and make various inferences. In the process of reading comprehension, the reader does not passively accept the text information, but makes full use of the existing knowledge structure to make predictions according to the clues provided by the text; uses the context content to confirm or revise the initial prediction, and at the same time prepare for the next step, predictions [9]. Using graphic organizers can help students to understand the overall content, and help them to make predictions according to the clues provided by the text. That's why the listening part and the reading part have the most graphic organizer.

The third most and the fourth part is the "speaking" part (including talking) and the "writing task" part. Although the speaking part and the writing task are the third and the fourth (only has total number of 6 graphic organizers), speaking and writing are also very important skills. Different from reading and listening, speaking and writing are output. In the process of language acquisition, input is the premise and foundation of output. Learners must first be able to understand English before they can produce language. However, only relying on input cannot truly internalize the language. Teachers must pay attention to the relationship between input and output, to improve students' comprehensive language application ability. Simply relying on input cannot acquire language well, and output also occupies a large position in language acquisition, and to some extent, language output can also promote language input [10].

The output requires more organizational thinking. In speaking and writing, the advantages of a graphic organizer are: it can clearly reflect the overall structure of the text and the use of cohesion, and it is helpful to analyze the model essay and conceive the structure of the text; it helps to develop students' associative thinking ability and expand writing ideas, thereby increasing students' sense of relevance to English context and language organization ability; it helps to cultivate students' divergent thinking ability and innovative thinking. Using a graphic organizer can help develop ideas, think about content, organize language, and more logically output ideas [11]. Therefore, the textbook should have more graphic organizers for speaking and writing task.

As for "using words and expressions" and "Using structures" part, there are the least graphic organizer. "Using words and expressions" and "Using structures" parts mostly are about learning grammar. English grammar is a difficult point for Chinese students to learn. Many students think that learning grammar knowledge is complicated, confusing and boring, and some students even give up learning grammar knowledge directly [12]. But if there are more graphic organizers in these two parts, the students can use them to study, practice and review the grammar knowledge. In this way, they can learn grammar better and promote systematic and integrated knowledge.

6.3. Numbers of Different Graphic Organizers

Graphic Organizers have many different types. But in the textbook, there are only six types and in which, T-charts are the most. The other types of graphic organizer are less. As mentioned above, different graphic organizers have different functions, and they are used in different scenarios. If the students only use T-charts to organize their ideas, they cannot develop a variety of thinking modes. The students may only organize ideas in a T-chart, but cannot do brainstorming by using a bubble

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map or cannot write something in order. So, the textbooks should include more types of graphic organizer.

7. Conclusion

This paper took textbooks 1-5 of the New Senior English for China Student's as the research object, and studied the number of graphic organizers in the textbooks. The study found that the number of books in each volume is not balanced; the number in each teaching part is uneven, the number in reading teaching is large, but the number in listening, speaking and writing is small; and the types of graphic organizers are relatively simple, T-charts are mostly, but few other types. It is suggested that the design of textbooks in the future can balance the number of books in each volume, the number of teaching links in each part, and the number of different types of graphic organizers.

This paper has some limitations. First, the research on textbooks in this paper is only aimed at the 1-5 volumes of the high school of the New Senior English for China Student's. Each textbook has its own characteristics, and all textbook series cannot be regarded as the research results of compulsory one. However, the compulsory series also have something in common. This paper can provide a reference for the research of the compulsory series. Second, the research is only a study of teaching materials, and there is a lack of investigations on teachers and students. In the future, empirical research can be added to better understand teachers' and students' understanding of graphics in teaching materials. the organizer's view.

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