

College students' Use of Metacognitive Strategies in the Process of Answering Banked Cloze Questions

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Abstract: In English reading, Banked Cloze has always been the key and difficult point in the examination. Students generally report that Banked Cloze is quite difficult to handle. The purpose of this study is to clarify the relationship between reading comprehension and metacognitive strategies in Banked Cloze, and to understand how college students use metacognitive strategies in Banked Cloze test, so as to find effective methods to help college students' English reading in their CET.

Keywords: College students; Metacognitive strategies; Reading comprehension; Banked cloze

1. Introduction

Recent years, in domestic and at abroad, many researchers emphasize on the importance of metacognitive strategies in effective English reading. For college students, it is necessary to know whether there exist any problems in the use of metacognitive strategies in their English reading and learn proper metacognitive reading strategies, realistically, to pass the examination--- College English Test Band 4 (CET4) and College English Test Band 6 (CET6). Reading is a complicated mental process during which the brain has to use multiple language systems such as morphology, syntax and phonology and employ one's other background knowledge at the same time. According to Cross and Paris (1988) [1], reading is a powerful activity, which requires the coordination of multiple cognitive strategies to decode, understand and learn from reading materials. This study focus on one of the CET4 testing type---Banked Cloze, which need effective metacognitive strategies to see the text of cloze test as a whole, involve him/ her into the context, and hold a deep comprehension instead of only making choice from just one sentence.

2. Metacognitive Strategies and Banked Cloze

2.1. Metacognitive Strategies

Brown(1983)^[2] defined Metacognitive Strategies as“high-level executive skills, including planning, monitoring and evaluating the success of learning activities” and he also distinguished metacognitive strategies from metacognitive knowledge, and the former are some general skills through which students manage, direct, regulate and guide their language learning, while the latter refers to information that language learners acquire about their learning. Wenden (1998)^[3] defined it as “self-management strategies”, that is, the management skills learners use to supervise and manage their learning. According to Ellis (1994)^[4], metacognitive strategies are learners' using knowledge about cognitive process and regulating their language learning process by planning, monitoring, and evaluation. Cohen(2000)^[5] pointed out that “metacognitive strategies involve pre-assessment and pre-planning, on-line planning and evaluation, and post-assessment of participants' language learning activities and language use events. Coskun(2010)^[6] noted that Metacognitive Strategies contain reflections on learning process, making one's learning plan, monitoring one's learning behavior and self-evaluation. According to O'Malley and Chamot (2001:137)^[7], Metacognitive strategies include thinking about the learning process, planning learning, monitoring learning in the learning process or self-assessment after the completion of tasks. Although there are slight differences among these definitions, planning, monitoring and evaluation are always included in these definitions. Researches on Metacognitive strategies can help students to learn how to learn and to become the guider of their own learning by cultivating the habit of setting goals, making learning plans, selecting specific strategies, self-monitoring, self-evaluating, and self-adjustment. Classification of Metacognitive

strategies in this thesis is concluded in *Table 1* as below.

Table 1. Classification of Metacognitive Strategies in this thesis

Metacognitive strategies	Categories
Planning	Selection of appropriate strategy
	Allocation of resources
Monitoring	Metacognitive awareness (feeling of knowledge)
	Comprehensive monitoring and controlling
	Making dynamic metacognitive judgment
Regulating/Evaluating	Regulating learning behavior
	Evaluating learning process

2.2. Banked Cloze

Gestalt psychologists believe that psychology studies from two aspects: direct experience and behavior. The Gestalt organization law proposed by the Gestalt school suggests that humans can organize empirical materials into an important whole in some way. Because the whole is not simply formed by the sum of each individual part, but rather the latter is influenced by the structure and characteristics of the whole. In this regard, Gestalt psychology is the theoretical basis of cloze test or cloze procedure. In Wikipedia, it is interpreted as the 'law of closure'. Gestalt psychology believes that when people observe the shape of an object, they will subconsciously fill in the vacancy and regard it as a complete shape.

The cloze test was first put forward by Wilson Taylor in 1953 on the basis of Gestalt psychology and Banked Cloze is one of Cloze test. Darnell^[8] believe that gaps in sentences or articles are similar to gaps in graphics, and people tend to fill them in when reading. Gestalt psychology believes that learning is also a kind of Gestalt in essence. In this process, people's understanding of the relationship between situations can achieve psychological Gestalt. Because of the advantages in reliability, objectivity and feasibility of the cloze test, it has been more and more widely used in foreign language testing. Choosing words to fill in the blank is a reasonable form of deleting words to fill in the blank. Heaton^[9] described the characteristics of this cloze in the book *Writing English Language Test*. "In this cloze, some words, such as function word, verbs or nouns, are selectively and subjectively deleted according to the needs of the test design, and then candidates should complete the word selection and fill in the blanks as required". Because of this, students generally feel that it is more difficult to complete the discourse type word selection and fill in the blanks. In terms of specific applications, Purya and Hamdollah^[10] advocated that syntax, main idea, detailed reading, and inference and judgment are all derived cognitive processes, and reading analysis of discourse can help observe the abilities exhibited by candidates in these processes.

3. Result and Discussion

3.1. Use of Metacognitive Strategies in the Process of Answering Banked Cloze Questions

Think-aloud is one of the research methods to observe students how to use learning strategies. Participants need to speak their thinking activities out while completing the task, by which researcher could discover learners' psychological activities and the learning strategies even being not realized by learners themselves (Wen 2003:221).^[11] This study begins with observing students' thinking activities and psychological reactions in the process of answering Banked Cloze Questions in CET 4, gaining an understanding of the application of metacognitive strategies in students' reading process, and exploring effective teaching methods for solving cloze problems in Sophomore from the perspective of metacognition. Six sophomores from North Sichuan Medical College, including three girls and three boys, were selected as the subjects of this study. Through analysing from the think-aloud activities of six students and immediate interview, metacognitive strategies students used in thier reading process of Banked Cloze were concluded in Table 2.

Table 2: Metacognitive strategies Six students used in the reading process of Banked Cloze

Number	Description of MS students used	Participants
1	Scan the whole text before starting reading	A1 B2
2	Predict based on personal understanding	B1 B2 C2
3	Make choice after reading one or two sentence, ignoring blanks	A2 B1 B2 C1 C2
4	Make choice after reading one paragraph or even more, ignoring blanks	A1 A2
5	Apply different learning method in different reading material	A1 A2 B2
6	Allocate time and attention appropriately	A1 A2 B1 C2
7	Make inference from context	A1 A2 B1 B2 C2
8	Make inference from sentence structure	B2 C2
9	Make inference with the sense of life	A1A2 B1 B2C1
10	Make notes (e.g. underlining, circling, ticking)	A1 A2 B1 B2 C2
11	Understand text from key points	A1 A2
12	Line key sentence of a paragraph out	A1
13	Make choice based on the logic of text	A1 A2 B1 B2 C2
14	Check whether the text is fluent and smooth with selected answers	A1 A2 B1 B2
15	Revise blanks after reading following contents	A1 A2 B1
16	Fill former blank based on the understanding of latter blank	A1 A2 B2
17	Speed up at the end of test	A1
18	keep an even speed while reading and don't spend time thinking one blank over about 2 minutes	A2 B1
19	Quickly review text with selected answers after finish test	A1 B1 B2
20	Make conclusion about the false choice	A1 A2 B1
21	Rethink personal weak points	A1 A2 B1 B2
22	Give self-evaluation about test performance to enhance belief	A1 A2
23	Apply good reading method into following study	A1 A2 B1 B2

Notes: A1=Student 1of Level A A2=Student 2of Level A

B1=Student1 of Level B B2=Student 2 of Level B

C1=Student1 of Level C C2=Student 2 of Level

The study found that not all the strategies were applied by six participants, six students were able to frequently arouse their metacognitive awareness in the process of answering the cloze questions; however, only two of them realized to make an evaluation about the reading process. The results revealed that students of Level A employed metacognitive strategies more frequently than students of Level B and Level C. Besides, the qualitative results of think-aloud protocols also showed that higher English proficiency students utilized metacognitive strategies more frequently than lower English proficiency students. These shed light on the fact that successful learners are higher strategy users. Frequency of each metacognitive strategy used by six students are showed in Table 3. Six sophomore students at whichever reading level in the study could consciously or unconsciously apply certain metacognitive strategies more or less in the reading process of Banked cloze test. Most of them could make choice after reading one or two sentence, ignoring blanks; make inference from context; take notes (e.g. underlining, circling, ticking), make choice based on the logic of text. Higher level students could scan the whole text before starting reading, make choice after reading one paragraph or even more, ignoring blanks, line key sentence of a paragraph out.

Table 3: Frequency of each metacognitive strategy used by six students

Metacognitive strategies	Description	Frequency
Planning	Selection of appropriate strategy	7
	Allocation of resources	11
Monitoring	Metacognitive awareness (feeling of knowledge)	23
	Comprehensive monitoring and controlling	9
	Making dynamic metacognitive judgment	4
Regulating/Evaluating	Regulating learning behavior	8
	Evaluating learning process	3

From Table 3, it can be summarized that six students can frequently awaken their psychological and cognitive awareness during the process of answering the word selection and filling in the blank questions; however, only two of them realized the need to evaluate the reading process. Only one student can use planning strategies to Select appropriate strategies and allocate the sources.

3.2. Correlation of Metacognitive Strategies and Test Performance in this study

It can be concluded that students with high test scores can frequently use metacognitive strategies in the process of answering Banked Cloze questions in CET 4. However, for students with lower scores in Banked Cloze, they use less metacognitive strategies. In this regard, it can be said preliminarily that students' cloze scores are positively correlated with the application of metacognitive strategies. The correlation analysis of the application of metacognitive strategies and students' cloze test performance is shown in Table 4 below.

Table 4: Correlations analysis of MS application and test performance

			Test Performance	Sum
Kendall's tau_b	Test Performance	Correlation Coefficient Sig. (2-tailed) N	1.000	.881 *
			.	.022
			6	6
	Sum	Correlation Coefficient Sig. (2-tailed) N	.881 *	1.000
			.022	.
			6	6
Spearman's rho	Test Performance	Correlation Coefficient Sig. (2-tailed) N	1.000	.907 *
			.	.013
			6	6
	Sum	Correlation Coefficient Sig. (2-tailed) N	.907 *	1.000
			.013	.
			6	6

*. Correlation is significant at the 0.05 level (2-tailed).

According to table 4, the application of metacognitive strategies was positively related to the test performance ($P=0.022<0.05$; $P=0.013<0.05$). Combining qualitative and quantitative analysis, it can be concluded that firstly, for high level students, they apply metacognitive strategies more frequently than low level students, especially using "monitoring" and "adjusting" strategies. Secondly, for most students, the more frequently they use metacognitive strategies; they can achieve better test results. In summary, the application of metacognitive strategies is positive related to college students' Banked cloze test 'performance in their CET4 or CET6.

4. Conclusions

This study conducted a study on one aspect of college students' reading in CET4 - word selection and filling in the blanks (Banked Cloze) - to observe whether students applied metacognitive strategies and how they used them in the process of answering Banked Cloze questions in CET 4. Through thinking-aloud and immediate interview, this study found that six students used "monitoring" and "moderation" strategies more frequently than "planning" strategies. It can be concluded that through the application of "regulation" or "evaluation", for students who can perform well or excellently in Banked Cloze tests, they can apply certain metacognitive knowledge and strategies during reading. That is to say, to some extent, metacognitive strategies are more or less related to the test scores of Banked Cloze tests in CET4. On this basis, research has proven that applying metacognitive strategies in Cloze reading is meaningful. The conclusion drawn from this study is that the test scores of Banked Cloze may be influenced by many factors, and the application of metacognitive strategies is one aspect of it.

Based on this, this study confirms the view that the effective application of metacognitive strategies in the reading process of Banked cloze can improve students' reading comprehension while coping with word selection and help them achieve relatively good test score. Therefore, it is necessary for college teachers to combine the training of metacognitive strategies with daily teaching. College English teachers and students should be aware of the significance of metacognitive strategies in their language teaching and learning. English teachers should update their understanding of language learning strategies and emphasize the importance of metacognitive strategies which will make students' learning more effective. Besides, college English teachers should train students' metacognitive strategies through think-aloud method and learner autonomy should be emphasized throughout the college education.

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