Application of Metacognitive Strategy to Primary Listening Teaching

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Abstract: It is of vital importance that our students should be taught to listen effectively and critically. This essay focuses the metacognitive strategy in listening and an empirical study of the application of metacognitive strategy to primary listening teaching is made.

1. Current Situation
According to the observations in Jie Fang Primary School, Lie Shimu Primary School and Shu Ren Primary School, usually many primary English teachers conduct listening course in nearly the same way. They present and explain some vocabulary items, which are assumed to be new to students, then play the tape once or twice. So, teachers often function as “cassette players”. After that, listening exercises in the textbooks are required to be done. Listening exercises, which are similar to one another in different units, are always matching, filling in the blanks or ticking off the correct answers. Most students complain listening is energy-consuming as well as time-consuming.

2. Metacognitive Strategy in Primary English Listening
The prefix ‘meta’ literally means ‘beyond’. Metacognition therefore means ‘beyond cognition’. Weinert describes metacognition as "second-order cognitions: thoughts about thoughts, knowledge about knowledge, or reflections about actions" (1987, pp. 8, cited from Hartman, 1998, pp. 1). Metacognitive strategy has a hierarchical relationship among metacognitive, cognitive and social/affective strategy. (Brown, 1983; O’Mally & Chamot, 1990; Purpura, 1997) O’ Malley and Chamot give a detailed division of metacognitive strategy. Among the main metacognitive strategy, advance organizers, directed attention, selective attention, self-management, advance preparation, self-monitoring, delayed production, self-evaluation and self-reinforcement are included. Although a literature on the study of metacognitive strategy does exist, the application of metacognitive strategy in recent years has only been restricted in the fields like reading and writing in language acquisition, mathematics and other subjects. In the current study, the metacognitive strategy of primary listening is focused to try to find out an effective way to promote students’ metacognitive awareness, help students to use it in English learning and then finally lead to the improvement in students’ listening performance.

Because of the importance of metacognition and the characteristics of primary school students, it is necessary and feasible for these young students to learn metacognitive strategy to improve their listening performance. However, it has not been testified whether primary school students will also improve their listening by teaching metacognitive strategy. Through the empirical study, major findings are to be obtained to offer valid answers to the research questions as follows: Whether there is
a correlation between metacognitive strategy and primary listening comprehension achievement? Whether the primary school students who accept metacognitive strategy based training in English listening will develop listening ability more quickly than the students who do not accept the training?

3. Design of the test

3.1 Hypothesis
Based on the tentative model about the metacognitive strategy for primary English listening, the hypotheses is that metacognitive strategy has positive effects on primary English listening and finally improves primary school students' listening ability.

3.2 Participants
One hundred and ten students (55 boys and 55 girls) from Grade Four of Jie Fang Primary School of Chongqing participated in this study. They were aged between ten and eleven. The reasons why I chose primary students of Grade Four as the subject goes as follows: they had the similar English learning experience. Although nowadays there are some primary even pre-school students studying English, such as Cambridge English, beyond school, from the questionnaire, almost of the participants in this study had learned English for one year. In primary school, they used the same English materials, had the same amount of English classes (three times per week) and took part in the same English examinations. Second, Most primary schools in Chongqing begin English course from Grade Three, but in the first year, primary school students contact only words and greetings, so the English listening tasks are very limited. In Grade Four, students begin to learn meaningful sentences, listening tasks are interesting and the listening exams are becoming difficult for students. Third, since they have only studied English for one year and just begin to learn meaningful sentences, they have not formed a fixed study habits or study techniques. That means it is probable for the teachers to give them some metacognitive strategy training.

The participants were divided into two groups: one class of 54, with 26 girls and 28 boys, comprised experimental group and received the training on metacognitive strategy centered model in English listening classroom. The other class of 56, with 29 girls and 27 boys, comprised comparison group, which received traditional English course. Unlike university students, primary school students do not have special listening classes. However, listening is very important in primary English, so the experimental and comparison groups had two English listening classes per three weeks. All the students are appointed to take Primary English as their course books and proper materials prepared by author.

3.3 Instruments
Listening comprehension tests was involved in the present study. By using this, data regarding students’ use of metacognitive strategy and students’ listening proficiency were collected respectively.

Both the pre-test and post-test were held to measure the subject’s comprehension proficiency. The listening comprehension tests’ components were randomly selected from the united final exam of Yuzhong district of Chongqing for grade four. The united final exam of Yuzhong district is a proficiency test whose authority is recognized in the city. All the primary schools of Yuzhong district use the united exam to test the students’ English proficiency. The reliability and validity have lived up to the requirement. Moreover, it has been found that the complexity of a language is related to the frequency of strategy use. When the language task is difficult, learners tend to use metacognitive strategy mostly in order to ensure a success. When the task is too easy learners need not to use metacognitive strategy. For sometimes it does not require a cognitive process, let alone metacognitive process. Thus, the task requirement should be considered thoroughly. Each of the listening tests consists of two passages with twenty blanks in total. The listening test was designed in a one-hundred score scale, thus each blank was assigned a score of five.
4. Procedure of the research

Both the experimental and comparison groups followed the routine syllabus when the metacognitive strategy-centered model was being carried out in the experimental group. At the very beginning of the training, a pre-test were given to every student in both the groups to serve as the start point for the comparison of the results of present pedagogy with the results at the end of experiment. Then, after a semester’s training, all the subjects would take a post-test which resembled the parts of the pre-test in pattern, difficulty and time limitation.

The survey was conducted by the author herself during the students’ regular English classes in 2016. The listening tests were carried out in the students’ class time. The participants were informed about the purpose of the test and they were assured that their performance would be used for research purpose only and the scores of the tests had no relation with the final scores of the course. The researcher was all along in the classroom to ensure that the subjects could fully understand what they were supposed to do and that they finished the test on their own. They were not permitted to discuss with each other. No discussions or references were allowed to use during the process of the tests. At the end of the tests, all test papers were collected on time no matter the students had finished them or not. Finally, researcher examines the answers one after another. All the data are processed with the program SPSS 13.0.

SPSS 13.0 was used to analyze the data to present the results from pre-test and post-test. Based on the results, the controlled class and the experimental class are compared. The standard of \( p < .05 \) was adopted to determine significances throughout the study. That is to say, a relationship can be regarded as statistically significant if the results are significant at the special alpha of .05 (i.e., probability of chance occurrence). This means that a result is considered statistically significant if it could have occurred by chance fewer than 5 times out of 100.

In order to measure the subject’s comprehension proficiency, both the pre-test and post-test were held. The data was also processed by SPSS 13.0. The results are in the following table.

| Table 1. The score of the controlled class in the pre-task test |
|------------------|----------------|----------------|-----------|----------------|
|                  | N              | Minimum        | Maximum   | Mean        | Std. Deviation |
| Score            | 54             | 40.00          | 85.00     | 64.0741     | 11.03485      |
| Valid N (list wise) | 54             | 54             |           |             |               |

| Table 2. The score of the experimental class in the pre-task test |
|------------------|----------------|----------------|-----------|----------------|
|                  | N              | Minimum        | Maximum   | Mean        | Std. Deviation |
| Score            | 56             | 45.00          | 80.00     | 64.6429     | 8.13841       |
| Valid N (list wise) | 56             | 56             |           |             |               |

Each of the listening tests consists of two passages with twenty blanks in total from the united final exam of Yuzhong district. The listening test was designed in a one-hundred score scale, thus each blank was assigned a score of five. According to Table 1 and Table 2, the mean score of the controlled class in the pre-task test is 64.0741 and that of the experimental class is 64.6429. The minimum score of the controlled class is 40 and the maximum is 85, while the minimum of the experimental class is
45 and the maximum is 80. These figures show that the controlled class and the experimental class have little difference in their listening comprehension before the study.

In the next term, the controlled class continues to receive traditional education while the experimental class learns English listening in the metacognitive strategy-centered model. All the two classes are in the charge of the same teacher. At the end of the term, all the participants have the post-task test which is also related to listening comprehension. The post-task test is also chosen from the united final exam of Yuzhong district. It also consists of two passages with twenty blanks in total. The listening test was designed in a one-hundred score scale, thus each blank was also assigned a score of five. The data was also processed by SPSS 13.0. The results are in the following table.

| Table 3. The score of the controlled class in the post-task test |
|-----------------|-------|-------|-------|-------|
| Score           | N     | Min     | Max     | Mean   | Std. Deviation |
|                 |       |         |         |       |               |
| Score           | 54    | 40.00   | 85.00   | 66.8519| 9.91931       |
| Valid N (listwise) | 54    |         |         |       |               |

| Table 4. The score of the experimental class in the post-task test |
|-----------------|-------|-------|-------|-------|
| Score           | N     | Min     | Max     | Mean   | Std. Deviation |
|                 |       |         |         |       |               |
| Score           | 56    | 70.00   | 100.00  | 86.5179| 7.06590       |
| Valid N (listwise) | 56    |         |         |       |               |

According to Table 3 and Table 4, we can see that as a whole, the students of the experimental class performed much better than the students of the controlled class. The mean score of the controlled class in the post-task test is 66.8519, which is much lower than that of the experimental class, 86.5179. The minimum score of the experimental class is 70 and the maximum is 100 while the minimum score of the controlled class is 40 and the maximum is 85. These two figures show that the experimental students’ listening comprehension is high. It is clear that the participants from the experimental class are much better in listening comprehension performance than the controlled class.

5. Conclusion
The study was carried out both quantitatively and qualitatively. When testing the effect of metacognitive strategy, listening comprehension test was used in this research for data collection. Data obtained seem to suggest that the training can improve the primary students’ awareness of metacognition, equip the learners with metacognitive strategy, and finally improve students’ listening proficiency.

Although the results of the experiment show that metacognitive strategy training in primary English listening instruction indeed facilitate listening comprehension. There are still some limitations of the experiment in the depth and width.

Firstly, the experiment is conducted for only one term. It is not long enough.

Secondly, the scale of the subjects is small. In the current study, only 110 primary school students from the same school are participated. These may influence the statistical results.

Moreover, many other variables which may yield somewhat different findings concerning the relationship between metacognitive strategy and listening proficiency, such as gender, learning styles,
attitude and motivation, are not concerned in this study.

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References
[1] Brown, A. & Baker, L. (1983). The role of metacognition in reading and studying. In Orsany, J. (Eds.). Reading comprehension: From research to practice. Hillsdale, NJ: Lawrence, Erlbaum.
[2] Hartman, J. J. (1998). Metacognition in teaching and learning: An introduction. Instructional Science, 26, 1-3.
[3] O’Malley, J. M. & Chamot, A. U. (1989). Listening comprehension strategy in second language acquisition. Applied Linguistics, 10, 418-435.
[4] O’ Malley, J. M. & Chamot, A.U. (1990). Learning Strategies in Second Language Acquisition. Cambridge: Cambridge University Press.
[5] Purpura, J. E. (1997). An analysis of the relationships between test-taker’s cognitive and metacognitive strategies use and second language test performance. Language Learning, 2, 289-325.