An Investigation into the Metacognitive Strategy Use in ESL Writing: A Case Study

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Abstract. The study aims to investigate the metacognitive strategy use of 93 Chinese college students in the ESL writing. The researcher used a questionnaire to the most and least used metacognitive strategies of all subjects, and conducted semi-structure interviews with three successful writers and three unsuccessful writers to explore the differences in the metacognitive strategy use of the two groups. The finding shows that the strategy of selective attention was the most frequently used while self-evaluation the least. Successful writers were active in using functional planning, selective attention, self-monitoring but inactive in self-evaluation, while unsuccessful writers were negative in using all the above strategies.

Introduction

Writing is one of the basic literacy skills that need to be mastered in SLL. The acquisition of writing itself is involved with various cognitive factors, among which learning strategies are often highlighted. Since the 1980s, many researchers, represented by [6] and [9] have worked hard in identifying the features of the learning strategies and classifying a wide range of reported learning strategies in SLL. The present study adopts the identification and classification of learning strategies made by [6], which has won the support of many empirical researches. By referring to Anderson’s ACT model, [6] classify the learning strategies into three categories: metacognitive strategies, cognitive strategies and social/affective strategies. According to [7], “Metacognitive strategies involve thinking about learning process, planning for learning, monitoring of comprehension or production while it’s taking place, and self-evaluation of learning after language activity is completed.” [6] identify two major categories of metacognitive strategies: planning and monitoring. Planning strategies are further divided into advanced organizer, directed attention, functional planning, selective attention, self-management; monitoring strategies are subdivided into self-monitoring, self-evaluation. Studies [10] and [2] have shown that good use of metacognitive strategies in language learning plays an active role in stimulating the learning progress.

The present study aims to probe into the metacognitive strategy use of 93 college ESL learners in the writing context. The learners are divided into successful writers and unsuccessful writers according to their writing proficiency. It attempts to answer the following two questions:

1) What metacognitive strategies do the subjects use in ESL writing?
2) Are there any differences between successful writers and unsuccessful writers in the metacognitive strategy use?
Literature Review

Studies on metacognitive strategies in writing were mainly carried out in three domains: the identification of metacognitive strategies in the writing context; the relationship between metacognitive strategies and writing proficiency; the differences in metacognitive strategy use between successful writers and less successful writers.

O’Malley and Chamot [6] performed a four-semester longitudinal study with the purpose of identifying learning strategies in SLL used by students drawn from elementary, intermediate and advanced levels of language study. In the respect of metacognitive strategy in writing, they found that students elementary students planned more at phase level and tried hard to make their work comprehensive; intermediate students focused more on planning and monitoring their style.

Mu Congjun and Carrington [5] made an exploration of two metacognitive strategies used in writing by investigating three Chinese students’ English writing strategies: planning, monitoring and evaluating. The three subjects all agreed that a good writing plan could facilitate writing and it’s necessary to have a holistic evaluation of the written work from different aspects in writing such as word, grammar, the arrangement of structure etc.

Kasper [3] studied the relationship between metacognition (including person, task and strategy knowledge) and the writing proficiency of ESL students. The subjects were 120 ESL students of intermediate and advanced level. According to the finding, there was a significant positive correlation between metacognitive strategy use and L2 writing proficiency, which further supported the prior study of [1]. In China, Lu Wenjun [4] investigated 120 seniors of English majors to analyze the relationship between metacognitive strategies and English writing proficiency, and found that metacognitive strategies played an active role in ESL writing proficiency and students with higher writing proficiency used metacognitive strategies more flexibly and frequently than those with low writing proficiency.

Methodology

Subjects

Subjects were 93 sophomores including 40 boys and 53 girls from the City College of Wuhan University of Science and Technology. They were from three different classes: Civil Engineering Class 2, Electric-Commerce Class 1, Applied Chemistry Class 1. Students’ age ranged from 19 to 21. They all had been studying English for six years before entering the college. It’s believed that they had developed relatively stable learning behaviors.

Instruments

*Questionnaire on Metacognitive Strategies in English Writing* was adapted from the one applied by [4]. On the basis of the identification and classification of metacognitive strategies made by [6], this questionnaire mainly investigated four categories of metacognitive strategies: functional planning, selective attention, self-monitoring and self-evaluation. The questionnaire was in a Likert format with 15 items, and each represented a metacognitive strategy possibly used. According to their own situation by choosing one figure from 1 (never use the strategy) to 5 (frequently use the strategy).

CET-4 writing test was used as the instrument to evaluate the English writing
proficiency of all subjects. Being held for more than 20 years, this nation-wide English test was among the most authoritative English tests to judge students’ English proficiency. Therefore, it’s convinced that CET-4 writing test can be a reliable and valid instrument for judging students’ writing proficiency.

**Procedures**

Subjects were assigned the writing task “On Students’ Selecting Lecturers” and required to finish it within 30 minutes. Then, Questionnaire on Metacognitive Strategies in English Writing were administered to all participants. Later, the compositions and questionnaires were returned upon completion. The compositions were marked by the researcher and another English teacher in terms of the standard for CET-4 writing evaluation and the average score was made to identify the writing proficiency of subjects. All the data was input into SPSS for data analysis.

To further investigate metacognitive strategy use, two subjects were chosen from each class for an interview. Three of them were on behalf of successful writers, while the rest three were representatives of unsuccessful writers. The compositions of successful writers were scored above 11 points, while those of the unsuccessful writers were scored below 7 points (the full score of the composition was 15 points).

**Results and Discussion**

**A Quantitative Study of the Metacognitive Strategy Use**

According to Oxford’s [9] key to understanding the average score of metacognitive strategy, strategy variables scored between 4.5 and 5.0 are regarded as “frequently used”, those between 3.5 and 4.4 seen as “always used”, those between 2.5 and 3.4 viewed as “sometimes used”, those between 1.5 and 2.4 considered “seldom used”.

Table 1. Descriptives of Writing Proficiency and Metacognitive Strategies.

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Writing Proficiency</td>
<td>8.9570</td>
<td>2.75805</td>
</tr>
<tr>
<td>Functional Planning</td>
<td>3.2276</td>
<td>0.81104</td>
</tr>
<tr>
<td>Selective Attention</td>
<td>3.6953</td>
<td>0.75606</td>
</tr>
<tr>
<td>Self-Monitoring</td>
<td>3.4247</td>
<td>0.73701</td>
</tr>
<tr>
<td>Self-Evaluation</td>
<td>2.6882</td>
<td>0.92528</td>
</tr>
<tr>
<td>Metacognitive Strategies</td>
<td>3.1937</td>
<td>0.62906</td>
</tr>
</tbody>
</table>

The means and deviations for the writing proficiency and metacognitive strategy scores of all subjects were presented in the table 1. Generally speaking, the average score for subjects’ writing was 8.9570, slightly lower than 9 points (the pass line for the writing test), which indicated that the overall writing proficiency of the whole subjects was low. With regard to metacognitive strategy use, the mean was 3.1937, suggesting that metacognitive strategies were used by students some times. Among different categories of metacognitive strategy, subjects rated the strategy highest for selective attention (M=3.6953) and the strategy lowest for self-evaluation (M=2.6882).
Table 2. Comparison of SWG and UWG.

<table>
<thead>
<tr>
<th></th>
<th>SWG M</th>
<th>SWG SD</th>
<th>UWG M</th>
<th>UWG SD</th>
<th>t</th>
<th>p(2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>WP</td>
<td>11.6522</td>
<td>0.72091</td>
<td>5.8065</td>
<td>2.21238</td>
<td>13.949</td>
<td>0.000</td>
</tr>
<tr>
<td>FL</td>
<td>3.6667</td>
<td>0.79682</td>
<td>2.9247</td>
<td>0.94950</td>
<td>3.267</td>
<td>0.002</td>
</tr>
<tr>
<td>SA</td>
<td>3.9540</td>
<td>0.52947</td>
<td>3.4839</td>
<td>0.82479</td>
<td>2.651</td>
<td>0.011</td>
</tr>
<tr>
<td>SM</td>
<td>3.7845</td>
<td>0.63289</td>
<td>3.1048</td>
<td>0.74099</td>
<td>3.808</td>
<td>0.000</td>
</tr>
<tr>
<td>SE</td>
<td>3.3241</td>
<td>0.61971</td>
<td>2.2968</td>
<td>0.74810</td>
<td>5.771</td>
<td>0.000</td>
</tr>
<tr>
<td>MS</td>
<td>3.6420</td>
<td>0.52064</td>
<td>2.8743</td>
<td>0.59583</td>
<td>5.299</td>
<td>0.000</td>
</tr>
</tbody>
</table>

SWG=Successful Writer Group; UWG=Unsuccessful Writer Group
WP= Writing Proficiency; MS= Metacognitive Strategies;
FL=Functional Planning; SA= Selective Attention; SM= Self-Monitoring; SE=Self-Evaluation

Table 2 presented the mean and deviation of the writing proficiency and metacognitive strategy of Successful Writer Group and Unsuccessful Writer Group. From the table, it could be observed that the ratings of SWG were higher than that of UWG in every variable. Independent T-test showed that there were significant differences between successful writers and unsuccessful writers in writing proficiency, general metacognitive strategy use and specific metacognitive strategy use. For the general metacognitive strategy use, successful writers were found to use metacognitive strategies more frequently than unsuccessful writers. The mean of different categories of metacognitive strategies for successful writer group ranged from 3.3241 to 3.9540. Except self-evaluation, the mean of the rest three categories of metacognitive strategies was above 3.5, showing that they were always used by subjects. Self-evaluation was used by the successful writers sometimes. The mean of different metacognitive strategies for unsuccessful writer group ranged from 2.2968 to 3.4839, indicating that those strategies were not often used in general.

This study showed that students with higher writing proficiency a better command of metacognitive strategy use than those with lower writing proficiency. However, How did the successful writers differ from less successful ones in using specific metacognitive strategies? A qualitative study was given to answer the above question.

**A Qualitative Study on Metacognitive Strategy Use**

This section presents the qualitative data obtained for the study. After the semi-structure interview, the metacognitive strategy use of three successful writers could be summarized as follows:

1) A pre-writing plan was necessary. The plan was conducted either in a rough or detailed way. The rough planning mainly referred to the listing of key words or key concepts on the scratch paper, while the detailed planning embraced the clear points and complete sentences grammatically right. All writers claimed that the pre-writing plan would help them clarify writing purpose and generate ideas.

2) The accurate language use was given particular attention. The content was thought to be generally desirable in the pre-writing stage, and the structure was a comparatively fixed one as the writers’ teachers taught them a variety of writing models for emulation. Therefore, the writers would like to be more concentrative on the language use such as spelling, diction and grammar.

3) Self-monitoring was conducted during the whole writing process. Writers reminded themselves to check the accuracy of the language use, but seldom showed much concern for the appropriateness of the content and structure.

4) Self-evaluation was made after the accomplishment of the writing but in a low frequency. The focus was mainly put on the weaknesses of the composition in
language use, idea organization, the overall structure etc. Writers expected more feedbacks from the teachers.

For unsuccessful writers, their use of metacognitive strategies turned to be rather inactive. The major findings were the following:

1) Pre-writing plan was barely made as it turned to be time-consuming. Instead, writers spared no effort to think about what to write next. In this case, they often displayed a “What Next Strategy” called by Cumming, the strategy of “questioning what else to write about after writing some ideas” (Cumming, 1983:113 cited in Victori, 1999:540).

2) The language use and structure of the composition was overlooked during the writing process. Writers just wanted to write as much as possible.

3) There was no checking in the writing process. Writers thought it was useless to check since they were not able to find out mistakes until teachers point them out.

4) Self-evaluation was never done after writing. Writers had an obvious negative impression on their writing, as they thought their work could never be qualified.

Successful writers possessed several shared features as follows: First, they generally had a good command of metacognitive knowledge. They're aware of their own writing problems (person knowledge), the requirement of writing task (task knowledge) and the approaches to solve the problems (strategy knowledge). Second, they’re in favor of pre-writing planning, indicating that they held a broad view of composing the writing task. Third, in the use of monitoring, they focused much on the language use in the writing process rather than the content and the structure, which reflected their learning belief that English writing was an activity closely related to language issue. Forth, they thought it’s the teacher that should be in charge of evaluation, which was a feature of product approach in the teaching of writing.

On the contrary, three unsuccessful writers didn’t like using metacognitive strategies on the whole. They also had something in common. First, they’re unable to identify their own writing problems, thus refused to use self-monitoring strategy or failed to use it. Both cases were related to the fact that they had a poor language foundation. Or rather, they’re lack of basic cognitive knowledge on language, the knowledge which helped them identify the problems. Second, “What Next Strategy” implied that they had a limited knowledge and a narrow view of the writing task. Third, their reluctance in evaluating their written products was largely associated with their deliberate avoidance of using it.

**Conclusion**

In sum, this study made an investigation of the metacognitive strategy use of 93 students in their ESL writing. Generally speaking, the subjects used metacognitive strategies in a mediocre frequency. Among four categories of metacognitive strategies, selective attention was the most frequently used one while self-evaluation the least. There were significant differences between successful writers and unsuccessful writers in metacognitive strategy use. Successful writers had a flexible use of metacognitive strategy, for they were equipped with sufficient metacognitive knowledge and a fairly good language foundation, while unsuccessful writers failed to use metacognitive strategies because of the inadequate language knowledge. The findings may give some pedagogical implications to the teaching of writing. First, teachers could deliver metacognitive strategy training to help students acquire a more effective use in metacognitive strategies; second, the language foundation should be strengthened in the teaching, as without sufficient language knowledge, students were
likely to fail in the metacognitive strategy use. Last, a multi-evaluating standard for writing should be introduced. Students should be taught to evaluate a composition from content, structure and language and find out their strengths and weaknesses.

References


