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Title	A protocol-based study of university-level Chinese EFL learners' writing strategies
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Source	<i>English Australia Journal</i> , 23(2), 37-56
Published by	English Australia

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# A Protocol-Based Study of University-Level Chinese EFL Learners' Writing Strategies

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*This paper reports on a small-scale study designed to investigate the writing strategies employed by undergraduates who were studying English as a foreign language (EFL) in a Chinese university. The study aimed to address three research questions: 1) Do skilled and unskilled Chinese EFL writers differ in their use of writing strategies? 2) Do their writing strategies vary as a function of the writing tasks that they are engaged in? 3) Do task types have a similar effect on the strategic behavior of skilled Chinese EFL writers and their unskilled counterparts? Data for the study consists of think-aloud reports collected from one unskilled and two skilled EFL writers while they were performing two writing tasks. Analyses of the transcribed protocols reveal important differences in strategy use between the skilled and unskilled writers and interesting patterns of variation between the writing tasks. The findings yield several implications for writing instruction.*

## *Introduction*

Since the early 1980s, it has been a widely accepted idea that second language (L2) writing teachers need to understand the processes of L2 writing and take them into account in writing instruction (Campbell, 1998; Hedgcock, 2005; Raimes, 1991; Susser, 1994). Early research into L2 composing (e.g., Arndt, 1987; Raimes, 1983, 1985, 1987; Zamel, 1982, 1983) yielded rich insights into the nature of L2 writing as a complex, non-linear, recursive process, the similarities and differences between L1 and L2 writing, and the differences between skilled and unskilled L2 writers (see Krapels, 1990; Silva, 1993, for reviews of this research). This interest in the process of L2 writing has continued to date, and notably, research on the sub-processes of L2 writing, such as formulating, reviewing, and revising, has intensified and become more sophisticated in recent years (see Silva & Brice, 2004, for a review).

Despite the existence of a wealth of research on L2 writing, much exploration remains to be done. For example, although L2 writing processes and strategies have been investigated extensively in relation to some variables (e.g., L2 proficiency, motivation, attitudes, and writing goals), other variables have received relatively little research

attention. One such variable is the writing task per se. Few studies have specifically addressed how writing tasks may influence the processes and strategies adopted by L2 writers and whether writing tasks impact on the strategy use of skilled and unskilled L2 writers similarly. Inquiry into the effects of writing tasks on strategy use, however, has the potential to yield important implications for process-oriented L2 writing instruction in the classroom.

A second gap in L2 writing research has to do with its predominant focus on L2 learners in Western educational settings. For example, although quite a number of investigations have involved Chinese learners of English studying in Western institutions of higher learning, few empirical studies published in English- and Chinese-medium academic journals have examined the writing processes and strategies of Chinese L2 learners in a Chinese context (Li & Li, 2003; Wang & Wang, 2004). However, research on L2 writing in different socioeducational contexts has been proposed as a primary theme on the L2 writing research agenda first by Silva (1990) and, most recently, by Hedgcock (2005) and Silva and Brice (2004). As Hedgcock points out, 'the cultures and social contexts in which various literacies emerge inevitably influence [their] developmental processes' (2005, p. 600). This view of literacy development underscores the need to study L2 writers in diverse sociocultural contexts to uncover the complex patterns of strategy use by L2 writers.

The need to examine the writing processes and strategies of Chinese EFL learners in the social, cultural, and educational contexts of China becomes all the more acute against the backdrop of an embryonic pedagogical shift of EFL writing instruction in China (You, 2004a, 2004b) from a current-traditional approach (see Kroll, 2001; Silva, 1990) to a more process-oriented one (see Susser, 1994). Although findings from research on L2 writing processes and strategies done on non-Chinese learners and in other contexts are valuable, it cannot be assumed a priori that EFL writers in China resemble L2 learners elsewhere in strategic behavior and writing processes. In this regard, it is important to heed sound cautions about the unproductiveness of wholesale borrowing of language teaching methodology in general (Hu, 2005) and writing pedagogy in particular (Leki, 1996; Pennington, Brock, & Yue, 1996). Pedagogical borrowings need to be adapted to target learners and contexts. The success of a process-oriented L2 writing pedagogy in China is predicated in large measure on a solid understanding of the processes and strategies used by Chinese EFL writers.

Given the considerations above, the study reported here focused on the writing strategies used by undergraduates studying EFL in a Chinese university, with a view to arriving at a nuanced understanding of strategy use by skilled and unskilled Chinese EFL writers. Specifically, the study aimed to address three research questions: 1) Do skilled and unskilled Chinese EFL writers differ in their use of writing strategies? 2)

Do their writing strategies vary as a function of the writing tasks that they are engaged in? 3) Do task types have a similar effect on the strategic behavior of skilled Chinese EFL writers and their unskilled counterparts? It was hoped that empirically grounded answers to these questions could lead to useful pedagogical implications for processed-oriented writing instruction in Chinese EFL classrooms and elsewhere.

### *Previous Research on L2 Writing*

The process of L2 writing has been a major focus of L2 writing research since the early 1980s. Early studies of the L2 writing process were inspired by developments in L1 writing research (Cumming, 1998; Hedgcock, 2005; Silva, 1993). In her comprehensive survey of these studies, Krapels (1990) identified a number of 'recurrent motifs' (p. 48). These include the findings that: (1) poor performance in L2 writing results more from a lack of composing competence than from a lack of linguistic competence; (2) the composing processes of L2 writers, skilled and unskilled, are similar to those of L1 writers; (3) learners' L1 writing strategies transfer to their L2 writing process; (4) L1 use in L2 writing has a number of facilitative functions; and (5) culture-bound topics elicit more L1 use than other tasks do. It is worth noting that some of the early studies also came up with contradictory findings. For example, Zamel's (1983) study indicated that L2 writers, both skilled and unskilled, compose like their L1 counterparts and the composing competence rather than the L2 language proficiency differentiated skilled and unskilled L2 writers. She also found that 'composing is a non-linear, exploratory and generative process' (p.165), which is consistent with Flower and Hays' (1981) claim about the L1 writing process. However, Raimes (1985, 1987) and Arndt (1987) observed some differences between L1 and L2 writing processes and among L2 writers. Raimes' and Arndt's findings underscore the need to examine the writing processes and strategies employed by individual L2 writers and warn against premature generalizations based on either L1 research or L2 research involving a homogenous sample of L2 writers.

Into the 1990s, research on the L2 writing process became increasingly focused on the subprocesses of L2 writing, for example, reviewing and revising (e.g., Berg, 1999; Caulk, 1994; Hedgcock & Lefkowitz, 1992). As Cumming (1998) observed, 'studies of students' composing processes have described with increased precision specific aspects of writing behaviors in second languages' (p. 64). While research looking closely at specific aspects of L2 composing processes is valuable and allows us to develop an in-depth understanding of these aspects, there is a potential danger of losing sight of the big picture because of a narrow focus. Consequently, studies of specific aspects or subprocesses of L2 writing need to be complemented by investigations that take a more holistic approach. Furthermore, it should be noted that although studies of L2 writers in different social, cultural, and educational contexts have increased in recent

years, the typical setting for most studies is a Western one. Our study is an attempt to address the two issues raised above by examining the writing strategies used by Chinese EFL writers in a Chinese context to complete entire writing tasks.

Of the many strands of L2 writing research, the one that is most relevant to the current study is research that has compared the writing behaviors of skilled and unskilled writers. Early work on novice and skilled L1 writers by Bereiter and Scardamalia (1987) provided a theoretical basis for similar L2 studies (Grabe & Kaplan, 1996). Based on a wide range of investigations, Bereiter and Scardamalia (1987) proposed a theory to capture differences between skilled writers and unskilled writers. They argued that skilled and unskilled writers take different approaches to writing. While novice or unskilled writers follow a knowledge-telling approach, skilled writers take a knowledge-transforming approach.

If skilled and unskilled L2 writers take different approaches to a writing task, they can be expected to exhibit different writing behaviors. This expectation has been supported by several studies. Sasaki (2000) reported that expert writers spent longer time planning overall organization in detail. In a protocol-based analysis of the relationship between Chinese EFL writers' strategies and their writing scores on an English proficiency test, Xiu and Xiao (2004) found that the skilled writers and unskilled writers differed in the use of two writing strategies: organizing ideas and formulating (or transcribing). The researchers interpreted their findings as consistent with Bereiter and Scardamalia's model. Yang (2002) also observed differences between skilled and unskilled L2 writers in planning globally, generating ideas, and revising. However, not all studies found differences between skilled and unskilled L2 writers. Raimes (1985) reported that 'no clear profile of the unskilled ESL writer emerged from this study of behaviors during composing' (p. 249). Arndt (1987) observed that writing behaviors among members of a group varied considerably.

A possible explanation for the inconsistent findings with respect to skilled and unskilled L2 writers may lie in the way L2 writers were classified as skilled or unskilled. Different criteria were used in different studies. Zamel (1983), Raimes (1987), and Cumming (1989) designated their subjects as skilled or unskilled on the basis of holistic assessment of compositions written by them on tests or in class. Sasaki (2000) used writing experience as a criterion in addition to holistic assessment of the subjects' written products. Xiu and Xiao (2004) differentiated their subjects by their scores on a national English proficiency test. Yang's (2002) subjects were judged to be good or poor writers on the basis of their scores on two previous writing tests and a questionnaire. The different criteria used in the studies make it difficult to decide whether the writing competencies of the skilled and unskilled L2 writers were comparable across the studies. In this regard, Raimes (1985) cautioned more than 20 years ago that

the validity of the criteria which differentiate skilled writers from unskilled writers should be a main concern in research design. Since the writing competence of the L2 writer can be influenced by many factors (Leki, 1996; Grabe, 2001), the adoption of multiple criteria should contribute to more precise assessment of an L2 learner's writing competence in the target language. This consideration motivated us to adopt multiple criteria in classifying participants in our study.

Although a large number of studies have been conducted to investigate the writing processes of skilled and unskilled L2 writers, few studies have focused on the influence of writing tasks on L2 writing strategies or the interaction between writing tasks and writing competence in relation to strategy use. Grabe (2001) pointed out that different writing tasks make different processing demands. He argued that a consideration of the nature of writing tasks can open up ways to address writing development more directly. Bereiter and Scardamalia (1987) provided evidence of the impact of different tasks and varying task complexity on L1 writing performance. Cumming's (1989) study revealed that more cognitively demanding tasks such as argumentative writing assignments produced significantly different behaviors from those found in less cognitively demanding tasks such as letter writing. Wang and Wen (2002) found that more L1 was used in the narratives produced by their subjects than in their argumentative essays. In spite of these promising findings, more research is needed before a better understanding of task effects in L2 writing can be developed.

## **The Study**

### *Participants*

The presented study involved four participants (male = 3, female = 1) who were third-year English majors studying on an English for Specific Purposes program in a technological university in western China. All the participants were aged 20. As discussed in the previous section, it is of crucial importance to adopt multiple assessment criteria so as to classify L2 writers reliably in terms of writing competence. This issue was especially important to the present study, which aimed to investigate differences in writing strategy use between skilled and unskilled writers. The principal criterion that we used was potential participants' performance in a compulsory English writing course. Their performance in this course was assessed through academic records and instructors' evaluation of their writing ability. Their overall scores for CET-6 and TEM-4 were also used as additional criteria.<sup>1</sup>

When the study began, the four participants were attending the same 2-semester compulsory English writing course. Peng and Ren, highly praised by their instructor, were selected as skilled writers, Huang and Yang as unskilled writers.<sup>2</sup> Peng was outstanding in English writing, compared with his peers. He wrote his own speech

script and won the second place in a local tertiary-level English speech contest in his second academic year. Peng and Ren were both awarded the highest scores among 110 students who took the writing course in the second semester. They passed CET-6 in their first year and TEM-4 in their second year. Huang and Yang, though regarded as highly motivated and hardworking students, were selected as unskilled writers because of their poor performance in the writing course. Huang was among the few who failed to obtain a pass grade in the writing course. Both Huang and Yang had failed in CET-6 and TEM-4.

### *Writing tasks*

The participants were asked to perform two writing tasks using the short written prompts presented in Appendix A. They were given two hours to complete either task. The word limit for either task was 200 to 300 words, which was the required length for their writing assignments and essays on tests. The first task required the participants to write a letter to a friend, describing his or her university life. The second task asked them to compose an argument expressing their views of what makes a good student.

The two writing tasks were chosen mainly for three considerations. The first consideration was that the two tasks should differ as much as possible in writing purposes and rhetorical structure. The overriding consideration, however, was the cognitive demands posed by the tasks. Based on previous research (Durst, 1987; Koda, 1993; Leki, 1996; Matsuhashi, 1981), we assumed that the description of a personal experience would be less cognitively complex and demanding than the argumentative task. We hypothesized that tasks varying in cognitive complexity as well as writing purposes and rhetorical structure would require the use of different writing strategies. The third consideration was the participants' familiarity with the tasks. Since previous research (e.g., Manchon, Murphy, & Roca de Larios, 2005) suggested that topic familiarity could enhance participants' involvement, we chose two education-related topics which we expected the participants to be familiar with.

### *Data collection and coding*

Following earlier studies of composing processes (e.g., Arndt, 1987; Bereiter & Scardamalia, 1987; Flower & Hays, 1981) and of language learning strategies (e.g., O'Malley & Chamot, 1990), we used the think-aloud procedure to collect data from the participants. The methodological decision was motivated by the understanding that despite its limitations, concurrent think-aloud is 'the only way available to us to develop some understanding of learners' mental processing' (Chamot, 2005, p. 115). A 20-minute training session was conducted individually with each participant to familiarize him or her with the think-aloud procedure immediately before data

collection. The training consisted of three activities: 1) a brief introduction of the think-aloud procedure by the second author of this paper; 2) a demonstration of think-aloud by the same researcher while reading a short passage; and 3) the participants' practice in vocalizing their thoughts while reading another short passage. Before the training session, a trial of the training activities was carried out with a classmate of the four participants to improve the effectiveness of the training sessions.

The tasks were administered in a quiet reading room, free from any interruptions so that the participants could concentrate on the tasks. The participants were allowed to think aloud in any language they felt comfortable with because, as Cohen (1994) pointed out, language choice in think-aloud might require participants' recoding of information, which could cause information loss or alter the original thought processes as a result of such constraints as memory capacity and poor command of the language used for reporting. In the process of data collection, when the participant paused for more than five seconds, he or she was prompted with general questions such as 'What are you thinking about?' and 'What is on your mind?' The second writing task was administered three days after the first one. All the think-aloud reports were recorded with a digital voice recorder. Unfortunately, Yang's think-aloud data was lost because of a technical problem. Table 1 presents the time the remaining three participants took to complete the tasks. All the participants spent more time on Task 2, and Huang, the unskilled writer, spent more time than Peng and Ren, the two skilled writers.

*Table 1 Time (in minutes) taken by the three participants to complete the tasks.*

	<b>Peng</b>	<b>Ren</b>	<b>Huang</b>
Task 1 (description)	22	26	31
Task 2 (argumentation)	31	27	53

The three participants' think-aloud reports were transcribed verbatim to increase the reliability of subsequent data coding (Manchon, Murphy, & Roca de Larios, 2005). No existing coding schemes were adopted for the coding of the transcriptions since those coding schemes were developed to address different research questions and to be used with different subjects, reflecting different theoretical and methodological considerations. The coding scheme used in this study (see Appendix B) was developed iteratively on the basis of the second author's repeated readings of all the transcriptions. Strategies emerging in the repeated readings were defined, redefined, categorized, and re-categorized (Gregg & Steinberg, 1980). The resultant coding scheme was then used by the second author and a colleague to code a complete think-aloud report independently. Discrepancies between the two coders were resolved through discussion until



complete agreement was achieved. Then all the remaining data were coded by the researcher. All together six full think-aloud reports were coded for analyses.

## Results and Discussion

Quantitative and qualitative analyses of the coded think-aloud protocols revealed that the two skilled writers and the one unskilled writer differed in their pattern of strategy use and that their writing strategies varied from one writing task to the other.

### *Differences in frequency of strategy use and types of strategy used*

Table 2 shows the participants' frequency of strategy use on the two tasks. Huang, the unskilled writer, employed 13 of the 14 strategies for 59 times on Task 1 and all 14 strategies for 62 times on Task 2. Notably, he used many more strategies and deployed most of the strategies more frequently than the two skilled writers did. Peng did not use four strategies on either of the tasks: revisiting topic, rereading to edit, evaluating language, and evaluating structure. Ren did not use the strategies of rereading to organize ideas and controlling on either of the tasks. Although Huang used the strategies of revisiting topic, global planning, rereading to generate ideas or language, and controlling more frequently than Peng and Ren did, the latter two rehearsed more frequently than Huang did.

*Table 2 Frequency of strategies used by the participants on the two tasks*

Main category	Strategy	Unskilled Huang		Skilled Peng		Ren	
		T1	T2	T1	T2	T1	T2
Topic-related strategies	Comprehend topic or prompt	1	1	1	1	1	1
	Revisiting topic or prompt	2	4	0	0	0	1
Planning rehearsing	Global planning	2	5	1	1	0	2
	Local planning	12	7	13	7	7	6
Rereading		4	3	11	4	7	2
	Rereading to edit	2	3	0	0	2	1
	Rereading to revise	3	4	1	4	6	4
	Rereading to refocus attention	0	2	2	2	1	0

	Rereading to generate ideas or language	19	15	5	12	2	4
Controlling	Rereading to organize ideas	1	1	0	2	0	0
Evaluating		8	5	1	1	0	0
	Evaluating content	1	4	1	0	3	1
	Evaluating language	3	7	0	0	6	4
	Evaluating structure	1	1	0	0	1	1
Total		59	62	36	34	36	28

Although the quantitative findings revealed considerable individuality and complexity of EFL writers' strategy use, they also identified some notable differences in strategy use between skilled and unskilled Chinese EFL writers. Our tentative conclusion about inter-learner differences was strengthened when we examined the quality of strategy use.

#### *Differences in quality of strategy use*

A close look at the think-aloud protocols turned up some salient differences in the quality of strategy use between the skilled and unskilled writers. After reading the topic, Peng and Ren made a quick decision on what they would write and how they would proceed. For example, Peng reported in English at the very beginning of the first task:

*I will write to, I will write a letter to one of my friends who is in Beijing. Then I will write my letter in two parts. First, I will write something about my university life, my campus life, including such as my social relationship, my relationship with my friends and classmates, also will include my study. And the second part, I will write something about the former classmates of our high school.<sup>3</sup>*

He did the same on Task 2:

*When I first saw this topic, I think at least an excellent student is not only a pedant but also an all-round human being. So in order to write this composition very well I should divide this composition into, say, into two parts. The first is the basic knowledge; that is to say, he has to manage the basic know-how of a specific field. And the second is his interpersonal skills, such as communicating with others, to be more sociable and to be more humane to others.*

Ren also made a quick decision on Task 2:

*The topic is similar to those tested in CET-6, which require you to have a stance. As far as this topic is concerned, I think I will agree with the second opinion. Good student should not only be excellent in academic studies. I think the society needs all-around talents. I will state my stance at the beginning.*

However, like Yin Ping in Raimes (1985), who spent more than 17 minutes trying to understand the prompt and revisiting the topic, Huang hesitated at the pre-writing stage for a long time on both tasks. He brainstormed laboriously, but his efforts to generate ideas and plan globally were ineffective. He revisited the prompt and planned repeatedly. On the second task, apparently faced with more difficulties, he spent almost 13 minutes - one fourth of the total writing time - reading the prompt, trying to generate ideas, and planning globally. He reported:

*I will give two examples to make a contrast. Let me see. Eh, if an excellent student ... academic, if, it should be that studying alone... those who don't perform well in study are not bad students. So, if he develops in other respects, but he doesn't do well in study, it is better to combine these aspects. Then he will be well rounded.<sup>4</sup>*

After these messy attempts at the generation and organization of ideas, he then revisited the prompt, asking himself:

*Which one should I support? 'Well rounded in intellectual, moral, and physical development.' I think I should agree with the second idea. The second is certainly easier to develop than the first one.*

Huang also differed from Peng and Ren in the use of local planning. Peng and Ren had clear and specific ideas about what they would write next. Peng reported on Task 2:

*The first paragraph, I want to introduce something about people's ideas about students... I just want to divide this paragraph into two parts.*

Similarly, Ren reported:

*I think I should write more. I should ask her for some suggestions about my further postgraduate study. Will it be abrupt and unacceptable? It seems not. I will write a paragraph about it. (Task 1)*

*'Go to extreme', I think I should exemplify how people go to extreme in the following. ... 'Last but not the least', I think I should talk about the health problem in the following. (Task 2)*

By contrast, Huang frequently asked himself on Task 1 about what to write next:

*I am thinking about how to conclude the second paragraph. How to conclude it? ... Add one sentence and should I add one sentence about his attitudes towards studying?*

Our findings about the relative effectiveness of the three participants' planning are consistent with Yang's (2002) conclusion that skilled writers plan more effectively than unskilled writers. However, different from Yang's (2002) and Sasaki's (2000) findings that successful writers spend more time planning before writing, the unskilled writer in our study resembled Raimes' (1985) Yin Ping and Perl's (1979) Tony, both of whom spent much more time on pre-writing activities than the successful writers. The seemingly inconsistent findings suggest that it is not the amount of time spent planning but the quality of planning done that distinguishes skilled from unskilled L2 writers.

Another difference between the skilled and unskilled writers had to do with the use of rehearsing. Peng and Ren typically articulated complete sentences before they wrote them. Peng used this strategy more efficiently and more frequently than the other two participants. He often rehearsed long complete sentences on Task 1. For example,

*I will be depressed or I will be very sad if I also can not get the scholarship this semester.*

He rehearsed an even longer sentence later on the same task:

*I have practiced a beautiful - I can not say beautiful, I have practiced standard English which is my favorite and which is the greatest achievement I have made in my university study.*

By contrast, Huang rehearsed only 4 times on the same task, articulating fragments of sentences in Chinese or just one or two English words. For example, Huang said:

*How to write ke wai huo dong [extra-curricular activities]? Which word? Public? Social?*

This finding about the varying use of rehearsing strategies supports Yang's (2002) claim that successful writers rehearse more frequently and more effectively.

Yang (2002) and Zamel (1982, cited in Krapels, 1990) found that their successful writers revised more often than their unsuccessful writers. This is not borne out in our study. The use of revising strategies by the three writers revealed a more complex picture. All three participants revised mostly lexical and grammatical elements rather than discursal structure. Ren typically revised by reading large chunks of text carefully. She even reread the whole text in order to identify problematic elements for revision. Peng sometimes revised by adding or deleting a word to make an expression correct or more accurate. The following excerpt shows that Peng added 'not' to make the meaning correct:

*Students in university are usually selfish to each other. Consequently one can easily, I am sorry, one can not easily find a heart-to-heart friend, a heart-to-heart friend as we did in high schools.*

Huang often read a large chunk of text repeatedly in order to revise, but he was unable to come up with correct or appropriate words or grammatical structures, probably because of his lower English proficiency. The following excerpt illustrates Huang's ineffective revision:

*I think this paragraph is not coherent. I will check the grammar. Should I add this? 'Call for subscribing for students'. I think this sentence is not complete. 'And other things. During this...during this...' The omission is not good. 'That activity...and ...' I will delete this. I think it is not correct. Ok, I will not add the word here, because the revision may leave the teacher a bad impression.*

The participants' predominant attention to surface issues in their revision may have been a result of three factors. First, it could have arisen from a transfer of their L1 revision strategies, which might be overwhelmingly concerned with low-level issues. Second, it might have stemmed from their knowledge of the imperfect command they had of English and the high probability of surface errors. Third, it might have resulted from L2 writing instruction which had emphasized grammatical correctness and diction. The data collected for the present study do not allow us to settle on a definite explanation. Further research is needed to identify the causes of the participants' strong tendency to address mainly surface issues in their revision.

To sum up, our analyses of the think-aloud protocols have revealed that although the unskilled writer employed strategies more frequently than the two skilled writers, his strategy use was clearly ineffective for most of the time. This suggests that writing competence may be related less to the frequency of strategy use and the variety of strategies used than to the effectiveness of strategy use. This finding is consistent with Leki's (1996) observation.

#### *Differences in strategy use between tasks*

The think-aloud protocols also revealed that the three participants' strategy use varied from the letter task to the argumentative task. With regard to the total frequency of strategy use, Huang increased strategy use slightly on the argumentative task, whereas Peng and Ren reduced strategy use somewhat (see Table 2). Peng and Ren rehearsed less frequently and reread more often on the argumentative task than they did on the letter task. Their rehearsals on the argumentative task also became shorter and incomplete. For example, in contrast to the long sentences he rehearsed on the letter task, the longest sentence Peng articulated on the argumentative task was 'A good

student is a perfect combination of knowledge and sociability.’ On the argumentative task, Ren reduced the use of evaluating, and Peng reduced the use of local planning. Huang increased the use of revisiting topic, global planning, and evaluating but did less local planning on the argumentative task (see Table 2).

As far as the impact of task complexity on the writing process is concerned, the findings of this study are consonant with the claim made by some researchers (e.g., Bereiter & Scardamalia, 1987; Grabe & Kaplan, 1996; Grabe, 2001) that the nature of the writing task that a writer is engaged on influences his or her composing processes. When writers are faced with a cognitively demanding writing task, higher order thinking may consume most of their attentional resources, with insufficient attention left for them to address language problems (Grabe, 2001; Hatasa & Soeda, 2000). This is a plausible explanation of why the two skilled writers had to reduce rehearsing and increase rereading as well as why most of their rehearsals were fragmentary. That is, the amount of attention available to them was not enough to rehearse long and complex sentences. Task effects on composing processes were also reflected in the unskilled writer’s prolonged process of making sense of the topic and planning globally. He also seemed to worry about the ideas and language of his writing constantly, for he evaluated his writing more frequently, probably subconsciously. All the evidence suggests that task complexity influences strategy choices. Furthermore, the task switch seems to have impacted on the writing processes of the skilled and unskilled writers differently, given that it was different writing strategies that varied from task to task for the individual writers. However, although our results indicate that strategy use varied with the writing tasks engaged on, it remains unclear whether the writers used different strategies on the different tasks intentionally or unwittingly.

## Conclusion

Although our protocol-based study has revealed some interesting findings about EFL writers’ strategy use, it has a number of limitations, and further research is needed before firm generalizations can be made. The first limitation concerns the reliability of the think-aloud protocols. It was found that the unskilled writer was not good at introspecting while writing. He frequently paused and kept silent. Although his silence met with prompting questions, he paid no attention to these questions sometimes. There is good reason to believe that some of his cognitive activities were not reported. In future qualitative research using the think-aloud procedure, careful and skillful prompting should be employed to obtain rich data about psychological processes. Another limitation of the study is the small number of participants involved. It is inappropriate to generalize our findings to other Chinese EFL learners. A third

limitation is that no data were collected from the participants on L1 writing tasks. Such data could have shed light on the use of certain strategies on the L2 writing tasks.

In spite of the limitations, some tentative implications can be derived from our findings for EFL writing instruction in China. One implication concerns strategy training in process-oriented L2 writing instruction. Our finding that what mattered was not the frequency but the effectiveness of strategy use suggests that L2 writing teachers in China should complement their efforts to teach new writing strategies to their students with efforts to train them to use particular strategies effectively. Another implication is that L2 writing instruction needs to take into account the potential effects of different tasks on the writing process. In particular, the relative cognitive demands of a task should be considered carefully in the design of a writing curriculum for L2 learners. For example, our findings suggest that if the main objective of a writing lesson concerns language, it would be appropriate to use less cognitively demanding tasks than more demanding ones. Conversely, if the main instructional objective is the structuring and organization of information, cognitively demanding tasks seem to be better candidates than less demanding ones.

Finally, based on the finding that task features interacted with strategy use, it would make sense to suggest that L2 writing teachers should consider how to take advantage of task features in their strategy training. An example should suffice to illustrate this point. Recall that the two skilled writers used the strategy of rehearsing more often and more effectively on the less cognitively demanding task than on the more demanding one, probably because of the differential amounts of attention available for rehearsing. If L2 writing teachers decide to train their students to use the strategy, less cognitively demanding writing tasks should provide better avenues for such training than more demanding tasks, where the students are likely to grapple with higher order thinking, with little attention being available for implementing the strategy of rehearsing. To conclude, if effective process-oriented L2 writing instruction is to occur, teachers must know what writing processes and strategies their students are currently using and what instructional activities can best facilitate their acquisition of those effective processes and strategies that they need to master.

### Notes

1. CET (College English Test) is a national English proficiency test that all tertiary-level students in China who do not major in the English language are required to take. The test consists of 8 bands, and CET-4 (Band 4) is the band that students must pass in order to graduate. TEM (Test for English Majors) is a national English test that all tertiary-level students in China who major in the English

language are required to take. It consists of 8 bands as well. English majors are required to take TEM-4 (Band 4) in their fourth semester. Although the participants in this study were English majors, they were encouraged to take CET-6 (a higher band than CET-4) because the test is more widely recognized than TEM by potential employers.

2. The participants are given pseudonyms in this paper to safeguard their anonymity.
3. For ease of reading, repetitions, hesitations, false starts, and grave grammatical mistakes are edited out in the excerpts cited as illustrations.
4. Huang thought aloud in Chinese on the two writing tasks. The cited examples were translated literally from Chinese into English by the second author.

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## **Appendix A: Instructions for the Writing Tasks**

### *Task One*

Write a letter of 200-300 words to your friend, describing your life in the university. You have two hours to complete the composition.

### *Task Two*

Some people think that good students are those who are excellent in their academic work. Others think that good students are those who are well rounded in intellectual, moral, and physical development. What is your opinion? Write a composition of 200-300 words in two hours.

## **Appendix B: The Strategy Coding Scheme**

1. **Topic-related strategies**
  - a) *Comprehending the topic or prompt*
  - b) *Revisiting the topic or prompt*
2. **Planning strategies**
  - a) *Global planning – ideas and/or organization for the whole composition or more than one paragraph*

- b) *Local planning – ideas and/or organization for (parts of) a paragraph or an ensuing sentence*
3. **Rehearsing –**  
*verbalizing words, expressions, sentences before writing them down*
4. **Rereading**
- a) *Rereading to monitor formal accuracy (e.g., grammatical mistakes, misspellings, misuses of mechanics)*
- b) *Rereading to revise content (e.g., adding, deleting, or replacing parts of text to improve meaning)*
- c) *Rereading to refocus attention on the writing task*
- d) *Rereading to generate ideas or language*
- e) *Rereading to organize ideas*
5. **Controlling -**  
managing writing process, time, length or format (e.g., deciding to start writing, redirecting one's attention to writing, and deciding to conclude writing)
6. **Evaluating**
- a) *Evaluating content*
- b) *Evaluating language*
- c) *Evaluating structure*

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