

The Study on Chinese Students' Critical Thinking in Writing Course of English Major

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Abstract

This paper tries to analyze the problem from the perspectives of Krashen's input theory and Swain's output theory so that on the basis of which, the i-o teaching model could be proposed in English major writing course in China. Furthermore, an experiment is conducted to assess the i-o teaching model and concludes that it is conducive to reinforcing students' capability of critical thinking and mitigating the current status of English teaching, in which language skills have been attached vital significance yet thinking ability has been overlooked.

Key words: Critical thinking; Input-output model; English writing; English major

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INTRODUCTION

The current status of critical thinking in writing teaching. Current years have witnessed the prevalent status of English teaching, in which language skills have been attached vital significance yet thinking ability has been ignored. Apart from a lack of solid language foundation and the negative interference of the native language, there is still a deficiency of consistency and clarity in writing, which is the manifestation of the absence of thinking ability (Wu, 2004). In traditional teaching approach, the authority of teachers and teaching materials leads to students' lack of independence,

initiative thinking and judging ability. What's more, the whole process of writing is inclined to become a mere tedious combination of letters, words and sentences.

Significance of the study. It may become crystal clear that critical thinking development has become a major concern for English majors, with which students could make profound discovery, find new problems and come up with solutions constantly.

Furthermore, since a strong connection between writing and thinking ability is existed, integrating the development of critical thinking with writing course could not only enhance students' thinking ability itself, but also promote their writing proficiency. For China's English teaching class that lacks emphasis on critical thinking for a long time, it may create a double-win process in language writing class. Therefore, this study points out the necessity and implementation of fostering critical thinking in English writing class, which might be a perspective project. By turning to the study of the development of critical thinking in writing class, some rewarding and satisfying findings in the new field might be discovered.

1. THE DEFINITION OF CRITICAL THINKING

In a 2006 book, Richard Paul and Linda Elder presented a critical thinking ternary model, which consists of three parts: the logical elements, intellectual standards and intellectual characteristics. Among them, the proposal of intellectual standards (accuracy, clarity, relevance, logic, adequacy, accuracy, depth, significance, fairness, breadth) in the model is a significant contribution to critical thinking. In particular, they accentuated the need to "raise important question", "collect information", "test justified conclusion and solutions", "thinking with an open mind", and "communicate effectively", which demonstrates the importance of thinking quality (Ren, 2013).

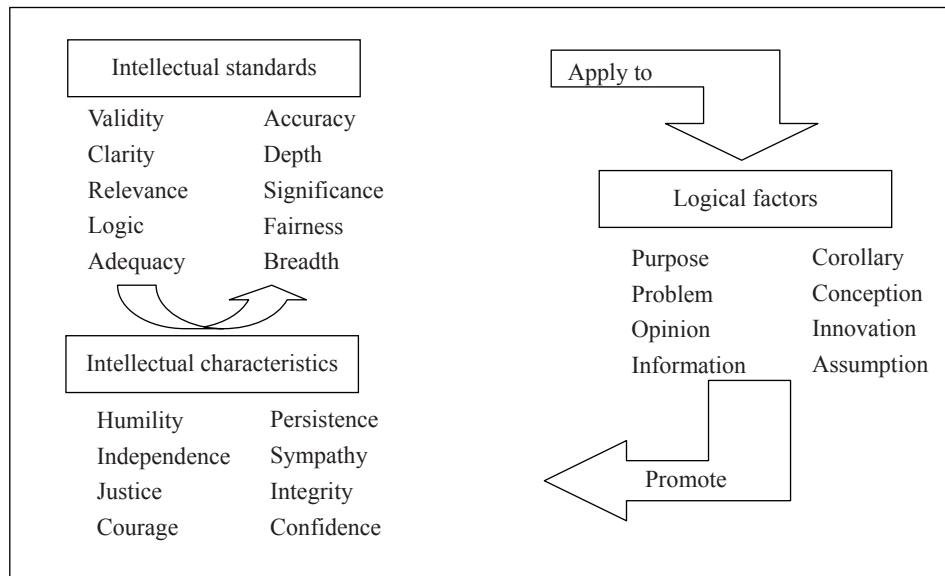


Figure 1
Paul & Elder's Ternary Model (Richard Paul, 2006)

In addition, Chaffee et al. (1989) maintained that critical thinking is the careful examination of our own thinking and that of others, enhancing the comprehending ability of our own. As a consequence, we might have a more comprehensive and clearer understanding of the world. It consists six phases, namely, initiative thinking, independent thinking, the careful study of the solution or the problem, organized discussion of our thoughts, the arguments and evidence to supports views, the acceptance of new things and various standpoints (Chaffee, et al., 1989).

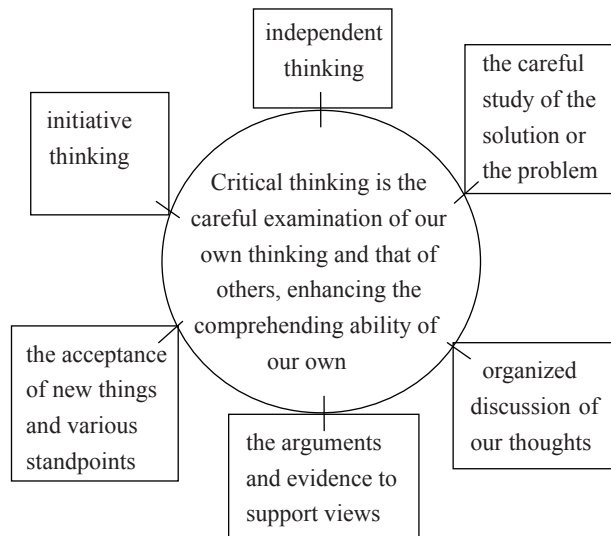


Figure 2
Critical Thinking (Chaffee et al., 1989)

In summary, critical thinking is a process of independent thinking, suspicion, research, demonstration and acceptance of different views. In other words, it not only demands one to dare to challenge the authority, re-identify problems, ask questions, resolve issues, but also be

willing to accept new things, and view things dialectically, so as to improve one's understanding of things constantly.

2. THE PROPOSAL OF INPUT-OUTPUT TEACHING MODEL

2.1 Krashen's Input Theory and Swain's Output Theory

Krashen's "Input Hypothesis": In the field of second language acquisition, the input hypothesis was proposed by Krashen in the mid-20th century. Krashen (1981) maintains that, the second language acquisition happens only when "comprehensible input" become accessible to the learners, namely "i+1", in which "i" refers to the current learning level of the learner and "1" means the higher part over the current level of learning.

Swain's output theory: Having found the limitation of Krashen's theory, Swain & Lapkin (1995) proposed the "output theory". They believe that second language acquisition could not be produced merely by language input, but also calls for comprehensible output. Swain & Lapkin (1995) put forward three functions of language output: noting-triggering function, hypothesis-testing function and meta-language function. Meanwhile, language output also promotes the fluency of language. Thus, a natural conclusion could be drawing from the output theory that language output is indeed significant for second language learners.

2.2 The Input-Output Teaching Model

According to Krashen's input theory and Swain's output theory, the paper tries to explore the Input-Output model to develop critical thinking in English major writing class (Figure 3), which includes the stage of input and stage

of output. As the teaching objective of the whole model, the output stage guides the teaching process in the input stage. In addition, in the input stage, teachers are required

to further train and develop the students' critical thinking based on their current knowledge and ways of thinking, i.e., the "i+1".

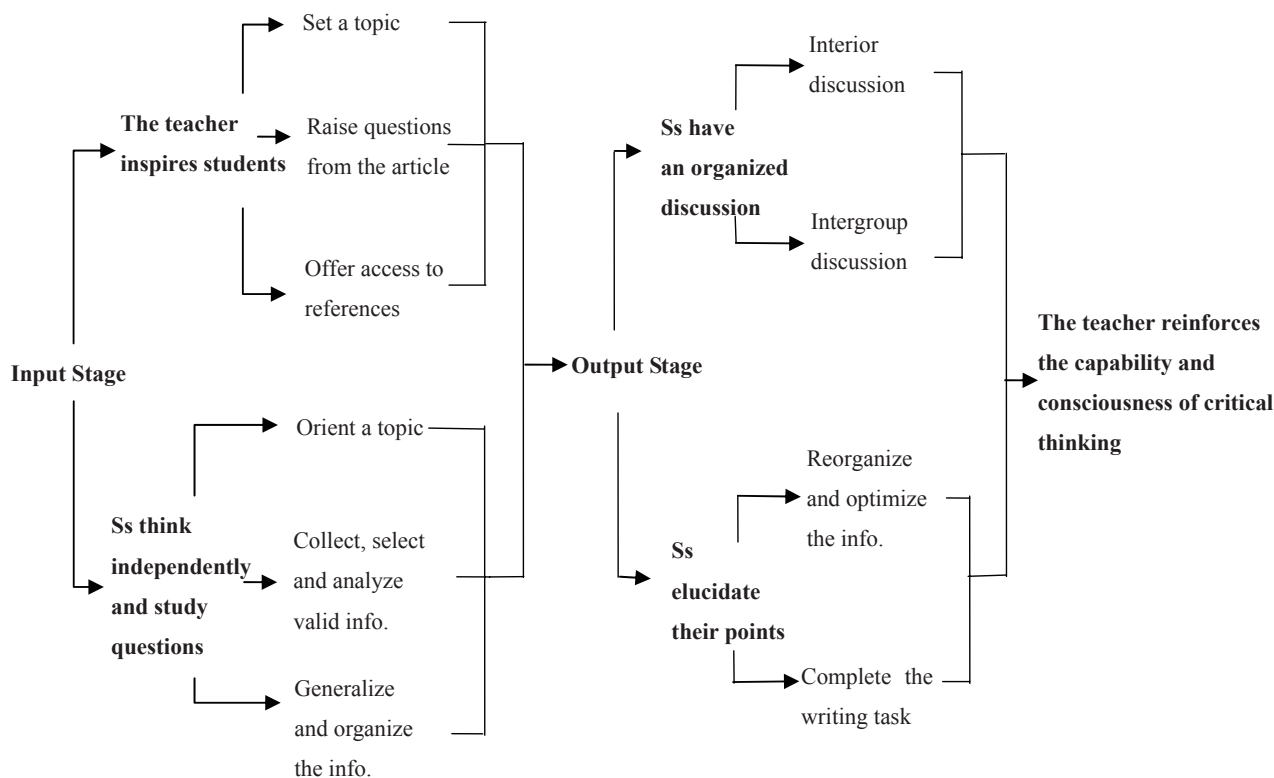


Figure 3
The Input-Output Model to Develop Students' Critical Thinking

2.2.1 The Input Stage of Input-Output Model

In the input stage, first of all, the teacher inspires students to think initiatively. First, as for the selection of writing topic, it's worth noting that the topic should have a strong relation with students' life, interests and the characteristics at their current stage. Meanwhile, it needs to be authentic, inspiring, open and controversial so as to inspire students' interests and offer them space of free discussion, brainstorming and critical thinking. Second, when guiding students to think critically, the teacher could direct them to judge, criticize and evaluate the standpoints, illustration and expression of the sample article. Specifically, the students should judge whether the standpoint is novel, whether the evidence is supportive and accurate, whether the structure of the article is logical, whether the expression is clear etc.. Of course, the teacher should also provide students with ways and access to further valid information concerning the topic as their reference.

In the second place, students are expected to think independently and study questions carefully. First, students should be clear about what they would like to write. Second, students should collect, select and analyze the valid information independently. In this process, it is required that students analyze, compare, synthesize, and

generalize the valid information collected according to their own standpoints. Meanwhile, they need to collect materials to overthrow their point of view constantly. This process of continuous negation and affirmation is indeed also a process of criticism (Han & Yi, 2009). Thirdly, students should also generalize and organize the valid information, which is also an examination of students' ability of reorganizing and processing information.

2.2.2 The Output Stage of i-o Model

In the output stage, in the first place, students have a discussion about their thoughts in an organized way. In this stage, students can brainstorm, accept and evaluate others' opinions while expressing their own ideas. At the same time, when different ideas confront with each other, one must learn to show respect to the disparity and learn to improve and complete his own writing clue so as to enhance the ability of critical thinking, which is a process of comparison, exploration, discussion and critical thinking. Secondly speaking, students elucidate their points of view with evidence. When having group discussion, a large amount of new information will emerge out. In this case, students should re-compare, reorganize and refine the writing structure for another time. Actually, the independent accomplishment of a writing task is not

only a mere combination of words and sentences, but also a process of expressing one's thinking. In other words, it means that we convey the ways of thinking by using language as the tool.

At last, the teacher should direct students to reinforce the consciousness and ability of critical thinking. After pondering and accomplishing the writing task, the students should assess others' works and offer feedback timely. In the process of mutual assessment, the teacher should guide students to see both disadvantages of themselves and advantages of others. As for the disadvantages of others, they can show the sympathy, meanwhile, as for one's own flaws, he can also accept them modestly. When commenting on the performance

of the students, the teacher should show appreciation for the highlights and make some complement when referring to the weak points. The encouragement is also needed to pay attention to critical thinking in the process of writing.

2.3 The Sample Analysis of the Input-Output Model

On the basis of writing topic "the Danger of the Internet" selected from Unit 3 in *An Integrated English course 4* (He, 2011), this section elucidates the appliance of the i-o model to practical teaching, for the sake of illustrating the model discussed above. And the specification on how to implement the model is further explained as follows:

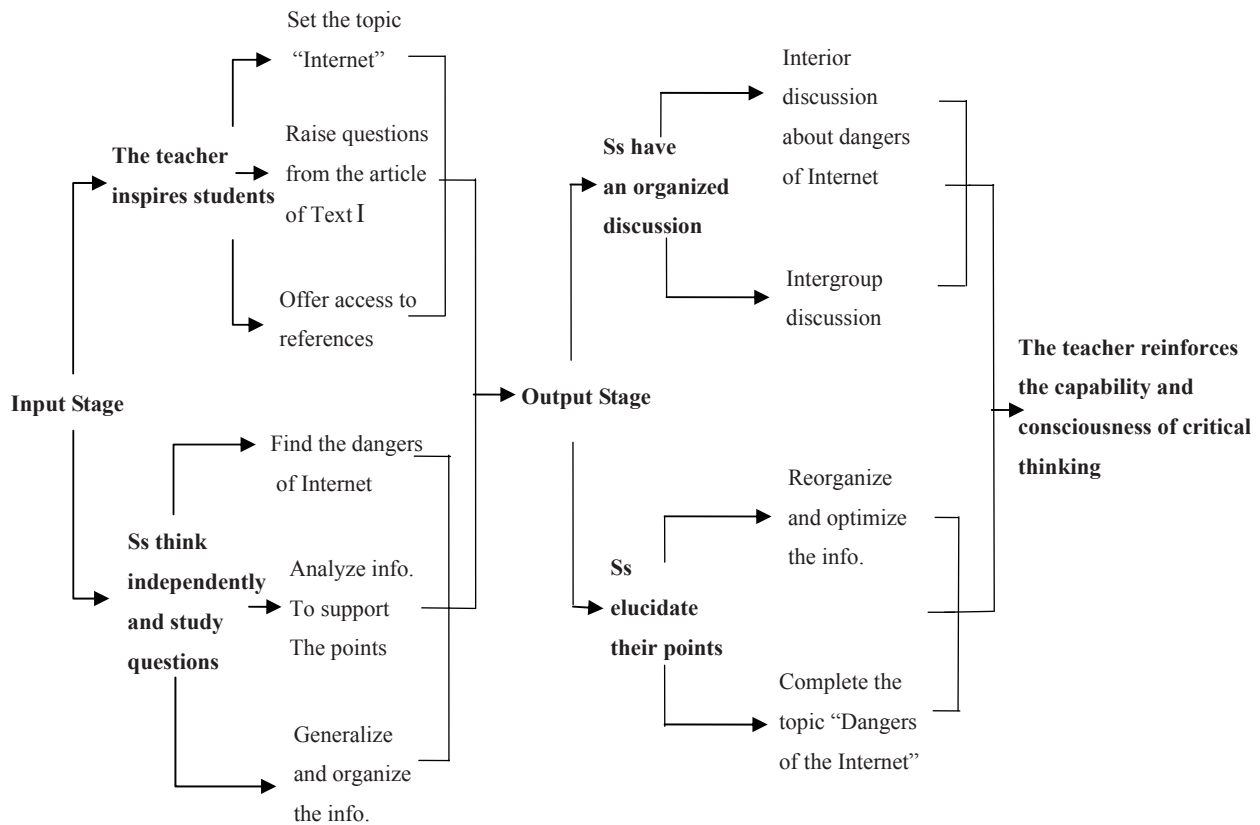


Figure 4
The Sample Analysis of the Input-Output Model

In the first place, the teacher sets a topic. In this unit, the topic is "the Internet", which has a strong relation with students' life, and is in accord with the interests and characteristics at their current stage. Meanwhile, the topic is authentic, inspiring, open and controversial enough so as to inspire students' interests and offer them space of free discussion, brainstorming and critical thinking. Then, the teacher selects the article from text I and raises questions to arouse criticism, inspiring students to judge whether the standpoint is novel, whether the evidence is supportive and accurate, whether the structure of the article is logical, whether the expression is clear or whether there could be further improvement or not etc..

Of course, the teacher should also provide students with ways and access to more information about the danger of the Internet as their reference.

Secondly, students are expected to think independently and study questions carefully. First, students should be clear about what they would like to write, including the problems caused by the wide use of the Internet, the evidence to prove and some feasible solutions. Second, students should collect, select and analyze valid data or examples independently. In the process, it is required that students analyze, compare, synthesize, and generalize the valid information collected according to their own standpoints. Thirdly, having found effective evidences to

support their sub-points, students should also generalize and organize the valid information.

Thirdly, students have a discussion about their thoughts in an organized way and then complete the writing task independently. In the process, the class can be divided into 5 groups. During the discussion, students may analyze the dangers of the internet from different perspectives, thus the task of small group discussion is to generalize the points overlapping with each other and summarize, classify the standpoints proposed by group members. After group discussion, here comes to intergroup discussion, which means each representative of the group stands out to share different ideas, offering the platform to further criticize, learn from each other and draw from each other's strength.

At last, the teacher should direct students to reinforce the consciousness and ability of critical thinking. After accomplishing the writing task, the students do mutual assessment and offer their feedback. Students are expected to do critical thinking and view things from a dialectical view. When commenting on the performance of the students, the teacher should show the encouragement of critical thinking in the process of writing and reinforce the awareness of critical thinking, not merely in writing, but also in students' life.

3. THE ASSESSMENT OF INPUT-OUTPUT MODEL IN CHINA'S ENGLISH WRITING CLASS

The previous section provides a framework for the implication of the i-o model in English writing class. And this section focuses on the assessment of the i-o model, involving the research questions, hypothesis, overall research design, subjects, research procedure, plus the results and findings.

3.1 Research Questions

This experiment is conducted in the hope of finding out the advantages of the i-o teaching model over traditional teaching method in English major writing class. On the basis of the general questions above, three specific questions will be raised.

Question 1: whether students play a dominant role in the experimental group conducted in the i-o model or in the control group conducted by traditional teaching method?

Question 2: Are the types of teaching activity in the experimental group more diversified than those in the control group?

Question 3: Is the initiative of the students in the experimental group higher and more active than that of the control group?

3.2 Hypothesis

Based on the research questions raised above, we make a general hypothesis that the i-o teaching model has more

merits than traditional teaching approach in teaching English writing. Meanwhile, corresponding to the above three questions, three sub-hypotheses are proposed as follows:

Sub-hypothesis 1: Students play a dominant role in the experimental group conducted in the i-o model rather than the control group conducted by traditional teaching method.

Sub-hypothesis 2: The types of activity in the experimental group are more diversified than those in the control group.

Sub-hypothesis 3: The initiative of the students in the experimental group is higher and more active than that of the control group.

3.3 Overall Research Design

The research is based on data collected in the process of classroom observation. First of all, the i-o teaching model is implemented in English major writing class in the experimental group. Then, the researcher collects data through classroom observation and feedback from students after class. Also, the data collected from both the experimental group and control group will be compared to demonstrate the advantages of i-o model over traditional teaching approach in English major's writing course.

3.4 The Subjects

Sophomores of English majors from China West Normal University are chosen as the subject, who comes from the second Level classes consisting of students whose marks of their entrance examination are between 105 and 120 points. The students in the experimental class consist of 30 students with 28 girls and 2 boys; the other class consists of 30 students with 26 girls and 4 boys.

3.5 Research Procedure

The experiment started from March 10th, 2015 to April 14th, 2015, the duration of which lasted 5 weeks. The two groups had a writing class once a week.

The writing topics chosen for both groups are the writing parts selected from Unit 1-5 in *An Integrated English course 4* (He, 2011).

Each week, the experiment proceeded one writing topic. As for the experimental group, it implemented the i-o model, which means, the duration of the class was divided into two phases, namely the input stage and the output stage. And the teacher and students of this group followed the instruction of the i-o model. For the control group, the teacher first explained how to compose the essay by offering background information about the topic, possible writing clues, and keywords, etc.. Then individually and independently, the students finished the writing task. After class, some specific feedbacks are given by the teacher in commenting on students' problems. At the same time, the instructor took notes and did recording concerning three aspects: The time of the speaking time of the teacher and students separately; the types of teaching activities; the

frequency distribution of students raising their hands or participating the activities during the whole class. On the basis of the data collected, the instructor made a comparison with the dominance of class, types of teaching activities, and initiative of students from both groups.

3.6 Results and Findings

Since data were collected from three aspects: The

dominance of class, types of teaching activities, and initiative of students, analysis of the results will be interpreted from those three perspectives.

3.6.1 The Dominance of Class

The dominance of class was assessed by recording the speaking time of the teacher and students separately. By analyzing the proportion of the speaking time, the research concludes the dominance of class.

Table 1
The Dominance of Class

	The i-o model			Traditional approach		
	T's time of speaking	Ss' time of speaking	Dominance of class	T's time of speaking	Ss' time of speaking	Dominance of class
1 st week	13min	31min		28min	9min	
2 nd week	11min	33min		30min	8min	
3 rd week	12min	33min	Students	27min	10min	Teacher
4 th week	10min	35min		29min	12min	
5 th week	12min	34min		30min	11min	

From Table 1, it is evident that in the i-o model, the dominance of class was shifted from the teacher to the students, which means the role of the teacher has changed from the performer to a guide and organizer. In this circumstance, the students became the real master of their own class. They had more time to express different opinions, evaluate, judge and criticize others' standpoints.

3.6.2 Types of Teaching Activities

To figure out how do the teacher and students interact with each other in class, the data were collected in terms of the types of teaching activities, which are provided as follow:

Table 2
Types of Teaching Activities

	The i-o model	Traditional approach
Types of teaching activities	Pair-discussion Discussion within group Intergroup discussion Q&A	Q&A Pair work

It can be concluded from Table 2 that there was more S-S interaction in the i-o model: Pair-discussion, discussion within group, intergroup discussion, etc., in which students could have meaningful and controversial debate to foster critical thinking rather than mechanical and tedious Q&As. On the contrary, in the traditional approach, the types of activities were confined to Q&A and pair work, which hardly helped trigger students' critical thinking.

3.6.3 Initiative of Students

For five consecutive weeks, the instructor scoped at the initiative of students in both groups and recorded the number of participants (for instance, students who raised their hands or were involved in class activities) in each time period. The specific data are reported in the following Figure 5.

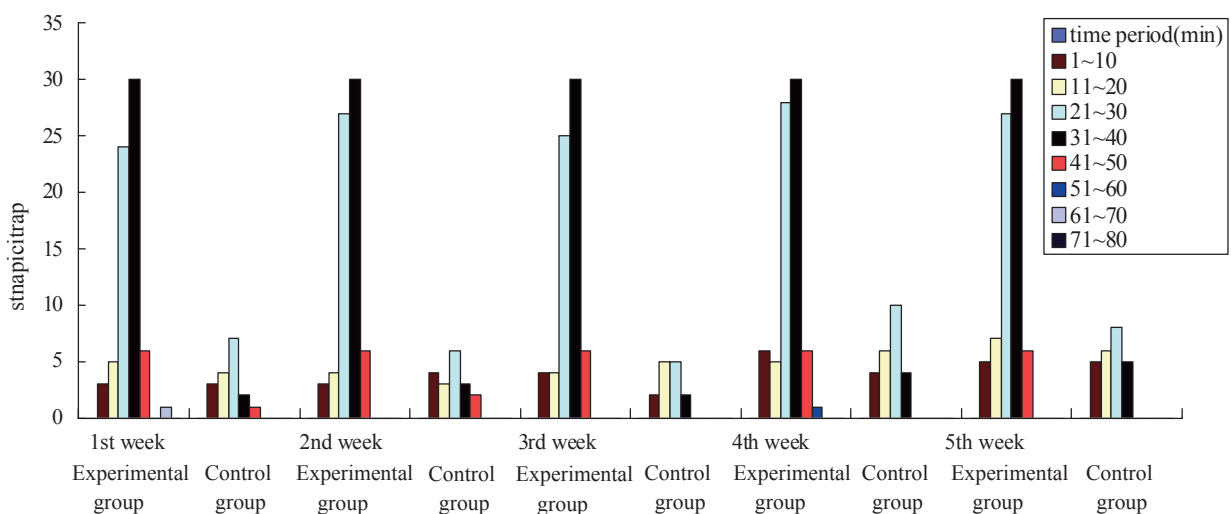


Figure 5
Initiative of Students

In Figure 5, the x axis represents rounds of week; the y axis means the number of participants; the bars are the time periods of a class. From the chart above, we can see that in both groups the initiative of students starts almost at the same level within the first 10 minutes, however, as time proceeds, the number of participants in experimental group climbs to 24 to 30 and the duration lasts about 20 minutes. Contrarily, the top number in the control group is no more than 10, and declines soon. Thus, it is obvious that the initiative of students in the experimental group conducted in the i-o model was significantly higher than those from the control group conducted in the traditional approach.

In conclusion, by comparing the traditional approach and the i-o teaching model, we can see that the advantages of the i-o model involve three perspectives: students dominating the class, various types of teaching activities, and high initiative of students. These advantages provide a suitable platform and vibrant atmosphere for fostering critical thinking in writing class.

CONCLUSION

By analyzing the relationship and importance of writing and critical thinking, it is clear to see that the i-o teaching model consist of two stages: the input stage and the output stage. In the input stage, the teacher inspires students to think initiatively. And students are expected to think independently and study questions carefully. In the output stage, students have a discussion about their thoughts in an organized way. Then the teacher directs students to reinforce the consciousness and ability of critical thinking. From the stage of input to the stage of output, critical thinking goes though the whole teaching process and plays a vital role. Compared with China's traditional teaching methods, the teaching model newly proposed is anticipated to break stereotyped teaching model, providing Chinese students with more space to develop independent thinking and critical thinking. It guides students to think dialectically and open their vision. Meanwhile, it could

also help students to discover, think about and judge this world independently and critically.

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