



A Survey on the Absence of Chinese University English Majors'

Critical Thinking Skills

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Abstract

This study, based upon the methods of questionnaire and two statistical analysis methods including descriptive statistics and inferential statistics, attempts to investigate whether Chinese university English majors lack critical thinking skills or not and meanwhile to examine to what degree the absence of their critical thinking skills reaches.

1. Introduction

In 1998, a Chinese scholar Huang Yuanshen wrote an article named *The Absence of Critical Thinking*, in which he said [1] that Chinese university English majors easily catch the disease of the absence of critical thinking, which is just like a stone throwing into the water, making a splash and drawing the attention of a large number of experts in education, foreign language teaching and learning, psychology, sociology and so on. Since then, a flood of articles have come out, and in the meanwhile a debate on whether Chinese university English majors lack critical thinking skills arises. Yet, up to now, no consensus has been reached. Then do Chinese university English majors really lack critical thinking skills? If the answer is positive, can we measure the degree of the absence of critical thinking skills? So in this study, first, a null hypothesis is proposed, and second, based upon the methods of questionnaire and quantitative analysis, we attempt to prove whether the proposition that Chinese university English majors are lack of critical thinking skills conforms to the fact, and simultaneously to investigate to what degree the absence of their critical thinking skills reaches.

2. Research methodology

2.1 Null hypothesis

Chinese university English majors do not lack critical thinking skills.

2.2 Methods

In this study, the following two methods are adopted.

- **Questionnaire.** A questionnaire is a research instrument consisting of a series of questions and other prompts for the purpose of gathering information from respondents [2]. The questions in a questionnaire can be open-ended and close-ended questions. In this research, the questionnaire with open-ended questions is used to measure critical thinking skills of Chinese university English majors.
- **Quantitative analysis.** It is a broad concept, covering many domains. Here, it is used to specifically refer to statistical analysis methods, one of which is descriptive statistics and the other inferential



statistics. “Descriptive statistics are the methods that help collect, summarize, present, and analyze data.” “Inferential statistics are the methods that use the data collected from a small group to reach conclusions about a larger group.” [3]. In this study, both of the two methods are used so as to sum up the main findings and to draw inferences.

2.3 Participants

There are altogether 222 participants, coming from School of English Language, Literature and Culture, Beijing International Studies University. Among them, 67 are from Grade One, 58 from Grade Two, 74 from Grade Three and 23 from Grade Four.

2.4 Open-ended questions

In order to ensure this survey is scientific, efficient and valid, we employ those open-ended questions put forward by Lynch, Wolcott & Huber [4]. The questions are about professional, personal and civic problems, which are listed as follows:

Professional Problems

- What is the best way to understand a piece of literature?
- What is the best way for a teacher to help students grow and learn?
- What can a leader do to promote effective team work?

Personal Problems

- What should I do to optimize my study development?
- What, if any, vitamin supplements should I use?
- What is the best way to care for my frail grandmother?

Civic Problems

- Should I volunteer with a particular nonprofit organization?
- What are the factors that you mainly consider in a voting?
- What are the most important things I can do to improve schools in my community?

3. Standards of evaluation

After we collect the Questionnaire, we find that we must have a set of standards which can help us judge whether Chinese university English majors possess critical thinking skills or not, and assist us in scaling the level of their critical thinking skills.

Until now, quite a number of standards have been raised. The most influential ones include the ones proposed by the Delphi Project [5], and those put forward by Paul & Elder [6]. But in this study, we make use of Lynch, Wolcott & Huber’s standards of evaluation [4], which, we found, workable and practical and which are briefly illustrated below [4].

Skill Pattern 0: Students proceed as if their goals are to find the single, “correct” answer.

Skill Pattern 1: Students proceed as if their goals are to stack up evidence and information to support the conclusion.

Skill Pattern 2: Students proceed as if their goals are to establish a detached, balanced view of evidence and information from different points of view.



Skill Pattern 3: Students proceed as if their goals are to come to a well-founded conclusion based on objective comparisons of viable alternatives.

Skill Pattern 4: Students proceed as if their goals are to construct knowledge, to move toward better conclusion or greater confidence in conclusions as the problem is addressed over time.

It is obvious that there are altogether five skill patterns, of which Skill Pattern 0 is the least complex skill pattern and Skill Pattern 4 is the most complex pattern, with Skill Pattern 1, Skill Pattern 2 and Skill Pattern 3 lying between.

4. Results and analysis

With standards available, we analyze the data and the result of the analysis is shown in Table 1.

Table 1 The Result of the Analysis

Grade	Pattern	1	2	3	Total
First	number	28	34	5	67
	percent	42%	51%	7%	
Second	number	29	22	7	58
	percent	50%	38%	12%	
Third	number	30	26	18	74
	percent	41%	35%	24%	
Fourth	number	10	8	5	23
	percent	43%	35%	22%	

From Table 1, the following conclusions can be drawn. First, some students possess the lowest and the least complex critical thinking skills. As can be seen, 28 (42%) out of 67 students from Grade One, 29 (50%) out of 58 from Grade Two, 30(41%) out of 74 from Grade Three and 10 (43%) out of 23 from Grade Four belong to the category of Skill Pattern 0. Let's cite some of their answers to see why they are put into this category. For the professional question "What is the best way to understand a piece of literature?", the following answers can be seen:

- To read books and writing movies. (from Grade One)
- To read more and have a discussion. (from Grade Two)
- To know its background and have much understanding to the culture. (from Grade Three)
- To read more about the literature of similar background. (from Grade Four)

For the personal question "What should I do to optimize my study development?", students answered as such:

- Take some hours to study careful every day. (from Grade One)
- Learn from others and try to find my own way. (from Grade Two)
- Plan the future and get a schedule. (from Grade Three)
- Make a clear plan and follow it. (from Grade Four)



For the civic question “Should I volunteer with a particular nonprofit organization?”, the typical answers are:

- I should. (from Grade One)
- Yes, I should. I volunteer to do some help to the old. (from Grade Two)
- Yes. (from Grade Three) ④ If I have time. (from Grade Four)

Apparently, these answers are somewhat naïve, not so well logically organized and not so appropriately expressed. The students do not come to the conclusion based upon evidence; instead they just present the one single answer based upon what they feel right. This demonstrates that their critical thinking skills are the lowest and the least complex.

In addition, a number of students’ critical thinking skills are better and more complex than the first group of students. The data shows that 34 (51%) of 67 students from Grade One, 22 (38%) of 58 students from Grade Two, 26 (35%) of 74 students from Grade Three and 8 (35%) of 23 students from Grade Four are in the category of Skill Pattern 1. To prove this classification, let’s analyze students’ answers first. For the professional question “What is the best way for a teacher to help students grow and learn?”, the typical answers are:

- Instead of teach them anything, but to tell them the methods and let them overcome all the difficulties by themselves. (from Grade One)
- They need to get along well with the students and they can’t just teach knowledge in the class.(from Grade Two)
- A teacher should not teach students only in professional parts, but also in creative parts. (from Grade Three)
- Teacher should guide students to assign and thinking to help them develop some learning habits.(from Grade Four)

For the personal question “What, if any, vitamin supplements should I use?”, students typically give the following answers:

- The vitamin that you need. (from Grade One)
- I think I may use vitamin C and D. (from Grade Two)
- Maybe V. (from Grade Three)
- What vitamin depends on your health. (from Grade Four)

For the civic question “What are the factors that you mainly consider in a voting?”, the following answers are representative:

- The quality of the candidates and their policies. (from Grade one)
- The qualities and work abilities and political opinions of every candidate. (from Grade Two)
- The strength and weakness of the candidates and what he or she can bring to me, and more importantly to the community. (from Grade Three)
- The personality, the policy. (from Grade Four)



Obviously, this group of students performs better than the first group. They can form their own point of view. However, they share such common weaknesses as “jumps to conclusions”, “stacks up evidence quantitatively to support their own view point and ignores contrary information”. [4]

Furthermore, a few students' critical thinking skills are higher than those of the first two groups. They belong to the Category of Skill Pattern 2, in which 5 (7%) out of 67 students are from Grade One, 7 (12%) out of 58 from Grade Two, 18(24%) out of 74 from Grade Three, 5 (22%) out of 23 from Grade Four. When they provide answers, they can identify issues, explain them from multiple perspectives, think of a better solution and finally come up with coherent and persuasive presentation, which can be detected from the following representative answers:

What can a leader do to promote effective team work?

- First, he helps or encourages the co-workers in the team to have a brainstorm, so the people in the team can have more creative and imaginative ideas. Second, control or manage the time of discussion. At last, summarize all the partners' idea probably. (from Grade one)
- Distribute tasks to the right person (appropriate ones). Set a deadline. Make sure the team members are familiar with each other. Improve interpersonal skills. Supervise and encourage team members in time. (from Grade Two)
- Specify the respective work of teammates according to their strengths and weaknesses. Build team spirit. Create a reward system. (from Grade Three)
- Good coordinated ability. Fully know the strengths of each individual. Distribute work in a reasonable way. Have disciplines. (from Grade Four)

What is the best way to care for my frail grandmother?

- Spare as much time as I can to listen to my grandmother's words, because the elderly always need someone to hear their feelings or chat. (from Grade one)
- Accompany with her. Talking and wandering and listen to her. Call my parents and uncle and aunts come back home at weekends. (from Grade Two)
- I'd better care for her from two aspects. On the one hand, I should give her some spiritual support by calling her regularly, etc. On the other hand, I should care for her physical condition, liking reminding her of doing some check in hospital. (from Grade Three)
- Spend more time together with her. (from Grade Four)

What are the most important things I can do to improve schools in my community?

- To give more moral classes and build up the link between society and the school. (from Grade one)
- To do a research and get the information about the students, parents and then do some enhancement to make them satisfied. (from Grade Two)
- The quality of education and the convenience for the community. (from Grade Three)
- Increase my own abilities and improve it when I have money. (from Grade Four)

Though these students do make grammatical mistakes, they perform the best among the three groups. They can identify issues and come up with answers from multiple perspectives, which shows that they



have a higher capability of analyzing, synthesizing, evaluating and reaching a reasonable conclusion. Yet, they also display their own weaknesses. For example, they can find one solution but they cannot express their adequate support for this one.

The above analysis reveals that almost all the students are in possession of critical thinking skills. The differences are that some have the lowest and the least complex thinking skills, some have lower and less complex thinking skills, and a few have higher thinking skills, which only arrives at the above-median level in the hierarchy of Thinking Skill Patterns. The analysis also exposes a strange phenomenon, that is, critical thinking skill patterns do not vary with the change of their grades. Our common sense tells us that with the growth and maturity of students, their critical thinking skills should have been increased, but the fact is not the case. So it might be inferred that our English language teaching and learning, including methodology, textbooks, etc. should be partially responsible.

5. Conclusion

From the above analysis, two findings can be drawn. First, Huang's proposition that Chinese university English majors lack critical thinking skills is not completely right. Second, Chinese university English majors to a certain extent have critical thinking skills, namely quite a number of students possess the lowest and the least complex critical thinking skills and only a minority of students have comparative complex thinking skills. Although this study is a pilot one and on a small scale, it reminds us that attempts should be made to inquire into the root cause and meanwhile measures should be taken to improve this deteriorating situation.

(I acknowledge thanks to the support given by The 12th Five-year Plan Project of National Science of Education and the Key Project of the Ministry of Education of China, No. GPA115057).

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