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CRITICAL THINKING IN LANGUAGE LEARNING FOR CHINESE EFL COLLEGE STUDENTS

Jiachang Li[1,2], Yue Lin[1,2]
1. Hanshan Normal University, Chaozhou City, Guangdong, China
2. PhD student, St. Paul University Philippines, Tuguegarao City, Cagayan, Philippines
li_jiachang@outlook.com

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Abstract:
The information revolution is shaping education nowadays, especially higher education. In the information age, critical thinking has become crucial for students for their academic and future career success. The Chinese academia is aware of the importance of critical thinking and the shortcomings of the traditional English as a Foreign Language (EFL) teaching in China. This research accentuates the need to transform the EFL classrooms for Chinese college students. First, the relationship between critical thinking and language learning is studied. The origin, definition, categorization and practical assessment tools of critical thinking are reviewed for a better understanding of critical thinking. Then the relationship between critical thinking and language learning is explored. Studies have shown that critical thinking can not only be taught and learned in the language learning process, but also affect language learning in a positive manner. In order to examine the status quo of the Chinese EFL college students' critical thinking, a questionnaire survey involving 1078 Chinese EFL college students was conducted. Participants of the survey were enrolled in a provincial pedagogical university in southeastern China. Results have shown that most participants hold an ambivalent attitude towards critical thinking, and it is necessary to improve students' critical thinking disposition, especially in analyticity, systematicity, critical thinking self-confidence, and inquisitiveness. The survey has also revealed a weak correlation between participants' critical thinking disposition and their College English Test results. Finally, feasible measures to facilitate critical thinking in the EFL classroom are provided based on the results and discussions. This research serves as a reference for EFL policymakers, educators, and learners to reflect on and enhance their own teaching or learning practices through the integration of critical thinking.

Keywords: Chinese college students, critical thinking, EFL, language learning.

1. INTRODUCTION

Critical thinking (CT) refers to the mental process of actively and rationally selecting, identifying, analyzing, assessing, synthesizing, evaluating, and reflecting on information, so as to form reasoned judgments. In the current information age, where enormous amounts of data and knowledge are generated and exchanged on a daily basis, it is of great importance to be equipped with critical thinking skills, as it enables one to filter out useless and outdated information, distinguish between truth and falsehood, develop meaningful perspectives, and make sound judgments. Critical thinking is an integral part of education, and remains at the forefront of education today (Beaumont, 2010). It is an essential skill for university students to foster logical thinking, develop creativity and improve decision-making. Therefore, it is a desired goal and a highly valued outcome in higher education in particular.

In the English as a Foreign Language (EFL) setting in China, where the traditional "jug-and-mug" style of teaching used to dominate the classroom, the teacher usually had the full control of the classroom and focused on imparting linguistic knowledge and skills through lecturing, rather than creating opportunities for students to engage in interactive activities in a reflective manner. Fortunately, the short-comings of such a teacher-centered approach have caused wide concern within the Chinese academia. Teachers, university administrators, educators, and policy makers have started to make efforts to incorporate critical thinking into the educational process. Specifically, critical thinking has been listed as a top social competence required in the teaching of English in the universities of mainland China, as stipulated in the Guidelines on College English Teaching (2022), a Chinese national document issued by the Steering Committee of the Ministry of Education for College Foreign Language Teaching. Therefore, there is a practical need to gain insight into critical thinking in language learning for Chinese EFL college students.

This research proposes to study the relationship between critical thinking and language learning, examine the status quo of Chinese EFL college students' critical thinking, and explore feasible measures to facilitate critical thinking in the EFL classroom. It is hoped that this research will serve as a reference for EFL policymakers, educators, and students to reflect on and enhance both teaching and learning practices through the integration of critical thinking into EFL classrooms.

Research Questions

This research was designed to explore the importance of critical thinking in language learning and its implementation in a Chinese EFL classroom.

Specifically, it sought to address the following three research questions:

1) What is the relationship between critical thinking and language learning?
2) What is the current level of Chinese EFL college students' critical thinking disposition?
3) What measures can be adopted to facilitate critical thinking in the EFL classroom?

2. LITERATURE REVIEW

2.1 Understanding Critical Thinking

2.1.1 Definitions of Critical Thinking

The concept of critical thinking was first documented about 2,500 years ago in the teaching of Socrates, known as "Socratic Questioning" in the form of asking thoughtful questions intended to draw out answers. The term "critical" is derived from the ancient Greek word "kritikos" meaning "able to judge, distinguish or choose" (Butterworth & Thwaites, 2013, p.7).

In the modern times, American educator, philosopher and psychologist John Dewey (1910) first introduced the term "reflective thinking" as an educational goal, an equivalent to what is known now as critical thinking. He defined it as an "active, persistent and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it, and the further conclusions to which it tends" (Dewey, 1933, p. 9). For Dewey, critical thinking is an "active" process that requires attention, engagement, and motivation, as opposed to passively taking in knowledge from someone else.

Similarly, Robert Ennis (1987) also used the same term as Dewey to describe critical thinking as "reasonable, reflective thinking focused on deciding what to believe or do" (1987, p. 10), and claimed that a taxonomy of critical thinking included both abilities and dispositions.

Another influential figure in the history of the critical thinking movement was Richard Paul, who defined critical thinking with his wife and collaborator Linda Elder as "the art of thinking about your thinking while you are thinking in order to make your thinking better: more clear, more accurate, and more defensible" (2006, p. 17). For Paul, the emphasis was placed on metacognition - the awareness and understanding of one's own thought processes and the patterns behind them.

However varied these definitions may seem, they all present the basic concept that critical thinking entails careful analysis and active reasoning. These pioneering researchers have laid the groundwork for understanding critical thinking.

2.1.2 Categorization of Critical Thinking Skills

Beyond the general definition, scholars have advanced different ideas on the categorization of critical thinking skills. Glaser (1941), Ennis (1987), Fisher (2001), and Fisher and Scriven (1997) all provided their own versions of critical thinking skills, which could be summed up as interpretation, analysis, evaluation, and inference.

In his well-known taxonomy of learning used to distinguish different categories of cognitive performance, Bloom (1956) and his team of collaborators classified six levels of thinking including knowledge, comprehension, application, analysis, synthesis, and evaluation, ranked from the least complex to the most complex. The first three levels were referred to as lower order thinking skills, while the last three were known as higher order thinking skills. Critical thinking skills, as a matter of fact, incorporate both lower order and higher order thinking, because critical thinking helps to generate information (lower order thinking) and make decisions (higher order thinking).

Facione led a ground-breaking Delphi panel of 46 experts in a project funded by the American Philosophical Association during 1987 to 1989 to work toward an international consensus on critical thinking, and completed a report on the results known as the Delphi Report, in which the expert consensus identified six critical thinking skills as "interpretation, analysis, evaluation, inference, explanation, and self-regulation" (Facione, 1990, p. 12). Each skill was further expanded into various sub-skills. Facione's report served as a turning point in the research of critical thinking, as it not only elucidated the characteristics of an ideal critical thinker, but also presented specific recommendations for critical thinking instruction and assessment.

2.1.3 Assessment of Critical Thinking

To evaluate a person's ability to think critically, researchers have endeavored to design aptitude tests as assessment standards. The Watson Glaser Critical Thinking Appraisal (WGCTA) is one of the most common critical thinking tests that measures and interprets a test-taker's critical thinking and reasoning skills. Developed by Watson and Glaser (1964), this timed, multiple-choice assessment is divided into five sections: (1) inferences, (2) recognition of assumptions, (3) deduction, (4) interpretation, and (5) evaluation of arguments. It is frequently used on the market in business, government, and legal settings for purposes of hiring and promotion.

Another widely used measure of critical thinking abilities is the Cornell Critical Thinking Test (CCTT). First developed in 1985 by Ennis and Millman, CCTT offers two levels of testing: Level X for students of Grades 4 to 14, containing skills in induction, credibility, observation, deduction, and assumption identification; and Level Z for college students and adults, covering induction, credibility, prediction and experimental planning, fallacies (especially equivocation), deduction, definition, and assumption identification (Ennis, Millman & Tomko, 2005). This test can either be administered by a parent at home, or used by a teacher in class.

The California Critical Thinking Dispositions Inventory (CCTDI), developed by Facione and colleagues (Facione & Facione, 1992), is an inventory designed to measure critical thinking disposition, which aims to assess seven dimensions: truth-seeking, open-mindedness, analyticity, systematicity, CT-confidence, inquisitiveness, and cognitive maturity. The California Critical Thinking Assessment Test (CCTST), also developed by Facione (1991), is a standardized test that targets college-level critical thinking skills including interpretation, analysis, inference, evaluation, explanation, and self-regulation, based on the theoretical construct of the Delphi Report, as previously discussed.

The above-mentioned assessment tools demonstrate that it is possible to gather and analyze meaningful data on students' critical thinking both in terms of skills and dispositions. The Chinese version of the CCTDI was adopted for this research to examine the status quo of critical thinking of Chinese EFL college students.

2.2 Critical Thinking and Language Learning

2.2.1 The Impact of Language on Critical Thinking

Language is often perceived as a communicative tool. However, the functions of language go far beyond that. For instance, psychological studies have shown that language can also serve as a cognitive tool in humans. Vygotsky was a pioneer in studying the importance of language in the cognitive development of humans. He believed in the centrality of language as a tool for thought or a powerful means of mediation (Mitchell & Myles, 2004; Vygotsky, 1934). He regarded language as the most important "psychological tool for organizing our individual thoughts, for reasoning, planning and reviewing our actions" (Mercer, 2000, p. 10). His view was echoed and further developed by a number of research. Whorf (1956) argued that "the structure of a human being's language influences the manner in which he understands reality and behaves with respect to it" (p. 23). Clark (1998) proposed six broad ways in which linguistic artifacts can complement brain activity. Carruthers (2002) integrated a large body of experimental evidence in support of the cognitive functions of language and theoretical consideration. Lupyan (2012) proposed a model of the "language-augmented thought", arguing that human cognition is transformed by the learning and use of language. Altogether, these studies have supported that view that language helps improve thinking. Critical thinking, as one type of thinking, is therefore affected by the language people speak.

2.2.2 The Impact of Critical Thinking on Language Learning

On the other hand, in recent decades, educators and scholars have been investigating the impact of critical thinking on language learning. Fairclough (1999) argued that critical language awareness (CLA) should be "a basic concern in language education" (p. 71). Various studies have proved that language learning is achieved with better results when activities that require critical thinking are incorporated into the classroom. It is worth noting that the issue of critical thinking was largely researched in the first language (L1) classrooms before the 1990s, and for the past three decades there has been growing interest among researchers and practitioners in the application of critical thinking to the second language (L2) contexts in regards to different language skills: listening (Mohammadi & Zare, 2014); speaking (Malmir, 2012); reading (Vaseghi et, el, 2012; Zhang, 2020); and writing (Moghaddam, M. M., & Malekzadeh, 2011; Sham, 2016). Various studies have confirmed the effectiveness of critical thinking in promoting the learning of English as a Second Language (ESL) or English as a Foreign Language (EFL). David and Dunham (1997) conducted an empirical study on the integration of critical thinking and EFL instruction. They made use of the Ennis-Weir Critical Thinking Essay Test to assess progress in critical thinking after one year of intensive academic English instruction among 36 Japanese students. The result of this experiment indicated that the participants in the treatment group scored significantly higher than those in the control group, thus proving that critical thinking skills can be taught as part of academic EFL/ESL instruction. Nejmaoui (2019) investigated the explicit integration of critical thinking skills in argumentative writing in a quasi-experimental design with 36 Moroccan EFL university students as the research subjects, and found that critical thinking is teachable and transferable.

2.2.3 The Relationship between Critical Thinking and Language Learning

The aforementioned studies have illustrated the relationship between critical thinking and language learning both qualitatively and quantitatively. On the one hand, language learning is conducive to the development of critical thinking. For instance, student-centered language classrooms offer opportunities for students to unlock and improve their critical thinking skills via communicative activities such as interviews, news reports, role plays, and group presentations, or cognitive exercises including critical reading and critical writing. Such language learning activities enable students to become more open-minded, inquisitive, analytical, creative, and empathetic. On the other hand, critical thinking affects language learning in a positive manner. Critical thinking allows language learners to impartially analyze information, develop active ideas and make reasonable decisions, thus making language learning more applicable, productive, and efficient.

3. METHODOLOGY

3.1 Research Design

The previous review of the literature has proved that critical thinking is of crucial importance for Chinese EFL students. The next question to be solved is the current status quo of Chinese EFL college students' critical thinking disposition. To answer this question, an online questionnaire survey was conducted among non-language major undergraduate students from year two to year four in a provincial pedagogical university in southeastern China, and the survey responses were collected from September 18, 2022, to September 22, 2022. Though not English majors, these students were all EFL learners and most of them had been learning English for about ten years.

3.2 Participants

A total of 1078 Chinese EFL college students of a provincial pedagogical university in southeastern China have been involved in the online questionnaire survey, among which 363 were sophomores, 458 were juniors, and 257 were seniors (see Figure 1). According to the survey, 793 of these students attended either College English Test (CET) Band 4 or Band 6 in China, and 718 students voluntarily provided valid results of the most recent CET test they took in June 2022 (see Figure 2).

Figure 1. Details of participants

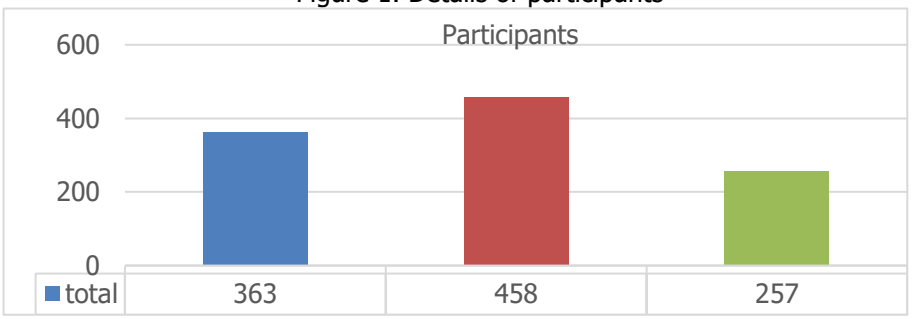
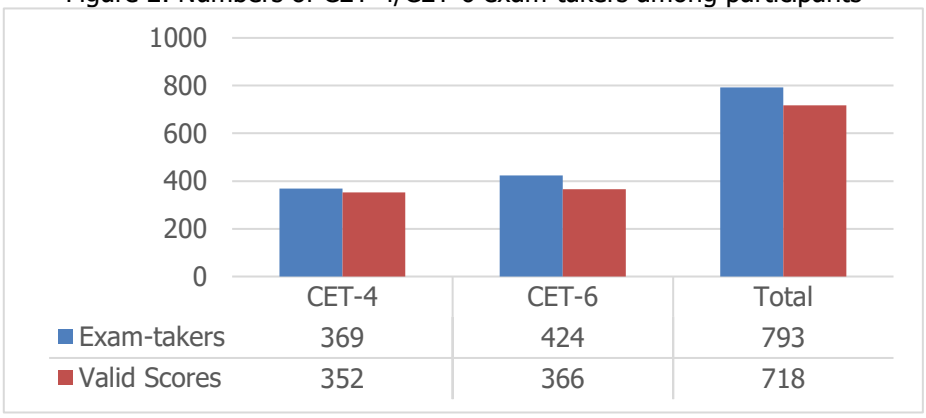


Figure 2. Numbers of CET-4/CET-6 exam-takers among participants



3.3 Instrumentation

The questionnaire was posted on an online questionnaire platform named Wenjuanxing in China. The survey consists mainly of three parts. The first part includes questions for personal information like gender, grade, and major. The second part is the Chinese Version of the California Critical Thinking Disposition Inventory (CCTDI-CV), which was adopted from CCTDI, as described earlier. Like the original version, the CCTDI-CV conceptualizes the constituents of critical thinking disposition in seven dimensions, namely truth-seeking, open-mindedness, inquisitiveness, analyticity, systematicity, critical thinking self-confidence, and cognitive maturity (see Table 1). The validity and reliability of the CCTDI-CV have been tested by Pang et al. (2004), and the result shows satisfactory content validity and internal consistency. Pang et al. (2004) conclude that the CCTDI-CV is instrumental for both students and teachers. The last part of the survey consists of questions about the participants' most recent results from the College English Test in China.

The survey is designed not only to find out the current level of Chinese EFL college students' critical thinking disposition, but also to examine the relationship between students' critical thinking disposition and their language proficiency.

Table 1. The seven dimensions of CCTDI

Dimension	Description
Truth-seeking	Measures intellectual honesty, which is the desire to seek the best knowledge objectively even if the findings do not support one's self-interest or preconceived opinions
Open-mindedness	Measures tolerance of new ideas and divergent views
Analyticity	Measures alertness to the need to use reason and evidence to solve problems

Systematicity	Measures the inclination to be organized, orderly, focused and diligent when solving problems
Critical Thinking Self-confidence	Measures the trust in one's own reasoning and ability to guide others to make rational decisions
Inquisitiveness	Measures intellectual curiosity and the desire for learning
Cognitive Maturity	Measures the inclination to see the complexity in problems and the desire to be prudent in making decisions.

3.4 Data Collection Procedure

The online questionnaire was posted and distributed to target students between September 18, 2022, to September 22, 2022, through the online questionnaire platform. Participants were allowed to access the questionnaire at their most convenient time with their own choice of equipment, i.e. smartphones, computers, laptops, etc. Clear instructions were given within the questionnaire in order to ensure its validity. Primary data were collected by the online questionnaire platform and adjusted for further analysis.

3.5 Data Analysis

The primary quantitative data collected through the questionnaire survey were processed and analyzed with statistical tools of Microsoft Excel. Like CCTDI, the CCTDI-CV also uses a 6-point Likert scale in which 1 means strongly agree and 6 means strongly disagree. There are altogether 70 items in the CCTDI-CV and for each of the seven dimensions 10 items. The total scores of participants were used to evaluate their critical thinking disposition. The scale shown in Table 2 was used to interpret the overall result of participants' scores of the CCTDI-CV. Their scores of each of the seven dimensions of the CCTDI-CV were also analyzed using the scale shown in Table 3.

Table 2. Scale for determining the participants' overall level of critical thinking disposition

Total Score	**Interpretation**
No more than 210	Negative attitude
Between 211 and 279	Ambivalent attitude
Above 279	Positive attitude

Table 3. Scale for determining the participants' level of critical thinking in the seven dimensions

Dimension	**Less than 30**	**30-39**	**40 and above**
Truth-seeking	Negative attitude	Ambivalent attitude	Positive attitude
Open-mindedness			
Analyticity			
Systematicity			
Critical Thinking Self-confidence			
Inquisitiveness			
Cognitive Maturity			

Pearson's correlation was employed to examine the relationship between the participants' critical thinking disposition and English proficiency. The interpretation of Pearson's Correlations Coefficient was based on Table 4.

Table 4. Interpretation of Pearson's Correlation Coefficient

Pearson Correlation Coefficient	**Strength of Relationship**
0.00	No Correlation
0.01-0.20	Slight Correlation
0.21-0.40	Low Correlation
0.41-0.70	Moderate Correlation
0.71-0.80	High Correlation
0.81-0.99	Very High Correlation
1.00	Perfect Correlation

4. RESULTS AND DISCUSSION

The aim of the following section is to analyze and discuss the results of the questionnaire survey in order to find out the status quo of the critical thinking disposition of Chinese EFL college students and any possible explanations for the results. The survey would also reveal the correlation between participants' overall critical thinking disposition and their English proficiency, and discuss possible reason for the result.

4.1 Overall Critical Thinking Disposition

According to the survey, the participants' mean score of the CCTDI-CV was 238.085. Based on the results shown in Table 5, 924 of the participants, which accounted for 85.714% of all participants, showed an overall ambivalent disposition in critical thinking with a total score of CCTDI-CV ranging between 211 and 279. 124 of the participants scored no more than 210, which indicated an overall negative attitude toward critical thinking. Only 30 of the participants, 2.783% of them, scored above 280 (280 included), showing an overall positive attitude toward critical thinking. The result indicates that most of the Chinese college EFL students' critical thinking disposition is ambivalent.

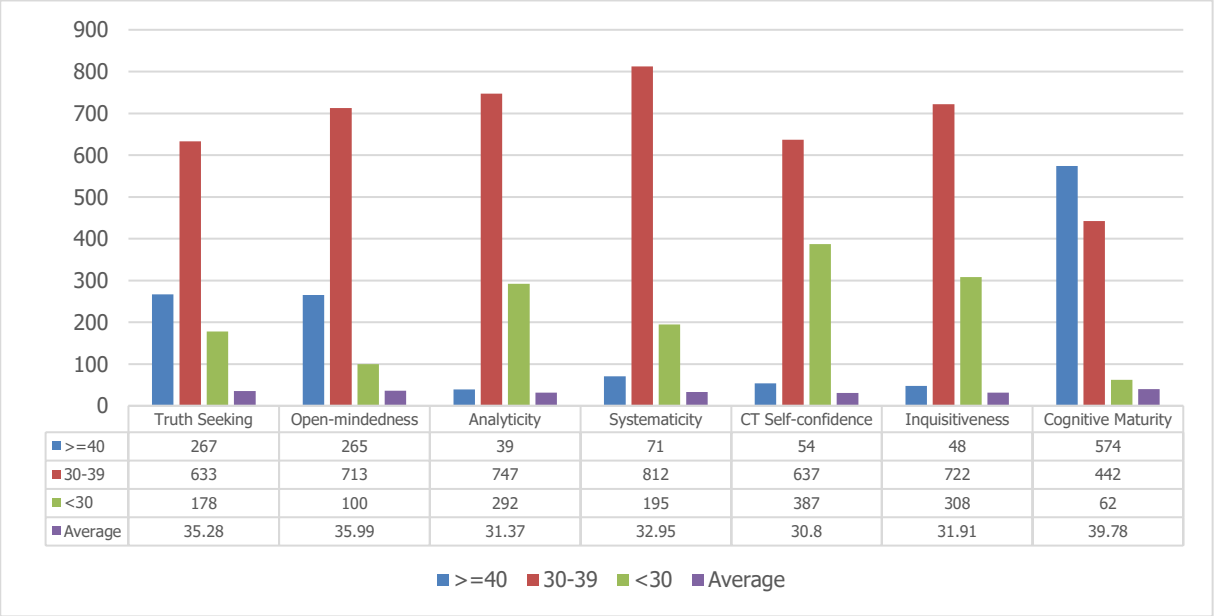
Table 5. Chinese College EFL Students' Critical Thinking Disposition

Total scores of CCTDI-CV	Number of participants	Percentage of participants
No more than 210	124	11.503%
Between 211 and 279	924	85.714%
above 279	30	2.783%

4.2 The Seven Dimensions of Critical Thinking

As shown in Figure 3, the participants' mean scores of the seven dimensions of the CCTDI-CV are between 30 and 40. The participants scored the highest, with a mean score of 39.78, in cognitive maturity with 574 of them showing a positive attitude, and 442 showing an ambivalent attitude. The mean scores for truth-seeking and open-mindedness of the participants were around 35, with more participants scoring between 30 and 39, showing an ambivalent attitude. As for analyticity, systematicity, critical thinking self-confidence, and inquisitiveness, only dozens of participants showed positive attitudes. Most participants held an ambivalent attitude, and the mean scores of participants in these four dimensions were relatively low, which were 31.37, 32.92, 30.8, and 31.91 to be specific.

Figure 3. Participants' Critical Thinking Disposition in the Seven Dimensions



	Truth Seeking	Open-mindedness	Analyticity	Systematicity	CT Self-confidence	Inquisitiveness	Cognitive Maturity
>=40	267	265	39	71	54	48	574
30-39	633	713	747	812	637	722	442
<30	178	100	292	195	387	308	62
Average	35.28	35.99	31.37	32.95	30.8	31.91	39.78

According to the analysis of the participants' CCTDI-CV result, only a few of them show a positive attitude in terms of critical thinking and the survey reveals that Chinese EFL college students are weaker in analyticity, systematicity, critical thinking self-confidence, and Inquisitiveness. This could result from the traditional "jug-and-mug" classroom or teacher-center classroom of the EFL teaching in China. With teachers taking control of the classroom, students are seldom given the chance to discover and solve problems on their own. Now that the Chinese academia has recognized the importance of critical thinking, it is necessary to provide educators and students with practical and feasible instructions to enhance students' critical thinking in EFL classrooms.

4.3 Relationship between Critical Thinking and English Proficiency

As shown in Table 6, the result of the correlation test between the overall critical thinking score of participants and their CET-4/ CET-6 results signify only a slight correlation relationship, which indicates that participants with higher critical thinking disposition don't necessarily score higher in the CET exams.

Table 6. Relationship between CT and CET-4/CET-6

	Pearson Correlation	Strength of Relationship
CET-4	0.065383	No Correlation
CET-6	0.025694	Slight Correlation

As the most influential and recognizable test here in China, CET assesses students' English proficiency against the teaching goals prescribed in the College English Syllabus and Teaching Requirements. It focuses mainly on students'

reading, listening, translation, and writing abilities. The design of the CET exams might be the reason why the survey shows a weak correlation relationship between students' critical thinking disposition and their CET exam results.

5. CONCLUSIONS AND RECOMMENDATION

By reviewing previous literature about critical thinking and language learning, the origin, definition, categorization and assessment of critical thinking are better understood and the relationship between critical thinking and language learning is clarified. Language, as a communicative tool, helps improve thinking and critical thinking can be taught and learned in the language learning process. On the other hand, critical thinking can better facilitate language learning to achieve better learning outcomes.

According to the questionnaire survey conducted in this research, most Chinese EFL college students hold an ambivalent attitude towards critical thinking, and it is necessary to improve students' critical thinking disposition, especially in analyticity, systematicity, critical thinking self-confidence, and inquisitiveness. Also, the research reveals the fact that the current CET exams focus more on language skills and cannot assess students' critical thinking skills.

In order to better facilitate Chinese EFL college students with the ability of critical thinking, changes need to be made in the Chinese EFL education in colleges, and hereinafter are some recommendations for EFL policymakers, educators, and students.

5.1 Making Revisions to the CET Tests for Better Assessment of Critical Thinking

For policymakers, besides enlisting critical thinking as one of the top social competences in the teaching guideline, revisions of the CET tests could help guide teachers and students to better focus on the cultivation of critical thinking. According to Alderson and Wall (1993, p. 5), "tests are held to be powerful determiners of what happens in classroom". The revision of the CET tests focusing on the assessment of the ability of critical thinking could be a powerful guide for both educators and students.

5.2 Enhancing Critical Thinking Training in EFL Classrooms

As for educators, now that critical thinking has been enlisted as one of the top social competences for English teaching in Chinese universities, educators should include the enhancement of critical thinking as one of the teaching objectives and incorporate critical thinking training in course design. Student-centered learning should be promoted in EFL courses in order to activate students' full potential.

5.3 Improving the Awareness of Critical Thinking

Chinese EFL college students themselves should also be the key party of this transformation. By knowing the importance of critical thinking and taking over the leading role in the learning process, they could better their critical thinking skills, and this would benefit not only their language learning but also their future careers.

In conclusion, it is believed that the ability to think critically is very useful to language learning, and therefore should be integrated into EFL settings. Future researchers could further examine and testify the results and recommendations of this research by carrying out experimental researches on specific activities entailing critical thinking.

REFERENCES

1. Alderson, C., & Wall, D. (1993). Does washback exist? *Applied Linguistics, 14*(2), 115-129.
2. Beaumont, J. (2010). A sequence of critical thinking tasks. *TESOL Journal, 1*(4), 427-448.
3. Bloom, B. S., Engelhart, M. D., Furst, E. J., Hill, W. H., & Krathwohl, D. R. (1956). *Taxonomy of Educational Objectives: The Classification of Educational Goals (Handbook I: Cognitive Domain)*. New York: Longmans Publishing.
4. Butterworth, J. & Thwaites, G. (2013). *Thinking Skills: Critical Thinking and Problem Solving (2nd Edition)*. Cambridge, United Kingdom: Cambridge Unity Press.
5. Carruthers, P. (2002). The cognitive functions of language. *Behavioral and Brain Sciences, 25*(6), 657-726.
6. Clark, A. (1998). Magic words: how language augments human computation. In J. Boucher & P. Carruthers (Eds.), *Language and Thought* (pp. 162-183). Cambridge University Press.
7. Davidson, B., & Dunham, R. (1997). Assessing EFL student progress in critical thinking with the Ennis-Weir Critical Thinking Essay Test. *JALT Journal, 19*, 43-57.
8. Dewey, J. (1933). *How We Think: A Restatement of the Relation of Reflective Thinking to the Educative Process*. Lexington, MA: D.C. Heath.
9. Ennis, R. H. (1987). A taxonomy of critical thinking abilities and dispositions. In J. B. Baron & R. J. Sternberg (Eds.), *Teaching Thinking Skills: Theory and Practice* (pp. 9-26). New York: Freeman.
10. Ennis, R. H., Millman J. & Tomko, T. N. (2005). *Cornell Critical Thinking Test (5th Edition).* Pacific Grove, CA: Midwest.
11. Facione, P. A. (1990). *Critical Thinking: A Statement of Expert Consensus for Purposes of Educational Assessment and Instruction (Research Report)*. Millbrae, CA: California Academic Press.
12. Facione, P. A. & Facione, N. C. (1992). *The California Critical Thinking Disposition Inventory*. Millbrae, CA: California Academic Press.
13. Fairclough, Norman (1999). Global capitalism and critical awareness of language. *Language Awareness, 8*(2), 71-83.

14. Fisher, A. (2001). *Critical Thinking: An Introduction*. Cambridge and New York: Cambridge University Press.
15. Fisher, A. & Scriven, M. (1997). *Critical Thinking: Its Definition and Assessment*. Point Reyes, CA: Edgepress and Norwich, UK: Centre for Research in Critical Thinking, University of East Anglia.
16. Glaser, E. M. (1941). *An Experiment in the Development of Critical Thinking*. New York: Advanced School of Education at Teachers College, Columbia University.
17. Hitchcock, D. (2017). *On Reasoning and Argument*. Cham, Switzerland: Springer International Publishing.
18. Lupyan, G. (2012). What do words do? Toward a theory of language-augmented thought. *Psychology of Learning and Motivation, 57*, 255-297.
19. Malmir, A., & Shoorcheh, S. (2012). An investigation of the impact of teaching critical thinking on the Iranian EFL learners' speaking skill. *Journal of Language Teaching and Research, 3*(4), 608-617. https://doi.org/10.4304/jltr.3.4.608-617
20. Mercer, N. (2000). *Words and Minds: How We Use Language to Think Together*. New York, NY: Routledge.
21. Mitchell, R. & Myles, F. (2004). *Second Language Learning Theories (2nd Edition)*. London: Hodder Arnold.
22. Moghaddam, M. M., & Malekzadeh, S. (2011). Improving L2 writing ability in the light of critical thinking. *Theory and Practice in Language Studies, 1*(7), 789-797. https://doi.org/10.4304/tpls.1.7.789-797
23. Mohammadi, E. N. & Zare, Z. (2014). The relationship between critical thinking ability and listening comprehension ability of Iranian EFL learners. International Journal of Research Studies in Language Learning, 4(3),
24. Nejmaoui, N. (2019). Improving EFL learners' critical thinking skills in argumentative writing. *English Language Teaching, 12*(1), 98-109.
25. Pang, M. C., Wong, K. S., Chan, K. L., Chan, M. F., Bai, H. H., Li, S. G., ... & Yin, L. (2004). Validity and reliability of the Chinese critical thinking disposition inventory. *Chinese Journal of Nursing, 39*(9), 644-647.
26. Paul, R. & Elder, L. (2006). *Critical Thinking: Tools for Taking Charge of Your Learning and Your Life (2nd Edition)*. Columbus, Ohio: Pearson Prentice Hall.
27. Sham, D. P. L. (2016). Teaching and learning ESL writing by critical thinking. *American Journal of Educational Research, 4*(12), 854-860.
28. Vaseghi, R., Gholami, R. & Barjesteh, H. (2012). Critical thinking: An influential factor in developing English reading comprehension performance. *Advances in Asian Social Sciences, 2*(1): 401-410.
29. Vygotsky, L. (1934). *Thought and Language* (E. Hanfmann, & G. Vakar, Trans.). Cambridge, MA: MIT Press.
30. Watson, G. & Glaser, E. M. (1964). *Watson-Glaser Critical Thinking Appraisal Manual: Forms YM and ZM*. New York: Harcourt, Brace, and World.
31. Whorf, B. L. (1956). *Language Thought and Reality*. Cambridge MA: MIT Press.
32. Zhang, Y. (2020). Developing EFL students' critical thinking competence in English reading class. *Creative Education, 11*, 1145-1151. https://doi.org/10.4236/ce.2020.117085