

Critical Thinking in English Reading Courses

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Abstract: This paper attempts to formulate an adaptable and task-based framework for enhancing the critical thinking of students in English reading courses. It has implemented a 10-month empirical research with 38 junior students majoring in business English in one Chinese university in 2023. The research consists of four stages, which are investigation, framework drafting, revision, and finalizing. The results are based on teacher observation, student feedback, and their assignment performance. A task-based framework is developed to engage students in analysis, evaluation, inference, observation, reflection, and reasoning for their better critical thinking development than traditional classes. The tasks are categorized into in-class reading, after-class reading, and assessments. During in-class tasks, worksheets and work-pair-share technique are applicable to enhance student skills in analysis, evaluation, inference, and reasoning; in after-class ones, the plus-minus-interesting technique helps students improve skills of observation, reflection, evaluation, and reasoning; assessment tasks raise their awareness and motivate them to strengthen critical thinking skills voluntarily. This study aims to enrich empirical studies and provides a feasible framework for integrating critical thinking in reading courses.

1. Introduction

Critical thinking is a thinking approach far from new, and it was introduced by Socrates thousands of years ago^[1]. It is still of great significance nowadays and regarded as a basic survival skill by scholars^{[2][3]}. With better critical thinking skills, students are more likely to perform better in the future^[4]. Considering its great influence, critical thinking is a priority in education at different levels. International Commission on the Futures of Education Commission^[5] lists critical thinking as a planned education achievement in 2050, and universities mostly regard it as a crucial attribute for graduates who intend to succeed in higher education^[6]. Davis and Barnett put forward that “there was considerable overlap between the liberal conception of the idea of the university and the idea of critical thinking”^[7]. The importance of critical thinking has been increasingly emphasized in language-related courses, and scholars^[8] said it is a must for effective language learning. It makes up for cultural deficiencies and helps facilitate cognitive processes that are necessary for language development^[9].

Although enhancing thinking skills helps students master foreign languages more proficiently than before^[10], the integration of critical thinking in actual teaching has not been highlighted enough^[11]. This is probably due to greater challenges that language teachers face than those of other

subjects^[12] and insufficient skills and pedagogical knowledge of teachers^[13]. Though there are great quantities of empirical studies on integrating critical thinking in education, those on second language teaching are limited^[14]. Existent studies mostly focus on the significance of cultivating critical thinking in writing courses^[10] and the exploration of how its direct instruction improves reading comprehension^[6]. There are scanty studies on how teachers could foster critical thinking in reading courses of English for specific purposes (ESP). However, students encounter extra difficulties in reading materials of ESP than those of English as a foreign language (EFL).

Therefore, this paper conducts a 10-month empirical research and aims to formulate an adaptable teaching framework for integrating critical thinking in reading courses for ESP students in universities. The questions that drive this study are as follows:

1) What problems do ESP teachers encounter in enhancing the critical thinking of students in reading courses?

2) How can teachers solve these problems and enhance the critical thinking skills of students?

2. Critical thinking

Though the concept has existed for a long time, critical thinking is still “elusive” as Davis and Barnett said^[7]. Dewey, the father of modern critical thinking studies, described it as “active, persistent, and careful consideration of a belief or supposed form of knowledge in the light of the grounds which support it and the further conclusions to which it tends^[11]”. Later, more scholars studied and interpreted critical thinking from different perspectives. It is defined as the capacity to reach sound decisions^[15], the ability to evaluate statements^[16], or the ability to analyze, criticize and advocate ideas and reason inductively and deductively^[17].

Critical thinking in higher education is said to include at least six dimensions: “(1) core skills in critical argumentation (reasoning and inference making), (2) critical judgments, (3) critical-thinking dispositions and attitudes, (4) critical being and critical actions, (5) societal and ideology critique, and (6) critical creativity or critical openness”^[7]. Critical thinking in EFL is understood as “a set of conceptual, methodological, criteriological and contextual considerations that integrates thinking skills, dispositions, attitudes, intellectual resources and pedagogical assistance..... It is oriented through a communicative approach, including task-based and project-based instruction, in order to take ownership of information, construct knowledge, take individual and collective action with the purpose of shaping up ethical citizens who are committed to the common good and the dignity of others”^[18].

Despite discrepancies in how scholars understand critical thinking, it is a common belief that critical thinking can be taught and learned^[19], and it is considered to involve the processes of analysis, evaluation, inference, observation, reflection, and reasoning^[14]. Effective ways of improving critical thinking include teacher application of suitable pedagogies and curriculum materials^[19], appropriate scaffolding of teachers^[6], active learning strategies of students^[20], and communications among students and those between students and instructors^[21]. Scaffolding acts as a “designed-in” support in the form of planned rather than spontaneous pedagogic tasks^[22].

3. Methods

This paper conducts a 10-month-long study on 38 junior-class students who major in business English at one Chinese university from September 2022 to June 2023, to explore how ESP teachers realize their teaching objective of critical thinking in reading courses. The research plan consists of four stages, which are the investigation, framework building, framework revision, and finalizing.

In the 1st stage, this aim is to explore what challenges exist in enhancing the critical thinking of these students based on observations of their class performance and feedback. To have an objective

understanding of existent obstacles, this author has assigned one student task, in which students are required to read English news, summarize main ideas, come up with their own opinions, and present all the information in class. In the 2nd stage, the purpose is to draft a task-based teaching framework for enhancing student critical thinking according to findings from the earlier stage and the teaching experience of this author. In the 3rd stage, the framework is implemented, adjusted according to student performance, and finalized.

4. Discussion

This section will present findings regarding challenges in teaching critical thinking to ESP students, and an applicable teaching framework for enhancing critical thinking in their reading courses.

4.1. Existent challenge

Based on insights from the teaching experiences of this author, class performance observation during this study, student feedback, and evaluation of student performance in reading tasks, this research has found the following hindrances in critical thinking teaching at the 1st stage:

In interviews with 23 randomly chosen students from this group, they highlighted the significance of critical thinking verbally. 15 students (65.2%) said critical thinking is of great importance in their course study, 7 students (30.4%) viewed it as an important influence, while only one student (4.4%) put forward it is of limited influence. Meanwhile, 8 students (34.8%) regarded it as a very influential factor in exam scores, 13 students (56.5%) considered it as important, and only two students (8.7%) said it only has some influence on exam scores. Regarding how critical thinking affects their job prospects, 17 students (73.9%) saw it as a very significant factor, and the remaining 6 students (26.1%) considered it as an important factor.

However, their actual performance in the assigned reading tasks indicates their insufficient critical thinking skills. Students were incapable of or not used to thinking critically, and they did not respond well to relevant requirements. In their assignment, students were required to list several keywords as reminders of the main ideas of articles that they read after class and then express their opinions of this news from at least two perspectives. However, they failed to fulfill all the requirements in the presentations of the 1st semester. One group of students failed to understand the main ideas, and they selected and wrote several seemingly important sentences on their PowerPoint slides. Student A, for example, read an article about influencers of live commerce. For the summary part, he just listed and read sentences about transaction volumes of the industry and the ending sentences. In the opinion section, the student simply listed original sentences from the article.

The second group of students performed well in the article summary; however, some did not have much to say regarding personal opinions, and others considered issues from similar perspectives to the original authors. For instance, student B chose an article concerning social phobia. She summarized it in a few keywords and covered the aspects of definition, causes, symptoms, and treatments in her presentation. However, there was a lack of opinion section. In the case of student C, he briefly summarized the main ideas of an article about the fall of Marvel, and in the opinion part, he mainly talked about the propaganda of these films like what the author did in the article.

One main reason for such phenomena is the Chinese education system. As Hu^[23] said, in Chinese education, learning and teaching are still mainly about “accumulating knowledge” instead of “constructing and using knowledge for immediate purpose”. Its National College Entrance Examination, which determines if students are admitted into universities and possibly affects their careers^[24], mostly remains rote-learning-oriented and memorization-oriented^[23]. Students habitually

believe and memorize information and ideas from books and teachers for high scores. To know about students' actual situation, this author has conducted an anonymous poll among the 23 students, and more than one half seldom or never disagree with what books or teachers say.

4.2. A task-based framework for enhancing critical thinking.

This study comes up with a framework for teaching critical thinking to ESP students in reading courses as shown in figure 1, based on findings regarding challenges in the process. This framework mainly consists of three categories of tasks: in-class reading, after-class reading, and assessment. The scaffolding strategy is applied during the in-class and after-class tasks to help students improve critical thinking skills. The assessment task is divided into two sectors, including the informing and the undertaking, and it aims to compel students to attach more importance to critical thinking in action than before.

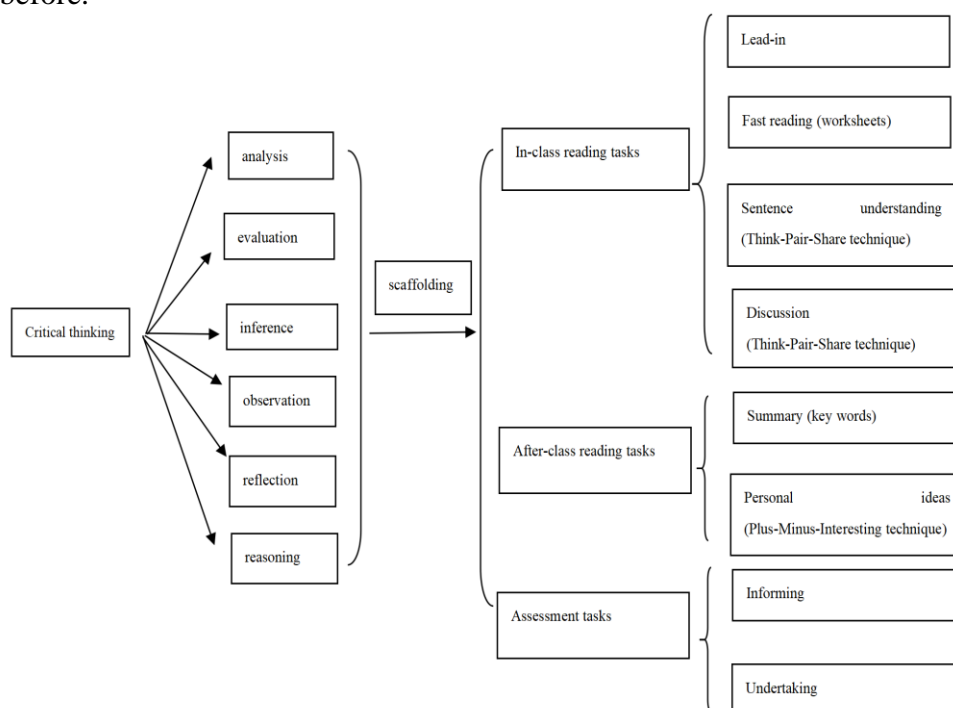


Figure 1: A framework for teaching critical thinking to ESP students in reading courses

The informing sector of the assessment task occurs at the beginning of the 2nd semester when students are notified of the teaching objectives of enhancing critical thinking skills, of types of questions in this final exam, and of scoring standards regarding the exam and the after-class reading assignment. In addition to traditional questions of reading comprehension and translations, the writing section of the final exam during this semester is changed into two parts, a summary of a short article and personal comments on the relative phenomenon. The grade of this writing task accounts for 45% of 100 points, and according to the scoring standards, the summary section constitutes 15 points while the comment one takes up the remaining 30 points. To be specific, the summary consists of two grading criteria, which are content (10 points), grammar, and lexical usage; and the comment one similarly includes content criteria (15 points) and language criteria (15 points).

In-class reading tasks are divided into the sectors of lead-in, fast reading, sentence analysis, and discussion. The lead-in usually lasts about 20 minutes, and it intends to shed light on article topics before students begin reading. Its main objectives are to evoke student memories of relevant

experiences and then explore features of specific business topics. For instance, before they started to study a long article about business ethics this semester, students were required to think about ethical or unethical behaviors of students and then describe them in class. Based on the descriptions, they tried to find adjectives that could modify ethical or unethical behaviors except the words *ethical* and *unethical*, and then some students were chosen randomly to share their thoughts. They were asked to justify why they chose relevant adjectives. After that, the author provided definitions from online or offline sources, the evaluations of these definitions, initial answers, and revised ones after listening to the ideas of students if there are any.

In the fast-reading sector of in-class reading tasks, articles are split into several parts, considering that the students are comparatively weak in vocabulary and grammar, and it is challenging for them to grasp the main ideas of long articles all at once. Students were required to read through specific paragraphs in a limited time and complete the worksheets that the teacher had prepared. A few students were invited to share their completed worksheets and elaborate on the location of relevant information and reasons for choosing them. The time-limited reading task forces students to scan articles, analyze and evaluate information, and distinguish main ideas from supporting ones without referring to dictionaries. The sharing part helps students reflect on their thinking process, justify themselves, and evaluate others' statements. These are indispensable critical thinking skills that this course intends to improve.

In the sentence analysis of in-class reading tasks, the think-pair-share strategy is applied, and students are required to analyze the literal and implied meanings of difficult sentences from the articles with the help of dictionaries or other online sources. For interpreting literal meanings, students shall analyze syntactic structures in a simplified way which only requires them to distinguish subjects, verbs, objects, or complements from other components. When the thinking time is over, students shall discuss with classmates nearby and raise questions if they have uncertainties about other parties' opinions. After the discussion sector, several groups are chosen randomly, and representatives of these groups summarize what they have discussed. When one group finishes the summary, the teacher first expresses approval of parts in which they have done well. Then she could raise follow-up questions regarding their interesting insights, and it is of great necessity for teachers to be open-minded and reflect critically on their ideas at the same time since critical reflection of teachers is conducive to that of students in countries with high power distance.

There is further discussion regarding relevant sentences and topics during the in-class reading tasks. As to a few sentences, background information is necessary for a more in-depth understanding than what students have after simple sentence analysis. In that case, teachers could ask some follow-up questions to motivate them to make assumptions and check online for more information, and the technique of think-pair-share technique can be applied. Students are required to answer similar questions as team assignments after class, and they shall share the discussions in the next classes. Then the teacher could provide not-mentioned background information and explore possible reasons for such a situation with students.

In the after-class reading tasks, students are assigned to read one piece of article and present their summary and ideas like what they have done in the 1st semester. However, there are two noticeable discrepancies between the tasks of these two stages. First is that students are required to read articles that they think are interesting rather than random ones in the 2nd semester; second, they shall adopt the Plus-Minus-Interesting technique in considering phenomena of relevant articles. Students shall re-do the opinion parts in the following classes if positive, negative, and interesting points are not presented. In class, students get high scores when they consider issues from aspects different from the authors, based on their real-life experiences, or according to information that they have gathered from other sources.

In teaching, teachers shall effectively raise questions and practice their critical thinking skills in

front of students, which helps students develop critical thinking skills and attitudes^[25]. It is of great significance for teachers to be open-minded and reflect critically on their ideas after they listen to students, especially in countries with high power distance. Their explicit appreciation of different ideas from students is also conducive to critical thinking teaching. Changes to assessments raise awareness of students and motivate them to practice critical thinking skills in the course study, considering they grow up in exam-oriented education and most aspire for high scores.

4.3. Evaluation of the framework

These tasks of the reading course aim to engage students in critical thinking processes of analysis, evaluation, inference, observation, reflection, and reasoning. After the 2nd semester, the effect of this new framework is evaluated based on student performance in the writing task of the final exam and a comparison of their presentations during the first and second semesters.

In the writing part of the assessment, students are required to read a short article before they write a summary and their ideas. The article has a familiar topic, and it contains a few business-related metaphors like that of debt and budget. Owing to the limited time of critical thinking training and probably pressure during this assessment, their writings do not indicate substantial but at least noticeable improvements in critical thinking. In the 1st stage, when the topic was about the correlation between two subjects, they simply listed the positive or negative influences of one subject on the other. However, during this exam, 10 students explored other influencing factors related to this article topic and cited their personal experiences or others as evidence.

Regarding their presentations of after-class materials, students have better critical thinking skills at the 2nd stage than they did at the 1st one. In the section of article summary, all 38 students can understand the main information of article sentences, though 12 are still not sure if they get key sentences or not. When it comes to the part of personal ideas, 28 students can consider issues from their angles rather than those of original authors, after the training of in-class reading tasks. In the 1st semester, student B did well in the article summary but mostly said she agreed with the author in the opinion part. However, in the second one, the student discussed what measures governments, societies, and individuals could take to prevent cyber violence after she summarized the original article from the perspectives of definition and typical cases. In the 2nd semester, student C summarized an article about son preference from the angles of definition, historical and cultural backgrounds, and influences. During the 1st semester, he explored the fall of Marvel from one perspective of propaganda which the author had already proposed; however, in the 2nd one, he discussed the situation in China based on the statistics about quantities of men and women from 1953 to 2020, and ratios of men to women in different provinces of the country. After that, he put forward that men and women should be treated equally.

5. Conclusion

This study has developed a framework for enhancing the critical thinking skills of ESP students based on empirical research of junior students in a Chinese university. It has been found that despite their awareness of the importance of critical thinking, students are not accustomed to thinking critically under the influence of exam-oriented education. The adaptable framework is formulated to overcome the challenge, teach critical thinking to similar groups of students, and engage them in analysis, evaluation, inference, observation, reflection, and reasoning. The framework includes three categories of tasks, which are in-class reading tasks, after-class reading tasks, and assessment tasks.

Before teaching, teachers shall make clear their critical thinking objectives, assign tasks based on

relative objectives, and set questions and scoring standards for final exams accordingly. Except for articles for the in-class reading tasks, they are advised to select a few teaching materials that are familiar to students in every discussion, so that students are willing or able to share their thoughts. The sharing helps enhance their skills in analysis, observation, reflection, evaluation, and reasoning. Reading articles on unfamiliar topics is of necessity to improve linguistic competence, and they are more likely to gain new insights from those articles than the familiar ones.

In the assessment task, students shall be informed of the significance of critical thinking and its influence on the scores of assessments. This is of great significance in an exam-oriented education system, and it encourages students to voluntarily take part in other critical thinking training tasks. It should be noted that the first step toward developing critical thinking effectively is to get teachers and students to reflect critically on assumptions that they take for granted^[26]. Therefore, teachers shall set an example, keep an open mind to ideas from students or other sources, evaluate them, and revise their own opinions if possible. In-class reading tasks, worksheets, and the think-pair-share technique could be applied to strengthen critical thinking skills in analysis, evaluation inference, and reasoning. In after-class reading tasks, the plus-minus-interesting technique could be applied by students in evaluating various phenomena. Open questions motivate students to think more critically and come up with new insights than objective ones during the process.

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References

- [1] Fisher, A., (2001). *Critical Thinking: An Introduction*. Cambridge university press, Cambridge.
- [2] Facione, N.C., Facione, P.A., (1996). *Externalizing the critical thinking in knowledge development and critical judgment*. *Nursing Outlook*, 3,129-136.
- [3] Moon, J., (2008). *Critical Thinking: An Exploration of Theory and Practice*. Routledge, London and New York.
- [4] Butler, H. A., Pentoney, C., & Bong, M. P. (2017). *Predicting real-world outcomes: Critical thinking ability is a better predictor of life decisions than intelligence*. *Thinking Skills and Creativity*, 25, 38–46.
- [5] International Commission on the Futures of Education Commission. (2021). *Reimagining our futures together: a new social contract for education*. UNESCO. https://unesdoc.unesco.org/notice?id=p::usmarcdef_0000379707.
- [6] Wilson, K. (2016). *Critical reading, critical thinking: Delicate scaffolding in English for Academic Purposes (EAP)*. *Thinking Skills and Creativity*, 22, 256–265.
- [7] Davis, M., & Barnett, R. (2015). *Introduction*. In M. Davis & R. Barnett (Eds.), *The Palgrave handbook of critical thinking in higher education*. Palgrave MacMillan, 1-26.
- [8] Lin, Y., (2018). *Developing critical thinking in EFL classes: An infusion approach*. Singapore: Springer.
- [9] Zhao, C., Pandian, A., & Singh, M. K. M. (2016). *Instructional strategies for developing critical thinking in EFL classrooms*. *English Language Teaching*, 10, 14–21.
- [10] Liu, F., & Stapleton, P. (2018). *Connecting writing assessment with critical thinking: An exploratory study of alternative rhetorical functions and objects of enquiry in writing prompts*. *Assessing Writing*, 38, 10–20.
- [11] Li, L. (2020). *Language Teacher Cognition: A Sociocultural Perspective*. Palgrave.
- [12] Lin, M., Preston, A., Kharrufa, A., & Kong, Z. (2016). *Making L2 learners' reasoning skills visible: The potential of computer supported collaborative learning environments*. *Thinking Skills and Creativity*, 22, 303-322.
- [13] Zhang, H., Yuan, R., & He, X. (2020). *Investigating university EFL teachers' perceptions of critical thinking and its teaching: Voices from China*. *The Asia-Pacific Education Researcher*, 5, 483–493.
- [14] Li, L. (2023) *Critical thinking from the ground up: teachers' conceptions and practice in EFL classrooms*, *Teachers and Teaching*, 6, 571-593.
- [15] Paul, R. (1988). *Critical thinking in the classroom*. *Teaching K-8*, 1, 49–51.
- [16] Lawson, T. J. (1999). *Assessing psychological critical thinking as a learning outcome for psychology majors*. *Teaching of Psychology*, 3, 207–209.
- [17] Freely, A. J., & Steinberg, D. L. (2000). *Argumentation and debate: Critical thinking for reasoned decision-making*. Stamford: Wadsworth.

- [18] Marin, M. A., & de la Pava, L. (2017). *Conceptions of critical thinking from university EFL teachers*. *English Language Teaching*, 7, 78–88.
- [19] Halpern, D. (2001). *Assessing the effectiveness of critical thinking instruction*. *The Journal of General Education*, 50, 270–286.
- [20] Kim, K. N. (2009). *Exploring undergraduate students' active learning for enhancing their critical thinking and learning in a large class (Publication Number 3380934) The Pennsylvania State University*. ProQuest Dissertations Publishing.
- [21] Howe, R. W., & Warren, C. R. (1989). *Teaching critical thinking through environmental education*. ERIC Clearinghouse.
- [22] Hammond, J., & Gibbons, P. (2005). *Putting scaffolding to work: the contribution of scaffolding in articulating ESL education*. *Prospect*, 1, 6-30.
- [23] Hu, G. (2002). *Potential cultural resistance to pedagogical imports: The case of communicative language teaching in China*. *Language, Culture and Curriculum*, 2, 93–105.
- [24] Li, L. (2016). *Integrating thinking skills in foreign language learning: What can we learn from teachers' perspectives?* *Thinking Skills and Creativity*, 22, 273–288.
- [25] Rezaei, S., Derakhshan, A., & Bagherkazemi, M. (2011). *Critical thinking in language education*. *Journal of Language Teaching and Research*, 4, 769-777.
- [26] Farrarelli, M. (2009). *Critical literacy approach in the EFL class*. *Journal of NELTA*. 14, 26-31.