Paper in Conference Proceedings

Developing Critical Thinking Skills of Bachelor Students Throughout the EFL Course

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Abstract

Developing students' critical thinking skills becomes essential as their employability rises. There are limited studies that examine the parallel development of critical thinking and English language skills despite the abundance of literature on the methodology and curricula for the development of English language skills through the material about different cultures in undergraduate education. This study attempts to bridge this gap by integrating critical thinking instruction and the study of intercultural communication theories into a one-semester English course. The purpose of this study was to determine the efficacy of the implemented culture-based materials and specifically teach critical thinking skills during collaborative, problem-based and role-playing learning activities for developing the critical thinking skills of first-year Bachelor students majoring in "Biology and English Teacher Education" at the Kazan Federal University (Volga region) during the academic year 2021-2022. The use of qualitative research methods - open-ended interviews and observation - revealed the positive dynamics. Post-test findings indicate that the students in the treatment group had a firm grasp of the concept of critical thinking. They reported that the teamwork, role-play simulations, and problem-solving activities improved their critical thinking and argumentation skills, indicating an increased enthusiasm for learning the cultures. The treatment group demonstrated an improvement in language pattern knowledge and vocabulary enrichment in English. The control group did not exhibit the same dynamics. The results of this qualitative study could be applied to a more in-depth study, such as developing and monitoring students' critical thinking skills development throughout a degree program.

Keywords: English as a Foreign Language; Critical Thinking; Intercultural Communication Theories; Collaborative Learning; Role-Playing.

1. Introduction

The social, environmental, and economic challenges of the twenty-first century necessitate that specialists in all fields be adaptable, innovative, and purposefully employ critical thinking. If organized properly, the critical thinking practice during the English as a Foreign Language (EFL) course can contribute to the development of not only linguistic competence but also knowledge of other cultures, critical and creative thinking, empathy and reflective skills, as well as emotional intelligence and study motivation. Students should be exposed to a broader range of specific cultural knowledge and appropriate behavior in order to be fully prepared for the challenges of a rapidly changing global environment. (Facione, 2013).

Conversely, critical thinking should not be confused with a constant propensity to argue with or criticize others. Critical thinking skills are effective in identifying fallacies and flawed logic, but critical thinking can also involve collaborative reasoning and addressing constructive issues. Critical thinking assists us in gaining knowledge, enhancing our theories, and improving our discussions. On the other hand, this way of thinking can be utilized to enhance work processes and social institutions (Meredith & Steele, 2020).

2. Literature Review

2.1. Definitions of Critical Thinking

For many years, scholars from various fields have discussed critical thinking. Numerous works on critical thinking ability define the terms argumentation ability, reasoning ability, critical reflection and judgment, and problem-solving ability. Ennis (1993, p. 180) defines critical thinking as "reasonable, reflective thinking that is focused on deciding what to believe or do," "the openness for dialogue, respect for the opinions of others without criticism," and "cognitive skills of interpretation, analysis, evaluation, inference, explanation, and self-regulation." Paul (1992) emphasizes skills like critical reading and listening, clarifying and questioning beliefs or perspectives, and dialogic reasoning: comparing perspectives and interpretations, noting significant similarities and differences, recognizing contradictions, and employing critical vocabulary. These experts concur that teaching students not only what to think but also how to think is fundamental. According to Meredith and Steele (2010), the technology of critical thinking involves a teacher-led process of denying and justifying ideas or facts about the world around us.

2.2. Components of Critical Thinking

Bloom's taxonomy is a good example of a framework for teaching and assessing higher-order thinking skills. In his model, six levels of thought are arranged hierarchically, from lowest to highest: lower-order thinking skills (remembering, understanding, and applying) and higher-order thinking skills (analyzing, evaluating, and creating) (Anderson & Krathwohl, 2001).

Facione (2013) lists interpretation, analysis, evaluation, inference, explanation, and self-regulation as cognitive skills of critical thinking. According to the researcher, critical thinking is a higher-order cognitive skill that entails acquiring knowledge through the processes of analyzing and pondering as opposed to merely accumulating information. The author asserts that skills in interpretation, analysis, evaluation, inference, explanation, and self-regulation are fundamental to critical thinking.

2.3. Teaching Critical Thinking

Numerous researchers have addressed the issue of critical thinking development by examining curricula and instructional methods (Halpern, 2014; Meredith & Steele, 2020). Additionally, collaborative learning can increase the intrinsic motivation of students (Andriessen & Baker, 2020; Archila et al., 2021). According to Carriger (2016), involving students in collaborative problem-solving tasks, expressing all possible evidence to support opposing claims, constructing arguments, and exchanging them to find solutions for complex problems through critical dialogue significantly contributes to the development of their cognitive skills. They can be viewed as tools for encouraging critical thinking (Rapant & Macagno, 2016). The process of critical thinking must be taught to students; they may discover these skills as they are integrated into the lesson plan. Integration of instruction on critical thinking skills with the main course material is a beneficial practice (Bensley & Spero, 2014).

The intercultural approach and a dialogue of cultures, which entail implementing intercultural theory material and considering intercultural collisions, are effective tools for incorporating emotional and activity-based aspects when practicing intercultural dialogue (Dorathy & Mahalakshmi, 2011). Awati et al. (2020) highlight the efficacy of role-playing or simulation-based scenarios for improving students' critical thinking when they collaborate to resolve situations that are similar to real life. Role-playing in the form of an interview or fictitious real-world scenarios is an energizing learning activity that enhances students' leadership skills, critical thinking, and imagination. When preparing for a class, teachers should consider what they can do to motivate or encourage students to learn. Some scholars emphasize the importance of peer evaluation or feedback because it promotes cooperative learning in small groups by having students give each other feedback (Murtazina, 2023; Silva et al., 2016).

3. Methodology

3.1. Participants

The participants were B1-level English speakers pursuing a Bachelor's degree in "Biology and English Teacher Education" at the Kazan (Volga region) Federal University. The experiment lasted for the first semester of the academic year 2021-2022. The experiment included 34 participants (17 students in the control and 17 students in the treatment

group). Students in the control group were instructed in English as a foreign language in accordance with the curriculum. In contrast, in addition to the basic curriculum, students in the treatment group participated in problem-solving activities in teams and role-playing while learning argumentation, dialogical, and monologic reasoning techniques.

3.2. Research Design

A qualitative study fits well within the scope of this investigation. Qualitative research emphasizes the exploration and description of the perceptions and actions of students (Saulius & Malinauskas, 2021). The data was collected by analyzing students' pre- and post-test interview responses and by observing students throughout the course in order to detect changes in their knowledge, skills, attitude toward the study, and language development.

3.3. Intervention

In the control group, students followed their degree program's course schedule, i.e., they were taught about different cultures, but only content mastery was emphasized. Students completed reading, writing, speaking, and listening assignments without engaging in argumentation, monological and dialogical reasoning, collaborative problem-solving, or role-playing activities.

In the treatment group, the main set of critical thinking skills and subskills based on Bloom's Taxonomy and Facione's model of cognitive skills were incorporated into the teaching process. As a linguistic objective, the development of students' argumentative, dialogical, and monological reasoning skills was specified. Included in the introduction to the course 'Dialogue of Cultures' were activities such as argument construction, monological reasoning, and dialogical reasoning.

The evaluation of specific arguments and the structure of reasoning were represented as follows: The students formulated opposing viewpoints on the following ethical issues: terrorism and pacifism, dictatorship and democracy, and the imposition and abolition of the death penalty. This assignment was designed to increase their awareness of the limitations of any judgment while simultaneously enhancing their vocabulary. They were required to use the phrases for conceding an argument ("It's true/obvious/evident that, "However," "First of all, I'd like to state," "The second argument in favor of"), adding an argument to strengthen the point ("Furthermore," "Moreover," "I might also add that"), and concluding ("Let me summarize my point of view," "To sum up," "Consequently, it must be treated as," "We can see").

4. Results

4.1. Students' Perceptions of Critical Thinking, Their Development of Critical Thinking Skills, and the Contributing Course Activities

The students in the treatment group, in contrast to those in the control group, reported that they had improved their critical thinking and argumentation skills as a result of the course. Now I attempt to verify the evidence and information and evaluate the credibility of the statements." "The course has improved my analytic abilities. Critical thinking enables me to see things from different perspectives ("It was an interesting assignment to view the situation from different perspectives and to write in support of both sides).

The attitude of students in the treatment group toward classroom activities was positive. They viewed problem-solving tasks in teams and role-playing as activities that were highly beneficial for improving their critical thinking skills ("The feeling that I can really contribute to the solution of the problem is exciting," they said). I preferred learning in small groups because it was more stimulating than working alone. "The experience of working in teams was enjoyable. It fostered a climate of confidence and ease. We helped and supported one another"; "I enjoyed considering alternative points of view in problem-solving"; "The work on resolving difficult situations was very enriching because it allowed me to reflect and consider alternative points of view").

The students also emphasized the significance of the course by emphasizing their increased enthusiasm for learning the cultures ("This course has piqued my interest for further learning about collectivist and individualist cultures," "The knowledge and skills gained during the course can help me to live and work across cultures," and "My experience in the course will help me in my future career because I want to work for a multicultural company"). In the control group, participants only mentioned the importance of the content, and none of the learning activities contributed to their improvement in critical thinking skills.

4.2. General Observations

Observations of the students in the treatment group revealed a significant improvement in their knowledge of English language structures, vocabulary enrichment, and empathic listening, as well as a growing interest in their studies. The classes did improve their English writing and speaking abilities; they began to listen patiently to a variety of viewpoints, and their public speaking skills improved. As they practiced peer evaluation of teamwork, the students' enjoyment of collaborative work increased. While working in teams, they could also track their progress in language learning. Improvements in English language skills and interest in studies were also observed in the control group, but information about different cultures may have been the only motivational factor.

5. Discussion

This study's findings corroborate Yang and Wu's (2012) assertion that a positive attitude and language learning success are interrelated. Also attributable to the well-selected content is the improvement in English language proficiency in both groups. As expected, the intercultural materials appeared to be a motivating factor for language learning. The findings support the assumptions of Silva et al. (2016) regarding the positive impact of peer evaluation on small-group work. Cooperative problem-solving in small groups appeared to promote student motivation and cognitive learning. Peer evaluation as a motivational tool to improve critical thinking skills was a real discoveryAccording to Silva et al. (2016), the exchange of feedback during collaborative work between groups with different perspectives on the same situation improves critical thinking abilities.

According to Awati et al. (2020), it contributes to the improvement of critical thinking and listening, speaking, reading, and writing skills. This study revealed a number of limitations. A study that lasts longer than a semester is recommended. Future research could provide a more representative sample by stratifying students according to their gender and race. Multiple groups are amenable to comparison. Similarly, a comparison could be made between the groups of various teachers. Consequently, additional research could include the evaluation of students' critical thinking skills using various questionnaires such as the Ennis-Weir Critical Essay Test or the California Critical Thinking Skills Test (Ennis & Weir, 1985; Facione & Facione, 2010).

6. Conclusion

Intercultural competence and critical thinking skills are developed concurrently during the English language course as a result of acquiring the theories of intercultural communication and learning the main critical thinking skills. This leads to an increase in knowledge of different cultures, an acceptance of cultural differences, and the growth of empathy and reflective skills.

This research is novel in that it incorporates critical thinking skills into the content itself and provides students with opportunities to practice argumentation, dialogical, and monological reasoning. The findings of this study could provide new insights into the design of content and methodology for the effective development of critical thinking in English as a foreign language classroom. This study's practical applicability consists of reviewing its findings for developing bachelor's-level critical thinking skills in groups with different degree specializations and choosing another study topic.

Acknowledgments

Author Contributions

The authors contributed equally to the writing of the article.

Conflict of Interest

The authors have no conflict of interest to declare.

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