Critical Thinking Instruction Incorporated in Cross-Cultural Communication Course Design: A Needs Analysis Report Based on Voices of Chinese International College Undergraduates

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Abstract

Critical thinking represents one of the most absolutely vital talents for every individual, both in the workplace and in their personal lives. Critical thinking has become a primary concern for all educational institution students in recent decades, particularly Chinese undergraduates. The intention of this study was to investigate the needs analysis of Chinese international college undergraduates’ perceptions of critical thinking skills incorporated into a cross-cultural communication course, as well as their expectations of critical thinking skills instructional coursework throughout the cross-cultural communication context. Throughout this mixed-methods investigation, 78 Chinese international college students volunteered to complete a critical thinking disposition inventory (CTDI) as the primary research instrument, in addition to a semi-structured interview. The research uncovered that Chinese international undergraduates exhibited unclear notions of critical thinking abilities. As a byproduct of China’s education system, the majority of Chinese international college undergraduates were flooded with dismissive attitudes toward critical thinking abilities. In order to control their academic advancement in a more critical and analytical fashion, Chinese students expressed a pressing need for critical thinking skills to be included in their cross-cultural communication course.

Keywords: critical thinking instruction, cross-cultural communication course, Chinese international college, needs analysis

1. Introduction

1.1 Background of the Study

Cognitive academics and educators continue to be fascinated by Socrates’ idea of critical thinking (CT) (Lapina, 2018; Paul & Elder, 2015). The CT process requires learners’ ability to interpret, analyze, appraise, reason, and interrogate information (Buchanan, 2016). According to Watson-Glaser (2010), the CT process includes identifying a problem, analyzing facts and evidence, and challenging the source of information. The CT approach produces results using observations and data that have been challenged and evaluated for accuracy (Marabini, 2022). The CT teaches a person proper cognitive abilities and environmental awareness (Martin, 2016). It is a kind of thinking that looks for evidence to support one’s actions and ideas (Meltzoff & Cooper, 2018; Raikou et al., 2017). Additionally, this act of thinking confers power on the individual over their own mental structures, enabling them to be shaped based on their own intellectual levels (Paul & Elder, 2019; Mahajan & Singh, 2017). While all CT-related specialists have made significant efforts to determine the effect of CT on an individual’s academic learning, Asian students have been criticized for a lack of critical thinking abilities both in school and in the workplace after graduation (Onen, 2021; Nauman, 2017; Febriana et al., 2017). In other words, unless CT ability is promoted as a critical component of teacher-led course teaching, students may not have an equitable chance to acquire it. To satisfy society’s demands, colleges must not only offer students the necessary knowledge and practical skills but also implant in them a sense of professionalism and attitudes that are desirable for society, especially in the societies of Asian countries (Braga, 2019; Dirgantara et al., 2018; Orgoványi-Gajdos, 2016). Students, thus, will need to acquire a range of abilities in order to contribute to the educational process, national and global growth, and progress in their disciplines via the use of a variety of teaching-learning and assessment methodologies (Connolly et al., 2022; Garapati & Padmaja, 2020; Estes et al.,...
On second thought, the influence of students’ critical thinking abilities on education has been considerably more readily accessible in recent decades (Abrami et al., 2015). Furthermore, Pu (2017) found that Asian students lack the critical thinking abilities required for academic assignments like essay writing and debates due to their cultural and educational backgrounds. Several studies by Western academics have shown that Chinese students studying overseas, notably in Thailand, lack critical thinking abilities (Hitchcock, 2017). Simply put, the critical thinking abilities of Chinese students who study overseas have become more important (Li & Ren, 2020; Sun, 2017). The World Economic Forum also published a study in 2010 on the top five talents needed by 2025, which include analytical thinking, critical thinking, active learning, and learning methodologies (Su, 2020). Employers believe workers’ critical thinking skills need to be significantly improved (Heng, 2018). In terms of social life, critical thinking abilities seem to be universally recognized as essential to future success.

1.2 Statement of the Problem

Chinese universities have devoted increasing emphasis in recent years to the development and implementation of effective thinking education for college students, creating courses to clarify critical thinking understanding and skills, but the teaching impact is not optimal (Chen, 2017; Zhu, 2016; Dong, 2015). In other words, students struggle to develop conscious, logical thinking habits as a result of their study and practice in critical thinking courses. On the other hand, when instructors promote critical thinking in their students, they do better. As people are confronted with real-world challenges in learning and life, they usually respond impulsively in accordance with their initial thinking and thinking patterns (Halpern & Dunn, 2021). This is due to the fact that academic habits could possibly be developed throughout the elementary and junior secondary school years (Ruminski & Hanks, 2020), which explicitly demonstrates that only colleges are capable of educating students in critical thinking (Jiang, 2020; Wang, 2019; Chen, 2017). To put it differently, educating critical thinking skills must commence in elementary and middle school, while a university critical thinking course’s objective is to hone students’ critical thinking abilities (Din, 2020; Nasution, 2019). Unfortunately, to a certain degree, the obstacles and unresolved issues necessary to conduct critical thinking instruction throughout the course potentially exist. The idea of teachers’ adopting critical thinking instruction in the classroom may collapse over China’s basic academic training and test-oriented education, which may be traced back to the traditional cramming-driven education system (Raphals, 2022; Zhou, 2016; Kim, 2015).

Education in China, from an educational standpoint, is founded on the notion of survival-competitive exam-oriented education (Zhu, 2020; Han et al., 2013). The students are proficient at responding to questions on a variety of board exams, but they have received little instruction in critical thinking skills that enable them to be creative regardless of whether they choose to study locally or internationally (Chen & Wang, 2018; Yang & Chen, 2017). Apparently, the lack of a suitable critical thinking instruction-based discipline in the classroom for the general benefit of Chinese students has been demonstrated to be the most important characteristic restricting Chinese students’ academic ability and resulting in quality defects, according to the findings (Wilberding, 2021; Sanacore, 2021; Lu, 2018; Wang, 2016). In a word, it is vital in critical thinking training to stress the importance of real-world learning situations and to rethink the traditional teaching paradigm (Chen & Wang, 2018; Lu, 2018; Wang, 2016). Prior to teaching critical thinking skills alongside relevant classroom activities, it is necessary to analyze the needs and assess students’ and instructors’ critical thinking abilities. Students learn from their teachers, but they also learn from activities that require them to work hard and think critically (Wilberding, 2021; Sanacore, 2021).

1.3 Objective of the Study

By including instruction in critical thinking skills into a cross-cultural communication course, Chinese students studying abroad may be able to improve their critical thinking capabilities. To do this, the researchers perform a needs analysis of integrating critical thinking teaching into Chinese International College’s Cross-Cultural Communication Course from both the student and instructor perspectives. In light of these concerns, the specific research topics addressed in this study sought to answer the following questions:

1) Prior to cross-cultural communication course design, how are the critical thinking skills of Chinese international college undergraduates?
2) What does the cross-cultural communication course’s requirements analysis reveal about the instruction of critical thinking based on Chinese college undergraduates’ perspectives?

1.4 Significance of the Study

This article presents a methodology for developing and integrating critical thinking training into a cross-cultural
communication course, emphasizing the significance of doing a needs analysis based on Chinese students’ perspectives. Alternatively, this research finding may aid and benefit the course instructor in preparing and developing the cross-cultural communication course by incorporating critical thinking instruction to assist Chinese students in applying critical thinking knowledge acquired during the course to solve future problems (Jackson, 2021; Haber, 2020; Hadjianastasis, 2017). From a practical aspect, studies on the critical thinking ability of Chinese college students, particularly those studying abroad, may be in their infancy. To assist international Chinese college students in solving real-world issues effectively, rationally, and systematically, critical thinking skills teaching, including the activity or technique of assessment, may be crucial. This paper could be used to help course instructors get a better and clearer picture of how to teach Chinese international students in other countries how to think critically. Students’ positive feedback on integrated critical thinking teaching may be well used in the future.

2. Literature Review

2.1 Needs Analysis as a Concept

Learners’ requirements and preferences are collected, analyzed, and then courses are chosen based on the results (Kováiková, 2015; Sieglová, 2019). Wishes, desires, expectations, reasons, deficiencies, limitations, and requirements are all needs (Davis, 2021; Harland, 2020). That is, individuals are driven by their own circumstances. According to Schuler et al. (2019), students may need to master survival skills. It’s critical to create educational programs and curricula that cater to prospective students’ demands, especially for post-graduate work. The needs analysis also aims to determine the instructional requirements for the target course content in order to build a curriculum (Rose & Sookraj, 2015; Rashidi & Kehtarfard, 2014). When assessing students’ special needs, we come across the term “needs analysis,” which used to indicate something more. The needs analysis was done in the early stages of ESP (1960s and early 1970s) to determine student communication needs and instructional objectives (Dan & Dan, 2018; Liu, 2015). Since the goal of needs analysis is to gather information about students’ needs, the activities related to it have evolved dramatically (Otilia, 2015).

2.2 The Various Needs Classifications

Similar to the need categories, scholarly perspectives on needs assessment are diverse. In the next part, the researchers would examine how various academics have defined the various types of criterion.

2.2.1 Experienced and Perceived Needs

Berwick and Johnson (1989) distinguished between perceived and felt needs. A learner’s perceived requirements are goals derived from the learning experiences of others. He thought that perceived needs were experts’ assessments of other individuals’ educational deficiencies. As a consequence of instructors’ or educational institutions’ external evaluations of learners’ language requirements, reported needs were often regarded as normal, objective, and genuine. Individuals’ perceived requirements are those that they believe they need. There was a relationship between attitudes, perceptions, expectations, and emotions of need. They are the “wishes and desires” of the students.

2.2.2 Learning and Target Needs

These are the demands identified by Hutchinson and Waters (1987). All of these are examples of “goal requirements.” Consider the “needs,” “lacks,” and “wants” of the circumstance. According to Hutchinson and Waters (1987), “necessities” are success criteria. These methods of data collection are efficient and practical. As a teacher, you must prioritize the needs of your students. Comparing existing knowledge to requirements shows “gaps.” A school may choose to teach (or not). The difference between the “goal proficiency” and the “actual proficiency” of students (Hutchinson & Waters, 1987) Hutchinson and Waters (1987) define target requirements. Wants and needs are equivalent. Students are dismissed. Individuals are self-aware. The term “wants” is described by Hutchinson and Waters (1987). Students have subjective wants, whereas instructors have objective needs. Sometimes, designer expectations and learner objectives conflict. The student must be aware of their post-training objectives. Berwick and Johnson provide a definition of “wants” (1987). Hutchinson and Waters (1987) recommend building a course around the starting and ending places. Long, tedious, and out-of-date educational materials may cause pupils to lose interest, but learners who are engaged may learn more efficiently. Hutchinson and Waters’ examination of learning settings, previous knowledge, and abilities provides a useful analysis of learning needs. It demonstrates that objectives and learning are essential, but also that the procedure is important.

According to Hutchinson and Waters (1987), relying just on expected results is insufficient because educators
need to consider the route’s requirements, prospects, and limits. Concerns regarding the path between the beginning point (lacks) and the target grow throughout the learning process (necessities). For instance, learners may be enthusiastic about a topic or a job but find lengthy, uninteresting, and out-of-date training materials tedious. Learning should be pleasurable, advantageous, controllable, and fruitful. It is curious about learning, not knowing. In actuality, the notions of “learning requirements” and “learning needs” developed by Hutchinson and Waters have proven beneficial. Therefore, the learner’s requirements must be continuously assessed. Course designers must take into account the learner’s motivation, learning environment, and prior knowledge and abilities. Hutchinson and Water’s (1987) goals and learning needs are also very different from product-oriented and process-oriented needs. Product-oriented needs focus on academic needs that are situation-specific and result-oriented, while process-oriented needs focus on the whole process.

2.3 Critical Thinking Skills

Critical thinking abilities consist of deliberate deliberation between what to do and what to accept as fact (Doan & Dan, 2018; Kováiková, 2015). Critical thinking entails evaluating and deciding whether or not you must accept anything by evaluating it with prudence. Additionally, critical thinking abilities could never be retained, but they may be acquired through persistent practice. From lower-order to higher-order thinking abilities, critical thinking is comprised of a variety of interconnected thinking components. Critical thinking requirements include clarity, correctness, logic, thoroughness, importance, fairness, depth, breadth, and precision (Erkens et al., 2018; Cobbinah, 2017). The guidelines must be implemented to ensure that the conclusion reached through the use of critical thinking is legitimate and intelligible. In addition to research, interpretation, and evaluation, critical thinking includes other fundamental processes (Oyen, 2021; Masaieid, 2020). An investigation is undertaken to uncover relevant evidence or locate sufficient relevant information to address the issue’s major questions (Masaieid, 2020; Erkens et al., 2018). If an individual would like to reach a conclusion on a matter, an investigation assists in identifying the most pertinent evidence. Furthermore, interpretation is a fundamental element of critical thinking. The definition of interpretation is determining the significance of the collected evidence (Kaeppel, 2021; McMullin, 2018), along with the fact that the interpretation provided must make sense. Throughout study and analysis, it is required to draw a conclusion based on the relevant facts acquired, while the conclusion must be consistent with logic. Even though research and interpretation are interrelated, a critical thinker’s conclusion is based on both perspectives. Prior to reaching any conclusion, a rational critical thinker must possess a full awareness of the problem or issue’s hazards, answers, and cures (Miller & Tucker, 2015). When a person participates in investigation, interpretation, and assessment, they are engaging in the essential processes of critical thinking.

2.4 Critical Thinking, Intercultural Competence and Awareness

A small number of academics have investigated the relationship between critical thinking (CT) and intercultural competence (ICC). Facione and Gittens (2015) assert that the ICC facilitates sound judgment in culturally complicated contexts. The author establishes a connection between CT and ICC by referencing decision-making that necessitates CT. Furthermore, two of the six CT capacities were discovered in Facione’s (2013) study (Daniel & Fair, 2020; Facione & Gittens, 2015) in her prior research on intercultural competence, examples and analysis in particular. More than this, Facione and Gittens (2015) also emphasized comparison thinking, cognitive flexibility, and the ability to stay objective and connect. These three skills exhibit self-regulation since they demand self-reflection. Some other researchers even highlighted respect, openness, and curiosity as positive IC communication traits, two of which match Facione’s open-mindedness and inquiry (Robinson & Knight, 2019; Van et al., 2013). Last but not least, the cognitive talents needed for CT and ICC overlap and are crucial for effective cross-cultural communication, according to Bennett (2013). Meanwhile, analysis, interpretation, inference, empathy, active listening, and information collection are all CT skillsets (Facione & Facione, 2013). Bennett (2013) involves problem-solving abilities while creating and sustaining connections, which requires exercising all of Facione’s CT talents (Miller & Tucker, 2015). “Curiosity, initiative, non-judgmentalness, open-mindedness, and tolerance of ambiguity” are among the scholar’s core values (Bennett, 2013), which potentially support Facione’s (2013) critical spirit and self-regulation.

3. Research Methodology

3.1 Participants

A total of seventy-eight students (N = 78) of Chinese nationality (N = 32, Male = 41%; Female = 46, 59%) from a Thai university-affiliated Chinese International College participated in this study. These undergraduates were required to enroll in the cross-cultural communication course administered by the General Education department. These individuals in terms of their majors were International Business (N = 55), Finance and Accounting (N =
and Tourism Management (N = 9) programs. Table 1 presents a description of the participants’ demographic information.

Table 1. Description of the Participants’ Demographic Information

<table>
<thead>
<tr>
<th>Category</th>
<th>Variant</th>
<th>Percentage (%)</th>
<th>Frequency (Count, N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>41%</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>59%</td>
<td>46</td>
</tr>
<tr>
<td>Majors</td>
<td>IB</td>
<td>70%</td>
<td>55</td>
</tr>
<tr>
<td></td>
<td>FA</td>
<td>18%</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>TM</td>
<td>12%</td>
<td>9</td>
</tr>
</tbody>
</table>

Note. IB: International Business; FA: Finance and Accounting; TM: Tourism Management.

3.2 Research Instruments

3.2.1 Short Form Critical Thinking Disposition Inventory (SF-CTDI)

The intention of this study was to explore Chinese college freshmen’s perspectives on the critical thinking instruction embedded in a Cross-Cultural Communication course. As a result, the Short Form-Critical Thinking Disposition Inventory (SF-CTDI), translated from the English version into the Chinese version, was utilized to assess the critical thinking skills of Chinese international college undergraduates prior to the design of a cross-cultural course as the initial step in the current research design. The SF-CTDI comprises of 18 items and three subscales: systematic analysis, thinking within the box and thinking outside the box. It was constructed by Hwang et al. (2010), and each question is scored on a 5-point Likert scale ranging from 1 (Never), 2 (Seldom), 3 (Sometimes), 4 (Frequently) to 5 (Always). In terms of reliability and validity, the SF-CTDI scale was established with 44% of variation described (Hwang et al., 2010). Overall and subscale Cronbach’s alpha coefficients and intra-class correlation coefficients were greater than 0.8, which was deemed to be an acceptable level of reliability. Based on these findings, the SF-CTDI (Chinese version) is a trustworthy instrument for assessing critical thinking disposition in academic settings.

3.2.2 Semi-Structured Interview

A total of forty-six individuals were interviewed using a semi-structured method. Participants who agreed to be interviewed again after completing the critical thinking disposition were recruited. In order to address the second research question, the researchers developed a series of interview questions to obtain a more in-depth understanding of how these students perceived critical thinking abilities and the usefulness of cross-cultural communication courses. The following is an example of a few vital questions that were asked during the interview:

1) What do you think about your individual critical thinking skills/abilities based on your previous learning or academic experiences?

2) Based on the first question, what would be your attitude toward Chinese students’ general critical thinking skills and abilities?

3) If critical thinking skills/abilities, such as identifying problem, analyzing, reasoning, judging, applying and comprehending, which critical thinking skills do you believe are the most beneficial and practical to be acquired from the Cross-Cultural Communication course?

3.2.3 Data Collection and Analysis

The gathering of data occurred between August and December of 2021. One of the researchers reached out to two instructors in charge of Cross-Cultural Communication courses offered by the department of General Education at a Chinese international college affiliated with a Thai university, requesting their assistance in distributing the Critical Thinking Disposition Inventory survey to their Chinese undergraduate students. The responses of all seventy-eight responders were collated. In the meanwhile, thirty-six students who indicated interest in participation were asked to participate in individual interviews lasting 15 to 20 minutes. The comments taken from individual participants would be recorded in English, and the interviewees’ responses were translated from Chinese to English for transcription of qualitative data in order to undertake theme coding analysis. The bulk of the data was collected using a CTDI survey and semi-structured online interviews. As is typical in quantitative research, frequency and percentage analyses were used to examine the data in this study. Quantitative studies were used to ascertain the participants’ perspectives on their own critical thinking abilities.
On the other side, qualitative data derived from verbatim interview transcriptions highlighted key elements of a practical cross-cultural communication course that incorporates critical thinking instruction, as experienced by Chinese college learners. The quantitative and qualitative data were incorporated in order to allow discourse among Chinese college students and course designers about the fulfillment of the prerequisites for critical thinking education inside a cross-cultural communication course.

4. Research Results

4.1 Burning Issue: Absence of Critical Thinking Skills Among Chinese Undergraduates

In order to carry out a quantitative analysis on the answers that each participant provided to all 18 questions that were a part of the critical thinking disposition inventory scale, the SPSS version 25.0 software package was utilized. In Table 2, the results of each item are depicted in completeness, along with the item’s mean score (X), the standard deviation (SD) for the complete set of items, and the average score for each categorical variable, in that order.

Table 2. A summary of participant’s responses to CTDI

<table>
<thead>
<tr>
<th>I. Systematic Analysis (item 1 to 5)</th>
<th>N</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I am a person with logical thinking</td>
<td>78</td>
<td>2.37</td>
</tr>
<tr>
<td>2. I am good at solving problems</td>
<td>78</td>
<td>2.46</td>
</tr>
<tr>
<td>3. I can easily organize my thoughts</td>
<td>78</td>
<td>3.11</td>
</tr>
<tr>
<td>4. I appreciate myself as a person who has comprehensive and precise thoughts</td>
<td>78</td>
<td>3.07</td>
</tr>
<tr>
<td>5. While facing a problem, my colleagues/peers are used to asking for my opinion in their decision-making because I am objectively analyzing the problem</td>
<td>78</td>
<td>2.45</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td></td>
<td><strong>2.69</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>II. Thinking within the box (item 6 to 13)</th>
<th>N</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. I only look for the truths which would support my opinions rather than those that would reject my opinions</td>
<td>78</td>
<td>3.27</td>
</tr>
<tr>
<td>7. I am afraid of discovering the truth in many issues</td>
<td>78</td>
<td>3.55</td>
</tr>
<tr>
<td>8. During a team discussion, if someone’s argument had been denied by others, the person would not have a right to express their argument</td>
<td>78</td>
<td>4.15</td>
</tr>
<tr>
<td>9. Everyone has the right to address their opinions, but I don’t bother with what they say</td>
<td>78</td>
<td>3.19</td>
</tr>
<tr>
<td>10. I pretend to be a logical person although I am not</td>
<td>78</td>
<td>3.93</td>
</tr>
<tr>
<td>11. Continuing education activities are a waste of time</td>
<td>78</td>
<td>3.82</td>
</tr>
<tr>
<td>12. If possible, I try to avoid reading</td>
<td>78</td>
<td>4.32</td>
</tr>
<tr>
<td>13. Decisions made by authority are always right</td>
<td>78</td>
<td>4.75</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td></td>
<td><strong>3.87</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>III. Thinking outside the box (item 14 to 18)</th>
<th>N</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>14. I have a strong desire for knowledge</td>
<td>78</td>
<td>2.21</td>
</tr>
<tr>
<td>15. I am satisfied that I can understand others’ ideas</td>
<td>78</td>
<td>4.02</td>
</tr>
<tr>
<td>16. I expect to face the challenge of peers’ care</td>
<td>78</td>
<td>2.80</td>
</tr>
<tr>
<td>17. It is interesting to solve tough problems</td>
<td>78</td>
<td>1.84</td>
</tr>
<tr>
<td>18. I like to know how things work out</td>
<td>78</td>
<td>2.14</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td></td>
<td><strong>2.60</strong></td>
</tr>
</tbody>
</table>

Table 2 discloses that in answer to the first study question, which was, “Prior to cross-cultural communication course design, how are the critical thinking skills of Chinese international college undergraduates?” Chinese college student participants in the current study confirmed an average mean score of 3.05 (X = 3.05) acquired from the whole critical thinking disposition inventory (CTDI). Furthermore, according to the categorical variables of the CTDI, such as systematic analysis, thinking within the box, and thinking outside the box (X), undergraduate participants demonstrated a significant degree of critical thinking skills in an unfavorable manner. This was particularly the case for undergraduates’ systematic analysis (X = 2.69, item 1−5) and thinking outside the box (X = 2.60, item 14−18). On the other hand, the outcomes of the study indicated a high averaged mean score of students’ thinking within the box (X = 3.87, item 6−13). Reversely, this categorical variable reflects students’ inability to apply their critical thinking abilities across the whole of the academic context.

4.2 Chinese Undergraduates’ Vague Awareness of Critical Thinking Skills

To address the second study question, “What does the cross-cultural communication course’s requirements analysis reveal about the instruction of critical thinking based on Chinese college undergraduates’ perspectives?” Initially, the findings of the interviews with Chinese undergraduates were categorized according to their grasp or
knowledge of critical thinking abilities and their awareness of the content of critical thinking skills. Samples of
the perspectives of Chinese undergraduates considering individual critical thinking skills (abilities) based on
their past learning or academic experiences were summarized in Table 3.

Table 3. General remarks of Chinese undergraduates regarding individual critical thinking abilities

<table>
<thead>
<tr>
<th>Chinese Undergraduates’ Response Excerpts from Interview Question 1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Interview Question:</strong> what do you think about your individual critical thinking skills/abilities based on your previous learning or academic experiences?</td>
</tr>
<tr>
<td>S1</td>
</tr>
<tr>
<td>S3</td>
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<tr>
<td>S7</td>
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<tr>
<td>S10</td>
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<tr>
<td>S11</td>
</tr>
<tr>
<td>S14</td>
</tr>
<tr>
<td>S26</td>
</tr>
<tr>
<td>S29</td>
</tr>
</tbody>
</table>

First, Chinese undergraduates were uncertain about the underlying meaning of critical thinking skills, yet they
were used to hearing the phrase critical thinking abilities. Some of the other participants indicated that critical
thinking seemed to do the thinking in a critical manner, but they tended to simply follow the views of others or
agree with their points of view without much thought. Other undergraduates agreed that critical thinking
included searching for other viewpoints or facts to confirm the veracity of information without challenging or
disputing it.

4.3 Dismal Critical Thinking Abilities among Chinese Students

Conversely, the research findings from the interview highlighted that undergraduate respondents had insufficient
critical thinking skills owing to their test-focused education system and compulsive memorizing. In addition,
other undergraduate respondents believed that Chinese students invariably observe their lecturers’ commands,
which are derived from the customary regime of the authorities. Moreover, a significant number of
undergraduate students expressed that the critical thinking skills of Chinese students may very well be limited or
cease to improve after high school, as a result of the study-for-examination instructional methods, which could
be taken into account a stereotypical fashion, exacerbating Chinese learners to be robots devoid of creative
expression, intellectual curiosity, and critical thinking skills. The representative comments made by participants
are shown in Table 4.

Table 4. Undergraduates’ remarks regarding the general critical thinking abilities of Chinese students

<table>
<thead>
<tr>
<th>Chinese Undergraduates’ Response Excerpts from Interview Question 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Interview Question:</strong> Based on the first question, what would be your attitude toward Chinese students’ general critical thinking skills and abilities?</td>
</tr>
<tr>
<td>S1</td>
</tr>
<tr>
<td>S3</td>
</tr>
<tr>
<td>S6</td>
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<td>S7</td>
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<td>S9</td>
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<td>S15</td>
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<td>S17</td>
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<tr>
<td>S19</td>
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<tr>
<td>S22</td>
</tr>
</tbody>
</table>
4.4 Zero-Remembering, Identifying-to-Analyzing, Applying-to-Inventing Cross-Cultural Communication Class

Last but not least, the findings of the study indicated that, in terms of Chinese undergraduates’ perspectives on how critical thinking instruction is incorporated into a cross-cultural communication course as the core requirement, undergraduates anticipate learning about broadening individual eyes to the world, intensively analyzing problems, critically reasoning scenarios, and investigating the truth or corroboration rather than simply repeating the teacher’s instruction or memorization of rigid rules, etc., as part of the core curriculum. In addition, the aforementioned skills, when examined from the viewpoint of Chinese undergraduates, according to student participants’ responses (N = 19, 41, would be both applicable and helpful in the process of acquiring constructive information and knowledge from the cross-cultural communication class. Table 5 contains exemplary examples of the comments made by participants.

Table 5. Undergraduates’ values of critical thinking in a cross-cultural communication course

<table>
<thead>
<tr>
<th>Chinese Undergraduates’ Response Excerpts from Interview Question 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Interview Question:</strong> If critical thinking skills/abilities, such as identifying problem, analyzing, judging, applying and comprehending, which critical thinking skills do you believe are the most beneficial and practical to be acquired from the Cross-Cultural Communication course?</td>
</tr>
<tr>
<td><strong>S1</strong></td>
</tr>
<tr>
<td><strong>S2</strong></td>
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5. Conclusion and Discussion

The objective of this study was to identify and evaluate the critical thinking abilities of Chinese foreign college freshmen in order to include critical thinking instruction into the cross-cultural communication coursework. Taken as a whole, the results of the current mixed-methods study provide insight into the usefulness of expanding our understanding of the lack of critical thinking skills (abilities) among Chinese international college undergraduates due to China’s conventional education system or academic study habits. The study-for-test strategy has a substantial influence on the restricted or nonexistent development of critical thinking abilities among Chinese students, which conforms to the assertion from several studies that there is a lack of knowledge of the definition or idea of critical thinking skills among Asian students (Hood, 2020; Li & Ren, 2020; Jiang, 2020; Kusumastuti et al., 2019; Ghaemi & Mirsaeed, 2017). In addition, the summary of Chinese undergraduates’ responses to the critical thinking deposition inventory revealed that absence of speculation is a common problem among Chinese college students, based on the CTDI’s items 12: if possible, I try to avoid reading (X = 4.32); 13: decisions made by authority are always right (X = 4.75), item 17: it is interesting to solve difficult problems (X = 1.84, lower than the seldom 2-point Likert scale point). This primarily manifests in the fact that Chinese students are inadequate and inexperienced with critical thinking skills, such as attending lectures without making statements, a lack of debate, a lack of automaticity in thoughts, and inordinate confusion in interpretation, which inevitably results in the inability to upskill to a competent range of expertise and inhibits Chinese students’ academic growth and the nation’s continued prospects.

Moreover, the outcomes of this research indicate that Chinese undergraduates believe and anticipate that critical thinking skills as a component of instructional coursework would therefore enable them to confront core content information without excessive memorization; rather, they would really like to study and understand how to precisely and essentially identify problems and analyze issues by separating them out. Significantly, via the
inclusion of CT training in the cross-cultural communication course, Chinese international students are more likely to adopt and apply topic knowledge to real-world circumstances and to be inspired to express themselves in a more innovative and constructive manner. Overall, a need exists for specifically aimed professional development for educators over the domain of critical thinking skills that includes a theoretical base, affirmation of the fundamental elements of critical thinking, and empirical evidence that teachers can employ to better comprehend the concept of critical thinking in a broad sense and critical thinking techniques in classroom instruction for learners in particular (Onen, 2021; Masaeid, 2020; Erkens et al., 2018; Cobbinah, 2017). Last but not least, if teachers appreciate critical thinking in depth, then not only can we convey the concept clearly to our students, but we can also utilize it to offer purpose and direction to nearly everything we undertake as both educators and learners under any academic scenario.

References


Li, J., & Ren, Y. (2020). The cultivation of critical thinking ability in academic reading based on questionnaires and interviews. *International Journal of Emerging Technologies in Learning (iJET), 15*(22), 104. https://doi.org/10.3991/ijet.v15i22.18197


Sun, Q. (2017). NEU students’ critical thinking ability cultivation based on problematic instruction with

https://doi.org/10.17265/1539-8080/2017.07.006


https://doi.org/10.5840/inquiryct201328318


https://doi.org/10.4324/9781315707808-9


https://doi.org/10.1007/978-981-10-0330-1_11


https://doi.org/10.18372/2306-1472.1.13660


https://doi.org/10.4324/9781003238089-2


https://doi.org/10.17265/2161-623x/2017.10.002


https://doi.org/10.4324/9781315559124-5


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