Critical Thinking Abilities, Cognitive Reading Strategies, and Task-Based Language Learning among Chinese EFL Learners

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Abstract: This study was aimed at determining the relationships among critical thinking abilities, cognitive reading strategies, and task-based language learning among Chinese EFL learners as basis for a proposed program to enhance English language learning. This study was conducted in five universities of China, including both public and private universities. This research efficiently employed the convenience of Wechat's online survey, engaging 400 respondents across five diverse universities, ensuring an equal representation of EFL learners. Finally, 400 valid questionnaires were retrieved. Findings showed that Chinese EFL learners had high critical thinking abilities, preferred to use certain strategies over other strategies in reading, and had high cognitive reading levels. Significant differences emerged in responses regarding critical thinking abilities and cognitive reading strategies, grouped by school and proficiency level. Participants from private universities and with ten years above English learning experience have better assessment than others and female students have better performance. There was significant difference in responses on cognitive reading strategies on exposure to reading when grouped according to sex. Female students have better assessment on reading strategies. This research investigated the detailed correlation among three variables and proposed a language learning enhancement program based on the results, aiming to improve the level of critical thinking abilities, cognitive reading strategies and implementation of task-based language learning. Additionally, the study is anticipated to contribute favorably toward reforming English reading instruction among Chinese EFL learners.

1. Introduction

In an age characterized by swift globalization and escalating cross-cultural exchanges, the demand for effective English language proficiency among non-native speakers has intensified. In this context, the acquisition of language skills goes beyond language competence and includes the ability to critically engage with information, understand complex texts, and communicate meaningfully. This dissertation examines the complex relationship between critical thinking skills, the application of cognitive reading strategies, and task-oriented language learning, particularly in the context of

Chinese language learners.

Language is closely related to thinking, and language is the tool of thinking. Western developed countries describe the mission of education as "cultivating students to form a sound personality, to become a complete person, so that they have a critical thinking ability, especially to cultivate students' ability of original thinking". In the rapidly evolving landscape of EFL education, the role of critical thinking abilities and cognitive reading strategies in enhancing language acquisition has garnered significant attention. The contemporary context of global communication and intercultural exchange underscores the urgency of equipping language learners with not only linguistic competence but also the cognitive tools to navigate complex communicative situations.

Critical thinking is the ability to think clearly and logically, to understand the connection between ideas. It is the art of cooperation in thinking and independent thinking. Critical thinking includes the ability to identify the reasoning behind an argument or situation, analyze the evidence presented, identify potential downsides, and draw conclusions. The concept of critical thinking has been evolving over centuries, but it gained significant traction in the 20th century with the contribution of philosophers and educators like John Dewey, who emphasized the significance of reflection and active engagement in learning. In the 1980s and 1990s, there was a surge of interest in critical thinking as an essential skill for education and the workforce, leading to the development of various teaching methods and assessment tools designed to foster this skill.

Cognitive reading strategies refer to a series of mental processes and techniques used by readers to understand and retain written information. These strategies are grounded in cognitive psychology and aim to enhance the reader's ability to comprehend, memorize, and recall material effectively. They include activities such as summarizing, questioning, visualizing, inferring, and predicting, among others.

Research into cognitive reading strategies has been extensive both internationally and domestically. Abroad, research has focused on how these strategies can be integrated into instructional practices across various grade levels and subject matters. Studies have shown that explicit teaching of cognitive reading strategies can improve reading comprehension significantly (Duke & Pearson, 2002).

In China, the study of cognitive reading strategies has gained momentum with the realization of their importance in the country's educational reforms. Researchers have explored how cultural factors influence the adoption and effectiveness of cognitive reading strategies among Chinese students (Li & Li, 2015).

Task-based language learning (TBLL) puts large emphasis on learning through meaningful tasks. In this approach, tasks are used as the central unit for language curriculum design and implementation. A task is usually a project or activity that requires learners to use the language in authentic contexts, often interacting with each other to solve problems, share information, or achieve a goal.

Internationally, research into task-based language learning began to emerge in the 1980s, with advocates such as Peter Skehan and Michael Long recognizing the potential of task-based instruction to promote naturalistic acquisition of language. Since then, numerous studies have been conducted on various aspects of TBLL, including task design, the role of interaction, and the practical effects of tasks in promoting language learning.

In China, the study of TBLL gained traction in the late 1990s and has since become a popular focus in both second language acquisition research and English language teaching practice. Chinese scholars have explored how TBLL can be adapted to fit the country's unique educational context, taking into account factors such as class types and the influence from Chinese cultural norms on language learning strategies.

In the rapidly evolving landscape of English as a Foreign Language (EFL) education, the role of critical thinking abilities and cognitive reading strategies in enhancing language acquisition has

garnered significant attention. The contemporary context of global communication and intercultural exchange underscores the urgency of equipping language learners with not only linguistic competence but also the cognitive tools to navigate complex communicative situations.

Chinese EFL learners encounter unique challenges arising from the different contexts between their native language, Mandarin Chinese, and English. The linguistic, cultural, and educational disparities between these languages influence learners' approach to language learning. Addressing these challenges necessitates an integrated understanding of language acquisition that encompasses both linguistic and cognitive dimensions.

The global proliferation of English as the lingua franca for communication, business, science, and academia has intensified the demand for effective language education. In China, as one of the world's most populous countries and a major global player, English proficiency is crucial for international engagement and economic development. The traditional teacher-centered approaches to language learning have gradually given way to more learner-centered methodologies that emphasize the development of critical thinking abilities and cognitive reading strategies.

Although the integration of critical thinking and cognitive reading strategies in language learning is increasingly acknowledged, the specific implications of these components in the context of task-based language learning among Chinese EFL learners require further investigation. This study seeks to address this gap by examining how critical thinking abilities and cognitive reading strategies contribute to the effectiveness of task-based language learning.

2. Objectives of the Study

This research aimed to assess critical thinking abilities, cognitive reading strategies, and task-based language learning among Chinese EFL learners as a basis for a proposed language program to improve English language teaching.

More specifically, this study described the profile of respondents in terms of sex, place of residence, type of school, student grade level, years of English study, and major. It assessed critical thinking skills of the respondents, focusing on truth-seeking, open-mindedness, analyticalness, systematicity, and confidence in reasoning; determined the respondents' cognitive reading strategies in terms of pre-reading, while-reading, and post-reading stages; This study determined task-based language learning in terms of students' understanding of task-based language learning, students' view of task-based language learning, and reasons for task-based language learning in the classroom; tested for significant differences in responses when grouped by profile; The study tested for significant relationships among critical thinking skills, reading strategies, and task-based language learning; This study proposed a language learning program to promote critical thinking skills, cognitive reading strategies, and task-based language learning among Chinese EFL learners.

3. Literature Review

Critical Thinking Abilities

Gregory Basham (2019) and others think critical thinking refers to the "effective identification, analysis and evaluation viewpoint and truth hypothesis, understanding and overcome personal prejudice and prejudice, form and can support conclusion, convincing reasoning, for thinking rational, intelligent decisions necessary for a series of cognitive skills and thinking quality", and points out that critical thinking is in accordance with the "clear, accurate, accurate, relevant, consistent, logical correct, complete and fair" clear academic standards of rigorous thinking.

Mei and Wang (2018) pointed out that critical thinking, through the attitude and behavior of questioning and verification, rationally analyzes the truth and falsehood of things, and judges to accept or reject a point of view. Zhong (2020) believes that the occurrence of critical thinking is

based on the argument, with logical and unbiased thinking about things, and consciously and prudently reflecting on their own thinking process. Wang and Yi (2022) defined the quality characteristics and ability elements of critical thinking, believing that the basis of critical thinking and problem solving is "rational spirit characteristics such as truth-seeking, independence, justice and openness", and their core ability is "insight, analysis, judgment and reflection"

Huang (2019) believes that critical thinking skills include judgment and reasoning, doubt and resolution, seeking common ground while reserving differences, evaluation and prediction, which not only cover the thinking skills at the general level, but also take into account the thinking ability at the subject level.

Critical thinking is a multifaceted skill essential for effective problem-solving and decision-making in both academic and real-world contexts. This literature review examines recent research on the subdomains of critical thinking abilities: truth-seeking, open-mindedness, analyticalness, systematicity, and confidence in reasoning.

Cognitive Reading Strategies

Cognitive reading strategies are cognitive processes that readers employ to comprehend and interpret texts effectively across different stages of reading: pre-reading (before reading), while reading (during reading), and post-reading (after reading) (Pressley, 2000; Anderson, 2005).This study explores the cognitive reading strategies employed by Chinese EFL learners and their relationship to critical thinking ability.

Pre-reading strategies prepare readers for the text, enhancing comprehension and retention. These strategies include previewing, predicting, and activating prior knowledge. Kendeou et al. (2014) emphasize the importance of previewing text to set a purpose for reading. Previewing helps readers establish a framework for understanding the content. Sainsbury & Clarkson (2017) found that students who previewed texts performed better in comprehension tests than those who did not. Brown & Kane (2015) highlight predicting as a key strategy that engages readers by setting expectations and fostering active reading. Zhang (2019) demonstrated that prediction activities improved comprehension among second language learners, suggesting its universal applicability. Lim and Keene (2020) showed that students who activated prior knowledge before reading had better recall and understanding of the material.

While-reading strategies involve engaging with the text actively, monitoring comprehension, and employing various techniques to understand and retain information. Duke and Pearson (2014) emphasize the role of questioning in fostering deeper understanding. By asking questions, readers actively engage with the text. Murphy et al. (2020) found that students who were trained to generate questions while reading demonstrated improved comprehension and critical thinking skills.

Post-reading strategies involve reflecting on the text, integrating new information with existing knowledge, and evaluating understanding. Pressley and Gaskins (2016) discuss reflection as a critical post-reading strategy that helps readers consolidate their understanding and relate it to prior knowledge. Duke et al. (2017) emphasize the importance of evaluating text content for critical thinking and deeper understanding. Evaluation involves assessing the credibility and relevance of the information. Woolley (2021) demonstrated that students who engaged in evaluative reading practices showed improved analytical and critical thinking skills. Hayes and Kuperis (2019) reported that students who actively made connections between texts and their own experiences had higher comprehension scores.

This study focused on the critical role of cognitive reading strategies in enhancing reading comprehension and learning. These strategies, encompassing pre-reading, while-reading, and post-reading stages, have been shown to significantly improve understanding and retention of text. Technological advancements and personalized learning environments offer new avenues for implementing these strategies effectively. Future research should continue to explore innovative

methods for integrating cognitive reading strategies into diverse educational contexts, ensuring that all students can benefit from these essential tools.

Task-Based Language Learning

Task-Based Language Learning (TBLL) is an approach that centers on the use of tasks as the primary unit of language teaching and learning. Tasks are activities that require learners to use language to achieve a specific goal, promoting communication and interaction (Ellis, 2003; Long, 2015).

Understanding how students perceive and comprehend TBLL is crucial for effective implementation in language classrooms. Research indicates that students often view TBLL positively due to its focus on real-world language use and communicative competence. Ellis (2003) defines TBLL as an approach where tasks serve as the primary unit of analysis and instruction, engaging learners in meaningful language use. Nunan (2013) emphasizes that tasks in TBLL are designed to simulate real-life language use, encouraging learners to develop practical language skills.

Norris (2013) explores students' perceptions of task authenticity in TBLL, highlighting its role in promoting learner engagement and motivation. Dörnyei (2014) and Samuda & Bygate (2018) highlight that learners generally find TBLL motivating and engaging, appreciating the opportunity to use language in meaningful contexts. Seedhouse (2014) argues that TBLL enhances learner autonomy and promotes active engagement in language learning tasks. Robinson (2015) explores the role of task complexity in promoting language learning outcomes and cognitive engagement among learners. Plonsky & Ziegler (2016) review empirical studies on the effectiveness of TBLL in improving language proficiency and communicative competence among learners. Kumaravadivelu (2016) discusses the cultural and contextual factors influencing the implementation of TBLL in diverse language learning settings. Bygate et al. (2017) examine the impact of task-based instruction on language learners' linguistic and communicative development.

Task-Based Language Learning (TBLL) offers a student-centered approach to language instruction that emphasizes meaningful communication, learner engagement, and the development of communicative competence. Students' understanding and positive views of TBLL underscore its effectiveness in promoting language acquisition and fostering a communicative learning environment in classrooms. The integration of TBLL is justified by its alignment with communicative language teaching principles and its potential to cater to diverse learner needs, making it a valuable pedagogical tool in contemporary language education.

4. Methods

Participants

The participants in this study comprised 400 college EFL students, all of whom have been exposed to English learning for at least seven years prior to their college enrollment, ensuring a solid language foundation for college-level reading. Nevertheless, their reading proficiency levels vary, as they hail from diverse institutions ranging from elite to middle-level and low-level universities. Within each university, students representing different proficiency levels were deliberately chosen. Fortunately, their prior comparable experiences in English learning facilitate the conduct of reading-related research.

Instruments

A questionnaires was employed as the primary instrument for data collection in the survey. Essentially, they comprise a set of questions, known as items, that adhere to a pre-established format to gather individual data on one or more specific topics. As McLeod (2018) explains, questionnaires are a form of written interviews that can be administered face-to-face, via phone,

online, or through postal mail. This research tool consists of a sequence of questions designed to elicit information from respondents. Employing questionnaires offers a swift, convenient, and cost-effective means of gathering extensive data from a diverse sample of individuals.

The questionnaire employed in this study was a modified structured version encompassing four sections. The first part focuses on the demographic characteristics of the respondents, while the remaining sections are dedicated to scaled questions. These scaled questions are further categorized into three distinct areas: Critical Thinking Abilities, Cognitive Reading Strategies, and Task-based Language Learning. The questionnaire's design primarily drew inspiration from three previously published studies. For the section on critical thinking abilities, the majority of items were chosen from the work of Ricketts (2003), with only the most frequently used items retained. Similarly, in the cognitive reading strategies section, the majority of items were selected from the study conducted by Andrew et al. (2006), with some additional items included. Lastly, for the task-based language learning section, the items were primarily sourced from the research of Alex (2021), retaining only those that were most commonly utilized.

The comprehensive questionnaire encompassed a total of 63 items, designed to minimize the time burden on respondents. The choices they make will reflect their genuine situations, ensuring accurate and relevant data collection. To determine the scores, the standard reporting technique utilizing the Likert scale was adopted. This involved summing up the values assigned to each selected choice, thereby generating an individual score for each respondent. Additionally, the researcher included a statement regarding data privacy in the survey form, clarifying that participation is voluntary and respondents have the ethical freedom to continue or discontinue answering the questionnaire at any point.

5. Findings

1) Respondents are predominantly males, rural based, attending public schools, in their later education years, with over ten years of English learning experience.

2) Chinese EFL learners agree that individuals value a range of critical thinking skills, particularly confidence in reasoning, and critical thinking abilities in English reading, demonstrating awareness in truth-seeking, open-mindedness, analyticity, systematicity, and confidence in reasoning.

3) Chinese EFL learners agree that there is a clear preference for strategies employed during the act of reading, emphasizing familiarity with texts and understanding new language over mere exposure to reading.

4) Chinese EFL learners agree that learners have a positive understanding of and perspective on TBLL, which is closely linked to their recognition of the sound reasons for its implementation in the classroom.

5) Highly significant differences exist in responses regarding critical thinking, cognitive reading strategies, and task-based language learning, based on profiles.

6) Highly significant correlations exist among students' critical thinking, reading strategies, and task-based language learning. Those with higher critical thinking abilities tend to use more effective reading strategies, displaying greater self-efficacy in reading. Better reading strategies correlate with improved comprehension.

7) A language program to enhance critical thinking abilities, cognitive reading strategies in task-based language learning among Chinese EFL learners has been proposed.

6. Recommendations

1) Chinese universities may expand their course offerings to include more focused courses on effective reading strategies, thereby strengthening Chinese EFLs' critical thinking and task-based

language learning.

2) English teachers may emphasize among EFL learners the significance of critical thinking in reading, introduce diverse reading strategies, and provide demonstrations, guided practice, and feedback to aid in internalization and effective application in a supportive learning environment.

3) School administrators may consider evaluating the proposed program to enhance reading comprehension for Chinese EFL learners before implementation.

4) Future researchers may explore enhancing Chinese EFL learners' reading proficiency through optimizing strategy utilization and strengthening critical thinking, cognitive reading strategies and task-based language learning.

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