

Impact of CoI Framework on Online Student Engagement

Fang Zhao

School of Education University of Leeds, Leeds LS2 9JT, United Kingdom.

Abstract: This study explores the experiences and perceptions of Chinese postgraduate students in the UK regarding online learning, focusing on the Community of Inquiry (CoI) framework. Semi-structured interviews were used to collect qualitative data, which were analyzed thematically. The findings reveal positive perceptions of online learning, challenges related to technology and infrastructure, the significance of social interaction and collaboration, and the limited impact of teaching quality on student satisfaction. The study emphasizes the importance of the CoI framework in designing effective online learning environments. Limitations include a small sample size and potential bias. Future research should involve larger and more diverse samples, investigate different teaching strategies, and enhance student agency and self-regulated learning in online education. Overall, this study contributes to understanding the applicability of the CoI framework and its potential for improving online learning experiences.

Keywords: CoI Framework; Online Learning; Chinese Postgraduate Students

1. Introduction

Digital technology has transformed education, with online learning becoming crucial (Bolliger & Halupa, 2018; Shelton et al., 2017)^[1,2]. Limited research exists on applying the Communities of Inquiry (CoI) framework to online courses for non-native or inexperienced learners, despite Fiock's (2020)^[3] proposals.

Chinese postgraduate students pursuing degrees abroad have increased due to globalization (Wu, 2020)^[4]. However, international students, including ESL learners, face challenges such as cultural differences, unfamiliar education systems, and adjusting to new lifestyles (Arthur, 2001)^[5]. In online courses, ESL learners may struggle with motivation, engagement, and a sense of connection, impacting their learning outcomes. Understanding these challenges and using the CoI framework to enhance pedagogy is crucial.

This study employs semi-structured interviews with a Chinese postgraduate student in the UK to identify strategies for ESL learners in online courses, emphasizing the CoI framework's social, cognitive, and teaching presence.

2. Research context

Technology integration in education, particularly online learning, has transformed the educational landscape. Prominent universities, like Tsinghua, Peking, Harvard, and MIT, have shifted to online lectures (Picciano, 2017)^[6].

The COVID-19 pandemic led to widespread school closures, affecting over 1.5 billion students worldwide (Demuyakor, 2020)^[7]. This prompted a surge in research on online learning and its impact.

This study employs the CoI framework to address language barriers in online learning. The CoI framework focuses on cognitive, social, and teaching presences. Previous research has applied the CoI framework to support non-native speakers and inexperienced learners in online courses (Martin et al., 2022)^[8]. The findings will inform the design of inclusive online learning environments. Evaluating the challenges and opportunities of technology integration is crucial, using tools like the CoI framework.

3. Literature review

The Communities of Inquiry (CoI) framework, proposed by Garrison et al. (2000)^[9], is widely recognized and used for creating effective online learning environments that foster critical thinking, research, and discussion. It emphasizes the convergence of social, cognitive, and teaching presences (Figure 1) to facilitate meaningful learning experiences and student engagement (Garrison et al.,

2000)^[9]. By promoting interactions among learners, instructors, and course content, the framework supports the co-construction of knowledge and the development of a strong sense of community (Szeto, 2015)^[10].

Empirical research in distance education and e-learning has extensively utilized the CoI framework as a valuable tool for designing online learning environments that address challenges such as the disconnection between students and instructors or peers (Moskal et al., 2013)^[11].

In this study, the CoI framework is applied to examine the social, cognitive, and teaching presence in online learning, specifically focusing on Chinese postgraduate students in the UK with no prior online learning experience. By using the CoI framework, the aim is to enhance the online learning experience and develop effective pedagogical practices for better learning outcomes.

By employing the CoI framework for interview questions, this study ensures a systematic exploration of participant experiences, leading to comprehensive data collection and grounded theoretical explanations.

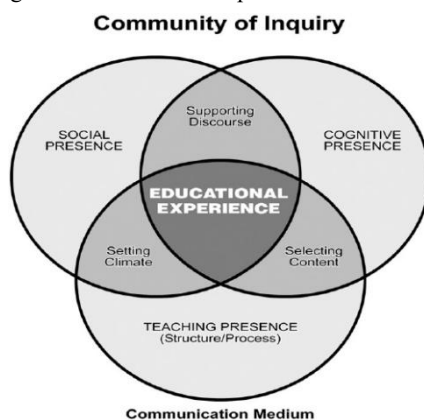


Figure 1. Community of inquiry framework.

(Garrison et al., 2010)^[12]

4. Method

This study investigates the experiences of Chinese postgraduate students in the UK without prior online learning experience and explores the role of the CoI framework in developing effective online learning environments. Semi-structured interviews were conducted as the data collection method (Kallio et al., 2016)^[13]. Interviews allow for in-depth exploration of processes, experiences, and perceptions. Convenience sampling was used to select participants based on ease of access, and a pilot test was conducted to ensure effective interview questions (Majid et al., 2017)^[14]. Face-to-face interviews were conducted in a coffee shop, recorded with consent, and later transcribed. Thematic analysis was used to analyze the interview data, identifying relevant themes and patterns (Braun and Clarke, 2006)^[15].

5. Discussion of Findings

The semi-structured interviews revealed important findings related to online learning experiences. Participants expressed positive attitudes towards online learning, while also highlighting challenges associated with technology, infrastructure, self-regulation, and motivation. They emphasized the significance of social interaction and collaboration, but perceived teaching quality and instructional design to be less influential on student satisfaction. These findings align with the CoI framework's focus on cognitive, social, and teaching presence in effective online learning environments.

Cognitive Presence

Student Experiences with Online Learning:

Online learning offers time efficiency and flexibility, allowing learners to incorporate education into their busy schedules without the need for travel.

Real-time interaction in online learning promotes critical thinking and deeper understanding through immediate feedback and clarification.

Challenges of Online Learning:

Language barriers can impede comprehension and effective communication. Instructors should create inclusive and supportive

learning environments to address language obstacles.

Internal and external distractions can hinder focus and engagement. Instructors should minimize distractions to foster an effective learning environment.

How Students Adapt to This Learning Format:

Immersion exercises, positive psychological cues, and goal setting can enhance language proficiency and create a supportive learning environment.

Self-motivation, goal setting, and dedicated learning spaces contribute to cognitive presence and engagement. Instructors should incorporate self-regulation techniques to support students' learning goals.

Technology and Infrastructure:

Real-time subtitles and playback functions aid language support, understanding, and self-regulated learning.

Navigating multiple digital tools and platforms can be challenging, particularly for students with limited technological proficiency or access. Accurate subtitles are essential for effective learning.

Social Presence

Social Interaction and Collaboration:

Asynchronous communication tools like discussion boards promote critical thinking and reflection, although they may not always foster a strong sense of belonging.

Collaboration in online learning environments facilitates deeper understanding, creative problem-solving, and social skill development, combating feelings of isolation and disengagement.

Teaching Presence

Teaching and Instructional Design:

Teaching presence, including effective course design, feedback, and facilitation, significantly influences students' perceptions of cognitive presence. Prioritizing instructional design over course content may indicate a deficiency in teaching presence.

Conclusion

This study examined the relationship between the CoI framework and online language learning through semi-structured interviews with one participant. The findings support the validity and usefulness of the CoI framework in understanding non-native speakers' experiences in online courses and designing effective language learning environments.

While the small sample size and potential bias limit generalizability, this study highlights the value of semi-structured interviews for gathering participant insights. Future research should include larger and more diverse samples, explore different teaching strategies, and focus on enhancing student agency and self-regulated learning in online language learning.

In conclusion, this study contributes to our understanding of the CoI framework's relevance to online language learning. Further research in this area has the potential to improve language learning experiences and inspire innovative approaches to online language education.

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