

## **CHAPTER 2**

### **THEORETICAL REVIEW**

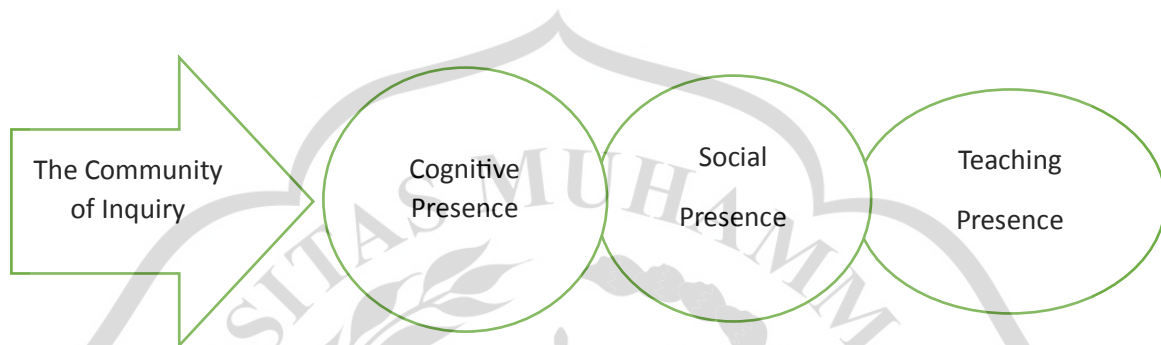
This chapter reviews existing literature on CoI, examining its theoretical foundations, key components, and its impact on higher education. By critically analyzing previous studies, this section seeks to uncover how CoI has been applied, its effectiveness, and the challenges that arise in its implementation.

#### **2.1. The Community of Inquiry (CoI)**

A community is a meaningful association based on a common interest; the objective is communication. Whereas, Inquiry is like technology that creates knowledge. Education technology is the research and ethical practice of facilitating learning and improving performance by creating and managing appropriate technology processes and resources. The Community of Inquiry (CoI) framework is a conceptual model initially developed to analyze and understand the key elements that foster a successful learning experience in online, text-based higher education environments (Garrison et al., 2010). In addition, Guo et al. (2021) found that the CoI framework is an important theoretical framework for understanding and promoting students' learning in online higher education, particularly the social and cognitive learning processes.

From those definitions, we can confirm that the CoI framework is the concept of effective online learning, and it consists of three presences: cognitive presence, social presence, and teaching presence. It can lead to better language acquisition,

development of language skills, increased participation, motivation, and engagement for students (Firat Altay & Altay, 2019).



**Figure 1. The Community of Inquiry (CoI) Elements**

Figure 1 shows the CoI and its three elements: cognitive presence, social presence, and teaching presence. The CoI can be simply a group of learners and teachers who form a community that aims to learn something together or solve problems together in the educational context. First, it consists of *cognitive presence*, which is how learners can communicate and reflect in the classroom. It focuses on their engagement in critical thinking, problem-solving, and knowledge construction. Cognitive presence is constructing meaning through exploration, integration, application, and sustained reflection in discourse in a community of inquiry. (Saadatmand et al., 2017).

Secondly, *social presence* is the ability of the learners or participants to project themselves socially and emotionally based on the objective. Social presence is a

complex concept that has evolved. It is generally understood as the sense of being with others in a mediated environment (Cui et al., 2013). However, Groen et al. (2020) found that social presence is how students relate to the educational community, build social connections, and feel comfortable communicating confidentially. Therefore, social presence is simply the connection between learners and the environment. Social presence in online learning refers to the ability of participants to project themselves socially and emotionally, fostering a sense of community and connection. It involves interaction and collaboration among students and instructors, creating a more engaging and supportive learning experience (Nguyen, 2015).

Third, *teaching presence* is the ability to set the curriculum in good learning conditions because a teacher is responsible for designing and facilitating the student's learning process and sharing their knowledge in the subject. Preisman (2014) found that teaching presence is the design, facilitation, and direction of cognitive and social processes to realize personally meaningful and educationally worthwhile learning outcomes. This definition emphasizes the instructor's active role in shaping the learning experience to achieve meaningful learning outcomes. Teaching presence is the design, facilitation, and direction of cognitive and social processes to realize personally meaningful and educationally worthwhile learning outcomes. So, the instructor's active role in shaping the learning experience to achieve meaningful learning outcomes.

## 2.2. The CoI in Higher Education

Recently, COVID-19 transformed education into distance learning. Many institutions decided to close and conduct distance learning because of the rules set by the World Health Organization to reduce the number of virus cases. Some students worried about the new learning environment, but some were comfortable. However, this distance learning motivated learners and instructors to show their engagement and create a successful learning environment. The majority of students found the online format enjoyable, comfortable, and convenient. They also viewed the flexibility of attending classes from home during the pandemic time as facilitating (Karalis & Raikou, 2020). Aside from this, there are still some challenges to understanding it. Teachers face a variety of challenges related to distance education such as its implementation of the distance education, individual challenges faced by students during the learning, some barriers related to the lack of resources during online, and difficulties with technology and instructors (Ozüdođru, 2021).

El-Seoud et al. (2014) conclude that the success of e-learning in higher education turns to effective delivery and instructor training. Altay & Altay (2019) also found that blended learning has been shown to improve EFL learners' acquisition of language, motivation, and engagement, particularly when implemented effectively. However, it also generated challenges related to teacher training and integrating blended learning within traditional classroom settings.

### 2.3. Previous Studies on CoI

In terms of earlier studies focusing on the CoI framework in education, researchers have generally concentrated on the functionality of the CoI framework, its three aspect elements, their relationships, and their effects on each other. Arbaugh et al. (2008) conducted research aimed at examining the development of a community of inquiry instrument, testing a measure of the CoI framework using a multi-institutional sample. He found that the instrument developed and tested in this research is a valid, reliable, and efficient measure of the dimensions of social presence and cognitive presence. However, while Arbaugh et al. (2008) stressed on multi-institutional students across the United States and Canada to develop the community inquiry framework, the current research is going to focus on the specific field of English education undergraduate students. The most common finding is that the three CoI aspects are interrelated and have a positive impact on each other. Implementing the CoI framework across fields has been the subject of increasing research. Important conclusions include: cognitive presence, social presence, and teaching presence (Arbaugh et al., 2008; Garrison et al., 2010).

Studies have shown that collaborative problem-solving and reflection enhance cognitive presence by promoting deeper learning. For instance, Songkram et al. (2015) stated that an e-learning system has the potential to improve cognitive skills in higher education students and contribute to their success in a technologically driven world. Thus, we can confirm that E-learning systems are not just a means to deliver education

but powerful tools to enhance cognitive abilities, equipping students for success in a rapidly changing, technology-driven world. Their ability to offer personalized, interactive, and accessible learning experiences makes them a transformative force in modern education.

In addition, some research highlights the importance of creating a supportive environment to reduce isolation, particularly in online courses. We never learn in isolation. We need each other to learn in meaningful and worthwhile ways. Interpersonal relationships are the greatest influence on our thinking and learning (Garrison D. Randy, 2017). However, Garrison et al. (2010) and Zaïane & Luo (2001) found the purposeful and academic nature of social presence within a community of inquiry, particularly in formal educational contexts. Students prioritize a shared social identity aligned with the course's purpose over personal identity or interpersonal relationships. This understanding places the three dimensions of social presence as a developmental progression. Participants first identify with the community and its purpose. By focusing on the purposeful and academic nature of social presence, educators create an environment where students feel socially and intellectually connected, supporting deeper engagement and learning outcomes.

Some recent studies also emphasize the instructor's role in designing clear course objectives and facilitating meaningful interactions. It means that the instructor must be sure that all the learners can access the tool used, for example, whether it is a Zoom meeting or a Google meeting, and have a good connection before the activities.

Because the students may be living in different areas, and they may have different capabilities to use those platforms. So, teachers must help them for good learning.

Preisman (2014) found limited evidence to support the idea that increased teaching presence significantly improves student outcomes. He suggests that students may be more satisfied with a well-organized course that offers prompt feedback and clear guidance than with an instructor who actively attempts to create a personal presence. Dockter (2016) concluded that the concept of teaching presence is more complex and multifaceted, involving interactions and relationships between teachers and students. Teachers must help students to understand, for example, when it comes to the assessment, and encourage them to work and discuss together because collaboration in the community of inquiry is very important. In short, teaching presence ensures that the community functions effectively, with students feeling guided and supported while actively engaging in the learning process. This dynamic role of the teacher helps create a rich, collaborative educational experience where all community members contribute to and benefit from shared learning.

The Community of Inquiry (CoI) framework is a widely used theoretical model that explains how deep and meaningful learning occurs in online and blended learning environments. These three elements create an engaging, interactive, and effective learning experience, especially in higher education. Overall, the CoI framework can be a valuable tool for improving the quality of online instruction. By focusing on the key elements of social, teaching, and cognitive presence, the framework can help

instructors create more engaging and effective learning experiences for their students (Arbaugh et al., 2008). In summary, further research is required to have a complete understanding of social presence and discover potential ways to enhance it. For this reason, this research collecting quantitative data from a huge sample is paramount to feed the literature discovery.

