IMPLEMENTING COMMUNITY OF INQUIRY FOR LANGUAGE LEARNING AMONG ENGLISH PRESERVICE TEACHERS

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Abstract

Community of Inquiry (henceforth, CoI) allows learning activities to run optimally. There are three components in CoI, i.e., teaching presence, social presence, and cognitive presence. This study aims to investigate the implementation of CoI among English Language Education students during lectures. The students' opinions, components of teaching presence, cognitive presence, and social presence during lecture activities were further investigated. The method used in this study was qualitative method. Data were collected through observation, focus group discussion, and content analysis. The results of the study showed that CoI can be implemented for lecture activities among English Education students. The students stated that CoI provides many benefits during the lecture activities. The components of teaching presence, social presence, and cognitive presence appear in learning activities during the implementation of CoI.

Keywords: Community of Inquiry (CoI), Language learning, MALL, Preservice Teachers

INTRODUCTION

The world of education provides many opportunities for innovation in an effort to offer ease and effectiveness of learning. Along with the development of the internet and smartphones, the learning process opens up many opportunities for educators to help the learning and teaching process. Mobile assisted language learning (henceforth, MALL) is an effort by educators to optimize smartphone functions for language learning (Kukulska-Hulme & Shield, 2008). The implementation of MALL at *Perguruan Tinggi Keagamaan Islam Negeri (PTKIN)* has been reported in several journal publications (Yudhiantara, 2017; Yudhiantara et al., 2018; Yudhiantara & Nasir, 2017).

In the 21st century, one of the skills needed is the ability to collaborate (Afrianto, 2018). To collaborate, there are many social media applications, such as Instagram and the like, that can be designed to support the process of learning English (Yudhiantara & Nuryantini, 2019a). In

addition to this, Instagram can be directed to improve students' ability to collaborate in learning English (Yudhiantara & Nuryantini, 2019b).

Education in the 21st century needs to provide students with the ability to learn using online technology and to hone students' collaboration skills. One of the efforts to fulfill this need is to implement CoI. CoI framework has three elements that support the success of teaching and learning process, namely teaching presence, cognitive presence, and social presence (Garrison et al., 1999; Garrison et al., 2010). The first element, teaching presence, represents teachers' responsibility to pay attention to their students' learning needs. To meet the students' in learning, teachers develop curricula, facilitate student learning activities, and present learning materials through direct teaching methods. Moreover, teachers provide opportunity for students to collaborate and reflect on their learning process. The second element, cognitive presence, reflects students' parts in learning process. Students are expected to have the ability to construct and ascertain meaning through reflection and discourse preserved within CoI framework (Garrison et al., 2010). Operationally, cognitive presence in CoI framework requires students to have the ability to define problems, seek information to answer problems and to understand the essence of the problem by synthesizing existing information to answer problems as well as offering solutions (Garrison et al., 2010). The last element is social presence. Students are in a position to get help to build a learning community by minimizing feelings of isolation during online learning. Elements of a good social presence produce a feeling of security for students to express their ideas and collaborate with colleagues.

CoI framework provides direction for both learner behavior and learning process to allow the construction of knowledge. The three elements in CoI framework help the learning process to reach a successful level (Garrison et al., 2010). In simple terms, CoI framework tries to help students and teachers to construct knowledge in an online collaborative environment. Knowledge building is obtained from the participation of all students and the role of instruction from the teacher to orchestrate the process that illustrates how teaching presence and social presence emerge in CoI.

Teaching presence implies teaching skills, such as organizing, designing, facilitating learning, and providing teaching (Garrison et al., 2010). CoI requires the articulation of specific behaviors related to learning and teaching to achieve a productive CoI (Shea et al., 2012). Social presence reflects online discourse that promotes positive feelings, interaction, and engagement (Garrison et al., 1999) as well as supports a collaborative and collegial environment.

In regard to the interactions in cognitive presence element, CoI reflects a pragmatic view of learning (Rubin et al., 2013). Overall, CoI framework articulates a building of knowledge that has characteristics as an epistemic engagement where teaching presence element acts as a long-distance teaching function and the social presence element provides an assistance for productive participation (Rubin et al., 2013).

For more than two decades, many studies on CoI have been carried out. CoI has attracted the attention of many researchers among education students (Galikyan & Admiraal, 2019). Yet, the implementation of the CoI framework in the context of MALL has not been widely discussed by researchers especially in the context of Islamic higher education in Indonesia. This study aims to investigate the implementation of CoI using MALL in the areas of students' perception, teaching presence, social presence, and cognitive presence.

METHOD

This study aims to investigate the implementation of COI in the learning process of English education students. The method used is qualitative method. Students of English education who took phonology courses in semester 5 participated in this study. There were 30 students involved in this study. In this study, students were assigned in groups to implement CoI.

Data collection techniques are used to collect evidence in answering the problem formulation. Among these techniques is, focus group discussion, to explore student opinions on CoI. Observations were made to investigate the CoI implementation process. The other technique used in this study was the analysis of documents and artifacts that represent the process of CoI implementation, e.g., e-mail correspondence and classroom semi-structured interviews.

The results of the interviews were transcribed and then analyzed. Data from the interviews, documents, artifacts, and field notes were tested and cross-checked to produce sound and correct interpretations. For the process of data description and interpretation, the data that had been coded were collected into several views and patterns to produce pattern coherence.

Coding stage

The data collected were coded to make it easier to categorize according to the problem formulation. The data were categorized based on the elements of CoI, i.e., teaching presence, social presence, and cognitive presence.

Description stage

The coded data were described in order to answer the problem formulation in the research. The description was adjusted to the formulation of the research problem.

Table 1. Template for Coding CoI Data

Elements	Categories	Indicators
Cognitive	Triggering event	Sense of puzzlement
	Exploration	Information exchanges
	Integration	Connecting ideas
	Resolution	Applying new ideas
Social	Emotional expression	Emotion
	Open communication	Risk-free expression
	Group cohesion	Encouraging collaboration
Teaching	Instructional management	Defining and initiating discussion topic
		Sharing personal meaning
	Building understanding	Focusing discussion
	Direct instruction	

Interpretation stage

After describing the data, this research will triangulate and examine all data to produce patterns that will provide a strong foundation for carrying out interpretation of the existing data.

FINDINGS AND DISCUSSION

This study aims to investigate how CoI is implemented for English Language Education students. This section will describe the findings related to the implementation of CoI, the percep-

tions of the students regarding the implementation of CoI, and how social presence, teaching presence, as well as cognitive presence appear in learning.

CoI implementation in language learning
Stages of implementation
Based on the syllabus, students took the courses for 16 meetings. Lecturers designed the teaching and learning activities for both study and exam activities. Of the 16 meetings, there were two meetings designed for the midterm and final exams. The rest of the meetings were designed for lecturing which included activities such as, providing material, exercises, and discussions.

Preparation
There were several things prepared for the implementation of CoI. On the first meeting, students received an explanation about CoI. In the next few meetings, students were informed about activities used to implement CoI as seen in Table 2.

Table 2. Stages of CoI Implementation During the Course

Meetings	Students' Activities
Meeting 1 Socializing related to the implementation of CoI	Students received explanations related to lecture activities
Meeting 2,3 Implementing CoI in lectures	Students followed directions on how to implement CoI in lectures
Meeting 4 Implementing CoI teaching presence element	Students followed directions and received learning materials from lecturers
Meeting 5 Implementing CoI for social presence element	Students interacted with fellow students related to lecture activities to implement CoI
Meeting 6.7 Implementing CoI for cognitive presence element	Students did assignments and exercises according to the instruction
Meeting 9,10,11,12,13,14,15 Implementing CoI for all stages	Students followed the direction of the lecturer in implementing CoI in the form of teaching, social, and cognitive presence

The implementation of CoI in lectures consisted of three elements, i.e., teaching presence, social presence, and cognitive presence. The three elements are indicators of the implementation of CoI activities in lectures. In the teaching presence element, the lecturers provided learning materials for lecture purposes. The lecturers also gave an explanation regarding learning materials in the teaching presence stage which took place on Whatsapp as a part of MALL implementation.

The second implementation of CoI was in the form of social presence. Social presence on the Whatsapp platform occurred when students interact with both students and lecturers. Interaction between students appeared in several meetings for lecture purposes. For this purpose, several activities were made to allow interaction between students. For example, students did an assignment to make questions and address them to their friends.

The last element in CoI implementation is cognitive presence. In order for cognitive indicators to occur, some meetings were designed by lecturers to provide opportunities for students to do

exercises or assignments. There were various assignments designed by lecturers. One of them was students created their own questions and provided answers to questions made by their friends.

Students' perception on the implementation of CoI

This study obtained several findings related to the opinions of students who took part in the study program and the implementation of CoI in learning activities. This research used focus group discussion to gather data related to student opinions in the implementation of CoI in learning activities. Based on the results of the focus group discussion, there were several findings that can be used to answer research questions related to student opinions in the implementation of CoI.

First, CoI was useful to be implemented in student learning activities related to teaching presence. Students agreed that teaching presence using WhatsApp platform in learning activities gave them the opportunity to study the materials given by their lecturers. They said that lecturers' teaching activities to explain lecture material could be accessed by video, audio notes and file sharing provided by lecturers to students for the purposes of their lectures and learning activities.

Second, the social presence element in CoI provided opportunities for students to build the ability to interact with fellow students. They stated that socialization allowed them to collaborate with their friends. WhatsApp provided the opportunity to interact with their lectures. Many things related to the lecture process were asked by students related to the lecture learning process on the WhatsApp social media platform.

Third, the cognitive presence element provided benefits in answering questions posed by their friends. They argued that the WhatsApp social media platform also gave them the facility to make questions for their friends. On other occasions, it provided a room for students to practice answering questions posed by their friends.

Teaching presence element

Based on the data obtained on the WhatsApp group platform, teaching presence element in the implementation of CoI appeared in lecture activities. Lecturers used WhatsApp group platform to teach material and used social media WhatsApp to share learning materials. The lecturers provided explanations related to lecture material. There were many features provided by the WhatsApp platform to facilitate lecturers in teaching material. There were several audio notes files made by the lecturer to explain the learning material. Through the audio notes, the lecturer gave a brief explanation regarding the learning material in the meeting. From these audio notes, students accessed information related to the lecture material they learned at the meeting.

There were several lecture activities where lecturers provided PDF files for students to read. The files facilitated lecturers to teach the material presented at the meeting. The PDF file can be accessed by students and they can read it for the purposes of studying the material at the meeting. Almost every meeting, lecturers used the PDF file sharing feature to provide learning materials to students.

Social presence element

The data related to student activities for social presence were obtained from the results of interactions between students on the WhatsApp platform. Based on the findings of this study, it can be seen how the element of social presence appears in the implementation of CoI. In this study,

students demonstrated their ability to interact in the learning process. There were some contents on the WhatsApp platform that showed social presence activities in the implementation of CoI. Students made interactions on these platforms, they asked and answered questions related to the materials as seen in Figure 3.
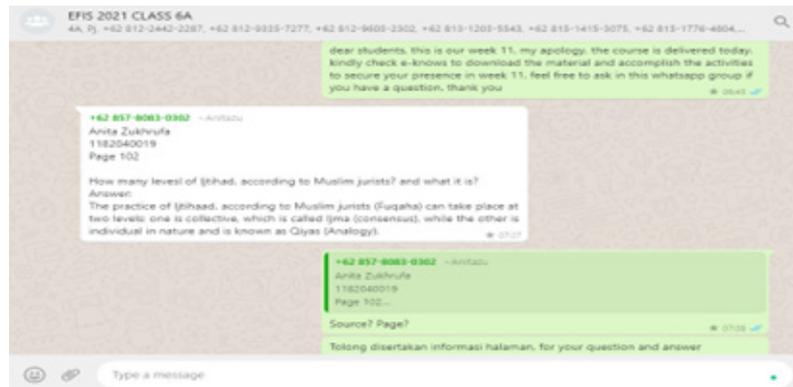

Figure 3. Component of Social Presence in CoI implementation

Cognitive presence element

Based on the data found in this study, students demonstrated their ability to make questions for others and also respond to questions from others. Students showed the ability to understand the learning material at a particular meeting. To show that students understand the lecture material, they responded to questions from the other students. Figure 4 shows cognitive presence element in the implementation of CoI.
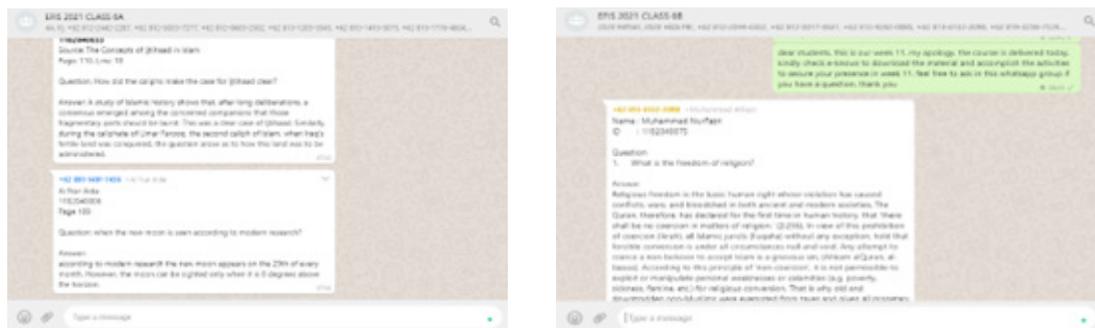

Figure 4. Cognitive Presence Component in CoI Implementation

Figure 4 shows students asked questions related to "how did the caliphs respond to the aspect of ijtihad?". The students provided answers related to these questions. It showed that the students understood the materials, especially in reading comprehension activities. In addition, Figure 4 showed that students understood the lecture material in reading activities for Islamic texts.

There are five findings described in this section, i.e., how to implement CoI in lectures, student opinions, teaching presence element, social presence element, and cognitive presence element. This research was a continuation of previous research related to the implementation of MALL in learning in the English Education study program.

There are several social media applications that can facilitate learning. Social media facilitates collaboration. In the 21st century, one of the skills needed is the ability to collaborate (Afrianto,

2018). Social media applications, such as Instagram and WhatsApp, can be designed to support the process of learning English (Yudhiantara & Nuryantini, 2019a). Instagram can be directed to improve students' ability to collaborate to learn English (Yudhiantara & Nuryantini, 2019b). Education in the 21st century needs to equip students with the ability to learn using online technology and also hone students' collaboration skills. One of the efforts to fulfill this need is to implement CoI. To achieve an optimal teaching and learning process, CoI framework has three elements, i.e., teaching presence, cognitive presence, and social presence (Garrison et al., 1999). CoI as a framework in learning has become a discourse in the realm of research. For more than two decades, CoI has become a magnet for educators in the world of education to try and improve students' learning abilities.

CoI improves collaboration skills and creates a positive learning environment. This study shows how asynchronous online discussion helps CoI elements interact to achieve successful learning (Galikyan & Admiraal, 2019). Another study showed that CoI in the context of blended learning at a faculty in Canada found that CoI had an effect on the learning process. Their opinions on the implementation of CoI were also presented (Wicks et al., 2015). CoI is implemented for doctoral students which combines research and online courses. This study shows how the CoI elements interact to achieve the program's goal of completing a doctorate optimally (Kumar & Ritzhaupt, 2014). Other research shows that CoI as part of a learning management system that helps other components. CoI is designed to help the learning process run effectively (Rubin et al., 2013). Research on the ability of CoI and its effect on learning outcomes has been carried out. The results of the study show that CoI has an influence on learning outcomes (Laforune, 2019; Shea & Bidjerano, 2012). Other research on CoI and its relationship with teacher professionalism has been carried out. Teachers' professional abilities, collaboration and teaching changes among teachers in order to improve their professionalism increased after COI was implemented (Butler & Schnellert, 2012).

There has been a study on the relationship and interaction between the CoI elements (Yu et al., 2011). Similarly, other studies have proposed an additional element in addition to the three main elements in the CoI framework. CoI investigations in three elements with proposals for student roles get priority. The terminology learning presence is offered regarding self-efficacy for online self-learner regulation (Shea & Bidjerano, 2010). Research on the development of CoI and its methodology has also been carried out. A review of the development of CoI and its research methodology is presented in a meta-analysis article (Garrison et al., 2010).

To achieve an optimal teaching and learning process, the CoI concept has three elements, (Garrison et al., 2010). Teachers need to pay attention to the needs of their students. Specifically, they must develop curricula, facilitate student learning activities, and present learning materials through direct teaching methods that students need. In an optimal learning environment, students are given the opportunity to collaborate and reflect on their learning process.

The second element is cognitive presence. Students are expected to have the ability to construct and ascertain meaning through reflection and discourse that is preserved within the CoI framework (Garrison et al., 2010). Operationally, CoI framework for cognitive presence requires students to have the ability to define problems, seek information to answer problems, understand the core of the problem by synthesizing existing information to answer problems and then offer solutions (Garrison et al., 2010; Shea et al., 2012).

The last element is social presence. Students are in a position to get help to build a learning community by minimizing feelings of isolation during online learning. Elements of a good social presence will produce a feeling of security for students to express their ideas and collaborate with colleagues.

CoI framework provides direction for learner behavior and the learning process that allows for the construction of knowledge. These three elements help the learning process to reach a successful level (Garrison et al., 2010). In simple terms, CoI framework tries to help students and teachers to construct knowledge in an online collaborative environment. Knowledge building is obtained from the participation of all students and the role of instruction from the teacher to orchestrate the process. This illustrates how teaching presence and social presence emerge in CoI. Teaching presence implies teaching skills such as organizing, designing, facilitating learning, and providing teaching (Garrison et al., 2010). CoI requires the articulation of specific behaviors related to teaching and learning to achieve productive CoI (Shea et al., 2012). Social presence reflects online discourse that promotes positive feelings, interaction and attachment or cohesion (Garrison et al., 1999) and also supports a collaborative and collegial environment. Regarding interactions in the cognitive presence component, CoI reflects a pragmatic view of learning. Overall, CoI framework articulates a building of knowledge that has characteristics as epistemic engagement where the teaching presence component acts as a long-distance teaching function and the social presence component provides assistance for productive participation.

CONCLUSION
This study investigates the implementation of CoI in learning process activities, student opinions regarding implementation, aspects of teaching presence, social presence, and cognitive presence. Based on the research results presented in the previous section, there are several conclusions that can be drawn in this study.

CoI can be implemented in lectures and learning activities in the English Education Study Program. There are several lecture meetings designed to achieve CoI elements, i.e., teaching presence, social presence, and cognitive presence. Students' opinions regarding the implementation of CoI showed that they got a lot of benefits from implementing CoI in their lecture process activities. These benefits were related to several elements in CoI. The teaching presence element appeared in lectures. Lecturers provided material, explained, and designed several activities and exercises for students. This shows that the features and facilities available on the WhatsApp group platform were used to achieve the teaching presence element. The social presence element appeared in the implementation of CoI. Students used WhatsApp group platform to interact with other students. Cognitive presence element appeared in the implementation of CoI in lecture activities. Lecturers gave assignments to students. With the features provided by the WhatsApp group, students demonstrated their ability to create questions and answers the questions. They also made questions for other friends and provided answers to the questions.

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