# A Case Study of Online Teaching in a Higher Vocational College in China during Covid-19

Kai Wang

*Abstract*—This paper is based on a researcher's exploration into a teachers' implementation of teaching students English writing online in a higher vocational college in China during Covid-19, which aims to find the role of teacher to facilitate the efficient online teaching. It adopts a qualitative research design with the samples including one teacher, 34 students and a sample class. The research instrumentals include the researcher's online classroom observation in the sample class and the semi-structured interview of the teacher and all the students after the sample class. All the data are collected for content analysis and triangulation. A theoretical framework of Community of Inquiry (CoI) is applied in the content analysis of the data within the context. A conclusion is drawn by the result and discussion that a leader and helper role of teacher who provides scaffolding in class and consultation after class with the modern educational ideal and information technology helps to promote the effective online teaching.

*Index Terms*—Community of Inquiry (CoI), information technology, online teaching, role of teacher

## I. INTRODUCTION

Covid-19 pandemic has lasted for 3 years throughout the world, which changes many aspects of people's life, and the education field is no exception. Under the city lockdown regulation which has been enforced after the most severe outbreak during Covid-19 in Shanghai, China since March in 2022, all the schools including higher vocational colleges shift from the traditional classroom teaching in school to the online teaching mode to implement routine teaching activities of a semester and how to conduct the daily routine online teaching effectively becomes a problem for all the teachers and the schools in the education circle. The research site in this case study, Higher Vocational College S, is one of them, and the pseudonym is used in consideration of privacy.

In large-sized classrooms in higher vocational colleges in China, it is commonplace to see English as Foreign Language (EFL) teachers first introduce the knowledge of the language and then ask students to do exercises by themselves. In this traditional way of teaching, most of the time spent in class is occupied by the explanation of the knowledge on the teacher's side, which conflicts with the educational ideal of student-centeredness advocated in the national college English curriculum. It pays little attention to the learning process of the students and the development of their language skills. After class, there is also a lack of communication between the teacher and the students. During Covid-19, the online teaching mode makes the situation more difficult. Therefore, this research explores in to a teacher's successful

Kai Wang is with Sultan Idris Education University, Malaysia.
E-mail: wangkai@ncedus.cn

implementation of teaching sophomore students of Higher Vocational College S English writing online in the mid-term, with the research purpose of expecting to find the correlation between the role of the teacher and the effective online teaching. It also aims to sort out an online teaching pattern and some pedagogical implications for the teacher which may apply to more contexts. The significance of the study is expecting to enlighten the higher vocational colleges and higher vocational college teachers in China with the effectiveness of using CoI framework to facilitate the online teaching and learning environment and improve the performance of teaching and learning in the specific context of EFL teaching and learning classes.

The research questions in the specific context of this research include:
1) What is the role of teacher in the effective online teaching?
2) What can the teacher do to facilitate the effective online teaching?

The theoretical framework of Community of Inquiry (CoI) is applied to this research, which functions to support the online teaching and learning environment. The CoI framework is one of the most widely used frameworks in online teaching and learning [1]. It is a collaborative-constructivist process model that describes the essential elements of a successful online higher education learning experience backed by Dewey's educational ideal and social constructivism [2]. These basic elements are created by Garrison, Anderson, and Archer, which include social presence, teaching presence and cognitive presence (Fig. 1) [3].
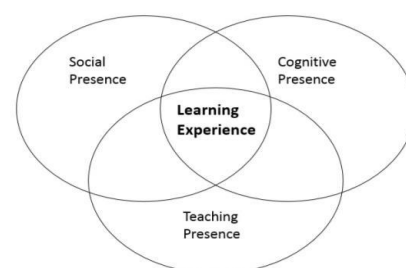


Fig. 1. Framework of Community of Inquiry (CoI).

To be more specific, social presence is defined as the ability of learners to feel affectively connected with peers and perceived their full personality through computer-mediated communication while cognitive presence refers to the extent to which learners can construct knowledge through discourse and reflection [4]. Teaching presence is defined as "the design, facilitation, and direction of cognitive and social processes" [5]. The CoI framework combining the three presences is served as the guideline for researchers to use

content analysis of online courses [6] as well as for instructors to make educational decisions [7].

Castellanos-Reyes [8] reviews the 20 years of the development of the CoI framework through literature. During the first decade from 2000 to 2009, the CoI framework is established with numerous researches focusing on the exploration of the three presences as the core unit, their relationship and interdependence. In the second decade from 2010 to 2019, the researchers change their focus to the CoI instrument the online learners use as they develop a 34-item instrument, which is claimed to be *"a valid, reliable, and efficient measure of the dimensions"* of the CoI framework [9]. Now and in the future, the focus is moving towards the design of successful online learning environment and educational experience within the CoI framework and researches are encouraged to be conducted with disciplinary differences. An exploration into the design of successful online learning environment and educational experience in the higher vocational college context in China still remains a vacuum.

## II. METHODOLOGY

This research utilizes a qualitative case study approach. The researcher explores into a case study of a teacher's implementation of teaching English writing online to sophomore students of a higher vocational college during the city lockdown days in Covid-19 based on a sample class.

Case studies have long been associated with interpretive qualitative research in applied linguistics, and have been proved productive and influential. [10] According to Duff, what forms the context in case study is a perspective of observable phenomenon. It "recognizes that each human case is complex, operating within a constellation of linguistic, sociolinguistic, sociological, and other systems, and the whole may be greater than, or different from the sum of its part", and it can "examine language learning and use both macroscopically and microscopically." In this study, the phenomenon of the language teaching and learning is observed through the sample class, and the views and feelings of the participants are explored in semi-structured interview in general and in details.

### A. Sample

The samples include 34 Chinese sophomore students of a class in the major of applied English, a Chinese English subject teacher in Higher Vocational College S and a sample lesson given by the sample teacher to the sample students.

All the students are about 20 years old who undergo 9-year-compulosry education and then three years higher school or middle vocational school education before they go to higher vocational college, throughout which all of them have learned English as a foreign language in English subject classes. They are learning English writing as a compulsory course in college in this semester from March to June in 2022. The pseudonym Student 1, Student 2, Student 3…are used randomly in this sample lesson for privacy. The teacher has several years teaching experience in the field of teaching English as a foreign language, including former successful online teaching experience. He has a master degree in English major and has received teacher's training organized by the municipal education committee in modern educational ideal and information technology. The pseudonym Teacher Z is used for him in terms of privacy. Teacher Z gives these students a writing class of 80 minutes online once a week throughout the whole semester from March to June. The sample lesson observed by the researcher of this study is conducted by the Teacher Z in the middle of the semester and it is chosen randomly from all the lessons he gives to the students of the sample class in the major of applied English in Higher Vocational College S. The sample lesson is implemented by Teacher Z with the online tool of Tencent Meeting, and the researcher also uses Tencent Meeting to observe the sample lesson at the same time. The lesson plan of the sample lesson which introduces the teaching activities is included in Appendix A.

### B. Instrumental

The research uses the instrumental of the researcher's online classroom observation of a sample lesson given by Teacher Z in the mid-term and a semi-structured interview of both the teacher and the student participants after the sample lesson for their experiences and feelings in the past half of the semester.

It is stated by Duff [11] that observation in classroom can help researcher understand the contexts in which language is used and it is always connected with the theoretical framework. What's more, Richards points out that observation is not only related with the mechanical process and recording observable behaviors [12]. The researcher observes the sample class online with the software of Tencent Meeting which Teacher Z uses to conduct the daily teaching. Tencent Meeting can also record the online class for replay if needed. The researcher's observation of the sample lesson lasts for 80 minutes, as long as the duration of the whole lesson. During the observation the researcher takes the field notes and completes the observation sheet after the observation. The examples in the observation are shown in Table I in the section of result and discussion.

TABLE I: SOME EXAMPLES IN THE OBSERVATION SHEET

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|---|
| Pre-task1: Student1: Tokyo. Teacher: Please describe your experience and feeling. For example, I went to Tokyo three years ago. It was a shopping paradise for me and I bought the electronic goods I wanted. I felt happy. Student 1: I went to Tokyo. I played there. I felt happy. Student 2: I go to Paris when I am a primary school student. I think the country beautiful. I take photos. Teacher: I went to Paris when I was a primary school student. The city was so beautiful that I took many photos. Please repeat. Student 2: I went to Paris when I was a primary school student. Teacher: The city was so beautiful that I took many photos. Student 2: The city was so beautiful that I took many photos. |
| Pre-task2: Student 3: I want to go to London for study. Teacher: tell us why. For example, I want to go to London for study because my dreaming school is there. Student 3: I want to go to London for study because of the film "Harry Potter". |
| While-task1: Student 3: I want to go to Newyork for study because my mother wants me to do so. Teacher: The topic sentence is too narrow to develop the supporting sentences. Please change it and tell me. Student 4: They are many advantages of going abroad for study. Teacher: There are many advantages of going abroad for study. |
| While-task2: Student 5: There is a grammar mistake in the first sentence of Student 6's work. Teacher: Can you correct it? What's the problem in the second sentence? Is this sentence relevant to the topic? What's the problem of the fourth sentence? Is the verb form in the past tense correct? |
| While-task3: Teacher: You don't write any conclusion sentence. Student 7: I don't know what to write. Teacher: You can conclude all the supporting sentences or repeat the topic sentence in another way. |

For example, because of these advantages, I really want to aboard for study.

While-task4: Teacher: You don't have any cohesion devices in your paragraph. Student 8:… Teacher: For example, you can use these words to connect your supporting sentences, such as "the first reason is…, second, last but not the least…" You can also use "In conclusion" at the beginning of your conclusion sentence.

It is concluded by Datko that semi-structured interview is applicable in qualitative language pedagogical research where the researcher has more control of the content and the informants are not restricted by response. It can be used to obtain subjective, first-hand information about the research problem for a specific topic [13]. Both the teacher and student participants are asked to participate in the semi-structured interview right after the implementation of the sample lesson. The semi-structured interview of Teacher Z is based on the following two questions: What educational ideal do you embrace and what information technology do you use to ensure successful online teaching? What experience do you have in teaching the 34 students English writing online this semester and what is your feeling? The semi-structured interview of the students is based on the following question: What experience do you have in online English writing learning with Teacher Z this semester and what is your feeling? The participants can also include whatever they want to express except these basic questions raised by the researcher. The semi-structured interview is conducted in the form of online open-ended question. The participants are asked to answer the open-ended questions on Chaoxing Learning Platform adopted by the school without time control, which allow them time to think about the questions and write down the answers, and it is also convenient to collect all the data on Chaoxing Learning Platform. After all the participants finish the open-ended questions on Chaoxing Learning Platform in a week, the researcher collects the data generated.

### C. *Procedure*

The sample lesson is implemented in the mid-term of the semester, in May, 2022, when the participating teacher has given the lessons to the participating students online for half a semester. The researcher asks teacher Z of the lesson plan for the sample lesson before class, and then observes the sample lesson online in Tencent Meeting meanwhile takes the field notes for data collection. After class, the researcher completes the observation sheet with the field notes. Both the teacher and student participants are asked by the researcher to participate in the semi-structured interview after the sample lesson by answering the open-ended questions on Chaoxing Learning Platform. Then the researcher collects all these data on Chaoxing Learning Platform with the permission of both the teacher and student participants. The document of the sample class lesson plan, the online classroom observation sheet and the outcome of the semi-structured interview are all collected for content analysis, and finally they are also given back to the teacher and student participants to view for triangulation.

## III. RESULT AND DISCUSSION

The researcher completes an online classroom observation sheet by focusing on the problems happening in the learning process of the students and how the teacher responds to them. At the pre-task stage, after the teacher divides the students into groups, all the students can quickly form a discussion on Wechat because they have been classmates for more than one and a half year. All of them are included in the class group on Wechat and they add each other in the friend list of Wechat. For the good examples without problem, the teacher uses the function of sharing the screen in Tencent Meeting and asks the students to read them for praise. The lesson plan is shown in Appendix A. Below are some typical examples in the researcher's online classroom observation sheet:

In the semi-structured interview of Teacher Z, he says he is trying all kinds of efficient teaching approaches and methods to facilitate the online teaching, such as task-based teaching approach and project-based teaching approach. He adopts the educational ideal of student-centered and teacher-guiding in these approaches by designing the online course and all the lesson plans before class. He is strict with the implementation of the course based on the lesson plans as well as he is willing to address all the problems in the learning process of the students in class and reflect on the lesson plans after class. He uses modern information technology tools of Tencent Meeting, Wechat, Chaoxing Learning Platform, PPT, E-mail to conduct class and interact with the students. Whatever problems the students have after class, he is also ready to help by means of the communication tools all the time. He feels a sense of fulfillment whenever there is a problem and it is solved by him. He also feels it a responsibility and duty of a teacher to guide the student in learning

In the semi-structured interview of the students, most of the students express their satisfied feelings of the timely feedback of the teacher whenever they have questions to ask in Tencent Meeting, Wechat and E-mail. After they submit the assignment required by the teacher, they can also receive the comment and correction by the teacher in time, and the score of the assignment is counted into the final score of the course. Some students mention that when a project is complicated, it is good to have group members to do it together and submit the project as a group work. Some students say they feel more engaged and focused with the tasks and PPT in class compared with just listening to a teacher giving a talk or reading the textbook.

All the results of this case study are in alignment with the three presences in the CoI framework for the online teaching and learning environment shown in Fig. 1.

### A. *Discussion about the First Research Question: What is the Role of Teacher in the Effective Online Teaching?*

#### 1) *Role of leader*

The teacher is in the position of a leader throughout the online course in this study. As a leader, he designs the course and the lesson plan for each class to lead the student to learn for a whole semester, in which his educational ideal is embedded to influence the students. It is said that in the course design which supports the social presence, students can incorporate feelings and experiences into their learning experience [14], and this is observed in the tasks of the sample class. As a leader, the teacher turns the whole class offline into a learning community online by organizing all the teaching activities and all the students with the online tools

of the modern information technology. The teaching presence of the teacher online as the facilitation and direction of the cognitive and social processes of the students both in class and after class supports the effective online teaching and learning environment.

*2) Role of helper*

The teacher has an educational ideal of a responsible helper which is both implanted in his mind and felt by his students. The role of a helper prepares the teacher for all kinds of problems the students encounter in the online learning. As a helper, the teacher creates more teaching presence in different teaching experiences of helping the students with their learning problems both in class and after class, which in turn has a positive impact on the social presence and cognitive presence of the students in their online learning. Richardson and Swan [15] find in their study that social presence positively affects student and instructor course satisfaction. During their study, it is found that students who perceive high social presence learn more than those who perceive low social presence. It is also said that improving cognitive presence in online courses can be done by focusing on triggering event, exploration, integration, and resolution [16]. Some of these instructional activities are observed in the sample class in which the teacher utilizes a task-based teaching approach to help the students in their learning experience and to promote the effective online teaching.

*B. Discussion about the Second Research Question: What Can the Teacher Do to Facilitate the Effective Online Teaching?*

*1) Scaffolding in class*

Scaffolding is a kind of instructional support and it enables students to complete a task they would be unable to do so without assistance [17]. In the sample class observed, the teacher is always providing scaffolding for the students to complete all the tasks, which meets the requirement of a teacher as a facilitator in teaching presence. The scaffolding strategies the teacher uses include forming group discussion to prepare the individual student for the question to answer later, giving encouraging and helping information when the student doesn't know what to say, providing the students with sentence structure to form a complete sentence, and asking questions to help students to identify the mistakes and problems. It is argued that adaptive scaffolding is better than fixed scaffolding [18]. When different students have different problems in the tasks, the teacher should be adaptive to provide different kinds of scaffolding. Scaffolding is so important that it not only ensures the implementation of the teaching process on the teacher's side but also facilitates the learning process on the student's side. In the online context, more communication with scaffolding is much better than the monologue of a teacher.

*2) Consultation after class*

The result of the semi-structured interview shows that the teacher is willing to provide consultation for the students with different kinds of online communication tools all the time after class, which can be seen a form of teaching presence. When a class is formed as an online learning community, the consultation provided by the teacher plays a critical role in it. The teaching presence of the teacher in online consultation can improve the cognitive presence and social presence of the students in their online learning, thus promotes a more effective online teaching and learning environment. It is also a requirement of the teacher to be able to use the modern information technology to support the online consultation.

## V. CONCLUSION

The research is a case study of the exploration in to a Chinese higher vocational college teacher's implementation of teaching English writing online in the city lockdown days in Shanghai, China under Covid-19. It is the role of the teacher as leader and helper who provides scaffolding in class and consultation after class that ensures and promotes the effective online teaching. The role of the teacher exhibited in the facilitation of teaching presence, social presence and cognitive presence is shown in Fig. 2.
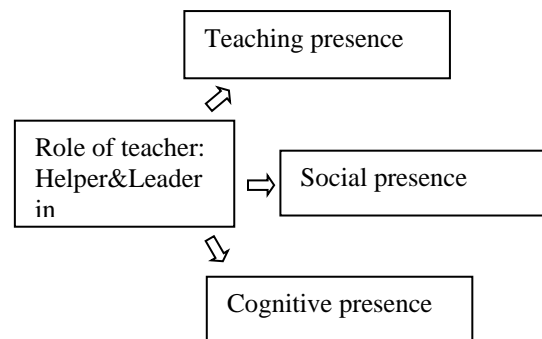


Fig. 2. Role of teacher in the facilitation of the three presences in the framework of CoI for effective online teaching,

Due to the limitation of the number of the samples, the specific context of the implementation of the online teaching in this research and the personal interpretation of the researcher, there remains a greater space for more to be discussed. Besides, the case study of online teaching under Covid-19 can be extended to more courses taught where participants with different social and cultural background are involved and more pedagogical implications are elicited.

## APPENDIX

TABLE A: LESSON PLAN OF THE SAMPLE LESSON GIVEN BY TEACHER Z

| Write a paragraph to the topic of going aboard for study |
| --- |
| Teaching aim: To enable the students to write a paragraph to the topic of going aboard with the unity, logic and coherence. Teaching approach: Task-based teaching approach. |
| Teaching procedure: Pre-task: 1. Brain-storming(10 minutes): The teacher divides the students into a group of 3-4 and ask them to discuss the following two questions in Wechat: Have you been travelled to a foreign city? If so, please describe about your experience and feeling. If you have a chance to go aboard for study, which city will you choose, and why? Then the teacher asks different students to answer the questions in Tencent Meeting. 2. Sentence development (10minutes): The teacher asks students to write down their answers to the second question in a complex sentence in Tencent Meeting, and then the teacher examines the vocabulary and grammar of the sentence with the class. While-task(60 minutes): |

1. The teacher asks the students to write down a topic sentence to the topic of going aboard on Chaoxing Learning Platform and then discusses these topic sentences with the students.
2. The teacher asks the students to write down at least five supporting sentences on Chaoxing Learning Platform and then ask each student to choose one classmate's work to comment and edit on the platform.
3. The teacher asks the students to write down a conclusion sentence and then ask different students to examine the topic sentence.
4. The teacher asks the students to put the topic sentence, supporting sentences and the conclusion sentence into one paragraph and use cohesion devices to make the paragraph with the unity, logic and coherence.

Post-task:
1. The teacher asks the students to do an oral presentation according to the paragraph they have written and make a short video with computer or mobile phone, and then to E-mail the video together with the paragraph to the teacher.

## CONFLICT OF INTEREST

The author declares no conflict of interest.

## REFERENCES

[1] S. Jan, P. Vlachopoulos, and M. Parsell, "Social network analysis and online learning in communities in higher education: A systematic literature review," *Online Learning,* vol. 23, no. 1, pp. 249–265, 2019.

[2] D. R. Garrison, *E-learning in the 21st Century: A Community of Inquiry Framework for Research and Practice*, 3rd ed. New York: Routledge, 2017.

[3] D. R. Garrison, T. Anderson, and W. Archer, "Critical thinking, cognitive presence, and computer conferencing in distance education," *American Journal of Distance Education*, vol. 15, no. 1, pp. 7–23, 2001.

[4] K. Swan and P. Ice, "The community of inquiry framework ten years later: Introduction to the special issue [special section]," *Internet and Higher Education*, vol. 13, no. 1–2, pp. 1–4, 2010.

[5] T. Anderson, L. Rourke, D. R. Garrison, and W. Archer, "Assessing teaching presence in a computer conferencing context," *Journal of Asynchronous Learning Networks*, vol. 5, no. 2, pp. 1–17, 2001.

[6] R. Tirado-Morueta, P. Maraver-López, Á. Hernando-Gómez, and V. W. Harris, "Exploring social and cognitive presences in communities of inquiry to perform higher cognitive tasks," *Internet and Higher Education*, vol. 31, pp. 122–131, 2016.

[7] J. M. Zydney, A. Denoyelles, and K.-Ju Seo, "Creating a community of inquiry in online environments: An exploratory study on the effect of a protocol on interactions within asynchronous discussions," *Computers and Education*, vol. 58, no. 1, pp. 77–87, 2012.

[8] D. Castellanos-Reyes, "20 years of the community of inquiry framework," *TechTrends,* vol. 64, no. 4, pp. 557–560, 2020.

[9] J. B. Arbaugh, M. Cleveland-Innes, S. R. Diaz, D. R. Garrison, P. Ice, J. C. Richardson, and K. P. Swan, "Developing a community of inquiry instrument: Testing a measure of the community of inquiry framework using a multi-institutional sample," *Internet and Higher Education,* vol. 11, no. 3–4, pp. 133–136, 2008.

[10] P. Duff, *Case Study Research in Applied Linguistics*, Beijing: Foreign Language Teaching and Research Press, 2011, p. 35.

[11] P. Duff, *Case Study Research in Applied Linguistics*, Beijing: Foreign Language Teaching and Research Press, 2011, pp. 128–129.

[12] K. Richards, *Qualitative Inquiry in TESOL*, New York: Palgrave Macmillan, 2003.

[13] J. Datko, "Semi-structured interview in language pedagogy research," *Journal of Language and Cultural Education*, vol. 3, no. 2, p. 153, 2015.

[14] J. C. Richardson, Y. Maeda, J. Lv, and S. Caskurlu, "Social presence in relation to students' satisfaction and learning in the online environment: A meta-analysis," *Computers in Human Behavior,* vol. 71, pp. 402–417, 2017.

[15] J. C. Richardson and K. Swan, "Examining social presence in online courses in relation to students' perceived learning and satisfaction," *Journal of Asynchronous Learning Networks*, vol. 7, no. 1, pp. 68−88, 2003.

[16] D. R. Garrison, T. Anderson, and W. Archer, "Critical inquiry in a text-based environment: Computer conferencing in higher education," *The Internet and Higher Education*, vol. 2, no. 2–3, pp. 87–105, 2000.

[17] L. A. Schindler and G. J. Burkholder, "Instructional design and facilitation approaches that promote critical thinking in asynchronous online discussions: A review of the literature," *Higher Learning Research Communications*, vol. 4, no. 4, pp. 11–29, 2014.

[18] X. Feng, "Scaffolding facilitates inter-school collaborative learning: A case study in China," *Journal of Educational Technology Development and Exchange*, vol. 5, no.1, pp. 45–62, 2012.