Online Collaborative Learning Communities (OCLCs):

Pathways to Promote Teachers' Professional Development in Transformative Educational System

Bhornsawan Inpin*
English Department, School of Liberal Arts
Mae Fah Luang University
Chiang Rai, Thailand
*bhornsawan@mfu.ac.th

Abstract—**With the dramatic and utmost advancement in a new paradigm shift of education, there is inevitably noticed that instructional designers (IDs) prioritize their professional development to help students gain their academic achievement and pursue their professional goals. Apart from that, technology, especially online learning, appears to play an important role to facilitate learning and becomes one of the popular ways to deliver instruction at any level of education with the flexibility to access anytime anywhere. With this ultimate goal, it is to bring IDs learning together rather than isolating them. This makes online collaborative learning (OCL) begin. The purposes of this study were to enrich OCLCs for promoting teachers' professional development in a transformative educational system and explore attitudes towards the use of OCLCs to promote teachers' professional development. The instruments used for this study were observation with a role of a participant observer and focus group interviews. The results of this study found that OCLCs can help enriching IDs to pursue their professional development based on three key constructs: interactivity, social context, and technologies proposed by Tu and Corry. For interactivity, IDs were found enthusiastic to express their opinions with their peers. They shared their knowledge, narrated their own experiences, and inspired each other. Next was social context. IDs learned how to manage their group. They selected one representative to act as a leader to manage the group and played respect to each other. Apart from that, they shared similar goals, interests, and experiences with others. Last but not least, technologies, they were comfortable to employ technologies to deliver knowledge, interests, and experiences for stimulating their knowledge development.**

Keywords—*online collaborative learning communities, teachers' professional development, transformative educational system*

I. INTRODUCTION

With the world, which is changing rapidly, education at all levels plays the most significant factor towards people in all genders and ages. That is because education is like an activity which can help people pursue their happiness and prosperity both in their individual life and society. This is also noticed that the aim of education is to sustain individual and societal improvement [1]. This rapid change is not only transforming the ways people think, live, learn, and interact, but also affecting all spheres of national development and higher education learning [2]. Not only that, Hyland studied the stages of social development and then proposed three stages of social development which are traditional, contemporary, and emergent [3]. It was found that collaboration is included in the emergent stage of social development. This makes transformative educational system focusing on collaborative learners.

Additionally, Thailand is challenged to move to Thailand 4.0 era which education is not an education. Puncreobutr [4] revealed that learning management is a new learning system, allowing the learner to grow with knowledge and skills for the whole life, not just to know how to read and write. Furthermore, Baxter [5] supported that the key to Thailand 4.0's success lies in improving human resources by drastically reforming and improving the education system while ask creating new, dynamic education system designed to produce specific workers for specific roles; encouraging creativity, innovation, critical thinking, entrepreneurship, sustainability and inclusiveness; ramping up digitalization and automation; and putting into place the necessary infrastructure demanded by these advancements. Consequently, education in Thailand 4.0 is more than preparing or providing knowledge for people. It is to prepare people for the requirements of citizens in the 21st century [6].

This makes not only educators, researchers, teachers, but also IDs are attempted to find out ways to gain their academic achievement and pursue their professional goals. With the responses of Thailand 4.0 and 21st century learning, together with stages of social development and types of educational system, IDs as the key of education practice require

transformation in all aspects, like characteristics, mind-set, and skills.

In order to facilitate the teachers and IDs in the 21st Century teaching and learning, technologies become creative and convenient tools to support learning. This is because technologies have great potential to enhance education if appropriately applied [7].

With this in mind, this study which is emphasized on professional development can provide a platform for IDs to promote their professional development. It is expected to keep IDs updating on new investigation on learning design, teaching and learning methods, tools and resources, and institutional dimensions to continue their professional development. And it is to expect that the professional development is continuous, collaborative, interactive, and practical. By conducting training for teachers, it will ensure the quality of IDs that can attain the educational goals.

II. REVIEW LITERATURE

A. Getting to Know about Online Collaborative Learning (OCL)

Online Collaborative Learning Communities, or OCLCs, are consisted of three main concepts: collaborative learning, online learning, and community learning. For collaborative learning, it is referred to a timeless strategy that has been prevalently used in the academic setting for enhancing in the students' learning by working together [8]. It is used in the literature as a general expression for group learning [9]. Apart from that, Smith and MacGregor [10] suggested that "collaborative learning is an umbrella term for a variety of educational approaches involving joint intellectual effort by students, or students and teachers together. In most collaborative learning situations, students are working in groups of two or more, mutually searching for understanding, solutions, or meanings, or creating a product."

Regarding to online learning, Means, Bakia and Murphy [11] defined online learning as a learner's interaction with content and/or people via the Internet for the purpose of learning. The learning may be part of a formal course or program or simply something learners pursue for their own interests. It is one of the accepted teaching methods in distance learning.

What about community learning? It is referred to classes that are linked or clustered during an academic term, often around an interdisciplinary theme, and enroll a common cohort of students. A variety of approaches are used to build these learning communities, with all intended to restructure the students' time, credit, and learning experiences to build community among students, between students, and their teachers, and among faculty members and disciplines [12]. OCL is one of the accepted teaching methods in distance learning. OCL is based on traditional collaborative learning, which includes five interwoven components: 1) positive mutual dependency; 2) personal accountability; 3) promoting

interaction; 4) social skills; and 5) group process [13]. Online collaborative learning is similar to face-to-face collaborative learning, except that group members meetings take place through the Internet in a synchronous or asynchronous way [13].

B. Concepts of Online Collaborative Learning (OCL)

Regarding to Tu and Corry [14], there are three major constructs: interactivity, social context, and technologies for online collaborative learning. Interactivity concerns the concepts and designs that engage learners in active collaboration. Social contexts refer to the learner-centered learning community. The third construct details technologies that support and enhance knowledge development and knowledge management. They are explained as follows:

Interactivity includes collaborative and active learning. Collaboration does not occur unless learners are granted authority over and are actively engaged in their activities.

C. Collaboration

Collaborative learning uses small groups of learners in the instruction encouraging them to maximize their own, and each other's learning. Collaborative learning engages learners in knowledge sharing, inspiring each other, depending upon each other, and applying active social interaction in a small group. Therefore, collaborative learning depends upon the art of social interaction among learners rather than a mechanical process.

D. Active Learning

Both students and teachers are learners and share their responsibilities in an online community and should be allowed a voice in determining what learning experiences they receive.

Social context emphasizes the characteristics of the learner and the learner-centered social learning environment (learning community).

Technologies function as major tools in human learning. Electronic computing and telecommunications are converging into human communication and knowledge development technologies. Technology not only delivers content (information), but it has the capacity to stimulate opportunities for knowledge development.

E. How to Employ Online Collaborative Learning (OCL) in Communities

In order to support teachers' professional development, it is important to concentrate on key factors to develop teachers' teaching performances in terms of learning design, teaching and learning methods, tools and resources, and institutional dimensions. Regarding to the preliminary survey, it was found that the teachers face these difficulties to design their teaching; that is to say, they have limited resources to design their classroom activities, they have low self-confidence to select teaching and learning methods, tools and resources, and institutional dimensions appropriately. Moreover, they did not

have any ideas to apply technology into the classroom. Last but not least, they felt that there is no connection among teachers, communities, and resources.

With this in mind, collaborative learning is integrated into online learning. Together with, they are transferred to 'community'. This is with the reason that the sense of 'community' must be sustained when implementing online collaborative learning [14]. The conceptual framework is presented in Figure 1:
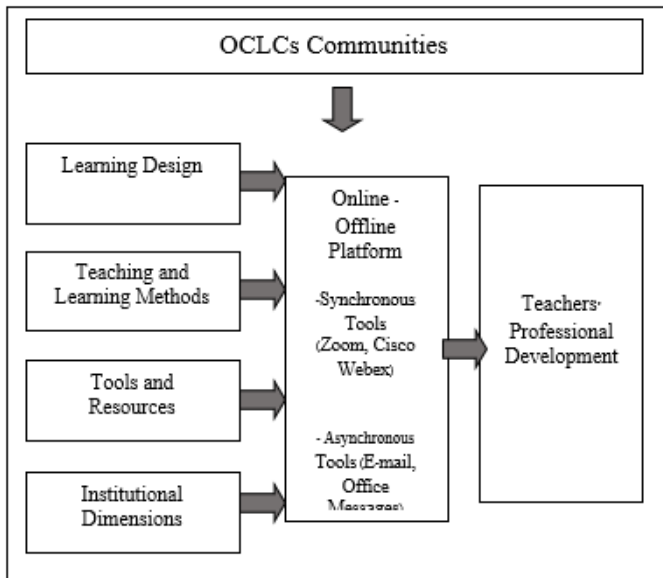

Fig. 1. Conceptual framework.

F. What OCLCs Look Like

OCLCs are referred to online platforms which employ the concept of collaborative learning, online learning, and community learning by integrating synchronous and asynchronous delivery modes. They aim to promote the teachers' professional development. They are consisted of four main areas: learning design, teaching and learning methods, tools and resources, including to institutional dimensions. They are launched in online mode using Zoom Meeting to conduct an orientation. Then, the contents are uploaded via Facebook Group every Monday. Within this, all participants can interact with each other, share their knowledge via online and offline chats during each week. Moreover, on every Saturday evening, online session by Zoom meeting is conducted in order to narrate their experiences, learn together, and share knowledge.

G. Research Objectives

There are two main purposes of the study:

- To promote teachers' professional development through OCLCs

- To explore attitudes towards the use of OCLCs to promote teachers' professional development.

H. Scope of the Study

This study is concentrated on the followings:

1) Scope of contents: The contents used in this study are based on the state and problems of EFL instruction. They are involved with learning design, teaching and learning methods, tools and resources, and institutional dimensions.

2) Scope of data resources: There are two groups of data resources: nine high school teachers who teach in Chiang Rai high schools and eighteen high school teachers who are volunteered to be trained in the professional development communities.

III. RESEARCH METHODOLOGY

This study aims to promote teachers' professional development through OCLCs and explore attitudes towards the use of OCLCs. For this section, it is devoted to the explanation of the procedures used in this study.

A. Participants

The participants of the study are referred to two groups of high school teachers in Chiang Rai. The first group is comprised of nine teachers who are positioning in high schools in Chiang Rai. They act as co-researchers throughout the research procedure and trainers in the communities. They are categorized into three main school sizes: small, medium, and large. There are also three main generations in these target high schools. Nine teachers are from the following schools: 1) Donchai Wittayakhom School, 2) Phanphittayakhom School, 3) Yanghomwittayakhom School, 4) Maiyawittayakhom, 5) Ban Saeo Wittayakhom School, 6) Wiangchai Wittayakhom School, 7) Samakkhi Witthayakhom 2 School, 8) Donsila Phagnam Witthayakhom School, 9) Boonruang Witthayakhom School. The second group is eighteen high school teachers in Chiang Rai province who are volunteered to be trained in the professional development communities.

B. Research Instruments

For this study, there are two instruments: observation and interviews.

- The observation: it is designed in order to investigate how OCLCs are promoted teachers' professional development. The researcher acts a role of a participant observer. The researcher is involved with contents' preparation, powered up participants to express their opinions and demonstrate their experiences, and advance the group.

- Focus-group interview: it is designed for eliciting the information from teachers in both groups. The interview topics are formed into questions. The areas of

questions are involved with their attitudes towards the use of OCLCs to promote teachers' professional development.

C. Research Procedures

In this research, it is divided the research procedures into four stages as presented in Figure 2:
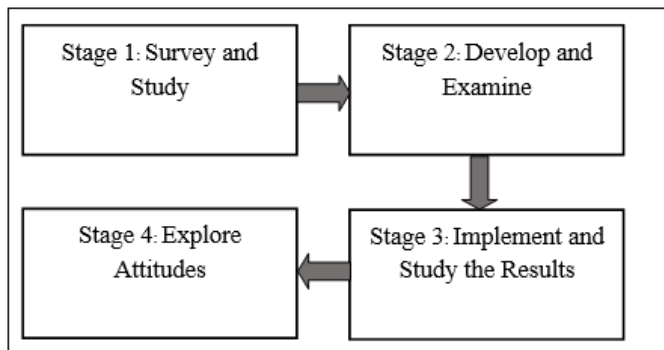
Fig. 2.   Research procedures.

1) Stage 1 (Survey and study basic information about state and problems of EFL instruction): In this stage, the researcher surveys and studies basic information about the state and problems of EFL instruction from two groups of teachers in the areas of learning design, teaching and learning methods, tools and resources, including institutional dimensions.

2) Stage 2 (Develop and examine OCLCs): The data from Stage 1 is analyzed and developed by identifying the components of OCLCs which are learning design, teaching and learning methods, tools and resources, and institutional dimensions. Then, OCLCs are examined the quality.

3) Stage 3 (Implement and study the results of OCLCs): OCLCs are implemented with two groups of teachers: those who act as co-researchers and trainers, and those who volunteer to join the communities.

4) Stage 4 (Explore the attitudes towards the use of OCLCs to promote teachers' professional development): In this stage, the researcher evaluates teachers' attitudes towards the use of OCLCs and analyze the qualitative data.

D. Data Collection

For this part, OCLCs is conducted in three months during May-July 2020. Nine teachers who act as co-researchers together with the researcher discuss and sketch the draft of contents consisting of learning design, teaching and learning methods, tools and resources, including to institutional dimensions. After that, they are validated by experts in related fields: language, curriculum and instruction, and technology in education. Then, they are all revised based on experts' suggestions and comments. After that, OCLCs are designed via Facebook Group and online tools with synchronous and asynchronous delivery modes. The contents are put in Facebook Group in offline format. Meanwhile, discussion and

demonstration will be held via Zoom Meeting as online mode. Eighteen teachers who are volunteered to be trained in the professional development communities are joined. We all participate in the communities to share knowledge, inspire each other, and demonstrate successful instruction. During the implementation, the observation is conducted in order to evaluate their performances. After the implementation is complete, focus group interview is also carried out to explore attitudes towards the use of OCLCs to promote teachers' professional development.

E. Data Analysis

1) Observation: The data obtained from the observation involving three constructs is conducted by categorizing with the similarities and differences and summarizing. They are categorized into the following dimensions: interactivity, social context, and technologies.

2) Focus group interview: The contents from the interview of teachers in two groups about the state and problems of EFL instruction are analyzed by categorizing with the similarities and differences and summarizing in order to provide basic information to design OCLCs.

F. Results and Discussion

The data from the implementation is then analyzed based on three constructs of Tu [14]: interactivity, social context, and technologies.

For interactivity, it was found that participants were found enthusiastic to express their opinions with their peers. They shared their knowledge and narrated their own experiences among group. And they interacted not only their own members but also co-participants, peers, and content.

Participant A revealed that, "It is a good channel for me to share my teaching techniques that I use in the classroom and get successful to others and they exchange their ideas about these techniques. This makes me have more self-confidence to continue using them."

Moreover, Participant 5 mentioned that, "in a multifaceted society, the trend of teaching and learning grows fast. This makes me out of date. When I join this community, it helps me a lot to know more new things. When I wonder about teaching methods or the new policy, I gain more knowledge from these communities. Moreover, my friends here can help me clarify them. I felt comfortable to share my opinions with others."

For social context, it was found that participants learned how to manage their own group. They selected one representative to act as a leader to manage the group. It enhances their self-directed learning (self-management, self-monitoring, and self-assessment).

Participant 7 supported that, "I am the leader of the group, but my role is not as a commander. I just manage the group and help facilitating all members if they face some

problems. They act as active members to help managing our group."

And Participant 12 said that, "During the time of the implementation, I always evaluate myself and am brave to accept my mistakes. And I think it is a good time to improve myself and it will continue."

For technologies, the participants had capacity selecting various technological tools (synchronous and asynchronous tools).

Participant 15 claimed that, "This activity guides me how to use technology to support my teaching. Even I am a novice to apply technology in my life and my teaching, I enjoy using it."

Participant 20 supported that, "It is quite amazing to gain more knowledge from technology. I love when we have online discussion via Zoom Meeting. I assure that technology can expand my knowledge and it make my life easier."

IV. CONCLUSION

OCLCs can promote teachers' professional development and they have positive attitudes towards the use of OCLCs to promote teachers' professional development. This is with the reason that OCLCs represent platforms of sharing knowledge, learning new things, and narrating experiences among group. In addition, OCLCs support social context. That is to say, group members learn to respect to each other and trust the leader who manages the group. Last of all, technology becomes an effective tool to support learning and dynamic interaction. This is supported by Tu and Corry [14] that technology, such as e-mail, threaded discussion board, listserv, and real-time discussion, are powerful tools for human communication and to bring people together.

Redmond and Lock [15] recommended that with OCLCs, teachers can create global classroom learning experiences where learners work as virtual team members, have access to an array of expertise and co-create knowledge with others for whom they may never meet in person but only online.

Furthermore, based on Palloff and Pratt [16], the recent studies of the online environment have noted that involvement or "social presence," better known as a feeling of community and connection among learners, has contributed positively to learning outcomes and learner satisfaction with online courses.

V. CONTRIBUTION OF THE STUDY

The result of this study will lead to a better understanding of promoting the teachers' professional development. They gain more knowledge related to learning design, teaching and learning methods, tools and resources, and institutional

dimensions. Not only to gain more knowledge but also, they apply various techniques in their classroom. It is also integrated digital technologies in teaching and learning both inside and outside the classroom. In addition, they will be definitely employed the instructional model to their classroom. Apart from that, it will be as a guideline for high school teachers to apply creative ways to design their teaching and learning in order to respond to the new paradigm shift of English language teaching and learning. It is also adding value to the traditional face-to-face teaching method. And it will be useful not only for teachers who join the study but also high school volunteers to enrich the present educational system. It is also support high school teachers to collaborate to each other to generate ideas and coach to others to be professional.

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