THE EFFECTS OF ONLINE DISCUSSION FORUMS ON READING COMPREHENSION SKILLS OF THE THAI EFL UNIVERSITY LEARNERS

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ABSTRACT

With the challenges of digital transformation and communication in the digital age, English reading skill has become more crucial for English language learners not only in order to achieve academic success, but also to deal with the complexity of digital reading. However, many Thai EFL learners at Huachiew Chalermprakiet University have encountered difficulties in English reading and problems of low reading comprehension. Online discussion has been recognized as a useful learning digital tool which can benefit students' learning and reading ability. The objectives of this research were 1) to investigate the effects of online discussion forums on students' reading comprehension skills; 2) to investigate the aspect of learning or knowledge the students constructed from interactions with peers and teacher in the online discussions; and 3) to investigate how they apply what they have learnt to improve their reading comprehension skills. Using an quasi-experimental design and mixed-methods for data collection, this research was carried out with one group of fifty first-year English major students at the Faculty of Liberal Arts. The participants were selected using random sampling and the interviewees were selected using purposive sampling. The research instruments included the Pre-and Post tests, four reading tasks, student reflection journals, teacher journal and student interviews. Based on the results of the paired t-test, there was a significant difference in students' Pre-test and Post-test scores. The overall student performance on the four reading tasks was high indicating their good command of reading comprehension skills. The data from students' reflection journals and interviews also support the positive effects of online discussions on student learning. It can be concluded that the use of online discussion forums positively affect students' reading comprehension skills. Online discussions enhance students' learning and development of reading skills. The participants learnt several aspects of learning or knowledge from online discussions. They were scaffolded by peers and the teacher, and that they received both cognitive and social gains. They cognitively developed text comprehension, reading strategies and techniques, knowledge of vocabulary, grammar and pronunciation and developed social skills and confidence. The findings reveal: reading strategies and techniques, study skills, correct pronunciation and vocabulary learning techniques were major aspects of learning the students applied for improvement.

The findings also show that the participants held positive attitudes towards online discussion forums. They had satisfactory online learning experience and recognized the benefits of online discussions on their learning.



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CHAPTER 1

INTRODUCTION

This chapter begins with the background of the study to present an overview of reading problems of language learners and the potential of online discussion in enhancing learning and reading skills. The statement of the problem and rationale of the study were addressed. Research questions, research objectives, scope of research, hypotheses, significance of the study and definitons of specific terms used in this study were also included.

1.1 Background of the Study

1.1.1 Reading problems of EFL learners

Reading comprehension is widely recognized as one of fundamental skills that learners need for acquiring information or knowledge in order to function in academic contexts (Semtin, & Maniam, 2015; Yukselier, 2014). Much empirical evidence from previous research affirms that there is a critical link between learners' reading proficiency and their academic achievement (Hijazi, 2015; Jala, 2020; Menaka & Jebaraj, 2017; Schwabe, McElvany & Trendtel, 2015). For EFL learners, being a skillful reader is one of language learning goals and a key to overall academic success. However, mastering reading comprehension skills is a challenge for many EFL learners, particularly those with low English proficiency.

Over the past two decades, reading problems of English language learners have been consistently discussed in the second or foreign language research. The existing literature (e.g. Gunning, 2002) reveals a number of causes or variables contributing to difficulty in processing texts and students' low reading comprehension. Those causes are, for example, a lack of schema or background knowledge, limited knowledge of vocabulary, knowledge of language structure (e.g. sentence structure, syntax, semantics), and inadequate practice of reading strategies including unfamiliarity to discourse / text types.

In the Thai EFL context, difficulty in understanding reading texts and problems of low reading comprehension among learners from primary to tertiary levels have been reported (Chawwang, 2008; Chuenta, 2002; Paksasuk, 2013; Subphadoongchone, 2000). In Chuenta's study (2002), students faced problems in identifying main ideas, understanding unfamiliar words, summarizing the texts, and inappropriate use of reading strategies. Similarly, Subphadoongchone (2000) and Adunyarittigun (2002) found limited knowledge of language.

structure and vocabulary play a major role in contributing learners' difficulties in predicting the meaning in contexts and guess the meaning of words from contexts. Meanwhile, Chawwang (2008) found that students' lack knowledge of sentence structure, vocabulary and reading comprehension have resulted in problems in making predictions from the text and identifying topics and main ideas.

More recent study, Paksasuk (2013) found limited knowledge of vocabulary, L1 interference and a lack of pronunciation skills which affect students' ability to translate and gain comprehension are three main causes of their reading difficulty. Paksasuk (2013) points out that even though students had learnt techniques to guess the meaning of unknown words, they still had problems dealing with vocabulary while reading the text. Likewise, Songsiengchai (2010) also reports that Thai learners are not familiar with using reading strategies that can enable them to achieve deeper comprehension. With similar findings, Munsakorn (2012) point out that some readers lack and did not apply appropriate reading strategies, consequencly, they have experienced low reading comprehension. More recently, Rungswang and Kosashunhanan (2021) found that most students experienced difficulties in using reading strategies.

With attempts to solve reading problems among EFL students, various teaching techniques have been proposed to help improve their reading skills. Based on their research findings, many researchers (e.g. Chawwang, 2008; Klimova & Zamborova, 2020; Manowong, 2017; Mokhtari & Reichard, 2004; Peng, Siriyothin & Lian, 2014; Suraprajit, 2019) suggest using educational technology such as the web 2.0, LMS, MOOCs, mobile apps, infographics including giving instructions on reading strategies, boosting up knowledge of vocabulary, and expanding linguistic and background knowledge of students.

Recently, online discussion forum is considered as a useful interactive learning tool which fosters active learning and student participation and improves student academic performance (Aljeraisy et al., 2015; Alzahrani, 2017; Onyema et al., 2019). Through having oral interactions with peers in online discussions, students can get benefits from scaffolding given by their peers (Ng, Cheung & Hew, 2010). Therefore, online discussion is considered as one useful learning method that has potential to benefit student reading comprehension skills.

1.1.2 The potential of online discussion

Online discussion is considered as a useful instructional method that can benefit student learning and help them improve reading comprehension skills in several aspects.

Promoting active learning, collaborative learning

Firstly, online discussion can promote active learning among students. Online discussion is based on student-centred learning approach and grounded on active learning which highlights the active role of individual learners in building their own knowledge from experiences and the environment surrounded them (Falchikov & Goldfinch, 2000). While participating in an online discussion forum, students need to take responsibilities for their own learning. They are involved in sharing ideas, asking inquiries, giving comments or suggestions and making decisions with their group in order to complete the tasks or solve the problems. Sivanandan, Rajandram and Chan (2014) point out that the nature of online discussion promotes active learning. It requires learners to take responsibility for their learning through meaningful activities that require them to performing tasks.

Promoting higher-order thinking skills and cognitive development through interactions Besides, oral interactions on online discussion forums can foster students' cognitive development. Online discussion is aligned to the principle of socially mediated learning of Vygotsky's (1978) sociocultural theory which highlights the fundamental role of social interaction in fostering cognitive development. Vygotsky (1978) believes that "learning is a social activity" where language is the mediated means in thinking process 'mental activity' and "community plays a central role in the process of making meaning" (p.68). When engaging in social interaction and collaborative activities with members in the community, individuals learn or construct knowledge from people they interact with.

From the socio-cultural perspective, when students are engaged in interactions on a discussion forum and do collaborative tasks with their peers and teachers, social interaction can facilitate their mental activity and help develop their cognitive skills. To complete reading tasks, students are required to, for example, read and comprehend the reading texts, recall and apply the reading strategies they learnt and give reasons to support their ideas. Indeed, discussions and collaborative tasks are cognitively demanding because these tasks require students to integrate knowledge of vocabulary, grammar, course content, language skills and of higher-order thinking skills. Therefore, online discussions can facilitate or enable students to develop their cognitive skills.

Providing opportunities to get scaffolding and self-reflection for learning improvement Additionally, online discussion gives students opportunities to be scaffolded by the more knowledgeable peers or the teachers while interacting and doing collaborative work with them. Qnline discussion is associated with the central ideas of Vygotsky's Zone of Proximal Development (ZPD). According to Vygotsky (1978), social interaction, challenging tasks and guidance (scaffolding) from the more knowledgeable persons can support an individual's cognitive development by expanding learning zone from their actual learning zone (what they can learn on their own) to their potential learning zone (ZPD / what they can learn with guidance). To promote their ZPD, students are responsible to construct knowledge through shared interaction and activities with the more capable peers who can be their peers or teachers (Vygotsky, 1978). Based on this principle, when involving in online discussions to complete reading tasks with peers and teachers, whether through synchronous or asynchronous modes, students may observe peers' learning strategies, receive help or guidance (scaffolding) from peers or teachers who shared knowledge or skills to them. For example, students may learn meanings of unknown words or they may learn strategies on how to identify the main idea of a paragraph from peers. With the guidance or scaffolding they received and learnt from interactions with others, students can use these strategies to improve their reading skills.

Moreover, online discussion provides students rooms for self-reflection. While reflecting their own learning, students compare their ideas with peers' ideas, use critical thinking, assess their own performance and find their strengths and weaknesses (Garrison, Anderson & Archer, 2000; Wang & Chen, 2008). Through reflection, students can access essential information about their learning and make plans for improvement. In previous studies, some researchers (e.g. Garrison et al., 2000; Wang & Chen, 2008) address the benefits of online discussion in promoting self-reflection among students and its contribution to help develop higher-order thinking skills.

1.2 Statement of the Problem

In the context of the first-year English major students taking a basic English reading course at Huachiew Chalermprakiet University, explicit instructions on reading strategies were given to students. Throughout the course, the students were trained to use various strategies ranging from the basic strategies (scanning, skimming, identifying good paragraphs, finding topics) to the complex ones (identifying main ideas of paragraphs and supporting details, finding

patterns of organizations of reading texts, guessing unknown words from the context, making inferences, distinguishing facts and opinions). A range of class assignments such as vocabulary boost-up activities, games, group presentations on reading texts, and other class activities for expanding world knowledge and pair / group reading practice were implemented and promoted throughout the course.

Yet, some students have still faced difficulty in reading for comprehension. From the observations of experienced instructors in teaching reading courses, low level of English proficiency of students was one of major problems. Other factors which also came into play included students' limited knowledge of vocabulary, inadequate knowledge of language structures such as sentence structure, syntax, word order, including a lack of background knowledge. Thus, it is important to find the solutions to help students develop their reading comprehension skills, enhance their learning and help them complete learning goals.

As technology has increasingly been a crucial part of education in the 21st century and many academic settings have embraced online tools and platforms to enhance students' learning and to meet different needs of learners (Onyema, Deborah, Alsayed, Naveed & Sanober, 2019). Taking technological advantages into account, this study proposed incorporating online discussion forums as a springboard where students can have beneficial gains from collaborative learning and scaffolding through having interactions with peers and teachers for improving their reading comprehension skills.

In the past decades, several studies on the use of online discussions in education have been conducted, and beneficial impacts of online discussions on learners and the learning process have often been reported. Research examining the effects of online discussion on students has been carried out with varied specific focuses— on speaking skill, student interaction, communication and student—teacher relationships and students' academic performance. However, few studies have reported on the effects of online discussion on students' reading comprehension skills and yet, these previous studies did not give a focus on the role scaffolding interaction on student learning. Thus, this study aimed to provide more empirical evidence on the effects of using online discussion forums on students' reading comprehension skills. This research also gave a specific focus on the aspects of learning or knowledge the students be scaffolded and construct through interactions and collaboration tasks with others in the online discussion forums and how they apply what they learn to improve their reading skills.

1.3 Research Questions

The research attempts to address the following research questions:

- 1. What are the effects of using online discussion forums on students' reading comprehension skills?
- 2. What aspects of learning / knowledge do students learn or construct from scaffolding interactions with peers and teacher in the online discussion forums?
- 3. How do students use what they have learned from online discussions to improve their reading comprehension skills?

1.4 Research Objectives

The objectives of the study are:

- 1. to investigate the effect of online discussion forums on students' reading comprehension skills
- 2. to explore aspects of learning / knowledge the students learn from scaffolding interactions with peers and teacher in the online discussion forums.
- 3. to investigate how the students make use of what they have learn from online discussions to improve their reading comprehension skills

1.5 Scope of the research

This study investigated the effects of using online discussion forums on students' improvement of reading comprehension skills and examines the aspect of learning or knowledge students learn or construct from interactions with peers and teacher in the online discussion forums. The study also further investigated the students' learning process by focusing on how students employ what they have learnt from online discussions to improve their reading skills

1.6 Hypotheses

Based on the literature (Alzahrani, 2017; Ng, Cheung & Hew, 2010; Onyema et al., 2019; Sivanandan et al., 2014; Wang & Chen, 2008), the use of online discussion forums can contribute to cognitive gains of learners. While having interactions with peers and teachers, students have opportunities to be scaffolded and receive feedback for learning improvement. In addition, learners can have self-reflection after online discussion and recognize their own strenghs and weakness. Thus, in this study, it is firstly hypothesized that learners who

participate in online discussion will perform better in reading tests. Secondly, it is hypothesized that the students make use of what they have learned from online discussions to improve their reading comprehension skills.

1.7 Significance of the Study

With attempts to solve the problems of low reading comprehension among Thai EFL learners, the researchers introduced various teaching approaches and techniques, material development, and different online learning tools in order to help learners improve their reading skills. However, the reading problems are situational and varied from context to context. The solutions proposed in previous research may not fit to all teaching contexts. Therefore, with a different approach of incorporating online discussion to promote learning from scaffolding interactions, this study was significant and can benefit language teachers and learners. Firstly, the results of this study can provide supportive evidence for the effects of online discussion forums on students' reading comprehension skills and how students make use of what they learn from scaffolding interaction to improve their learning. English language teachers may recognize the postive effects of online discussions on students' reading comprehension and incorporate online disscussions into reading instructions to help students improve their reading ability. The results of the study can also benefit teachers by providing implications that can shed light on how to design online discussions in a way to facilitate students' learning in reading courses. In addition, learners taking the course can receive beneficial impacts on their learning. They are likely to have self-reflection of their performance, gain opportunities to learn from the more knowledgeable people (peers & teacher) and feedback essential for their learning improvement.

1.8 Definitions of Terms

In this study, operational definitions of the key terms are used:

Reading comprehension skills include a wide range of skills which are essential for facilitating reading comprehensions. In this study, the target reading comprehension skills consist of identifying good paragraphs, topics & main ideas and supporting details, guessing unknown words from the contexts, and identifying patterns of organizations of texts).

Online discussion forums is a discussion board or channel on the MS Teams, which enables users to post messages, share files or images, chat, have online meeting. It is a room for users to interact with others and do collaborative tasks.

Microsoft Teams (MS Teams) is a web-based application developed for collaborative working and digital community where users can chat through instant messaging to members in their groups and have video conferencing, through 'Meet'. The feature 'Meet' allows students to make and receive call with internal and external groups or 'MS Team Calling', and do collaborate working on this platform where they can find , share information with 'File sharing' and 'Screen Sharing', and edit files in real time using familiar apps like MS Word, PowerPoint, and Excel. In this study, the feature 'Meet' was used for synchronous online discussion.

Scaffolding / scaffolding interactions refers to the advices, suggestions, comments, demonstrations, questions or other given by peers or teachers while doing tasks and interacting with others through online discussions. These include the knowledge of vocabulary, reading strategies and techniques on how to identify good paragraphs, patterns of organization, topics, main ideas, supporting details and signal words.

Cognitive presence is defined as the types of knowledge or aspects of learning that learners learn or are able to construct from interacting with peers and teachers in online discussion

Social presence is defined in accordance with Garrison's definition (2009) as the ability of participants to adjust themselves to become part of the community, to communicate purposefully in an online environment (discussion forums), and develop inter-personal relationships with others.

Teaching presence is defined in a similar sense with that of Anderson, Rouke, Garrison, and Archer (2001) as the way a teacher designs and organizes instructions, facilitates discourse for learning community (online discussion forums), and gives direct instruction. It is the process which drives or facilitates learners in constructing meanings for their learning and achieving desirable learning outcomes.

CHAPTER 2 LITERATURE REVIEW

This chapter presents an overview of the related literature. The theory of the Community of Inquiry and its conceptual framework which underpinned online discussion learning is discussed in relation to Vygotsky's socio-cultural theory, cognitive development, zone of proximal development and scaffolding. The discussions on two modes of online discussions, their benefits to student learning, previous studies on online discussions and other related studies were also included.

2.1 The Community of Inquiry (The CoI) as a model of online learning

The Community of Inquiry (CoI) is widely accepted as a social constructivist model of learning processes in online educational environments. Within this model, learning or online educational experience is arisen or constructed within the community from the interaction of three dimensions: social, cognitive and teaching (Garrison, Anderson, & Archer, 2000). The concept of the CoI has originally evolved from 'Inquiry' and 'Community', the two core ideas of John Dewy's educational philosophy and practice. Dewey (1959) believes that "through collaboration that respected the individual, students would assume responsibility to actively construct and confirm meanings. It is this collaborative constructivist approach that is worthy of further exploration in online learning" (Dewey, 1959 as cited in Swan, Garrison & Richardson, 2009, p.3). In brief, the Community of Inquiry is the online learning community where teachers and students are involved in, and where students are actively engaged in constructing meaning or knowledge through collaborative shared understanding and discourse within the community (Garrison, 2009). In much research, the CoI is used as the pedagogical model for designing a practical colloborative online learning environments or communities to promote students' critical thinking (Garrison et al., 2000), improve online learning experiences (Gao, Ward & Fabricatore, 2023), academic performance and soft skills (Tusyanah, Handoyo, Indira & Mayasari, 2023).

Within the conceptual framework of the Col, Garrison et al. (2000) highlights three core elements: Cognitive Presence, Social Presence and Teaching Presence. Cognitive Presence is defined as to "the extent to which learners are able to construct knowledge and confirmed meaning through sustained reflection and discourses in a critical community of inquiry"

(Garrison, Anderson & Archer, 2001, p.5). In order to facilitate cognitive presence, *Social Presence and Teaching Presence* are two crucial elements needed (Wang & Chen, 2008). The second element, Social Presence, refers to "the ability of participants to adjust themselves and be part of the community, communicate purposefully in an online environment (discussion forums), and develop inter-personal relationships by way of projecting their individual personalities" (Garrison, 2009, p. 352). The last element, Teaching presence, is defined as "the design, facilitation, and direction of cognitive and social processes for the purpose of realizing personally meaningful and educationally worthwhile learning outcomes" (Anderson, Rouke, Garrison & Archer, 2001, p. 24).

Anderson et. al (2001, p.5) state that

"Teaching presence begins before the course commences as the teacher, acting as instructional designer, plans and prepares the course of studies, and it continues during the course, as the instructor facilitates the discourse and provides direct instruction when required."

The interaction of these core elements is esstential for facilitating the process of learning in virtual environment (Garrison et al., 2000). These elements of the CoI framework are correlated and contribute to learning experiences as shown in Figure 2.1.

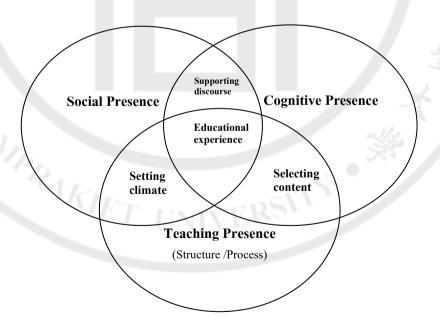


Figure 2.1 The Community of Inquiry (CoI) framework (Garrison et al., 2000, p.3)

Garrison's (2009) categories and indicators of the three elements: Social Presence, Cognitive Presence and Teacher Presence were presented in Table 2.1.

Table 2.1 The categories and indicators of the three core elements of the Col Garrison (2009, p. 353)

Elements	Categories	Indicators
Social	Open communication	Learning atmosphere / risk-free expression
Presence	Group cohesion	Group identity & encouraging collaboration
	Personal / Affective Expression	Emoticons
Cognitive	Triggering Events	Sense of puzzlement
Presence	Exploration	Information exchange
	Integrating	Connective ideas
9	Resolution	Applying new ideas
Teaching	Design & Organization	Setting curriculum & methods
0	Facilitating Discourse	Shaping constructive exchange
耳	Direct Instruction	Focusing and resolving issues

2.1.1 Three core elements for facilitating online learning process

In designing online learning environment to facilitate the process of online learning, it is crucially important to include three correlated elements: Social Presence, Cognitive Presence and Teaching presence in online discussion activities.

Social Presence

To promote a sense of community among learners, help them develop interpersonal relationship with other students, motivate students' learning and engagement in discussion, teachers should consider beginning with opening communication in which individuals are given floors / rooms to introduce themselves and get to know others through interaction. Then teachers should promote cohesion among learners by building group identity and establishing collaboration and later focus on personal or affective variables such as personal identify or characteristics of individuals (Garrison, 2009).

Cognitive Presence

Cognitive presence is "the inquiry process where learners are tasked with a problem or issue and, through iteration between discourse and reflection (public and private worlds), construct meaning and confirm understanding" (Garrison, 2009, p. 353). Cognitive presence is operationalized into four phases of the inquiry process: 1) recognizing and identifying the problematice issues; 2) exploring the problems by collecting relevant information and perspectives through individual exploration and discourse; 3) analyzing and synthesizing to understand the existing information with the goals to find a solution through reflection, sharing ideas and use critical thinking to analyze the ideas; and 4) examining for the best solution through application (Garrison & Anderson, 2003; Garrison, 2009).

Teaching presence

Teaching presence is the way a teacher designs and organizes instructions, facilitates discourse for learning community (online discussion forums), and gives direct instruction. It is the process which drive or facilitate learners in constructing meanings for their learning and achieving desirable learning outcomes (Anderson, Rouke, Garrison & Archer, 2001).

To establish teaching presence, teachers should consider these steps:

1. Planning, Organizing and Preparing for the Online Discussion

This step involves planning tasks / activities for online discussion with clear learning goals, brief instructional materials, discussion forum posting requirements and assessment procedures.

2. Facilitating Discourse is essential for online learning as it can help maintain students' interest, motivate students to learn and increase their engagement in discussion (Anderson, et al., 2001). Various types of facilitating techniques should be provided during the online discussion sessions. For example, pointing to areas of agreement / disagreement, directing discussions to reach consensus /understanding, giving encouragement, acknowledging, encouraging students to make contributions, involving participants to take part in, prompting discussion, and measuring the quality of the process (Anderson et al., 2001).

3. Giving Direct Instruction

Teachers may give direct instruction by means of presenting content and questions, narrowing down the discussion to the specific issues, giving a wrap up after the discussion, confirming understanding and clarifying misperceptions (Shea et al., 2006). By means of direct instruction, students are given not only scaffolding, but also opportunity to have responsibility for their learning. This instruction is considered as a 'guide on the side'. It is an approach

whereby learning is socially shared. Garrison and Vaughan (2008) note that this is the path to a meaningful, systematic, and worthwhile educational experience.

2.2 Vygotsky's socio-cultural theory, Cognitive Development and Zone of learning

2.2.1 Meditation for cognitive development and Language as a tool for meditation

According to Vygotsky's (1985) socio-cultural approach, social contexts, psychological and cultural tools play crucial roles in human mental activity or thinking. Vygotsky (1978) proposes that human cognitive development or learning is facilitated through mediation mediated by psychological and cultural tools such as language, literacy and logic. When an individual interacts directly with the social context (environment) and is culturally mediated by a tool, for example, speech, an individual's mental activity is influenced and guided, and their thoughts also transform and shape their activities (Negueruela-Azarola & Garcia, 2016).

With the socio-cultural approach in second language learning, learning is viewed as a a socially mediated process where language is often used as a tool for promoting thinking. Negueruela-Azarola et al. (2016) point out that language is one of "symbolic cultural tool which "are both content and tools for thinking processes in human beings" (p.296). In the context of second language learning, Lantolf and Thorne (2007) note that language is one of the primary means of mediation. The mediation process occurs through learners' participation in different settings such as peer interaction and in institutional contexts, for example, schools and workplace.

In language learning, 'regulation' is one form of meditation. Lantolf and Thorne (2007) explain that regulation can be divided into three stages: object-regulation, other-regulation and self-regulation. Object-regulation is the stage that learners are controlled to "use objects to regulate their thinking" for completing the task. Other-regulation is both "implicit and explicit meditation" depending on the forms /levels the learners receive assistance or scaffolding from other people (e.g. peers and teachers) in order to regulate their thinking and achieve the tasks. The last stage, self-regulation, is the stage learners are able to regulate their thinking and achieve the task on their own with little or no assistance from other people (Lantolf & Thorne, 2007, p.200).

In second language learning, a second language (L2) is also used as a tool to mediate thinking through 'private speech of self-talk'. Lantolf and Thorne (2007) describe private speech as the phenomenon "when an individual communicate socially, he /she appropriates

the patterns and meanings of the speech and utilize it inwardly to mediate his /her mental activity" (p.202). Lantolf (2006) notes that private speech is used for regulating mental activity in performing cognitive tasks and it is substantial process to acquiring a second language. In short, by means of using a language as a mediated tool, learners can develop their thoughts from interacting with the environment, learn through varied stages of regulation and develop new ideas or alternative solutions for solving a problem or completing tasks.

2.2.2 Social interaction, Zone of Proximal Development and Scaffolding

Based on the principle of socio-cultural theory which emphasizes social interaction, cultural context and language, Vygotsky (1978) argues that social interaction plays a crucial role in cognitive development. An individual learns or develop his /her cognitive skills through interactions with other people in society, particularly more knowledgable or experienced ones. During interactions language plays a role in faciltaing communication, transmitting ideas and developing thinking skills. According to Vygotsky (1978), an individual learns through interactions at two levels: first, on the social level between people and later, on the individual level inside an individual. At the first level, an individual learns from exchanging ideas or negotiationg for meanings through interactions with other people. At the later level, he or she internalizes what is learnt into his or her mental part - internalization.

To understand the levels of coginitive development, Vygotsky (1978) introduces the concept 'Zone of Proximal Development' or ZPD. He defines ZPD as "the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (Vygotsky, 1978, p.86). Simply puts, the actual development level is what a learner can do by his/her own; however, their own capabilities to solve problems or perform tasks are limited. Guidance or assistance is needed for learner' cognitive development and ZPD is the area where a learner is able to perform the tasks with guidance or assistance from the more capable people.

To facilitate cognitive development assisting learners to expand the level of actual development to the potential level, guidance or assistance should be given to learners through collaborative activities and interactions with the more capable peers or teachers. The more capable people or the More Knowledgable Other (MKO) can be peers, coaches, teachers or others with more experienced, skillful or competent people with respect to performing

particular tasks. The knowledge, beliefs, values, strategies, or skills shared or demonstrated by the more capable people can faciliate learners' learning and help them expand their abilities and enable to carry out more challenging tasks on their own (Vygotsky, 1978). Therefore, it is important to promote collaborative activities and social interaction in language classrooms and their cognitive development.

In discussions of Vygotsky's Zone of Proximal Development, scaffolding is a key concept for the development of cognition. 'Scaffolding' refers to assistance or guidance that enables a learner in performing the tasks or solve a problem. Wood, Bruner & Ross (1976) explain that 'scaffolding' involves "the process that enables a child or novice to solve a problem, carry out a task or achieve a goal which would be beyond his/her unassisted efforts" (p.90). While interacting and doing collaborative tasks or activities, the more capable peers or teachers provide scaffoldings to enable the less capable learners perform the challenging tasks or solve their problems independently. Scaffolding may come in various forms such as through raising guided questions, giving suggestions / feedback, demonstration, modeling or simplifying problems (Wood et al., 1976). Thus, to promote cognitive development, it is crucially important to provide challenging tasks or learning activities where the less capable learners need to interact, collaborate with others and receive scaffolding by the more capable people.

In fact, scaffolding and ZPD is closely related to the concept of other-regulation – the second stage of regulation. Mitchell and Myles (2004) point out that when a learner perform tasks with the guidance or assistance given by the more capable person, the learner mediates mental activity through other-regulation. In short, by means of collaborative talk, the less capable learner gets involved in shared knowledge of how to perform tasks, and lastly, the learner can build new ideas, knowledge or achieve the skills for dealing with the challenging tasks or solve the problems on their own. Once the learner can work independently, their capabilities on the particular tasks have been expanded – that will, in turn, shift to self-regulation, which is independent learning.

Therefore, in English language teaching (ELT) context, there is a necessity to provide interactive collaborative learning activities where the less capable learners can be scaffolded on how to carry out the tasks or solve the problems independently. The less capable learners can develop their cognitive skills and expand their learning zone. Vygotskys (1978) suggests giving students opportunities to hold discussions about their learning. By means of productive

discussions, learners can get involved in meaningful interactions, receive feedback and develop their cognitive skills.

2.3 Online Discussion: synchronous and asynchronous modes

Discussion is one of collaborative learning activities which are most beneficial to student learning (Ertmer et al., 2007; Richardson & Swan, 2003). The traditional form of discussion is face-to-face discussion which takes place in classroom settings. This form of discussion engages students to interact and collaborate around a task in a face-to-face situation. It is beneficial to learning offering opportunities for students to get immediate on-the-spot clarification and engage them in making meanings of cues such as gestures, voice, tone, facial expressions and body language (Verenikina, Jones & Delahunty, 2017).

However, with the rise of online learning and emerging new educational technology, there has been a shift from face-to-face discussion to online discussion. Online discussion is mostly viewed as an vital integral part of interactive online learning. Online discussion can be implemented through a variety of online learning tools such as chat, video or web conferencing, online meeting and via various applications and platforms, for example, Elearning, Zoom, Microsoft Teams and Google Meet.

Two modes of online discussion are synchronous and asynchronous discussions. Synchronous discussion is a live or real-time discussion in which participants are required to be present in the discussion forum at the same time in order to respond to each other. Synchronous discussion can take place through various forms, for example, video conferencing, web conferencing or webinar, live chatting and online class lectures. Through synchronous discussions, participants can collaborate, share ideas and receive immediate feedback, ideas and opinions from other learners or the instructor. Additionally, when learners have encountered troubles with any of the course content during the discussion, synchronous mode allows them to ask questions or ask for help and get instantaneous answers (Lawless, 2023).

Asynchronous discussion is the form of discussion which participants access and participate at different times. It is more learner-centered approach in that participants can post, share ideas or give responses on a discussion board for peers to review at some later time. Learners determines time and pace of instruction (Negash & Wilcox, 2008). Asynchronous discussion comes in various forms such as email, blog, prerecorded lecture videos, online discussion boards and other social media platforms.

2.4 Potential benefits of online discussion

In previous research, online discussion forum is considered a useful online instructional tool. Productive online discussion can bring benefits to learning in several aspects. First of all, the use of online discussion forums plays a role in facilitating the process of learning and contribute to learning improvement (e.g. Guo, Chen, Lei & Wen, 2014; Seethamraju, 2014; Jose & Abidin, 2016). In Guo et al.'s (2014) study, it was found that discussion boards can facilitate deep understanding of the course content. The facilitating feedback received from peer interaction can help learners construct knowledge. In this study, facilitating feedback had significant effects on student learning and their cognitive engagement in online discussions. Online discussion allowed opportunities for students to take active roles in their learning (Guo et al., 2014). In Seethamraju's (2014) study, online discussion forum was perceived by students as an important learning component. The exchange of views and ability to post their responses on asynchronous online discussion encourage more students' participation and improvement in quantity and quality of student responses on discussion and facilitate learning. When participating in online discussions, the participants also received the benefits of peer-to-peer learning and the benefits of case study pedagogy (Seethamraju, 2014). With similar findings, Jose and Abidin (2016) concluded that online discussion forums can help promote learners' improvement of language skills. Through sharing ideas and analyzing grammatical and spelling errors of their peers' writings on the discussion forums, the participants can apply what they have learnt to improve their writings.

Besides, online discussion can help foster students' critical thinking skills. While engaging in online discussions, the students need to use various thinking skills. Fitriana and Anggia (2016) found that the students develop their thoughts, arrange their ideas, research for information to support their ideas, review peer comments, analyze and reflect their own comments and construct a new idea. These activities require students to involve in critical thinking process during the discussions and can enhance their critical thinking skills. Recent research by Rathakrishnan, Ahmad and Suan (2017) found that the students who participated in Padlet online discussion have greater critical thinking level at both macro and micro skills than the students who did not take the online discussion. The findings show that online discussions enable the participants to use their macro critical thinking skills in any areas of learning and improves their ability to evaluate source credibility. Regarding their micro thinking skills, the participants were able to create their own ideas when providing feedback to their

peers. They were engaged in active learning and communication in order to produce, gain and evaluate knowledge.

Online discussion can also help students develop their self-reflection through engaging in self-reflection tasks (Cooper, 2006; Rolheiser et al., 2000). With the opportunities for students to exchange their ideas with and receive feedback from peers and teachers, students can evaluate their own performances, compare their performance with those of peers, learn and make a decision on effective strategies to apply for improving their work. Through other-regulation and their self-reflection, students may be able to carry out tasks and solve learning problems independently and develop themselves to become self-regulated learners.

Moreover, online discussion can help establish a sense of community, collaborative learning and motivation. In their research, Mohamad and Shaharuddin (2014) found that online forum discussion useful in developing a sense of learning community among students. The students were engaged with the course and working as a group. They were willing to read, share and discuss their readings, expand and confirm upon each other's ideas and arguments to complete the tasks (Mohamad & Shaharuddin, 2014). Likewise, Williams and Lahman (2011) point out that students were more engaged with the lesson through online discussions. The students who were reluctant to speak in face-to-face classrooms became more active in online classes. In their study, it is concluded that the higher level of engagement in online classes has led to more effective students' learning.

Lastly, online discussion can promote student interaction in virtual classrooms. In Omar et al.'s (2012) study, it is reported that conducting online discussions on Facebook could build up confidence and collaboration among learners. Additionally, Seethamraju (2014) found that exchanging views with peers and posting their responses on online discussion boards can encourage students to interact more and more engagement in discussions.

2.5 Previous studies on using Online Discussion to promote learning and related studies

With different specific research focuses, several studies (e.g. Aljeraisy et al., 2015; Manowong, 2017; Ng, Cheung & Hew, 2010; Onyema, Deborah, Alsayed, Naveed & Sanober, 2019; Wang & Chen, 2008) examined the effects of incorporating online discussion forums on students' learning. Wang and Chen (2008) conducted a design-based study to develop the online discussion activity for promoting cognitive development. This three-phase study developed a new instructional design of online discussion activity based on the framework of

Activity Theory, Vygotsky's socio-cultural theory and Garrison et al.'s (2001) Community of Inquiry. This study implemented the new design in a university course to investigate the effects of the new designed online discussion activity. Wang and Chen (2008) report that the newly designed activity is found successful in contributing to student learning in several aspects. The students were more enthusiastic in participating, had more interaction and provided scaffolding to their peers by posting questions to stimulate thinking. The students can also externalize their viewpoints, compare their thoughts with that of their peers, and evaluate various claims, arguments and comments. In addition, the study found that the new online discussion activity is successful in promoting student autonomy. In relation to Garrison et al. (2001)'s three dimensions of COI framework: cognitive presence, teacher presence and social presence, the findings of Wang and Chen (2008) showed that the cognitive presence- students' higher order learning has been supported by teacher presence and social presence. The roles of teachers and peers as facilitators and class interactions in online discussions can facilitate students' learning.

In Ng, Cheung, and Hew's (2010) case study, peer facilitation techniques were used to promote scaffold interaction in asynchronous online discussions. The qualitative data were obtained from discussion transcriptions and student interviews. The findings showed that scaffolding interaction in online discussions could be achieved through five peer facilitation techniques: expressing appreciation, considering others' viewpoints, inviting peers to contribute, questioning, and challenging peers' ideas. The students felt that the peer facilitation techniques are useful and benefit to their learning improvement. Therefore, based on the these findings, to ensure effective online discussion, peer facilitation techniques should be included so that they can promote scaffolding interaction and postively affect student learning.

Aljeraisy and team (2015) investigated the impact of the Web 2.0 technology 'Discussion Boards' on students' grades and satisfaction with the learning environment. In this study, the performance of two sample groups were compared after six weeks of the experiment. The results of the study show that the use of online discussion boards have positive impact on students' grades and their satisfaction. The majority of students have become more confident and report that the interaction and collaborative experience in online discussion forums help them increase their knowledge and understanding of the course materials. This has lead this study to conclude that discussion boards were a powerful tool for developing pedagogical competencies, for example, critical thinking, collaboration and reflection (Aljeraisy et al., 2015).

A more recent study, Onyema, Deborah, Alsayed, Naveed & Sanober (2019) examined the effects of using online discussion forum 'CSC forum' on Computer Science major students' learning and communication. One control group with 15 students was given conventional teaching and the experimental group was given conventional teaching and were made to engage in online discussions. The participants were assigned to participate in Pre-class and Post-class discussions on "Live Chat" module and after the discussions the participants were given feedback for improvement on the CSC forum. This study revealed that the CSC forum can promote idea exchange among students regarding the course content and assignments, and also improved the quality of communication and relationships between students and teachers. Onyema et al.'s (2024) study highlighted exchanging of ideas among students regarding course content and assignments, and also improved the quality of communications and relationship between students and teachers.

With interest in online learning tools, Manowong (2017) incorporated infographics and other online tools (Padlets, Google Docs and Canva applications) into classroom instructions to help students develop their reading skills and vocabulary knowledge including increasing students' learning motivation. Twenty-seven university students from different majors taking English for Science and Technology course were assigned to do four infographic assignments and assignments on other online tools throughout the period of 8 weeks. To complete these assignments, the participants had opportunities to apply various reading strategies. The data were collected from students' reflections posted on Padlet walls, classroom observation, teacher journal and online questionnaire. Based on the findings of the study, in students' perceptions the infographic assignments can enhance their reading comprehension in terms of increasing vocabulary knowledge, knowledge of language structures and better understanding of English reading texts. From students' reflections, infographics can provide motivating and the easy-to-read visual texts that facilitate students in reading comprehension. Infographic assignments can encourage them to read English texts more and create desirable learning experience as the participants were given rooms for their creativity. It can be concluded that the technology-based activity can increase students' learning motivation and promote creativity. The students recongized the benefits of technology-integrated learning activities, which make their learning convenient, create interactive and motivating learning environment. Obviously, Manowong's (2017) findings showed the potential of online tools as classroom instructions can not only motivate students to learn, but also has potential to benefit students' learning and their reading comprehension.

In conclusion, the existing literature has confirmed incorportating of online discussion as useful classroom instructional tools that can encourage students to actively participate in learning activities. It can provide opportunities for students to engage in a learning community with collaborative atmosphere, express their creativity, be more autonomous and interactive learners. Thus, online discussions has potential to facilitate learning and students hold positive attitudes towards this technological form of learning.

2.6 Pedagogical practices for effective online discussion

Previous research has provided some pedagogy for teachers and educators in providing effective online discussion. First of all, it is important to make appropriate choice of online discussion modes. Course instructors should determine the mode of discussion to match the learning objectives, learners' needs and teaching contexts. Synchronous discussion allows students to collaborate with others in real time. They can share ideas, exchange information, ask for help and receive feedback from peers and teachers. Immediate responses received from others can help facilitate their learning process. Learners may make use of or process the received information instantly to improve their learning. Meanwhile, asynchronous online discussion offers more flexibility in time. Students have more time to recheck, generate their ideas, reflect and give responses to peers on a discussion board at any time and at their own pace. In more relaxing learning environment, students are likely to be encouraged and stimulated to exchange their ideas or knowledge. This may increase more student engagement and create a positive learning experience of online discussion.

In addition, teachers should establish a sense of community and promote relationships between group members. Garrison (2009) remind us about the significant role of social presence in enhancing online learning stating that learners adjust themselves to be part of the group or community, have purposeful interactions in a trusting environment, and establish interpersonal relationships with others. When they feel a sense of community, learners may subsequently be more motivated, actively participate in discussion and perform better in collaborative learning activities. In several correlational studies (e.g. Chatterjee & Correia, 2019; Han, Jiang, Mentzer & Kelley, 2022) examining the relationship between sense of community, motivation and collaborative learning activities found the relationships between students' sense of community, their motivation and involvement in collaborative learning. Therefore, to create a sense of community among students and make online discussion more productive, teachers should create a floor for open communication through having students introduce themselves or have

small talks to help students get to know each other. Teachers should also help establish group identity to promote cohesion among students and make them adjust themselves to different personalities of individual students (Garrison, 2009). In such a trusting learning environment, students are likely to feel relaxed, more willing to participate and make more contributions to their collaborative learning.

Moreover, teachers should use a well- designed online discussion and monitor it so that it can create meaningful interaction and benefit learning. Verenikina, Jones and Delahunty (2017) have addressed four important components of designing and making successful online discussion. One of important components of a well-designed online discussion is creating an outcome-oriented task for online discussions. Teachers should create engaging tasks that explicitly linked to learning objectives / outcomes. The tasks should involve students to help solve the problems. The authenticity of discussion tasks which allow students to draw on their prior knowledge or experience can increase their engagement in discussions.

Besides, to ensure effective online discussion, teaching students communicative strategies on online platforms is needed. Students should be trained to familiarize with several important strategies for creating a sense of belonging to joint collaborative knowledge construction. Verenikina et al. (2017) suggest three communicative strategies for online discussions. The first strategy is establishing a positive social space, that is, building good relationships among group members. The second one is building collective understandings. By restating, extending ideas and presenting different perspectives, this strategy can ensure clear mutual understanding of the topics among group members and broaden their perspectives. The final strategy, constructing new knowledge, is a strategy used for shifting a discussion to a "more critical discussion to co-construct new knowledge" (Verenikina et al., 2017, p.11).

The third component is teacher presence. Teachers should maintain their presence and play roles in online discussions. It is important for teachers to facilitate learning and monitor the discussions in order to ensure that the discussions run smoothly and that students will achieve the learning outcomes. During the discussions, teachers should provide interactional scaffolding which is 'ongoing' support to respond to the needs of students instantly. Interactional scaffoldings are, for example, giving clear directions, giving reassurance / clarification, giving explanations, demonstrating examples, expressing agreement or disagreement, directing discussions, raising guiding questions to ensure if the students are on the right track. Such interactional scaffolding strategies can facilitate student learning and help them complete the online discussion tasks more successfully.

The last component of online discussion is informing clear expectations and students' roles. Teacher should make students know clear expectations for participation at the beginning. It is essential to make students clear about the requirements for participation in online discussion. With understanding of what they are expected to do in online discussions, they can make plans and determine their roles and make contributions in the discussion (Verenikina et al., 2017).

2.7 Challenges in online discussion

Several contextual constraints have been addressed as challenges to effective online discussions. One common constraint is student workload in online learning. Teachers should consider students workload. Online discussion increase in student responsibility of their learning; therefore, assigning students to participate in many discussion sessions may become a demanding task for students. In some studies, restrictions of the number of student responses are likely to limit students to express their ideas freely. Another constraint is less teacher involvement in online discussions. In previous studies, teachers had less involvement in discussions. This is owing to teachers' high workload that prevented the academic staff to engage with the students in the online discussion (Al-Fahad, 2010; AlJeraisy et al., 2015; An, Shin & Lim, 2009; Hew & Cheung, 2010).

All in all, previous research have reported on the effects on online discussions on speaking skill, student interaction, student -teacher communication and relationships and students' grades and learning satisfaction. With different specific research focuses and design, these studies yield different results. Although few studies have reported on the effects of online discussions on students' reading comprehension, none of these studies paid attention to the role of scaffolding interaction on student learning and their reading improvement. Thus, this study aimed to investigate the effects of online discussion forums on students' English reading ability. This research also investigated the aspects of learning or knowledge the students be scaffolded and construct through interactions and online collaboration tasks with others and investigated how they apply what they learn to improve their reading skills.

Taking into account the roles of social presence and teacher presence in promoting cognitive development, the researcher established a sense of collaboration and good relationships among students by encouraging team members to interact and express ideas in a relaxing online learning environment. This can help the students feel a sense of community and be more active and motivated in learning. Additionally, to facilitate students' learning and their

reading improvement, this research applied synchronous discussion mode where students can receive scaffolding interaction or get feedback from the teacher and peers in real time. To limit the constraints about student workload and teacher involvement, the researcher ensured assigning appropriate amount of reading tasks and assignment and gave each group sufficient teacher involvement by interacting and facilitating their learning with them in each discussion session.



CHAPTER 3

Research Methodology

This chapter presents the methodology of this study consisting of conceptual framework, research design, research participants, research instruments, research procedure, data collection and data analysis.

This study was conducted to answer the following research questions:

- 1. What are the effects of using online discussion forums on students' reading comprehension skills?
- 2. What aspects of learning / knowledge do students learn or construct from scaffolding interactions with peers and teacher in the online discussion forums?
- 3. How do students use what they have learned from online discussions to improve their reading comprehension skills?

3.1 Conceptual Framework of the study

The Community of Inquiry framework is a pedagogical model of learning process in online environments, consisting three core elements: Social Presence, Cognitive Presence and Teaching Presence. In this study, the online discussions were designed and implemented based on the framework adapted from Garrison et al.'s (2000) framework of the Community of Inquiry as presented in Figure 3.1 and Table 3.1. The researcher implemented the online discussion as the instructional method in which students are required to participate, discuss, share ideas, gather information and receive feedback including making a consensus for the best responses on the reading tasks (problems). Students were involved in the community of Inquiry (discussion forum), got cognitive engagement (shared ideas, gathering knowledge, aspects of learning or learning skills), social engagement with peers, and they made use of psychological, technical, or cognitive support and assistance from the teacher to complete the target tasks.

Based on this framework, online discussion forums were designed as the community of inquiry where the participants were involved in the three presences. As shown in Table 3.1, the three presences were integrated as components of online discussions. The four phases of cognitive presence were operationalized through the steps of implementing online discussion.

The social presence and the teacher presence were integrated in the design of online discussion and the teacher's roles in online discussion.

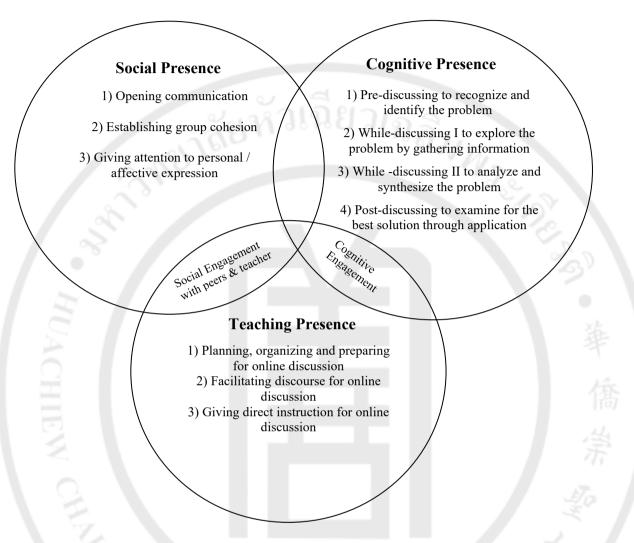


Figure 3.1 The conceptual framework of designing and implementing an online discussion (adapted from the CoI Framework of Garrison et al., 2000, p.3)

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Table 3.1 The Three Presences in Online Discussion:

Four phases of creating cognitive presence, the social presence and the teacher presence in online discussion

Four phases of Cognitive Presence	Steps of implementing online discussion
(Garrison et al., 2001, p.4-5)	
1) recognizing and identifying the	1) Pre-discussing
problem or issue	At the beginning of online discussion, the teacher posted the
(300)	triggering events by giving introduction to the reading tasks :
	-informing the skills assessed in each task
3	-explaining each reading task, the task directions and task
	duration
2) exploring the problem or issue	2) While-discussing 1
through gathering of relevant	During the discussion, the participants and the teacher
information and perspectives through	participated in the discussions by:
individual searches and discourse	-brainstorming for the ideas, expressing personal ideas
6	-repeating or restating the previous ideas of others
五	-giving critique or contradictions to others' ideas
= 1	-explaining ideas upon the external resources
2	-giving unsupported or irrelevant ideas
3) analyzing and synthesizing to make	3) While-discussing 2
sense of the existing information with	During the discussion, the participants and the teacher:
the goal to reach resolution through	-giving critique or contradiction of previous ideas and giving
reflection, sharing and critically	reasons to support " I disagree/ I don't think so because"
analyzing the best ideas	-restating the previous ideas, expressing agreement or and giving
372	additions
120	-Justifying hypothesis or personal ideas supported by external
AKD	resources such as teachers' comments on previous work, reading
TE	exercises, content in the handout and online dictionary
	-creating or justifying the solutions to the problem (e.g. the
	answers for the reading task)
4) examining for the best solution	4) Final-discussing
through application	At the final stage, the participants examined the solutions by:
	-Using experience to defend the solutions and
	-Making a consensus on the solutions (answers)

Social Presence	1) Opening Communication			
Open communication	-having each group member introduce themselves and had			
Group cohesion	them open their cameras to get to know each other			
Personal / Affective Expression	2) Establishing Group Cohesion			
	- establishing collaboration and assigning group members to			
	support each other			
196	3) Giving Personal / Affective Expression			
617610	- having a small talk with individual students and paying			
Collo	attention to personal characteristics of individual students and			
	factors affecting their participation in discussion			
Teacher Presence	1) Planning, Organizing and Preparing for the Online Discussion			
Design & Organization	The teacher planned tasks for online discussion with clear			
Facilitating Discourse	learning goals, brief instructional materials, discussion forum			
Direct Instruction	posting requirements and assessment procedures.			
G /	2) Facilitating Discourse for the Online Discussion			
A	The teacher motivated students to learn and increase their			
\circ	engagement in discussions by pointing areas of agreement /			
	disagreement, seeking to reach consensus			
豆	encouraging, acknowledging, or promoting student			
	contributions, drawing in participants and prompting discussion.			
	3) Giving Direct Instruction for the Online Discussion			
<u> </u>	The teacher gave direct instruction by: presenting content and			
	questions, narrowing down the discussion to the specific issues,			
	giving a wrap up of the discussion, confirming understanding,			
	pointing misperceptions and responding to technical problems.			

3.2 Research Design

In this research, an quasi-experimental research was designed based on mixed-methods for data collection. Firstly, the research aimed to investigate the effects of incorporating online discussion forums on students' improvement of reading comprehension skills of Thai first-year students studying in a private university. Secondly, it aimed to examine aspects of learning or knowlege the students have learnt from scaffolding interactions in online discussion forums. Additionally, it also investigated the extent to which the students use what they have learnt for improving their learning.

3.3 Research Participants

The participants of the study were 50 first-year English major students who enrolled the course 'EG1003 Basic Reading-Writing in English' at Huachiew Chalermprakiet University in 2021. The participants were informed about the research project by the researcher. With their voluntary, fifty students participated in student reflection journals and thirty participants participated in the Pre-and Post-tests. The participants for the Tests were selected based on random sampling. Twelves participants were selected to participate in the interview. The researcher selected them using purposive sampling based on their written responses in the reflection journals and their roles during the online discussions. The participants were homogenous in their native language and ages, but heterogeneous in genders and levels of English proficiency. The interview participants were selected using purposive sampling.

3.4 Research instruments

In this study, several research instruments were used to collect the data: Pre-/Post-Reading Comprehension Tests, four Reading Tasks, Interview Protocol, Teacher Journals, Student Journals, and Discussion Forums on Microsoft Team.

3.4.1 Pre-/Post Reading Comprehension Tests

The pre- and post- tests were used to measure students' reading comprehension skills. The pre-and post tests are *Reading Comprehension test*, part of the Michigan English Test (MET) developed by Michigan Language Assessment, University of Michigan available online on its website: https://michiganassessment.org/resource-type/sample-test/. The test consisted of 30 multiple-choice items, which measures the reading comprehension skills: Understanding main idea and identify purpose, identify supporting details, understanding vocabulary in context, drawing inferences and conclusions, understanding rhetorical function and synthesizing ideas. The test lasted for 40 minutes. The rationale of using the MET was, firstly, the Michigan English Test is recognized as a standardized test of English language proficiency among schools, institutions, government agencies, and business around the world. Its *Reading Comprehension Test*, is renowned as a reliable and valid measure used for assessing reading skills of English language learners. The MET is a multilevel test of high-beginner to advanced levels and is also aligned to the CEFR levels (A2-C1), and this allows researchers and educators to base students' test scores on the levels of CEFR. The test items in the Pre-and Post-tests were the same. The Pre-and Post Reading Comprehension Tests were presented in Appendix A.

3.4.2 Online Discussion Forums & Four Reading Tasks

3.4.2.1 Online discussion forum

Twelve channels or discussion forums (Group 1- Group 12) were created on Microsoft Teams of the course EG1003. The students were assigned to work in groups of 4-5 students and joined the channel of their groups. While they were collaborating to complete the reading tasks, one of their group members was assigned to share the screen. On the shared screen on MS teams, all members could see the details of the reading tasks on the MS Word worksheet such as the task instructions, reading texts and questions. The teacher attended the online discussion forums of each group. Due to the limited class time, the teacher had attended the students' discussion of each group for 1-2 times. Each attendance for each group lasted about 8-10 minutes. The students were allowed to manage their own forums (Group Channel). They shared the screen to share files of document, asked questions or gave opinions using microphone, posted a message and sent files on the POST or via CHAT channel.

3.4.2.2 Four Reading tasks

During the implementation of the online discussions, four reading tasks were assigned to the participants. The four reading tasks aimed to have students practice a wide range of reading comprehension skills as follows: Reading Task 1 Understanding good paragraph, Reading Task 2 Identifying Topics & Pronoun referents, Reading Task 3 Identifying Topics, Main ideas, Signal words & Supporting Details and Reading Task 4 Identifying patterns of organization & signal words. These reading tasks were designed and sequenced based on the lessons, course content, and the level of task difficulty ranged from simple to complex levels. Four reading tasks were presented in Appendix B.

The participants were assigned to work in groups of 4-5 and join the group forums on MS Teams of the course EG1003. They were assigned to complete the four reading tasks based on the given learning schedule from the fifth week to the ninth week. During the online discussions on MS Teams, the participants brainstormed, discussed ideas, gave explanations, comments and suggestions to complete the tasks. Table 3.2 presented the descriptions of the four reading tasks.

Table 3.2 Descriptions of four reading tasks

Tasks	Reading Task 1	Reading Task 2	Reading Task 3	Reading Task 4
	(Total 15 scores)	(Total 15 scores)	(Total 15 scores)	(Total 15 scores)
	Understanding	Topics & pronoun	Topics, Main ideas, Signal	Understanding patterns of
	good paragraphs	referent	words & Supporting	organization & signal
		2 2010	Details	words
Target	1. Identify a good	1. Understand the gist	1. Understand the main	1. Understand the patterns
skills	paragraph	(general idea) of a	points and supporting	of organization of
measured	2. Understand the	paragraph	details of paragraphs	paragraphs.
	gist (general idea)	2. Identify and write the	2. Identify the topics,	2. Identify the patterns of
	of the paragraph	best topic of the	main ideas, signal words	organization and signal
//	8	paragraphs	and supporting details of	words of paragraphs.
		3. Find referent pronouns	paragraphs	3)

3.4.3 Student Reflection Journals

The participants were asked to write four reflection journals for four online discussion sessions. The reflection journal was used to gather the data regarding their learning and cognitive development. On the journals, the participants were asked to write their responses to the critical questions about reading problems, roles in discussions, aspects of learning or knowledge they have learnt from participating in online discussions, attitudes towards online discussions, techniques or what they apply for improvement including their level of reading ability and areas for improvement. The Student reflection journal was presented in Appendix C. The participants' written responses on the journals were qualitatively analyzed using content analysis and the analyzed responses were coded into themes.

Regarding the validation of the student reflection journal, the items on the journal were validated using the Index of Congruence (IOC) by three university lecturers having expertise in English language research. The experts were asked to indicate the degree to which each item /question taped the domain measured by rating a three-point scale (-1 = the item does not tap the domain, 0= unsure or unclear, and +1 = the item clearly taps the domain). The results showed that all items were scored 1 and the IOC value of each item was 1. Consequently, the overall IOC value of the student journal was 1.00 indicating that all the items were acceptable.

3.4.4 Interview Protocol

The semi-structured interview were conducted with twelve participants. The interview was used to collect the data regarding attitudes towards using online discussion as reading instruction, students' learning experience about online discussions, aspects of learning/knowledge they have learnt from participating in online discussions, and how the participants make use of the aspects of learning for their reading improvement. The interviews were conducted in Thai and lasted for 15-20 minutes. The interview questions were validated by experts with research experience and the interview protocol was trialed before the actual interview session. The interview questions were presented in Appendix D.

To validate the interview protocol, the researcher used the evaluation form with 5-point rating scale. The interview protocol was evaluated in eight aspects: objective, content, item clarity, wordiness and response, balance, choice of word and sequence of questions and format. Overall, the quality of the interview protocol was high, with the high mean level of agreement (\bar{x} = 4.78). Based on these results, the interview questions were acceptable.

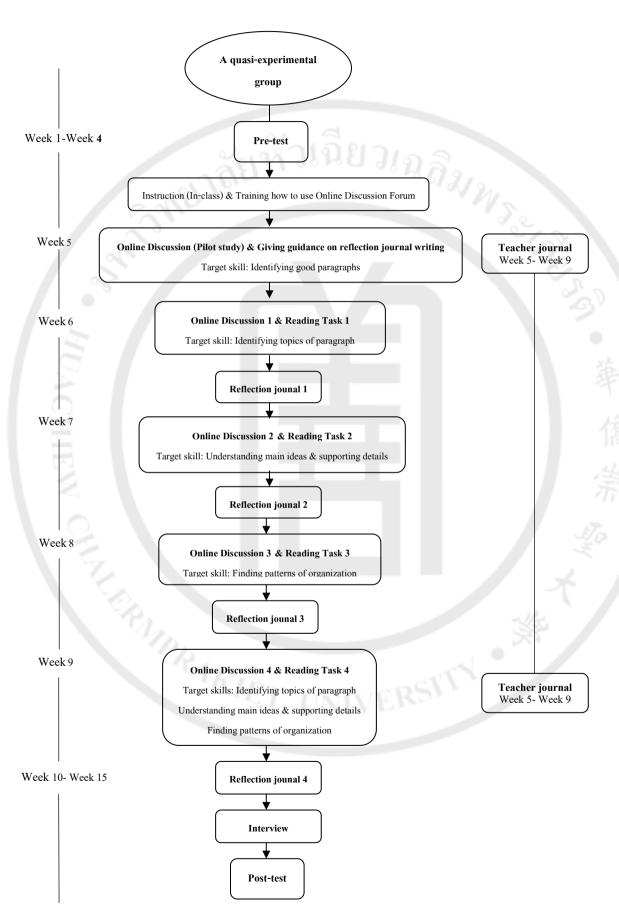
3.4.5 Teacher Journals

Teacher journals were used to collect the data while observing the online discussions. Emerging themes and interesting incidents were noted in teacher journals. In each discussion session, the teacher took notes starting from the fifth to the ninth week of the course. The data from the teacher journals were used to triangulate the data from student journals. The teacher journal was presented in Appendix E.

3.4.6 Microsoft Team Application – Platform for Online Discussion

Discussion Forums which are a feature available on Microsoft Team (MS) were used for organizing group online discussions. The researcher created 12 channels (discussion forums) for 12 groups of the students on the EG1003 MS Teams. The two main features of discussion forums were the 'Post' feature and the 'Meet' feature. The 'Post' feature in MS Team allows participants to write and send messages to other members in the class and the messages posted are recorded in Post History. The "Meet' feature was used for making a video discussion and the video could be recorded as audio files 'MP4'. The picture of MS Teams of EG1003 with online discussion forums was presented in Appendix F.

3.5 Research procedure



3.6 Data collection

3.6.1 Preparation & Pre-test

During Week 1 to Week 4, the students learned the fundamental reading skills such as scanning, skimming, prefix, suffix and roots of vocabulary, components of a paragraph /reading texts and how to identify a good paragraph. The researcher trained the students to use online discussion forum on MS Team application. The training aimed to familiarize the students with functions of online features of the discussion forum. The rules or teacher-student agreement about the use of online discussion forum are clearly made and informed. Then the teacher assigned the students to participate in the Discussion Trial, which was the pilot phase of the study. The online discussion and the students' roles during the discussion were observed to find out the problems or provide assistance to the students. The information from the pilot study was gathered and used to limit problems during the online discussion.

Before the actual implementation of online discussion, the pre-test was conducted using the MET Reading comprehension Test. Then the course instructor prepared for the online discussions by planning tasks and activities for online discussion with clear learning goals, brief instructional materials, discussion forum posting requirements and assessment procedures. Prior to the online discussion forums, the teacher provided an example of how to perform each reading task and explanations in order to make the participants understand how to perform the tasks. To establish Anderson et al. (2001)'s aspect of teacher presence for facilitating cognitive and social presence, the course instructor used different types of facilitating techniques during the online discussion sessions to assist students in completing the tasks, to maintain students' interest, to motivate them to learn and to increase their engagement in the discussions.

3.6.2 Implementation of Online discussion 1-4 and four reading tasks

Four online discussions were held in a series starting from the fifth week of the course to the ninth week. The first three online discussion sessions focused on a single target reading skill and assigned students to complete reading tasks. Meanwhile, the fourth online discussion focused on multi reading comprehension skills and students were assigned to complete the final task.

During the online discussions, the teacher joined the group forums to monitor the student discussion. The teacher played a role as the facilitator and took part in the discussion by discussing ideas and providing assistance (e.g. giving examples, giving explanation, pointing

to the key points and raise guided questions) to assist students achieve the reading tasks. During the online discussions, the teacher also observed the classes, assesses students' learning and took notes of information about the students' performance. After each online discussion, the teacher gave a wrap-up session to summarize the skills and techniques learnt. Then the participants were asked to write a reflection journal and submit to the teacher.

3.6.3 Interview

After the online discussions were completed, the researcher interviewed twelves participants by their voluntary. The interview participants were selected based on their written descriptions in the reflection journals and online discussion performance. Emerging interesting issues on teacher journals were taken into account. The semi-structured interview was conducted in a relaxing environment or settings. The researcher interviewed the participants in Thai to facilitate their understanding and the interviews were audio-recorded.

3.6.4 Post-test

In the final step of data collection, the post-test was conducted to assess the participants' reading comprehension skills after participating in online discussion forums. In Week 15, the researcher asked the participants to do the post-test. After the test administration, the researcher quantitative analyzed the Pre-and Post-test scores using inferencial statistics.

After the implementation of all instruments and data collection, the researcher gathered the information from different research instruments. The researcher then triangulated the data derived from different sources for reliable findings.

3.7 Data Analysis

The data were analyzed in order to answer the research questions. The quantitative data of the student demographics were analyzed for means, maximum, minimum, average, standard deviation and percentage. The students' scores from the pre-and post-tests were evaluated using IBM SPSS Statistics 26 for the means, maximum, minimum, average, standard deviation. The differences between the reading comprehension score obtained from the pre- and post-tests were calculated using T-test. The differences within group were examined by the pair T-test. The qualitative data regarding the aspects of learning or knowledge the students learn from participating in the online discussion forums derived from student reflection journals was analyzed using content analysis, coding into themes and discussed in relation to Garrison et al's

(2000) framework. The data from the teacher journals were coded into themes and analyzed using content analysis. To ensure data triangulation, the coding themes were validated by three experts with experience in mix-methods research. The transcriptions of the interview were translated into English and the data were analyzed using qualitative work.



CHAPTER 4 RESULTS

This chapter presents the results of pre-/post-reading comprehension tests, students' performances on four reading tasks, four student reflection journals, student interviews, and teacher journal. The results were presented in order of the research questions:

4.1 Research question 1) What are the effects of using Online Discussion Forums on students' reading comprehension skills?

In response to this question, the quantitative results collected from the Pre-and Posttests and four reading tasks were presented and discussed.

4.1.1 The results of the Pre- and Post- Reading Comprehension Tests

The pre- and post-tests consisting of 30 multiple-choice items were used to measure students' reading comprehension skills before and after implementing 4-week online discussion forums in the course of EG 1003. Based on the results of Pre-and Post-tests, after the 4-week online discussion forums, the participants have performed better on their post-reading comprehension test. Overall, the students' test performances were at a moderate level. The mean scores of their pre-and post-tests ranged from low to moderate levels.

Table 4.1 Pre- and Post- Test Results of the Reading Comprehension Test

Test	N	Mean Score	SD	Mean differences	t	df	Sig. (2- tailed)	て
Pre-test	30	11.53	5.367	-4.333	-6.945	29	0.000*	
Post-test	30	15.87	5.008		-01	D		

^{*} p < 0.05

As shown in Table 4.1, the students' post-test mean score for reading ability (\overline{X} =15.87, SD = 5.008) was higher than that of the pre-test mean score (\overline{X} = 11.53, SD = 5.367). The paired t-test showed a significant difference between the pre-test and post-test scores (t = 6.945, p < 0.05). The results from the pair t-test which showed a significant difference in the Pre-and Post-

test scores and the high post test scores of individual student indicates that the use of online disscussion forums plays a role in students' learning and their reading comprehension skills.

4.1.2 Students' Performance on Four Reading Tasks

In implementing the online discussion forums, four reading tasks were assigned to the participants. The participants worked in groups of 4-5 to discuss in group forums on MS Teams of the course EG1003. They were assigned to complete the four reading tasks based on the given learning schedule from January-April 2021. During the online discussions on Microsoft Teams, the participants brainstormed, discussed ideas, gave explanations, comments and suggestions in order to complete the tasks. The four reading tasks were assigned to have students practice a wide range of reading comprehension skills. These reading tasks were sequenced according to the level of difficulty of reading comprehension skills as follows: Reading Task 1 Understanding a good paragraph, Reading Task 2 Identifying Topics & Pronoun referents, Reading Task 3 Identifying Topics, Main ideas, Signal words & Supporting Details and Reading Task 4 Identifying patterns of organization & signal words. Overall, the students' performance on all the four reading tasks were high. I The scores, mean scores, standard deviations and percentages of students' performance on reading task 1-4 were presented in Table 4.2 and Figure 4.1.

Table 4.2 Scores and Percentages of Students' Performance on Reading Task 1 -4

Group	Reading	g Task 1	Readi	ng Task 2	Read	ding Task 3	Readi	ng Task 4	Average
1 5	(Total 1	5 = 100%)	(Total :	15 = 100%)	(Total 15 = 100%)		(Total 15 =100%)		percentage
	Score &	Percentage	Score &	Percentage	Score & Percentage		Score & Percentage		
G1	15	100	14.5	96.67	14.25	95.00	12.19	81.25	93.36
G2	15	100	14	93.33	13	86.67	15.00	100.00	95.00
G3	15	100	15	100.00	14.75	98.33	14.06	93.75	80.50
G4	15	100	14.5	96.67	12.25	81.67	15.00	100.00	77.68
G5	15	100	15	100.00	14.75	98.33	14.53	96.88	81.29
G6	15	100	15	100.00	14	93.33	14.53	96.88	80.04
G7	15	100	14	93.33	13.25	88.33	15.00	100.00	95.40
G8	10	66.7	14.25	95.00	13.75	91.67	14.06	93.75	86.79
G9	5	33.33	12.25	81.67	9.75	65.00	13.13	87.50	66.88
G10	5	33.33	13.5	90.00	12.25	81.67	13.13	87.50	73.13
G11	15	100	10.25	68.33	10.5	70.00	13.13	87.50	81.45
G12	10	66.7	10.5	70.00	10.75	71.67	15.00	100.00	77.10
MIN	5	33.33%	10.25	68.3%	9.75	65.0%	12.19	81.25%	
MAX	15	100%	15	100%	14.75	98.3%	15	100%	

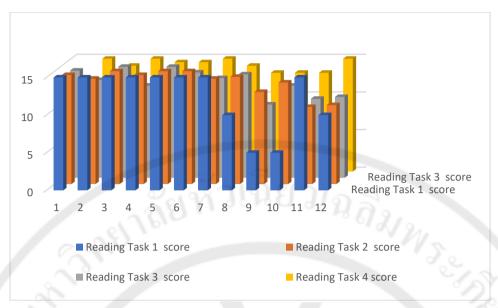


Figure 4.1 Students' Scores on Four Reading Tasks

Table 4.3 Mean Scores and Standard Deviations of Student Performance on Four Reading Tasks

Task	Mean score	SD	Percentage
Reading task 1	12.50	3.99	83.34
Reading task 2	13.56	1.68	90.42
Reading task 3	12.77	1.70	85.14
Reading task 4	14.06	0.96	93.75
Overall			88.16

As shown in Table 4.2 and Table 4.3, the students' overall performance on the all four reading tasks were over 80%, which were considered 'high'. In Reading Task 1, the mean score is at a high level with 12.50, (SD = 3.99). Most groups (8 groups) of participants obtained the full score 15 scores, 100% while a few groups (Group 9, 10 and 12) had low - moderate scores ranging from 5 to 10 scores (33.33% - 66.7%). In Task 2, the mean score was quite high with 13.56 (SD = 1.68). The majority (9 groups) completed the task with more than 90% of the total score and the remaining groups (Group 9, 11 and 12) obtained moderate – high scores (20.5-24.5) ranging from 68.3% - 81.7%. Regarding Task 3, the mean score was at a high level, with 12.77 (SD = 1.70). Nine groups acheived this task with more than 90% of the total score whereas three groups (Group 9, 11 and 12) were between moderate -high levels (19.5-21.5) ranging from 65% -71.7%. It is important to note here that due to the more complexity and

level of difficulty of the Task 3, student performance on this task was lower than their performance on the other tasks. As for Task 4, the mean score was high with $14.06 \, (SD=0.96)$. All groups of the participants achieved the task with more than $80\% \, (81.25\% - 100\%)$, indicating that the participants' performance on Task 4 was between a high and a very high level. When considering the group performance on each task, the results show the consistency in the scores of most groups (Group 1-8). Their scores were between a high - very high level across the reading tasks. In the meantime, a few groups of participants (Group 9, 10, 11 and 12) have reflected some improvement in reading comprehension skills. Their performance on Task 2 (70%-90%), Task 3 (65%-81.7%) and Task 4 (87.5%-100%) were higher than their performance on Task 1 (33.3% -66.7%). Based on these results, it can be concluded that the participants were able to complete the reading tasks successfully, and that their overall performance on reading tasks were high. They were able to identify good paragraphs and find good topics, pronoun referents, main ideas, supporting details, signal words and patterns of organizations of paragraphs.

In addition to the quantitative data, the qualitative data obtained from student journals and interview revealed the integration of online discussions in the reading course affected student learning. The participants reported about reflections on their learning. They assessed their own and peers' performance, identified their own and peers' strengths, weaknesses, particular areas for improvement including setting their own learning goals. These excerpts reflect the effects of online discussions on student learning.

"My reading abilities or skills were at a moderate level because I was not able to read clearly and correctly. My reading is not natural and I still cannot give appropriate pauses when reading sentences. I cannot pronounce or speak with accent correctly. I also cannot read fluently."

(Participant 1 - Reflection Journal 2)

"Online discussion made me recognize my peers' skills. I have also recognized my weaknesses. For example, I spoke too fast and that made my peers fail to understand me. I have also learnt techniques in doing tasks from the teacher."

"Online discussions made me and peers in my group confident to express opinions more and *recognize levels of skills of my peers, the extent to which they understand the texts.* This made us use our knowledge to advise or help peers in the aspects /issues they did not understand."

(Participant 32 - Reflection Journal 2)

"My peers read the articles quickly, but they did not interpret the meanings based on the meanings the articles really conveyed. They need to slow down and be more careful."

(Participant 8 - Reflection Journal 4)

"I think I was at a moderate level. My classmates understood the meanings of vocabulary and can understand the reading texts. Their reading abilities were better than mine."

(Participant 23–Reflection Journal 4)

"I think group discussion is useful to me because I dare to speak up and express my opinions and I exchange knowledge with the teacher and peers. More importantly, I recognize that my peers have good skills and this makes me need to develop my abilities."

(Participant 14- Interview)

"What I find it useful from online discussion is teacher and peers' exchanging ideas.
...... I think when comparing with my peers, my reading skills was at fair level because I do not know much vocabulary. This makes me not able to understand the meanings of articles, but after I study this reading course, my reading skills have been developed."

(Participant 39- Interview)

4.1.3 Summary of the results of research question 1

The statistical analyses of students' scores from the Pre-Post Tests and four reading rasks were presented to corroborate the effects of online discussion forums on students' English reading comprehension skills. The t-test results have shown that the students' post-

test scores were significantly higher than those of the Pre-Test. This reflects that through participating in online discussion forums, the students were exposed to learning opportunities from their peers and the teacher and received feedback for their learning improvement.

The descriptive statistics from the Four Reading Tasks have shown the high mean scores of students' English reading. This indicates that students' English reading abilities were at a high level. There was also a gradual increase in students' reading scores from Reading Task 1 to Reading Task 2 and from Reading Task 3 to Reading Task 4. These results have shown their progress in English reading comprehension skills, and that the students gradually learned and developed their reading ability. It can be explained that the use of online discussions as a part of reading instruction in EFL classrooms can provide students with opportunities to learn how to complete reading tasks, reflect their own and peers' performance, and learn how to improve their reading ability. Based on these results, it can be concluded that the use of online discussions assist students' learning in EFL classrooms and appears to postively affect their reading comprehension skills.

The qualitative data from student journals showed that the use of online discussions as part of reading instructon have affected the students' learning process. Doing collaborative reading tasks and having interactions with peers and the teacher provided the participants opportunities for reflecting their learning. The participants assessed their reading abilities, compared their own with peers' performance and recognized their strengths and weaknesses. With the feedback obtained / guidance from their peers and the teacher, the participants can identify areas/aspects of learning to be improved as well as setting clear personal learning goals.

4.2 Research question 2) What aspects of learning / knowledge do students learn from scaffolding interactions with peers and teacher in the online discussion forums?

To answer this question, the qualitative data drawn from student responses on their four reflection journals, student interviews and teacher journals were analyzed using content analysis. The emergent themes were shown to illustrate aspects of learning or knowledge the participants learnt from having interactions and doing collaborative tasks with peers and the teacher in the online discussion forums. The themes were presented as follows:

4.2.1 Cognitive gains that facilitate students' learning and reading comprehension skills

The online discussion forums played a role as a springboard for scaffolding. In other words, they were the rooms where the participants got assistance or help from their peers and the teacher. While engaging in the online discussions and interacting with peers and the teacher, the less capable students have been scaffolded by the more knowledgeable ones. The qualitative responses have shown that the scaffold interaction gave students cognitive gains which facilitate the process of their learning and reading comprehension for task completion. The students have known meanings of new words, how to pronounce words and grammar. They have also gained more comprehension of the reading texts, reading techniques and learning skills for completing the tasks. These excerpts have reflected students' recognition of cognitive gains:

4.2.1.1 Gains in vocabulary, pronunciation and grammar

"I learn new words, how to find the main points and important ideas. I understand the content of reading texts more and be able to understand the texts faster. I also learn to work with friends and exchange ideas – learning to respect the others' ideas."

(Participant 5 - Interview)

"I learn more vocabulary from peers who know vocabulary I don't. I learnt how to pronounce words and ways or techniques of reading and decoding the meanings from the teacher and peers."

(Participant 1 Reflection Journal 2)

"I remember *peers' pronounciation of words and use what I learn to*practice my pronunciation and reading aloud at a word and sentence level.

(Participant 11- Reflection Journal 1)

"Vocabulary- some words I don't know their meanings, but friends do, so we share what we know. I also learn about finding patterns of organization of the paragraphs. Friends in our group have different ideas, so we share our ideas and finally we got the best answers."

(Participant 7 – Interview)

"I got different ideas of people and understand things from different viewpoints. For example, a word with different parts of speech has different meanings. When a word is used in different contexts, it may convey different meanings."

(Participant 3 – Reflection Journal 3)

"I learn vocabulary and understand the meaning of a sentence more. I also learn how to write a main idea with correct structure. I can consult my friends and learn additional things that I don't."

(Participant 38 Reflection Journal 2)

"I learn more about English grammar from reading texts and changing ideas with friends and the teacher.

(Participant 26 Reflection Journal 1)

"I get new words, idioms and reading techniques for understanding the texts."

(Participant 34 Reflection Journal 4)

4.2.1.2 Gains in text comprehension and reading techniques and skills. The participants have gained more comprehension about the reading passages and learnt techniques for identifying main ideas and finding organizational patterns of paragraphs as presented in these excerpts.

"Doing online discussion helps enhance my knowledge learnt from peers and the teacher. My peers and I don't understand some content on reading task, but the teacher can help us get clear understanding. Also, I have a chance to exchange ideas with my friends."

(Participant 5 -Interview)

"At first, I am confused about *topic and main idea*. When I interact with my friends, they help explain it to me and I understand more."

(Participant 40 Reflection Journal 2)

"I learn how to find main points of paragraphs and important details from discussing with friends."

(Participant 42 Reflection Journal 4)

"I learn how to write a good topic to cover the ideas in a paragraph and I learn to read the whole paragraph in order to understand and be able to identify pronoun referents."

(Participant 22 Reflection Journal 1)

"I understand about topic and main idea more on how to write those things. I learn how to find a keyword in a paragraph.

(Participant 10 - Interview)

"Looking for a keyword in a paragraph can help get the ideas about the paragraph faster and it is not necessary to translate all words in a paragraph."

(Participant 8 – Reflection Journal 4)

"I learn more vocabulary from peers who know more vocabulary than me. I learn how to pronounce words and ways or techniques of reading and decoding the meanings from the teacher and peers."

(Participant 1 Reflection Journal 2)

"I learn new words, how to find the main points and important ideas. I understand the content of reading texts more and be able to understand the texts faster. I also learn to work with friends and exchange ideas – learning to respect the others' ideas."

(Participant 5- Interview)

"Vocabulary- some words I don't know their meanings, but friends do, so we share what we know. *I also learn about finding patterns of organization of the paragraphs.* Friends in our group have different ideas, so we share our ideas and finally we got the best answers."

(Participant 7 – Interview)

"I learn many techniques that I can apply to reading articles and for academic reading. And I learn many new words that I have not known."

(Participant 15 - Interview)

"What I learn is the skills and techniques that the teacher gave us. Even if I have some knowledge, but the suggestions from the teacher can help me develop my skills to be more proficient and have more understanding about the lessons."

(Participant 32 Reflection Journal 2)

4.2.2 Students' learning of social skills and self-confidence

The participants reported social aspects of their learning while interacting with others on online discussion forums and assisting their peers' learning. Based on their written responses on student journals and interviews, they had social and psychological gains in terms of self-confidence, a sense of belonging in a group and teamwork, being open to and respect different ideas and how to negotiate for different ideas and make an agreement. These excerpts have reflected their social and psychological gains on the aforemention themes.

4.2.2.1 Building self- confidence, a sense of belonging in a group and emphathy and establishing good relationships and cooperation for teamwork

"My English skills was quite good. When my peers had problems, they often asked for my help. I was given trust from my friends and accepted to be a group leader in online discussions. This made me have more efficacy in my skills."

(Participant 32 - Reflection Journal 2)

"It's good idea that we can exchange ideas to each other. Sometimes our ideas are not absolutely right. When discussing with the teacher and peers, *they suggest* and help us understand more. The way we can discuss like this helps us be confident to give opinions. This is good for us."

(Participant 3 – Reflection Journal 3)

"The online discussion allows me and my peers to be confident to express ideas. We learn that our skills are varied and our understanding of the lessons are

at different levels. This makes us help our peers in their learning. We give suggestions or help them by explaining the points they do not get clear understanding."

(Participant 32 Reflection Journal 3-4)

"Participating in discussions and exchanging ideas with friends makes me more confident in my answers. Sometimes I may not get the right answers, but peers can help explain to make me understand. Also, listening to teacher' discussions make me understand more."

(Participant 9 Reflection Journal 4)

"I think interacting with the teacher and peers makes me learn different ideas.

This makes everyone be confident to share ideas to each other. It makes us have a closer relationship and can freely talk to each other with no shyness."

(Participant 4 – Reflection Journal 4)

"What I learn from working in groups is a sense of unity. We help each other in completing the tasks. We filled up things that friends don't know. I know friends more and learn 'teamwork'."

(Participant 30 -Reflection Journal 4)

"The advantage of online discussion is that we practice expressing opinions, having arguments and giving reasons to support our opinions. *We also practice working in teams*."

(Participant 17 Interview)

"I've exchanged the points that I don't get clear and have shared knowledge with friends. I feel that I dare to express myself because some people in the group don't know who I am. This makes my group have a sense of unity in cooperating to complete the work."

(Participant 36- Interview)

4.2.2.2 Learning to be open-minded and respect to different ideas and how to negotiate different ideas for making an agreement

"We need to have a sense of unity to complete the assigned tasks. We need to listen to others' opinions. We should not be self-centered and should not think that our own ideas are superior to others' ideas."

(Participant 27- Relfection Journal 2)

"The useful point from exchanging ideas I use in learning is that being *open-minded to others' ideas more*. When we have opportunities to *express ideas, do it on our best and in appropriate way. We should not look down others' ideas."*(Participant 37- Reflection Journal 2)

"The additional thing I learn from online discussion is learning to be open for different opinions. Even if we have different ideas, we try to negotiate and make an agreement. We try to understand what each of us think and say."

(Participant 32 Reflection Journal 2)

"I get many advantages from the teacher's suggestions and peers' ideas. **This makes**me learn things from different perspectives."

(Participant 21-Reflection Journal 3 & 4)

4.2.3 Summary of the results of research question 2

The qualitative analyses of the participant responses on journals and interveiws can be concluded to answer the question. The participants learnt many aspects of learning or knowledge from participating in online discussions. They received cognitive gains that facilitate their learning and reading comprehension. The knowledge or aspects of learning include meanings of new words, how to pronounce words and grammar, gained more comprehension of the reading texts, reading techniques and learning skills for completing the tasks. Apart from cognitive gains, the participants reported social gains that they learnt from interacting and collaborating with others on the online discussions and from assisting their peers' learning. The participants developed social skills and had psychological development

in terms of having more self-confidence, having a sense of belonging in a group and teamwork, being open to and respect different ideas, and lastly, being able to negotiate for an agreement.

4.3 Research question 3) How do students use what they have learned from online discussions to improve their reading comprehension skills?

The qualitative data gathered from the student journals and interviews were drawn to answer this question. The participants' responses on journals and interviews were qualitatively analyzed using content analysis and grouped into four themes, and then the data were quantitatively analyzed for frequencies and percentages. The results showed that the participants learnt four aspects / types of knowledge and used for improving their reading skills. Table 4.4 presented the frequencies, percentages and ranks of the learning aspects / knowledge the students have found effective and used for their reading improvement.

Table 4.4 The frequencies, percentages and ranks of the learning aspects / knowledge that were used in improving reading skills by the participants

Aspects /knowledge learnt and used for	Frequency	Percentage	Rank
reading improvement		(100%)	
Reading strategies & techniques	30	30.0%	1
1. Practice how to identify the topics /main ideas of reading	10	10%	
texts.			
2. Read the whole texts and skip unknown words.	6	6%	
3. Read at a slower pace and processing for the meaning of	4	4%	
each sentence.			
4. Skim & look for keywords to get the gist of a paragraph.	5	5%	
5. Reread a specific part of the texts that are unclear.	2	2%	
6. Read the texts & look for signal words to identify the pattern	3	3%	
of organization.			
Study skills	27	27.0%	2
7. Exchange ideas with others can help learn things from	9	9%	
different perspectives.			
8. Review the lessons regularly.	5	5%	
9. Take notes of lectures and do exercises more frequently.	5	5%	

10. Analyze the texts and think logically.	2	2%	
11. Study the lessons to prepare before the class & discussions.	3	3%	
12. Be confident to speak up their ideas/give opinions/answer	3	3%	
questions.			
Pronunciation & Reading fluency	25	25.0%	3
13. Practice how to pronunce words correctly and clearly.	15	15%	
14. Practice reading difficult words .	4	4%	
15. Practice reading aloud to increase reading fluency.	3	3%	
16. Practice reading with rising and falling intonation / stress.	2	2%	
17. Make a list of words that they often mispronounced for	1	1%	
extra practice.			
Vocabulary learning technique of guessing word meanings	16	16.0%	4
18. Study meanings of new words /jot down new vocabulary	10	10%	
and its meaning.			
19. Practice guessing meanings of unknown words from the	4	4%	
context.			
20. Recognize different meanings of a word and choose the	2	2%	
appropriate meaning of words to the context.			

As shown in Table 4.4, with the highest percentage of 30.0%, reading strategies and techniques learnt from their peers and the teacher were perceived as the most useful learning aspect that the participants applied to improve their reading skills. The majority of participants have applied a technique of identifying the topics and main ideas, with the highest percentage of 10.0%. Some participants (6%) read through the whole texts and skipped unknown words. 5% have used skimming and looking for keywords to get the gist of the texts and 4% learnt to read at a slower pace and thinking while decoding the meanings of each sentence. In addition, 3% read the texts and look for signal words to identify the pattern of organization while 2% reread a specific part of the texts when they were unclear and another.

With 27.0%, *study skills* were perceived as the second aspect the participants found effective for improving their reading comprehension. With the highest percentage of 9%, exchanging ideas with other people was found an effective strategy. The participants perceived that this strategy helped them learn things from different perspectives and reasons. 5% of the participants found it useful to review the lessons regularly and another 5% did note taking of

lectures and did exercises more frequently. Additionally, fewer participants (2%) mentioned other useful study skills: preparing for the class and online discussions (3%), having a logical thinking (2%) and being confident to speak up or give opinions (3%).

Pronunciation and reading fluency were perceived as the third learning aspect useful for reading improvement, with 25.0%. The participants perceived that it was worth applying peers' and the teacher's pronunciation as the models for improving their reading and pronunciation. Most participants (15%) learnt how to pronunce words correctly and clearly and did pronunciation practice. Some participants (4%) practiced reading difficult words and another 3% practiced reading aloud to increase their reading fluency. Besides, 2% practiced intonation and another 1% made a list of words they often mispronounced for improving their pronunciation.

With 16.0%, vocabulary learning techniques and guessing word meanings were the aspects the participants considered as effective for reading improvement. The majority of the participants (10%) studied meanings of new words /jotting down new vocabulary and its meaning. 4% of the participants applied the technique of guessing meanings of an unknown word from the context and 2% recognized different meanings of a word when reading and they learnt to chosse the appropriate meaning of words to the context.

4.3.1 Summary of the results of research question 3

To answer the question, the quantitative and qualitative analyses of student responses on journals and interveiws show how the participants made use of what they have learnt from scaffolding interations with peers and the teacher through online discussions to improve their learning. The participants have applied four main learning aspects / types of knowledge for improving their reading comprehension skills. Reading strategies and techniques learnt from their peers and the teacher were the most effective learning aspects that the participants found useful and applied to improve their reading abilities. A wide range of study skills were also reported as the aspect of learning most participants found worth applying to improve their learning. Additionally, peers' and the teacher's pronunciation and reading fluency were perceived by the participants as useful modeling for their pronunciation and reading practice. And lastly, vocabulary learning techniques and guessing word meanings were the techniques the participants applied for increasing their vocabulary knowledge and reading comprehension.

4.4 Other findings: Students' attitudes towards online discussion forums

The qualitative analyses of student journals, student interviews and teacher journals provided data regarding students' attitudes towards online discussion forums. The qualitative data were coded into four themes and presented as follows:

4.4.1 Students' attitudes towards the presence of the teacher and peers and their roles in online discussions

The participants held positive attitudes towards the presence of the teacher and peers on online discussion forums and their roles in facilitating and providing assistance to the participants while having discussions in online learning environment. The following excerpts reflected their attitudes on teacher's and peers' presence and their roles in being prompt to assist and giving advice and explanations for completing the reading tasks.

4.4.1.1 Giving advices and explanations for completing the tasks

"Sometimes my ideas and friends' ideas are contradict and we need to discuss. *Having* the teacher giving advice during the online discussion is great. This makes us understand in many points that my friends cannot explain."

(Participant 23 - Reflection Journal 1)

"In the first two online discussions, we did not hear new ideas or different answers from group members, but the teacher helped giving support and guided us to the answers so we always learnt new things."

(Participant 21 - Interview)

"Sometimes when we have inquiries about the tasks, *the teacher will help us by giving explanation.....*

In each online discussion, the teacher comes in and asks if we have any questions about the reading task. And if we have questions, the teacher will explain those points to help us understand."

(Participant 13 -Reflection Journal 2 and Journal 4)

"I think discussing ideas is a good thing because each of us can share our ideas and take all the ideas to analyze in order to get the answers. Doing discussion can absolutely help decrease pressure because we can talk. I also like teacher involvement in discussion and the way she monitored to see which part we got struggled."

(Participant 22-Reflection Journal 4)

"I learn from the teacher. The teacher gives me detailed explanation. Although I do not have much knowledge, I can understand. The teacher gives a very good introduction."

(Participant 25 - Reflection Journal 2)

The following excerpts have reflected how peers assist the participants' learning.

"I am assigned by the group to be the head. While discussing online, I try to have everyone express ideas. Whenever group members misunderstand, I will explain to them."

(Participant 32- Reflection Journal 1)

"Peers and the teacher are very supportive. When we have problems or inquiries, we discuss and help each other solve the problems. We exchange ideas all the time to help us get clear and complete the reading tasks."

(Participant 31- Reflection Journal 4)

"I am impressive to have a discussion with friends and the teacher. For the first two online discussion forums, the group members cooperate very well. We help each other to find the answers, and this helps us finish the tasks within the given time. And the teacher joined the discussion and helped it easier for us to understand."

(Participant 34 Reflection Journal 3)

4.4.1.2 Psychological support from peers and the teacher

Some participants revealed that they received psychological support from peers in their groups and the teacher while participating in online discussions. Their reflections are illustrated in the following excerpts:

"I feel grateful to have peers and the teacher give help. The teacher will always give suggestions to the group in order to help us get to the right direction."

(Participant 11- Reflection Journal 4)

"Peers and the teacher are very supportive. When we have problems or inquiries, we discuss and help each other solve the problems. We exchange ideas all the time to help us get clear and complete the reading tasks."

(Participant 31- Reflection Journal 4)

4.4.2 Students' online learning experience and their attitudes towards incorportaing online discussions as part of reading instruction

The qualitative data from the interview and student journals revealed the participants' desirable learning experience about online discussions and their postive attitudes towards incorporating online discussion as part of instructions in English reading courses. The student excerpts are presented as follows:

"It's fun and enjoyable experience that everyone can express their ideas and the teacher is not too strict."

(Participant 12 - Reflection Journal 1)

"I think it is a good thing to participate in online discussions with peers. It helped me learn new things and know peers' different opinions which can give me new ideas. I got suggestions from teacher and that helped my peers and me in doing the learning task. Exchanging ideas with teachers can also help us understand and complete the tasks."

(Participant 1 Reflection journal 2)

"I am impressive to have a discussion with friends and the teacher. For the first two online discussion forums, the group members cooperated very well. We help each other to find the answers, and this helps us finish the tasks within the given time. And the teacher joined the discussion and helped it easier for us to understand."

(Participant 34 Reflection Journal 3)

"It is good that we have exchanged ideas with each other. Sometimes our idea is not quite good, but when we speak up our ideas, the teacher and peers can give good suggestions and make us understand more. The way we have chances to discuss and exchange ideas also allows us to be confident in speaking and sharing ideas."

(Participant 3 Reflection Journal 2)

"Participating in online discussion helps enhance my knowledge learnt from friends and the teacher. My peers and I don't understand some points on reading task, but the teacher can help us get clear understanding. Also, I have a chance to exchange ideas with my friends."

(Participant 8 - Interview)

"It's good that we can exchange ideas to each other. Sometimes our ideas are not absolutely right. When discussing with the teacher and peers, they can suggest and help us understand more. The way we can discuss like this helps us be confident to express ideas. This is good for us."

(Participant 3 - Reflection Journal 3)

"I think discussing ideas is a good thing because each of us can share our ideas and take all the ideas to analyze in order to get the answers. Doing discussion can absolutely help decrease pressure because we can talk. I also like teacher involvement in discussion and the way she monitored to see which part we got struggled."

(Participant 40 -Reflection Journal 2)

"I think that online discussion is good because I can know how peers think about my ideas and check if they understand them. And the teacher will know if we understand or which parts we don't understand so that the teacher will give more explanation."

(Participant 28-Reflection Journal 4)

4.4.3 Students' negative attitudes towards online discussion forums

However, one participant viewed that she did not learn anything from their peers during the online discussions. As the participant expressed on this excerpt:

"I rarely exchanged ideas with the group members, but I learnt from listening to peers and the teacher's talks. I did not learn something new. I think I rarely learn things from the group."

(Participants 6 Reflection Journal 2)

From this excerpt, it reflected that the partcipant was not comfortable expressing her opinions and might not be familiar with exchanging ideas with other group members. This may result from the participant's personality factor and mismatch between the class activity and her learning styles.

4.4.4 Students' problems in online discussions

Based on the qualitative data from student journals and interviews, some participants reported that they experienced certain problems while doing online discussions such as poor WiFi connection, students' lack of participation and expressing ideas in performing tasks and online discussions and possibility of conflicts in discussions.

"I would like the teacher to speak slower because some friends may not be able to follow *because of the poor Internet connection*."

(Participant 4- Interview)

"Sometimes my peers and I had *problems of Internet and it interrupted our discussions* causing us not able to understand each other."

(Participant 22 - Reflection Journal 1)

"What my peers need to improve is giving cooperation for group work because it is the group score and *I want everyone to help each other, not just leaving the head or a particular member do.* My peers often said that they did not dare to turn on microphone and speak up. This is what I wanted my peers to improve."

(Participant 8 –Interview)

"Some group members joined the online discussions, but they did not give any ideas."

(Participant 12 - Reflection Journal 1)

"Brainstorming ideas did not work because *some members did not understand the tests and did not express their ideas."*

(Participant 14 - Interview)

" In the first two online discussions, we did not hear new ideas or different answers from group members."

(Participant 21 - Interview)

"When working in groups, we have different ideas, different levels of ability.

In the first discussion, we did not understand each other."

(Participant 30 - Reflection Journal 1)

Based on the qualitative data drawn from observing the classes and the teacher journals, the teacher has recognized some problematice issues in implementing online discussions. Student lack of cooperation and participation to express ideas is the first issue to be mentioned. While most participants were active, a few participants in particular groups lacked participation in online discussions. They rarely expressed their opinions, kept silent most of the time of the activity and gave very little help to the group. This appeared to have effects on the group performance in completing particular reading tasks. Due to the students' lack of expressing ideas to group members, the group took longer time to complete the tasks. Another problem is inadequate or poor Internet connection. Some participants have encountered problems in accessing Microsoft Teams (MS Teams) for online discussions. This also has interrupted the online discussions and caused the participants to take longer time to complete the tasks. The last problem was inadequate time management. Resulting from the first and the second problems aforementioned, the teacher needed to spend longer time with some particular groups in order to provide help and give assistance for completing the tasks. Consequently, the wrap-up sessions to be provided after each reading task were often delayed. Thus, the teacher carried out one make up class online via MS Teams in order to

conduct the third online discussion session and follow the teaching plans and course schedule.

In conclusion, the qualitative data showed that the participants had positive attitudes toward online discussions. The participants held positive attitudes towards the presence of the teacher and peers on online discussion forums and their roles in facilitating and providing assistance to the participants during the online discussions. The participants had psychological support from their group members and they experienced good learning experience about online discussions and expressed their agreement towards incorporating online discussion as part of instructions in English reading courses. However, a few participants hold negative attitudes towards online discussion. They perceived it as not worthwhile learning experience because they learnt nothing from their group members during the online discussion. Regarding students' problems in doing online discussions, poor WiFi connection, students' lack of cooperation and active participation in online discussions were found interrupting student learning and their group performance.

CHAPTER 5 DISCUSSIONS AND CONCLUSION

In this chapter, the results of each research question are discussed and concluded. The pedagogical implications for using online discussions in reading courses for EFL learners are discussed based on the findings. Limitations of the study and recommendations for further เนลิงพร research are included.

5.1 Discussion and conclusion of the results

5.1.1 Discussion of Research question 1) What are the effects of using Online Discussion Forums on students' reading comprehension skills?

Based on the quantitative analyses from the paired t-test, the descriptive statistics of the student performance on the four reading tasks and the qualitative analyses on students' reflections of their learning, it can be concluded that the use of online discussion forums as part of reading instruction appears to positively affect students' English learning and their reading comprehension skills.

The findings show that online discussions make some contributions to student learning and development of reading skills. The process of learning occured when the students were involved in the four reading tasks, collaborated and discussed with peers and the teacher on the MS teams. Through interacting in online discussion forums, the students were exposed to learning opportunities, particularly they were scaffolded for their learning improvement. During the discussions, the participants had to complete collaborative tasks, solve the problems and interact with peers and the teacher, they had opportunities to use lower-to higher-order thinking skills: remembering, understanding, applying, analyzing, evaluating and creating and opportunities to reflect their own learning. The qualitative findings confirm that the participants did assessed their reading abilities, compared their own with peers' performance and recognized their strengths and weaknesses. With the feedback obtained through scaffolding interaction, the participants can identify areas for improvement.

This is in line with Garrison, Anderson, and Archer (2000, p.3) research findings reporting that when participating in online discussion, the students got involved in critical thinking process. They developed their thoughts, prepare their ideas, finding reasons to support ideas, review peer comments, analyze and reflect their own comments. While reflecting their own

and others' learning, the students learnt to assess their own and peers' reading skills, performance on tasks and recognized their strengths and weaknesses.

With similar findings on students' self-reflection in online discussions, Wang and Chen (2008) reported the effect of the online discussion activity on student cognitive development and learner autonomy. In their findings, online discussion was found making contributions to student learning. The participants became more enthusiastic and interactive in learning. They were involved in promoting peers' learning by raising questions to stimulate thinking, expressing viewpoints, comparing ideas, and evaluating claims, arguments and comments (Wang, & Chen, 2008).

In consistent with the findings of this study, Ng, Cheung, and Hew (2010) point to the roles of online discussion in facilitating learning. Based on their findings, on online discussion forums, the participants had scaffolding interaction and the peer facilitators facilitated their peer learning by creating a trusting learning environment, showing appreciation to motivate the participants to express more ideas (Ng, Cheung, & Hew, 2010).

5.1.2 Research question 2) What aspects of learning / knowledge do students learn from scaffolding interactions with peers and teacher in the online discussion forums?

The quantitative data obtained from student journals and interview reveal that the participants learnt several aspects of learning or knowledge from scaffolding interactions with others during the online discussions. The participants received both cognitive and social gains. Regarding the aspects of learning the students cognitively developed included comprehension of reading texts, reading techniques of finding topics and main ideas, finding patterns of organization, knowledge of vocabulary, grammar, correct pronunciation and how to complete the reading tasks.

To better understand the ways the participants had cognitive gains, it can be explained in relation to Vygotsky's (1978) principle ideas of social interaction, Zone of Proximal Development (ZPD) and scaffolding. Online discussions play a crucial role as a springboard for scaffolding. Through social interaction with others, particularly the more capable people, the participants were scaffolded by receiving assistance, guidance, modeling, comments and other forms. For example, the participants observed and learnt how their peers and the teacher in translating and interpreting the meanings of words and sentences, how to read words and used correct pronounciation, how to find main ideas of a paragraph, which signal words to

look for, how to identify the patterns of organization and study skills. The scaffolding provided to the participants can help facilitate their learning and reading comprehension. It can help an individual student expand their actual reading abilities and later carry out the challenging reading tasks independently. These explanations on scaffolding are also in accordance with Garisson's (2009) concept of cognitive presence stating that learners develop types of knowledge or aspects of learning they construct from interacting with others in online learning environment.

With respect to social gains, the participants learnt social skills and developed psychologically from interacting and collaborating with others on the online discussions and from assisting their peers' learning. The participants had more confidence or self-efficacy, developed a sense of belonging in a group and teamwork. They learnt to being open to accept other ideas and give respect to them, and they learnt to deal with different ideas and negotiate for an agreement. More importantly, they learnt to be emphathy from giving assistance to their peers and became more willing to make contributions for their groups. The findings of this study is in accordance with those of Ng et al. (2010) revealing that the participants learnt to value, respect peers' opinions and were open to opposing ideas, and that they responded to questions and learnt to think from different perspectives and lastly challenged peers' viewpoints to come up with other alternative ideas (Ng et al., 2010).

The findings on student development of social skills and psychological gains can be discusssed in relation to Garisson's (2009) one of three aspects of online learning, social presence. It is explained that online discussion forums functioned as a community or learning environment where students and teachers needed to adjust themselves to become part of the community, learn ways to communicate purposefully and establish relationships with others in the community.

5.1.3 Research question 3) How do students use what they have learned from online discussions to improve their reading comprehension skills?

The quantitative data showed that the participants reported four major aspects of learning they found useful and applied for their reading improvement. These aspects of learning included reading strategies and techniques, study skills, correct pronunciation models and vocabulary learning and word guessing techniques. With the highest percentages, reading strategies and techniques and study skills were found the most useful areas the participants applied for their improvement. Meanwhile, correct pronunciation models and vocabulary

knowledge and techniques about learning and guessing vocabulary were found useful by some participants. One possible explanation for the perceived usefulness of reading strategies, techniques and study skills is that reading is a receptive process which readers decodes the meaning of a text in their brains/minds. While reading the participants do not speak out what they were thinking and how they figure out to get the meaning of texts or identify main ideas to achieve text comprehension. Thus, speaking up or sharing their thoughts on how each student figure to understand the texts, find the topic, main ideas and translate the meanings of texts were found useful to the participants, particularly the less capable students.

5.1.4 Other findings: Students' attitudes towards online discussion forums

The qualitative data show that the students held positive attitudes towards online discussion forums. They were satisfied with the presence of the teacher and peers on online discussion forums. In particular, the participants found the teacher supportive and played a appropriate role in facilitating and providing assistance to the participants during the online discussions. The participants were also satisfied with psychological support from their peers and they had good learning experience of online discussions. The participants also expressed their agreement towards incorporating online discussion as part of instructions in English reading courses. However, a few participants hold negative attitudes towards online discussion. They perceived that they learnt nothing from their group members during the online discussion. This may result from personal factor of a particular group of students who were not familiar with expressing opinions and exchanging ideas with peers, and this may be due to the mismatch between the demanding of online discussion activity and students' learning styles. Regarding students' problems in doing online discussions, poor WiFi connection and students' lack of cooperation and active participation in expressing ideas were found interrupting student learning and their group performance.

5.2 Implications of the study

The findings from this study suggest some pedagogical implications to language teachers and educators.

5.2.1 Using online discussions in EFL reading classrooms to enhance student reading comprehension and reading improvement

Based on the findings that provide supportive evidence for the positive effects of online discussion forums on students' reading comprehension skills, it can be concluded that online discussions can contribute to student learning and their development of reading skills. Language teachers and educators, therefore, should consider incorporating online discussions as a classroom instructional tool in reading courses. The students should be assigned to participate in online discussions regularly. To ensure effective online discussions, peer facilitation techniques, supportive roles of teachers as facilitators and interactions among group members and teachers should be given and promoted.

By setting collaborative tasks in online learning environment where students are required to take active roles in collaborating, interacting and exchanging ideas, it can help promote reflection on learning among students. While participating in online discussions, both the less and the more capable students may assess their own learning by making comparison with peers' performance, recognize their strengths and weaknesses in reading. The students can get clearer understanding of English reading texts and learn how to mangage their reading problems. With opportunities for scaffoldingself-reflection, students may gain essential infomation for improving their reading ability.

5.2.2 Using online discussions to promote cognitive and social skills and build a supportive learning environment

The findings on the aspects the participants learnt from participating in online discussions reflect the skills or knowledge the participants cognitively and socially developed. Thus, it is crucial to take account of the benefits online discussions on cogintive and social development. Language teachers and educators might find it useful to use online discussions and scaffolding techniques in a way to promote the development of cognitive and social skills or other areas of learning. Through engaging in collaborative activities and discussions with peers, students have chances to assist and receive assistance for their learning. In such learning environment, students can learn to have emphathy, adjust themselves by establishing relationships with other group members to get along with the group, develop a mindset of cooperation for teamwork, learn to accept and respect different ideas or perspectives, and learn to negotiate for an agreement. By setting online discussions in a supportive trusting learning environment where students assist each other in their learning, it can motivate and

drive students to be more engaged in online discussions and make contributions for their groups.

Additionally, the findings of the study on how students made use of what they learnt from scaffolding interaction to improve their learning can reflect the problematic areas in reading or the areas the students need or desire to improve. This information can be useful to teaching pedagogy for reading courses. The problems or area for improvement the participants mentioned can shed lights on the techniques, skills or types of knowledge needed to be taught to students. In some cases where students lack appropriate reading skills, providing more direct instructions or assistance to help the students improve their reading comprehension skills may be a necessity.

5.2.3 Promoting postive attitudes towards online discussions among EFL readers

Based on the findings on the positive attitudes towards the online discussions and the aspects of learning the participants learnt, it is clear that students recognize the benefits of online discussions as part of reading instruction. Therefore, teachers should encourage and motivate to participate in online discussions. By having students get involved in online discussions and do collaborative activities with peers, they can make them recognize good learning opportunities.

5.3 Limitations of the study

Firstly, this study was limited to one intact group of participants. As only one section of EG1003 Basic Reading and Writing in English was openned for a semester. The fifty students who enrolled in this course and participated in the study were the intact group. With this limitation, the research was carried out with one group using a quasi-experimental design. This study was also limited to only 50 first-year students majoring in English. Thus, this study was limited by the limited number of the participants.

5.4 Recommendations for further research

Firstly, it is recommended that a replication study can be carried out with a true experimental design (a control group and a experimental group) can help increase the generalization of the research findings. With the experimental design with a control group, the researcher can compare students' reading abilities between the control group and the experimental group and the quantitative analyses may yield stronger evidence to support the

effect of online discussions on students' reading comprehension skills. In addition, researchers may consider using a larger sample size and the participants with different levels of English reading ability as it may yield different or interesting results. And lastly, further research should consider extending the scope of the study. Scaffolding or peer facilitation techniques and teacher facilitation is viewed as interesting areas for understanding how scaffolding or peer facilitation facilitates students learning and help them develop reading comprehension skills.

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APPENDIX A

PRE-/POST- READING COMPREHENSION TESTS

Name	ID.No	Section
The test aims to assess English	reading comprehension skills. It const	ists of 30 questions.
	ete the entire test. Each question has or question from the choices printed in the	

PART 1: READING COMPREHENSION (30 POINTS)

Directions: Read the given passages and choose the best response for each question.

Passage 1 A new type of health care service

What if the next time you need to visit the doctor, you could just turn on your computer instead of driving to the doctor's office for your appointment? Right before your appointment, you go online to complete a questionnaire about your medical needs, and then, when you are ready, you speak to a medical professional by phone or video chat. The doctor writes up a plan for your treatment and sends it to you by email. A prescription for medication, if needed, goes directly to the pharmacy of your choice. If your pharmacy provides a home delivery service, you may never need to leave your own home during your illness.

This idea of telemedicine has been gaining popularity in the United States over the last several years as it offers benefits to both consumers and health care providers. For people who live in isolated, rural areas, a trip to the nearest doctor may take hours, so telemedicine is not only convenient, but perhaps the only reasonably available medical care in their community. Even for those who have ready access to medical services, the availability of online consultations may lead patients to seek medical help earlier and more frequently, instead of waiting and eventually needing emergency care, which is much more expensive to both patients and insurance companies.

Of course, there are limits to virtual medicine. Many diagnoses require lab tests or X-rays that cannot be done remotely. More than that, many doctors feel that faceto-face communication with their patients is essential. During online consultations, doctors might easily miss subtle signals that would help them better understand their patients' problems. Even so, virtual medicine is likely to become more prevalent in the medical care of tomorrow, as patients continue to look for easy access and convenience, and insurers identify ways to reduce their expenses.

1. Why does the passage begin with a question?

- A. to show how little is known about telemedicine
- B. to suggest the possibility of telemedicine
- C. to question the effectiveness of telemedicine
- D. to criticize the current research on telemedicine

- 2. According to the passage, why could pharmacy delivery service be important?
 - A. It lets people stay at home when sick.
 - B. It is helpful for people who are very ill.
 - C. Pharmacy employees can check on patients.
 - D. Patients can get their medications faster.
- 3. In the third sentence of paragraph 2, which word is closest in meaning to ready?
 - A. completed

B. quick

C. willing

D. prepared

- 4. What claim does the author make to support the belief that telemedicine can reduce costs?
 - A. Doctors do not need to pay for office space.
 - B. Fewer lab tests will be conducted.
 - C. Patients will need less emergency care.
 - D. There are no transportation expenses.
- 5. In the third sentence of paragraph 3, what does the word that refer to?
 - A. the importance of face-to-face communication with patients
 - B. the inability to perform certain tests remotely
 - C. the limits of virtual medicine
 - D. the fact that some doctors dislike telemedicine

Passage 2 Changes in language

It is commonly accepted that languages change over time, with new words added and older terms dropped from common use. Charles Darwin, more famously associated with biological evolution, claimed that languages were also evolving over time, but this was only a speculative account of linguistic evolution. Modern research now suggests that Darwin's assertion was right and that words used most commonly in everyday language evolve at the slowest rate, while rarer words are more likely to change.

Researchers in the United Kingdom investigated the evolution of language by studying cognates, words that sound similar in different languages and express the same meaning, to identify how much variation now exists in Indo-European languages after 6,000

to 10,000 years of evolution. They discovered that frequently used words are more likely to have cognates, while less common words are more likely to be unrelated in different languages. The findings allowed a "mutation rate" to be calculated, based on frequency of use, which showed that the most common vocabulary exhibited almost no variation in 10,000 years. Vocabulary used less often was replaced in as few as 750 years.

A second study, in the United States, examined the roots of English from over 1,200 years ago to compile a list of 177 irregular old English verbs. Researchers discovered that of the original irregular verbs only 98 remain irregular today, suggesting that verbs tend to become "regularized" over time. The rarest verbs in the list were the most likely to have been regularized. A statistical analysis of these verbs indicated that if one was used 100 times less frequently than another, it would evolve 10 times faster than the more commonly used verb. Both studies support the notion that languages evolve much like natural species do.

- 6. According to the passage, why was Darwin's theory of linguistic evolution unproven?
 - A. He did not consider Indo-European languages.
 - B. He never published his finding.
 - C. His theory did not account for how verbs evolved.
 - D. His theory was not based on experimental evidence.
- 7. How did researchers in the United Kingdom study linguistic evolution?
 - A. by identifying the most important words in IndoEuropean languages
 - B. by determining how long it has taken IndoEuropean languages to evolve
 - C. by comparing cognates found in IndoEuropean languages
 - D. by examining how different European languages define cognates
- 8. What did the "mutation rate" allow researchers to understand?
 - A. that rarely used words took 10,000 years to change
 - B. whether or not a word was related to other words
 - C. how much variation occurred in words of certain frequencies
 - D. if a word was evolving quickly enough

- 9. Which irregular verbs are most likely to become regularized?
 - A. those that are the least irregular
 - B. those that are most commonly used
 - C. those that have cognates in other languages
 - D. those that are used infrequently
- 10. What do the two studies reported in the passage have in common?
 - A. Both investigate the relationship between word frequency and rate of change.
 - B. Both identify the most commonly used words in a variety of European languages.
 - C. Both challenge Charles Darwin's theory that languages will evolve over time.
 - D. Both analyze languages to determine the reasons for important words being replaced.



A

Midvillage's Fifth Annual International Film Festival

Come check out our film festival. It's bigger and better than ever!

- Over 50 films representing 25 countries
- A wide selection of award-winning entriesdramas, comedies, documentaries, and animation
- Screenings featuring introductions and period discussions with the films' stars
- Post-festival events including workshops with leading producers, directors, screenwriters, and actors

Reserve your tickets early at midvillagefulnifest.com or by calling 1-800-555-0000. Films will be shown at 10 different theaters around Midvillage at conveniently scheduled afternoon and evening times:

В

Midvillage's Daily News staff reporter Gary Davis interviews film critic Sophie Allen.

- Q: In your opinion, who was the most influential film director of the 20th century?
- A: Oh, without a doubt, Federico Fellini! He was an award-winning, highly respected Italian filmmaker who lived from 1920-1993.
- Q: Tell us about his early life.
- A: Fellini was born in the small town of Rimini, Italy. In 1926, he saw his first film. It had a strong effect on him and sparked his lifelong love of cinema.
- Q: How did he start his careor in the film business?
- A: He went to Rome in 1939 and began writing newspaper and magazine articles. This put him in contact with screenwriters and he soon received his first screenwriting credit. In 1942, Fellini went to Africa, where he transitioned from writing to being a filmmaker.
- Q: What was his most significant contribution to the world of cinema?
- A: I would say that it was his unique, very personal style, which combined memory, dreams, and fantasy. Fellini's approach can be seen in many of today's most renowned films.

C

Value of Using Movies as a Teaching Tool

by Dr. Hannah Potera



Using film in the classroom has a positive effect on both young children and adolescent learners

Movies, when used appropriately, can be an effective teaching tool for children. This is because, in addition to being attention-grabbing, they have the potential to teach life skills and promote values needed in today's world. The vivid images evoked by film bring about strong emotions and can spark a child's interest and imagination. By providing a picture of people, places, and moral diferents, many of which may be new to children, films raise awareness of social issues and promote social responsibility. In turn, children become introspective and reflect on their own lives, seeing them more clearly and, perhaps, differently. They learn to think more deeply and critically about the world, and develop feelings of compassion for others. Thus, their lives are enriched.

Movies are very much a part of today's world, and older students have become quite used to this fact. When film is brought into the classroom, these students can connect with concepts in ways that are comfortable and familiar to them. Movie topics are generally current and relevant, and therefore more tikely to generate interest and hold students' attention. By engaging with the visuals, students can learn and retain more.

As an added bonus to teachers, those who use film in class are generally seen as friendlier and more human, generating a stronger teacher-student relationship. As students feel more comfortable with the media and the instructor, they learn and remember more.

Dr. Hannah Peters is a movie producer and a professor of film studies at Midvillage College.

Questions 11-12 refer to Section A.

11. What can participants do after	r the festival?		
A. watch a special screening of foreign films			
B. attend sessions with professionals in the field			
C. lead a panel discussion			
D. try out for a part in a m	iovie		
12. In the first sentence of the fin	al paragraph, wha	t does Reserve mea	n?
A. remember B. s	sell	C. trade	D. secure
Questions 33 – 36 refer to Section	on B.		
13. What is the main purpose of s	section B?		
A. to explain the work of	a film critic	B. to descr	ribe life in Italy
C. to tell about a movie di	rector	D. to prom	ote Italian movies
14. In the first question, what doe	s influential mean	?	
A. being popular around t	he world		
B. having the power to ca	use change		
C. creating the most movi	es		
D. being the best writer			
15. How did Fellini begin his care	eer?		
A. as a movie script write	r	B. as a trav	vel writer in Africa
C. as a film critic		D. as a jou	rnalist
16. In the last answer, why does S	Sophie Allen ment	tion dreams?	
A. to talk about a popular	movie topic		
B. to tell about her hopes	for the future		
C. to describe a method of	f an important dire	ector	
D. to promote a current fi	lm		

Questions 17-19 refer to Section C.

- 17. In the second paragraph, why does the author mention imagination?
 - A. to state something that can be positively affected by films
 - B. to describe something that parents try to encourage
 - C. to refer to something that is harmed by watching movies
 - D. to illustrate how teachers must plan lessons using films
- 18. According to the author, what is one reason older children can connect to film?
 - A. They are used to its presence in their lives.
 - B. They spend a lot of time playing video games.
 - C. They often need to watch movies for homework.
 - D. They prefer movies to books.
- 19. In the second sentence of paragraph 4, what does they refer to?
 - A. teachers
- B. media
- C. students
- D. films

Question 20 refers to two or more sections.

- 20. Who is most likely to lead a workshop after the Midvillage Film Festival?
 - A. Hannah Peters
- B. Gary Davis
- C. Sophie Allen
- D. Federico Fellini

Passage 4

A

Mayday Inn:

Come to beautiful Victorian Cape May!

Founded in 1857, Cape May is one of the oldest ocean resorts in the United States. Our graceful hotel has specious rooms with old-world charm and modern conveniences, like antique lumiture and Internet access. Situated on a tree-lined street in the historic district, we are surrounded by line examples of Victorian architecture.

Our friendly staff will happily help you:

- book a ride in a horse-drawn carriage
- · take a city tour
- · visit the lighthouse
- arrange visits to antique stores

Visit us online at www.maydayinn.com.



History 287/English Literature 242

The Victorian Era: An Overview Professor Donald Wilson

The United Kingdom's Queen Victoria reigned from 1837 until 1901. Characterized by a rapidly growing middle class, this crucial period saw dramatic changes to British society.

Through fectures, discussions, and readings, learn about the Victorian era by exploring three time periods:

Early (1830-1848)

Britain's first railroad opened, allowing the middle class to travel, resulting in the development of a tourist infrastructure.

Middle (1848-1870)

The Great Exhibition of 1851, the first world's fair, presented views of modern architecture. Private homes went from being part of the workplace to separate, selfcontained structures.

Late (1870-1901)

This period saw the beginning of the decline of Britain as a world power.

The second half of the course will focus on the publishing inclustry of the Victorian era. With the increase in literacy, the public's appetite for books and magazines grew. Novels and works of nonfiction were presented to the public as a series, in monthly parts over a period of time. Several such selections will be included on the course reading list.

C

Charles Dickens: His Life and Work

by Donald Wilson



Charles Dickens (1912– 1970) was a renowned British writer whose many Victorian era works are considered literary classics.

The second of eight children; Dickens was born into poverty. Due to unfortunate circumstances, he spent a good portion of his

youth working to help support his family. His loneliness and feelings of abandonment and betrayal by the adults who were supposed to take care of him became common themes in his work.

At age 15, for the second time in his childhood, he was forced to leave school and contribute to his family's income. He began an office job that became the starting point of his career as an author. Dickens was later employed as a reporter, then a magazine publisher.

One of his early novels, Oliver Twist, was based on his experiences as a child, supporting himself and figuring out life on his own. The book was published chapter by chapter, and readers eagerly looked forward to the next monthly installment. Dickens's success continued with David Copperfield, A Tale of Two Cities, and Great Expectations.

Charles Dickens's large body of work went beyond the novel to include autobiography, travel books, and plays. In 1851, he even took part in a theater production that was performed before Queen Victoria.

Sadly, he was involved in a railroad accident in 1665 and suffered injuries from which he never fully recovered. Fortunately, Dickens's lengthy stories, with their unlorgettable characters, live on.

Donald Wilson is a biographer of Charles Dickens and an expert on Victorian life and literature.

Question 21 refer to section A.

Question 21 refer to section A.	
21. In the third sentence of the paragraph, what does	s architecture mean?
A. building design	B. garden layout
C. traditional homes	D. old-fashioned hotels
Questions 22 – 25 refer to section B.	
22. What is the main purpose of section B?	
A. to tell about the life of Queen Victoria	B. to describe a university class
C. to give details about British society	D. to encourage reading about
history	
23. According to the passage, what important event	took place during the early Victorian era?
A. An international convention was held.	
B. A new form of transportation was develo	ped.
C. More workplaces were built.	
D. Britain started to become less important.	
24. Why does the author mention private homes in	the middle Victorian period?
A. to describe housing prices of the Victoria	n era
B. to tell about a new British industry	
C. to report on changes in family structure	
D. to give an example of how British society	y changed
25. In the second sentence of the last paragraph, wh	at does literacy mean?
A. reading ability	B. publications
C. education	D. culture
C. education	
Questions 26 -29 refer to section C.	
26. According to the passage, what did Dickens do	for much of his youth?
A. He studied at school.	
B. He worked to earn money.	

C. He wrote novels and plays.

D. He traveled across Great Britain.

27. How did the young Dickens feel about the adults in his life? A. They frightened him. B. They took good care of him. C. They disappointed him. D. They appreciated his hard work. 28. In the last sentence of paragraph 4, why does the author mention David Copperfield? A. to describe Dickens's most famous novel B. to give an example of another Dickens novel C. to name a magazine that Dickens published D. to tell about an unsuccessful Dickens work 29. What was Dickens's relationship to Queen Victoria? A. He wrote a book for her. B. He worked for her. C. He never met her. D. He acted in a play for her. Question 20 refers to two or more sections. 30. How are Dickens's novels typical of Victorian literature? A. They have children as the main characters. B. They often used architecture for their subject matter. C. They were published in sections over time. D. They tried to help those who lived in poverty

APPENDIX B

FOUR READING TASKS FOR ONLINE DISCUSSIONS

EG1003 Four reading tasks & Online Discussions

Instructions and guidelines to follow

- 1. Have students form a group of 4-5 students and complete **4 Reading tasks.** Each group will be assigned a room on MS Team for discussion. It is a forum where you can talk and work freely with your team members. Each group needs a LEADER.
- 2. Each group is required to do online group discussions when doing reading tasks. During your discussion, the teacher will observe your discussions and give advice (if needed).
- 3. Each student is required to participate in the online discussion through brainstorming, discussing, sharing ideas, explaining things, or giving suggestions to your group members. Everyone has to SPEAK UP your ideas in Thai or English!
- 4. The leader or other group members need to briefly explain the final conclusions of the group to the teacher for every discussion.
- 5. After each online discussion, each student is required to write a Reflection Journal (to describe what they have learnt from the discussions with team or from the teacher). SUBMIT your Reflection Journal before the next online discussion session.
 - 6. The Four reading tasks aimed to assess students' reading comprehension skills.
 - 7. Each group has to complete FOUR reading tasks as follows:

Reading Task	Target Skills to be assessed
1	Identifying a good paragraph
	1. Identify a good paragraph
	2. Understand the gist (general idea) of the paragraph
2	Identifying topics of paragraph & pronoun referents
	1. Understand the gist (general idea) of a paragraph
	2. Identify and write the best topic of the paragraphs
	3. Find referent pronouns
3	Topics, Main ideas, Signal words & Supporting Details
	1. Identify the main points and supporting details of paragraphs
	2. Identify the topics, main ideas, signal words and supporting details of
	paragraphs
4	Understanding patterns of organization & signal words
	1. Understand the patterns of organization of paragraphs.
	2. Identify the patterns of organization and signal words of paragraphs.

Details of online discussions

Schedule	Procedure /steps of the implementation
	Online Discussion (Pilot study) & Giving guidance on reflection journal
Week 5	writing บอกขั้นตอนในการทำอภิปรายงานกลุ่ม ให้นศ.ฝึกอภิปรายเพื่อเตรียมความพร้อม
	และครูอธิบายวิธีการเขียน reflection journal
Week 6	Online Discussion Session 1
ก่อนเริ่มการอภิปรายกลุ่ม	1. Explain Reading Task 1 to the students and explain procedures to follow
9:00-9:30	ครูอธิบายงานชิ้นที่ 1 ให้นศ.เข้าใจ และบอกขั้นตอนในการทำอภิปรายงานกลุ่ม
18)	2. Have students access to the online discussion group on MS Team and do
6.9/10	an Online Meeting to get them ready for the actual discussion ให้นศ.เข้ากลุ่ม
	discussion ที่สร้างให้ใน MS Team และให้เริ่มประชุมกลุ่ม
	3. Have students do the Reading Task 1 by sharing a screen and typing the
ช่วงอภิปรายกลุ่มทำงานชิ้นที่ 1	answers. ให้นักศึกษาทำงานชิ้นที่ 1 (Reading Task 1) โดยให้แชร์หน้าจอและพิมพ์
Reading Task 1	คำตอบในใบงานที่ได้รับ
9:30-10:30	4. The teacher observes each group.ครูสังเกตการณ์แต่ละกลุ่ม
\mathcal{S}	5. Have each group submit the Reading Task 1 via MS Team Assignment.
	ให้นศ.แต่ละกลุ่มส่งงานชิ้นที่ 1 ผ่าน Assignment ใน MS Team
หลังส่งงานชิ้นที่ 1	6. Explain and get through the answers of the questions in the task
10:30-10:50	ครูอธิบายและเฉลยคำตอบของข้อคำถามในห้องเรียนออนไลน์ของรายวิชา
명	7. Write and Submit Reflection Journal 1 เขียน และส่ง Reflection journal 1
Week 7	Online Discussion Session 2
ก่อนเริ่มการอภิปรายกลุ่ม	1. Explain Reading Task 2 to the students and explain procedures to follow
9:0-9:30	ครูอธิบายงานชิ้นที่ 2 ให้นศ.เข้าใจ และ
Z .	2. Have students access to the online discussion group on MS Team and do
	an Online Meeting to begin the discussion ให้นศ.เข้ากลุ่มdiscussion ที่สร้างให้ใน
81	MS Team และให้เริ่มประชุมกลุ่ม
	3. Have students do the Reading Task 2 by sharing a screen and typing the
ช่วงอภิปรายกลุ่มทำงานชิ้นที่ 2	answers. ให้นักศึกษาทำงานชิ้นที่ 2 (Reading Task 2) โดยให้แชร์หน้าจอและพิมพ์
	คำตอบในใบงานที่ได้รับ
Reading Task 2	4. The teacher observes each group.ครูสังเกตการณ์แต่ละกลุ่ม
9:30-10:30	5. Have each group submit the Reading Task 2 via MS Team Assignment.
	ให้นศ.แต่ละกลุ่มส่งงานชิ้นที่ 2 ผ่าน Assignment ใน MS Team
หลังส่งงานชิ้นที่ 2	6. Explain and get through the answers of the questions in the task.ครูอธิบาย
10:30-11:00	และเฉลยคำตอบของข้อคำถามในห้องเรียนออนไลน์ของรายวิชา และสรุปประเด็นการ
	เรียนรู้
	7. Write and Submit Reflection Journal 2 เขียนและส่ง Reflection journal 2

Week 8	Online Discussion Session 3
	1. Explain Reading Task 3 to the students and explain procedures to follow
ก่อนเริ่มการอภิปรายกลุ่ม	ครูอธิบายงานขึ้นที่ 3 ให้นศ.เข้าใจ และบอกขั้นตอนในการทำอภิปรายงานกลุ่ม
9:00-9:30	2. Have students access to the online discussion group on MS Team and do
	an Online Meeting to begin the discussion ให้นศ.เข้ากลุ่มdiscussion ที่สร้างให้ใน
	MS Team และให้เริ่มประชุมกลุ่ม
ช่วงอภิปรายกลุ่มทำงานชิ้นที่ 3	3. Have students do the Reading Task 3 by sharing a screen and typing the
	answers. ให้นักศึกษาทำงานชิ้นที่ 3 (Reading Task 3) โดยให้แชร์หน้าจอและพิมพ์
9:30 -10:30	คำตอบในใบงานที่ได้รับ
E of to	4. The teacher observes each group.ครูสังเกตการณ์แต่ละกลุ่ม
	5. Have each group submit the Reading Task 3 via MS Team Assignment.
10	ให้นศ.แต่ละกลุ่มส่งงานชิ้นที่ 3 ผ่าน Assignment ใน MS Team
หลังส่งงานชิ้นที่ 3	6. Explain and get through the answers of the questions in the task.ครูอธิบาย
10:30-11:00	และเฉลยคำตอบของข้อคำถามในห้องเรียนออนไลน์ของรายวิชา และสรุปประเด็นการ
D	เรียนรู้
	7. Write and Submit Reflection Journal 3 เขียนและส่ง Reflection journal 3
	35
Week 9	Online Discussion Session 4
Week 9	Online Discussion Session 4 1. Explain Reading Task 4 to the students and explain procedures to follow
Week 9 ก่อนเริ่มการอภิปรายกลุ่ม	
8 1	Explain Reading Task 4 to the students and explain procedures to follow
ก่อนเริ่มการอภิปรายกลุ่ม	1. Explain Reading Task 4 to the students and explain procedures to follow ครูอธิบายงานชิ้นที่ 4 ให้นศ.เข้าใจ และบอกขั้นตอนในการทำอภิปรายงานกลุ่ม
ก่อนเริ่มการอภิปรายกลุ่ม	1. Explain Reading Task 4 to the students and explain procedures to follow ครูอธิบายงานชิ้นที่ 4 ให้นศ.เข้าใจ และบอกขั้นตอนในการทำอภิปรายงานกลุ่ม 2. Have students access to the online discussion group on MS Team and do
ก่อนเริ่มการอภิปรายกลุ่ม	1. Explain Reading Task 4 to the students and explain procedures to follow ครูอธิบายงานชิ้นที่ 4 ให้นศ.เข้าใจ และบอกขั้นตอนในการทำอภิปรายงานกลุ่ม 2. Have students access to the online discussion group on MS Team and do an Online Meeting to begin the discussion ให้นศ.เข้ากลุ่มdiscussion ที่สร้างให้ใน MS Team และให้เริ่มประชุมกลุ่ม 3. Have students do the Reading Task 4 by sharing a screen and typing the
ก่อนเริ่มการอภิปรายกลุ่ม	1. Explain Reading Task 4 to the students and explain procedures to follow ครูอธิบายงานชิ้นที่ 4 ให้นศ.เข้าใจ และบอกขั้นตอนในการทำอภิปรายงานกลุ่ม 2. Have students access to the online discussion group on MS Team and do an Online Meeting to begin the discussion ให้นศ.เข้ากลุ่มdiscussion ที่สร้างให้ใน MS Team และให้เริ่มประชุมกลุ่ม
ก่อนเริ่มการอภิปรายกลุ่ม 9:00-9:30	1. Explain Reading Task 4 to the students and explain procedures to follow ครูอธิบายงานชิ้นที่ 4 ให้นศ.เข้าใจ และบอกขั้นตอนในการทำอภิปรายงานกลุ่ม 2. Have students access to the online discussion group on MS Team and do an Online Meeting to begin the discussion ให้นศ.เข้ากลุ่มdiscussion ที่สร้างให้ใน MS Team และให้เริ่มประชุมกลุ่ม 3. Have students do the Reading Task 4 by sharing a screen and typing the
ก่อนเริ่มการอภิปรายกลุ่ม 9:00-9:30	1. Explain Reading Task 4 to the students and explain procedures to follow ครูอธิบายงานชิ้นที่ 4 ให้นศ.เข้าใจ และบอกขั้นตอนในการทำอภิปรายงานกลุ่ม 2. Have students access to the online discussion group on MS Team and do an Online Meeting to begin the discussion ให้นศ.เข้ากลุ่มdiscussion ที่สร้างให้ใน MS Team และให้เริ่มประชุมกลุ่ม 3. Have students do the Reading Task 4 by sharing a screen and typing the answers. ให้นักศึกษาทำงานชิ้นที่ 4 (Reading Task 4) โดยให้แชร์หน้าจอและพิมพ์
ก่อนเริ่มการอภิปรายกลุ่ม 9:00-9:30 ช่วงอภิปรายกลุ่มทำงานชิ้นที่ 4	1. Explain Reading Task 4 to the students and explain procedures to follow ครูอธิบายงานชิ้นที่ 4 ให้นศ.เข้าใจ และบอกขั้นตอนในการทำอภิปรายงานกลุ่ม 2. Have students access to the online discussion group on MS Team and do an Online Meeting to begin the discussion ให้นศ.เข้ากลุ่มdiscussion ที่สร้างให้ใน MS Team และให้เริ่มประชุมกลุ่ม 3. Have students do the Reading Task 4 by sharing a screen and typing the answers. ให้นักศึกษาทำงานชิ้นที่ 4 (Reading Task 4) โดยให้แชร์หน้าจอและพิมพ์ คำตอบในใบงานที่ได้รับ
ก่อนเริ่มการอภิปรายกลุ่ม 9:00-9:30 ช่วงอภิปรายกลุ่มทำงานชิ้นที่ 4 Reading Task 4 9:30 – 10:30	1. Explain Reading Task 4 to the students and explain procedures to follow ครูอธิบายงานชิ้นที่ 4 ให้นศ.เข้าใจ และบอกขั้นตอนในการทำอภิปรายงานกลุ่ม 2. Have students access to the online discussion group on MS Team and do an Online Meeting to begin the discussion ให้นศ.เข้ากลุ่มdiscussion ที่สร้างให้ใน MS Team และให้เริ่มประชุมกลุ่ม 3. Have students do the Reading Task 4 by sharing a screen and typing the answers. ให้นักศึกษาทำงานชิ้นที่ 4 (Reading Task 4) โดยให้แชร์หน้าจอและพิมพ์ คำตอบในใบงานที่ได้รับ 4. The teacher observes each group.ครูสังเกตการณ์แต่ละกลุ่ม
ก่อนเริ่มการอภิปรายกลุ่ม 9:00-9:30 ช่วงอภิปรายกลุ่มทำงานชิ้นที่ 4 Reading Task 4	1. Explain Reading Task 4 to the students and explain procedures to follow ครูอธิบายงานชิ้นที่ 4 ให้นศ.เข้าใจ และบอกขั้นตอนในการทำอภิปรายงานกลุ่ม 2. Have students access to the online discussion group on MS Team and do an Online Meeting to begin the discussion ให้นศ.เข้ากลุ่มdiscussion ที่สร้างให้ใน MS Team และให้เริ่มประชุมกลุ่ม 3. Have students do the Reading Task 4 by sharing a screen and typing the answers. ให้นักศึกษาทำงานชิ้นที่ 4 (Reading Task 4) โดยให้แชร์หน้าจอและพิมพ์ คำตอบในใบงานที่ได้รับ 4. The teacher observes each group.ครูสังเกตการณ์แต่ละกลุ่ม 5. Have each group submit the Reading Task 4 via MS Team Assignment. ให้นศ.แต่ละกลุ่มส่งงานชิ้นที่ 4 ผ่าน Assignment ใน MS Team 6. Explain and get through the answers of the questions in the task.ครูอธิบาย
ก่อนเริ่มการอภิปรายกลุ่ม 9:00-9:30 ช่วงอภิปรายกลุ่มทำงานชิ้นที่ 4 Reading Task 4 9:30 – 10:30	1. Explain Reading Task 4 to the students and explain procedures to follow ครูอธิบายงานขึ้นที่ 4 ให้นศ.เข้าใจ และบอกขั้นตอนในการทำอภิปรายงานกลุ่ม 2. Have students access to the online discussion group on MS Team and do an Online Meeting to begin the discussion ให้นศ.เข้ากลุ่มdiscussion ที่สร้างให้ใน MS Team และให้เริ่มประชุมกลุ่ม 3. Have students do the Reading Task 4 by sharing a screen and typing the answers. ให้นักศึกษาทำงานชิ้นที่ 4 (Reading Task 4) โดยให้แชร์หน้าจอและพิมพ์ คำตอบในใบงานที่ได้รับ 4. The teacher observes each group.ครูสังเกตการณ์แต่ละกลุ่ม 5. Have each group submit the Reading Task 4 via MS Team Assignment. ให้นศ.แต่ละกลุ่มส่งงานชิ้นที่ 4 ผ่าน Assignment ใน MS Team
ก่อนเริ่มการอภิปรายกลุ่ม 9:00-9:30 ช่วงอภิปรายกลุ่มทำงานชิ้นที่ 4 Reading Task 4 9:30 - 10:30 หลังส่งงานชิ้นที่ 4	1. Explain Reading Task 4 to the students and explain procedures to follow ครูอธิบายงานชิ้นที่ 4 ให้นศ.เข้าใจ และบอกขั้นตอนในการทำอภิปรายงานกลุ่ม 2. Have students access to the online discussion group on MS Team and do an Online Meeting to begin the discussion ให้นศ.เข้ากลุ่มdiscussion ที่สร้างให้ใน MS Team และให้เริ่มประชุมกลุ่ม 3. Have students do the Reading Task 4 by sharing a screen and typing the answers. ให้นักศึกษาทำงานชิ้นที่ 4 (Reading Task 4) โดยให้แชร์หน้าจอและพิมพ์ คำตอบในใบงานที่ได้รับ 4. The teacher observes each group.ครูสังเกตการณ์แต่ละกลุ่ม 5. Have each group submit the Reading Task 4 via MS Team Assignment. ให้นศ.แต่ละกลุ่มส่งงานชิ้นที่ 4 ผ่าน Assignment ใน MS Team 6. Explain and get through the answers of the questions in the task.ครูอธิบาย

Reading Task 1

Identifying a good paragraph (15 points)

Target	skills	to be	assessed	•
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- 1. Identify a good paragraph
- 2. Understand the gist (general idea) of the paragraph

Directions: Read the following groups of sentences. Decide if each reading text is a good paragraph and tick a mark '✓' in the blank. If no, identify the unrelated idea (s) and underline it /them.

Paragraph 1

In the United States, sports stars make a lot of money. It's not unusual for a basketball player to get \$6 million a year. Some baseball players are also paid millions of dollars. These sports stars also get extra money from sporting equipment companies. For example, manufacturers pay sports stars to wear the shoes they make.

1. Is this a good paragraph?
Yes No - Please underline the unrelated idea(s).
2. Explain or give reasons why it is a good or not good paragraph. (Explain what the paragraph is mainly about and identify the unrelated idea(s) in the paragraph)
Paragraph 2
Many American scientists are worried about the drinking water in the United States They think that soon there may be no more clean drinking water. Dirt, salt, and chemicals from factories can get into the water, making it unsafe to drink. This is already true in some places One example is a small town in Massachusetts. Many children in this town became sick because of chemicals in the water. In some areas, people get their water from the mountain. The water from mountain snow is delicious and clean. Another place with water problems is California. The water near old air force airports is not safe to drink. Chemicals from rockets got into the ground and then into the water.
1. Is this a good paragraph?
Yes No - Please underline the unrelated idea(s).
2. Explain or give reasons why it is a good or not good paragraph. (Explain what the paragraph is mainly about and identify the unrelated idea(s) in the paragraph)

Paragraph 3

There are several reasons why people travel by train. Some people use the train to go to work every day. It's faster and easier than driving a car. Some cars now have a special map to help you. Tourists often travel by train when they go on a vacation. In European countries, for example, train is a good way to visit different cities. Some people take the train just because they love trains. Their hobby is traveling on the railroads of the world. While commuting to work, people can read, work, drink coffee, chat with other passengers or sleep.

1. Is this a good paragraph?
Yes No - Please underline the unrelated idea(s).
2. Explain or give reasons why it is a good or not good paragraph. (Explain what the paragraph is mainly about and identify the unrelated idea(s) in the paragraph)
Paragraph 4
Many people have trouble getting to sleep at night. Others wake up often during the night, and still others wake up very early and can't get back to sleep again. These people all have insomnia. That is, they don't sleep well. Insomnia can cause many different problems. When people are not sleeping well, they often become unhappy and anxious. Most people sleep better in a dark, quiet place. They may also become very tired and sleepy. This may have negative effects on their family life or their work. It can even lead to accidents. A tired bus driver, for example, could fall asleep while driving.
1. Is this a good paragraph?
YesNo - Please underline the unrelated idea(s).
2. Explain or give reasons why it is a good or not good paragraph. (Explain what the paragraph is mainly about and identify the unrelated idea(s) in the paragraph)

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Paragraph 5

People who work in large office buildings get sick more often than normal. They may have headaches, stomachaches, or sore, red skin. The Coronavirus 2019 outbreak has become the global pandemic. The reason for this lies in the buildings themselves. These large buildings usually have windows that cannot be opened. The same air stays in the building for a long time and becomes unhealthy. It may be full of chemicals that come from the furniture, the rugs, or the photocopy machines. Or it may be full of cigarette smoke. This unhealthy air causes "sick building syndrome," as doctors call this problem. In order to cure the people with this syndrome, it is necessary to treat the buildings. The answer is simple: more fresh air.

1. Is this a good paragraph?		
Yes	No - Please underline the unrelated idea(s).	
2. Explain or give reasons why it is a good paragraph is mainly about and identify the	ood or not good paragraph. (Explain what the the unrelated idea(s) in the paragraph)	
Self-assessment - Please assess how wel the good paragraphs.	ell you can give explanation or reasons for identi	ifying
Level 3 = clear, logical and reasonab	ole reasons	僑
Level 2 = some quite clear ideas, qui	uite logical and reasonable ideas.	4
Level 1 = not able to give clear and	l reasonable reasons.	不
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Reading Task 2

Identifying topics & pronoun referents (30 points)

Target skills to be assessed:

- 1. Understand the gist (general idea) of a paragraph
- 2. Identify and write the best topic of the paragraphs
- 3. Find referent pronouns

A. IDENTIFYING TOPICS

A. IDENTIFYING TOPICS DIRECTIONS: Read all the words in each group. Write the BEST topic on the line.

. mystery romance science fiction horror action
. violin piano cello drum saxophone
. Australian Brazilian Russian Cambodian Egyptian
. cake brownie pudding custard waffles
. jacket sweater scarf coat gloves
. bridge tower building skyscraper house
. painting drawing photograph dancing singing
3. TOPICS & FINDING PRONOUN REFERENTS
DIRECTIONS: WRITE the best topic of each paragraph and FIND the referents.
Mexico City is growing fast. In 1970, the city had about nine million people. Now <u>it</u> as over 17 million. All these people are causing problems for the city. There are not enough obs. Also, there is not enough housing. Large families have to live together in very small omes. Many homes do not have water. <u>They</u> also do not have bathrooms or electricity. The Mexican government is worried about all these problems. <u>It</u> is working hard to make life etter in the city. (5 points)
. Topic:
. Referents: it (in line 1) refers to
They (in line 4) refers to
It (in line 5) refers to

9. When people think of mushrooms, <u>they</u> usually think of one kind. This is the kind you see in pictures and read about in stories. <u>It</u> has a white bottom and a red top. However, mushrooms can be found in many different sizes, shapes, and colors. Some mushrooms of very small. They are so small you cannot even see <u>them</u> with just your eye. Other mushrooms are very, very large. For example, one mushroom that grows underground can be the size of a football field. <u>They</u> are mushrooms that looked like big balls and mushrooms that looked like sticks. Some are white, others are yellow, orange, brown, black, or even purple. (6 points)
1. Topic:
2. Referents: they (in line 1) refers to
It (in line 2) refers to
them (in line 4) refers to
They (in line 6) refers to
10. In 1990, J.K. Rowling lived with her young daughter in Edinburgh, Scotland. She worked as a part-time teacher, but she wanted to write a book. One day she had an idea for a children's book. She thought about the idea for several years. She made many notes and read lots of books. Finally, she started writing. Her first book, Harry Potter and the Philosopher's Stone (or Harry Potter and the Sorcerer's Stone) was published in 1997.

Reading Task 3

Identifying topics, main ideas, signal words, & supporting details (30 points)

Target skills to be assessed:

- 1. Understand the main points and supporting details of paragraphs
- 2. Identify the topics, main ideas, signal words and supporting details of paragraphs

DIRECTIONS: Read each paragraph. Then write the main idea of each paragraph, its supporting details, and signal words. (NO. 1-3)

1. The sports utility vehicle (SUV) was invented in the early 1990s. It quickly became very popular in the United States. There are several reasons for this. First of all, it is larger than most cars. It can carry lots of people, bicycles, toys, dogs, and other things. This makes it popular with families. It also has four doors and a big back door, so getting in or out is easy. In addition, an SUV is taller than most cars. This means that the driver can see above other cars and can see the road well. Finally, an SUV has a lot more power than most cars, so it can go faster. It can also go on very rough roads where other cars cannot go. (9 POINTS)

Topic:		昌
Main idea:	9	4
		2
Signal Words	Details	
Res		_
THET	TATUERS	

hours. Another likeness is the terrible noise level in the trains. A further similarity is that the two subway systems both cover a wide area at little expense for commuters. However, the differences between the two are quite striking. While subway stations in New York range from plain to ugly, Paris stations are generally attractive. Many of the French stations are filled with works of art. In Paris, the subway trains are clean and they run every few minutes. On the other hand, New York's trains can sometimes be less clean and reliable. (11 POINTS) Topic: Main idea: **Similarities** Signal words Signal words **Differences** Spike Lee, an African-American film director, is one of the most famous people in his field. He was born in Atlanta, Georgia, in 1975; Spike's middle-class family moved to Brooklyn, New York, when he was two years old. His father, jazz musician Bill Lee, and his mother, Jackie, an art teacher, had five children. The less provided a loving and stable home for their family. Spike's interest in movies began as a youngster. After graduating from Morehouse College in Atlanta, he studied filmmaking at New York University. Soon after that, he made his first feature film, She's Gotta Have it, with a budget of only \$200,000. Since the success of that movie, Lee has written, produced, and directed more than fifteen films. All of them are extremely controversial and extraordinary popular with both black and white audiences. (10 POINTS) Topic:

Both New York City and Paris depend on vast subway lines to transport their

millions of commuters. In both cities, the subways are often crowded, especially at rush

2.

n idea:		
Signal Words	Details	
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Reading Task 4

Identifying signal words and patterns of organization (16 points)

Target skills	to	be	assesse	d
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- 1. Understand the patterns of organization of paragraphs.
- 2. Identify the patterns of organization and signal words of paragraphs.

DIRECTIONS: The following choices are for the items NO. 1 -8.

CHOOSE the right UNDERLINE at least TWO SIGNAL WORDS that the writer uses to show the pattern.

L = Listing	TO = Time Order / Sequencing
CC = Comparison & Contrast	CE = Cause & Effect
PS = Problem & Solution	
1. In the past, people could travel between Sweden and	Denmark only by boat. Nowadays there
s a new bridge and tunnel between the two countries a	and people can travel by car. The trip is
nuch faster these days. Before, it took 45 minutes, but	now it takes only 15 minutes.
Pattern:	
2. The Boston Red Sox baseball team needs a new bas	seball stadium for several reasons. First,
the old stadium was built more than ninety years ago	
soo small. Many baseball fans cannot get tickets for bas	seball games.
Pattern:	
3. Carol's accident happened in part because of the weather	ather. It was a dark and stormy night, so
she could not see the road well. But there was another re	eason (cause) for the accident. Carol was
alking on her call phone and she was not watching the	road carefully.
Pattern:	
4. The Galileo spaceship was sent into space in October	er 1989 to study the planet Jupiter. Two
years later, Galileo was halfway to Jupiter. In Decen	nber 1995, Galileo reached Jupiter and
began to circle the planet.	
Pattern:	
5. Jennifer found herself gain weights about 5 kilogram	
ner. Since then she has been going on a diet and exerci	ising at the First Fitness Center. Finally.

she can solve her problem. She has lost her weight.

Pattern: _____

6. Most pets teach children valuable lessons. One of good teacher is dogs because they teach children to be responsible. Children who have to feed the dog, give the dog water, and walk the dog learn to be responsible for the life of another being. Cats also teach children responsibility. Children who own a cat learn about independence since cats are quick to teach this. Pattern:
7. Susan and Sam are siblings, but they are different in many ways. Susan is tall and thin, but Sam is short and heavy. While Susan has blonde hair and blues eyes, Sam has dark hair and brown eyes. Susan is a quiet kind of person. In contrast, Sam is a sociable person. He loves to talk and meet people. Pattern:
8. The Potato Famine happened in Ireland in the 1840s. The Irish people were poor. They couldn't buy meat or bread because they were too expensive. They ate mostly potatoes. Then a disease killed many of the potato plants. As a result, there were no enough potatoes to eat, so most people died of hunger. Pattern: ***********************************

APPENDIX C STUDENT REFLECTION JOURNAL

ปัญหาในการเรียนรายวิชาการอ่านของฉัน	
ะแห้วเนีย	3193
1190.	613/2
e also	5.
	27.0
 สิ่งที่ฉันคิดว่าต้องการปรับปรุงหรือแก้ไข 	
2	
ร. ความคิดเห็นต่อบทบาทของฉันขณะร่วมอภิปรายออนไลน์	
The state of the s	
192	- S
P.C.	
WET TOWN	ERSII.
. ความคิดเห็นของฉันต่อการได้ร่วมอภิปราย พูดคุยแลกเปลี่ยเ	มความคิดเห็นกับเพื่อนๆ และครูผู้สอน
ů (้ ขี้ขึ

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	1788	A 40 m	3,236	2/2	
เ วิธีหรือเทคนิคต่างๆ ่	ในการอ่านที่เพื่อนท์	ำแล้วฉันคิดว่า	เป็นสิ่งที่ดีที่ควรเ	ทำตาม คือ	
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2 สิ่งที่ฉันเห็นหรือทรา	200	307018 1 3 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	22248		
2 สงทนนเทนทายทา เ	บ .	เพพางแบนสงท	ก เศษตุกงผถงกา	กกขึ้ง ผเถ	
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T.					
สิ่งที่ฉันคิดว่าเป็นประ	โยชน์จากการอภิปร	ายออนไลน์ แล	เะได้นำไปใช้ในก	ารปรับปรุงการ	าเรียนรู้วิชาการ -
ห์ดีขึ้น คือ					
171016 110					
	-3/16.	FINI	VERS	· _	



APPENDIX D

INTERVIEW PROTOCOL

Date of interview: T	ime:
Interviewee:	
Introduction (3-4 minutes)	ding the participants for soming. The interdigues may
have a small talk to make the interviewee relaxed ar	king the participants for coming. The interviewer may
informs the interviewee about the interview.	id comfortable. (1-2 minutes). Then the interviewer
< <off record="" the="">></off>	
	As you may know, my name is Khwanchanok
Suebsook, the researcher who is responsible for this	
session. First of all, I'd like to give you information al	pout interview.
The interview aimed to obtain more informa	ation about the use of online discussions, your
learning experience and the aspects of learning or kr	nowledge the participants have gained through
scaffolding while participating in online discussions. T	here are 6 questions: Please feel free to express
ideas. May I record the interview? (Previously, the int	erviewee is informed and asked for permission for
audio recording. Before the interview the researcher	asked for his/her confirmation again.)
<< On the record>>	40
This is the interview with the participant number	code All right. Let's start with the first
question	
	-Ulst.
Interview questions (10 -15 minutes)	
 นักศึกษามีความคิดเห็นอย่างไรกับการจัดให้มีการอภิปรา 	ายในรายวิชาการอ่าน
What do you think of incorporating online discu	ussion forums in reading course?

2. ในการอภิปราย นักศึกษามีบทบาทอย่างไร

No. _____

- How do you perceive your role in online discussions?
- 3. นักศึกษาได้รับหรือเรียนรู้สิ่งใดบ้างจากการร่วมสนทนากับเพื่อนและครูในการอภิปราย โปรดระบุประเด็น/ความรู้/ทักษะ ที่นักศึกษาได้เรียนรู้
 - What do you get or learn from having interactions with peers and the teacher in online discussions? Please specify the aspect of learning /knowledge /skills you learn.

- 4. นักศึกษาได้นำสิ่งที่เห็นว่าเป็นประโยชน์จากการเรียนรู้ ไปใช้ปรับปรุงทักษะการอ่านของตนเองในเรื่องใดบ้าง What aspects of learning you find useful and use to improve your reading skills?
- 5. นักศึกษาสนุกกับการเรียนออนไลน์หรือไม่ โปรดเล่าประสบการณ์ของท่าน Do you enjoy online discussions?
- 6. นักศึกษามีปัญหาในการเรียนออนไลน์หรือไม่ หากมี โปรดระบุประเด็นปัญหา Do you have any problems in participating in online discussions? If so, what are the problems?



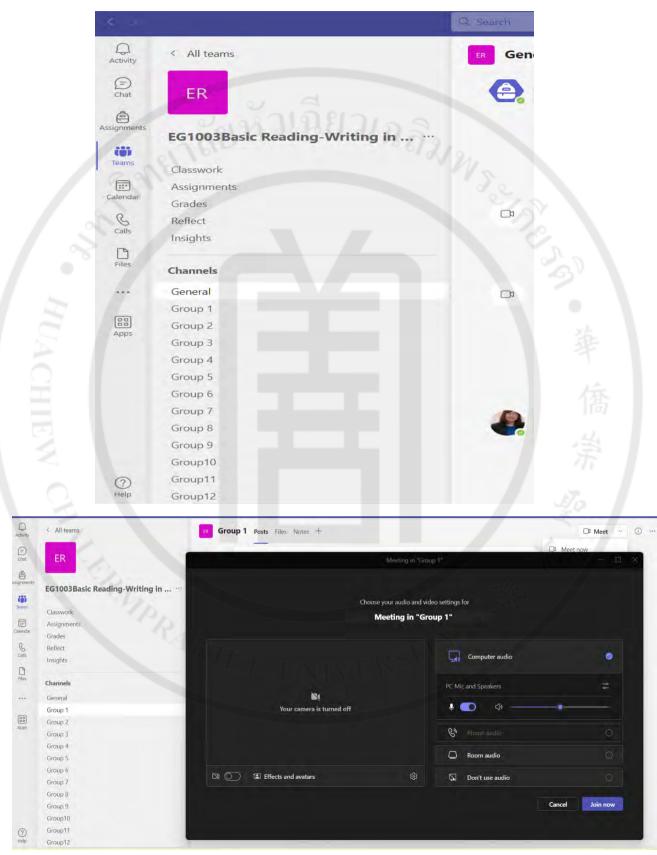
APPENDIX E TEACHER JOURNAL

Group	Reading task	Topics of interaction	Student roles & their interactions	Strategies used for scaffolding	Problems/ interesting incidents observed
		U _A C			華
		HE			僑
	\	N C			宗
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		To the second		**	
			Ro		

Aspects of learning / knowledge shared to the participants by	Teacher reflection				
peers and the teacher					
HUACHIEW CHARLERAMPRAKIET U	A A A A A A A A A A A A A A A A A A A				

APPENDIX F

MS TEAMS for online discussions



APPENDIX G

The Students' Pre-and Post-test scores and the T-Test Results

Test taker No.	Pre-test score	Post-test score
S1	9	15
S2	7	11
S3	15	20
S4	6	9
S5	11	16
S6	18	23
S 7	8	16
S8	6	7
S9	12	18
S10	4	8
S11	11	16
S12	17	23
S13	12	13
S14	17	20
S15	16	19
S16	11	16
S17	8	12
S18	8	14
S19	21	11
S20	20	26
S21	8	14
S22	8	11
S23	5	11
S24	6	17
S25	-17	20
S26	10	15
S27	15	19
S28	25	27
S29	7	13
S30	8	16
TOTAL =30	Mean = 11.53	Mean = 15.87

IBM SPSS Statistics 26

T-Test

Paired Samples Statistics

		Paired S	amples	Statistics		
		Mean	N	Std. Deviation	Std. Er n Mea	
Pair 1	Pre-test	11,53	30	5.36	1 00	.980
	Post-test	15.87	30	5.00	8	.914
	Pair	ed Sampl	ac Carre	dations		
	Pair	ed Sampi	es Corre	lations		
				6 TOWN	mr.	
			N	Correlation	Sig.	

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	Pre-test & Post-test	30	.785	.000

Paired Samples Test

Ph - 1	4 11 9	Philips	
P 21	TOP	Differe	2930

Me	ean Std. Deviatio	Std. Error n Mean	Lower	nce Upper	1	df	Sig. (2-tailed)
INTE	eati Siu, Deviatio	Mean	Lower	Obbei	, l	QI	org. (2-tailed)

APPENDIX H
Students' Scores on Four Reading Tasks

Students' Raw scores

Group	Reading Task 1	Reading Task 2	Reading Task 3	Reading Task 4	e 90
No.	(Total 15 = 100%)	(Total 30 = 100%)	(Total 30 = 100%)	(Total 16 =100%)	Total score
	Understanding of	Topics & pronoun	Topics, Main ideas, Signal	Understanding of patterns of	otal
	good paragraphs	referent	words & Supporting Details	organization & signal words	F
G1	15 (100%)	29 (96.7%)	28.5 (95.5%)	13 (81.25%)	85.5
G2	15 (100%)	28 (93.3%)	26 (86.7%)	16 (100%)	85
G3	15 (100%)	30 (100%)	29.5 (98.3%)	15 (93.75%)	89.5
G4	15 (100%)	29 (96.7%)	24.5 (81.7%)	16 (100%)	84.5
G5	15 (100%)	30 (100%)	29.5 (98.3%)	15.5 (96.87%)	90
G6	15 (100%)	30 (100%)	28 (93.3%)	15.5 (96.87%)	88.5
G7	15 (100%)	28 (93.3%)	26.5 (88.3%)	16 (100%)	85.5
G8	10 (66.7%)	28.5 (95.0%)	27.5 (91.7%)	15 (93.75%)	81
G9	5 (33.3%)	24.5 (81.7%)	15 (50.0%)	14 (87.5%)	58.5
G10	5 (33.3%)	27 (90.0%)	24.5 (81.7%)	14 (87.5%)	70.5
G11	15 (100%)	20.5 (68.3%)	21 (70.0%)	14 (87.5%)	70.5
G12	10 (66.7%)	21 (70.0%)	21.5 (71.7%)	16 (100%)	68.5

Students' Final scores

Group	Reading Task 1	Reading Task 2	Reading Task 3	Reading Task 4
No.	(total score = 15)	(total score = 15)	(total score =15)	(total score = 15)
G1	15	14.5	14.25	12.19
G2	15	14	13	15
G3	15	15	14.75	14.06
G4	15	14.5	12.25	15
G5	15	15	14.75	14.53
G6	15	15	14	14.53
G7	15	14	13.25	15
G8	10	14.25	13.75	14.06
G9	5	12.25	9.75	13.13
G10	5	13.5	12.25	13.13
G11	15	10.25	10.5	13.13
G12	10	10.5	10.75	15

APPENDIX I

Tabulation for the frequency and percentage of student responses on journals

Aspects /knowledge learnt and used for reading improvement

equency

(100%)

Participant Response No.

Reading strategies & techniques	30	30.0%	1/2
			100
1. Practice how to identify the topics /main ideas	10	10%	P14, P19, P20, P22, P27,
of reading texts.		7	P30, P31, P42, P44 P50
2. Read the whole texts and skip unknown	6	6%	P4, P14, P15, P35, P38, P39
words.			37
3. Read at a slower pace and think while	4	4%	P13, P32, P37, P41
decoding the meanings of each sentence.			3
4. Skim and look for keywords to get the gist of a	5	5%	P12, P13, P18, P20, P23
paragraph.			1.5
5. Reread a specific part of the texts that are	2	2%	P26, P30
unclear.			.44
6. Read the texts, look for signal words to	3	3%	P7, P45, P46
identify the pattern of organization.			
Study skills	27	27.0%	40
7. Exchange ideas with others can help learn	9	9%	P2 _, P3, P4, P12, P15, P18,
things from different perspectives.			P33,
			P38, P40
8. Review the lessons regularly.	5	5%	P25, P28, P30 _, P40, P42
9. Take notes of lectures and do exercises more	5	5%	P6, P8, P10, P47 _, P49
frequently.		RSI	
10. Analyze the texts and think logically.	2	2%	P8, P10
11. Study the lessons to prepare before the class	3	3%	P12, P37, P40
& online discussions			
12. Be confident to speak up their ideas/give	3	3%	P17, P39, P39
opinions/answer questions.			

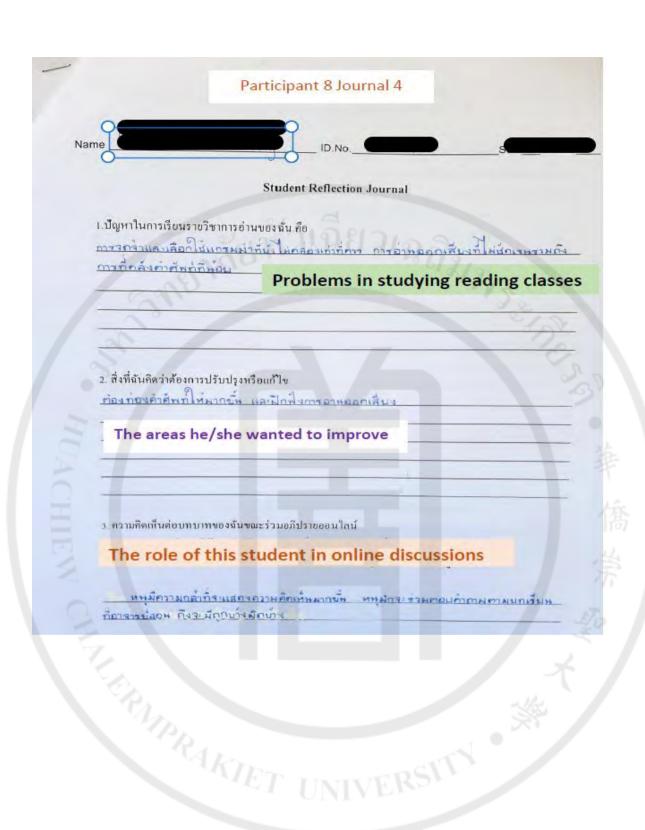
and clearly. 14. Practice reading difficult words . 15. Practice reading aloud to increase reading 3 3% Fuluency. 16. Practice reading with rising and falling 2 2% intonation / stress. 17. Make a list of words that they often 1 1% Fullipping mispronounced for extra practice. Vocabulary learning technique of guessing 16 16.0% word meanings 18. Study meanings of new words /jot down new 10 10% Fullipping for extra practice.	P1, P6, P7, P11, P14, P22, P23, P24, P27P29, P34, P37, P39, P41, P48 P11, P14, P14, P37 P6, P16, P11
and clearly. 14. Practice reading difficult words . 15. Practice reading aloud to increase reading 3 3% Fuluency. 16. Practice reading with rising and falling 2 2% Fuluency intonation / stress. 17. Make a list of words that they often 1 1% Fullipping mispronounced for extra practice. Vocabulary learning technique of guessing 16 16.0% word meanings 18. Study meanings of new words /jot down new 10 10% Fullipping for extra practice.	P23, P24, P27P29, P34, P37, P39, P41, P48 P11, P14, P14, P37 P6, P16, P11
14. Practice reading difficult words . 4 4% F 15. Practice reading aloud to increase reading 3 3% F fluency. 16. Practice reading with rising and falling 2 2% F intonation / stress. 17. Make a list of words that they often 1 1% F mispronounced for extra practice. Vocabulary learning technique of guessing 16 16.0% word meanings 18. Study meanings of new words /jot down new 10 10% F	P34, P37, P39, P41, P48 P11, P14, P14, P37 P6, P16, P11 P3, P2
14. Practice reading difficult words . 4 4% F 15. Practice reading aloud to increase reading 3 3% F fluency. 16. Practice reading with rising and falling 2 2% F intonation / stress. 17. Make a list of words that they often 1 1% F mispronounced for extra practice. Vocabulary learning technique of guessing 16 16.0% word meanings 18. Study meanings of new words /jot down new 10 10% F	P11, P14, P14, P37 P6, P16, P11 P3, P2
15. Practice reading aloud to increase reading 3 3% Filtering 16. Practice reading with rising and falling 2 2% Fintonation / stress. 17. Make a list of words that they often 1 1% Finispronounced for extra practice. Vocabulary learning technique of guessing 16 16.0% word meanings 18. Study meanings of new words /jot down new 10 10% Finispronounced for extra practice.	P6, P16, P11 P3, P2
fluency. 16. Practice reading with rising and falling 2 2% Fintonation / stress. 17. Make a list of words that they often 1 1% Fintspronounced for extra practice. Vocabulary learning technique of guessing 16 16.0% word meanings 18. Study meanings of new words /jot down new 10 10% Fintspronounced for extra practice.	P3, P2
intonation / stress. 17. Make a list of words that they often 1 1% Finispronounced for extra practice. Vocabulary learning technique of guessing 16 16.0% word meanings 18. Study meanings of new words /jot down new 10 10% Finispronounced for extra practice.	E.
mispronounced for extra practice. Vocabulary learning technique of guessing 16 16.0% word meanings 18. Study meanings of new words /jot down new 10 10% F	P11
Vocabulary learning technique of guessing 16 16.0% word meanings 18. Study meanings of new words /jot down new 10 10% F	xt.
word meanings 18. Study meanings of new words /jot down new 10 10% F	xt
18. Study meanings of new words /jot down new 10 10% F	
	P7, P7, P21, P23, P19, P24
vocabulary and its meaning	P36, P38, P37, P39
19. Practice guessing meanings of unknown 4 4% F	P12, P9, P15
words from the context.	P43
20. recognize different meanings of a word and 2 2%	P7, P8
choose the correct meaning of words to the	
context	

APPENDIX J

Examples of grouping and coding student responses on journals

		Darklana ta a	° 6/3/2	1d
.ปัญหาในการเรียนรายวิช การที่ฉันมีคลังคำศัพท เละบางทีฉันก็ไม่ทันได้ดูค์ เป็นเพราะความสนใจของ	ก์น้อยทำให้ไม่อาจเข้าใ กำนั้นๆให้ดีทำให้มองแ		้ทำให้อ่านคำนั้น ตีความความหม	นๆไม่ได้หรืออ่านผิด เายผิดไป ในบางครั้ง
	เก้ไขคือ การออกเสียง	ต้องฝึกให้บ่อยๆ ให้อ่าน: การหาคำศัพท์เพิ่มมากขึ้	~	
	เก้ไขคือ การออกเสียง การอ่านนั้นๆให้เข้าใจ		น และการมีสมาร์	ธิกับการเรียนมากขึ้น -
ลิ่งที่ฉันต้องปรับปรุงเ ำความเข้าใจกับเนื้อหาใน	เก้ไขคือ การออกเสียง การอ่านนั้นๆให้เข้าใจ บข้าง Are	การหาคำศัพท์เพิ่มมากขึ้ง eas he/she wanted	น และการมีสมาร์	ธิกับการเรียนมากขึ้น -
ลิ่งที่ฉันต้องปรับปรุงเ ำความเข้าใจกับเนื้อหาใน ม่เสียสมาชิง่ายๆกับสิ่งรอง	เก้ไขคือ การออกเสียง การอ่านนั้นๆให้เข้าใจ บข้าง Are	การหาคำศัพท์เพิ่มมากขึ้ eas he/she wanted	น และการมีสมาร์	ธิกับการเรียนมากขึ้น -

	คิดเห็นของฉันต่อการได้ร่วมอ			5. 5.			
	เคิดว่าเป็นเรื่องที่ดีเพราะมันช่า	-	4				
	รถให้ไอเดียใหม่กับฉันได้ แล						
<mark>กันมากจ</mark> ็	ขึ้น รวมทั้งการแลกเปลี่ยนควา	วามคิดเห็นกับอาจารย์ก็ช่วยใช	ห้เข้าใจและทำงา	นกันได้ถูกต้องด้วย			
	Positive attitude towar						
		and learn different ideas elp them perform tasks e	asier and evch	anging ideas with the			
		tand and work together.	asiei aliu excii	langing ideas with the			
5. ในชา	นะผู้เรียน ประเด็น/เรื่องที่ฉัน	ได้เรียนร์เพิ่มเติม จากการฟัง	และร่วมพดคยแ	เลกเปลี่ยนกับเพื่อนๆ และคร			
คือ		g he/she learnt from par					
เรื่อ	วงของการรู้จักฟังและแลกเป						
	มาทำความเข้าใจในเรื่องที่ฉัน						
	เท้ที่ฉันไม่รู้และอ่านไม่ออกเ						
	การอ่าน การแปลความหมาย จ			-Take peers' or teacher's ide	oos to		
Maria	THE IN THE SECTION OF	ino it isomismos priso		make himself/herself under			
				some unclear points.			
	รื่อเทคนิคต่างๆ ในการอ่านที่	4 . 2	aaai	 -Learn more vocabulary from peers. 	m		
	and the same of th	ทศทควรทาตาม	-Learn how to pronounce w	ords			
	รที่เพื่อนฝึกอ่านตามสำเนียงที่			- learn techniques of readin	- 11		
	รที่เพื่อนกล้าอ่านออกเสียงให้	ฟัง		translating from the teacher peers.	r and		
	รที่เพื่อนฝึกอ่านบ่อยๆ		peers				
การ	รที่เพื่อนฝึกอ่านออกเสียงคำที่			1. 6.0			
	ses on item 5.1 link	Techniques found useful a -practicing pronunciation b					
to those on	item 6	-read aloud in front of pee -practice reading more oft					
		-practice listening and pro					
5.2 สิ่งที่	ฉันเห็นหรือทราบว่าเพื่อนทำ	แล้วฉันคิดว่าเป็นสิ่งที่อาจจะเ	ยังต้องปรับปรุง เ	คือ			
การ	รฝึกอ่านออกเสียง						
การ	รฝึกอ่านคำให้ถูกต้อง ชัดเจน			ir peers' level of			
การ	- รฝึกอ่านให้อ่านคล้อง เว้นวรร	คประโยคให้ดีและถูกต้อง		nd specify areas for			
การ	รฝึกอ่านให้บ่อยๆเท่าที่สามาร	ถทำได้	improvem	ent			
	าเป็นประ โยชน์จากการอย่	กิปรายออนไลน์และได้นำ	าไปใช้ ในการ:	ปรับปรุงการเรียนรู้วิชาการอ่าง	u		
ให้ดีขึ้น คือ			Things th	at he/she used to improv	/e		
การได้ฝึก	อ่านออกเสียงตามเพื่อนที่เ	ฉันคิดว่าสำเนียงภาษาดี	reading				
การฟังการ	รอ่านของตัวเองกับเพื่อนแ	เละนำมาปรับให้คีขึ้น	-improve reading by practicing				
การฝึกอ่าง	นบ่อยๆตามเพื่อนที่ฝึกอ่าน		pronunci	pronunciation			
การฟึงแล	ะฝึกอ่านออกเสียงตามอาจ	<mark>การย์</mark>		his/her reading and peer and use it for improvemen			
_				reading more often			
	Ak	Dr.	_				
	-37	ET: TINIX	711 100	listening and pronounce			
7. ความสามาร	ลหรือทักษะในการอ่านข	องฉัน เมื่อเปรียบเทียบกั	บเพื่อนๆ ที่ฉัน	รู้จักหรือร่วมทำงานด้วย อยู่ใเ	Ц		
ระดับเพา							
				อ่านได้ไม่ชัดเจนและยังอ่านไม			
			ประโยคในการ	รอ่านได้ไม่ดี ฉันยังไม่สามารถ	a		
อ่านออกเสียงห	เรือสำเนียงให้ถูกต้อง รวม	มทั้งยังอ่าน ได้ไม่คล้องดี	Self-refle	ections on learning			
			-assess his	her own reading skills			
			-recognize	weaknesses			
			- learn tec	hniques of reading and			
				ake correct pronunciation			



-help expr	e towards online discussions ress ideas and try to find the answers. w ideas from peers.
5. ในฐานะผู้เรียน ป	ระเด็น/เรื่องที่ฉันได้เรียนรู้เพิ่มเดิม จากการฟังและร่วมพูคอุยแลกเปลี่ยนกับเพื่อนๆ และค
คือ	J. 19871281742 2
ภารหาคีปเริร์กร จำเป็นคองแปลด	บอง บทกวามทับ - ซึ่งมันทำให้สามารถเข้าใจ บท กวามทันได้เข้าขึ้น และก็ไม่ อาทากกำกัวย
The aspec	ets of learning the participant learnt from
	ing in online discussions
	chnique of finding keywords of a paragraph, which can make derstand the paragraph faster and it is unnecessary to I words.
	างๆ ในการอ่านที่เพื่อนทำแล้วฉันคิดว่าเป็นสิ่งที่ดีที่ควรทำตาม คือ
ที่ให้ตเล็ก-เร เข้าใจของตัวเอง ก็ทำไล้แกษ เท็ใจ	ภาไว้แปะใหหน่งสือ หรือบทเรียนไหน สอนจบแล้วก็สรุปเทือหาตามตาม ภาให้ไม่ต้องคนึ่งเปิดหลังสือทั้งหมดเหลาะเพื่อหามีแบอ เราก็ถ่าหลรุป
pages becau summary to	se small notes in book. It is not necessary to open all use the book has lots of content. He/she just read the ease understanding and it is faster.
	\sim
4	กความอย่างใว แต่เพื่อหติความไม่ตรงตามก็แกความมหเบียกไร วง
รที่ เพื่อหรีบถ่านบ ใจ เบ๊ษและรถมก	Assess their peers' reading performance and specify areas for improvement
ร ที่ เพื่อหรีบถ่านบ ใจ เน้นและชอปก สิ่งที่ฉันคิดว่าเป็นประ	Assess their peers' reading performance
รที่ เพื่อหรีบถ่านบ ใจ เม้นและรอบถ สิ่งที่ฉันคิดว่าเป็นประ หัดิขึ้น คือ การที่ไม่แปลคำตั	Assess their peers' reading performance and specify areas for improvement - โยชน์จากการอภิปราขออนใสน์และใค้นำไปใช้ ในการปรับปรุงการเรียนรู้วิชาการอ่าน
รที่ เพื่อหรีบถ่านบ ใจ เม้นและรอบถ สิ่งที่ฉันคิดว่าเป็นประ หัดิขึ้น คือ การที่ไม่แปลคำตั	Assess their peers' reading performance and specify areas for improvement
รที่ เพื่อหรีบถ่านบ จใจ เม้นและชอมถ สิ่งที่ฉันคิดว่าเป็นประ ห้ดีขึ้น คือ การที่ ไม่แปลค่ายั พัทดาบกาวมหมาย	Assess their peers' reading performance and specify areas for improvement - โยชน์จากการอภิปราขออนใสน์และใค้นำไปใช้ ในการปรับปรุงการเรียนรู้วิชาการอ่าน
ส่งที่ฉันคิดว่าเป็นประ สั่งที่ฉันคิดว่าเป็นประ ห้ดีขึ้น คือ การที่ไม่แปลค่าผั ผักลาบความหมาย Things that I	Assess their peers' reading performance and specify areas for improvement ะโยชน์จากการอภิปราขออนใลน์และได้นำไปใช้ ในการปรับปรุงการเรียนรู้วิชาการอ่าน เมา กามความหมายกรรฐ เพราะว่ายางก็คำคำนั้นอาจระเป็นสำหวานหรือ
สิ่งที่ฉันคิดว่าเป็นประ สั่งที่ฉันคิดว่าเป็นประ ห้ดีขึ้น คือ การก็ไม่แปลค่าตั ผักลามกาวมหมาย Things that I	Assess their peers' reading performance and specify areas for improvement ะโยชน์จากการอภิปราขออนใลน์และได้นำไปใช้ ในการปรับปรุงการเรียนรู้วิชาการอ่าน เมา กามความหมายกรรฐ เพราะว่ายาง ก็คำคำน้ำควาวระบับหล้าหวานหรือ เราการคุมรับทบองปรับยะทัย he/she used to improve reading ot translate the literal meaning of words because it may as different meanings. We should consider the context.
สิ่งที่ฉันคิดว่าเป็นประ หัดขึ้น คือ การที่ไม่แปลคาศ ศักดานการมหมาย Things that I - He/She did no be idioms or ha	Assess their peers' reading performance and specify areas for improvement ะโยชน์จากการอภิปราขออนใลน์และได้นำไปใช้ ในการปรับปรุงการเรียนรู้วิชาการอ่าน เมา กามความหมายกรรฐ เพราะว่ายาง ก็คำคำน้ำควาวระบับหล้าหวานหรือ เราการคุมรับทบองปรับยะทัย he/she used to improve reading ot translate the literal meaning of words because it may as different meanings. We should consider the context.
ส่งที่ฉันคิดว่าเป็นประ สั่งที่ฉันคิดว่าเป็นประ หัดิขึ้น คือ การที่ ไม่แปลค่าตั มีหลานการมหมาย Things that I -He/She did no be idioms or ha	Assess their peers' reading performance and specify areas for improvement ะโยชน์จากการอภิปราขออนใลน์และได้นำไปใช้ ในการปรับปรุงการเรียนรู้วิชาการอ่าน เมา กามความหมายกรรฐ เพราะว่าบาง ก็คำคำเน้นอาจระเป็นสำหวานหรือ เราการคุมรับกายองปราโบคนั้นๆ he/she used to improve reading of translate the literal meaning of words because it may as different meanings. We should consider the context.
รที่ เพื่อหรีบถ่านบ จึงที่ฉันคิดว่าเป็นประ เห้ดีขึ้น คือ การที่ ไม่แปลค่าตั มีหลานกามหมาย Things that I -He/She did no be idioms or has ระดับ. 2 เพราะ	Assess their peers' reading performance and specify areas for improvement *โยชน์จากการอภิปราขออนใสน์และใต้นำไปใช้ ในการปรับปรุงการเรียนรู้วิชาการอ่าน เมาการครา มหมายกรรฐ เพราะว่าบาง ก็คำคำนั้นอาจระเป็นสำหารหรือ เชาการคุมขึ้นทยองปราโยคนั้นว he/she used to improve reading ot translate the literal meaning of words because it may as different meanings. We should consider the context. ทักษะในการอ่านของฉัน เมื่อเปรียบเทียบกับเพื่อนๆ ที่ฉันรู้จักหรือร่วมทำงานด้วย อยู่ใน เรามารถนาความและเกือวามหมมายก็อามมายก็อากมายก การปลักออันการ

Participant 32 Journal 2 Name Napatsorn Sriduana ID.No. 630091 Sec 01 Class Student Reflection Journal เ ปัญหาในการเรือนรายวิชาการอำนายงนั้น คือ Problems in studying reading classes ในการการแบบกางๆ ที่ยังต้องกาสังการที่สาวแว้า Lange Pattern เมษานน หรือการหา Main Idea ในแก่ละ paragraph นึงโสกว่าตัวเองนังให้มีความแม่นนำ 100 / หรือบางที่ขางมีการศีครามผิด ทำให้คลาดเคลื่อน และเปิดข้อผิดพลาด 2. สิ่งพี่ถับติดว่าต้องการปรับปรุงหรือแก้ใน ที่องการปรับปรุงในเรื่องความเรื่า และความแม่นบ้าในการถ่าน จับใจความสำคัญ และ ที่คาาฟิก็อย่างถูกคือง Areas he/she wanted to improve ร ความคิดเห็นต่อบทบาทของล้นขณะร่วมแก๊ปรายอยนไลน์ he role of this student in online discussions รราได้ ใบผลบทหายทห้าที่ใช้เป็นที่วทห้ากลุ่ม ในขณะร่วมอภิปรายออนไหน้กันในกลุ่ม ระพยายามให้เพื่อนทุกคนพูดแหดงความดิดเห็นกันยยู่ศลยก นากมีจุดไหนที่ เพื่อหงจำใจ เอาเกาสแม้เพียงเล็กพ้อยก็จะอธิบายให้เพื่อแห้งกันที่

Attitude towards online discussions

- -group members helped each other.
- -members have different ideas.
- -some peers did not give opinions and that made it take time to finalize the answers, but they can solve this problem.
- ความศิตเทินของฉันต่อการใต้ร่วมอภิปราช พุดคุณเถกเปลี่ยนทางมศิลเพิ่นกับเพื่อนๆ และครูผู้สอน

การรามถูกปราย ค่อนจ้างเป็นไปอย่างราบรีน ทุกอนในกลุ่มต่อหจ้างจ่ายเหลือกันได้ดี แต่อาจจะมีขางจุดในจ่างของการขาบรามดำตอน มีความอิดเห็นก็ไม่ตางกันน้าง เพื่อนบางคนอาจจะบังไม่ค่อยกล้า แสดงความกิดเห็นมากษัก ทำให้การรวบรวมตำตอบ ใช้เวลาค่อนจ้างนาน เพียงว่าส่วนารถแก้ไจได้

ร ในฐานะผู้เรียน ประเด็นฝรื่องที่ฉันได้เรียนรู้เพิ่มเติม จากการพับและร่วมพูดอุยแลกเปลี่ยนกับเพื่อนๆ และครู

The aspects of learning he/she learnt from participating in online discussions

- ที่งที่เขาได้เป็นหรู้ดีจ กักษะ และเทคนิดต่างๆที่สาจางมีได้ แพะพ้า ถึงแม้ว่าบางอย่าง เราจะ มีความรักยุ่แล้ว แต่การที่ได้รับ คำแพะพ้าจากอาจางย์ ก็เป็นเหมือนกับการ เพิ่ม ความสำนาญ คำามเจ้าใจในการเรียนของเรามากขึ้น

- สิ่งที่ได้ เรียนรู้ เพิ่มเติมจากการร่วมอภิปราย คือ การรับพังการหลือเพิ่มต่างๆของ เพื่อน แต่ละคน ถึงแม้จะยังพีลวามคิดที่ไม่ตรงกัน แต่ก็ทำให้เราพยายามปรับและทำความ

(จำใจใหล้งที่ พื่อแก้องการจะสื่อยอกมามากขึ้น

-The skills and techniques the teacher advised. Teacher's advice can help make him/her more skillful in learning.

-Learning to listen to different opinions of peers and how to deal with and understand their

5.1 วิธีหรือเทคนิสต่างๆ ในการยามที่เพื่อนทำแล้วฉันอัดวาเป็นสิ่งที่

การพบาบามค่อยญ อ่าน passage แล้วหาด้างเฉม เพราะบางที่ เราอาจจะติดนี สับทำ อะไรเว็วเกินไป การได้มาอภิปรายกลุ่มจึง เหมือนค่อยๆทำให้เรา คะเจียดรอบคอบ มากจั้น

Techniques found useful and he /she wanted to follow
Reading at a slower pace and think while decoding the meanings of reading texts.

Assess their peers' level of reading and specify areas for improvement

5.2 สิ่งที่สัมเพิ่มหรือทราบว่าเพื่อนท่าแล้วฉันคิดว่าเป็นพื้นที่อาจจะยังต้องปรับปรุง คือ

ล้าหรับเพียนบางคนอาจจะยังไร่นี้ความกระที่อรื่อรั้นมากพล และยังขาดตาวนรอบตอบ ในการรวนรวมกำหายน หรือไม่ก่องให้จำในรายกะเฉียดท่างๆของเพื่อหา

ก สิ่งที่ฉับคิดว่าเป็นประโยชาจากการอภปรายออนใหน้ดละใต้นำไปใช้ ในการปรับประการเรียนรู้วิชาการย่าน ให้ดีขึ้น ที่ค

การอภิปรายาสุดปัลฟ์ทำให้เราและเพื่อนในกลุ่มกล้าที่จะแสดงกวามคิดเห็นพากขึ้น และทำให้ รู้ว่าทักษะของเพื่อนแต่ละคนในระดับใก , มีความเข้าใจเพื่อทานากน้อยเพียงใก ตัวให้เราสามารถใช้ครามรู้ของเราไป และนำทรือ ช่ายในประเด็นที่เพื่อนยังไม่ค่อย

Things that he/she used to help improve their peers' reading -can use knowledge to advise or assist peers in what they do not understand Do not mention techniques used to improve his/her own reading skills.

7. ความสามารถหวิชากักยะในการอ่านของฉัน เมื่อสโรยบเทียบกับเพื่อนๆ ถึงันรู้จักหรือร่วมทำงานด้วย อยู่ใน ระดับ เพราะ....

ส่วนตัวคิดว่าความสายารถจะจากะลงอยู่ในระดับค่อนจ้างดี เพราะ พากมีจุดโทษที่ เพื่อน ไม่เข้าใจ เรือไม่มั่นใจ เรามักจะได้รับการไร้ ราจใจจากเพื่อมในการช่วยแนะนำ / อธิบายในสิ่งที่เพื่อมีไม่เจ้าใจ

Self-reflections on learning

-assess his/her own reading skills

- recognize his/her important role in assisting peers' learning

Examples of coding responses:

The aspects of learning the participants found useful and used for their reading improvement.

Reading strategies & techniques

1. Practice how to identify the topics /main ideas of reading texts.

Participant No. 31

 ในฐานะผู้เรียน ประเด็น/เรื่องที่ฉันได้เรียนรู้เพิ่มเติม จากการฟังและร่วมพูดคุยแลกเปลี่ยนกับเพื่อนๆ และครู คือ

ได้ รู้จักกร ให้ เขามีผไลนี้ ในการลื่อสารครางกุ้มดำมากที่สุด จาก เาต่ก่อนไม่ รู้ทริต การให้งาน ไม่รู้จักแลม MS Team และให้เครื่องสั่วในเอมไม่เม็น

สิ่งที่ฉันกิดว่าเป็นประโยชน์จากการอภิปรายออนไลน์และได้นำไปใช้ ในการปรับปรุงการเรียนรู้วิชาการอ่าน
 ให้ดีขึ้น คือ

ดือ หรือการค่าน Topic สายกรกล้าไปปริบาธิอาเลองไล้

Participant No. 44

5.1 วิธีหรือเทคนิคต่างๆในการอ่านที่เพื่อนทำแล้วฉันคิดว่าเป็นสิ่งที่ดีที่ควรทำตาม คือ <mark>เทคนิคที่เพื่อนชอบบอกบ่อยๆคือให้หาคำที่บ่งบอกถึงใจความหลัก หรือคำเชื่อมต่างๆที่</mark>สามารถเปลี่ยนแปลงสถาณการได้

6สิ่งที่ลันคิดว่าเป็นประโยชน์จากการอภิปรายออนไลน์และได้นำไปใช้ในการปรับปรุงการเรียนรู้วิชาการอ่านให้ดีขึ้น คือ ประโยชน์ที่ได้รับนั้นมีได้จากทั้งอาจารย์และเพื่อนๆในกลุ่มคือการอ่านจับใจความโดยใช้เทคนิคที่เรียนมาซึ่งมันส่งผลให้ตัวผมได้เข้าใจเนื้อหา ได้อย่างชัดเจนยิ่งขึ้น

6. Read the texts, look for signal words to identify the pattern of organization.

Participant No. 45

5.1 วิธีหรือเทคนิคต่างๆ ในการอ่านที่เพื่อนทำแล้วถันกิดว่าเป็นสิ่งที่ดีที่ควรทำตาม คือ

ทำความเข้าใจบทความจะทำให้ หาง่ายมากขึ้น

6. สิงที่ฉันลิดว่าเป็นประโยชน์จากการอภิปรายออนไลน์และได้นำไปใช้ ในการปรับปรุงการเรียนรู้วิชาการ ให้ดีขึ้น คือ เทตนิก ของเพื่อน และ อาจารย์ นำไปใช้จะประหยัก เวลา และ เข้าใจ ได้ ง่ายขึ้น การสา pattern โดย หา signal Hords และ การทำ ความเข้าใจบทความ ก่อน Identify

Pronunciation & Reading fluency

13. Practice how to pronunce words correctly and clearly.

Participant No.48

 สิ่งที่ฉันคิดว่าเป็นประโยชน์จากการอภิปรายออนไลน์และได้นำไปใช้ ในการปรับปรุงการเรียนรู้วิชาการอ่าน ให้ดีขึ้น คือ

การออกเสียงหรือการพูด เพื่อนได้สอนอ่านออกเสียงคำศัพท์หรือประโยคนั้นๆให้ฟังการจะอธิปรายจริงๆ เรียนรู้การอ่านเสียงที่ ถูกต้อง ได้ลองฝึกอ่านประโยคยาวๆจากการอธิปทรยศ สกิลการอ่านเพิ่มบ้างนิดหน่อยในหนึ่งระดับแต่ก็เป็นการพัฒนาตนเอง

Vocabulary learning techniques

18. Study meanings of new words /jot down new vocabulary and its meaning

Participant No.21

5.1 วิธีหรือเทคนิคต่างๆ ในการอ่านที่เพื่อนทำแล้วฉันคิดว่าเป็นสิ่งที่ดีที่ ควรทำตาม คือ

<u>การจดบันทึกคำศัพท์ใหม่ๆ</u>และหาวิธีออกเสียงที่ถูกต้องครับ//อันนี้เป็นจุดที่ พยามทำจริงๆครับ

6. สิ่งที่ฉันคิดว่าเป็นประโยชน์จากการอภิปรายออนไลน์และได้นำไปใช้ ใน การปรับปรุงการเรียนรู้วิชาการอ่านให้ดีขึ้น คือ การได้คำศัพท์ใหม่ๆและการแก้ไขไวยากรณ์ที่ถูกต้องของคำตอบครับ

20. recognize different meanings of a word and choose the correct meaning of words to the context

Participant No. 8

6. สิ่งที่ฉันคิดว่าเป็นประโยชน์จากการอภิปรายออนไลน์และได้นำไปใช้ ในการปรับปรุงการเรียนรู้วิชาการอาน ให้ดีขึ้น คือ

การที่ไม่แปลคำศัพท์ ตามควา มหมายตรงๆ เพชาะชาบาง ที่คำคำหั้นอาจวะเป็นสำนวนหรือ พีหลาบความหมาย เรากาชกุบชิบทของปรา บคหรั้นๆ

APPENDIX K Interview Protocol Evaluation Form and Reflection Journal Evaluation Form

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An Evaluation Form of Interview Protocol

This evaluation form is developed to evaluate the interview protocol based on the following criteria: content, clarity, wordiness & negative wording, responses, balance, use of jargon & technical language, and number of question & time. Please tick to indicate the degree to which you agree with the statements using the scale below. Please write down your comments or suggestions in the space provided

1 = Strongly disagree

4 = Agree

2= Disagree

5 = Strongly agree

3 = Undecided

Criteria / aspects		Rat	ting sca	ile		Comments / suggestions
Ω	1	2	3	4	5	Comments / suggestions
Content						衙
1. The questions cover all important areas						.22,
addressed in the objectives.			100			第一 第一
(please see the objectives in the protocol)						
2. The questions are sufficient to achieve the						# P
objectives.						
Clarity						7
3. The questions are direct and specific.						**
4. The participants can understand what is	P.					~ ·
being asked.	TA	$\widehat{Q}_{R'}$	T 7	10s. 1003	OTE TO	SI^{1}

Criteria / aspects	- 7	Ra	ting sca	ale	1 983	36
	2)1	2	3	4	5	Comments / suggestions
5. There are no <i>double-barreled</i> questions						3,0
(two questions in one).						
Wordiness & Negative wording						
6. The questions are concise.				M		3)
7. There are no unnecessary words						
8. The questions are asked without negative						ž <u>k</u>
wording.						
Balance						J-fre
9. The questions are unbiased and do not						1衙
lead the participants to a response.						
10. The questions are asked using a neutral						市
tone.						- Fo
Use of jargon & technical language						₹'
11. The terms used are understandable by						- / * /
the target population.						
12. The use of technical language is minimal						38
	6					

Criteria / aspects	Rating scale					Comments (suggestions
531	1	2	3	4	5	Comments / suggestions
Number of question & time						200
13. The number of questions is appropriate.						
14. The time is appropriate. (10-15minutes)				N /		

Additional comments or suggestions	
	建
	一
	4 0

Expert

An Evaluation Form of Items on Reflection Journal

This evaluation form is developed to evaluate the content of items of the student reflection journal. Please tick to indicate the degree to which each item is congruent to the domain measured by using the scale below.

1 = clearly measuring,

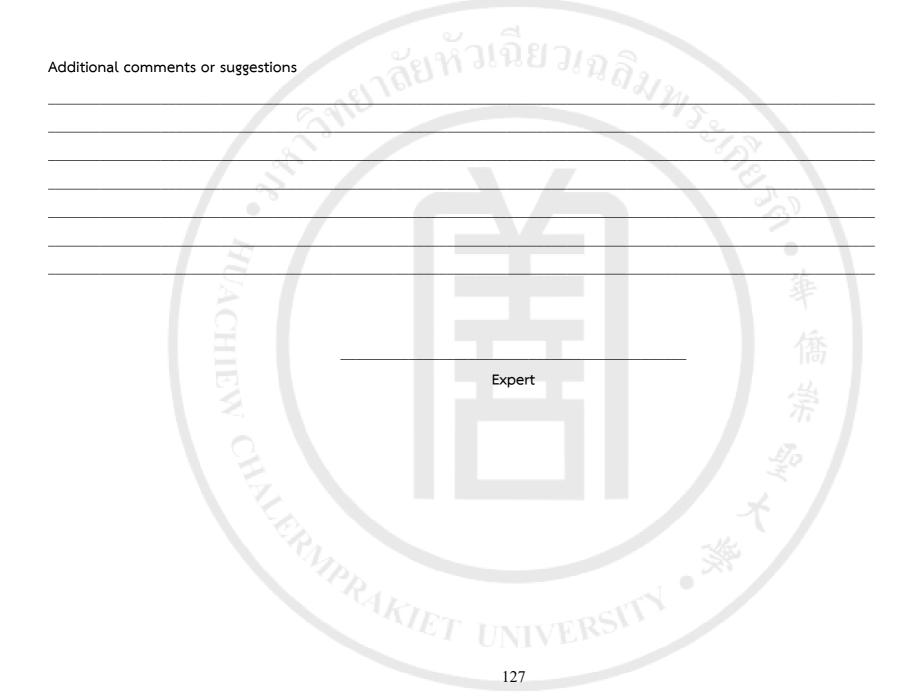
0 = unclear, or

-1 = clearly not measuring

If you have any comments, please write them in the space provided.

Item	Statements on reflection journal	Ite	m rat	ing	Comments
	9	1	0	-1	
Doma	in 1 Reading problems of learners & areas for				7
impro	vement				
	ปัญหาในการเรียนรายวิชาการอ่านของฉัน คือ				奉
1	My perceived problems in studying in the reading course are				一
2	สิ่งที่ฉันคิดว่าต้องการปรับปรุงหรือแก้ไข คือ				
2	The areas /things I want to improve are				ホ
Doma	in 2 Roles & Attitudes towards online discussions of				
learne	ers				$\mathcal{Z}_{\mathcal{O}}$
2	ความคิดเห็นต่อบทบาทของฉันขณะร่วมอภิปรายออนไลน์				7 3
3	My perceived roles in online discussions are				
	ความคิดเห็นของฉันต่อการได้ร่วมอภิปราย พูดคุยแลกเปลี่ยนความคิดเห็นกับเพื่อนๆ				
4	และครูผู้สอน				-1/4
-	My attitudes towards exchanging information with peers				
	and the teacher in online discussions are				

Item	Types of information & questionnaire statement	Ite	m rat	ing	Comments
	0.7610	1	0	-1	013/9
	n 3 Aspects of learning/knowledge the learners learnt / e from participating in online discussions				
5	ในฐานะผู้เรียน สิ่งที่ฉันได้รับ หรือ เรียนรู้เพิ่ม จากการมีส่วนร่วมในการสนทนาและพูดคุย แลกเปลี่ยนกับเพื่อนๆ และครู คือ As a learner, the areas /things I get or learn from participating in interactions and exchanging ideas with peers and the teacher are	N		Z	
	 5.1 วิธีหรือเทคนิคต่างๆ ในการอ่านที่เพื่อนทำแล้วฉันคิดว่าเป็นสิ่งที่ดีที่ควรทำตาม คือ Reading strategies/techniques I learn from peers and find it useful to follow are 5.2 สิ่งที่ฉันเห็นหรือทราบว่าเพื่อนทำแล้วฉันคิดว่าเป็นสิ่งที่อาจจะยังต้องปรับปรุง คือ The areas /things I observe from peers and realize that they need to improve are 				华
	n 4 Aspects of learning/knowledge the learners find useful e /apply to improve their reading				16
6	สิ่งที่ฉันคิดว่าเป็นประโยชน์จากการอภิปรายออนไลน์ และได้นำไปใช้ในการปรับปรุงการ เรียนรู้วิชาการอ่านให้ดีขึ้น คือ The areas/things I find it useful from participating in online discussions and use to improve my learning in the reading course are				宗皇
Doma	in 4 Learner assessment of their reading abilities/skills				- / * /
7	ความสามารถหรือระดับทักษะในการอ่านของฉัน My perceived reading ability or skill is				3/82



APPENDIX L

Examples of Students' Reading Tasks

		12+16 = 28)
Group <u>¶</u>		
Readi	ng Task 2	
Target skills to be assessed:		DV
1. Understand the gist (general idea) of a parag	graph	
2. Identify and write the best topic of the parag	graphs	1 12
3. Find referent pronouns		
A. IDENTIFYING TOPICS		
DIRECTIONS: Read all the words in each g	group. Write th	e BEST topic on the line.
1. mystery romance science fiction horro	or action	Types of movies
2. violin piano cello drum s	saxophone	Musical instruments
3. Australian Brazilian Russian Cambodian	n Egyptian	Nationalities 2
4. cake brownie pudding custard	waffles	Desserts 2
5. jacket sweater scarf coat	gloves _	Winter clothes &
6. bridge tower building skyscraper	house	Building
7. painting drawing photograph dancing	singing _	Hobbies



B. TOPICS & FINDING PRONOUN REFERENTS

DIRECTIONS: WRITE the best topic of each paragraph and FIND the referents.

8. Mexico City is growing fast. In 1970, the city had about nine million people. Now it has over 17 million. All these people are causing problems for the city. There are not enough jobs. Also, there is not enough housing. Large families have to live together in very small homes. Many homes do not have water. They also do not have bathrooms or electricity. The Mexican government is worried about all these problems. It is working hard to make life better in the city. (5 points)

5

Topic: Problems in Mexico City

Referents: it (in line 1) refers to Mexico City

They (in line 4) refers to Homes

It (in line 5) refers to Mexican goverment

9. When people think of mushrooms, they usually think of one kind. This is the kind you see in pictures and read about in stories. It has a white bottom and a red top. However, mushrooms can be found in many different sizes, shapes, and colors. Some mushrooms of very small. They are so small you cannot even see them with just your eye. Other mushrooms are very, very large. For example, one mushroom that grows underground can be the size of a football field. They are mushrooms that looked like big balls and mushrooms that looked like sticks. Some are white, others are yellow, orange, brown, black, or even purple. (6 points)

Topic: Kinds of mushrooms

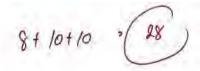
Referents: they (in line 1) refers to people

It (in line 2) refers to ______MUShroom/

them (in line 4) refers to MUShrooms

They (in line 6) refers to MUShrooms

In 1990, J.K. Rowling lived with her young daughter in Edinburgh, Scotland. She worked as a part-time teacher, but she wanted to write a book. One day she had an idea for a children's book. She thought about the idea for several years. She made many notes and read lots of books. Finally, she started writing. Her first book, Harry Potter and the Philosopher's Stone (or Harry Potter and the Sorcerer's Stone) was published in 1997. It was a big success right from the beginning. After that, she wrote more books about Harry Potter. By 2001, she became one of the J. K. Rowling the successful Topic: Referents: She (in line 2) refers to J. K. Rowling her (in line 1) refers to J. K. Rowling It (in line 5) refers to Harry Potter and the Philosopher's Stone (or Harry Potter and the Sovcerer's Stone) ACHIEW CHARLEBANDRAKIET



Reading Task 3

Target skills to be assessed:

- 1. Understand the main points and supporting details of paragraphs
- 2. Identify the topics, main ideas, signal words and supporting details of paragraphs

IDENTIFYING TOPIC, MAIN IDEA & SUPPORTING DETAILS DIRECTIONS: Read each paragraph. Then write the main idea of each paragraph, its supporting details, and signal words. (NO. 1-3)

The sports utility vehicle (SUV) was invented in the early 1990s. It quickly became very popular in the United States. There are several reasons for this. First of all, Torselarge than most cars. It can carry lots of people, bicycles, toys, dogs, and other things. This makes it popular with families. It also has four doors and a big back door so getting in or out is easy In addition, an SUV is faller than most cars. This means that the driver can see above other cars and can see the road well. Finally, an SUV has a lot more power than most cars, so it can go taster It can also go on very rough roads where other cars cannot go. (9 POINTS)

Topic: Reasons why SUV became popular in the US.

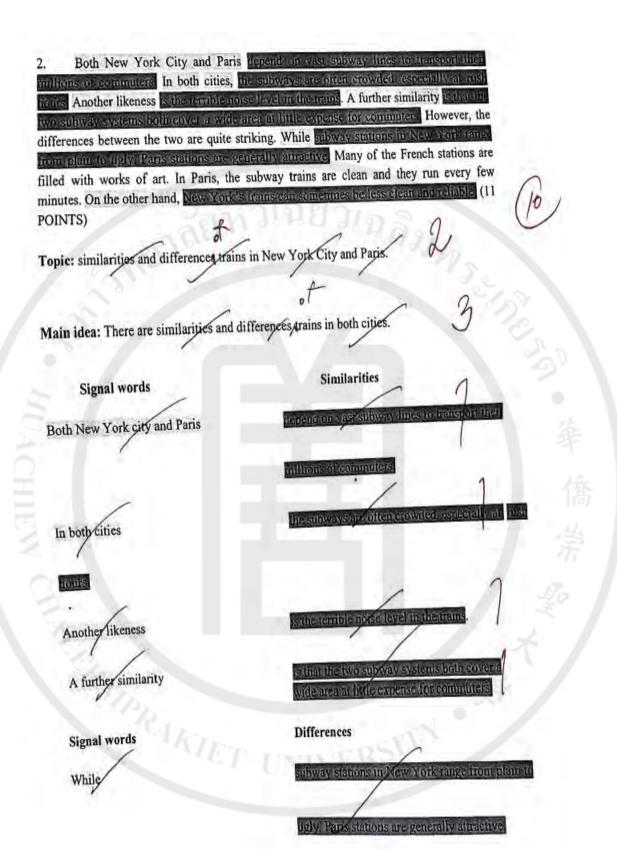
Main idea: There are several reasons why SUV became popular in the US

Details Signal Words I is larger than most cars Fisit of all In addition

can see above other cars and can see the road well

RAKIET an SUV has a lot more power than most cars, so it can go Finally

faster



diable.

Spike Lee, an African-American film director, is one of the most famous people in his field. He was born in Arland, Georgia, in 1975; Spike's middle-class family moved in Brooklyn, New York, when he was two years old. His father, jazz musician Bill Lee, and his mother, Jackie, an art teacher, had five children. The less provided a loving and stable home for their family. Spike's interest in movies began as a youngster. After graduating from Morehouse College in Atlanta, he studied filmmaking at New York University. Soon after that, he made his first leating from She's Gotta Have it, with a budget of only \$200,000. Since the success of that movie, he has written moduled and dreater more than fifteen films. All of them are extremely controversial and extraordinary popular with both black and white audiences.

(10 POINTS)

Topic: Biography of Spike Lee

2

Main idea: How Spike Lee became a famous people and film director

3

Signal Words

1975

Details

....

He was born in Atlanta

When he was two years old

family move to Brook vi

After graduating

He studied filomakin

Soon after that

He made his first feature film

Since the success

Lee has written, produced, and directed

Group 1

Pattern:

Reading Task 4

Target skills to be assessed:

- 1. Understand the patterns of organization of paragraphs.
- 2. Identify the patterns of organization and signal words of paragraphs.

IDENTIFYING SIGNAL WORDS AND PATTERN OF ORGANIZATION

DIRECTIONS: The following choices are for the items NO. 1-8.

CHOOSE the right UNDERLINE at least TWO SIGNAL WORDS that the writer uses to show the pattern.

	O. L. / Carabaning
L = Listing	TO = Time Order / Sequencing
CC = Comparison & Contrast	CE = Cause & Effect
PS = Problem & Solution	

1. In the past, people could travel between Sweden and Denmark only by boat. Nowadays there is a new bridge and tunnel between the two countries and people can travel by car. The trip is much faster these days. Before, it took 45 minutes, but now it takes only 15 minutes.

Pattern: CC	2
The Boston Red Sox baseball team needs a new baseball stadium for old stadium was built more than ninety years ago and it has many problem Many baseball fans cannot get tickets for baseball games.	or several reasons. First, the ems. Second, it is too small

3. Carol's accident happened in part because of the weather. It was a dark and stormy night, so she could not see the road well. But there was another reason for the accident. Carol was talking on her call phone and she was not watching the road carefully.

Pattern: CC CE

. The Galile	o spaceship v	was sent into	space in October December 1995	1989 to study	the planet Jupite	r. Two years
the second second	was halfway	to Jupiter, in	December	, Games reason	# 1 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
he planet.	/		9	1		
Pattern:	TO		d	•		
· · · · · · · · · · · ·	ound herself	gain weights	about 5 kilogra	ms. She consid	ered that was a	crisis for he
5, Jenniier i	ke has been t	poine on a di	about 5 knogra	at the First Fit	ness Center. Fir	nally, she ca
Since then or	oblem. She ha	as lost her we	eight.			
soive Hei pi	-	/	1/2	2		
Pattern:	PS/		1 2			
	-			/		and the same
6. Most no	ets teach chil	dren valuable	e Jessons. One	of good teache	r is dogs becau	se they tea
children to	he responsible	e. Children w	ho have to feed	the dog, give the	e dog water, and	walk the u
A CONTRACTOR OF	manageriala fo	ar the life of a	nother being. Ca	12 grad rendit al		lity. Childi
who own a	cat learn abo	ut independer	nce since cats ar	e quick to teach	this.	2
WINGOWN	200				2	
Pattern:	CCo	/		6.5		
			. /	-		this but Co
is short an Susan is a people.	d heavy. Whi i quiet kind o	le Susan has b	ey are different i blonde hair and b contrast, Sam is	lues eyes, Sam a sociable perso	has dark hair and n. He loves to t	l brown eye alk and me
W 141.000	CC	/	0			
Pattern:		/		(8. 54. c)	G	a. Stane
			eland in the 1840 too expensive. T t, there were no			
hunger.		1		7/		
in whom	. CE	/	0			
Pattern	-	1				
			V.53.00000		CARACTERIA	
7145.16	*********	*********	***********	**********	*********	******

