

Language Learners' Interactional Competence and Synchronous Online Group Activities

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Introduction

This study responds to the suggestion by Moorhouse et al. (2021) that we need to acquire a fine-grained understanding of what constitutes classroom interactional competence (CIC) and how it might be achieved in an online setting. While work has been done to understand teachers' competence, less is known about students. Therefore, we need a better understanding of the competency students need to successfully use interaction to support learning in synchronous online lessons, through features, including breakout rooms. Popular video-conferencing software (VCS), such as Zoom, used for synchronous online teaching, includes a "breakout room" function that allows teachers to assign students to a group. This creates a synchronous space within the main lesson for student-to-student group activities and discussions (Moorhouse et al., 2022).

During the COVID-19 pandemic, there has been a ubiquitous use of VCS as a platform for online learning. However, the competences needed to use VCS for synchronous teaching and learning effectively differ from in-person contexts. While some research has been done to explore students' engagement in breakout rooms (e.g., Keskin & Çelik, 2021), we still need to know much more. The study reported here, drawing on a mixed-methods survey of university language learners in Vietnam who were attending lessons through VCS, adds to our growing understanding of interactional competence for synchronous online language lessons. Specifically, drawing on CIC as a conceptual framework, it aims to understand the interactional competencies learners need to interact during group work in breakout rooms successfully and what learners can learn from engaging in such activities.



Literature Review

e-Classroom Interactional Competence

Walsh (2006) coined the term classroom interactional competence (CIC). He defined it as "teachers' and learners' ability to use interaction as a tool for mediating and assisting learning" (p. 65). Walsh (2013) argued that learning is regarded as a social activity strongly influenced by involvement, engagement, and participation; therefore, interaction is essential for learning to occur in a classroom. Although CIC is highly context-specific, Walsh suggests that some characteristics are universal to any classroom, anywhere. The first constituent involves the convergence of pedagogic goals and the language used to achieve the goals. According to Walsh (2006), the two elements' convergence is not static but constantly re-adjusted. The second constituent is interactional space for students. Thus, teachers need to purposefully deploy time so that students can participate in the discourse, contribute and receive feedback on their contributions. Typically, this can involve group work and other opportunities for student-to-student interactions. Thirdly, classroom interactional competence entails understanding feedback more fully, which requires the ability of a teacher to shape learner contributions (Walsh, 2013) by taking a learner's response and doing something with it rather than simply accepting it.

However, Walsh's (2013) conceptualization pertained to the in-person learning environment, i.e., physical classroom, not the synchronous online classroom. The physical and virtual teaching and learning environments are fundamentally different, creating new interactional practices (Moorhouse et al., 2022). To help teachers and scholars consider the competencies needed for synchronous online teaching, Moorhouse et al. (2021) proposed three critical elements for classroom interactional competence for synchronous online teaching – e-CIC; technological competencies; online environment management competencies; and online teacher interactional competencies.

Technological competence concerns the teacher and student's ability to use digital tools to foster classroom interaction. For example, teachers and learners need to be familiar with the features of various digital tools and how they can be used for teaching. In the synchronous online classroom, this will mean awareness of VCS platforms and various features, such as written chat, annotation, drawing, and oral channels that can aid interaction (Kohnke & Moorhouse, 2022; González-Lloret, 2020). It can also mean combining the VCS with other tools, such as game-based platforms, learning management platforms, and collaborative tools depending on the pedagogical aims of the lessons.

Online management competence is concerned with creating an environment conducive to interaction. While Moorhouse et al. (2021) were initially concerned with the teacher's role, students also have an essential role in creating a positive learning environment. Ideally, teachers and learners are working together to develop etiquette and expectations for the online space. Teachers and learners may have to deal with the challenges of isolation feelings and the lack of face-to-face interaction with the teacher and other learners (Keshavarz et al., 2022).

Online teacher interactional competence concerns teachers' ability to elicit and facilitate interaction during synchronous online lessons. Strategies such as extended wait time, explicit question sequences, and the use of multimodal communication channels can help teachers do this (Moorhouse et al., 2021). However, students also require specific competence to interact during synchronous online language lessons. For example, they need to be able to self-nominate, choose appropriate channels for communication, and adopt turn-taking practices suitable to the online mode. We know little about how students understand their interactional competencies nor how they may acquire them. This study will address this area.

The Use of Breakout Rooms in Online Learning

VCS breakout room functions provide a space for student-to-student interaction separate from the main class interface. When assigned to breakout rooms, students can still contact the instructor if they are having any problems, and while the students are in breakout rooms, the instructor can broadcast a short message to all students. However, teachers cannot simultaneously observe all group activities in breakout rooms (Premji, 2021). The breakout room function provides a space to engage students in group activities and provides opportunities for students to communicate directly with classmates (Lee, 2021). Besides, breakout rooms encourage learner-learner interaction (Martin & Parker, 2014) and facilitate collaborative learning and interaction (Chandler, 2016).

However, there is evidence of the challenges of using VCS to conduct language learning online. For example, Kohnke and Moorhouse (2020) found that group discussions in Zoom, a popular VCS platform, take a significant amount of time and are difficult for the instructor to monitor. Furthermore, it can be burdensome for instructors to supervise students' interaction in larger classes, and students can get tired from looking at the screen for an extended period of time (Moorhouse, 2020). Students may suffer from "Zoom fatigue" or the "tiredness, anxiety, or worry" due to excessive videoconferencing sessions (Wiederhold, 2020, p. 437) or multitasking and not focusing, as well as Internet connection problems, and the awkwardness of having to speak to a screen (Zhang, 2020).

Previous Studies

One recent study by Keskin and Celik (2021) explores break-out rooms' efficacy in motivating students to speak English and providing a collaborative learning environment by conducting several task-based activities and group discussions. Fifty-eight students responded to the ten items questionnaire sent to them via a Google form. Based on 10-week sessions on break-out rooms, the results of the questionnaire, and the findings of the teachers' field notes, it was found that using break-out rooms for speaking activities, discussions, and other tasks held in groups helped involve students in speaking English during the lessons. Mostly, students liked working in groups in break-out rooms and sharing their work after the sessions. In another recent study, Nisa, et al. (2021) observed and surveyed students learning speaking via small group discussions in Zoom breakout rooms. The findings reveal that students can exchange ideas and opinions about teaching discussions in small group discussions to be more confident in their speaking skills. In breakout rooms, students not only exchanged views and opinions, but produced different knowledge, experiences, and talents that each student shared in the small group. The study concluded that the learning method using the breakout room effectively increases students' participation in speaking in a speaking course. Besides, the findings indicate that most students prefer small group discussions to whole class discussions because they helped them be more active and confident. However, these studies did not reveal the interactional competencies of students on what they did to interact with other members in breakout rooms and what they reported learning from other members via interaction with them.

Interaction in synchronous online language lessons employed in language teaching and learning has been studied, but there is a gap in finding out what students need to know to interact in breakout rooms in online courses and what they report to learn. This study was set out to fill this gap and attempts to answer the following research questions:

1. What competencies do university-level EFL learners need to effectively use interaction for learning during breakout room group activities?

2. What do students report learning from interaction with other students and teachers in breakout rooms?

Research Methodology

This qualitative-dominant study using a mixed-methods survey was conducted at a university in Vietnam. The students and teachers had been using Zoom and its breakout room function since the onset of the pandemic in 2020 to conduct synchronous online lessons. The data was collected at the end of 2021 after more than one year of students learning via Zoom.

Participants

The participants in this study were enrolled in English-language skills courses at a university in Vietnam and were recruited through purposive and convenience sampling. Invitations were sent to the students who studied and were familiar with Zoom and breakout rooms. The participants included 40 males, 200 females and 3 other students who did not identify their genders. The students were in their first year (43.6%), second year (46.9%), third year (4.1%), and fourth year (4.3%), respectively. They majored in English linguistics and literature (44.9%), English pedagogy (30.9%), and interpretation and translation (24.3%).

Data Collection Tool

The study adapted the questionnaire created by Moorhouse et al. (2021) to collect students' views instead of teachers. The final survey includes three sections: biographical information (3 items), technological competence (4 items and one open question), and interactional competence (five items and six open questions). The number of items was kept to a minimum to allow respondents to provide fuller responses to the qualitative items (Braun et al., 2020). The qualitative or open questions aimed to collect participants' experiences and perceptions of online synchronous interaction in breakout rooms (e.g., "What knowledge and skills do students need to successfully use interaction as a tool for mediating and assisting learning' when learning in breakout rooms?"). Qualitative items allow for "rich and complex accounts of the type of sense-making" of participants (Braun et al., 2020, p. 1). This makes open-ended items particularly useful for this study due to its exploratory nature. The survey was administered online through the use of Google Forms.

Data Analysis

Quantitative data were analyzed statistically via SPSS, and qualitative data from the survey were analyzed through an iterative thematic analysis (Braun et al., 2020) in a deductive approach. The contents from the open answers were read, re-read, and coded into themes and sub-themes related to the e-CIC. They were then reviewed and organized, with the final three themes established.

Data from the questionnaire completed by 243 students were recorded and tabulated for reliability coefficient, which achieved 0.703, indicating that the items were reliable. The mean scores of clusters two and three were also compared, and the statistics are presented in Table 1.

Comparison	of Mean	Scores

Group	N	Min	Max	Mean	SD	
Ques 4-6	243	1	5	4.03	0.75	
Ques 9-14	243	5	5	3.58	0.59	

The items surveying students' technological competencies achieve a higher mean value of 4.03 compared to 3.58 for the cluster focusing on interactional competence. It indicates higher agreement of the respondents with their perceived competence in manipulating the features of Zoom breakout rooms in online learning.

Findings

The findings are organized under two aspects of e-CIC, technological and interactional competencies.

Technological Competence

Overall, all the items in the cluster on technological competence reach a very high mean value of 4.037 and SD of 0.7521. The statistics of this cluster are presented in Table 2. The statement with the highest mean score, "*I know how to use* the *chat function in Zoom breakout rooms to interact with other students/teachers in the online classes given by Hue* University *of Foreign Languages*" (M=4,08; SD=0,882), suggests that the chat box was a tool that students relied on and it seemed to be very familiar with students in online learning. The statement "I know how to use the screen-share function of Zoom breakout rooms in the online classes" also reached a high mean value (4.05), followed by the mean value of the statement "When in Zoom breakout rooms with other students, I pay attention to the instructor's broadcast short messages to all students to know what to do in the lessons" (M=3.98; SD=0.813). These figures reflect a reality of online education with the functions of chat box and screen share most often used and least for broadcast to all students in breakout rooms.

TABLE 2

Mean Score of Cluster 2: Technological Competence

Statements (N=243)	Min	Max	Mean	SD
4. I know how to use the chat function in Zoom breakout rooms to interact with other students/teachers in the online classes	1	5	4.08	0.882
5. I know how to use the screen-share function of Zoom breakout rooms in the online classes	1	5	4.05	0.834
6. When in Zoom breakout rooms with other students, I pay attention to the instructor's broadcast short messages to all students to know what to do in the lessons.	1	5	3.98	0.813
Total	1	5	4.037	0.7521

Interactional Competence

As it can be seen from Table 3, all the statements achieved mean scores from 3.19 to 3.94, showing a rather high agreement with the ways students interacted with other students and the teachers in breakout rooms. Among all the interactional activities surveyed, the respondents tended not to ask teachers often in breakout rooms. The statement, "When in Zoom breakout rooms, I ask the online teacher if I have questions related to the class activities," had the lowest mean score (M= 3.19) with the highest standard deviation value (SD=1.0). In comparison, the statement, "*I exchange ideas and opinions with other students about the activities given to us in Zoom breakout* rooms," reached the highest mean score in this cluster, M=3.94; followed by the statement "*When in Zoom breakout rooms, I interact orally with other members*" with the mean M=3.77.

TABLE 3

mean scores of Cluster 5. Interactional Competence in D	reakoui 200	ms		
Statements (N=243)	Min	Max	Mean	SD
9. When in Zoom breakout rooms, I respond to the written	1	5	3.58	0.893
chat of other members.				
10. When in Zoom breakout rooms, I interact orally with	1	5	3.77	0.912
other members.				
11. When in Zoom breakout rooms, I give	1	5	3.60	0.892
hints/advice/guidance to other members if they have				
questions.				
12. I exchange ideas and opinions with other students	1	5	3.94	0.853
about the activities given to us in Zoom breakout rooms.				
13. When in Zoom breakout rooms, I respond to the online	1	5	3.40	0.989
teacher's broadcast messages.				
14. When in Zoom breakout rooms, I ask the online	1	5	3.19	1.000
teacher if I have questions related to the class activities.				
Total	1.67	5.00	3.5809	0.58688

Mean Scores of Cluster 3: Interactional Competence in Breakout Zooms

Besides the statistics presented in Tables 3 and 4, students' answers to the questions "what should you know about Zoom in general and breakout rooms, in particular, to successfully study on this platform?" recorded 48 short answers. Students generally reported the main features of breakout rooms, for example, share screen, raise hand, typing messages in the chat box, and recording (seven responses). Students' answers also mentioned the need to know how to use breakout rooms to interact with teachers. Breakout rooms should be used to exchange ideas in Zoom with other students and teachers (5 responses), breakout rooms function helps teachers to divide students into smaller groups (3 responses), and the operations and functions of the zoom room so that it can be easily manipulated and communicated to teachers in the classroom (2 responses).

Reported Learning From Interaction in Zoom Breakout Rooms

With the open question, "What knowledge you do learn from interaction with the teacher(s) in Zoom breakout rooms? The answers of the respondents indicated, "I can learn a lot of new knowledge" (five responses), "I learned a lot of new grammar and vocabulary knowledge" (three responses), "I am able to learn daily communication sentences" (one response), "I can find the mistakes and understand how to fix them from the teacher's suggestions" (one response) and, "Teachers point out our mistakes when we are in breakout rooms and thanks to this, I got improvements in my study" (one response).

In comparison, for this question, "What knowledge you do learn from interaction with other students in Zoom breakout rooms?" the students' answers indicate knowledge related to the lesson (3), sharing opinions and developing critical thinking (3); broadening knowledge about major (3). One student wrote, "In the speaking classes when discussing with my friends, I was able to learn some useful expressions in their talks as well as enrich the ideas for the speaking topics. Regarding ELT methodology courses, I could understand more about theories and aspects of language teaching and learning (such as features of audio lingual/ grammar-translation methods, learner styles, task design, and so on) via discussing the given exercises". The reported learning from interaction with other students was about knowledge and sharing ideas with peers.

Answering "What skills do you learn from interaction with the teacher(s) in Zoom breakout rooms?", students reported learning communication/interaction skills (20), public speaking to be more confident (7), listening skills (4), problem-solving (4), all language skills (3), how to share screen and interact on zoom (2). One student wrote, "Control the voice and solve problem when the internet connection is interrupted." However, two students reported that they did not learn any skills from learning via zoom.

The students also answered the question, "What skills do you learn from interaction with other students in Zoom breakout rooms?" Their short answers indicated they learned communication skills (26), teamwork and

group work (22), Discussion in groups (4), presentation skills (3), all language skills (2), and how to interact enthusiastically was like other students (2), initiating and contributing to group discussion (2), computer using skills (2), how to express personal ideas (2), how to share your ideas (2), time management skill (2), listening skill (2), and problem- solving (2). The short responses of students indicate that communication was the keyword reported most by students. The students also emphasized teamwork and group work

Discussion

The findings from the current study indicate that to function in group discussions in VCS platform breakout rooms; students first need technological competence. Technological competence was found more necessary than interactional competence for EFL students when learning online via Zoom (M=4.03 and M=3.58, respectively, see Table 2). The related previous studies, e.g., Keskin and Çelik (2021), and Nisa et al. (2021), have explored the roles of Zoom. The current study's finding follows up with the argument that for students to make the most of the VCS as a platform for learning, they need to know the features of the platform they are working on first and then how to interact in this mode. Moorhouse et al. (2021) pointed out that technological competence or the ability to use language learning tools help teachers and students manage the platform and promote interaction. The current study indicates that for interaction in synchronous online language lessons to take place, it is essential that learners use the chat function (M=4.08, see Table 2). The students in the current study also showed high agreement with using most features of the VCS, for example, screen share and instructor's messages broadcast.

Besides technological competence, students need interactional competence to exchange ideas and opinions in breakout rooms. This finding reflects the online community of inquiry (Garrison, 2017), where participants shared concepts related to a topic at hand and interaction in written chat, and answering questions. The current study similarly indicated students' preference for working in groups and breakout rooms as Keskin and Çelik (2021) found.

Another finding of this exploratory study was to document what students reported learning from interaction with teachers and other students in VCS breakout rooms. Their responses to the open questions recorded the highest number of answers for learned communication skills, followed by teamwork and group work. They also reported they gained knowledge of English grammar and vocabulary or ideas related to the lesson topics. Besides, the students' responses suggest that they learned from interacting with teachers and students. Nisa, et al. (2021) similarly reported students' learning of speaking skills in breakout rooms. In comparison, the current study reported more general learning by students, from language knowledge to skills and contents related to the lessons.

Conclusion

The current study responded to the suggestion of Moorhouse et al., (2021) to know what constitutes classroom interaction competence. Still, it explored the concept in the online learning context during the pandemic time – the use if breakout rooms in language classes, during normal times may provide different responses. The findings provide implications for teachers and learners regarding the use of VCS breakout rooms as a platform for class activities. It is suggested that learners need technological competence followed by interaction competence to learn English via VCS breakout room group activities and that interaction with teachers and students in this platform was reported to lead to gains in communication skills and knowledge of English grammar and vocabulary. However, the current study's findings were limited to self-reported responses

to a questionnaire; however, the short answers to the open questions were seen to reach a lower number of responses. Therefore, longitudinal studies to record students' actual learning as well as observation of student practice of interaction in online classes would provide more concrete gains in the learning of students in online classes.

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