# Affordances of Lexicon Learning in Peer-Peer Computer Mediated Interaction During Covid-19 Outbreak: Doing Teaching, Initiating and Doing Learning Practices

Gülşah Uyar

#### Abstract

The outbreak of COVID-19 has changed education practices through moving faceto-face education to complete internet-based education. Therefore, the integration of technology which already gained acceleration before the pandemic has become the only solution to be able to carry out educational practices. The issue of making students communicate with each other on online platforms to get the best from educational practice and peer learning especially came into prominence following the outbreak of the COVID-19. This era also brought/raised the importance of the examination of technology integration in various practices in education including the peer-peer interaction in video-mediated task-based communication. To shed a light on an aspect of technology integration, the current study makes use of the data that comes from video recordings of online peer-peer interaction on individual virtual city tours of a group for three weeks during COVID-19 pandemic. The video-recordings of student-student interaction in groups are analyzed by using the micro lenses of multimodal conversation analysis (CA). The study contributes to the field with an in-depth examination of peer-peer interaction out of the classroom. The examination of the data shows that participants do lexicon teaching, initiate and do lexicon learning via negotiation of meaning during their videoconferences on their virtual city tours. Thus, it is obvious that peer-peer computer-mediated interaction provides learning opportunities and enables learning which suggests that tasks which require peer-peer interaction out of classroom can be integrated into course design.

*Keywords*: learning opportunities, peer-peer interaction, videoconferencing, COVID-19, CMC, lexicon

#### Introduction

In line with the developments in the technology and adaption of human to technology in daily life, integration of it in educational settings and research on it have been increasing. Like other businesses, education needs to adapt to new regulations of new normal following the outbreak of COVID-19 (Triyason et al., 2020). Therefore, the integration of technology which already gained acceleration before the COVID-19

# Article info

Received: 26.12.2021 Revised: 24.04.2022 Accepted: 09.05.2022 Published online:14.10.2022

Erzincan Binali Yıldırım University, Department of English Language Teaching, gulsahuyr@gmail.com, ORCID: 0000-0002-5023-9971

pandemic has become the only solution to be able to carry out educational practices. While transforming the education to online environments completely, teachers carried out their teacher practices synchronously or asynchronously (Yi & Jang, 2020) in various countries. The issue of making students communicate with each other on online platforms to get the best from educational practice and peer learning especially came into prominence following the outbreak of the COVID-19. Thence, in addition to classes, designing online group tasks was a way to meet students' needs to be a part of a community and have shared experience (Dwivedi et al., 2020) via fostering peer-peer interaction.

Even before the pandemic, technological tools that provide students with situations to communicate in the target language have gained popularity by reason of the need of L2 students to use and get exposed to target language. While these tools provide an environment for computer-mediated communication (CMC) between native and nonnative students or non-native students from different parts of the world, they also may be helpful to convert the nature of classes by making students communicate with their classmates. Students can have more facilities to practice L2 in CMC settings when compared to teacher-fronted classroom interaction which restricts students (González-Lloret, 2011). Moreover, peer-peer interaction has more facilitative roles for L2 learning than teacher-fronted interaction (Fernández-García & Martínez-Arbelaiz, 2002). However, in spite of the efforts to change, classroom interaction is usually shaped and dominated by teachers (Sert & Seedhouse, 2011). As students have actual interaction with peers in online settings, they have a chance to improve their pragmatic skills in addition to linguistic resources, as well (González-Lloret, 2011). Synchronous computer mediated communication (SCMC) enables students to be more autonomous by engaging in more complex situations similar to actual interaction than classroom interaction (Gonzalez-Lloret, 2011). Therefore, educators can benefit from online tasks as they meet what students need and through them students exchange and improve their intercultural knowledge (Jauregi et al., 2011).

To have a holistic view of learning, contexts out of the classrooms should also be examined as they enrich and extend learning opportunities (Sert & Seedhouse, 2011). How students orient to computer mediated communication activities as learning opportunities and how they make use of these opportunities are largely unexplored. Moreover, the literature is generally shaped by asynchronous, semi-synchronous or synchronous text-chat interactions. Even though computer mediated oral communication was getting less attention (Jenks & Brandt, 2013), oral communication in L2 via videoconferencing has been becoming popular recently. However, despite the developments in technology and the increasing number of studies before and following the outbreak of COVID-19 exploring online interaction in L2 learning, as Balaman (2018) remarks L2 development in online task settings are primarily studied with etic and theory-driven perspective and studies which adopt emic perspective and have datadriven methodologies are needed to examine the process of mutually sharing knowledge in online tasks (Balaman & Sert, 2017). Therefore, CA can be the tool to examine technology enhanced language learning and how interaction is performed online (González-Lloret, 2015) by analyzing how participants make use of their resources and

perform action without any pre-determined theories (Nguyen & Langevin, 2016). In parallel with the need to employ CA methodology to examine the interaction and development in online settings and its potential to display the process from the emic perspective with micro-analytic tools, the number of the studies which address CALL with conversation analytic tools has been increasing (e.g., Balaman & Sert, 2017; Dooly & Davitova, 2018; Dooly & Tudini, 2016; Fischer & Tenbrink (n.d.); Gibson, 2009; González-Lloret, 2008; 2015; Jenks, 2009; Jenks & Brandt, 2013; Kitade, 2000; Markman, 2005; Negretti, 1999; Nguyen & Langevin, 2016; Sert & Balaman, 2018). With these in mind, the current study makes use of the data that comes from online peer-peer interaction on individual virtual city tours of a group for three weeks during COVID-19 pandemic. The focus of the task is on authenticity and meaning making (Chapelle, 2009) and is loosely structured process-oriented task (Balaman, 2018) which does not require an output at the end. Individual virtual visits are held to give a topic to students to talk about and give them expertise on places they visited as they are expected to visit different places in the city. In doing so, it is aimed to create information gaps among participants which is expected to facilitate learning opportunities. In line with the data and my focus for this study, literature review is presented on the effects of COVID-19 pandemic on higher education, development of L2 in CMC settings, and learning and learning opportunities in interaction in the following section.

#### **Literature Review**

#### **Effects of COVID-19 Pandemic on Higher Education**

IAU Global Survey on the effects of COVID-19 on higher education showed that almost all the universities were affected by the pandemic and face-to-face education was completely abandoned in most of them (Marinoni et al., 2020). Online education has been the only and fundamental way to maintain education practices to adapt to new normal. (Xie et al., 2020). Therefore, COVID-19 era has transformed the practices of education (Yi & Jang, 2020), and the tools such as "Zoom" and "Teams" became a part of education and our daily life (Dwivedi et al., 2020). To provide quality learning experience to students in accordance with their needs, face-to-face classes and online classes can be integrated (Dwivedi et al., 2020) which was already in use before the outbreak of the COVID-19 and it became the common practice under the name of hybrid classes in most universities in Turkey following the end of curfew period.

A number of participants in IAU Global Survey put forward that immediate transformation to online education had brought some challenges as the pedagogy needs to be different in online classes than in face-to-face classes and how to meet these challenges may change across teachers. Nonetheless, higher education institutions did not necessarily promote to improve abilities of teachers while transforming education to online settings (Marinoni et al., 2020). For example, on one hand, COVID-19 promoted large scale implementation of technology mediated education, however, on the other hand it challenged the belonging to a community and engagement. While students could

reach the affordances of face-to-face education such as connectedness, friendship and collaboration, these affordances are quite limited in online learning settings. The teacher-student and student-student interaction can be in danger of diminishing in online settings (Xie et al., 2020). Therefore, to substitute physical face-to-face education, online education is to incorporate physical, bodily, and social dimensions of learning as it would be an underestimation of face-to-face education to replace it with text messages (Skulmowski & Rey, 2020). Besides the challenges COVID-19 pandemic generated while moving from physical face-to-face education to online education, it also promoted learning opportunities for more flexible learning, and virtual mobility and collaborative online learning practices were conducted more commonly. Moreover, some teachers take advantage of online teaching to learn and use new teaching practices and to extend their perspectives (Marinoni et al., 2020) and transformation of education to technology settings was seen as an opportunity for modifications in education (Yan, 2020). Accordingly, while enrollment rate to online classes of students at higher education increased even before pandemic (Xie et al., 2020) it seems that online and hybrid education promise to attract more students at higher education level even after COVID-19 in the next normal following the transformation to online education during the outbreak of COVID-19 and with new perceptions of online education as distance education seems to be compatible with various fields and blended learning can be answer for fields which require lab-based experience. Moreover, it extends learning opportunities and environments (Xie et al., 2020). However, it would be premature to claim if online classes will substitute face-to-face classes or replace it (Skulmowski & Rey, 2020).

#### **Development of L2 in Computer Mediated Communication**

There are studies which found a positive correlation between lexicon development and computer mediated interaction in other domains of SLA than CA (e.g., Fuente, 2003; Smith, 2004). Although most CA studies on CALL were descriptive in nature (e.g., Abe & Roever, 2019; Fernández-García & Martínez-Arbelaiz, 2002; Gibson, 2009; Jenks, 2009; Jenks & Brandt, 2013; Rusk & Pörn, 2019), there are a few studies which examine the development of interactional competence (IC) over time (e.g., Balaman, 2018; Gonzales, 2012; González-Lloret, 2008, 2015; Sert & Balaman, 2018) as well.

Communicating in L2 with interlocutors is an essential part of improving interactional competence and language resources (Chapelle, 2009) and CMC settings provide the opportunity to learners. CMC enables learning by affording a setting for collaborative learning, enhancing self-correction and meaningful interactions between NS and NNS and interaction among NNS from different proficiency levels with its unique properties (Kitade, 2000). CMC setting "provides linguistic resources not easily available in all language classrooms; among these, real, rich input, pragmalinguistic and sociopragmatic feedback from more advance speakers, a variety of speech act sequences, and space for engagement" (González-Lloret, 2015, p.581).

The first study -at least to my knowledge-which combines CALL and CA was carried out by Negretti (1999). Although the study was carried out to find out

differences between text-chat and face to face interaction, namely descriptive in nature, Negretti (1999) claimed that chat enhances oral proficiency skills. Similarly, Gonzalez-Lloret (2011) carried out a case study and she displayed that a single participant's interactional resources have increased through text-chat. In their longitudinal study, Balaman and Sert (2017) found that IC of participants has developed in time as their resources to perform the task have enriched and progressivity of the interaction was achieved better in the computer mediated collaborative task. In another study, Sert and Balaman (2018) found that language policing practices of participants changed from other to self-policing which is attributed to development and learning as students do not need to use L1. The authors also propose that negotiation of meaning practice of students and information gaps in the tasks have the potential to enhance learning and development longitudinally in online task settings.

# Learning and Learning Opportunities in Interaction

After the social turn in SLA which followed the long-term dominance of cognitivist mainstream SLA (Atkinson, 2011), researchers have started to investigate language learning in social encounters. Thus, interaction has emerged as a popular research topic among scholars and some researchers propose that interaction is a tool to enable and facilitate language learning (e.g., Duff & Talmy, 2011; Kasper & Wagner, 2011; Lantolf, 2011; McKinney & Norton, 2011). For example, from the point of CA, learning occurs "on and in action" (Sert & Seedhouse, 2011, p.4). Thus, interaction has taken its place and gained popularity in studies which employ CA methodology as well (e.g., Brouwer, 2003; Lee, 2010; Pekarek Doehler & Pochon-Berger, 2015; Sahlström, 2011).

Although interaction in classroom setting has been examined in various studies (e.g., Cancino, 2015; Kardaş İşler & Can Daşkın, 2020; Lee, 2006; Mori, 2004; Walsh, 2002, 2006; Waring, 2008, 2009, 2011) and studies resulted in the emergence of the notion of classroom interactional competence (CIC) (Walsh, 2006), literature lacks studies which examine language learning opportunities in interactions out of the classroom setting (Kim, 2017) which provide learners with situations similar to real life experience.

Negotiation of meaning and expert roles are pre-conditions for language learning opportunities. Thus, curricula should include tasks which require negotiation and questioning whether in peer-peer interaction or students-teacher interaction (Reichert & Liebscher, 2012). However, it is noteworthy that emergence of language learning opportunities does not necessarily result in learning depending on (non)orientation of participants (Kim, 2012). Learner initiatives also play an important role in the active participation of learners (Kardaş İşler et al., 2019) and emergence of learning opportunities and by taking initiative of learning, learners manage their own learning processes (Waring, 2011).

Kim (2017) argues that peers consider and check epistemic status of each other and take precautions to prevent any breakdowns in the interaction. Not only learners orient to pedagogic goals and task achievement, but also, they deploy their turns to

achieve intersubjectivity. Therefore, their sequential turns and asymmetry in knowledge lead to learning. Moreover, as epistemic status of interactants is displayed in and through interaction (Kim, 2017), opportunities for learning emerge in situ. According to Brouwer (2003), in sequences that provide language learning opportunities (a) participants orient to each other to search, (b) there is role distribution as novice and expert among participants. For example, description of a noun by novice and deploying the noun by expert may provide learning opportunities in interaction (Kim, 2012).

All in all, micro-analysis of task performance of participants is needed to bring insight to developments in task enhanced computer mediated interaction (Sert & Balaman, 2018) and to have pedagogic implications for language learning, we should answer whether negotiation of meaning results in comprehension and acquisition (Gonzalez-Lloret, 2003). Moreover, Sahlström (2009, p.103) suggests that "if learning is understood as situated or constituted in interaction, research on interaction will provide for better understandings of learning." With these in mind, this study sets out to explore learning opportunities in peer-peer computer mediated interaction setting through micro analytic lenses of CA. Accordingly, I will provide the research context and data analysis respectively and I will discuss the results by referring to literature in the last section.

## **Research Context**

#### **Setting and Participants**

The data for the current study comes from a task-based activity for general purpose English class conducted during COVID-19 lockdown in Turkey. The participants are three third grade undergraduate students at a state university, in Turkey. All of the participants are female and their age range from 21-23. They are enrolled to general-purpose English class and as a requirement of their course they implement some tasks. Although the participants did not get preparatory class because of the procedures applied in higher education, they get intense English classes which are offered for 4 years. The general-purpose English classes offered to them are distributed among grades as 6 hours a week in the first and second grades, 3 hours a week in the third and fourth grades. In addition to general purpose English classes, they get aviation English classes at 3rd and 4th grades in respect with their department.

Universities in Turkey adopted distance education during COVID-19 pandemic which caused some methodological changes in course designs of teachers, too. The task for the current study was designed to enhance peer-peer interaction which was ignored during online classes because of various factors. First of all, the time for online classes was restricted and most of the time was spent by lecturing. Secondly, students were not used to online settings which probably made them feel anxious about speaking. The last reason can be turn-taking practices which is quite different in online classroom interaction than face to face classroom interaction as we may face with some internet connection problems and embodiment of students is not available in most of the cases in online education and students may not prefer to interact with their peers to avoid overlaps. Therefore, peer-peer interaction could not be achieved whereas it is an essential part of teaching as learning occurs in-and-through interaction and peers have an important role in it.

## **Research Procedure**

To enhance peer-peer interaction the task that requires the students to virtually visit a city and then to share the experience with group members via computer mediated communication was introduced in the scope of the class in addition to online classes and weekly assignments. Students were divided into groups of three or four and they formed their own groups. By doing so, the possibility of feeling anxious was quite eliminated as students constructed their groups with peers they can easily interact. After the introduction of the task, informing students about the procedure, and getting consent forms, the task was conducted for three weeks. It is also noteworthy that the task is quite loosely structured which has some similarities to conversation for learning (CfL) by Kasper and Kim (2015) However, the task cannot be called as CfL as the topic was given by the teacher and it was assessed at the end of the semester. The students were expected to have recordings for about 20 minutes each week and no strict rules (i.e., L2 only) was introduced. The first step of the task was to individually visit a place in a certain city on virtual worlds so that students could take notes and before sharing their experience with group members, they could get familiar with vocabulary they do not have in their repertoire to share what they have experienced. The cities were London, New York and Bangkok respectively. Then, the second step was to meet group members online, to talk to group members about their virtual visit and record their interaction through the built-in video-recorder of Zoom. When they completed this step, they were expected to send their recordings to the teacher on Google Classroom before deadline each week.

The current study focuses on the screen-recordings of the implementation of task which come from one group consisting of three participants. The recordings of three weeks last approximately 60 minutes. To ensure the anonymity of the participants and regarding ethical issues, pseudonyms were used and data-session was conducted to ensure reliability of the findings. The data was analyzed through the micro analytic lenses of CA which provides fine-grained transcripts of interaction which also makes it open to reliability checking. By following CA research methodology, transcripts of the data were examined by unmotivated looking (ten Have, 2007) which uncovered that the task enabled students a setting where they could have learning opportunities and initiatives and doing teaching practices as well. Thus, how learning opportunities emerged and how they were used by students were analyzed by employing Multimodal Conversation Analysis (See Appendices for Transcript Conventions). Collections of the cases were done for each phenomenon found in the dataset. However, the study is not without limitations because of the video format of the participants; participants in the recordings are seen one by one. In other words, the participant who holds the turn by speaking is seen in the recordings because of speaker mode of the program. So, multimodal actions of nonspeaking participants are not available in this dataset. The data will be analyzed with this in mind and situations which may create ambiguity will be avoided in the analysis.

# Analysis

Learning opportunities, the task provide students are examined through the microanalytic lenses of CA. The data is analyzed in three sub-sections: doing teaching, initiating learning and learning respectively.

# **Doing Teaching**

This section aims to indicate how participants use their resources in meaning making process and to teach words to their peers in the task of computer mediated interaction on individual virtual visits. It was found out that participants used their verbal and embodied resources besides artefacts available for doing teaching practices to be able convey meaning to their peers. I present one representative extract from the data. Before Extract 1 starts, SER takes the turn and starts to give some general information about her visit. The extract starts with her elaboration on her visit by showing a small globe in her hand.

# Extract 1

Doing Teaching

1		<pre>hehe \$very beautiful\$♠</pre>
2 3	SER:	<pre>(inaudible) like this (.) but er they   were not (.) color(.) ↓ ful  rolls her hands▲</pre>
4	ELI:	huh
5	SER:	and they were er hemispheres (0.6) <b>Aumm</b> i don't know <b>A</b> Ascratches her head
6		it is true er but i will say er $\clubsuit$ hemispheres (0.4) erm
-		♦ shows the globe>
7		♠(2.0) like umm (1.0) half ♠spheres ♠draws an imaginary line on the globe♠fig1
8 9	GAM:	(0.5) huh♠
10		> (0.8)

In line 1, ELI orients to what SER shows but SER does not orient to ELI's evaluation and goes on to give information which is maybe because she is aware that they are doing a task and they should achieve what they are expected to do. In other words, she moves forward where she was left and explain what she saw is similar to the globe in her hand in line 2 (like this). In line 4, ELI shows active listenership (Sert, 2019) with a minimal response token (huh huh). SER states that there were hemispheres in line 5 and in the same line, we see her hesitation (umm i don't know) which is reasoned in line 6 (it is true er). Then in line 6, she utters hemisphere again which accompanied by her showing the globe one more time and followed by pause of 0.4 length and hesitation marker (erm) and another lengthy pause (2.0) in line 7. After the long pause, she explains the word hemisphere (like umm (1.0) half Aspheres) in the same line. Moreover, starting from the lengthy silence in line 7 she draws an imaginary line on the globe. Her explanation and embodiment practice show that SER thinks that her peers may not know the work hemisphere and she uses her verbal and embodied resources, and artefact she holds in her hand to explain the meaning of hemisphere. By doing so, she uses all her resources available in meaning making process. Actually, it is similar to practices that a teacher can do in the classroom to teach a word. Besides, after a silence of 0.5 in line 8, GAM shows understanding with a minimal response token in line 9 (huh).

As it was mentioned before, in speaker mode students are seen on the screen one by one and it prevents to make big claims about GAM's situation as her actions are not available for analysis. On the other hand, SER's doing teaching activity is very clear. Therefore, even if I do not have clear evidence if SER's peers knew the meaning of hemisphere before Extract 1 or they learned from SER, it is clear from the extract that SER successfully conveyed the meaning by using her resources. In this sub-section, it is observable that participants themselves undertake doing teaching practice although there is no initiation -as least explicitly- from their peers. Learning opportunities in the task are not limited to these practices, and in the dataset, there are examples of initiation to learn a meaning of a word as well which are presented in the following part.

# Initiating Learning

In this part, how students orient this task as a learning opportunity and explicitly initiate learning is portrayed with one representative extract. Students ask meaning of certain words they do not know. This is mostly achieved by "what does x mean?" question format as it can be seen in extract 2. Extract 2 comes from the first week of the task and starts with SER's remark on her visit.

# Extract 2

Initiating Learning

```
SER: and (0.5) then two there were sal er \diamondsculptu\diamond
1
                                                 ♠averts her eyes♠
2
          sculptures of er people and Aother things=A
                                       ♠rolls her hands♠
3
    GAM:
          =SER\uparrow i have a question
4
    SER: ye [yes
5
    GAM:
              [ummm (1.0) what does *your(.)ermm (.)what does (0.2)*
                                    &-----averts her gaze-----*
6
          $sculpture mean$
          *rolls her hands*
7
           (1, 2)
    SER: oka:y sculpture means err things (.) made of stone er
8
9
    GAM: huh huh
10
    SER: and still
11
    GAM: huh huh *o:kay okay* i understand
                   *---nods---*
```

In line 1 SER mentions that she saw sculptures. However, she has problem in the pronunciation of the word that she starts to pronounce two times, but she cannot utter the whole word (and (0.5) then two there were sal er  $\bigstar$  sculptu $\bigstar$ ). Moreover, she averts her gaze in her second try. In line 2, she solves the problem and utters the word correctly and elaborates on that (sculptures of er people and  $\wedge$  other things= $\wedge$ ). Whenever SER completes her sentence, GAM calls SER in line 3 and she states she has a question. After getting approval from SER in line 4 with acknowledgement token, GAM starts her question (what does &your(.)ermm (.)what does (0.2) &) accompanied with aversion during troubles in line 5 and she completes her question in line 6 (\*sculpture mean\*). After GAM's question, we observe a lengthy silence of 1.2 in line 7. The SER takes the turn to answer her peer's question in line 8 and she makes an explanation (oka:y sculpture means err things (.)made of stone er). GAM responds with a minimal response token to show understanding in line 9. However, SER goes on her explanation in line 10 (and steel), too. In line 11, GAM takes the turn again. She responds with a minimal response token and then she claims understanding (huh huh ♣o:kay okay♣ i understand). Her embodied action, nodding, also shows her understanding of the meaning.

It is obvious that students use the task-based activity as an opportunity for learning and they initiate for learning when they need. In the next part how initiation shown here helps students to add new vocabulary to their repertoire is displayed.

# Learning

In this sub-section, I portray how a single student, GAM, shows her orientation what her friend, SER, has taught her and how the word sculpture became a part of her repertoire. In extract 2, GAM asks about the meaning of sculpture and she claims understanding

after SER's explanation. Although GAM used the same word for 7 times in three-week period, here I analyze one example in the first week just after SER's teaching. The extract 3 was tracked about 7 minutes after extract 2 and it shows that GAM uses the word sculpture.

# Extract 3

Learning

1	GAM:	$\star$ when (.) i (.) enter the $\star$ err inside (.5) umm (.)
		$\phi$ opens hands and moves towards the screen $\phi$
2		there was information desk (0.5) umm $>$ of course<(.)
3		+like (.)er +every (.) museum (.) should be (0.7)and err
		*rolls right hand*
4		some documents (0.3)er about(.) museum (.) for (.) tourists
5		(1.0) and also:(.)there was a $(0.5)$ antique $(0.6)$ ca:r it (.)
6		<pre>#it's (.)it's #very shiny (.) #clear (1.0) a:nd(0.5) er(.)</pre>
		<pre>\$\$cratches head\$ \$rolls hands&gt;</pre>
7		black color it's cute+ (1.2) a:nd.hh err(.) in the
		>-
8		museum (0.9) er there was ancient (.) $\clubsuit$ items er coins (.)
		♣shakes her head>
9		plates (.) forks 🜲 (0.5) and busts (.) statues err (.)umm
		>-
10		♣ er sculptures♣ maybe (.)[as SER says]
		&1&fig3
		1=smiles and raises index finger
		fig3
11	SER:	[hehehe]
12		(0.6)
13	GAM:	come to every (.) er (.) * every (.) country*
14		*rolls left hand *

The extract starts with an extended turn of GAM from line 1 to 10. She describes what she saw from first moment of entrance to the museum. Firstly, she mentions about the information desk in line 2 (there was information desk (0.5) umm >of course<) and line 4 she describes what she saw in the information desk (some documents (0.3) er about (.) museum (.) for (.) tourists). After she describes an antique car she saw in the museum in lines 5-7, she moves on with ancient items she saw in the museum in line 8. Through the lines 8 to 10, she gives examples of ancient items that she saw in the museum such as coins, plates and so on and as the last item she utters sculpture in line 10 ( $\Box$  er sculptures $\Box$  maybe (.) [as SER says]) which accompanied by a smile and embodiment activity as raising index finger. After she utters sculpture, she also points to the resource of this knowledge as SER ((.) [as SER says]). Moreover, we see SER's laughter as a reaction to the word sculpture in line 11 which is overlapped with the last part of GAM's turn in line 10 ([as SER says]). SER's laughter here, overlapping with GAM's pointing her as the source of her knowledge, indicates that she also knows-or understands from GAM's embodiment- that GAM has uttered what SER has taught her.

This extract shows that students in a CMC setting can learn lexicon from each other through initiation for learning or doing teaching practices of their partners and they can add new vocabularies to their repertoire. In this extract-also in the rest of the collection- it is obvious that the word "sculpture" became a part GAM's repertoire following her initiation for learning.

## **Discussion and Conclusion**

With the effects of COVID-19 outbreak on educational practices (Dwivedi et al., 2020; Marinoni et al., 2020; Xie et al., 2020; Yi & Jang, 2020) new challenges have arisen (Marinoni et al., 2020; Skulmowski & Rey, 2020) for both teachers and students. In order to cope with challenges such as being connected, engagement and peer-peer interaction (Skulmowski & Rey, 2020; Xie et al., 2020), the task in the current study was assigned to students, which requires them to interact with their peers on their individual virtual visits through CMC.

Similar to previous studies (Balaman, 2018; Balaman and Sert, 2017; Chapelle, 2009; González-Lloret, 2015; Sert & Balaman, 2018), this study shows that computer mediated peer-peer interaction provided opportunity for L2 lexicon development. The study examined how students extend their repertoire of lexicon and displayed that computer mediated interaction can be a useful tool for learning affordances that students take initiatives when they encounter with an unknown word and negotiate meaning which is the first condition for learning according to Smith (2003). As Smith (2003) argues negotiation of meaning practice emerges when there is nonunderstanding, and we also encounter "What does x mean?" question form, which shows that not only the speaker but also the interlocutor plays a role in maintaining intersubjectivity by taking

initiative for learning, which also shows that students orient this activity as a learning opportunity. Moreover, although there was not any explicit initiation from their peers, they performed some doing teaching practices, which is in line with remarks of Kim (2017) that students may have predictions about future challenges and to maintain intersubjectivity they take some precautions by doing teaching practices. All in all, the micro-analytic examination of the data showed that students-oriented computer-mediated interactions as a learning opportunity for themselves and for their peers. Accordingly, they initiated learning or did teaching in lexicon level.

In addition to initiation for learning and doing teaching, the study also displays how learning occurs in situ. Extract 2 and extract 3 provide evidence of how initiation results in learning (Kardaş İşler et al., 2019) at least locally. After initiation for the word "sculpture", we see GAM uses the word when she takes the turn to share her experience in the same week and she uses the same word for six times in the following two weeks. Thus, the study shows how initiation for learning ended up with not only learning locally and but also in the long-term as "sculpture" became a part of GAM's repertoire according to her displayed epistemic status in and through interaction (Kim, 2017).

Although the study does not inform us about comparison of classroom interaction and peer-peer interaction out of the classroom (Fernândez-Garcia & Martinez-Arbelaiz, 2002), the interaction and learning affordances were not similar to classroom interaction (Cancino, 2015; Kardaş-İşler & Can-Daşkın, 2020; Lee 2006, 2007; Mori, 2004; Walsh 2002, 2006; Waring 2008; 2009; 2011). That is to say, it was similar to a real-life conversation (Gonzalez-Lloret, 2011) in which power distribution is equal and there is a dynamic role distribution among peers depending on the context.

Unlike what Mori (2004) observed in peer-peer interaction in classroom, and in contrast to the suggestion of González-Lloret (2003) to pair participants from different L1 backgrounds, the participants in this study did not use any L1 although they are coming from same L1 background and they were not instructed for L2 use only. L2 only interaction of the participants may result from the idea that every second of interaction is available to the teacher and they avoid using it unlike classroom interaction. Also, this practice can be attributed to proficiency level of students that in lower proficiency levels, L1 can be used as a resource as their repertoires in L2 are limited. Therefore, examining how lower-level students implement tasks with peers from the same L1 background merits further study.

All in all, it is obvious that participants in this study make an effort to maintain intersubjectivity which generated doing teaching, initiating for learning and learning practices. The results show that the peer-peer computer mediated interaction enhanced the participants' L2 repertoire (Gonzalez-Lloret, 2011) or provided a setting for learning. The study contributes to the field with an in-depth examination of peer-peer interaction out of the classroom (Sert & Seedhouse, 2011). In addition to other domains of research (Fuente, 2003; Smith, 2004), conversation analytic result of peer-peer computer mediated interaction as a learning opportunity and how learning emerges. Moreover, distance education and

hybrid classes seem to be promising for the future by means of the affordances they provide and extended perception of students and teachers during COVID-19 pandemic (Xie et al., 2020) although the extent to what degree online classes will be in use in future is unclear for now (Skulmowski & Rey, 2020). Thus, it is compatible to integrate CMC to distance education and hybrid classes in the next normal era (Xie et al., 2020) as it is obvious that peer-peer computer mediated interaction provides learning affordances and enables learning which suggests that tasks which require peer-peer interaction out of classroom can be integrated to course design (Reichert & Liebscher, 2012).

Overall, the study offers to integrate CMC while transferring the educational practices to online and hybrid classes, and to examine if/how it facilitates learning for further studies as online and hybrid classes, which have gained popularity following the outbreak of COVID-19 and the developments of technology, are to keep their places. Another pedagogical implication the study concludes is giving tasks in which students can use similar vocabularies through CMC may help the students to recall and use them in the long-term. Further studies might triangulate the findings with stimulated recall or through more longitudinal CA investigations. How CMC is shaped across different proficiency levels also merits further study.

#### References

- Abe, M., & Roever, C. (2019). Interactional competence in 12 text-chat interactions: First-idea proffering in task openings. *Journal of Pragmatics*, 144, 1–14. https://doi.org/10.1016/j.pragma.2019.03.001
- Atkinson, D. (2011). Alternative approaches to second language acquisition. Taylor & Francis.
- Balaman, U. (2018). Task-induced development of hinting behaviors in online taskoriented 12 interaction. *Language Learning & Technology*, 22(2), 95–115.
- Balaman, U., & Sert, O. (2017). Development of L2 interactional resources for online collaborative task accomplishment. *Computer Assisted Language Learning*, 30(7), 601–630.
- Brouwer, C. E. (2003). Word searches in NNS–NS interaction: Opportunities for language learning? *The Modern Language Journal*, 87(4), 534–545.
- Cancino, M. (2015). Assessing learning opportunities in EFL classroom interaction: What can conversation analysis tell us? *RELC Journal*, 46(2), 115–129.
- Chapelle, C. A. (2009). The relationship between second language acquisition theory and computer-assisted language learning. *The Modern Language Journal*, 93, 741–753.

- Dooly, M., & Davitova, N. (2018). 'What can we do to talk more?' Analysing language learners' online interaction. *Hacettepe University Journal of Education*, 33, 215–237.
- Dooly, M., & Tudini, V. (2016). 'Now we are teachers': The role of small talk in student language teachers' telecollaborative task development. *Journal of Pragmatics*, 102, 38–53. https://doi.org/10.1016/j.pragma.2016.06.008
- Duff, P. A., & Talmy, S. (2011). Language socialization approaches to second language acquisition: Social, cultural, and linguistic development in additional languages. In D. Atkinson (Ed.), *Alternative approaches to second language* acquisition (pp. 107–128). Routledge.
- Dwivedi, Y. K., Hughes, D. L., Coombs, C., Constantiou, I., Duan, Y., Edwards, J. S., Gupta, B., Lal, B., Misra, S., Prashant, P., Raman, R., Rana, N. P., Sharma, S. K., & Upadhyay, N. (2020). Impact of COVID-19 pandemic on information management research and practice: Transforming education, work and life. *International Journal of Information Management*, 55, 102211. https://doi.org/10.1016/j.ijinfomgt.2020.102211
- Fernández-García, M., & Martínez-Arbelaiz, A. (2002). Negotiation of meaning in nonnative speaker-nonnative speaker synchronous discussions. *Calico Journal*, 279–294.
- Fischer, K., & Tenbrink, T. (n.d.). Video Conferencing in a Transregional Research Cooperation: Turn-Taking in a New Medium. In J. Döring, H. W. Schmidtz, & O. Schulte (Eds.), *Connecting Perspectives. Videokonferenz: Beiträge zu ihrer Erforschung und Anwendung* (pp. 89–104). Shaker Verlag.
- Fuente, M. J. (2003). Is SLA interactionist theory relevant to CALL? A study on the effects of computer-mediated interaction in L2 vocabulary acquisition. *Computer Assisted Language Learning*, 16(1), 47–81. https://doi.org/10.1076/call.16.1.47.15526
- Gibson, W. (2009). Negotiating textual talk: Conversation analysis, pedagogy and the organisation of online asynchronous discourse. *British Educational Research Journal*, *35*(5), 705–721.
- Gonzales, A. (2012). Interlanguage pragmatic development in native speaker/nonnative speaker participatory online environments. *Spanish and Portuguese ETDs*. <u>https://digitalrepository.unm.edu/span\_etds/17</u>
- González-Lloret, M. (2003). Designing task-based CALL to promote interaction: En busca de esmeraldas. *Language Learning & Technology*, 7(1), 86–104.
- González-Lloret, M. (2008). Computer-mediated learning of L2 Pragmatics. In E. A. Soler & A. Martinez-Flor (Eds.), *Investigating pragmatics in foreign language learning, teaching and testing*, (pp. 114–132). Multilingual Matters.
- González-Lloret, M. (2011). Conversation analysis of computer-mediated communication. *Calico Journal*, 28(2), 308–325.

- González-Lloret, M. (2015). Conversation analysis in computer-assisted language learning. *Calico Journal*, 32(3), 569–594.
- Jauregi, K., Canto, S., De Graaff, R., Koenraad, T., & Moonen, M. (2011). Verbal interaction in second life: Towards a pedagogic framework for task design. *Computer Assisted Language Learning*, 24(1), 77–101.
- Jefferson, G. (2004). Glossary of transcript symbols with an introduction. *Pragmatics* and Beyond New Series, 125, 13–34.
- Jenks, C. J. (2009). When is it appropriate to talk? Managing overlapping talk in multiparticipant voice-based chat rooms. *Computer Assisted Language Learning*, 22(1), 19–30.
- Jenks, C. J., & Brandt, A. (2013). Managing mutual orientation in the absence of physical copresence: Multiparty voice-based chat room interaction. *Discourse Processes*, 50(4), 227–248.
- Kardaş İşler, N., Balaman, U., & Şahin, A. E. (2019). The Interactional management of learner initiatives in social studies classroom discourse. *Learning, Culture and Social Interaction*, 23, 100341. <u>https://doi.org/10.1016/j.lcsi.2019.100341</u>
- Kardaş İşler, N., & Can Daşkın, N. (2020). Reference to a shared past event in primary school setting. *Linguistics and Education*, *57*, 100815.
- Kasper, G., & Kim, Y. (2015). Conversation-for-Learning. In *The Handbook of Classroom Discourse and Interaction* (pp. 390–408). John Wiley & Sons, Ltd. https://doi.org/10.1002/9781118531242.ch23
- Kasper, G., & Wagner, J. (2011). A conversation-analytic approach to second language acquisition. *Alternative Approaches to Second Language Acquisition*, 117, 142.
- Kim, Y. (2012). Practices for initial recognitional reference and learning opportunities in conversation. *Journal of Pragmatics*, 44(6–7), 709–729.
- Kim, Y. (2017). 'What is stoyr-steruh type?': Knowledge asymmetry, intersubjectivity, and learning opportunities in conversation-for-learning. *Applied Linguistics*, 40(2), 307–328. <u>https://doi.org/10.1093/applin/amx029</u>
- Kitade, K. (2000). L2 Learners' discourse and SLA theories in CMC: Collaborative interaction in internet chat. *Computer Assisted Language Learning*, *13*(2), 143–166.
- Lantolf, J. P. (2011). The Sociocultural Approach to Second Language Acquisition: Sociocultural Theory, Second Language Acquisition, and Artificial L2 Development. In D. Atkinson (Ed.), *Alternative approaches to second language acquisition* (pp. 36–59). Routledge.
- Lee, Y. (2010). Learning in the contingency of talk-in-interaction. *Text & Talk*, 30(4). <u>https://www.degruyter.com/view/journals/text/30/4/article-p403.xml</u>
- Lee, Y.-A. (2006). Respecifying display questions: Interactional resources for language teaching. *TESOL Quarterly*, 40(4), 691–713. <u>https://doi.org/10.2307/40264304</u>

- Marinoni, G., Van't Land, H., & Jensen, T. (2020). The Impact of COVID-19 on Higher Education Around the World (p. 50). *IAU Global Survey Report*.
- Markman, K. M. (2005). To Send or Not to Send: Turn Construction in Computer-Mediated Chat. In Proceedings of the Twelfth Annual Symposium About Language and Society, 48, 115-124. Austin: Texas Linguistic Forum.
- McKinney, C., & Norton, B. (2011). An identity approach to second language acquisition. *Alternative Approaches to Second Language Acquisition*, 85–106.
- Mondada, L. (2018). Multiple temporalities of language and body in interaction: Challenges for transcribing multimodality. *Research on Language and Social Interaction*, 51(1), 85–106. <u>https://doi.org/10.1080/08351813.2018.1413878</u>
- Mori, J. (2004). Negotiating sequential boundaries and learning opportunities: A case from a japanese language classroom. *The Modern Language Journal*, 88(4), 536–550.
- Negretti, R. (1999). Web-based activities and SLA: A Conversation analysis research approach. *Language Learning & Technology*, *3*(1), 75–87.
- Nguyen, H., & Langevin, A. (2016). Some interactional functions of text in a text-andvoice Scmc chat session for language learning. *International Journal of Computer-Assisted Language Learning and Teaching (IJCALLT)*, 6(1), 1–23.
- Pekarek Doehler, S., & Pochon-Berger, E. (2015). The development of L2 interactional competence: Evidence from turn-taking organization, sequence organization, repair organ- ization and preference organization. In T. Cadierno & S. W. Eskildsen (Eds.) Usage-based Perspectives on Second Language Learning (pp. 233-267).Mouton de Gruyter.
- Reichert, T., & Liebscher, G. (2012). Positioning the expert: Word searches, expertise, and learning opportunities in peer interaction. *The Modern Language Journal*, 96(4), 599–609. <u>https://doi.org/10.1111/j.1540-4781.2012.01397.x</u>
- Rusk, F., & Pörn, M. (2019). Delay in L2 interaction in video-mediated environments in the context of virtual tandem language learning. *Linguistics and Education*, 50, 56–70.
- Sahlström, F. (2009). Conversation analysis as a way of studying learning—An introduction to a special issue of sjer. *Scandinavian Journal of Educational Research*, 53(2), 103–111.
- Sahlström, F. (2011). learning as social action. In J.K. Hall, J. Hellerman, & S. Pekarek Doehler (Eds.), *L2 Interactional Competence and Development* (pp. 45-65). Multilingual Matters.
- Sert, O., & Balaman, U. (2018). Orientations to negotiated language and task rules in online L2 interaction. *ReCALL*, *30*(3), 355–374.
- Sert, O., & Seedhouse, P. (2011). Introduction: Conversation analysis in applied linguistics. *Online Submission*, 5(1), 1–14.

- Skulmowski, A., & Rey, G. D. (2020). COVID-19 as an accelerator for digitalization at a German University: Establishing hybrid campuses in times of crisis. *Human Behavior and Emerging Technologies*, 2(3), 212–216. https://doi.org/10.1002/hbe2.201
- Smith, B. (2003). Computer-mediated negotiated interaction: An expanded model. *The Modern Language Journal*, 87(1), 38–57.
- Smith, B. (2004). Computer-mediated negotiated interaction and lexical acquisition. *Studies in Second Language Acquisition*, 26(3), 365–398.
- ten Have, P. (2007). Doing conversation analysis. SAGE.
- Triyason, T., Tassanaviboon, A., & Kanthamanon, P. (2020). Hybrid classroom: Designing for the new normal after COVID-19 pandemic. In *Proceedings of* the 11th International Conference on Advances in Information Technology, 1– 8. <u>https://doi.org/10.1145/3406601.3406635</u>
- Walsh, S. (2002). Construction or obstruction: Teacher talk and learner involvement in the EFL classroom. *Language Teaching Research*, 6(1), 3–23. https://doi.org/10.1191/1362168802lr0950a
- Walsh, S. (2006). Investigating classroom discourse. Routledge.
- Waring, H. Z. (2008). Using explicit positive assessment in the language classroom: IRF, feedback, and learning opportunities. *The Modern Language Journal*, 92(4), 577–594. <u>https://doi.org/10.1111/j.1540-4781.2008.00788.x</u>
- Waring, H. Z. (2009). Moving out of IRF (Initiation-Response-Feedback): A single case analysis. *Language Learning*, 59(4), 796–824. <u>https://doi.org/10.1111/j.1467-9922.2009.00526.x</u>
- Waring, H. Z. (2011). Learner initiatives and learning opportunities in the language classroom. *Classroom Discourse*, 2(2), 201–218. https://doi.org/10.1080/19463014.2011.614053
- Xie, X., Siau, K., & Nah, F. F.-H. (2020). COVID-19 pandemic Online education in the new normal and the next normal. *Journal of Information Technology Case* and Application Research, 22(3), 175–187. https://doi.org/10.1080/15228053.2020.1824884
- Yan, Z. (2020). Unprecedented pandemic, unprecedented shift, and unprecedented opportunity. *Human Behavior and Emerging Technologies*, 10.1002/hbe2.192. https://doi.org/10.1002/hbe2.192
- Yi, Y., & Jang, J. (2020). Envisioning possibilities amid the COVID with fine-grained nature of CA which makes it open to reliability checking -19 Pandemic: Implications from English language teaching in South Korea. *TESOL Journal*, 11(3), e00543. https://doi.org/10.1002/tesj.543

# Appendices

# Jefferson (2004) Transcription Convention

[]	Overlapping utterances – (beginning [) and (end])
=	Contiguous utterances (or continuation of the same turn)
(0.4)	Represent the tenths of a second between utterances
(.)	Represents a micro-pause (1 tenth of a second or less)
:	Elongation (more colons demonstrate longer stretches of sound)
•	Fall in pitch at the end of an utterance
-	An abrupt stop in articulation
?	Rising in pitch at utterance end (not necessarily a question)
CAPITAL	Loud/forte speech
	Underline letters/words indicate accentuation
$\uparrow \downarrow$	Marked upstep/downstep in intonation
0 0	Surrounds talk that is quieter
hhh	Exhalations
.hhh	Inhalations
he or ha	Laugh particle
(hhh)	Laughter within a word (can also represent audible aspirations)
><	Surrounds talk that is spoken faster
<>	Surrounds talk that is spoken slower
(( ))	Analyst notes
()	Approximations of what is heard
\$\$	Surrounds 'smile' voice

#### Mondada (2018) Multimodal Transcription Convention

* *	Gestures and descriptions of embodied actions are delimited between
+ +	two identical symbols (one symbol per participant)
$\Delta \Delta$	and are synchronized with corresponding stretches of talk.
*>	The action described continues across subsequent lines
>*	until the same symbol is reached.
>>	The action described begins before the excerpt's beginning.
>>	The action described continues after the excerpt's end.
•••••	Action's preparation.
	Action's apex is reached and maintained.
,,,,,	Action's retraction.
ric	Participant doing the embodied action is identified when (s)he is not the
	speaker.
fig	The exact moment at which a screen shot has been taken
#	is indicated with a specific symbol showing its position within the turn at talk.

# Covid-19 Salgını Esnasinda Öğrenciler Arası Bilgisayar Temelli İletişimde Kelime Öğrenme Olanakları: Öğretme, Öğrenmeyi Başlatma ve Öğrenme

# Öz

COVID-19 salgını fiziki eğitimi tamamen internet temelli eğitime taşıyarak eğitim etkinliklerini değiştirmiştir. Bu sayede, pandemi öncesinde hali hazırda hız kazanmış olan teknoloji entegrasyonu eğitim faaliyetlerini devam ettirmedeki tek çözüm haline geldi. Öğrencilerin eğitim uygulamalarından en iyi şekilde yararlanabilmeleri için çevrimiçi platformlarda birbirleriyle iletişim kurmaları ve akranlarından öğrenmeleri konusu özellikle COVID-19'un patlak vermesinden sonra ön plana çıkmıştır. Bu dönem aynı zamanda video aracılı görev tabanlı iletişimde akran-akran etkileşimi de dahil olmak üzere eğitimdeki çeşitli uygulamalarda teknoloji entegrasyonunun incelenmesinin önemini gündeme getirdi/arttırdı. Mevcut çalışma, teknoloji entegrasyonunun bir boyutuna ışık tutmak amacıyla data olarak COVID-19 salgını esnasında bir öğrenci grubunun bireysel sanal geziler üzerine üç haftalık etkileşiminin video kaydını kullanmaktadır. Öğrenci etkileşiminden gelen video kavıtları konuşma çözümlemesinin (KÇ) mikro analitik lensleri kullanılarak analiz edilmiştir. Bu çalışma, sınıf dışında akran-akran etkileşiminin derinlemesine incelenmesiyle alana katkı sağlamaktadır. Veri bireysel sanal şehir turları üzerine olan video konferanslarında katılımcıların anlam müzakeresi yoluyla kelime öğretme, kelime öğrenmesini başlatma ve öğrenmeyi gerçekleştirdiklerini göstermiştir. Bu nedenle, akran-akran bilgisayar aracılı etkileşimin öğrenme firsatları ve öğrenmeyi sağladığı açıktır ve bu sınıf dışında akran-akran etkileşimi gerektiren görevlerin ders tasarımına entegre edilebileceğini göstermektedir.

Anahtar Kelimeler: Öğrenme olanakları, akran-akran etkileşimi, video konferans, COVID-19, Bilgisayar temelli etkileşim, kelime