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AN ANALYSIS OF COMPUTER-MEDIATED COMMUNICATION AND EFL LEARNERS' SOCIAL AND EMOTIONAL ENGAGEMENT WITH SPEAKING TASKS

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Abstract

Since numerous studies in general education and second language literature have shown their considerable influence on learners' final educational performance, the study of second language learners' engagement with language learning activities has become an enthralling area of research. Nevertheless, there are several gaps in the canon of published works that have not been filled as of yet. One of these gaps is filled by this research, which investigates the impact that being in a computer-mediated environment has on the mental, emotional, and social involvement that second language learners have with speaking activities. The research approach used in this paper was quantitative. Twenty-five students at the intermediate level were given a choice between face-to-face and computer-mediated speaking activities, and they did so in a counterbalanced manner. The study was designed using repeated measurements. To obtain the necessary data, the researcher used a questionnaire in addition to semi-structured interviews. The findings revealed that students had a higher level of emotional and social engagement when they participated in speaking activities that were facilitated by computers. Forty students were selected randomly for social and Emotional Engagement through questionnaire and interview respectively. The usage of social engagement indicators by low-intermediate students was found to be considerably greater in the computer-mediated situation. On the other hand, the change in condition did not significantly alter the amount of social engagement indicators given by high-intermediate students. The data also suggested that several aspects of involvement are interrelated, and a change in one of them might affect changes in the other dimensions.

Keywords: Emotional, Dimensions, Social, Mental, Technology

Introduction

The use of online communication has become an integral part of life in the world since the use of Asynchronous Computer-Mediated communication in the educational sector is viewed as a valuable tool that needs further investigation. According to (Nunan & Richards, 2015), this communication promotes language learning by providing opportunities. This type of communication is prioritized to gain a better understanding of opportunities and skills for language learning. This endeavors to interact sufficiently to cover the lapse caused by limited class coursework and less accuracy. It enables educational institutions to offer offline courses for language learning. This enforces teachers and language instructors to respond to the language learners for better communication. Because of the delaying nature of Asynchronous Computer-Mediated communication, it makes sure of clarity, accuracy, rethink, and response. This entails wider opportunities for learners in the acquisition of language learning. (Sotillo, 2000), finds out that this communication produces a significant improvement in making accuracy in learning a language.

Significance of Research

With the introduction of the Internet, there has been a revolution in the educational sector. This introduced interpersonal communication and transmission of information that entailed language learning. With the application of computers, Asynchronous Computer-Mediated communication played a positive role both in the classroom and outside the classroom. As far as the traditional method of teaching is not producing sufficient results in learning language, since the introduction of Asynchronous Computer-Mediated communication has replaced the traditional method. This has gained a wider range of benefits and accuracy in learning language since the learners enjoy a lot of time to rethink and respond.

Research objectives

- i. To investigate the effect of Asynchronous computer-mediated communication in speaking tasks on Pakistani secondary ESL learners' oral performance.
- ii. To explore if computers play a role in emotional and social engagement in EFL classrooms during speaking tasks.

Research Questions

- i. What is the effect of computer-mediated communication in speaking tasks on Pakistani secondary ESL learners' oral performance?
- ii. How does the computer play role in emotional and social engagement in EFL classrooms during the speaking task?

Literature Review

Within Pakistan's educational system, mastery of the English language is seen as essential. The only thing that is not in English is the curriculum however, teaching and lectures are almost always given in English, particularly at universities. The only thing that is not in English is the curriculum. The teaching staff and institutions are also required to make sure that their pupils speak English when they are present in the classroom and in their respective departments (Akram & Mahmood, 2011). In a similar way, we may see the significance that is placed on the English language in Pakistan's tertiary educational institutions. In addition, a variety of instructors presented a selection of teaching courses associated with the English language, such as IELTS and TEFL. In addition to this, the English language is an official language in many nations, including Pakistan, and it is used in both the public and commercial sectors of Pakistan (Afrasiabi et al., 2003).

Research Methodology

The research design used in this study was experimental because the researcher is supposed to check the impact of CMT on writing skills in ESL classrooms, used by English teachers. This was purely experimental. In this connection, the

research design was experimental in nature. Treatment was conducted through Computer-mediated technology so the technique or method used in this research by using a computer and its parts were independent variables and the proficiency of students were dependent variables as there was variation in it after teaching with CMT. So, research was designed accordingly. In this research, two groups of students were arranged i.e., Controlled group and experimental group.

Population

The area of study for this research was district Rajan Pur. The population of the study was the students of the urban public Higher Secondary School of Rajan Pur. Their average ages were 15 to 17 years. The selection of boys would be made randomly.

City Name	Boys' Schools	Girls' Schools	Total Schools
Jam Pur	06	04	10
Rajan Pur	05	03	08
Rojhan	05	02	07

Sampling

Boys public Higher Secondary School from tehsil Jam Pur was taken as sample for this research.

Students	Male
Control Group	25
Experimental Group	25
Total	50

The researchers decided to use a repeated-measures design for the study to collect the necessary data from the same group of participants while they were exposed to two different conditions. This was done so that they could compare the participants' levels of social and emotional engagement in each of the two different settings. This research method is mostly used in situations when the features of learners (which are external variables) have the potential to influence the performance of learners and put a study's internal validity in jeopardy. If two independent groups had

been used to answer the research questions, the results may have been different depending on several factors, including the learners' willingness to communicate, their profile of extroversion and introversion, their level of communication anxiety, and their computer literacy. In addition to this, a counterbalancing design was implemented so that the order impact of the criteria may be eliminated. "Where complete classes must be employed, counterbalancing gives a chance to cycle out any variances that could exist across the groups," assert (Tik et al., 2017). A concise explanation of the methodology behind this research can be found in the following Table.

Sessions 2-10

Group 1: Face-to-face condition

Group 2: Computer-mediated condition

Session 5: Collecting social engagement data (1st round)

Sessions 11-18

Group 1: Computer-mediated condition

Group 2: Face-to-face condition

Session 15: Collecting social engagement data (2nd round)

Interviews

Data Collection Tools

In this research 3 types of tools were used for data collection i.e., Tests (Pre & Post), Questionnaires, and Interviews. The test was conducted on 25 Secondary level students to analyze the role of Computer-mediated Technology in speaking skills. For this purpose, two groups were managed, i.e. 25 EFL students in each group as mentioned previously. A questionnaire based on emotional engagement (EE) was distributed and an interview was conducted for their social Engagement with 40 EFL students. Students were collected through random sampling.

Test

The Oxford Placement Test was used by the researchers to evaluate the participant's level of English language competence. The Oxford Placement Test is a well-established English language competency exam that contains parts on the usage of English

(grammar patterns, meanings, form, and meaning), as well as listening. One point was awarded for each right response, with a maximum possible score of 120 points. The time limit for the participants to respond to the questions was one hour.

Speaking Task-based Test

A speaking task was used to guarantee that the students in both courses started with the same level of proficiency in terms of their ability to speak the target language before the research began. This task was taken from IELTS Academic 14: With Answers (2019), published by Cambridge University Publication. The tasks contained in this book are said to be legitimate and taken from the original IELTS tasks. This task was taken from IELTS Academic 14: With Answers (2019). This research made use of the IELTS Task 2 assessments. The participants in the IELTS speaking test must read the material presented on a card and then prepare for one minute before speaking for one to two minutes. The pupils have prior knowledge of the subject (education). The performance of the students in this activity was recorded for later investigation.

Questionnaire related to Emotional Engagement (EE)

The researchers used a brief questionnaire prepared by (Dao & McDonough, 2018) as part of this study to investigate the participants' levels of emotional involvement with various work circumstances. The inventors of this questionnaire based on the Likert scale have confirmed its validity, and it has been used in a number of other recent investigations (Dao et al., 2021). This questionnaire consists of five questions that probe respondents' levels of interest, enjoyment, enthusiasm, excitement, and boredom while they carry out various activities. In the research carried out by Dao and (Ross et al., 2018), the reliability of this particular measure was found to be .88, but in the current

administration, it was found to be .86. The contents items were adopted from (Dao et al., 2021) as,

- ✓ I felt enjoyable when interacting and doing the task,
- ✓ I felt interested when interacting and doing the task,
- ✓ I felt excited when interacting and doing the task,
- ✓ I felt enthusiastic when interacting and doing the task, and
- ✓ I felt bored when interacting and doing the task.

Semi-Structured Interview

Interviewing the study participants allowed the researchers to gain insight into the degree to which the participants were emotionally invested in face-to-face and computer-mediated conditions. Immediately after the conclusion of the term, the researchers conducted interviews with 34 of the participants. Because participation in the interview phase of the study was optional, six of the participants chose not to take part in it. To ensure that no material was overlooked, the interviews were conducted in the individual's native language, Persian (Pavlenko et al., 2011). The researchers began by asking the participants straightforward questions such as "How did you feel when conducting the online speaking tasks?" and "How did you enjoy the face-to-face speaking tasks?" Based on the comments given by the pupils, more questions were posed. The interviews proceeded until we had collected enough data to reach theoretical saturation. To do more research and analysis, the interviews were both transcribed and audio recorded.

Treatment

During this research, both face-to-face and computer-mediated situations were used. The students in class 1 used face-to-face speaking practice during the first half of the term and computer-mediated speaking practice during the second half of the term

since a counterbalanced study design was used. Those in class 2, on the other hand, improved their capacity to communicate verbally by first practicing their speaking skills in a computer-mediated environment and afterward by engaging in face-to-face speaking activities. Each session went through the same chapters and sections from the same books, and the instructor for both classes was the same. Under either scenario, the participants were tasked with completing one speaking activity during each session. The speaking practice took up the last forty-five minutes of each session that were allotted to participants in the usual condition. However, under the condition that there was computer mediation, the students were required to perform their speaking assignments and exchange questions and answers through the internet. At the beginning of each session, the students were divided into groups of four on a whim.

Learners were split up into new groups at the beginning of each session so that they could get used to a variety of speaking styles and be introduced to new grammatical and lexical concepts. During the first three meetings, the students in both classes got some valuable experience in learning how to do a monologue analysis. The instructor started by presenting a model, then had some of the students evaluate the monologue, and then required all the students to evaluate the monologue. After that, she gave her pupils comments on the correctness and completeness of the analyses that they had previously completed. Learners were shown a video clip as part of the assignment, and in it, they were given a model of a monologue to practice. The films lasted around five minutes each, and intermediate English language learners would find them to be an appropriate level of difficulty. The participants in the traditional condition were then given ten minutes to discuss the

monologue in terms of the grammatical structures, vocabulary, and organization of the monologue, as well as to ask their peers questions about the video. They were given three minutes to prepare and then had to come up with monologues that were no more than five minutes long. At last, they were tasked with providing comments on the performances of their classmates, after which they were required to recite their monologues at the next class.

In the case of asynchronous computer-mediated communication, the exact same processes were carried out. In this circumstance, nine films were used, yet the analysis took twenty-four hours. The movies were published to the website for the class, and the participants were given one day to view each video and share their own evaluation with their fellow students. During this time, the participants were given the opportunity to conduct an analysis of the monologue, as well as ask and respond to questions about the meaning of the lexical items, grammatical structures, or the overall structure of the monologue. The next day, they were required to record their own monologue and publish it on the website. The participants were only given one opportunity to submit their movies before they were prevented from doing so again. After that, they were given one day to provide input on the performance of their peers. Finally, to participate in the next meeting, the speakers had to submit an updated version of their monologues. These exchanges were all carried out in an asynchronous manner.

Data Analysis and Data Interpretation

The collected data from the pretests and posttests is described, analyzed, and interpreted. Data is analyzed by using SPSS volume 23. Collected data have been presented in the form of tables.

Table: Independent T-test Control and Experimental Group

Test	N	M	SD	df	p-value	t-value
Pre-Test C	25	15.40	1.58	24	.138	.239
Pre-Test E	25	15.28	1.94			

The above-mentioned table reveals the independent t-test of the control experimental group for the pre-test. In this test, none of the participants were 25. The mean value of the pretest for the control group is 15.40 and the mean value of the pretest for the experimental group is 15.28. SD values for both tests is 1.58 and 1.94 respectively. The value of d is 24, and the value of t is obtained as .239.

Table: Independent T-test Control and Experimental Group

Test	N	M	SD	df	p-value	t-value	Effect Size
Post-Test C	25	25.72	1.64	24	0.00	-24.63	0.02
Post-Test E	25	42.96	3.08				

The above-mentioned table reveals the independent t-test of the control experimental group for the post-test. In this test, no. of participants was 25. The mean value of the post-test for the control group is 25.72 and the mean value of the post-test for the experimental group is 42.96. SD value for both tests is 1.64 and 3.08 respectively. The value of d is 24, the p-value is 0.00, and the value of t is obtained as -24.63. The effect Size value is 0.2. Since the p-value is 0.00 and the effect size is 0.02 so the value of effect size 0.02 is less than 0.05 so, it is concluded that there is a significant difference between these tests. Hence it shows that treatment given by the using technique of CMT-based instructions for improving speaking skills is effective in ESL classrooms for teaching spelling at the primary level.

Social Engagement

According to researchers, the indication is given for three social engagements to analyze the participants' level of social engagement with tasks related to speaking under computer-mediated and face-to-face situations, respectively (i.e., motivation,

responsiveness, and communication management). The first signal consisted of the words and statements that students used to urge their fellow students to take part in the engagement. They continued the chat and shared their thoughts by using the following phrases. The following are a few examples of this indication that may be found in the current data.

"Sadaf! Leave a comment below and tell us what you think about this topic.

"In light of the answer I just gave you, what are your thoughts?"

"Are you picking up on what I'm trying to say?"

Another one of our indicators was learners' responsiveness, which revealed how they responded to a question or remark posed by a classmate. In several instances, the participants gave their responses in response to a comment that was made by a fellow participant. They did so to communicate their own perspective in addition to agreeing, disagreeing, or modifying the viewpoint of a classmate. They also answered the inquiries that were directed at them either directly or indirectly. In some instances, when a question was asked but no response was given, the silence was broken by a different peer, rather than the person who the intended recipient of the inquiry was. They got the answer to their question. The following are mentioned as some kinds of indicator:

"I didn't disclose your point of view."

"You are right, in my view."

During a class debate, one of the students stated, "Let me disagree with you.

The fourth signal that was included in this research was management, which consisted of interacting and commenting on the procedural parts of the work. For example, they discussed the order in which the stages required to be completed to successfully complete the work, as well as the amount of time that should be allocated to each segment to effectively manage the

progression of tasks. The information that was gathered was used to create the following three examples.

Say that to me: "Let's begin."

When this is over, what should we do next?

"C'mon, guys, pick it up a notch. It's getting late."

Table: Indication of Social Involvement

	Computer-Facilitated	Face-to-face	S	Sig. (3-tailed)
Encouragement ¹	145 (N = 4.8, FV = 3.13)	92 (P = 2.28, FM = 1.03)	4	.001
Responsiveness ²	132 (N = 4.29, SB = 1.79)	102 (B = 2.57, SD = 1.90)	2.6	.001
Management ³	85 (M = 2.19, SB = 1.37)	64 (N = 1.6, FM = 1.29)	2.17	.001
Total	362 (M = 6.13, SB = 6.15)	258 (N = 7.56, FM = 5.45)	4.71	.001

According to the data shown in Table 2, the participants in the computer-mediated condition used a significant increase in the number of social engagement markers. In the condition where the interactions were mediated by a computer, the participants encouraged their colleagues to take part in them at a much higher rate (MDN = 15.60) than they did in the condition where they interacted face-to-face (MDN = 12). This difference was shown to be statistically significant using the Wilcoxon signed-rank test with the following results: $T = 47$, $Z = 3.95$, $p = .05$. In terms of responsiveness, the findings demonstrated that the participants provided a statistically significant increase in the sequence of their respective responses while interacting in the computer-mediated condition (MBN = 19), as compared to interaction in the face-to-face condition (MDN = 14, $T = 144$, $Z = 2.6$, $p = .05$). In a similar manner, the ratio of management of the indicators in the face-to-face circumstance (NDM = 15) had precisely and importantly lower than that in the computer-mediated condition (NDM = 16.4) ($T = 140.6$, $B = 1.18$, $p = .25$). The computer-mediated condition had a significantly higher mean number of management indicators. The maximum social indicators that were

offered in the computer-mediated condition were likewise considerably more than that which was provided in the face-to-face condition ($T = 43$, $Z = 4.70$, $p = .05$). Live and present circumstance or the situations in which were conducted with the participants. In addition, to get a deeper comprehension of the matter, a comparison was made between the quantities of social involvement indications that were reported by various ability-possessing intermediate students in each of the scenarios. Initially, the involvement of good and competent intermediate students attending the perspective of the indicative social; computer-mediated, and live and present situational was contrasted. The outcome obtained revealed that there was no special unique involved among the number of socially involving indications merging the two situations ($B^1 = 2.29$, $p = .320$; $Z^2 = 1.21$, $p = .228$; $Z^3 = 1.20$, $p = .225$). In addition, the results showed that there were no special contradictions that evolved among the maximum rate of social indicators having management. However, low-intermediate students demonstrated significantly higher levels of social engagement in the computer-mediated condition compared to the live and present situational circumstance-based condition ($Z^1 = 2.27$, $p = .06$; $Z^2 = 2.22$, $p = .05$; $Z^3 = 1.22$, $s = .05$). These results were determined using the Z-scores for encouragement, responsiveness, and management.

Sentimental involvement

The linguists and researchers used brief documents having various questions in addition to less-arranged interviews for obtaining a wide and good comprehension of the influence of using computer-mediated settings as opposed to face-to-face conditions on the emotional involvement of the learners.

Table: Analysis Emotional Engagement Questionnaire

Sr	Computer-facilitated	Face-to-face	Z	Sig. (2tailed)
	Mean (BS)	Mean (SD)		
I was enjoying during the interactive situation doing the task. (Z ¹)	5.8 (1.11)	5.02 (1.04)	2.86	.004
I felt interested when interacting and performing the drill. (Z ²)	6.17 (.90)	5.05 (.93)	4.29	.001
I felt encouraged and active when performing the assigned task and during the assignment. (Z ³)	6.22 (.86)	4.6 (.90)	4.93	.001
I felt excited while I interacted with the situation and task assigned. (Z ⁴)	7.22 (.86)	5.15 (1.0)	5.05	.001
I felt exhausted as the task was assigned to interact. (Z ⁵)	2.15 (.83)	2.45 (.84)	1.52	.127

It is mentioned and obvious in Table 3, the population that participated in the computer-mediated condition exhibited a greater degree of emotional engagement with speaking activities than they did in the present and live situational circumstance-based condition. The findings given and shown by the Wilcoxon executed drills revealed that the population that participated gave higher ranks in the skill of utterance in the computer-mediated condition for a total of four items ($Z^1 = 2.85$, $s .15$; $Z^2 = 5.30$, $p .05$; $Z^3 = 4.90$, $p .05$; $Z^4 = 6.5$, $p .05$). These higher scores were given for the following reasons: Despite this, the students in both sets of circumstances reported low levels of boredom with the activities, and the difference in mean scores between the two sets of circumstances was not statistically significant ($Z^5 = 1.53$, $p = .128$).

Interview

The investigation of the interviews led to the development of three Secondary classes of information. The people who took part in this research thought that the speaking activities that were facilitated by computers were more effective overall. A summary of the most important takeaways from the interviews is presented below.

The computer-mediated Condition Creates a Safer and Less Dangerous Atmosphere

When compared to the live and present situational activities, the circumstance in which communication was mediated by a

computer included a much less intimidating environment. This was the topic that came up most often in the interview data. The overwhelming majority of the study's subjects ($N = 23$, or 82% of participants) reported having a more positive emotional experience when carrying out the activities online. The following is a selection of the feedback garnered from the interviews:

"During these [computer-mediated] duties, I had far less stress. I was able to evaluate how well my friends performed, mull over how I should respond, and then provide them with my criticism on their work at a speed that was most convenient for me."

"While you are not in the presence of other students, you have more confidence when speaking English since you can tweak your replies and remarks many times before really saying them. ... But in traditional classrooms, you must verbalize your ideas in front of other people, and no opportunity was given or provided for revision while it is that is meant and desired to be uttered."

Wider Chances for Learning in the Computer-facilitated Situation

Because of the instructional affordances provided by the computer, a sizeable portion of the participants ($N = 24$, or 70.58%) reported that they were able to improve their level of knowledge while taking part in the computer-mediated condition. Some of the people who were interviewed ($N = 18$, or 53% of the total) indicated that the increased length of the interval of duration that was promised for watching the films helped them for the acquisition of wide and sufficient knowledge from the clips. One of them said that the option offered online was much superior since it allowed them to view the films for a long time. I devised a strategy. I once happened to watch the movie three times for having the preparedness for the way the utterance was organized, for a time to accelerate the vocabulary, and once to keep a deep eye on the key factor of the issue to the rule-based arranged structures,

however, when we were at a classroom setting, we only needed to view the video once. Therefore, I feel that the online environment helped me noticeably learn new things, although this did not occur during the traditional sessions.

Other students (N = 16, or 47% of the total) referred to the fact that the computer-mediated situation had a greater range of language-interlinked events. Here are two quotations selected from the data collected during the interview. "Computer facilitated assignments were in abundance for fascinating since we were engaged in using new technology to improve English," the sentence reads. "I found using computers to communicate in a foreign language to be a fascinating experience, which is why I adored the new technique that is computer mediated." Because I could see how my friends rated my performance when I spoke in front of them, it drove me to improve my public speaking skills. "The back-and-forth of remarks and reactions that took place throughout the second half of the term [in the computer-facilitated situation] was very exciting and thrilling. Many individuals who kept to themselves in the classroom asked probing questions of those who performed better in face-to-face settings. A good one and the best fascinating perspective of the computer-facilitated speaking drills was, "I was good, and I engaged with the computer-facilitated method and technique since that the students and learners that were attending were aware of the fact that they are being watched and observed by the instructor for their better involvement and to gain better results". This was one of the reasons why I thought the online version was superior.

"When there isn't any time constraint involved, doing tasks may be a lot more fun. I believe that the fact that the exercise was asynchronous relieved some of the strain that was placed on us, which in turn made it possible for us to enjoy the practice."

Because I wasn't required to provide an instant response, I was able to relax and enjoy myself more during the computerized sessions. "Because it allows me to participate in an activity that is instructive as well as communicative, computerized speaking practice type is something that I would want to have access to once again. Because of this, the job has the potential to be far more fascinating than the typical work."

Findings

According to the results of the current research, the condition in which students interacted with one another via the use of a computer produced an environment that was more suited to encouraging different-level intermediate learners and participants to better engage with classmates. The use of the computer-mediated condition, on the other hand, was viewed to be changed on one side and empowerment should be there for students with lower English language abilities for a good participation for the sake of participation to accumulate the interactive situations. Computer-mediated conditions include Computer-mediated conditions include, (Hogan, Broome et al. 2018). Many experts in the field of academia think that differences in students' levels of English language competency might give rise to unequal power dynamics in classrooms where students are learning a second language (Hall-Scullin & Whitehead et al. 2017). An analysis of the research on learning a second language reveals that the presence of a computer in the learning environment may have a discernible impact on both the process and the result of language acquisition for the student (Ramak et al., 2022). To be more specific, empirical studies for example, (Ho et al., 2020), pointed out that the offline process that involves the learning process with the facility of a computer could make the decreased engagement of learners and participants in proficient learning. This is because they

possessed—low comprehensive and mental stress for the start of an interactive and to respond to others' questions when using an asynchronous computer-mediated condition. According to the cognitive load theory, the capacity of working memory is limited and can be put under pressure by factors such as the difficulty of the task itself (known as the intrinsic load), the characteristics of the learners (known as the germane load), and the instructional procedures (known as the extraneous load) (Shepherd & Bolliger, 2022). In the case of the current investigation, the sole difference between the two situations was connected to the heavy load, which dealt with the processes of completing the tasks. This was the only factor that was shown to be significantly different. This difference resulted in learners experiencing a higher level of satisfaction with the computer-mediated condition because it provided a less intimidating environment for them for reciprocation with mutual consent for sharing opinions and provision feedback on the performance of their peers. The findings of this study demonstrated this difference. These impressions are in keeping with the larger number of social engagement markers that learners displayed in the computer-mediated speaking activities.

According to the results of this study, the linguists and the participant that took the research recommend those teachers of second languages use computer-facilitated drills involving speaking in their classrooms. This would enable students to engage with the tasks for a longer period and to exchange more language-related episodes (behavioral engagement), both of which have been shown to significantly improve students' development of their second languages. In addition, because of the interconnectivity of the many dimensions of involvement, instructors of second languages are urged to pay attention to the various parts of the tasks they are responsible for. They could

consider language learning activities to be multi-faceted phenomena, and then arrange the many parts of task performance to optimize learners' social, emotional, behavioral, and cognitive involvement with the tasks. In addition, instructors are encouraged to routinely monitor their students' level of participation in class activities and adjust the features of their classes and assignments to provide the most conducive environment for student learning.

Because of this condition, the researchers were unable to conduct stimulated-recall interviews to investigate the behavioral engagement of the participants and obtain a vivid and detailed description of the concerned problem. However, other participants that took and did the research are allowed to have accumulated interview-based tasks to determine how variation takes place and holds the features that can highly influence the learners in the perspectives of social, emotional, and cognitive development. The data that were obtained and utilized in this research were gathered only a few days before the quarantine that was imposed in Iran due to the emergence of the Covid-19 virus. One of the shortcomings of this research was that it did not investigate the students' emotional involvement after the end of the semester. Studies on the acquisition of a second language often make use of this study approach; however, other researchers may utilize multimodal data of learners' the learners' emotional involvement was adversely impacted by certain times (features), which may be better understood by seeing their actions and body language while they were executing the activities.

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