Learner’s Use of First Language in EFL Collaborative Learning: A Sociocultural View

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ABSTRACT

This study investigates the functions served by learners’ first language (L1) in classroom interaction among Iranian learners of English (L2). The study aims to determine how learners’ L1 serves them in their L2 learning. It adopts a qualitative approach. The study involved the participation of eleven Grade 9 learners in one Iranian high school in Malaysia. Sources of data included transcripts of classroom interactions and interviews with learners. Learners used L1 in social and private speech, for a variety of purposes. Learners used L1 in their social speech to talk about language and task, and in their interpersonal relations. L1 created a context for more participation and collaboration. Learners’ L1 private speech functioned beneficially in their cognitive process and assisted the less proficient learners in successfully performing the tasks. The findings affirm the sociocultural perspective of language learning that the social interaction involving L1 and L2 mediates the learners’ mental processes. This study contributed to the body of knowledge on second language learning by providing evidence that the transition from being other-mediated to self-mediated may occur through L1 mediation. Implications for group work are discussed.

**Keywords:** L1 use, second language learning, sociocultural theory, EFL, classroom interaction

INTRODUCTION

Use of L1 in L2 classroom has been reported in many studies where the teacher and learners shared the same L1. The debate over whether learners’ L1 should be included or excluded in language classroom was an issue of contention for decades. On one side of the debate, researchers maintained that L1 should be banned or restricted in the classroom in order to provide opportunities for maximal target language (TL) use (Duff & Polio, 1990; Mori, 2004; Polio & Duff, 1994). While researchers on this side of the debate agree that total L1 exclusion is not possible, they contend that L1 must be avoided as much as possible. They argued that classroom is the only opportunity foreign language (FL) learners have for exposure to the language; thus, it is essential to maximize the learners’ exposure in the limited class time available. On the contrary, Butzkamm (2011, p. 380), who has been an advocate for the benefit of L1 in L2, argues that “classrooms can never provide enough exposure for the learners to sort out the many complexities of a language all by themselves.” Exposure to the FL alone cannot result in foreign language learning, as Butzkamm argues, just because there’s never enough exposure to it in the classroom. Butzkamm (2003) views L1 as a cognitive and pedagogical resource and states...
that through using the mother tongue, we have learned to think and to communicate. Butzkamm maintains that L1 is the greatest asset people bring to the task of foreign language learning. According to Butzkamm, the use of L1 will save pupils from a feeling of frustration and allow learners to gain confidence. Paradoxically, this leads to the learners becoming less dependent on their L1. However, it should be noted that proponents of L1 use in L2 learning discourage overuse of L1 and adopting “an anything goes approach” to L2 pedagogy, as Lantolf (2000, p. 87) argues. Lantolf maintains that recognizing a key role for L1 in learning L2 does not mean being over-dependent on L1 and using L1 for all communicative functions.

Previous studies conducted on the use of L1 in L2 examined teachers’ use of L1 in a range of varied contexts in order to understand the pedagogical role of L1 in the teaching of L2. These studies focused on different aspects: pedagogical purposes of teachers’ use of L1 in the L2 classroom (Carless, 2008; Inbar-Lourie, 2010; Üstünel & Seedhouse, 2005); teachers’ beliefs or students’ perspectives on the role of L1 use in the teaching of L2 (Anh, 2010; Bateman, 2008; Levine, 2003; Macaro, 2001) and the amount of teacher use of L1 or TL in classroom (Crawford, 2004; Duff & Polio, 1990). These studies examine the different aspects of L1 use, and show that there is a role for L1 in teaching and learning L2. Although many studies concluded that L1 is a meaningful component that has an impact on L2 learning, widespread agreement has not been reached on how, when and how much use of L1 are more beneficial for L2 learning.

Other studies focused on the use of L1 involving specific language skills or sub-skills. These include studies on: grammar (Şimşek, 2010); vocabulary (Liu, 2009; Tian & Macaro, 2012); writing process (Kim, 2011; Myung-Hye, Yang-Sook, & Nara, 2013); and reading comprehension (Seng & Hashim, 2006; Upton & Lee-Thompson, 2002). Studies dealing with reading comprehension reported instances where the use of L1 facilitated the process of comprehending the L2 text; however, these studies investigated the role of L1 in L2 reading comprehension among ESL tertiary students and did not focus on high school EFL learners.

Many studies carried out in the field have maintained and emphasized that L1 use while learning L2 is normal. Some of these studies have found L1 use in L2 learning beneficial and concluded that L1 use can scaffold and enhance learner participation and interaction. Other studies; however, have contradictory findings on the extent of L1 that should be allowed. For example, some studies record that when learners are allowed to speak any language, they will resort mostly to L1 use. This would undermine the entire point of L2 learning. Other studies; however, reported L1 use to a limited extent (e.g., Storch & Aldosari, 2010). Indeed, many studies have suggested that a systematic and prudent use of L1 is beneficial in L2 learning. However, determining the amount and balance of this L1 use has not been elaborated on. Thus, there is a need for further research into this phenomenon to find out what judicious or prudent L1 use means in different contexts.

The amount and purpose of L1 in L2 have been studied to provide insights and to enhance the understanding of the role which learners’ L1 play in the learning of an L2. Studies have demonstrated a role for use of L1 in carrying out the tasks successfully. Functions are suggested for L1 while the learners were engaged in different L2 tasks. All this proved a positive and beneficial role for learners’ L1 in L2 learning which has been negatively viewed in teaching and learning of L2 for decades.

Classroom discourse, either as group work or whole class discussions, improves learners’ literacy development. Studies show that peers can provide opportunities for learning when they work in groups collaboratively, a view which is supported by the sociocultural research. However, most studies cited earlier were conducted in experimental or quasi-experimental settings. Not many studies have been carried out to investigate L1 in the naturalistic social setting of a classroom, and thus, this study attempts to address the gaps and contribute to knowledge by studying L1 in high school learners’ interactions in ongoing classroom setting. It is hoped that this study will shed light onto the phenomenon of learners’ L1 use in mediating own and each other’s learning of L2.
RESEARCH ON L1 USE FROM THE SOCIOCULTURAL PERSPECTIVE

Vygotsky’s Sociocultural theory (SCT) is a cognitive theory which claims cognitive development results from human social activity. It is a culturally defined model for cognitive development in which the role of cultural context in cognitive development is emphasized. It is “a theory of mind that recognizes the central role that social relationships and culturally constructed artefacts play in organizing uniquely human forms of thinking.” (Lantolf, 2004, pp. 30-31).

Language, as Lantolf and Thorne (2007, p. 205) state, is “the most pervasive and powerful cultural artefact that humans possess to mediate their connection to the world, to each other, and to themselves”. From the sociocultural perspective, language, in general, mediates our learning; hence, learners’ L1 is viewed as a resource in second language acquisition (Antón & DiCamilla, 1999; Brooks & Donato, 1994; Swain & Lapkin, 1998). Learners’ first language is seen both as a tool for communication when used in their interpersonal speech with others as well as a tool for thought in learners’ self-directed intrapersonal speech. In other words, L1 serves both social and metacognitive functions in the SLA process.

Developmental processes happen through participation in linguistic and cultural settings, including institutional contexts and classrooms. In a classroom, language serves not only a communicative function in learner-learner and learner-teacher speech, but is a psychological tool as well. Studies within the sociocultural framework investigated the use of L1 as an important semiotic tool, especially among L2 learners who shared their L1. Some research looked at learners’ speech as cognitive activity to uncover how learners use their L1 as a cognitive tool (Brooks & Donato, 1994). Swain and Lapkin (2000) suggest that denying students’ access to the L1 deprives them of an invaluable cognitive tool.

Scholars who view language as a mediational tool suggest that what occurs in collaborative dialogues not only leads to learning, but that it is learning in itself (Donato, 1994; Swain & Lapkin, 1998). Donato (1994) suggests that in joint activity, language serves to co-construct knowledge and that the use of either the L1 or the L2 as a mediational tool creates new language or new knowledge about language and consolidates existing knowledge. Donato concludes that “in social interaction, a knowledgeable participant can create, by means of speech, supportive conditions in which the novice can participate, and extend current skills and knowledge to higher levels of competence” (p. 52).

For decades, in L2 classrooms, learners have been encouraged to participate using the target language. However, studies from the EFL context show that learners are not able to use L2 only, and resort to their L1 in their interactions. According to Vygotsky (1978), “social interaction mediates cognitive development” and hence, in the context of a classroom, more social interaction, both learner-learner and learner teacher, is needed. Sometimes, L1 is required to bring about this increased participation. In an L2 classroom, everyone’s contribution is important and everyone, whether less or more proficient, should participate in the group and contribute to the completion of tasks. More recent research suggests that using the L1 while interacting with others in the classroom is a means to scaffold learning and to co-construct knowledge (Antón & DiCamilla, 1999; Swain & Lapkin, 2000). As increased participation is required for better L2 learning, and as more recent research suggests that L1 use allows for increased participation, total exclusion of L1 in an L2 learning classroom may reduce learner participation. This in turn may result in a departure from the L2 learning.

Antón and DiCamilla (1999) investigated the use of L1 in the discourse of L2 learners while they engaged in L2 writing tasks. Vygotskian sociocultural theory was used by the researchers to justify their approach. Anton and DiCamilla claimed that problem solving dialogue in L1 can play an important role in learning an L2. The study used university students who were English speakers studying Spanish. Their analysis of data demonstrated how L1 as a psychological tool played a critical role in serving three important functions. Anton and DiCamilla argue that when learning an L2, writing a text in that language can be done collaboratively like any other joint activity. They further argue that
in the process of this collaborative joint composition using a shared L1 to solve the problems which might arise can assist the learning of the L2. Based on Vygotsky, they argue that the use of L1 by the learners plays an important cognitive role, provides scaffold, helps to externalize inner speech and also establish intersubjectivity. As argued by the researchers, these are all required for task performance and achieving their goals.

Some studies aimed at understanding the effect of task type on the amount of L1 and functions served by L1. For example, Swain and Lapkin’s (2000) study investigated functions which L1 served for English speaking Grade 8 learners of French while doing a dictogloss task and a jigsaw task. French was used as the language of instruction. Researchers used the sociocultural perspective as the framework to analyse and interpret the data. It was required that each student pair to come up with a written story as the final product for the task. The authors addressed the relationship between the quality of the written stories and the amount of L1 use too. As for the amount of L1 use, there were no statistically significant differences between the two tasks. Researchers reported similar functions for L1 as what was reviewed for Antón and DiCamilla’s (1999) study. The authors concluded that without the use of L1, learners might not have been able to accomplish the task effectively, or complete it at all.

Scott and de la Fuente’s (2008) qualitative study investigated the use of L1 during a collaborative consciousness-raising, form-focused task. The study used English speaking university students studying French or Spanish. The researchers analysed participants’ recorded interactions during their pair work and data from recalled protocols. Some groups were allowed the use of L1, while some groups were told to use only L2. The researchers observed that learners who were required to use L2 during the task talked to themselves in the L1 as they translated the text, recalled grammar rules, reviewed the task, and planned what to say in L2. They reported that students who used L1 engaged in smooth, continuous interaction; whereas, the interactions of students who used L2 were characterized by frequent pauses and fragmented interaction. They also reported that students who used L1 participated nearly equally in the interaction while the conversation in all pairs of students who used L2 was unbalanced, with one student dominating it. The unbalanced interaction inhibited their capacity to engage in collaborative dialogue and students were less successful to work on the task. The degree to which the students in two groups used metalinguistic terminology was another difference reported by the researchers.

Despite the fact that there have been studies reporting on what is occurring when learners use L1, there is still a need to know what is also best for the students. The argument regarding L1 use in an L2 classroom is no longer concerned with whether L1 should be completely avoided or not. The question, now, is how to utilize L1 in the best way that would benefit L2 learning. More research from diverse language pairs and from different contexts will provide more insight on how to take advantage of learners’ L1 in L2 and to avoid using it as an easy option. The purpose of this study is to examine learners’ use of L1 and the functions served by it in the learning of L2. The following questions guided the study:

1. What functions does L1 serve in the Grade 9 Iranian learners’ interpersonal speech in an EFL reading class?
2. What functions does L1 serve in the Grade 9 Iranian learners’ intrapersonal speech in an EFL reading class?

METHODOLOGY

This study adopts a qualitative case study approach which covers both the phenomenon of interest, i.e. use of L1, and its context. A case study design enabled the researcher to investigate and better understand the phenomenon of L1 use in L2 learning. As Merriam (1998, p. 41) stated, case studies provide a rich and holistic account of a particular case as they are ‘anchored in real life situations’. Qualitative case study guided the researcher in the process of collecting, analysing, and
interpreting the data. However, some quantification and frequency counts were carried out in order to find out the functions for which learners relied on their L1 most.

This study was conducted in an Iranian EFL school located in the ESL context of Kuala Lumpur, Malaysia. The Iranian Ministry of Education has set up schools overseas, giving Iranians abroad access to Iranian education. Students from primary to pre-university levels are enrolled in these schools and the schools follow the same curriculum as the schools in Iran. They are oriented towards Iranian school exams by the Iranian Examination Board. The same textbooks which are published in Iran and used in national schools are used in overseas schools as well.

The study involved the participation of 11 Grade 9 students. It is a requirement by the Iranian Ministry of Education for all Grade Nine learners to take English as a school subject. Participants ranged in age from 14 to 16. Persian is the native language of the participants, and English had been a compulsory subject since junior high school for the participants (since Grade 6). Thus, the learners had been exposed to the English language for at least three years. All the students in the only Grade 9 class in the selected school consented to participate in the study, and hence, their participation was not based on a specific criterion. In this report, the participants are given pseudonyms to achieve anonymity.

Qualitative data from learners was collected. Learners’ classroom interactions with the teacher or with other learners were recorded and transcribed verbatim. Transcripts of classroom interactions were used to answer the research questions of the study. In order to have a clearer picture regarding the focus of the questions, follow up interviews based on transcripts were conducted as well, when necessary.

Five reading lessons of the textbook, covered in seven sessions, were recorded. The number of audio recordings was not predetermined, as it depended on the number of students in each class and the social arrangements at the time of doing the tasks. Audio recordings were made during normal class times and under normal class conditions. To acquire a high quality of sound, as well as to avoid being too distracting, digital audio recorders with internal microphones were set up at different locations in the classroom to catch both the teachers’ and the students’ utterances during class. The follow up interviews allowed the researcher to access the information unavailable in recordings.

DATA ANALYSIS AND FINDINGS

Utterance was chosen as the unit of analysis for this study, as it seemed most appropriate for the purpose of the study. Utterance has been used in previous studies in literature as well, (e.g., Appel & Lantolf, 1994; Leeming, 2011) and thus it was utilized in this study for the qualitative analysis, as well as to quantify and to determine the frequency of functions of learners’ use of Persian (L1) in their speech. Transcribed data containing Persian was first identified and divided into utterances and then these utterances were coded for the functions they served.

For the coding of interaction data, a list of possible functions for L1, inspired by the earlier literature investigating L1 use in L2 classroom, was used. For example, DiCamilla and Anton’s (2012) study investigated the categories for the social functions of L1 use in L2 classroom for the study. DiCamilla and Antón’s study investigated functions of learners’ use of L1 in L2 classroom as they were performing a writing task, and so the categories had to be adapted slightly for the purpose of this study. The earlier literature on private speech (e.g., Centeno-Cortés & Jiménez Jiménez, 2004; DiCamilla & Antón, 2004) inspired the coding for the self-regulatory functions of L1 in learners’ thinking process for this study.

The inter-rater reliability for the data was determined by asking a bilingual speaker (Persian & English) to code a ten percent sample of the data set. Inter-rater agreement rate was determined to be 84%. Then, the disagreements regarding coding were resolved through further discussion.

Data analysis revealed that the learners’ L1 was used to serve a variety of functions. They used it both interpersonally as a social tool and intrapersonally in own thinking process.
Findings: Benefits of L1 use

Data analysis in this study affirmed the sociocultural theoretical orientation and found learners used L1 intrapersonally in their speech as a cognitive tool and interpersonally as a means of communication. According to Vygotskian sociocultural theory, speech has dual mediational macrofunctions - a primary function, to mediate our social activity, and a secondary function, to mediate our mental activity (Lantolf & Appel, 1994). It is an orientation towards viewing dialogue as both a means of communication and a cognitive tool (Swain & Lapkin, 1998).

The following table shows frequency of macrofunction of use of L1 in learners’ speech in their classroom interactions. The learners used L1 interpersonally in their metatalk about language; metatalk about task; interpersonal relations; and intrapersonally in their vocalized private speech.

Table 1 Frequency of Macrofunctions of Use of L1

<table>
<thead>
<tr>
<th>Functions of Use of L1</th>
<th>Grade 9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interpersonal use of L1 in metatalk about language</td>
<td>975 (49.82%)</td>
</tr>
<tr>
<td>Interpersonal use of L1 in metatalk about task</td>
<td>572 (29.23%)</td>
</tr>
<tr>
<td>Use of L1 in interpersonal relations</td>
<td>384 (19.62%)</td>
</tr>
<tr>
<td>Intrapersonal use of L1 in vocalized private speech</td>
<td>26 (1.33%)</td>
</tr>
<tr>
<td>Total use of L1</td>
<td>1957 (100%)</td>
</tr>
</tbody>
</table>

Interpersonal Use of L1 in Metatalk about Language

The most frequent category of functions for L1 use was the instances when learners talked about the language (49.82%). Much of the speech in the learners’ classroom interaction involved discussions about meaning and vocabulary problems, grammar, spelling, etc. Interpersonal use of L1 in metatalk about language refers to any use of L1 in the learners’ speech that has a common shared focus on language, including its meaning or form. Analysis of the data showed that this consisted a wide variety of different sub-functions. This is because the learners mostly used their L1 to elicit assistance or to provide assistance to each other, to translate, or to argue about a point while doing the tasks.

Analysis of learners’ interaction data showed that, while talking about language, the most common use of Persian (L1) for learners was for the purpose of requesting assistance. The sub-function of use of L1 to request assistance included any use of L1 by the learners asking for L1 equivalents of unknown L2 words, asking for L2 equivalents of words, requesting more information or clarification, seeking confirmation, and requesting help regarding the spelling or the pronunciation of L2 words. Expressions indicating comprehension difficulty or vocabulary inadequacy, and the learners’ request for repetition were included in this sub-function as well. Use of L1 to request assistance counted for 26.80% of L1 use that fell under the function of interpersonal use of L1 in metatalk about language.

The next most frequent sub-function was the use of L1 to provide assistance (22.69%) which included any use of L1 while providing L1 equivalents for L2 words in response to a partner’s explicit request, responding to a partner’s question, providing further explanation, providing hints to either facilitate peers’ L2 production or their understanding of L2, as well as instances of peer correction.

Other sub-functions under interpersonal use of L1 in metatalk about language, from most frequently used to less frequently used included: use of L1 to argue and express agreements or...
disagreements; translation; initiate L2; express understanding; respond to the teacher’s question; and to check other peers’ understanding of L2.

The next sections report and extend on some of the identified uses of L1 in the data which constitute the interpersonal use of L1 in metatalk about language in detail. Examples from the learners’ interactions are used to illustrate how L1 was used in interacting with each other or with the teacher to better understand and learn L2. When reporting the example interactions, Romanization of the Persian utterances are given in italics. These are followed by the English translations for learners’ L1, which are given in brackets ( ). Words or phrases which are in Bold signify L2 utterances within a learners’ L1 speech. Sentences which the students read out from the textbook or a dictionary are underlined. Pauses are shown by + sign and researcher’s comments are added in [].

Segments of the learners’ interaction data are selected to provide evidence for each macrofunction of L1 use and demonstrate in what way each of these interactions were beneficial for the learners. Each example was chosen as a representative for the macrofunctions described, and to display the role L1 played in the learners’ L2 learning. It should be noted that not all instances of L1 were beneficial. There were instances in the learners’ speech where they overused L1, or instances where the use of L1 did not prove to be helpful in the learning of L2. For instance, Example 7 demonstrates a scenario whereby L1 use by a learner was misleading.

Example 1 shows an instance of L1 use in learner-learner interactions, where one learner asks for the meaning of an unknown L2 word. In his speech, Kian used the L2 word ‘regularly’ when he was trying to define ‘servant’, a new word in the textbook. However, this might have caused the other learner, Ata, comprehension difficulty. Ata did not let his partner finish his sentence and immediately interrupted him to ask the meaning for ‘regularly’. Ata’s question ‘What?’, in line 3, further indicates that this might have been the first time he had come across the word ‘regularly’. In reply, Kian repeated the word followed by its L1 equivalent to resolve the problem.

Example 1 (Group work)

1.  Kian:  Someone regularly
2.  Ata:  Chi?
3.   (What?)
4.  Kian:  Regularly, be tor e maamool o monazam.
   (Regularly, at regular times and routinely)

A learner speaking in L2 or reading the L2 text, followed by another learner’s interruption in order to ask the L1 meaning of a word was frequent pattern for the use of L1 in learner-learner interactions. The learner who did not know the meaning would use L1 to ask, and if the other learner knew the word he would provide the partner with the L1 equivalent. Ata, in the above excerpt, was proficient enough to have been able to produce a simple utterance equivalent to it in L2, and yet he used L1 and said “chi? (what?)”. Since it was not clear as to why he used L1, a follow up interview was carried out later. Ata admitted he should have uttered the said word in L2 because it was easy. Ata’s comment, “amma in assoon bood , chera be fekram naresid?” (but this was easy, why couldn’t I think of it?) shows that despite having enough proficiency to respond in L2, the L2 equivalent for the word did not even occur to him at the time. It could be said that L1 was more accessible to the learner and it allowed him to have a more immediate reaction to the unknown L2 word.

Example 2 is a part of conversation which appeared in group interactions while learners were working on the new words of the lesson, before the reading passage. One of the new words was ‘plant’. A member in the group, Hamid, was asked to define ‘plant’ in English. However, using TL, he provided some examples of ‘plant’ by saying the words ‘flowers’ and ‘grass’. Kian, another group member, first praised him using L1 and then reminded him that what he had already provided were
examples and not a definition. And later Kian asked him again whether he knew how to define the word in L2. Hamid, who was not sure whether he could add anything or not, finally expressed inadequacy and said “Nemidoonam che joori” (I don’t know how).

**Example 2 (Group work)**

1. Hamid: Plants are flowers, grass and something like that.
3. (That’s right. Do you know the definition? ++ These are the examples.)
4. Hamid: *be englisi? + mitoonam begam voli.. +++ na, nemidoonam che joori*
5. (In English? + I can but, +++ no, I don’t know how.)

This is an instance where a learner used TL to initiate his conversation in order to answer the partner’s question; however, as we can see he was unable to produce an English definition and continued using L1 to express his inability. Hamid’s use of L1 at this point, as it is evident in the data, is not just an easy option. He started to talk in TL, and from analysis of his non-verbal interactions (his voice), it is evident that he was happy and eager to continue in TL. Hamid thought he would be able to define ‘plant’ in English, even after a partner reminded Hamid that what he had said were just examples. Later, he finally realised that he did not know how to say it in L2 and put an end to his hesitations and used L1 to express that he was not able to do that.

Example 3 illustrates how the two more proficient learners in the group utilize L1 and provide assistance to Hamid. In this example, Kian, a somewhat proficient learner, utilized L1 and suggested that Hamid, a less proficient learner, define the new word in Persian first. Hamid then, starts to define the word, but leaves it incomplete (line 5). Kian, then, repeats Hamid’s definition and completes it for him, and then prompts him to say it in English. Kian then specifically tells Hamid to repeat the L1 definition they came up with, in L2 (line 12). However, Hamid is unable to come up with a complete L2 definition on his own, as can be seen by a long pause he makes (line 13). Kian realises this, and provides Hamid with the rest of the L2 definition, broken down into parts, with Hamid repeating each part after him.

**Example 3 (Group work)**

2. (What’s a plant? Say it in Persian. What’s the definition of a plant in Persian?)
3. Ali: *Yek chizie ke [Did not finish]*
4. (It’s something that) [Did not finish]
5. Hamid: *Ye mojooode zende*
6. (It’s a living thing)
8. (A living thing that grows from the earth (out of the ground). What’s that?)
9. Hamid: Plant
11. (Yeah. Explain it in English. What I just said in Persian, say it in English)
12. Hamid: Plant is a +++ umm, *vaysa [did not finish]*
13. (Plant is a +++ umm, wait) [did not finish]
In the first part of the above example, we see two higher proficient learners trying to provide scaffolded help to the lower proficient learner through L1. In the second part, the low proficient learner then imitates a higher proficient learner in order to come up with an L2 sentence. This imitation, according to Lantolf (2000), is a “creative act in which individuals appropriate what is available to them in their interactions with other individuals”. Repetition also enables Hamid to maintain his focus of attention, and also to think and evaluate the newly learned L2 sentence.

It was found that in many instances the less proficient learner in the group was able to transfer his learning to another task. Example 4 demonstrates how Hamid was able to start a definition (line 6) after, Ali, in the previous example, provided him with the correct way to start defining a word. As it was seen in Example 3 (line 4), Ali, who was another higher proficient learner, initiated the beginning of the definition of a word, in order to show Hamid how to define correctly. Later on, during the same lesson, the learners began to discuss another L2 vocabulary in the textbook. As can be seen in Example 4, we see that Hamid has picked this up, and goes on to use it while defining ‘world’. In this example, we also see Kian providing Hamid with a bit of help. Kian, as in the previous example, provides Hamid with the L1 definition. However, this time, Hamid is able to produce an L2 definition immediately and on his own, based on Kian’s L1 hint, and does not need anyone else to come up with both the L2 and L1 sentences for him. This suggests that the L1 definition scaffolded his L2 production.

Example 4 (Group work)
1. Kian: OK, world. Ta’rife world chie?
2. (OK, world. What’s the definition for world?)
3. Hamid: World, +++
4. Ali: Jahan
5. (World)
6. Hamid: Jayi ke +++ Jayi ke +++
7. (A place where +++ A place where+++)
8. Kian: Jayi ke zendegi mikonom
9. (A place where we live.)
10. Hamid: Is a place that we live.
It should be noted that Kian’s question at the beginning of this example was a rhetorical question, used to check his peer’s comprehension.

Example 5 is taken from a group interaction data involving Vahid, Parsa, and Ata while they are engaged in a True/False task. In this example, we see how a less proficient learner contributes to the group by providing the L1 equivalent in the context of the specific sentence. The statement given to them included the word ‘teeth’ in the context of a comb. The two higher proficient learners were confused by this word, but the lower proficient learner, Ata, realises what this means, and provides them with the L1 equivalent.

**Example 5 (Group work)**

1. Vahid: A comb has teeth. What do you call those +++
2. Parsa: I knew the name, I knew it. It’s mmm+
3. Ata: *baba dandoone dare dige.*
4. (It has teeth.)
5. Vahid: *dandoon*
6. (teeth) [referring to dental]
8. (It says here that a comb has teeth. It means this [teeth] in this sentence.)

Another scaffolding function of L1 when learners were talking about language was when they were trying to come up with a definition for the word ‘cow’, seen in example 6. Earlier than it is seen in the segment, the more proficient learner had given a long definition for the word ‘cow’. Ata, the less proficient learner, was not able to keep up with the long definition given by Kian.

**Example 6 (Group work)**

1. Ata: kind of animal? [rising tone]
2. Kian: It’s a kind of animal and cow will give us milk, cheese and some dairies
3. Ata: *ye bar dige begoo, in akhariye*
4. (say it again, this is the last time)
5. Kian: cows are a kind of animal, *kari nadare*, cows will give us, *will ayande*, will  
6. *give us, be ma mide*  
7. (cows are a kind of animal, it’s easy, cows will give us, will – for future,  
8. *will give us, will give us*)  
9. Ata: will give us
11.  
12. (milk, milk, will give us cheese, cheese, then and some dairies, *dairies*)  
13. means dairies. We can make dairies.)
In the above example, Ata just repeated a small part of the definition provided by Kian, in a rising intonation, indicating that he needed more help in order to say it fully. Kian then breaks down the definition into smaller parts, and in between each part he provides L1 translations for the part he is saying. The L1 utterances in between the L2 utterances play a scaffolding role by enhancing Ata’s memory. It is easier for a learner to keep in their memory an L1 sentence or utterance, compared to L2. When breaking up the sentences and providing L1 meanings, Kian even provides Ata with some grammar points and hints (line 7). He points out to Ata that the word “will” indicates something happening in the future. Kian also utilized L1 to provide affective support in line 7, by telling Ata that what he has to learn “is easy”.

From the analysis, it was evident that learners used their L1 frequently to ask for help in their social speech during classroom interactions. The instances of use of L1 to serve this function indicate that when facing problems during L2 learning tasks, learners relied on their L1 in order to seek assistance, and that L1 was also used to provide the help required to finally solve the problem. The analysis also suggested that for some learners, utilizing L1 enhanced their group work.

However, it should be noted that L1 use was not necessarily always beneficial. In the following example Ali, Reza, and Amin were doing the new words section of the lesson. Ali was reading and asking Amin the questions from the textbook. Amin reread a question, and did not know the meaning of ‘foreign’ which was used in it, and so was unable to answer it.

Example 7 (Group work)

1. Ali: Ali’s father travels a lot. He visits many foreign countries. He knows
2. two languages. Does Ali’s father visit foreign countries? +++
3. Reza: Amin, he is asking from you.
4. Amin: Does Ali’s father visit foreign countries? (rereads)
5. Reza: Do you know the meaning of foreign?
6. Amin: No.
7. Reza: Foreign means out, + outside, outdoor. You know, It’s not in, umm, + another country, kharej
8. [Foreign means out, +outside, outdoor. You know, It’s not in, umm, + another country, out]
10. We are living in a foreign country.
11. Reza: OK.
12. Ali: It doesn’t mean outside. You can’t like say this is outside, you can’t say foreign instead.
13. Reza: hmm. I tell you the Persian meaning for it. It means, hmm, +
16. [Foreign means foreign, foreign]
17. Ali: It doesn’t exactly fit as that, you can’t replace them
18. Reza: Next one.

As it is seen, most of the learners’ interaction occurred in L2 and L1 is only used by the two more proficient learners (lines 8, 17, and 18) to provide the equivalent for the L2 word ‘foreign’. This excerpt is an instance that Reza’s unsuccessful intrapersonal L1 mediation, resulted in him using an improper L2 equivalent, “outside” (line 7) for an unknown L2 word in the context of the L2 sentence in their textbook ‘foreign’. Use of L1 was misleading. In informal Persian conversation people use the
word ‘kharej’ for foreign countries or overseas. Another English equivalent for ‘kharej’ is ‘outside’. The wrong L2 synonyms “out, outside, and outdoor” provided by Reza in line 7 indicates that the intrapersonal use of L1, i.e. the improper L1 equivalent, was the cause for this performance. Ali noticed this and used L2 (line 14) to correct it and finally he used L1 to provide the proper L1 equivalent (line 17). And in line 18 Reza’s L1 utterance “khareji, khareji” indicates he had already problem to remember proper L1 equivalent.

Interpersonal Use of L1 in Metatalk About Task

Analysis revealed another category of functions for use of L1 in classroom interactions which emerged at points at which the learners talked about the task. Learners used their L1 as a tool to manage the task and resolve task related problems. L1 use in utterances dealing with division of labour, task clarification and transitioning to the next step of the task were considered under this function. Other uses of L1 in learners’ speech while they talked about what needed to be done such as, where to read or which question to answer, and discussions on who should use a dictionary to find meanings of words were also put in this category. Interpersonal use of L1 in metatalk about task was the second most frequent function for which learners used L1 (29.23%). DiCamilla and Antón (2012, p. 175) state that “to collaborate successfully, students need not only to resolve the linguistic problems that the task confronts them with, but also to reach an agreement concerning how they are going to work together, what their view of the task is, and so on”. The data displayed that groups which put more effort into getting organized and in planning the task seemed to be able to work more collaboratively. In many instances, learners used L1 for this purpose.

Example 8 illustrates learners’ interpersonal use of L1 to talk about task. At this point of interaction, they were doing the new words section of a lesson. They were required to read the sentences and answer the questions in their group and to finally make their own sentences using the new words presented in the textbook. They also had to prepare for a presentation in front of the class. Some learners planned what to do and how to accomplish the task requirements at the start of their group work, whereas others did not have task management at the beginning and each member started doing a part at random. In both of these cases, learners used L1 in their metatalk about task. However, some used L1 and produced random utterances about how to do the task and asked and answered task related questions. On the other hand, others utilized L1 to properly manage the task by clearly talking about what needed to be done and about each person’s part in the group. Closer analysis revealed that the latter got more engaged with the task and worked collaboratively, which resulted in better performances by them.

In Example 8, Zia, Ali, and Amin use L1 to talk about the task. At some points, Ali tries to lead the task and makes suggestions to other peers on how to do the task (line 22). In lines 8 and 15 he suggests that they should follow the order of new words introduced in the textbook. As evident in this segment of interaction, it seems that reaching an agreement on how to do the task is difficult for these learners. This example is one where labour division is not carried out well.

Example 8 (Group work)

1. Zia: *vaista, daram forget ro peida mikonom.*
2. (Wait, I’m looking for the word *forget*)
4. (Servant an assistant you hire. What are you looking for?)
5. Zia: *forget, Inaha.*
6. (forget. Here it is)
8. (forget is the next word)
9. Zia: not remembering something
10. Amin: *chi? Servant?*
11. (What? Servant?)
This example illustrates that although each learner is doing something for the group, effective learning does not seem to be taking place. Poor group management is evident. Learners’ speech reflects the fact that no clear group dynamics have been established, and it is unclear whether learners benefitted from their L1 interactions or their group work. Examples such as the one above suggest that instead of use of L1 itself, the way in which L1 is implemented should be questioned. The manner of L1 use seems to influence the outcome of tasks and interactions, and may be both help or constrain the L2 learners. It seems that other factors of L1 use be highlighted.

Use of L1 in Interpersonal Relations

The category of use of L1 in interpersonal relations involved any speech by the learners not directly related to the task or to linguistic aspects. Data analysis revealed that sometimes learners used L1 in their social talks to humanize affective ‘climate’ (Ferguson, 2003). The category of interpersonal relations included any use of L1 in off task speech, in making jokes and humorous remarks, complaints, to praise or for teasing other learners, to give advice, to call the teacher, to respond to name when the teacher or a learner called them, and to make apologies. In some instances, learners used L1 to make peers feel confident and more comfortable. The most frequent themes which were considered under use of L1 in interpersonal relations consist of use of L1 in off task speech, in learners’ complaints, or for the purpose of making jokes.

Off task speech included a range of L1 utterances which deviated from the task. For example, this occurred when discussing English vocabulary not in the lesson or talking about dictionary they were using, or topics which were completely unrelated to the lesson such as the weather or music. Utterances such as asking to borrow stationery from each other, and talking about their English marks were also considered as off task.

Class recordings and the interviews with the learners suggested they preferred to use their L1 over their L2 for humour. This may be because having a much better grasp on their L1, they can manipulate the language better to make it humorous. Also, they have more experience making jokes in their L1, which could also be another reason for it.

Example 9 is taken from a group work interaction. It displays the learner’s use of L1 to express humour and to make jokes. In the example below, Ali was talking to Amin while they were doing the Comprehension Questions section of their lesson. Ali is not happy with Amin’s translation, and makes a humorous remark about it.

Example 9 (Group work)
Example 9 (Group work)
1. Ali: google translate az to behtar tarjome mikone! [laugh]
2. (Even Google Translate translates better than you!) [laugh]

One other use of L1 in learners’ interpersonal relations was when they used L1 utterances to make complaints about their peers’ performance or to praise them for their contributions to the group. Example 10 is an instance of use of L1 by a learner to complain about some other group members.

Example 10 (Group work)
2. man benevisam, nemideh.
3. (Now that we’re doing ‘few’, he asks me the previous one, we’ve been talking
4. about it for half an hour. I say let me write notes, but he won’t.

Making complaints in L1 was not only limited to group interactions among the learners. It was found that in a few instances, the learners even used L1 to express complaints to the teacher, usually regarding aspects related to peer’s language proficiency, or another peer not cooperating. One interesting finding of the study regarding L1 use to complain was related to proficiency levels. It was seen that when the proficiency levels of the learners in the same group was too different from each other, usually the more proficient learner complained after a while, and was not eager to continue. They used L1 utterances such as (‘How many times do I have to tell you?) or (I’m getting tired.’) to express their complaints.

Intrapersonal Use of L1 in Vocalized Private Speech
Similar to other studies in literature (e.g., Antón & DiCamilla, 1999) the analysis of data revealed instances where learners used L1 not as a communicative function, but as a means for self-mediation. While doing the tasks, there were instances in classroom interactions where learners used L1 in their speech. However, those utterances were not intended for an audience. Private speech, as Lantolf (2000, p. 88) states, is a “speech that is not directed at an interlocutor but is intended for the speaker himself or herself.” Studies have found different functions served by intrapersonal use of language as private speech. They found that private speech aided learners in their process of reasoning, in gaining control over the task, in motivating them, managing their own thought process, keeping anxiety and frustration under control, and avoiding distraction or acting as a search process (Centeno-Cortés & Jiménez Jiménez, 2004).

There were 26 examples of private speech in the data. This made up 1.33% of total use of L1 in learners’ speech. From the analysis of data, it was found that learners used L1 in their intrapersonal self-directed comments or questions, affective utterances, L1 utterances as pause fillers, and also in their repetitions of L1 utterances produced by other peers or the teacher.

Learners also used L1 in their private speech to focus on problems and search their memory to find solutions. An example of L1 in self-talk is given in Example 11, which is taken from whole-class interaction while the class was engaged in reading a passage of their textbook. The passage in the learners’ textbook consisted of two short stories on the learning a foreign language. After one of the students read the text out loud, the teacher asked another learner, Amin, to summarize the first story.
Example 11 (Whole class)

1. Amin: Here is a one French man. He want to go to the, Ummm, koja mikhast
2. bere? ye lahze.
3. (Here is a one French man. He want to go to the, Ummm, Where did he want to go? Wait!)

In this segment of interaction, Amin is talking about the story. At a point in his summary, he could not remember the destination of the traveller in the story, and so he was unable to continue. He paused, which was then followed by a self-talk. As seen in the example, the question “Where did he want to go?” and later the utterance “Wait” were not meant for communication with someone else, and show that he tried using L1 as a cognitive tool to control his own cognitive process. These L1 utterances in his speech functioned as search process and helped him in searching his memory.

Another instance of L1 use with an intrapersonal function is displayed in example 12. This is a segment of learners’ interaction while they were discussing new vocabularies. In this example, L1 enabled a less proficient learner to produce L2 definition for the word ‘land’ without any further assistance from more knowledgeable peer in group.

Example 12 (Group work)

1. Hamid: the part of the earth
2. Kian: the part of the earth, bakhshi az zamine
3. (the part of the earth, a part of earth.)
4. Hamid: zamin e
5. (it’s earth)
6. Kian: that is not the sea
7. Hamid: that is not the sea, darya nist, that is not the sea. Doroste, ab nist,
8. zamine, khoshke. The part of the earth that is not sea.
9. (that is not the sea, not sea, that is not the sea. That’s correct, there is
10. no water, it’s earth, it’s dry. The part of the earth that is not sea.)

As displayed in example 12, Kian, the more proficient peer in the group, reads the dictionary definition for ‘land’ to the two less proficient peers in the group, Hamid and Ata. However, they are not able to repeat it immediately after Kian. Then, Kian uses L1 and translates a part of the definition, i.e. ‘the part of the earth’ to Persian. He used this strategy to mediate peers’ thinking. It seems that it was beneficial and proved effective in Hamid’s thinking process. This is evident in Hamid’s L1 utterance ‘zamin e’ (line 4). After this, Hamid himself employed the same strategy and translated the second part of the definition ‘that is not the sea’ (line 7). However, these L1 utterances are not directed to peers but to Hamid himself. L1 in this way assisted him to think about the meaning of the definition and make more sense of it. This indicates that Kian’s L1 utterances make Hamid actively involved in the process of L2 learning. Another self-addressed L1 utterance in his speech ‘doroste’ (That’s correct) in Line 7 further supports this finding. This utterance functions to reduce Hamid’s anxiety, and acts as an emotional release about his own performance. It suggests his sense of achievement regarding a relatively difficult task for him. It is clearly evident that the function for this utterance is not social, and that the learner is affirming to himself and is not commenting on the dictionary definition.
Another instance of using L1 in vocalized private speech is evident in the following example. The subject of this interaction is a homophone for the word “yard”. In Persian, the word “yard”, depending on its spelling, can mean both ‘life’ or ‘yard’. In line 7 of example 13, Hamid, uses L1 to regulate his own learning by explaining to himself that “hayat, hayat e bazi (yard, yard, the one we play in)”. This self-talk in the form of L1 explanation might enable him to better remember the word. Hamid, by repeating the same thing to himself, tries to mediate his own learning on an intrapersonal level which might assist him in creating new L2 knowledge.

Example 13 (Pair work)

1. Ali: Yard mishe hayat. khanom yard mishe hayat dige?
2. (Yard is yard. Miss yard means yard, right?)
3. Hamid: hayat e bazi?
4. (the one we play in?)
5. Ali: are
6. (yes)
7. Hamid: hayat e bazi [repeats]
8. (The one we play in.) [repeats]

Vygotskian view of private speech provided evidence for the intrapersonal processes in which learners were engaged in their attempt to learn L2. Analysis of functions in this study is indicative that learners’ L1 intrapersonal speech has “social origins in the speech of others but that takes on a private or cognitive function” (Lantolf (2000, p. 15). Findings revealed that learners used L1 as a tool to mediate and direct their thinking. Self-questioning, repetition, and producing utterances such as “pas mishe goft (it can be said that)” before producing an L2 utterance were observed in data and served the function of focusing learners’ attention on the task or on the linguistic problem they were trying to solve. In some instances, these utterances helped them to retrieve information from their memory, and helped in making meaning of L2 texts in their own minds. From the examples, it can be concluded that learners’ transition from being mediated by peers to being self-mediated in the process of L2 learning is through their L1 mediation.

DISCUSSION AND CONCLUSION

Findings of this study affirmed Lantolf (2000) in that learning is a social phenomenon, and that dialogue among learners can be an effective site for L2 learning to happen and that language plays an important role in mediating L2 learning.

Findings of the study suggest that many of the problems learners faced while reading were vocabulary and meaning related problems. In many instances, learners assisted each other and could overcome the problems faced. It was observed that they used their L1 in the process not only to discuss meanings but also to create an atmosphere in which participation in their social interaction were enhanced. It was found that during group work, one peer was willing to wait for the other to struggle to produce his own utterances, the L1 probes, hints or explanations mediated their peers learning. This finding is in line with Donato (1994) study. It was seen that the learners collaboratively constructed L2 sentences as a result of their social interactions, which in turn were facilitated by the use of L1. Findings showed that there were instances that the more proficient peer intentionally mediated the less proficient peer’s L2 learning and provided effective scaffold through the use of L1. It was found that if it was needed, the more proficient learners tailored their level of knowledge to
that of the less proficient peer’s, in order to help him move beyond his own actual level of L2. In this way, they encouraged more participation and engagement from the less proficient peer. When a peer needed mediation, at many points other peers utilized L1 and provided the mediation needed. It was observed that in this way, learners benefited from group interaction.

In other words, they mediated peer’s learning of L2 with the interactions they created through use of L1 which enabled the less proficient learner to extend his current competence. During the interactions, it was observed that the more proficient learner deliberately guided and supported the less proficient peer by providing both language and affective support (e.g. Examples 2 & 3). This resulted in the less proficient learners’ actively getting involved in the learning process and constructing L2 knowledge with the help of other peers.

This study found that during the interpersonal use of L1 in metatalk about task, all learners used L1 to some extent. It was actually seen that L1 use was preferred by the learners to talk about task requirements and in task related speech. However, the group performances were not all of the same quality, and therefore, it cannot be concluded that the use or avoidance of L1 when talking about task was the main issue. When the performance of each group was considered, it was seen that the groups which performed the tasks successfully were the ones that had better task management and work division, regardless of the level of their L1 use in metatalk about task. This suggests that the presence or absence of L1 in task related speech by itself does not affect the task quality or performance so much as other factors do. Factors such as group management, their group work and how engaged the group members became with the task seem to have a large effect on task performance.

The study also suggests that learners’ complaints about their groupmates’ performance in their interpersonal relations has implications for pedagogy. The findings of this study suggests that teachers should take into account the proficiency level of the learners when assigning them to groups, and that group members should not have proficiency levels which are drastically different from each other.

It was found that learners produced L1 intrapersonal speech in their thinking process when the task became more difficult. Learners produced L1 private speech in an attempt to gain control over the task and to solve the linguistic problems encountered. Doing this, L1 use was found to serve them both cognitive and affective functions. It was seen that learners utilized L1 in their own thinking process for the rehearsal purposes and in retrieving information from their memory. They also used L1 as a search process. For example, learner’s use of L1 in a self-directed question such as, “chi bood?” (What was it?) functioned as a lexical search and aided him in coming up with the right answer.

From the study, it was seen that learners’ L1 private speech was effective when L2 imposed cognitive demands on learners and acted to reduce their anxiety, and assisted them in making the task more manageable, especially for low proficient learners. The sociocultural theory argues that private speech mediates thinking process and facilitates the transition from collaborative to independent problem solving. Closer analysis of learners’ intrapersonal L1 utterances affirmed this. An example of this is reported in Example 12 of the study. This study contributed to the body of knowledge on second language learning by providing evidence that the transition from being other-mediated to self-mediated may occur through L1 mediation.

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