ENGAGEMENT IN INITIATION, RESPONSE AND FEEDBACK IN L2 CLASSROOM INTERACTIONS

Masoomeh Estaji and Meisam Mirzaei Shojakhanlou

Abstract

Engagement in the L2 classroom is consequential for enhancing the quality of L2 learning experiences; however, the exploration of engagement in the Initiation, Response, and Feedback (IRF) cycles has received scant attention in L2 pedagogy. This study reports on research, examining engagement in Initiation, Response, and Feedback moves in the IRF cycles. Video recordings and questionnaires were used to collect data from ten EFL classes, being directed by eight teachers, with 73 learners. Using a post-interaction questionnaire and conversation analysis of classroom interactions, the analysis of the data revealed 784 triadic cycles out of which 493 moves embodied engagement. The data showed that not only do the Response and Feedback stages afford L2 learners the opportunity to deliberate on Form-focused language-related episodes (F-LREs), Lexis-focused LREs (L-LREs), and Mechanical LREs (M-LREs), but they also promote social and affective engagement. The comments on the questionnaire also revealed a deeper understanding of the participants' affective engagement. The findings revealed that certain features of the IRF cycles and peers' contributions encourage engagement during the IRF cycles. The results also demonstrated that scaffolding, mutuality, reciprocity, back-channeling, and commenting on preceding contributions made L2 learners socially engaged. The analysis suggests that the IRF cycles can create ad-hoc chances for engagement in L2 classroom interactions.

Keywords

affective engagement, classroom interaction, cognitive engagement, IRF cycle, social engagement

1 Introduction

One of the requirements of learning is the active involvement of students, and action is the kernel feature of learner engagement (Mercer 2019). From a pedagogical perspective, engagement is defined as how intensively L2 learners are involved in completing a pedagogical task and activity (Svalberg 2009, Philp & Duchesne 2016, Hiver et al. 2021). An engaged student is characterized by their active involvement and commitment to learning, and engagement is seen as a significant factor which can drive meaningful learning (Hiver et al. 2021). In other words, engagement explains all learning (ibid.).

Over recent decades, engagement has been commonly used and investigated in mainstream education (Fredricks et al. 2005). Despite much research in this area, there is less agreement on its conceptual definition and there are unanswered

Discourse and Interaction 16/1/2023, pp. 70-92 ISSN 1802-9930 https://doi.org/10.5817/DI2023-1-70 questions regarding its role in learning (Reschly & Christenson 2012, Dincer 2019). This lack of consensus is more evident when it comes to language pedagogy and L2 classroom learning (Philp & Duchesne 2016, Montenegro 2017, Noels et al. 2019). While there are controversies in the literature, it has been evinced that engagement bolsters efficient learning (Schlenker et al. 2013, Jang et al. 2016). Student engagement as participation practices has precedence over accuracy, and it is the ultimate goal since it affords L2 learners the opportunities to take part in classroom practices and tasks (Walsh 2002). One of the pedagogical goals in L2 classroom interactions is student engagement as L2 learners' participation can augment language learning opportunities. These surfacing learning opportunities in classroom interactions can be a rich locus for investigation (Sert 2017).

One of the prevalent features that is accounted as a central structure in classroom dyadic interactions is Initiation-Response-Feedback (IRF), "a teacher Initiation, a student Response, and a teacher Feedback" (Walsh 2011: 17). The way it is adopted and employed relies on the context in which it is used (Waring 2009). These three restrictive stages of IRF can be broken to permit classroom interactions to happen with higher frequency and expansion, which are highly likely to facilitate learning opportunities (Sert 2017). However, how the components of this triadic pattern are structured and organized in larger sequences is subject to flexibility (Walsh 2011). Previous studies on the functions of this triadic cycle have found varying results. On the one hand, it was found that the IRF cycle follows an uninterrupted and restrictive pattern, in which the teacher's feedback in the F stage terminates the sequence, providing little room for the pupils to engage in the classroom interactions (Hall 2010). On the other hand, it has been reported that this triadic cycle can be flexible, providing L2 learners with opportunities to be involved in collaborative knowledge construction (Nassaji & Wells 2000, Waring 2009, Li 2019).

From a methodological perspective, research on interaction in language education has given us invaluable insights into interaction and discussion of language forms, error correction, group work dynamics, and learner engagement. However, these studies have not covered other variables in relation to student engagement (Svalberg 2009, Philp & Duchesne 2016, Aubrey et al. 2020, Mercer & Dörnyei 2020). Tajeddin and Kamali (2020) reported a new perspective on IRF cycle. They argued that L2 teachers need to expand the post-F stage to see if the L2 learner has an awareness to the given feedback, is engaged and internalized the feedback in short-term memory, and uptake has pushed the learner to use the language. Their findings demonstrated that the post-f stage was not expanded to give L2 learners more chances to be engaged in the interactions. As few studies have examined engagement in L2 classroom, more studies are required to gain an insight into the interconnections between classroom discourse and different dimensions of engagement with language (Sulis & Philp 2021). Given the present gap in the literature, this study attempted to examine the stage (in the triadic cycle of Initiation, Response, and Feedback) in which the L2 learners were engaged in L2 classroom interactions. This study employed engagement with language, a multifaceted concept as conceived by Svalberg (2009), entailing the cognitive, social and emotional aspects. In particular, the following question was posed in this research study:

At what stage of the Initiation, Response, and Feedback cycle does engagement happen to Iranian EFL learners at upper-intermediate level?

2 Literature review

Appearing straightforward, engagement has been defined in different ways over the years. Early research such as Lamborn et al. (1992: 11) viewed engagement as "active involvement, commitment, and concentrated attention, in contrast to superficial participation, apathy, or lack of interest". Recent studies focusing on L2 education see engagement as the intensity of L2 learners' involvement in task completion, and it is perceived as a multilayered construct characterizing different features like emotional, cognitive, behavioral, and social (Svalberg 2009, Lambert 2017). Similarly, Philp and Duchesne (2016: 51) have considered it as "heightened attention and involvement" in a task performance.

Social engagement reflects the L2 learners' reciprocity and quality of their interaction, while cognitive engagement indicates L2 learners' mental investment and effort in task performance. Emotional engagement reflects the learners' various emotions (e.g. passion, apathy, enjoyment, and the like). The behavioral facet is related to the students' on- and/or off-task participation. Although these subcomponents are conceptualized as separate facets, they are closely interrelated (Reeve 2012, Dao 2020). The most contemporary perspective on engagement was proposed by Svalberg (2009, 2018). Her model is known as engagement with language, which represents the affective, cognitive, and social states. According to this threefold model, language is considered as a vehicle of communication and/or an object. The cognitive facet of engagement is viewed as an L2 learner's focused attention, alertness, and knowledge construction, while the affective dimension represents a student's eagerness, purposefulness, and autonomy. Social engagement is seen as how much students are interactive, supportive, and initiating.

Despite being comprehensive and pioneering, Svalberg's model has been adopted by only a limited number of studies to examine engagement with language in L2 classroom interactions. For example, Lambert et al. (2016) employed a simplified version of Svalberg's model to examine different engagement types. They operationalized cognitive engagement as the L2 learners' attention to interaction characteristics and language used in their dyadic interactions (e.g. LREs). Affective engagement was seen as the L2 learners' eagerness to engage, while social engagement was considered in terms of reciprocity, support, and collaboration during interactions. They identified engagement with language through analyzing classroom interactions, chat logs, and questionnaires in both synchronous computer-mediated chat (SCMC) and face-to-face (FTF) interaction.

Their findings revealed that complex tasks inspired more cognitive engagement on the part of the learners. As for completing tasks in FTF classrooms, L2 learners indicated more affective engagement as they saw the tasks as intriguing, helpful, and fun. The learners also reported that performing the assigned task was contingent on their partners' contributions, for which there was greater eagerness to participate, while SCMC students showed lower affective engagement. Those L2 learners with more affective engagement also manifested greater social scaffolding that ushered in significant instances of cognitive engagement. The researchers concluded that the components of this threefold engagement are closely interconnected. That is, L2 learners' high level of affective and social engagements can promote the cognitive facet of engagement as well.

In a very recent study, Dao and Sato (2021) recruited 74 Vietnamese EFL learners to examine the dynamic nature of the affective facet of engagement and how this aspect of engagement associates with interactional behaviors in a communicative English course. They used a picture-sequencing task to have the students engaged in interactions. Their results indicated that L2 learners' emotional status is subject to change as their emotional engagement differed during the intervals. In line with previous studies (Boudreau et al. 2018), these results show that emotional engagement is prone to change even during a short communicative task.

Furthermore, being gauged in three intervals, the emotional engagement of the learners while performing a new task had a growth from interval 1 to interval 3, which suggests that L2 learners need time to reach a stabilized level of engagement. Completing a new task, the learners were more concerned about the language form but after a while, they showed a tendency to be socially and interactionally engaged. It was also found that the amount of L2 production and degree of collaboration have a positive correlation with the affective facet of L2 learners. However, emotional engagement did not promote the L2 learners' attention to linguistic aspects known as language-related episodes (LREs). In a seminal study, Dao (2020) examined the efficiency of interaction instruction on promoting the L2 learners' engagement. The results supported the development of engagement through strategy instruction. L2 learners being under instruction treatment not only manifested more tendency to be involved in LREs productions but also have more talk in the picture-based story recount. Likewise, in terms of social and emotional engagement, while performing discussion tasks the students were more enthusiastic and had more reflection on their peers' contributions. However, individual differences such as proficiency and attitudes as well as task features were shown to have an effect on the L2 learners' strategy and engagement.

The learners' engagement through peer interaction in L2 classroom discourse was also investigated by Dao and McDonough (2018). Their findings showed that having interaction with the learners at higher proficiency levels promoted the lower proficiency learners' engagement in terms of both cognitive and social facets. The learners manifested the tendency to produce more idea units. Regarding the cognitive engagement with language, L2 learners with lower proficiency significantly engaged in LRE and self-correction as one of the indicators of cognitive engagement and LRE was obvious in dyadic-interactions between higher and lower proficiency students. In terms of social engagement, being involved in classroom dyadic interactions and being pushed by proficient partners, less proficient learners had more active roles and were accordingly more socially engaged. These results imply that L2 teachers need to consider pairing students with different language competencies when they are assigned to perform classroom interactions. Considering the significance of engagement and ubiquity of the IRF cycles in L2 classrooms, this study sought to explore the stage in which engagement occurs in this triadic cycle.

3 Method

3.1 Participants

The data for this study were collected from 73 EFL learners at upperintermediate level through convenience sampling, the most common and largely practical strategy (Dörnyei 2007). The participants were monolingual native speakers of Farsi, except for six students who were bilingual in Farsi and Azeri. From the participants, 32 (44%) of the students were male and 41 (56%) were female, with an average age of 26. The classes were taught by eight EFL teachers, whose ages ranged from 27 to 48, teaching English in a non-state (private) English language institute in Iran. The teachers were either Teaching English as a Foreign Language (TEFL) graduates or had taken teacher training courses in advance.

3.2 Corpus

The data for this study were taken from ten adult EFL classes. Classroom interactions were video-recorded and documented. As Nunan and Bailey (2009: 259) put it, "three basic approaches to document classroom interaction are (1) through the use of observation systems to code data (either in real-time or using the recorded data), (2) by recording and transcribing classroom interactions, and less commonly, (3) by producing ethnographic narratives". The video-recorded corpus came from 90-minute classes, corresponding to a total of about 900 minutes. To avoid missing classroom interactions, high-quality video recordings were required. To do so, the researchers singled out ten classes whose installed cameras could provide them with high-quality videos and voices.

3.3 Questionnaire

To explore the students' views, attitudes, and perceptions on the interactions emerging from the IRF cycles, how they realized the purpose of interaction, and how they took to the interaction, an open-ended questionnaire entailing eight questions was employed. The items were adapted from Baralt et al.'s (2016) and Dao's (2019) studies. The items revolved around the triadic dimensions of engagement: cognitive, affective, and social engagement. To ensure the content validity of the questionnaire, the designed items were issued to four outside researchers who are experts in the area of applied linguistics. The received comments in terms of content and linguistic features of the questionnaire were meticulously applied. After revising and finalizing the items, the questionnaire was administered. The L2 learners' written comments were garnered to figure out how they viewed the interaction based on the IRF cycles. The obtained data were used to compare the identified and actual engagement from the interactions with the comments written by the students. The items in the questionnaire were in English, and the learners were supposed to report their perceptions in English as well.

3.4 Data collection procedure

At the outset of the study, the learner participants and teachers were informed about the research purpose. In other words, before the commencement of the data collection, the whole procedure and purpose of the research was fully explained to assure the participants that their confidentiality would be maintained. They agreed to support the present study by letting the researcher video-record the classroom interactions. The manager of the institute also showed his agreement by granting the researchers permission to use the cameras installed in the classes.

After testing all the cameras and being sure they had enough quality to capture every detail of classroom interactions, the whole classroom interactions were recorded. Subsequently, the IRF cycles were identified, and the recordings were transformed into textual forms through transcription. The obtained transcriptions were analyzed to identify the emerging engagement dimensions from the IRF cycle based on the framework proposed by Svalberg (2009, 2012). After completing the IRF cycle interactions, a perception questionnaire was employed and the participants were asked to comment on the items.

3.5 Data analysis

To analyze the obtained transcriptions, Conversation Analysis (CA), as an important ethnomethodological approach to analyzing spoken data (Markee 2000), was employed. Given that classroom interactions are complex and meanings are shaped and co-constructed by the participants, CA can be a versatile tool to unravel the micro details of talk-in-interaction (Walsh 2011). The system developed by Ten Have (2007) was used to have a line-by-line transcription and analysis of the data. The emerging engagement from the IRF cycles was coded based on a scheme devised by Baralt et al. (2016). Their scheme contained all the dimensions of engagement, including the cognitive, affective, and social facets proposed by Svalbverg (2009, 2012). Table 1 depicts the components of the scheme. The obtained transcriptions were coded for the three facets that constitute engagement with language: i.e. the cognitive, social, and affective aspects.

Criterion	Coder comments	
Cognitive engagement	Noticing of language and/or interaction features?	
	Attention on the language as an object or as a medium?	
	Critical/analytic reflection during the task? (Reasoning induction or memory/imitation-based reflection?) Hypothesis formation?	
Affective engagement	Willingness to engage? (Eagerness or withdrawal?)	
	Learner's purposefulness (Focused on task or bored?)	
	Autonomy: dependent or independent behavior?	
Social engagement	How interactive with partner to learn?	
	Socially supportive? Negotiates and scaffolds?	
	Leader or follower? (Reactive or initiating types of interactions?)	

Table 1: Scheme for coding the learners' engagement

The emerging cognitive engagements from the IRF stages were coded when the participants discussed language issues and reflected on language features (Svalberg 2009). For instance, an L2 learner's comment such as "What is the passive form of this structure?" was coded as a cognitive engagement, as it indicates the student's critical reflection on forms. Moreover, the obtained comments from the questionnaire were analyzed following the content analysis approach (Braun & Clarke 2006). For inter-coder reliability of the codings, 25 per cent of the data were coded by a second rater. Pearson correlation r was found to be 0.94 for cognitive engagement, 0.88 for social engagement, and 0.86 for affective engagement.

4 Results

This study examined the stage in which engagement occurred for L2 learners in the IRF cycle. Descriptive statistics of the engagement are indicated in Table 2, demonstrating that an overwhelming majority of engagements transpired in the R stage. Cognitive, social, and affective engagement constituted 50 per cent, 61 per cent, and 70 per cent of the engagements in the R stage, respectively (Figure 1). Regarding the engagements in the F stage, 40 per cent, 30 per cent, and 25 per cent of the engagements accounted for the cognitive, social, and affective engagements, respectively. However, the I stage had far less engagement.

	Initiation	Response	Feedback
Cognitive engagement	10%	50%	40%
Social engagement	9%	61%	30%
Affective engagement	5%	70%	25%

Table 2: Engagement in the IRF cycle

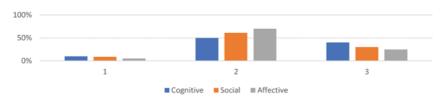


Figure 1: Engagement dimensions in the IRF cycle

The analysis of the corpus data revealed 784 triadic cycles, out of which 493 engagements happened. As Table 3 indicates, 43 per cent of the transpired engagements were social. Cognitive and affective dimensions comprised 39 per cent and 18 per cent of the engagements (Figure 2).

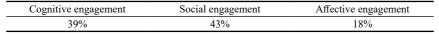
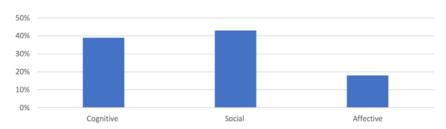
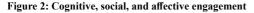


Table 3: The use of cognitive, social, and affective engagement





In terms of coding the cognitive engagements, LREs were used to identify the emerging cognitive aspects (Storch 2007, Zhang 2021). LREs were any segment in which L2 learners stopped to discuss and reflect on their language use. These episodes were categorized based on that aspect of language the learners reflected on. Form-focused LREs (F-LREs) were episodes, where L2 learners discussed morphology and syntax. As Table 4 shows, there were 187 (37.9%) F-LREs in this study. Mechanical LREs (M-LREs), which were concerned with pronunciation and spelling, accounted for 12.9 per cent of the LREs. Lexis-focused LREs (L-LREs), engaging the learners in word choices and word meanings, made up 48.8 per cent of LREs.

	N	%
F-LRE	187	37.9
L-LRE	241	48.8
M-LRE	64	12.9
Total	793	100

Table 4: Summary of LREs (F-LRE, L-LRE, M-LRE)

4.1 Cognitive engagement

The primary data used to determine cognitive engagement, surfacing from the IRF stages, were the transcriptions. The secondary data for the cognitive facet of engagement was the questionnaire. The obtained data from the IRF cycles showed that cognitive engagement accounted for 39 per cent of the identified engagement facets. In 192 cases, there was noticing of language and interaction features. The students and teachers stopped to reflect on and discuss the accurate use of particular forms, including the lexical items, linking devices, grammar, and pronunciation. Out of 192 cognitive engagements, 10 per cent, 50 per cent, and 40 per cent transpired in the Initiation, Response, and Feedback stages, respectively. Reflection on the language as an object was more evident in both the Response and Feedback stages. A sample of the IRF stage in which the lexical cognitive engagement (L-LRE) occurred, accounting for 48.8 per cent of cognitive engagement, is presented below.

Excerpt 1

T: recently we talked about learning English better
S1: it's important to 'explain' words
T: it is important to::
S2: ex (3) extend hum
T: extend?
S3: teache::r extend is doing for long time
S1: extend hamoun bishtar kardane dige [it means to increase something]
S3: no:: no::: extend yani tamdid kardan teacher? Yes? [extend means to make something continue for a longer time]
T: yea
S3: we expand our words
S1: yea yea expand hum improve yes we had it in our book
T: expand expand new words (.) very:: goo:d (4) it's useful or it's good to expand new words (.) what else?

S2: hum I I have bee:n reading story books T: aha

As can be seen, the teacher (T) initiated the cycle by asking the students to recall what strategies they could implement to learn English. Student 1 (S1) ventured a word and made an attempt to respond to the teacher's question, but he was not successful in using the correct lexical item. Witnessing the problem, the teacher tried to elicit the correct form which led the other students to step in. S2 made her contribution by offering "*extend*" but she was unsuccessful and the teacher again endeavored to push S2 to notice her mistake and provide the correct word which was followed by a contribution from S3 and commencing a talk segment where the students stopped and explicitly discussed the language form.

S3 corrected the wrong lexical choice and elaborated on the differences between "*extend*" and "*expand*". They collaboratively hypothesized and, after asking questions and offering different lexical items, they eventually came to a conclusion on the required lexical item. The reflection on lexical choice (lines 4-8) is an instance of a lexical LRE (language-related episode) (Storch 2008), where there was an explicit focus on the lexical item. As is evident, the LRE in the preceding excerpt is elaborate noticing where the participants deliberated on the form and took into account alternative lexical items.

In terms of grammatical engagement/form-focused engagement (F-LRE), it made up 37.9 per cent of the cognitive engagement. The following excerpt is an instance of F-LRE in the IRF cycle, which commences with a request from the teacher for sharing ideas about euthanasia and assisted suicide.

Excerpt 2

T: ok let's share our ideas about euthanasia and assisted suicide.

S1: I think it does not have legal it's hum it's inlegal

T: yes it is illegal in Iran and other countries too

S1: aha in other countries illegal?

T: yes

- S1: sometimes people have bad <u>ill</u> and hs their ((inaudible)) their life is not hum good for them and they hum prefer <u>die</u> and they wish they <u>die</u>
- T: they have bad ill?

S1: yeaa=

S3: noun is used because ill is not hum illness

T: yea an adjective can't be used with have when there is not a noun after it

S1: yes illness (3) <u>but</u> I think in our culture we we:: prefer hum to save our our families hum life=

T:hum

S1: even they are very bad (.) they are had have a bad iile iile /ail/ illness

T: good job

In response to the request in the initial stage, S1 began enunciating his ideas about euthanasia. He believed that assisted suicide is illegal, but his contribution was ill-formed (line 2), which elicited an expanded recast from the teacher and after receiving the correct form, S1 corrected the earlier deviant form. The correction led to uptake on the part of the student. S1 went on by focusing on the content of the theme under discussion (Lambert et al. 2017). However, he made an ill-formed production and did not understand the correct use of "*ill*" and "*illness*" and used an adjective instead of a noun.

Encountering this mistake in the response stage, the teacher used elicitation to push S1 to correct himself, but he was not successful, which promoted F-LRE

where S3 stepped in and discussed the formal aspects of language and elaborated on the difference between "*ill*" and "*illness*", *noun is used because ill is not hum illness* (in line 9). In the subsequent line (10), the teacher endorsed the preceding contribution by explaining how an adjective follows a main verb when there is not a noun following the adjective, *yea an adjective can't be used with have when there is not a noun after it.* S1 acknowledged and continued the discussion, *yes illness* (3) <u>but</u> I think in our culture we we prefer hum to save our our families *hum life.*

4.2 Social engagement

Social engagement was operationalized as how the participants respond positively to the contributions in interaction and how much they support their peers (Svalberg 2009, Baralt et al. 2016). The responsiveness was evident in the learners' acknowledgment, repetition, suggestion, commenting, providing backchannels, and expanding on each other's ideas. Excerpt 3 taken from the IRF cycles shows an example of the learners' social engagement.

Excerpt 3

T: you read that reading. Who is the guy? What is that reading about? S1: *it explains about uhh* (0.4) *several singers uhh* (0.2) *I think.* S2: several singers or several fans? S1: fans= S2: =veah S1: uhh (0.4) hum all of them hs T: what kind of uhh reading it is? Is it a magazine paper, newspaper, website, social media profile what is it? S1: I think it is a website S2: looks like a ↑website SS: veah T: so people can contact uhh it is a fan page= S1: *I think they are comments.*= T: so they ask some questions. Like what Elnaz? S3: about the:: tickets of hi:s .hhh (0.3) show S4: his concert S1: his concert. a::::nd and (0.4) < and about > ne::w alb. [album]S2: *album*] S1: *album*] S1: a:..:d for example weny was not .uhh was disappointed fo::r (.) for his download [uhh download S3: *downloading process*?] S: <yes> and he wants to get his money back=

 $T: =hum \ ok$

In Excerpt 3, the learners had a discussion about the content of a reading passage. The IRF cycle begins with an initiation from the teacher, which elicited an incomplete response from S1 (line 2), *it explains about uhh (0.4) several singers uhh (0.2) I think*. Noticing the wrong answer, S3 initiated the feedback stage by commenting on S1's contribution and using a confirmation check. This illustrates some characteristics of social engagement in the F stage. The participants' initiation and maintenance of interaction can be an indicator of social engagement (Svalberg 2009). After receiving the comment, S1 provided the correct answer, *fans*= (line 4), then S3 used back channeling, one of the features of social engagement (Zhang 2021), to confirm the answer, *=yeah* (line 5).

S1 went on by giving further information about the topic under discussion, but his utterance was interrupted by the teacher by reinitiating the IRF cycle where he asked another question which led to a response from S1, *I think it is a website*, and a subsequent confirmation and repetition from his peers in the F stage (lines 9-10), *looks like a* \uparrow *website*, *yeah*, indicating the social facet of engagement in the response phase. The teacher elaborated on S1's answer by adding further information to enrich it and in turn, S1 provided further elaborations on the teachers' contribution which ushered in confirmation on the part of the teacher and reinitiation of the cycle by nominating another student, S3 to respond. Following a response from S3 (line 13), her peers manifested their social engagement through scaffolding, repeating, developing, and commenting on the preceding ideas (lines 15-21).

4.3 Affective engagement

Affective engagement was operationalized through the students' explicit demonstration of positive emotions and enjoyment (Dao & McDonough 2018, Dao 2019, Nakamura et al. 2021). An instance of affective engagement surfacing in the IRF cycle is given in the following excerpt.

Excerpt 4

T: what is you plan for yalda? S1: I will go to one of my friend's home and play PES all night ((laughing)) T: aha S2: I will come (laughing) SS: laughing T: laughing The teacher initiated the IRF cycle by asking a question about S1's plan for Yalda night, an Iranian winter solstice festival celebrated on the 'longest and darkest night of the year'. His answer to the question in the R stage, *I will go to one of my friend's home and play PES all night*, was accompanied by his laugh and was followed by backchannelling from the teacher. Then S2 reacted to S1's response seeming that he found the answer interesting and manifested his enjoyment by showing his enthusiasm about playing PES. Likewise, other students alongside the teacher went about laughing, showing affective involvement.

To have a deeper understanding of the students' perceptions about engagement in the IRF stages, the students' written comments on the questionnaire were analyzed. The obtained data through the questionnaire made it possible to gain an insight into the students' affective engagement because this side of engagement is not straightforward to uncover through the interaction data. The obtained data from the questionnaire was used to corroborate the interaction data. This was done to ensure that the engagement data were coming from the learners' perceptions rather than the researchers' possible subjective judgment. In case required, the students were allowed to use their dictionaries and internet or google translator to write their comments on the questionnaire.

The obtained data from the questionnaire revealed that overall, the learners who were nominated to provide a response to the question in the F stage had a positive perception of classroom interaction based on the IRF cycle. After being involved in the IRF emerging interaction, out of 40 L2 learners, 34 of them commented on the questionnaire that the interaction was *interesting*, *good speaking chances*, and *compelling*. Moreover, the participants reported on the questionnaire that their peers, as friends, helped them to not only handle the grammatical and lexical problems but also come up with ideas to continue interaction.

These findings indicate that during the IRF cycle, the students provided and received assistance from their peers. Likewise, based on the comments on the questionnaire items, the students expressed that interaction was positive and their peers' contributions made them more *willing* to be engaged in interaction. As the following excerpt shows, the student is delighted with the help he received from his peers. As he reported, receiving assistance from his classmates, this student was more encouraged to be engaged in the interaction and got the chance to produce more English words, which are indicators of affective engagement (Svalberg 2012).

Excerpt 5

When I was picked to answer the question, I did my best to answer the question and when I noticed how my friends tried to help me, I was more encouraged to <u>continue</u> and the teacher did not stop me. It was interesting to have your friends help you because their assistance encouraged me to use more English words and had a chance to express my ideas.

Another student also suggested that when he was assigned to respond to a controversial question such as euthanasia, he was more encouraged by his peers which in turn led to more social engagement. In other words, the students' emotional engagement resulted in more social engagement among them. Excerpt 6 reflects this aspect of engagement.

Excerpt 6

Trying to answer the questions, I had an exciting and controversial discussion about the topic with my friends. We had opposite <u>views</u> but we had to keep the discussion going to reach an agreement which helped us to elaborate on our ideas.

However, while providing responses to a question in the initiation stage of the IRF cycle two of the students expressed that they did not pay much heed to their peers' contributions and just concentrated on expressing and developing their ideas. The following excerpt demonstrates their comments.

Excerpt 7

As the question was challenging, I just tried to come up with my ideas and I did not pay much attention to my peers' ideas because I thought their interruptions were distracting me from the question and when I could not generate sufficient ideas I was annoyed.

Excerpt 8 demonstrates that creating chances for students to freely participate in classroom discussions spurred them on to make contributions to ongoing interactions. This student explicitly showed that his experience was *fun* and *enjoyable*, which signifies the student's affective engagement.

Excerpt 8

It was a fantastic experience because when my friends and I were allowed to state our views and help each other, I could express my ideas without being worried about other's judgement. It was really fun, and I enjoyed speaking in English.

Overall, the CA of the spoken data revealed that the IRF cycles can create chances for L2 learners to reflect on F-LREs, L-LREs, M-LREs. The comments

on the questionnaire also confirmed that the students were inspired by their peers' contributions and had positive attitudes toward the emerging interaction from the IRF cycles.

5 Discussion

By following Svalberg's (2009) framework, this study sought to investigate at what stage of the IRF cycle the cognitive, social, and affective engagement transpired. The descriptive results indicated that the majority of cognitive, social and affective engagements happened in the response and feedback stages. The cognitive and social dimensions accounted for 80 per cent of the engagement, showing that L2 learners produced more LREs and had more responsiveness in the IRF cycles, which was confirmed by the reported comments in the questionnaire.

The learners' higher production of responsiveness suggests that the R and F stages of the IRF pattern is a valuable juncture to engage L2 learners in responding to their peers' contributions. In this stage, the students showed more tendency to pay attention to the content of their classmates' responses in the R and F stages, demonstrating that there was greater responsiveness in the second and third stages of the IRF pattern. This finding partly corroborates with previous studies reporting that L2 learners prioritize expressing and transferring the messages (Storch & Aldosari 2013, Young & Tedick 2016). Additionally, a greater number of IRF cycles commenced with questions which mainly required the learners to express their opinions about a topic related to their lessons, requiring the students to use their higher-order thinking, have a "space to think", pay heed, and make their mind up (Phung 2016: 12). This can be considered as a possible reason behind having a higher rate of social engagement on the part of the learners (Aubrey et al. 2020).

Moreover, L2 learners' experience and their close relationships can explain the existence of social engagement (Aubrey et al. 2020) because the students were classmates for several semesters. Their close relationships were evident in their reactions to their peers' contributions in which they showed that they knew their peers' interests, hobbies, and profession. Being socially engaged is suggested to be driven by the close friendships among the students and congenial atmosphere in the class (Leeming 2021). The learners also manifested happy feelings and had fun, which are likely to be driving factors in promoting social scaffolding (Baralt et al. 2016). Social engagement and scaffolding, emerging from the IRF patterns, confirms the view that classroom learning is not merely a cognitive process but rather it is co-constructed and is continuously created and recreated through ongoing classroom interactions (Waring 2009, Hall 2010, Sert 2015). As affective, social, and cognitive factors are closely interconnected, social engagement can encourage cognitive engagement. In terms of cognitive engagement, it was found that the second dominant engagement was cognitive engagement.

Regarding cognitive engagement, the findings evinced that L2 learners had the chance to reflect on language forms either F-LREs or L-LREs in the IRF cycles. As mentioned, the IRF cycle afforded L2 learners the opportunity to be socially engaged which, as has been found by some studies, can result in cognitive engagement (Svalberg 2009, Baralt et al. 2016, Leeming 2021). However, the difference between being responsive (social) and the produced LREs (cognitive) was marginal, not corroborating the previous findings that L2 learners scarcely produce LREs in pure classroom interactions (Williams 2001, Philp et al. 2010). Responsiveness of the learners in the IRF cycle seems to emanate from their eagerness to listen to their peers (Svalberg 2009), mutual support (Philp & Duchesne 2016), and reciprocity (Dao & McDonough 2018). This was corroborated by the students' written comments on the questionnaire. The findings of the current study confirm Li's (2019) results that the F stage is a spot where the learners can be granted with space to expand their productions and be engaged in certain pedagogical goals.

Although teachers keep a grip on the initiation and feedback stages of the IRF, as can be seen in Excerpts 1 and 2, in the response and feedback stages, students voluntarily stepped in and commenced F-LRE and L-LRE, discussing the correct use of the parts of speech of "ill" and the word choice "expand". This shows the IRF patterns can be manipulated to provide students with an opportunity to be engaged in LREs and learning activities. The analyzed excerpts indicate how the basic IRF cycles are prone to be modified and expanded to not only facilitate L2 learners' cognitive engagement but also develop their online contributions (Waring 2008, Li 2019). These findings are congruent with Young's (2009: 94) argument that "participants create meanings – meanings that are intimately connected to the context in which they are created".

Moreover, scaffolding was very evident in the IRF cycles. Rather than simply closing the sequence in the F stage, the teachers used elicitation in the F stage to elicit the correct answer, but when the teacher's elicitation failed, other students stepped in and began scaffolding their peer to come up with the correct answer. At this stage, the students started a meta talk, an indicator of cognitive engagement. Cognitive engagement of the students let them scaffold their peers and reflect on the target language form (F-LRE) (Gibbons 2006, Sharpe 2006, Vacca 2008, Li 2019). The empirical data from the scaffolding sequences in the IRF cycles confirm Hammond and Gibbons' (2006) assertion that teachers' hints in the IRF moves can create chances for the students to get engaged in LREs and knowledge construction.

The majority of IRF cycles began with questions about the students' personal views on topics related to their lessons. The topics necessitated expressing perspectives that could vary from student to student. The student who was picked by the teacher to respond to the question at the initiation stage of the IRF cycle had to produce more words and idea units to transfer a message. The questions required the students' personal views on topics, which can be considered a one-way interaction where the information-provider tried to express the message. Therefore, both the information provider and receivers worked to complete the interaction. When the questions were inferential, the students used more words to express their message which can represent the students' engagement in the IRF cycles. These findings echo Xu and Qiu's (2021) conclusion that unfamiliar topics push students to be more engaged in language productions.

6 Conclusion and implications

This study examined how engagement occurred in the IRF cycle patterns in L2 classroom interactions. The findings suggest that the triadic cycle creates chances for L2 learners to be socially, cognitively, and affectively engaged in classroom interaction. Learners manifested a high level of responsiveness and scaffolding in the IRF patterns. Likewise, learners were involved in longer turns and spent more time in their interactions. They also had reflections on language forms and word choices. The R and F stages were shown to be a rich point where L2 learners can have a meta talk, be engaged in F-LREs, L-LREs, and M-LREs. In terms of affective engagement, the emerging interaction from the IRF stages afforded learners the opportunity to feel thrilled and be willing to be engaged in interaction. Besides, when inferential questions are queried in the initial stage of the IRF cycle, L2 learners are more engaged in supporting each other, take more turns, and spend more time on the topic under discussion. It can also be concluded that if the F stage is not closed by the teacher and students have more chances to be engaged in interaction, they can have co-constructive sequences that can create chances for the students to be engaged in dialogic interaction and knowledge construction (Walsh 2011).

The findings suggest several pedagogical implications. The IRF sequences are dynamic and closely interconnected with pedagogical goals (Pekarek Doehler 2018). L2 teachers can benefit from the dynamic nature of the IRFs in classroom interactions to provide L2 learners with engagement opportunities. The obtained data from the micro-analysis of classroom interactions can be used in teacher education to equip novice and pre-service teachers with sufficient

tools to employ the triadic pattern and improve L2 learners' social, cognitive, and affective engagement. Furthermore, the learners reported that inferential and controversial questions in the initiation stage can lead to more social engagement. Accordingly, L2 teachers need to consider the topics and questions they tend to include in the initiation stage. The scrutiny of the sequences affords language researchers the opportunity to come up with novel ways of examining engagement in L2 classroom discourse.

With all its implications, this study is not devoid of limitations. As this study mainly focused on examining classroom interactions in one language institute in Iran, the results cannot be generalized to all L2 EFL classroom interactions. Moreover, this study focused on engagement in the IRF cycles. As the F stage was demonstrated to be a rich juncture for L2 learners' engagement, future studies can examine student engagement with corrective feedback in the IRF cycles. Likewise, further research is required to examine whether or not the IRF cycles can lead to elaborate and limited LREs and idea units.

Appendix: Post IRF cycle Questionnaire

Instruction: Read the questions and provide answers in the boxes next to each question

- What was your overall perception of the interaction that you just did?
 Do you think there was a specific goal to this interaction?
- 3. What features of language did you notice or need during the interaction?
- 4. How important and/or helpful was working with your partner in order to complete the interaction?
- 5. Did your partner help you? If so, how?
- 6. Provide three adjectives to describe the interaction.
- 7. Now provide three adjectives to describe how you felt during the interaction.
- 8. Do you think that you and your partner were both equally willing to contribute in completing the interaction?

References

- Aubrey, S., King, J. and Almukhaild, H. (2020) 'Language learner engagement during speaking tasks: A longitudinal study.' *RELC Journal* 53(3), 519-533. https://doi. org/10.1177/0033688220945418
- Baralt, M., Gurzynski-Weiss, L. and Kim, Y. (2016) 'Engagement with language: How examining learners' affective and social engagement explains successful learnergenerated attention to form.' In: Sato, M. and Ballinger, S. (eds) *Peer Interaction* and Second Language Learning: Pedagogical Potential and Research Agenda. Amsterdam: John Benjamins. 209-240.

- Boudreau, C., MacIntyre, P. and Dewaele, J. M. (2018) 'Enjoyment and anxiety in second language communication: An idiodynamic approach.' *Studies in Second Language Learning and Teaching* 8(1), 149-170.
- Braun, V. and Clarke, V. (2006) 'Using thematic analysis in psychology.' *Qualitative Research in Psychology* 3(2), 77-101.
- Dao, P. (2019) 'Effects of task goal orientation on learner engagement in task performance.' International Review of Applied Linguistics in Language Teaching 58(3), 315-334.
- Dao, P. (2020) 'Effect of interaction strategy instruction on learner engagement in peer interaction.' System 91, 102-244. https://doi.org/10.1016/j.system.2020.102244
- Dao, P. and McDonough, K. (2018) 'Effect of proficiency on Vietnamese EFL learners' engagement in peer interaction.' *International Journal of Educational Research 88*, 60-72. http://dx.doi.org/10.1016/j.ijer.2018.01.008
- Dao, P. and Sato, M. (2021) 'Exploring fluctuations in the relationship between learners' positive emotional engagement and their interactional behaviours.' *Language Teaching Research* 25(6), 972-994. http://dx.doi.org/10.1177/13621688211044238
- Dincer, A., Yeşilyurt, S., Noels, K. A. and Vargas Lascano, D. I. (2019) 'Selfdetermination and classroom engagement of EFL Learners: A mixed-methods study of the self-system model of motivational development.' Sage Open 9(2), 1-15. http:// dx.doi.org/10.1177/2158244019853913
- Dörnyei, Z. (2007) Research Methods in Applied Linguistics: Quantitative, Qualitative, and Mixed Methodologies. Oxford: Oxford University Press.
- Fredricks, J. A., Blumenfeld, P., Friedel, J. and Paris, A. (2005) 'School engagement.' In: Moore, K. A. and Lippman, L. H. (eds) What Do Children Need to Flourish? Conceptualizing and Measuring Indicators of Positive. New York, NY: Springer. 305-321.
- Gibbons, P. (2006) Bridging Discourses in the ESL Classroom: Students, Teachers and Researchers. London: Continuum.
- Hall, J. K. (2010) 'Interaction as method and result of language learning.' Language Teaching 43(2), 202-215. http://dx.doi.org/10.1017/S0261444809005722
- Hammond, J. and Gibbons, P. (2006) 'Putting scaffolding to work: The contribution of scaffolding in articulating ESL education.' *Prospect 20*(1), 6-30.
- Hiver, P., Al-Hoorie, A. H., Vitta, J. P. and Wu, J. (2021) 'Engagement in language learning: A systematic review of 20 years of research methods and definitions.' *Language Teaching Research*. http://dx.doi.org/10.1177/13621688211001289
- Jang, H., Kim, E. J. and Reeve, J. (2016) 'Why students become more engaged or more disengaged during the semester: A self-determination theory dualprocess model.' *Learning and Instruction* 43, 27-38. http://dx.doi.org/10.1016/j. learninstruc.2016.01.002
- Lambert, C. (2017) 'Tasks, affect and second language performance.' *Language Teaching Research 21*(6), 657-664. http://dx.doi.org/10.1177/1362168817736644
- Lambert, C., Gurzynski-Weiss, L. and Kim, Y. (2016) 'Engagement with the language: How examining learners' affective and social engagement explains successful learnergenerated attention to form.' In: Sato, S. B. M. (ed.) *Peer Interaction and Second Language Learning: Pedagogical Potential and Research Agenda*. Amsterdam: John Benjamins. 209-239.
- Lambert, C., Philp, J. and Nakamura, S. (2017) 'Learner-generated content and engagement in second language task performance.' *Language Teaching Research 21*, 665-680. http://dx.doi.org/10.1177/1362168816683559

- Lamborn, S., Newmann, F. and Wehlage, G. (1992) 'The significance and sources of student engagement.' In: Newmann, F. M. (ed.) Student Engagement and Achievement in American Secondary Schools. New York: Teachers' College Press. 11-39.
- Leeming, P. (2021) 'The influence of small groups on leader stability and task engagement in the language classroom.' *Language Teaching Research*, 1-27. http://dx.doi. org/10.1177/1362168821989866
- Li, J. (2019) 'Looking beyond IRF moves in EFL classroom interaction in China.' In: Nguyen, H. T. and Malabarba, T. (eds) Conversation Analytic Perspectives on English Language Learning, Teaching, and Testing in Global Contexts. Bristol: Multilingual Matters. 87-109.
- Markee, N. (2000) Conversation Analysis (Second Language Acquisition Research. Monographs on Research Methodology). Mahwah, N. J.: Erlbaum.
- Mercer, S. (2019) 'Language learner engagement: Setting the scene.' In: Gao, X. (ed.) Second Handbook of English Language Teaching. New York: Springer. 1-19.
- Mercer, S. and Dörnyei, Z. (2020) Engaging Language Learners in Contemporary Classrooms. Cambridge: Cambridge University Press.
- Montenegro, A. (2017) 'Understanding the concept of student agentic engagement for learning.' *Colombian Applied Linguistics Journal 19*(1), 117-128.
- Nakamura, S., Phung, L. and Reinders, H. (2021) 'The effect of learner choice on L2 task engagement.' *Studies in Second Language Acquisition 43*(2), 428-441. http://dx.doi. org/10.1017/S027226312000042X
- Nassaji, H. and Wells, G. (2000) 'What's the use of triadic dialogue? An investigation of teacher-student interaction.' *Applied Linguistics* 21(3), 376-406. http://dx.doi. org/10.1093/applin/21.3.376
- Noels, K. A., Lascano, D. I. V. and Saumure, K. (2019) 'The development of selfdetermination across the language course: Trajectories of motivational change and the dynamic interplay of psychological needs, orientations, and engagement.' *Studies in Second Language Acquisition 41*(4), 821-851. http://dx.doi.org/10.1017/ S0272263118000189
- Nunan, D. and Bailey, K. M. (2009) *Exploring Second Language Classroom Research:* A Comprehensive Guide. Boston, MA: Heinle, Cengage Learning.
- Pekarek Doehler, S. (2018) 'Elaborations on L2 interactional competence: The development of L2 grammar-for-interaction.' *Classroom Discourse* 9(1), 3-24. http://dx.doi.org/10.1080/19463014.2018.1437759
- Philp, J. and Duchesne, S. (2016) 'Exploring engagement in tasks in the language classroom.' *Annual Review of Applied Linguistics* 36, 50-72.
- Philp, J., Walter, S. and Basturkmen, H. (2010) 'Peer interaction in the foreign language classroom: What factors foster a focus on form?' *Language Awareness 19*, 261-279. http://dx.doi.org/10.1080/09658416.2010.516831
- Phung, L. (2016) Task preference, affective response, and engagement in L2 use in a US university context.' *Language Teaching Research 21*(6), 751-766. http://dx.doi. org/10.1177/1362168816683561
- Reeve, J. (2012) 'A self-determination theory perspective on student engagement.' In: Christenson, S. L., Reschly, A. L. and Wylie, C. (eds) *Handbook of Research on Student Engagement*. New York, NY: Springer. 149-172.
- Reschly, A. L. and Christenson, S. L. (2012) 'Jingle, jangle, and conceptual haziness: Evolution and future directions of the engagement construct.' In: Christenson, S. L., Reschly, A. L and Wylie, C. (eds) *Handbook of Research on Student Engagement*. New York, NY: Springer. 3-20.

- Schlenker, B. R., Schlenker, P. A. and Schlenker, K. A. (2013) 'Antecedents of academic engagement and the implications for college grades.' *Learning and Individual Differences* 27, 75-81. http://dx.doi.org/10.1016/j.lindif.2013.06.014
- Sert, Ö. (2015) Social Interaction and L2 Classroom Discourse. Edinburgh: Edinburgh University Press.
- Sert, O. (2017) 'Creating opportunities for L2 learning in a prediction activity.' System 70, 14-25. http://dx.doi.org/10.1016/j.system.2017.08.008
- Sharpe, T. (2006) 'Unpacking scaffolding: Identifying discourse and multimodal strategies that support learning.' *Language and Education* 20(3), 211-231. http://dx.doi.org/10.1080/09500780608668724
- Storch, N. (2007) 'Investigating the merits of pair work on a text editing task in ESL classes.' *Language Teaching Research 11*, 143-159. http://dx.doi. org/10.1177/1362168807074600
- Storch, N. (2008) 'Metatalk in a pair work activity: Level of engagement and implications for language development.' *Language Awareness* 17, 95-114.
- Storch, N., and Aldosari, A. (2013) 'Pairing learners in pair work activity.' Language Teaching Research 17, 31-48. http://dx.doi.org/10.1177/1362168812457530
- Sulis, G. and Philp, J. (2021) 'Exploring connections between classroom environment and engagement in the foreign language classroom.' In: Hiver, P., Al-Hoorie, A. H. and Mercer, S. (eds) *Student Engagement in the Language Classroom*. Clevedon: Multilingual Matters. 101-129.
- Svalberg, A. M.-L. (2009) 'Engagement with language: Interrogating a construct.' Language Awareness 18, 242-258. http://dx.doi.org/10.1080/09658410903197264
- Svalberg, A. M.-L. (2012) 'Language awareness in language learning and teaching: A research agenda.' *Language Teaching* 45(3), 376-388. http://dx.doi.org/10.1017/ S0261444812000079
- Svalberg, A. M.-L. (2018) 'Researching language engagement; current trends and future directions.' *Language Awareness* 27(1), 21-39. http://dx.doi.org/10.1080/09658416.2 017.1406490
- Tajeddin, Z. and Kamali, J. (2020) 'Typology of scaffolding in teacher discourse: Large data-based evidence from second language classrooms.' *International Journal of Applied Linguistics* 30(2), 329-343. http://dx.doi.org/10.1111/ijal.12286
- Ten Have, P. (2007) Doing Conversation Analysis. London: Sage.
- Vacca, J. S. (2008) 'Using scaffolding techniques to teach a social studies lesson about Buddha to sixth graders.' *Journal of Adolescent & Adult Literacy 51*(8), 652-658. http://dx.doi.org/10.1598/JAAL.51.8.4
- Walsh, S. (2002) 'Construction or obstruction: Teacher talk and learner involvement in the EFL classroom.' *Language Teaching Research* 6(1), 3-23. http://dx.doi. org/10.1191/1362168802lr095oa
- Walsh, S. (2011) Exploring Classroom Discourse: Language in Action. London: Routledge.
- Waring, H. Z. (2008) 'Using explicit positive assessment in the language classroom: IRF, feedback, and learning opportunities.' *The Modern Language Journal* 92(4), 577-594. http://dx.doi.org/10.1111/j.1540-4781.2008.00788.x
- Waring, H. Z. (2009) 'Moving out of IRF (Initiation-Response-Feedback): A single case analysis.' *Language Learning 59*(4), 796-824. http://dx.doi.org/10.1111/j.1467-9922.2009.00526.x
- Williams, J. (2001) 'Learner-generated attention to form.' *Language Learning 51*(1), 303-334. http://dx.doi.org/10.1111/j.1467-1770.2001.tb00020.x

- Xu, J. and Qiu, X. (2021) 'Engaging L2 learners in information-gap tasks: How task type and topic familiarity affect learner engagement.' *RELC Journal*. http://dx.doi. org/10.1177/00336882211061628
- Young, A. and Tedick, D. (2016) 'Collaborative dialogue in a two-way Spanish/English immersion classroom: Does heterogeneous grouping promote peer linguistics scaffolding.' In: Sato, M. and Ballinger, S. (eds) Peer Interaction and Second Language Learning: Pedagogical Potential and Research Agenda. Amsterdam: John Benjamins. 135-160.
- Young, R. (2009) *Discursive Practice in Language Learning and Teaching*. Chichester: Wiley-Blackwell.
- Zhang, B. (2021) 'Engaging in dialogue during collaborative writing: The role of affective, cognitive, and social engagement.' *Language Teaching Research*. http:// dx.doi.org/10.1177/13621688211054047

Masoomeh Estaji is an Associate Professor of Applied Linguistics at Allameh Tabataba'i University (ATU), Tehran, Iran. She earned the Top Researcher Award at ATU in 2018, 2020 and 2022. She has presented and published numerous papers on methodology, testing, and second language acquisition (SLA). Her research interests include teacher education, language testing and assessment, and ESP.

Address: Department of English Language and Literature, Faculty of Persian Literature and Foreign Languages, Allameh Tabataba'i University, Tehran, Iran. [e-mail: mestaji74@gmail.com]

Meisam Mirzaei Shojakhanlou is a Ph.D. candidate of TEFL at Allameh Tabataba'i University (ATU), Tehran, Iran. His areas of interest are L2 pragmatics, interlanguage pragmatics, discourse analysis, and teacher education.

Address: Department of English Language and Literature, Allameh Tabataba'i University, Tehran, Iran. [e-mail: meisammirzaei2@gmail.com]