

Learner engagement in peer task-based interaction: Identifying the effect of interlocutor  
proficiency and task outcome

Van Phung Dao

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By: Van Phung Dao

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respect to originality and quality.

Signed by the final examining committee:

\_\_\_\_\_ Chair  
Dr. Sandra Martin-Chang

\_\_\_\_\_ External Examiner  
Dr. Masatoshi Sato

\_\_\_\_\_ External to Program  
Dr. Adel Jebali

\_\_\_\_\_ Examiner  
Dr. Sara Kennedy

\_\_\_\_\_ Examiner  
Dr. Pavel Trofimovich

\_\_\_\_\_ Thesis Supervisor  
Dr. Kim McDonough

Approved by \_\_\_\_\_  
Dr. Richard Schmid, Department Chair

June 1, 2017 \_\_\_\_\_  
Dr. André Roy, Dean of Faculty Arts and Science

## ABSTRACT

### **Learner engagement in peer task-based interaction: Identifying the effect of interlocutor proficiency and task outcome**

**Van Phung Dao, Ph.D.**

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The goal of current peer interaction research is to develop an in-depth understanding of how peer task-based interaction promotes second language (L2) learning. Situated in this line of research, this dissertation investigated peer task-based interaction in light of learner engagement conceptualized as a multifaceted construct that manifests in cognitive, emotional and social dimensions. Specifically, the dissertation investigated how interlocutor proficiency and task outcome affected learner engagement in tasks during peer interaction, and whether learner engagement in tasks was predictive of L2 question development during peer interaction.

Study 1 investigated whether learners engaged differently during peer interaction when they were paired with peers from different proficiency levels. Fifteen Vietnamese core learners of English as a foreign language (EFL) were asked to work with a peer of higher proficiency and another peer of lower proficiency. The core learners' degree of engagement when interacting with the lower proficiency partner and a higher proficiency partner was compared. The results revealed that the core learners showed greater cognitive and social engagement as reflected in their behavior. The core learners also reported greater emotional engagement when working with higher proficiency partners, although their preferences did not show explicitly in their interaction.

Study 2 examined the impact of task outcome on learner engagement. This study compared learner engagement in the tasks that have convergent outcome as opposed to divergent outcome. A convergent task was the one that required learners to agree on an outcome whereas a divergent task did not have this requirement. The degree of learner engagement between the two tasks was compared to determine whether task outcome affected how learners engaged in tasks during peer interaction. The results showed that learners demonstrated greater cognitive and social engagement in the convergent task than the divergent task. Their emotional engagement in both tasks was not significantly different.

Different from Study 1 and Study 2, the last study in this dissertation set out to make a link between learner engagement and L2 question development. Twenty-seven learners carried out five tasks that were designed to elicit L2 questions. A logistic regression was conducted to establish whether learner engagement was predictive of L2 question development, which was operationalized as a stage increase in Pienemann and Johnston's (1987) development sequence of question formation. The predictor variables included in this logistic regression were cognitive, emotional and social engagement operationalized as question idea units, laugh episodes, and instances of responsiveness, respectively. The results revealed that only cognitive engagement was a significant predictor of L2 question development.

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### **Contribution of Authors**

The original idea of the dissertation stemmed from an informal discussion with my supervisor, Dr. Kim McDonough. I took the lead in drafting an initial proposal and revised it through many rounds of my supervisor's insightful comments before the dissertation proposal was defended, and then the data collection occurred.

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## Glossary

**Peer interaction:** Peer interaction is a type of conversational interaction in which learners carry out communicative tasks with minimal or no teacher participation. Peer interaction is also called learner-learner interaction and contrasts with teacher-learner interaction and learner-native speaker interaction.

**Learner engagement:** Learner engagement refers to learners' involvement in a task that they are asked to complete. Learner engagement reflects three different dimensions (e.g., cognitive, emotional and social).

**Cognitive engagement:** Cognitive engagement refers to learners' attention to task content and language features. Learner attention to task content is learners' discussion and thinking about task contents, operationalized as idea units. Learners' attention to language is their attention and discussion of formal aspects of language, operationalized as learners' discussion of language problems.

**Emotional engagement:** Emotional engagement refers to learners' emotions aroused during task execution by task characteristics, their partners and/or the learners. Emotions are classified into two categories: positive feelings such as enjoyment, interest, pleasure and excitement, and negative feelings such as frustration, boredom, anxiety, and worriedness.

**Social engagement:** Social engagement refers to the relationship that learners establish when they carry out a task. This relationship could be either positive or negative. Positive social engagement is learners' feeling of being socially included and affiliated with each other. Negative social engagement is learners' feeling of being excluded and not considered as a legitimate partner. This may lead to learners' withdrawal or non-collaboration, which is likely to result in failure to achieve the task goal.

**Proficiency pairing:** Proficiency pairing is the act of grouping two learners based on their proficiency. For example, a mixed proficiency pairing includes dyads formed by having a learner of lower proficiency work with a higher proficiency learner. These

mixed proficiency dyads are often contrasted with similar proficiency dyads that are comprised of two learners from the same or similar proficiency level.

**Task type:** Task type refers to a type of tasks that have similar characteristics. For instance, convergent tasks are one type of tasks that require learners to arrive at a consensus or agree on a certain task outcome. In contrast, divergent tasks do not have this requirement and often diverge learners to different even opposite task outcomes.

## Chapter 1. Introduction

For the past few decades, there has been an increasing volume of research investigating various aspects of conversational interaction, with scholars generally concurring that conversational interaction promotes second language acquisition (e.g. Long, 1996; Mackey & Gass, 2006). Recently, peer interaction, a type of conversational interaction in which learners carry out communicative tasks with minimal or no teacher participation (Philp, Adams, & Iwashita, 2014), has received increased attention due to its greater prevalence in L2 classrooms as compared to learner-native speaker interaction. Research indicates that peer interaction provides L2 learners with opportunities to give and receive feedback (Adams, 2007; Sato & Lyster, 2012), practice their language use (Mackey, 2012; Mackey, Abbuhl, & Gass, 2012; Philp, 2012), and engage in collaborative learning (Swain & Lapkin, 2002). However, questions have been raised about the effectiveness of peer interaction for facilitating L2 learning due to its shortcomings, such as learners' lack of attention to form (Philp, Walter, & Basturkmen, 2010), non-collaboration (Storch, 2002), mistrust of peer feedback (Yoshida, 2008), negative perception towards peers (Kowal & Swain, 1994), and low task engagement (Baralt, Gurzynski-Weiss, & Kim, 2016; Lambert, Philp, & Nakamura, 2016; Phung, 2016; Qiu & Lo, 2016).

Despite its informative findings, peer interaction research to date has limitations. First, it focuses mainly on feedback, pair/group dynamics, and learners' discussion of language form but has not expanded to other variables such as learner engagement that has recently received more attention (Philp & Dushesne, 2016; Svalberg, 2009). Although it is arguably a methodological strength that this body of research has focused narrowly on a small set of variables to facilitate comparison, further research needs to expand its scope in order to gain further insight into different dimensions of peer interaction. Second, this existing research has explored peer interaction exclusively from either the cognitive or social perspective. Although each of these perspectives provides a unique view of the relationship between peer interaction and L2 learning, many studies are situated predominantly in one theoretical camp. The merits of each approach are often articulated through reference to the shortcomings and inadequacies of the other. Given the complexity of language learning (Larsen-Freeman & Cameron, 2008) and the fact that interaction is a cognitive, emotional and social phenomenon (Batstone, 2010; Swain, 2013; van Lier, 2002), peer interaction research needs to go beyond the well-established constructs and draw on a more holistic perspective in order to gain greater insights into how peer interaction facilitates L2 learning (Sato & Ballinger, 2016). Recent studies have

shown a shift to a more comprehensive perspective when investigating peer interaction (Baralt et al., 2016; Lambert, Philp & Nakamura, 2016; Phung, 2016; Qiu & Lo, 2016; also see Philp & Duchesne, 2016; Svalberg, 2009). Following this new line of research, the current dissertation explores learner engagement perceived as a multifaceted construct reflecting three dimensions: cognitive, emotional and social. In order to situate learner engagement in its broader context, the next section discusses the relevant theoretical models.

### **Engagement with language**

Contemporary approaches to learner engagement have been heavily influenced by Svalberg's (2009, 2012) work on the construct of 'engagement with language'. Svalberg defined engagement with language as a state including cognitive, affective and social states and/or as a process in which language is treated both as an object (e.g., learners reasoning about language features) and as a means to communicate meaning. In her model, engagement with language was comprised of three main states and/or processes: cognitive, affective and social. Cognitive engagement was an individual's alertness, focused attention and active construction of his or her own knowledge. Criteria to identify cognitive engagement included whether a learner was energetic or lethargic, noticed language features, reflected critically or simply reacted, and if learner's reasoning was inductive or memory-based. Affective engagement was the willingness to interact demonstrated by withdrawal or eager participation, off task or on task behavior. Social engagement reflected whether individuals were interactive, supportive of each other through negotiation and scaffolding, and active in initiating and maintaining interaction. Notably, Svalberg (2009) formulated the construct of engagement with language in relation to language awareness that she defined as explicit knowledge about language. Language awareness was postulated to be constructed by engaging with language, with language awareness as not only an outcome but also a resource feeding into the process of engaging with language.

Although Svalberg's (2009) pioneering conceptualization acknowledges the multiple dimensions of engagement with language and fits relationship to language awareness, little research has been situated in the framework. It seems that operationalizing the subcomponents of the construct is challenging in L2 research due to difficulties in how to define terms for each subcomponent. For example, focused attention, a feature of cognitive engagement, refers to learner attention to language as an object and as a means of communication. These two kinds of attention seem difficult to differentiate and measure, particularly when one just examines the learners' behavior in interaction. In addition, the terms used to describe affective and social engagement such as autonomy, purposefulness,

willingness to engage, and interactiveness can have different meanings in L2 literature according to their theoretical basis.

These difficulties in operationalizing engagement with language are reflected in recent L2 research. In the first study to apply Svalberg's framework into L2 research, Baralt et al. (2016) examined the relationship between engagement with language and two variables: task complexity (simple versus complex tasks) and task modality (face-to-face versus synchronous computer-mediated chat). They used different data sources such as transcripts, chat logs, and exit questionnaires to gauge the three aspects of engagement with language and to triangulate the data. The researchers simplified the criteria for each type of engagement. For example, they described cognitive engagement as noticing language and/or interaction features and operationalized it as learners' discussion of language form or language-related episode (LREs). Baralt et al.'s effort to simplify the criteria for each type of engagement has shown challenges when using Svalberg's model to describe engagement. These challenges were also seen in Ahn's (2016) study in which she simply described how the learners demonstrated language awareness through engaging with language. Despite being descriptive, the studies using Svalberg's model have shown a first promising step in conceptualizing and operationalizing engagement.

### **Task engagement**

Also trying to conceptualize the construct of engagement, Philp and Duchesne (2016) proposed a model of task engagement. Drawing on educational research on student engagement, Philp and Duchesne (2016) defined engagement as a state of heightened attention and involvement, which manifests in four distinctive but interdependent dimensions: cognitive, behavioral, emotional and social. They described each of these four components based on both educational and L2 research. For example, in educational research cognitive engagement included processes that refer to, for example, sustained attention and mental effort, and self-regulation strategies. Indicators of cognitive engagement included questioning, reasoning, idea exchange, evaluative comments (Helme & Clarke, 2001), private speech and exploratory talk (Mercer & Dawes, 2008). In L2 research, cognitive engagement was the learners' focus on the language such as learners discussing language rules (Toth, Wagner & Moranski, 2013).

As for emotional engagement, it was described at two levels: school and class/task activities. At the school level, emotional engagement referred to the connection that students feel with their school. At the class and task level, this emotional engagement was students' motivated involvement, with indicators including enthusiasm, interest, enjoyment,

disaffection, anxiety, frustration and boredom (Skinner, Kindermann & Furrer, 2009). Emotional engagement was also considered at the class level as learners' feelings of connection with peers.

With regard to social engagement, it should be pointed out that this construct is not included in the model of student engagement in education research, and is different from social engagement in Svalberg's (2009) model. While social engagement in Svalberg's (2009) model concerned whether learners are interactive, supportive and active in interaction, it is described in relation to cognitive and emotional engagement in Philp and Duchesne's (2016) model. At one point, they described socially engaged learners as those who show reciprocity and mutuality in their interaction as reflected in their behavior (e.g., listen and draw on each other's expertise and ideas, and provide feedback). Also considering it as another aspect of engagement, Philp and Duchesne (2016) referred to behavioral engagement as students' participation in academic activities, which is arguably linked to their learning outcome. Indicators of this behavioral engagement could be seen through learners' effort, persistence and active involvement. In L2 research, behavioral engagement was the amount of speech learners produce during interaction measured through turns and words.

Task engagement model has shown a step forward in conceptualizing the construct of engagement by emphasizing the interconnectedness of its different components. For example, learners who are not socially engaged (e.g., dislike working with peers) would probably show less cognitive engagement (e.g., not invest cognitively in the task). This would lead to their off-task behavior (i.e., no behavioral engagement), which in turn may create frustration among peers (i.e., no emotional engagement). Given its detailed description, a few recent studies have adopted Philp and Duchesne's conceptualization of task engagement in investigating the effects of task features on learners' task engagement. These studies showed that both task features (e.g., task content) and task implementation (e.g., task repetition) are factors affecting how the learner engaged in tasks (Lambert et al., 2016; Phung, 2016; Qiu & Lo, 2016).

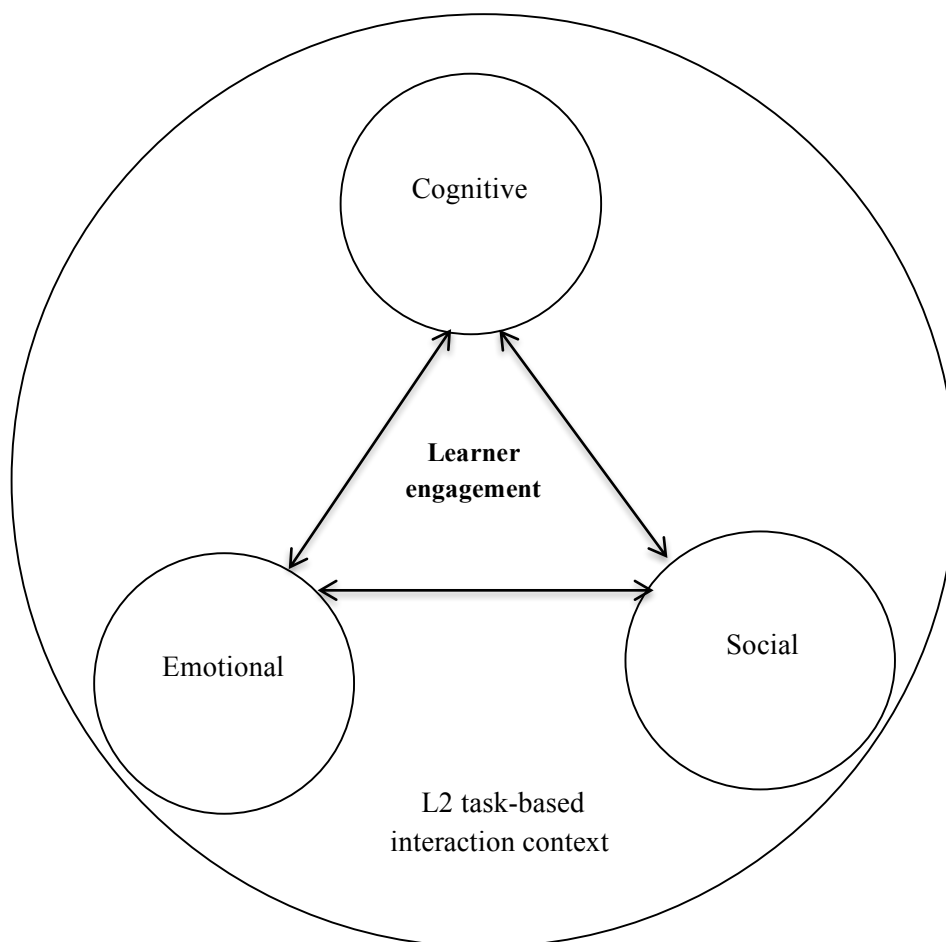
### **Learner engagement**

To further contribute to the conceptualization of engagement, this dissertation proposes a hybrid model of 'learner engagement' that derives from both Svalberg's (2009) model of engagement with language and Philp and Duchesne's (2016) model of task engagement. In this hybrid model, learner engagement is learners' involvement in a task, in which language learners are the agent of the engagement process and a task is the activity which they are asked to carry out. Learner engagement is comprised of three sub-components:

cognitive, emotional and social. To make it more operationalizable in L2 research and avoid underspecification, each of these components is conceptualized with specific reference to learners, a task, language aspects, and the context of classroom interaction.

The figure below illustrates a model of learner engagement in a task. In this figure, learner engagement manifests in three dimensions with learners as an agent of the engagement process and L2 task-based interaction as the context. Following Philp and Duchesne (2016), the subcomponents of engagement are interrelated, which is illustrated in the figure.

Figure 1. Learner engagement in a task



As mentioned earlier, the construct of learner engagement in a task is conceptualized in relation to the learners, the task and the language aspects. Its components are therefore defined and operationalized so that they reflect these aspects. With specific reference to the task and the language aspects, cognitive engagement in this hybrid model is defined as learners' attention, which is operationalized through learners' attention to task content (i.e., learners' thinking about content in order to complete the task) and discussion of language features (i.e., learner attention and discussion of formal aspects of language).



Emotional engagement refers to learners' emotions aroused during the task completion process. Emotions could encompass a wide range of types (see Imai, 2010), e.g., eagerness as in Svalberg's (2009) model or pleasure as in Philp and Duchesne (2016). However, for learner engagement, emotions are those socially constructed during interaction, that is, provoked specifically due to the task characteristics, their partners or/and learners during interaction. They are classified into two categories: positive feelings such as enjoyment, interest, excitement, enthusiasm, eagerness, pleasure; and negative feelings such as frustration, boredom, anxiety, and worriedness. These emotions could be expressed through learners' behavior in the interaction or kept internally in learners' mind during the course of task completion.

Although Philp and Duchesne (2016) integrated social engagement as an additional component into their model, it was not discussed separately but related to cognitive and emotional engagement. Within this hybrid model of learner engagement, social engagement refers to the social relationship that learners establish when they carry out a task. This relationship could be either positive or negative. That is, on the one hand learners can feel socially included and affiliated to each other (positive connection/relationship); this therefore stimulates more interaction, as suggested in Svalberg's (2009) model, and enhances collaboration. On the other hand, learners may feel excluded and disconnected from partners (negative connection/relationship). This could lead to withdrawal or non-collaboration in the task, which may result in failure to achieve the task goal.

### **Justification for the hybrid model**

The proposed model of learner engagement foregrounds two major differences from the previous two models. The first difference is that the term 'learner engagement' is used in order to reflect that the participants of this engagement process are learners. Russell, Ainley and Frydenberg (2005) argue that engagement at the level of task activity represents 'energy in action', which reflects the connection between the persons and the activity that they are involved in. Thus, with the focus on L2 learning through task-based interaction, this hybrid model stresses that it is the learners who are the agent of the engagement action and the activity is a task that they are asked to carry out. In addition, it is important to specify that learners are the agent of engagement, not the task or the language, because only learners can express emotions (emotional engagement), show thinking and attention (cognitive engagement), and construct a relationship (social engagement). In addition, it should be noted that the model was contextualized in the context of classroom, therefore being applicable to research that is conducted in classroom settings.

The second difference, particularly from Philp and Duchesne's (2016) model, is the exclusion of behavioral engagement because it is taken as a reflection of cognitive, emotional and social engagement (see Oga-Baldwin & Nakata, 2017). For instance, when learners are cognitively, emotionally and socially engaged in a task, they would demonstrate this in their behavior during interaction. Examples of cognitive engagement through behavior could be learner's discussion of language form and task content such as questions, justifications, and explanation. Social engagement could be seen through learners' behavioral support during interaction such as feedback and mutual help. Similarly, emotional engagement could be demonstrated through learners' behavioral expression of interest, excitement and enjoyment such as frequent laughs. Thus, it seems reasonable to not differentiate behavioral engagement from cognitive, emotional and social engagement. The second reason is that when behavioral engagement is considered as one component of task engagement, its operationalization seems to overlap with cognitive and social engagement. That is, it is suggested in Philp and Duchesne's model that behavior engagement could be measured through amount of speech such as turns and words. However, language output could also be evidence for other components. For instance, when learners enjoy the task (emotional engagement), pay heightened attention to the task (cognitive engagement) and like to work with peers (social engagement), they are likely to produce more language.

In sum, rather than relying exclusively on LREs or pair dynamics, researchers can explore how task design and implementation factors affect learner engagement perceived as a holistic construct in order to gain more insight into different dimensions of peer interaction. In addition, although attempts to define and operationalize the construct of engagement have been put forward, these models not only vary in their use of the term but also conceptualize it differently. Thus, to contribute to the discussion of conceptualizing the construct of engagement, the present dissertation proposes a model of learner engagement with more specific reference to the task, learners, and language aspects. Based on the proposed model, the three studies in this dissertation aim to investigate the effects of proficiency and task outcome on learner engagement during peer task-based interaction, and the relationship between learner engagement and L2 question development. An overview of these three studies is presented in the next section.

### **The three studies**

With the focus on learner engagement in tasks during peer interaction, the three studies in this dissertation share a major goal of conceptualizing the construct 'learner engagement' and obtaining a deeper understanding of its relationship with two variables (i.e.,

proficiency and task outcome), and with L2 question development. Although all three studies investigated learner engagement, each of them has its own specific goals and objectives, and therefore contributes to increased understanding of different aspects of learner engagement, task performance, and L2 development in the context of peer task-based interaction.

Study 1 tracked the engagement of fifteen learners in tasks when they were paired with a lower proficiency peer and a higher proficiency peer. The study was motivated by previous research findings that proficiency affected how learners interacted with their peers. In addition, peer interaction research that investigated the proficiency variable tended to examine one aspect of interaction such as cognitive (e.g., LREs), and social (e.g., learner collaboration and pair/group dynamics), with very little research targeting the emotional aspect. Thus, this study focused on examining how proficiency affects different dimensions of learner engagement.

Study 2 compared learner engagement in two types of tasks: convergent and divergent. These two tasks differed from each other in terms of outcome, with the convergent task requiring learners to arrive at consensus and the divergent task encouraging learners to reach different outcomes. Due to this difference in task characteristics, it was proposed that learner could engage in task differently during peer interaction when carrying out these tasks. Given tasks as a central unit to L2 learning and teaching, this study could contribute not only to advancing current understanding of the effects of task features on task engagement in peer interaction, but also generating useful implications for implementing effective L2 learning and teaching activities.

Different from the two studies mentioned above, study 3 sets out to make a link between learner engagement and L2 question development. The study used a pre-test and a posttest to determine whether learner engagement was predictive of L2 question development based on Pienemann and Johnston's (1987) developmental sequence. The development of L2 questions was evidenced when learners moved to a higher stage in Pienemann and Johnston's six-stage development sequence. It was assumed that the development of L2 questions would be predicted by the degree of learner engagement in the tasks. The next chapters will present these three empirical studies in detail.

## Chapter 2. Study 1

### The effect of interlocutor proficiency on learner engagement during peer task-based interaction

Peer interaction has recently received increased attention in L2 research due to its prevalence in language classrooms and its facilitative role in L2 learning. This body of research indicates that peer interaction provides learners with opportunities to give and receive feedback (Adams, 2007; Sato & Lyster, 2012; Shehadeh, 2001), practice their language use (Mackey, 2012; Philp, 2012; Philp et al., 2014), and engage in collaborative learning (Swain & Lapkin, 2002). However, the effectiveness of peer interaction for promoting L2 learning depends on different factors. Among these factors, proficiency has been shown to affect how learners interact with their peers (see Philp et al., 2014; Sato & Ballinger, 2016 for recent reviews).

Previous studies have reported the impact of interlocutor proficiency on learners' discussion of language form in task-based interaction. For instance, low proficiency learners rarely discussed language features during the course of task completion (Philp et al., 2010). In addition, compared to their higher proficiency peers, low proficiency learners tended to focus their attention more on lexical than grammatical items (Leeser, 2004; Williams, 2001). The degree of learner attention to language forms also varied when learners interacted with partners from different proficiency levels (Choi & Iwashita, 2016; Kim & McDonough, 2008), especially when they were assigned with different task roles (Dao & McDonough, 2017). In sum, interlocutor proficiency has been shown to affect the degree of discussion of language form and types of language features to be discussed (grammatical and lexical features). However, this body of research focused predominantly on the effect of interlocutor proficiency on peer interaction at the cognitive level, particularly through LREs. Although LREs could reflect some of learners' cognitive processes during interaction, this well-established construct did not tap into other cognitive processes such as learners' thinking and discussion of task content during the course of task completion.

Besides affecting learners' discussion of language forms, interlocutor proficiency may also affect the social relationship among learners during interaction. For instance, in mixed proficiency dyads, higher proficiency learners tended to ignore their lower proficiency peers instead of supporting each other during interaction (Kowal & Swain, 1994; 1997). This led to non-collaboration and unequal contribution to the task (Kim & McDonough, 2008; Watanabe, 2008; Watanabe & Swain, 2007). It should be noted that this research was not designed to examine directly the impact of interlocutor proficiency on peer interaction at the social level,

but in relation to LREs. In addition, a majority of this research examined the social aspect of peer interaction largely through collaborative dynamics based on learners' behavior in interaction (see Storch, 2001; Dao & McDonough, 2017) and through descriptive data (Baralt et al., 2016; Sato, 2016; Storch, 2002; Watanabe, 2008). Thus, additional evidence that focuses on learners' social engagement (e.g., mutual help on language and task content/execution, interaction encouragement, and responsiveness) is necessary in order to depict more fully the social relationship that actually exists among learners as well as its impact on peer interaction.

Previous research has also suggested that interlocutor proficiency could provoke certain negative or positive emotions, which then in turn affect the benefits of peer interaction for L2 learning (see Sato & Lyster, 2007; Swain, 2013). For example, in a mixed proficiency dyad, the high proficiency learners at times got frustrated with their less proficient peers and therefore did not consider them as legitimate partners, which led the lower proficiency learners to adopt a passive role (Kowal & Swain, 1994). In addition, during peer interaction, learners may feel comfortable or threatened when interacting with partners (Phung, 2016; Sato & Lyster, 2007; Sheen, 2004; Yoshida, 2008). To date, very little research has examined whether interlocutor proficiency significantly affects learners' emotions. Given peer interaction as a cognitive, emotional and social phenomenon (Atkinson, 2010; Block, 2003; Swain, 2013), there is a need for L2 research that takes emotions into account.

To summarize, proficiency has been shown to impact peer interaction at different levels such as cognitive, emotional and social levels. However, peer interaction research that looked at the impact of interlocutor proficiency has drawn largely on the commonly used constructs such as LREs and collaborative dynamics. Thus, to gain more insights into the relationship between interlocutor proficiency and peer interaction, L2 research needs to extend its scope by, for example, exploring new constructs that could capture different aspects of interaction. To achieve this, the multidimensional construct learner engagement was proposed. To contextualize the construct of learner engagement, relevant models that propose related constructs, such as engagement with language and task engagement, are discussed.

Contemporary approaches to learner engagement have been heavily influenced by Svalberg's (2009, 2012) model of engagement with language. Svalberg defined engagement with language as cognitive, affective and social states and/or process in which language is treated both as an object and/or as a means to communicate meaning. Engagement with language included three main states and/or processes: cognitive, affective and social. While cognitive engagement was an individual's alertness, focused attention and active construction

of his/her own knowledge, affective engagement reflected one's willingness to interact, purposefulness, and autonomy. Social engagement was one's supportiveness and interactiveness.

Despite a pioneering attempt in conceptualizing engagement, few studies have adopted Svalberg's model in L2 research (e.g., Baralt et al., 2016; Ahn, 2016). The first study that used Svalberg's framework was Baralt et al. (2016) that investigated the relationship between engagement with language and two variables: task complexity and task modality. However, to make the construct measurable, the researchers simplified criteria for identifying each type of engagement. For instance, cognitive engagement with language was reconceptualized as learners' noticing and/or discussion of language features. In addition, they used a post task questionnaire to describe qualitatively affective and social engagement. Baralt et al.'s effort in reconceptualizing and operationalizing engagement has shown challenges in applying Svalberg's model in L2 research.

Although not specifically referring to Svalberg's (2009) model, Philp and Duchesne (2016) model of task engagement appears to be more elaborated by shifting the focus to engagement at the level of task activity, so-called task engagement. Philp and Duchesne (2016) defined task engagement as a state of heightened attention and involvement. Based on educational research, task engagement is posited to manifest in four dimensions: cognitive, emotional, behavioral and social. Whereas cognitive engagement could include processes such as sustained attention, mental effort, and self-regulation strategies, emotional engagement referred to a variety of emotions such as enthusiasm, interest, enjoyment, disaffection, anxiety, frustration and boredom. Behavioral engagement was learners' on-task or off-task participation which could be measured through language output. Social engagement reflected reciprocity and mutuality among learners in interaction.

Philp and Duchesne's (2016) model of task engagement seems more sophisticated as it specifies the context of task engagement (i.e., task-based interaction in language classroom) and operationalizes the construct using common units of analysis such as amount of language production and time on task, negotiation meaning and elaborative clauses, and back channels as indicators of behavioral, cognitive and social engagement, respectively (Lambert et al., 2016, Phung, 2016, Qiu & Lo, 2016). Recent research that used Philp and Duchesne's (2016) model of task engagement reported the effects of different task features such as learner-versus teacher-generated content (Lambert et al., 2016), topic and task preference (Phung, 2016), and task repetition and content familiarity (Qiu & Lo, 2016) on task engagement.

To contribute to the on-going discussion about the nature of engagement, a hybrid model of learner engagement based on both Svalberg's (2009) and Philp and Duchesne's (2016) models is proposed. Learner engagement is learners' involvement in a task, in which language learners are the agent of the engagement process and a task is the activity that they are asked to carry out. Learner engagement comprises three sub-components: cognitive, emotional and social. To make it more operationalizable in L2 research and avoid the insufficiency of detailed description of the construct, each of these components is conceptualized with specific reference to learners, a task, language aspects, and the context of task-based interaction.

Specifically, cognitive engagement is defined as learners' attention, operationalized as learners' discussion of task content and language features. Emotional engagement is learners' emotions aroused during interaction. Although emotions encompass a wide range of types (see Imai, 2010), e.g., eagerness as in Svalberg's (2009) model or pleasure as in Philp and Duchesne's (2016), in this hybrid model they are those aroused particularly due to the tasks, learners or/and their partners. The emotions are either positive feelings such as enjoyment, interest, excitement, pleasure or negative feelings such as frustration, boredom, anxiety, and worriedness. Social engagement refers to learners' social relationship that could be either positive or negative. That is, on the one hand learners could feel socially included and affiliated to each other (positive relationship); this therefore stimulated more interaction as suggested in Svalberg's (2009) model (i.e. initiates and maintains interaction) and enhanced collaboration among them. On the other hand, learners might feel excluded and disconnected with partners (negative relationship). This could lead to withdrawal or non-collaboration (e.g., passiveness and domination), which may result in failure to achieve the task goal.

The model of learner engagement foregrounds some major differences from the previous models. First, the term 'learner engagement' is used to reflect that the participants of this engagement process are learners. When learner engagement consists of cognitive, emotional and social components, it is important to specify the agent of the action of engagement because only learners as a person, not the task or the language, who could show thinking and attention (cognitive engagement), express emotions (emotional engagement), and construct a relationship among interlocutors (social engagement). Second, the model excludes behavioral engagement component, which is considered as a subcomponent of task engagement in Philp and Duchesne's model (2016), because behavioral engagement is the reflection of cognitive, emotional and social engagement (see Oga-Baldwin & Nakata, 2017; Reeve & Tseng, 2011). For instance, when learners are cognitively, emotionally and socially

engaged, they could demonstrate these in their behavior. Examples of cognitive engagement through behavior could be learner's discussion of language form and task content such as justification, explanations, and questioning, which Lambert et al. (2016) referred to as elaborative talk. Social engagement could be seen through learners' behavioral support such as explicit encouragement, mutual help, and responsiveness in interaction. Emotional engagement could be demonstrated through learners' behavioral expression of interest, excitement and enjoyment such as frequent laughs. Thus, it seems more reasonable not to differentiate behavioral engagement from cognitive, emotional and social engagement, given that it is an indicator of all other components.

To summarize, previous research that investigated the impact of interlocutor proficiency on peer interaction has focused predominantly on LREs and collaborative dynamics. To expand this line of research, this current study used the construct of learner engagement to explore the impact of interlocutor proficiency on peer interaction. As described previously, learner engagement reflects cognitive, emotional and social dimensions. Because proficiency affected learners' discussion of language and their collaboration (Leeser, 2004; Watanabe & Swain, 2007; Williams, 2001), it may also affect all of these dimensions of learner engagement. The study therefore addresses the following question: Does proficiency affect L2 learners' engagement during task interaction?

## **Method**

### **Participants**

The participants were 45 Vietnamese learners of English as a foreign language (26 females and 19 males) who were enrolled in a degree program at a university in Vietnam and consented to participate in the study. Their age ranged from 18 to 24 years old ( $M = 20.27$ ,  $SD = 1.10$ ). They had a diverse range of English proficiency levels based on paper-based TOEFL test scores ( $M = 451.71$ ,  $SD = 52.64$ ). The participants were divided into three equal groups of 15 learners using a 50-point TOEFL score difference (Dao & McDonough, 2017; Kowal & Swain, 1994; 1997) to determine proficiency difference between these groups: core group ( $M = 450.06$ ,  $SD = 36.84$ ), lower proficiency group ( $M = 408.53$ ,  $SD = 44.13$ ), and higher proficiency group ( $M = 496.53$ ,  $SD = 35.37$ ). Although speaking skill was not assessed in TOEFL paper-based test, results of this test indicate the overall language proficiency of a learner, suggesting that this global proficiency measure could reflect learner's speaking ability (Butler, Eignor, Jones, McNamara & Suomi, 2000; Educational Testing Service, 2011).



## **Design**

A within-groups design was used to examine the effect of proficiency on the core learners' engagement in peer interaction. The independent variable was interlocutor proficiency, which was manipulated by having a core group of learners interact with a peer from a lower proficiency group and a peer from a higher proficiency group. The dependent variable was the core learners' engagement, which consisted of three main components: cognitive, social and emotional engagement. Cognitive engagement was operationalized as the core learners' attention and discussion of task content and language issues. Although cognitive engagement could reflect different aspects, this operationalization focused narrowly on learner attention. Social engagement was operationalized as the core learners' social relationship with their peer in interaction as reflected in their responsiveness such as offering and receiving help, encouraging and responding to each other during interaction. Finally, emotional engagement was operationalized as the core learners' positive feeling aroused during interaction: enjoyment, interest, excitement and pleasure. Although emotions could be negative as discussed earlier, the present study operationalized emotional engagement in terms of only positive values because data from the pilot study did not show any explicitly negative emotion. The pilot participants only exhibited positive emotion as reflected through their excited intonation, explicit comments about emotion, and laughs. In addition, because just a few instances of these explicitly positive emotion occurred in the pilot data, a post-task questionnaire that asked the learners to rate their emotions based on a Likert scale was used as done similarly in previous studies (Baralt et al., 2016; Lambert et al., 2016; Phung, 2016; Qiu & Lo, 2016).

## **Materials**

The task was a fifteen-minute collaborative picture sequencing task, taken from materials used in the participants' regular English program. Two sets of ten pictures were used (see Appendix 1). The first set of pictures depicted a series of life events of a person from his childhood to adulthood. The second set of pictures described another series of events from a family's vacation.

The materials also included a five-item questionnaire that asked about learners' emotional engagement based on a 10-point score scale (see Appendix 2). The five items measured the learners' degree of enjoyment, interest, excitement and pleasure in interaction (e.g., how much they felt enjoyable, pleased, interested and excited when interacting and doing the task). All of the items in the questionnaire were developed by the researcher based on qualitative findings of previous research (Baralt et al., 2016; Helme & Clarke, 2001; Philp

& Duchesne, 2016). The questionnaire was informally pilot tested and Cronbach's alpha as a measure of internal consistency showed an overall reliability coefficient of .94.

### **Procedure**

Participants carried out the tasks during a fifty-five minute, regularly scheduled class. Although the interactions were recorded, learners were told that the tasks were part of their regular activities. Thus, if they were not comfortable being recorded, they could turn off the recorder and kept interacting to complete the task. After completing a short background information form, the participants were asked to discuss and sequence a set of ten pictures to create a story. One participant from the core group was paired with a peer from the lower proficiency group to sequence one set of pictures, and with a peer from the higher proficiency group to sequence another set of pictures. Sequence of participants' interactions was counterbalanced, with a half of core learners interacting with lower proficiency peers first and then with higher proficiency peers while the other half doing it in the reversed order. Because learners may produce different amounts of speech during the interaction, the time of task was controlled, with each interaction occurring within only fifteen minutes across pairs. At the end of each interaction, all core and non-core learners completed the emotional engagement questionnaire. Their interactions were audio-recorded using a portable digital recorder.

### **Analysis**

The audio-recordings were transcribed by a highly proficient English speaker and verified by the researcher. The transcripts were coded for evidence of individual core learners' cognitive, emotional, and social engagement. Cognitive engagement was operationalized as idea units and language-related episodes (LREs) (Swain & Lapkin, 1998). An idea unit was defined following McCarthy's (1991) *theme-rheme* framework as a segment of information, idea or comment about the theme under discussion that the core learners produce (also see Lambert et al., 2016; Shin, Lidster, Sabraw, & Yeager, 2016). Excerpt 1, taken from Pair 03 between the core learner and the lower proficiency peer (LP learner) illustrates the core learner's cognitive engagement with the task content through idea units. In this excerpt, the core learner produced two idea units.

Excerpt 1. Cognitive engagement: Idea units

- 1 Core learner: ...the family waiting on the station station
- 2 LP learner: There are station ok uh there are two people in the station
- 3 Core learner: I think this picture is the first uh because uh the family

the family move from house to the station first do you  
know do you agree with me uh?

4 LP learner: Ya the station

5 Core learner: Uh move uh move from house to station uh ...

The first idea unit (line 1) is new information that the core learner provided to describe the family's vacation journey *the family waiting on the station*. The second idea unit is learner's justification of the sequence of a picture in the set *because uh the family the family move from house to the station first* (line 3). The core learner's utterance (line 5) *uh move uh move from house to station uh* was not counted as an instance of idea unit because it was the repetition of her previous comment (line 3). Since the study focused on the core-learners' engagement, the lower-proficiency learner's idea units, e.g., *there were two people in the station* (line 2) were not included in the frequency counts.

Following Swain and Lapkin (1998), LREs were defined as episodes where the core learners either initiated or responded to language problems. LREs that did not involve the core learners (e.g., the non-core learners' self-correction) were excluded from the analysis. Excerpt 2 shows the cognitive engagement of a core learner and a higher proficiency partner (HP learner) as reflected in initiation of a lexical problem—*traffic jam*.

Excerpt 2. Cognitive engagement: a LRE

1 Core learner: They look worry uh...it is *bị kẹt xe là gì?* [*What is traffic jam?*]

2 HP learner: The traffic jam

3 Core learner: This is traffic jam uh and I think they are late

In Excerpt 2, after the core learner requested for help with a lexical phrase *traffic jam* in her native language (line 1), her higher proficiency partner provided the answer (line 2) which was accepted subsequently (line 3).

Emotional engagement was identified through the frequency of laughs and instances of talk where the core learners explicitly expressed or commented about their emotions (Glenn & Holt, 2013). Excerpts 3 and 4 taken from Pair 02 between a core learner and a higher proficiency partner illustrate the core learner's emotional engagement as reflected through laughs and enjoyment during the task.

Excerpt 3. Emotional engagement: a laugh episode initiated by the core-learner

1 HP learner: Oh and the rat here he's as almost as big as his as her head

2 Core-learner What the...the mountain rat?

- 3 HP learner: Mountain mountain rat  
 4 Core-learner Ha ha [*laughing*]  
 5 HP learner: [*laughing*]

In Excerpt 3, the core learner made fun of an idea from her higher proficiency partner, who compared a rat in a picture to a human head (line 1), by referring to it as *the mountain rat* (line 2) and laughed subsequently (line 4).

In Excerpt 4 below, both the core and the higher proficiency learners appeared to enjoy the ideas that they thought of in order to describe the picture. The higher proficiency learner that initiated the instance of laughs seemed to be excited and humorous, thus thought of a strange idea to explain the picture where people were waiting in the bus station as *they are robbed* (line 1). This made the core learner laugh and comment that her partner was *imaginative and funny* (line 2).

Excerpt 4. Emotional engagement: a laugh episode initiated by the core learner's partner

- 1 HP learner: They are robbed maybe there are some robbers that rob their  
 baggage [*laughing*]  
 2 Core-learner: Yeah that why they're that's why they are so sad...you are so  
 imaginative and funny yeah [*laughing*]

It should be noted that laugh episodes where only non-core learners laughed or expressed positive emotion explicitly without any response from the core learners were excluded from the analysis.

Evidence of social engagement included episodes where the core learners provide help, encouragement and show responsiveness to their partner's ideas or opinions (Storch, 2001). The help episode differed from language form discussions or LREs as described above in terms of three characteristics. First, it occurred when the core learners offered and/or sought help from the partner. Second, this help could concern many aspects that could be related to the task execution, task content, or any other areas. Third, it did not target language as those LREs that were considered evidence of cognitive engagement.

Excerpt 5 from Pair 12 shows an episode of help regarding task execution that the core learner asked for and then received help from his higher proficiency partner.

Excerpt 5. Social engagement: An instance of task execution help

- 1 Core learner: So what we should do now?  
 2 HP learner: Let me see...maybe uh we divide into five and five right...and uh...  
 I will describe five pictures and you describe these pictures ok?

3 Core learner: Ok

In Excerpt 5, when the core learner asked about how to proceed with the task (line 1), the higher proficiency learner suggested dividing 10 pictures into two sets, with each describing five pictures (line 2). The core learner then agreed to proceed with the task that way (line 3). Excerpt 6 taken from Pair 05 also illustrates the core learners' social engagement as reflected on how the core learner encouraged and supported his lower proficiency partner during the interaction.

Excerpt 6. Social engagement: An instance of encouragement

- 1 LP learner: Uh... I feel uh nervous at now
- 2 Core learner: Yeah take it easy and you choose one...just one picture
- 3 LP learner: Uh--
- 4 Core learner --yeah I choose one uh... can you describe something about your picture?
- 5 LP learner: I think uh two boys are play football together and uh ...

In Excerpt 6, when the lower proficiency learner expressed her nervousness (line 1), the core learner comforted her *take it easy* (line 2) and suggested that she chose a picture and described it (line 4). This encouragement and suggestion seemed to help the nervous lower proficiency learner start describing the picture (line 5).

Social engagement also included episodes of responsiveness, where the core learners respond to and/or engage with the partner's previous opinions or ideas as demonstrated through repeating, commenting, completing and building on or developing partner's ideas. Learner responsiveness was based on Storch's framework of interactional patterns that draws on the equality (e.g., amount of language production) and mutuality (e.g., learners' engagement with each other's ideas). Thus, instances of responsive were different from instances of idea units, with the former focusing on reciprocity between two interlocutors and the latter concerning the speech amount of each interlocutor.

Excerpt 7 from Pair 15 illustrates the core learners' responsiveness as reflected in two instances of responsiveness.

Excerpt 7. Social engagement: responsiveness

- 1 HP learner The second picture I think these are these people are a couple
- 2 Core learner They maybe uh ...husband and wife or boyfriend and girlfriend ...and this boy on uh the bed he's sleeping ...maybe he's the couple's son
- 3 HP learner The son yeah

- 4 Core learner So I'll link the picture to this girl  
 5 HP learner Is this girl the mother?  
 6 Core learner Right ...

In Excerpt 7, the first instance of responsiveness is the core learner's engagement with a partner's idea (lines 1–2) in which the core learner developed her higher proficiency partner's idea about two people in the picture as a couple *these people are a couple* by specifying who they were *maybe husband and wife or boyfriend and girlfriend*. The second instance of responsiveness is the core learner's response to his partner's question (lines 5–6). That is, when the higher proficiency learner asked a question about the idea in the previous turn *is this girl the mother* (line 5), the core learner responded with a confirmation *right* (line 6).

Following the training by the researcher, a second rater coded independently a subset of the data (25%) for instances of cognitive, emotional and social engagement. Interrater reliability using a Pearson correlation was  $r = .88$  for cognitive engagement,  $r = .95$  for emotional engagement, and  $r = .90$  for social engagement. A score for each type of engagement (cognitive, emotional and social scores) per core learner was then calculated by summing the total number of episodes in each category. To establish whether proficiency affected the core learners' engagement, the frequency counts in each category were compared using paired-samples *t*-tests. For the emotional engagement questionnaire, a reported emotional engagement score per core participant was obtained by summing the five thematically corresponding items. The results from the questionnaire were to triangulate and supplement the coded measure of the core learners' emotional engagement.

### Results

To investigate whether proficiency affected the core learners' engagement during peer interaction, all instances of cognitive, emotional and social engagement identified in the transcripts were summed. Table 1 shows the instances of engagement that occurred when the core learners interacted with lower-proficiency and higher-proficiency partners.

Table 1

*Learner engagement by partner's proficiency*

Core learner engagement	Lower proficiency partner		Higher proficiency partner	
	M	SD	M	SD
Cognitive	50.27	14.15	68.67	17.79
Emotional	8.33	5.63	10.67	11.32
Social	29.40	13.15	48.60	26.76

As shown in Table 1, the core learners showed greater engagement in all three categories when they interacted with higher proficiency partners than with lower proficiency partners. Paired-samples *t*-tests using an adjusted alpha level of .017 (.05/3) showed that the core learners' engagement was significantly higher for cognitive engagement:  $t(14) = 6.76, p = .001, d = 1.85$ , and social engagement:  $t(14) = 4.13, p = .001, d = 1.53$ . However, there was no significant difference in emotional engagement:  $t(14) = .85, p = .411, d = .24$ . Although the statistical analysis for emotional engagement revealed no differences based on proficiency, the core learners reported higher emotional engagement when interacting with higher proficiency partners. The analysis of questionnaires showed that scores for emotional engagement were significantly higher when the core learners interacted with higher proficiency partners ( $M = 37.20, SD = 7.11$ ) than with lower proficiency partners ( $M = 31.00, SD = 9.56$ ):  $t(14) = 3.14, p = .007, d = 0.84$ .

To illustrate the findings that the core learners showed greater engagement when interacting with higher proficiency partners than with lower proficiency partners, Excerpts 8 and 9 taken from transcripts of Pair 12 that involve the same core participant show two interactions. In Excerpt 8, when interacting with a higher proficiency partner, the core learner produced four idea units.

Excerpt 8. The core learner interacts with a higher proficiency partner

- 1 Core learner: Uh...I think uh...the man...man say goodbyes uh...the couple...and the couple...the couple have has a baby
- 2 HP learner: Uh...I think she's his mom
- 3 Core learner: Oh yes
- 4 HP learner: And they are a family ...and grandmother?
- 5 Core learner: Yes grandmother I think couple uh bring ...uh bring yours—bring your children uh bring your children go to...
- 6 HP learner: City?

- 7 Core learner: Ah yes they
- 8 HP learner: City yeah and I will say about my pictures it is a really happy family
- 9 Core learner: Yes
- 10 HP learner: Dad is holding the baby and mom is uh feeding him I think so... and this too
- 11 Core learner: Prepare for college
- 12 HP learner: Ah we we we connect with this... maybe uh... maybe we will let it in here and we we we we continue our talking
- 13 Core learner: But I don't realize connect between some pictures
- 14 HP learner: Maybe uh uh I think it's a process of a boy ...you can see a boy little boy and here he is bigger
- 15 Core learner: Oh yeah

As can be seen in Excerpt 8, the four idea units that the core learner produced were: *the man say goodbyes* (line 1), *the couple has a baby* (line 1) *couple bring your children go to city* (lines 5), *prepare for college* (line 11).

In contrast, when interacting with the lower proficiency partner, the same core learner produced only one idea unit: *coconut trees* (lines 5 –10) as shown in Excerpt 9.

Excerpt 9. The core learner interacts with a lower proficiency partner

- 1 LP learner: Uh ...there are one plane... uh be uh there's one uh family
- 2 Core learner: Yeah one family
- 3 LP learner: Birds
- 4 Core learner: Bird
- 5 LP learner: Birds and uh trees
- 6 Core learner: What do you think this tree?
- 7 LP learner: Uh
- 8 Core learner: Coconut
- 9 LP learner: Coconut
- 10 Core learner: Yeah coconut
- 11 LP learner: And uh boat boat
- 12 Core learner: Boat?
- 13 LP learner: Boat
- 14 Core learner: Boat



15 LP learner: And beach

Additionally, when comparing the linguistic structure of idea units in both Excerpts 8 and 9, it appeared that the core learner produced clause-long idea units when interacting with the higher proficiency partner. In contrast, she produced a one-word long idea unit when interacting with the lower proficiency partner.

In terms of cognitive engagement operationalized as LREs, the core learners initiated and responded to more language problems when interacting with higher proficiency partners than with lower proficiency partners. Excerpts 10 and 11 taken from two interactions (Pair 09) involving the same core learner illustrated this difference. In Excerpt 10, the core learner produced five LREs while talking to a higher proficiency partner.

Excerpt 10. The core learner interacts with a higher proficiency partner

- 1 Core learner Uh this family uh they are go to—they go to the travel
- 2 HP learner Yes travel travel uh yes I think so and next picture
- 3 Core learner Uh they are uh they are eat uh —they are eating for dinner uh
- 4 HP learner I think they have to prepare some cloth food before they travel
- 5 Core learner Ok ok... uh next picture are you get on *đi lên máy bay là gì?*[what is ‘get on board’] ah go to plane
- 6 HP learner uh go to plane...uh travel by plane [*laughing*] but uh I don’t know and uh uh... no I think they uh are moving on the street in order to they need to go uh
- 7 Core learner move to hotel uh...or motel [*wrong pronunciation*]?
- 8 HP learner Motel motel [*correct pronunciation*] yes yes and ...uh they have lunch have lunch after that
- 9 Core learner Yes they have lunch in restaurant
- 10 HP learner Uh lunch in restaurant before before they move uh it’s wrong ...yes...uh she waiting for the station then she go to plane in order to they move move to another place after that I don’t know that picture... I have no idea [*laughing*]
- 11 Core learner *cái gì* [what?] she wait airport uh she wait for airport ...wait *mà cái này chờ sân máy bay mà* [here waiting at the airport]
- 12 HP learner Huh I uh
- 13 Core learner *Chớ đâu phải xe lửa đâu ờ* [it’s not the train] uh not train ok?
- 14 HP learner I don’t know

15 Core learner Airport uh ....I think now restart to describe the story first the family prepare to uh something uh ...to have a travel

As can be seen in Excerpt 10, the core learner produced two LREs that concerned verb tenses (line 1 and line 3), two LREs about lexical issues such as a phrase (line 5) and a missing article (line 11), and one LRE about a phonological problem. With regard to characteristics of LREs, three out of five LREs were the core learners' self-correction of their language errors (lines 1, 3, and 11).

In contrast, when interacting with a lower proficiency partner, the core learner produced only one LRE as shown in Excerpt 11.

Excerpt 11. The core learner interacts with a lower proficiency partner

- 1 LP learner: I think uh it ...my son can go to school ... son can go to school  
 2 Core learner: Yes son go to school first uh...after that uh  
 3 LP learner: Ya my son to school uh ...work work he ... đưa đi học là gì [what is *sent to school*]?  
 4 Core learner: I don't find the word  
 5 LP learner: What word you find?  
 6 Core learner: *Đưa đón đưa rước* [*pick up*] pick pick catch up  
 7 LP learner: Catch up ...  
 8 Core learner: Take?  
 9 LP learner: Uh...[*long pause*] it's ok  
 10 Core learner: Father have to...take take take  
 11 LP learner: Take children  
 12 Core learner: Take take children take children to school ...[*long pause*]  
 13 LP learner: How picture this...working?  
 14 Core learner: His working he earn money this ok?  
 15 LP learner: Yes yes and uh

In Excerpt 11, the core learner was involved in only one LRE (lines 3–9). In this LRE, the core learner responded to a language problem raised by her lower proficiency learner (line 3). Although the core learner could not provide a solution at first (line 4), she was able to suggest two solutions later (line 6 and line 8).

Regarding social engagement, Excerpts 12 and 13 taken from the same core learner (Pair 11) demonstrate differences in social engagement when interacting with higher and lower proficiency peers. In Excerpt 12, when interacting with a higher proficiency partner, the core learner was involved in four instances of responsiveness.

Excerpt 12. The core learner interacts with a higher proficiency partner

- 1 HP learner: Ok I think the boy is the main character
- 2 Core learner: Alright...
- 3 HP learner: Maybe from she was a baby to uh until she –he get older
- 4 Core learner: He grow up alright
- 5 HP learner: Ya
- 6 Core learner: So what do you think about the first picture?
- 7 HP learner: First one uh...*[long pause]*
- 8 Core learner: I think first picture is this picture because he's very little and his mother have to fed him
- 9 HP learner: Yeah
- 10 Core learner: what's it? *[laughing]*
- 11 HP learner: Uh when he uh when he got older a little bit uh he he he fall fall over the bed something like that fall over the bed to the ground
- 12 Core learner: You mean he you mean he made an accident he made an accident
- 13 HP learner: Ya

In Excerpt 12, the core learner exhibited greater social engagement as reflected in four instance of responsiveness: agree with a partner (lines 1–2), comment on partner's previous opinions (lines 3–4), invite partner to talk and maintain conversation when the partner paused (lines 6–9), and clarify partner's idea (lines 10–13).

In contrast, when interacting with a lower proficiency, the core learner showed less social engagement as reflected in only two instances of responsiveness.

Excerpt 13. The core learner interacts with a lower proficiency partner

- 1 Core learner: What do you think about the first picture uh the story?
- 2 LP learner: In uh ...the first picture uh...*[long pause]*
- 3 Core learner: I think the story is the son go out and he forgot to close the door ...it's the reason that the mouse come to his mother room ...and come to the bed that make the mother very surprise
- 4 LP learner: Her?
- 5 Core learner: No she's angry and scared
- 6 LP learner: Ah scare
- 7 Core learner: And in the second one she is very angry and then she hit him

- and in uh
- 8 LP learner: May be she realize mistake
- 9 Core learner: yes yes realize ...and after that she think long time and she think many things and understand that she should not do too like that ...
- 10 LP learner: She something wrong with her son
- 11 Core learner: Yes and then I think she have to apologize to her son and uh for –forgive his mistake... and in this picture uh in this picture there are three member in his family mother father and a daughter – son –a children and they gather together to enjoy the meal together and they plan for this trip in the next situation uh they plan for go to a beach...I talk a lot [*laughing*] what do you think?
- 12 LP learner: [*laughing*] uh uh I think ...we uh but this picture I don't understand...

In Excerpt 13, the core learner responded to the partner's idea only in two instances of responsiveness (lines 8 –9, and lines 10 –11). In addition, the core learner ignored his partner's questions (lines 4) and showed the dominance in conversation (lines 3 and 11).

### Discussion

The goal of this study was to investigate whether proficiency influenced learners' cognitive, emotional and social engagement. The results indicated that the core learners showed significantly higher cognitive and social engagement when working with higher proficiency partners. Although the core learners did not demonstrate significant differences in emotional engagement, they reported higher levels of positive emotion in the questionnaire.

As shown earlier, the core learners generated significantly more LREs, operationalized as evidence for cognitive engagement, when talking to higher proficiency partners than to lower proficiency learners. These results corroborate previous research findings that when paired with more advanced partners, learners tended to produce more LREs (Kim & McDonough, 2008; Leeser, 2004; Williams, 2001). In addition, the core learners appeared to self-correct their language problems more often when interacting with higher proficiency learners (Excerpt 10), and responded more to language problems initiated by their lower proficiency partners (Excerpt 11). Previous research suggested that difference in characteristics of LREs (e.g., self-correction and collaborative resolution of language

problems) may have differential effects on L2 learning (see Fernández Dobao, 2014; Swain & Lapkin, 1998; Williams, 2001). However, it is not known in this data what characteristics of LREs, i.e., self-correction (see Kormos, 1999; Shehadeh, 2001) and joint-effort in resolving language problems, are more beneficial to L2 learning because no measures were used to test this effect.

In addition, the results showed that the core learners produced significantly more idea units when paired with higher proficiency learners than with lower proficiency learners. However, previous research reported that proficiency did not affect the extent to which learners elaborated their talk and negotiated for meaning (Lambert et al., 2016). It is possible that when talking to higher proficiency partners, the core learners might have been prompted by their higher proficiency partners to talk. In addition, the core learners were also probably more able to retrieve relevant lexical and syntactic resources to generate content based on their higher proficiency partner's contribution and help (see Philp et al., 2016). As a result, they were able to produce more idea units.

Another main finding was that the core learner demonstrated more social engagement when working with higher proficiency partners. Previous studies suggested that in mixed proficiency dyads, the higher proficiency learners might encourage their lower proficiency partners to talk (Watanabe & Swain, 2007; Kowal & Swain, 1994, 1997; also see Storch, 2001). The core learners in this study could have been 'pushed' by higher proficiency partners to actively contribute to the conversation. Thus, they tended to take more active stance, gained more speaking floor (Jenks, 2007), and thus socially engaged more in the task by initiating and maintaining more interaction (Baralt et al., 2016; Reeve, 2012; Svalberg, 2009). In contrast, the core learners dominated conversation when interacting with lower proficiency partners (Excerpt 13). The dominance of higher proficiency learners in interaction with lower proficiency peers was also documented in previous research (Dao & McDonough, 2017; Kowal & Swain, 1994, 1997).

Finally, although the core learners did not show significant difference in their emotion explicitly in their performance, they reported more positive emotions when working with higher proficiency partners than with lower proficiency partners. One possible explanation for the non-significant results is that the core learners might have hidden their actual emotion interactions in order to avoid conflicts with their classmate partners. However, they could reveal this affective stance in post task measures such as questionnaires because the responses were not shared among learners. Although these speculations about the core learners' emotions are suggestive, the current study suggests that emotional engagement is a potential

variable affecting peer interaction (Baralt et al., 2016; Lambert et al., 2016, Phung, 2016, Qiu & Lo, 2016).

The findings suggest some implications for pedagogy. First, because the core learners demonstrated higher production of LREs, idea units and greater social engagement when talking to higher proficiency partners, the teachers could pair low proficiency learners with higher proficiency partners to promote their engagement. However, higher proficiency learners may dominate the conversation as reflected in when the core learners worked with their lower proficiency partners. Thus, teacher may train the higher proficiency learners or model for them on how to interact collaboratively with lower proficiency partners (Fujii, Ziegler, & Mackey 2016; Kim & McDonough, 2008).

Inevitably, the study has some limitations. Methodologically, due to the feasibility in operationalizing the construct, learner's emotional engagement captured only positive emotions that could be easily tracked in transcripts of audio-recordings through laughter or learners' explicit comments about their emotions, thus leaving out the negative emotions. Because participants of the current study consented to audio-record their interactions only, video-recordings and more sophisticated transcription may be needed in future research to detect more accurately learners' both negative and positive emotions (e.g., facial expressions and sitting posture). In addition, the current study used a questionnaire to measure emotional engagement for data triangulation, but the questionnaire items were closed questions that asked the learners to rate their emotions using a Likert scale. Thus, the post-task questionnaire may need to expand to include open-ended questions as used in previous studies (Baralt et al., 2016; Lambert et al., 2016; Phung, 2016) in order to gain more insight into this aspect of engagement. Finally, although instances of responsiveness as indicators for social engagement could explain partly the learners' social relationship in interaction, open-ended questionnaires and post task interview are needed to triangulate with this measure.

### **Conclusion**

The present study provides evidence that proficiency impacted learner engagement. The core learners showed greater cognitive and social engagement when paired with higher proficiency partners than when they interacted with lower proficiency partners. In addition, the core learners reported that they felt more emotionally positive when interacting with higher peers. The findings highlight that the teacher could pair learners with higher proficiency partners in order to promote their language production (i.e., idea units), attention to form, positive emotions, and better social relationship in interaction. To conclude, the study provides further insight into peer interaction as a complex and multidimensional phenomenon,

with proficiency being an influential variable affecting all of its aspects (cognitive, emotional and social).

### **Connecting Study 1 to Study 2**

Study 1 showed that proficiency affected different dimensions of learner engagement in task-based interaction. However, Study 1 employed only one type of task, a discussion task, so it is not known whether task type plays a role in learner engagement. Previous research suggests that task features, such as task content and task topic, are another variable affecting engagement (Lambert et al., 2016; Phung, 2016; Qiu & Lo, 2016). Knowing which task features promote learner engagement will provide a useful guide for teachers when selecting and designing effective tasks for their instructional activities. Therefore, Study 2 addressed the effects of task features on learner engagement, particularly focusing on task outcome: divergent and convergent.

In addition, as Study 1 showed that learners' emotional engagement was not easily tracked in transcripts, additional qualitative data is needed to gain more insight into this aspect. Thus, apart from the emotional engagement Likert-scale questionnaire, Study 2 included open-ended questions to address this issue. These additional questions were designed to elicit learners' perception about emotions, and also gain more qualitative data about their cognitive and social engagement to complement the quantitative results.



### Chapter 3. Study 2

#### The effect of task goal orientation on learner engagement in peer interaction

Since tasks are used as the main means to get second language (L2) learners to interact with each other in the classrooms, L2 research has investigated various task features in order to inform L2 instructors about how to select and design tasks that encourage learners to engage in interaction (Baralt et al., 2016; Lambert et al., 2016; Skehan, 2014). One of the important features of tasks among many task features is their outcome (Lambert & Engler, 2007). In task-based language teaching that considers task a central unit for organizing instructional activities, task outcome is a required feature of tasks because the ultimate purpose of getting learners to carry out tasks is to achieve a non-linguistic goal (Ellis, 2003; Erlam, 2016; Long, 2015; Skehan, 2014). Task outcome manipulated along the communication goal is often classified into two categories based on Pica, Kanagy and Falodun's (1993) taxonomy of task features: convergent and divergent. Convergent outcome refers to a task feature requiring learners to arrive at consensus to achieve the task goal. In contrast, divergent outcome is a task feature that does not require learners to agree on an outcome, and thus often leads learners to debate or disagree with each other. These convergent and divergent task outcomes have been postulated to determine the opportunities for learners to receive input, provide feedback, and modify language production (Pica et al., 1993).

Previous research showed that task outcome manipulated along convergent and divergent goals impacted the occurrence of negotiation for meaning, an interactional feature central to L2 learning (Long, 1989, 1996). For instance, tasks with a convergent outcome enhanced turn exchanges, encouraged learners to engage more in negotiation for meaning (Duff, 1986; Jackson, 2007; Nunan, 1989), and promoted learners' collaboration when they worked toward a single task goal (Skehan, 2001; Wegerif, Mercer & Dawes, 1999). However, divergent tasks were more likely to induce learners to use more syntactic complex structures in their language production than convergent tasks (Skehan & Foster, 2001).

Despite providing insights into the kind of interaction that each task outcome promoted, this body of research examined the impact of task outcome only on the cognitive aspect of interaction, with negotiation for meaning and language production (i.e., words and turns) used predominantly as dependent variables. In addition, little research addresses whether task outcome affects social and emotional aspects of interaction. Considering interaction as a cognitive, emotional and social phenomenon (Batstone, 2010; Swain, 2013;

van Lier, 2002), research on the impact of task outcome on learners' task performance needs to expand to investigate not only whether task outcome affects cognitive aspect but also emotional and social aspects of interaction, for example, by using a new construct such as learner engagement conceptualized as a multifaceted construct (Philp & Duchesne, 2016; Svalberg, 2009).

Recent task research has documented the impact of task features on learners' task engagement. Much of this task research on engagement has been situated in Philp and Duchesne's framework (2016), which conceptualized engagement as having four sub-components: cognitive, behavioral, emotional and social (Baralt et al., 2016; Lambert et al., 2016; Phung, 2016; Qiu & Lo, 2016). As discussed earlier, it seems that the behavioral component overlaps with other components. That is, when learners are cognitively, emotionally and socially engaged in tasks, they probably demonstrate this engagement in their behavior. Therefore, behavioral engagement is arguably excludable from being a component of engagement. Besides, many studies that used Philp and Duchesne's model operationalized task engagement by using common constructs such as negotiation for meaning, language output (e.g., words, clauses, turns), and back channels (Lambert et al., 2016; Phung, 2016; Qiu & Lo, 2016). This points to the necessity of including new constructs in the operationalization of engagement to provide more comprehensive descriptions of each engagement type.

In light of these issues, a model of learner engagement based on Philp and Duchesne's model was proposed. Learner engagement reflecting three different dimensions (e.g., cognitive, emotional and social) refers to learners' involvement in a task that they are asked to carry out. With a specific reference to learners as an agent of the engagement process and tasks as an activity that has a non-linguistic goal, three components of learner engagement were therefore conceptualized and operationalized differently from Duchesne and Philp's framework. Specifically, cognitive engagement was learner's attention and discussion of task content and language aspects, which was therefore assessed by the number of idea units and LREs. Social engagement was social relationship operationalized as learners' responsiveness in interaction. Emotional engagement was learners' emotions that arouse during interaction due to the tasks or the learners themselves, operationalized as episodes of laughs.

To summarize, task outcome manipulated along task goal orientation impacted learners' negotiation for meaning and language production (Duff, 1986; Jackson, 2007; Skehan & Foster, 2001). However, little is known about whether task outcome (i.e.,

convergent versus divergent outcome) influences learner engagement perceived as a multifaceted construct reflecting cognitive, social and emotional dimensions. As stated earlier, convergent and divergent tasks have been shown to promote different kinds of interaction. It was proposed that the convergent outcome that requires learners to arrive at consensus would affect positively all dimensions of learner engagement. In contrast, the divergent outcome that was likely to induce debate and disagreement would negatively affect learners' social relationship and/or emotions. Therefore, the following research question was formulated: Does task outcome affect L2 learners' engagement in task interaction?

## **Method**

### **Participants**

The participants were 32 Vietnamese learners (26 females and 6 males), recruited from two EFL classes at a university in Vietnam. They ranged in age from 20 to 25 years old ( $M=22.44$ ;  $SD= 1.13$ ), and were enrolled in an undergraduate program at the time of data collection. Their average English proficiency based on paper-based TOEFL test was 479.82 ( $SD = 58.84$ ).

### **Design**

A within-groups design was used to examine the effect of task outcome on learner engagement. The independent variable was the task outcome operationalized in terms of task goal orientation: convergent versus divergent outcomes. While convergent outcome was manipulated by asking learners to discuss and agree on a list of problems and solutions, divergent outcome required learners to defend their opinions and argue against partner's viewpoint. The dependent variable was learner engagement measured through three subcomponents: cognitive, emotional and social engagement. Cognitive engagement was learners' attention and discussion particularly about task content and language aspects. Emotional engagement was learners' positive emotions aroused during interaction: enjoyment, interest, excitement, enthusiasm and pleasure (see Philp & Duchesne, 2016; Baralt et al., 2016; Phung, 2016). Finally, social engagement was learners' social relationship that reflects in their responsiveness during interaction.

### **Materials**

The tasks were convergent and divergent tasks (Appendix 1). The convergent task asked the learners to discuss to identify the problems existing in their university and propose solutions to these problems. At the end of the task, the learners submitted to the teacher a list of problems and solutions that they agreed on, which they used later in order to write a report. The divergent task asked the learners to defend their preference towards shopping online or at

the store. At the end of the task, the learners submitted a list of reasons to explain their preference as well as reasons to argue against their partner's choice. These lists were used in order to write a report that evaluates students' shopping behavior.

The materials also included an emotional engagement questionnaire and an exit questionnaire (Appendix 2). The emotional engagement questionnaire taken from Study 1 consisted of five Likert scale questions that investigated learners' emotional engagement. As described in Study 1, the five questions asked learners to indicate using a 10-point scale how much they felt enjoyable, interested, excited, enthusiastic or pleased. The reliability of the question items using Cronbach's alpha was .89.

The exit questionnaire asked the learners to provide descriptive answers to eight open-ended questions adapted from Baralt et al. (2016) that aimed to gain insight to learners' perceptions about their interactions while carrying out the two tasks. Specifically, the questions asked the learners to comment on their cognitive, social and emotional engagement as well as their overall perception about the tasks, task outcome, and task topic. All questions were pilot tested to make sure that they were clear to the participants. The instructions emphasized that the participants had to compare the two tasks when providing written responses. Thus, each question had two answer boxes next to each other so that the participants could compare their answers to the same question for each task.

### **Procedure**

The participants carried out the tasks during their regularly scheduled English class meetings, with one class ( $n = 16$ ) in the morning and the other class ( $n = 16$ ) in the afternoon. First, the researcher introduced the research project and answered questions from the participants (5 minutes) who completed the consent and background information forms (10 minutes). Then, the participants were asked to carry out the tasks in pairs within 10 minutes. To control the effect of speech quantity across pairs, the time of task allotted was ten minutes for all pairs. To counterbalance task sequence, eight pairs from the first class were asked to do the convergent task first and then the divergent task whereas eight pairs in the second class did the tasks in the opposite order. At the end of each task, the participants completed the emotional engagement questionnaire. Their interactions were audio-recorded using a portable voice recorder. One day after the data collection sessions, the participants received two recordings of their interactions. To facilitate comparison between two tasks, the learners were required to listen to their interaction recordings before completing the exit questionnaire. The exit questionnaires were returned to the researcher within two days.

## Analysis

The audio-recordings were transcribed by a research assistant and verified by the researcher. The transcripts were coded for three kinds of engagement per singular participant. Following the same guidelines used in Study 1, cognitive engagement was operationalized as idea units and LREs. As described earlier, idea units were a segment of information, idea or comment about the theme under discussion (see McCarthy, 1991; Ellis & Barkhuizen, 2005; Lambert et al., 2016). An example of idea units is shown in Excerpt 1 taken from Pair 02 in the divergent task.

### Excerpt 1. Idea units

- 1 P1: For shopping at the store you have a chance to touch the material of the products and also you can fit on your body whether it fit with your measurement or not and also you have a chance to purchase –uh can reduce the cost with the sell seller

- 2 P2: I think shopping online you can also purchase price with the sale off

Excerpt 1 has four idea units. Learner 1 produced three idea units to argue for the benefits of shopping at the store or the market: (1) *you have a chance to touch the material of the products*, (2) *you can fit on your body whether it fit with your measurement*, and (3) *you have a chance to purchase–uh can reduce the cost with the seller*. Learner 2 generated one idea unit to provide a rationale for her preference towards shopping online: *you can also purchase price with the sale off*.

LREs were a talk episode in which the learners either initiated or responded to the language problem (Swain & Lapkin, 1998). Excerpt 2 taken from Pair 11 in the convergent task shows a LRE in which learner 2 struggled to remember the word *blame* (line 1), and asked for help (line 3), but he was able to retrieve the word (line 5) despite being suggested using another word (line 4).

### Excerpt 2. A LRE

- 1 P2: Yes so we cannot uh we cannot uh *đồ thừa* [*blame*] I forgot that word
- 2 P1: [*laughing*]
- 3 P2: Can you help me?
- 4 P1: You can change another word
- 5 P2: Ah blame uh blame for the teacher
- 6 P1: Uh

7 P2: Blame for the method of the teacher yeah blame

8 P1: Blame yeah

Emotional engagement was learners' positive emotion operationalized as instances of laughs. Excerpt 3 taken from Pair 01 in the divergent task shows the learners' positive emotions.

Excerpt 3. A laugh episode

1 P1: You mean in our life think about I think we are the... our country they uh maybe we are the agriculture people so I think the shopping traditional market can help a to... I mean sorry how can I say it

2 P2: Because you cannot support your idea [*laughing*]

3 P1 [*laughing*] but I Think ... it's always in our mind in my mind I was born in a country side a rural area so I love shopping traditional market

In Excerpt 3, when the learner 1 had difficulties to explain why he liked shopping at the traditional market (line 1), the learner 2 laughed and commented that her partner did not have strong rationales for his preference (line 2). This comment also made the learner 1 laugh accordingly (line 3).

Social engagement was learners' social relationship operationalized as instances of responsiveness. An instance of responsiveness was a talk episode in which learners respond and engage with their partner's contribution as demonstrated through acknowledging, repeating, commenting or developing each other's idea. An instance of responsiveness taken from pair 15 in the divergent task is shown in Excerpt 4.

Excerpt 4. An instance of responsiveness

1 P1: How about the unemployment at university A [*pseudonym*]?

2 P2: It's hard to say [*laughing*] but you try your best to learn more and more to get many kinds of certificates and you become successful

3 P1: uh yes ...

Excerpt 4 showed an instance of responsiveness between two learners on the theme of unemployment. When learner 1 initiated the unemployment problem at university A (line 1), learner 2 responded by commenting *hard to say* (line 2) and reasoning *you try your best to learn more and more to get many kinds of certificates and you become successful* (line 2). Her partner then agreed with this comment *uh yes* (line 3).

For inter-reliability of the coding, a second rater coded independently 25% of the data set. The Pearson correlation  $r$  was .92 for idea units, .86 for LREs, .96 for laugh episodes, and .97 for responsiveness instances. Scores for three kinds of engagement per participant were

calculated by summing all instances in each category. Paired-samples *t*-tests were conducted to identify the effect of task outcome on learner engagement. For the emotional engagement questionnaire, a score was obtained by summing the five items on each questionnaire, and then comparing them using a paired-samples *t*-test. Written comments from the exit questionnaire were analyzed qualitatively to supplement the quantitative results.

### Results

To investigate the effect of task outcome on learner engagement, all instances of engagement were summed in each category. Table 2 shows the instances of engagement identified in the transcripts between two tasks.

Table 2

*Learner engagement by tasks*

Engagement	Convergent task		Divergent task	
	M	SD	M	SD
Cognitive	44.22	18.87	32.94	14.76
Social	24.90	13.97	14.22	9.58
Emotional	3.56	3.23	2.59	2.92

As shown in Table 2, the learners demonstrated greater engagement in the convergent task than the divergent task across all three categories. Paired-samples *t*-tests with an adjusted alpha level of .017 (.05/3) showed significant difference in cognitive engagement:  $t(31) = 8.56, p = .001, d = 1.79$ , and social engagement:  $t(31) = 6.69, p = .001, d = 1.34$ . However, there was no significant difference in emotional engagement:  $t(31) = 1.32, p = .196, d = .24$ . The results of the emotional engagement questionnaire similarly showed that there was no difference in the learners' reported emotional engagement based on task outcomes:  $t(31) = .92, p = .36, d = .16$

To illustrate the learners' difference in cognitive and social engagement, Excerpts 4 and 5 taken from Pair 11 are shown below. In Excerpt 4, the learners produced 17 instances of idea units.

Excerpt 4. Convergent task

- 1 P1: I think that we have to try to talk...yeah the first problem is about the projectors
- 2 P2: Yeah

- 3 P1: and the second problem...uh...the first problem is about the projectors...projectors
- 4 P2: Ya
- 5 P1: our school have to fix it...I know...what...uh...uh..
- 6 P2: give the solutions
- 7 P1: yeah give solutions...yeah...to change the new projectors
- 8 P2: and spend more money for other facilities
- 9 P1: yes for the students for the teachers...the students to should study and learn...teaching method change...yes or something like that and the next problem is about...
- 10 P2: Free
- 11 P1: fees yes
- 12 P2: fees [laughing]
- 13 P1: Ya fees about uh...[laughing]
- 14 P2: [laughing] government
- 15 P1: yeah government has many politics right
- 16 P2: I don't know
- 17 P1: politics...
- 18 P2: You mean chính sách [*policies*] I'm not sure
- 19 P1: ya the government has to do that recuse cost
- 20 P2: Ya
- 21 P1: help... support for poor students to go to school yes yeah
- 22 P2: yeah we will...how do you think about the situation that the students don't want to practice in class...uh...I mean that the students ask...uh sorry teacher
- 23 P1: the teachers ask
- 24 P2: ...the teachers ask the students to practice but they don't want to do
- 25 P1: so the teachers must be a friend
- 26 P2: How do you do
- 27 P1: must be a friend of the students and make a friendly atmosphere
- 28 P2: Yes
- 29 P1: in
- 30 P2: yeah but sometimes the teachers are very easy...you know
- 31 P1: Ya



32 P2: easy...they are easy and they make a friendly atmosphere in class but in this situation the students...I mean the students don't feel afraid about the teacher...

33 P1: Yes

34 P2: and students lazy and uh they don't want to do exercise uh and just stay in class

In Excerpt 4, the learner exchanged many turns and produced many idea units (17 instances): projector problem (lines 1–4), school have to fix projectors (line 5), change projectors (lines 6–7), spend more money (line 8), students should study and learn (line 9), change teaching method (line 9), fee (line 10–13), governmental policies (lines 14–19), support for poor students (line 21), students don't want to practice when the teacher asks (line 22–24), teacher as a friend (line 25), create friendly atmosphere (line 27), teachers are easy (line 30), student not afraid of teachers (line 32), lazy students (line 34), students don't do exercise (line 34), just stay in class (line 34).

In contrast, the learners in the divergent task (Excerpt 5) did not have many exchanges of turns and produced fewer idea units (10 instances).

Excerpt 5. Divergent task

- 1 P1: Hi nowadays uh...internet social networking and social media...uh is...makes it makes our life more easier ...so because because I I think I really like online shopping ...so you think about shopping online I mean I choose shopping online than shopping store market
- 2 P2 In my opinion uh...I like shopping on the market uh uh than shopping online ...*[long pause]* because I think shopping on the market I can...uh... choose ...choose directly...uh...product ...uh ...that I can like I like I think so ...
- 3 P1: For me I like shopping online more than shopping market ...uh...that I like shopping online first I... I think shopping online is quite easier nowadays...uh...in...uh...on on my day I just spend a lot of time... to face my laptop to see more and more somethings in... shopping online
- 4 P2 I don't agree with you because I think... uh ...I think I like go shopping... in the super...supermarket such as...because I can...uh I can go shopping with my friends for our relax...and...uh...*[long pause]* I like the convenience of...uh... the supermarket uh and I can choose any... product such as I like

- and I can ... I can ... choose ...uh...the...[*laughing*]
- 5 P1: [*laughing*] uh I think...shopping in the market is spend a lot of time to...move from one market to another market and you must spend a lot of time I think very uh...and super uh and uh shopping in the supermarket you must use car motorbike or bicycle go to the market and I think shopping online is more convenient..
- 6 P2 Uh...uh however I think shopping online I can no exactly about the quality of the shop
- 7 P1: Nowadays there are many a lot a lot of shopping online that you choose so you can choose you believe ...
- 8 P2 In contrast I don't believe quality of product on shopping online ...
- 9 P1: If you between really...[*long pause*]
- 10 P2 Because...I think go to the ... market... will...uh...uh...will have reality of product than shopping online [*long pause*]
- 11 P1: Ok we have... uh... we have many reason for this so but for me I also like shopping online and you like shopping market

In Excerpt 5, the learners produced 10 instances of idea units: social network and media make life easier (line 1), choose produce directly (line 2), online shopping is easier (line 2), just spend time with the laptop (line 2), shopping with friends for relaxation (line 4), convenience of the supermarket (line 4), spend time for commuting (line 5), use motorbike or bicycle (line 5), cannot know the quality exactly (line 6), and lots of shops that you can believe (line 7). Besides, both Excerpts 4 and 5 showed that very few instances of LREs occurred except two LREs in Excerpt 4 (lines 10–13, and lines 15–19). This reflected the small number of LREs observed in both tasks across pairs in two tasks: divergent ( $M=2.07$ ,  $SD=2.19$ ) and convergent ( $M=1.80$ ,  $SD=1.89$ ).

In terms of their social engagement, the learners in the convergent task (Excerpt 4) showed greater social engagement as reflected in seven instances of responsiveness such as: provide back channels to show agreement (lines 1–4, lines 30–33, and lines 34–35), continue partner's idea (lines 6–7), collaboratively discuss the solution (lines 8–21), complete partners' turn (lines 22–24), and ask for clarification (lines 25–29). In contrast, the learners in the divergent task (Excerpt 5) showed low social engagement as reflected in their parallel provision of reasons to argue for their preference. Only one instance of responsiveness that showed their social engagement was observed (lines 6–8). In this responsiveness instance, the learner 2 (P2) argued that online shoppers could not *know exactly about the quality of the*

*shop* (line 6). To respond to this argument, learner 1 (P1) said that there were online shops that could be trusted –*there are a lot of shopping online that you choose so you can choose you believe* (line 7). The less social engagement could be also seen in line 11 where the learner 1 concluded that they did not agree with each other due to their different preferences: *so for me I like shopping online and you like shopping market.*

### **Discussion**

The goal of the current study was to investigate whether task outcome impacted learner engagement in terms of cognitive, social and emotional dimensions. The results showed that the learners demonstrated greater cognitive and social engagement (i.e., more instances of idea units and responsiveness) in the convergent task than the divergent task. However, there was no difference in emotional engagement which was measured as behavior during the task or the learners' perceptions.

Learners' greater generation of idea units in the convergent tasks suggests that when the learners converged on the same task goal, they were more likely to pay attention to each other's ideas and discuss them collaboratively to reach a consensus. This finding supports previous research that convergent outcome tasks encouraged learners to talk, negotiate for meaning, and exchange more turns (Duff, 1986; Jackson, 2007; Skehan & Foster, 2001). The learners' greater need to pay attention and discuss each other's ideas during the convergent task was confirmed by comments on the exit questionnaire:

*'It is important for us to listen to each other's ideas in order to evaluate the problems and solutions that existed at our university when we proposed...so that we could agree on the list in the end...we also had to reason whether the solutions to the problems were reasonable and applicable...'* [translated from Vietnamese, Pair 05, Convergent task].

However, when the learners were asked to debate and defend their opinions (i.e., divergent outcome), the learners did not seem to pay attention to each other's ideas, but just focused on their own arguments. This reflected one of the learners' comments (Pair 16) in the divergent task:

*"I could not think of many ideas to argue against my partner...so I just focused on my reasons and did not care much about whatever she [my partner] said because my role was to disagree with my friend...however sometimes I ran out of ideas to argue against her...this task was difficult"* [translated from Vietnamese, Divergent task]

Thus, it appears that tasks manipulated along the task outcome affected learners' attention and mental effort (i.e., cognitive engagement) when producing content.

Although the learners showed difference in cognitive engagement in terms of idea units, the results indicated that the number of LREs observed in both tasks was low. This finding supports previous research which argued that in meaning-focused tasks, the learners tended to focus on conveying the messages rather than attending to language form (Nunan, 1989; Pica, 2002; Pica et al., 1993). The small number of LREs in both tasks also corroborates previous research findings that learners rarely generated LREs in communicative tasks (Philp et al., 2010; Williams, 2001). In addition, contrary to research which reported that tasks with convergent outcome induced more negotiation of meaning than those with divergent outcome (Duff, 1986; Skehan & Foster, 2001), the current study showed that task outcome did not affect learners' discussion of language problems. It is possible that proficiency may moderate the effect of task outcome on the occurrence of LREs (Leeser, 2004; Williams, 2001). However, since the current study did not focus on proficiency variable, this speculation is simply suggestive.

Another main finding was that the learners' social engagement was greater in the convergent task than the divergent task. The finding suggests that the convergent task outcome encouraged the learners to engage more socially with each other. The comment of one learner in the convergent task showed this tendency:

*'Through doing this task, I had a good interaction with my partner. Specifically, due to the task requirement we could build the similar perceptions about one issue...and we agreed on many problems and solutions at our university...and practiced expressing personal opinions about issues that both of us shared the same view'* [translated from Vietnamese, Pair 10, Convergent task].

The other participant of this pair also commented positively on their social engagement:

*"In this task I often used expressions that I learnt to show my agreement, helped and supported my friend when she prompted an idea but could not finish it... my friend also jumped to help me when I did not know how to express my ideas...because we discussed and agreed with each other, we ended up having too many reasons especially for students' dropout at our university..."* [translated from Vietnamese, Pair 10, Convergent task].

These comments highlight that learners in the convergent task were socially engaged as reflected through their willingness to listen to each other (Baralt et al., 2016; Svalberg, 2009),

reciprocity (Damon & Phelps, 1989; Dao & McDonough, 2017), and mutual support (Philp & Duchesne, 2016; Storch, 2008).

In contrast, the divergent outcome task tended to lower the learners' social engagement as reflected in the comments from two participants in the divergent task:

*I felt difficult to interact because we always disagreed with each other...that sometimes made it difficult to continue interacting because whatever I said my partner always rejected and argued for his preference [translated from Vietnamese, Pair 07, Divergent task].*

Another learner also reported the difficulties in connecting socially with her partner in the task when they were required to argue against each other:

*'Sometimes I agreed with my partner but because I had to argue for my shopping preference I did not respond to her [partner], I meant I ignored her opinions. That's why I felt bored and wanted to end the conversation ...just wanted to get the task done because I had disagreement even in myself' [translated from Vietnamese, Divergent task].*

These comments showed that the learners in the divergent task did not seem to perceive the task goal (i.e., divergent outcome) to be meaningful when asked to argue against each other. When tasks goals are not perceived to be meaningful, the learners might not feel encouraged, thus invest less in doing the task (Egbert, 2003; Maehr, 1984; see Lambert & Minn, 2007), and fail to use all available resources to complete the task (Bygate & Samuda, 2009).

Therefore, the learners' negative perception toward the meaning of the task goal in the divergent task seemed to affect the degree of their willingness to participate and engage socially with the partners (see Baralt et al., 2016; Svalberg, 2009). In addition, the fact that the core learners ignored partner's opinions as shown in Excerpt 13 indicated that they did not seem to interact collaboratively but talked with low mutuality (Dao & McDonough, 2017; Galaczi, 2008), or just passively received information/ideas from partners (Reeve, 2012). This therefore might have led to less social engagement.

In addition, task outcome did not appear to affect significantly the learner's emotional engagement. Learners' written responses in the exit questionnaire indicated their positive emotions for both tasks in terms of topics and content: convergent task (e.g., very fun and hilarious, exciting, interestingly 'hot and realistic' topic) and divergent task (e.g., exciting, curious, familiar topic but interesting). The learners' positive reaction to both tasks corroborated previous research findings that reported learners' positive emotions in the tasks

that they preferred (Egbert, 2003; Phung, 2016) or the tasks that they could generate their own task contents (Lambert & Minn, 2007; Lambert et al., 2016).

The findings have some pedagogical implications. First, the current study suggests that teachers could use convergent tasks in order to promote learners' cognitive and social engagement in classroom activities. Second, teachers who have learners with similar characteristics to the participants of the current study should use divergent tasks with care because these divergent tasks might cause greater disagreement that can lower learners' social engagement. In addition, because the learners of the current study selected the task topic (e.g., their university) that related to their real life experience, they reported to prefer the contents they generated. Thus, the study suggests that letting the learners select their topics and the task content that resonate with their experience would create positive impacts on their performance (Egbert, 2003; Phung, 2016; Lambert et al., 2016). One possible way to elicit information about task topics that the learners prefer is to survey their preferences at the beginning of the course.

The study has limitations that need to be kept in mind when interpreting the results. Although the tasks used in the present study represented the typical tasks that are used frequently in the participants' EFL classes, they did not reflect a wide range of tasks that teachers could use in the program. Thus, it is worth exploring different types of tasks that have divergent and convergent outcomes to confirm whether the impacts of task outcome maintain across tasks. In addition, the study did not explore the individual differences such as learners' belief or mindset (see Sato, 2016) as well as contextual factors that may also play a role in affecting how they engage in tasks, particularly those tasks that require the interactants to defend their arguments (i.e., divergent or debate tasks). Thus, future research may need to explore the impact of these factors in combination with task outcomes to shed more light on their possible combined effect on learner engagement.

### **Conclusion**

The current study provides evidence that task outcome operationalized as divergent versus convergent goal orientation affected the learner's cognitive and social engagement. The findings suggest that designing tasks with a convergent outcome is potentially effective in enhancing generation of idea units and creating a better social relationship between learners. The study also points to the importance of considering task features, particularly task outcome, when selecting and designing tasks for effective language learning activities. To conclude, the study provides insight into peer task-based interaction in light of learner

engagement, with task outcome affecting learner engagement both in the cognitive and social aspects of interaction.

### **Connecting Study 1 and Study 2 to Study 3**

Study 1 and Study 2 demonstrated that there were differences in learner engagement due to learner proficiency and task outcome. However, the first two studies were not designed to explore whether there was a relationship between learner engagement and L2 learning. To fill this gap, the third study in the current dissertation was conducted to investigate whether learner engagement is predictive of L2 English question development.



### Chapter 4. Study 3

#### Identifying the impact of learner engagement on L2 English question formation

To date, much of L2 interaction research situated in the cognitive framework has sought to account for the relationship between interaction and subsequent L2 production or development (e.g., Doughty & Williams, 1998; Gass, 1997; 2003; Gass & Mackey, 2007; Long, 1996; Mackey, Abuhl, & Gass, 2012; Mackey & Goo, 2007; Mackey & Sachs, 2012). An example of this research is the studies that reported a positive association between interactional features and L2 question development following Pienemann and Johnston's (1987) framework. For instance, recasts, modified output and LREs have been shown to facilitate L2 question development for both adult learners (Kim, 2012; Kim, Payant & Pearson, 2015; Mackey, 1999; 2006; Mackey & Philp, 1998) and young learners (Mackey & Oliver, 2002). In addition, previous studies have identified which interactional features were predictors of question development. They included learners' responses to recasts (McDonough & Mackey, 2006), and modified output produced in response to clarification requests (McDonough, 2005). Interactional processes such as structural priming have also been shown to facilitate question development (McDonough & Mackey, 2008). In sum, these studies showed that different interactional features are facilitative of L2 question development.

However, this existing research has focused largely on the relationship between cognitive processes and L2 question development. For instance, many of the independent variables investigated in this body of research reflected only cognitive processes such as recast, modified output, LREs, negotiation of meaning (e.g., clarification requests) and structural priming. Thus, they have been criticized for not considering social factors that have been shown to affect interaction (Storch, 2001; Watanabe & Swain, 2007) and L2 knowledge construction (Imai, 2010). Considering interaction also as a social phenomenon (Atkinson, 2002; Batstone, 2010; Block, 2003; Firth & Wagner, 1997; Toth & Davin, 2016), L2 research from the social perspective has documented a wide range of social factors that affected L2 production during interaction. These include, for example, social context of interaction and L2 learning (Duff & Kobayashi, 2010), interlocutor relationship (Storch, 2001; Watanabe & Swain, 2007), participatory structure of interaction (Jenks, 2007; Yule & MacDonald, 1990), instructional context (Lyster & Mori, 2006; Oliver & Mackey, 2003), and learner background (Bigelow, DelMas, Hansen & Tarone, 2006). Despite their impact on L2 interaction, little research has explored whether social factors have a direct role in L2 question development.

Among many social factors mentioned earlier, learners' social relationship during interaction has been shown to affect the occurrence of L2 learning opportunities such as LREs (Choi & Iwashita, 2016; Fernández Dobao, 2014; Storch, 2008; Swain & Lapkin, 1998). However, it is unknown whether this social factor is associated with L2 question development.

Apart from cognitive and social factors, L2 research also recognizes the influence of affective factors in language production. Many studies have investigated affective factors that are closely related to motivational aspects of interlocutor behavior and their personality characteristics such as introversion/extroversion, and intuition/sensing (e.g., Dornyi, 1998; 2005; Ehrman, Leaver & Oxford, 2003; Gardner, 2001; Moody, 1988). Although these studies have advanced the current knowledge about the important role of affective variables in language acquisition, these variables have received less attention in interaction research as compared to cognitive and social factors (Imai, 2010; Swain, 2013). It appears that emotion and cognition are interdependent, with emotions affecting learners' motivation, investment, and cognitive processes in L2 learning (Swain, 2013; Waninge, 2015). In addition, previous research showed that there was a positive correlation between positive affective responses and L2 task performance (MacIntyre & Legatto, 2011; MacIntyre & Serroul, 2015). This therefore calls for bringing these affective factors particularly emotion to the foreground of current L2 research, together with cognitive and social factors.

Recent interaction research that investigated task engagement has been a pioneering attempt to investigate cognitive, emotional and social factors altogether (Baralt et al., 2016; Lambert et al., 2016; Phung, 2016; Storch, 2008). However, these studies just examined the effects of task factors and implementation conditions on different aspects of task engagement; they did not consider the effects of engagement on L2 acquisition. Storch's (2008) study is among the few studies that examined the impact of cognitive engagement on language learning. Operationalizing cognitive engagement as the extent of learners' discussion of language features, she found that elaborate cognitive engagement (i.e. deliberately extensive discussion of language form) facilitated more consolidation of linguistic items that were discussed than limited cognitive engagement (i.e., mere repetition, acknowledgement signals or no response to language problems). However, Storch's study focused narrowly on the relationship between cognitive engagement and L2 vocabulary learning, without considering social and emotional engagement. Thus, it is still unclear whether social and emotional engagements play a role in L2 lexical learning.

To summarize, L2 interaction research has demonstrated that different interactional features (e.g., recasts and modified output) are predictive of L2 question development.

However, this research has tended to draw solely on the cognitive approaches without considering social or affective/emotional factors. Thus, this study attempts to bring together cognitive, affective and social perspectives to investigate the effects of interaction on L2 question development by exploring a new construct, learner engagement, conceived as a multidimensional construct that arguably comprises cognitive, emotional and social components as explained in Study 1 and Study 2. As discussed earlier, previous research about task engagement has not shown a direct link between engagement and language development. Thus, the current study investigated whether learner engagement predicts L2 question development.

## **Method**

### **Participants**

The participants were 27 Vietnamese learners of English as a foreign language (EFL), recruited from an EFL class at a university in Vietnam. At the time of data collection, they were enrolled in various undergraduate degree programs. Their age ranged from 18 to 21 years old ( $M = 18.59$ ,  $SD = .85$ ). The average paper-based TOEFL score of 20 participants was 398.85 ( $SD = 36.22$ ). Seven participants were unable to take the test because of scheduling conflicts.

### **Design**

This study used an associational design to investigate whether learner engagement predicts L2 question development. The predictor variables were cognitive, emotional, and social engagement subcomponents. The outcome variable was L2 question development, operationalized as a learners' advance to a higher stage in Pieneman and Johnston's six-stage developmental sequence (see Appendix 3). To determine learners' developmental stage of L2 questions, this study required learners to produce at least two different questions from the same stage, as suggested in previous research (Kim, 2012; Mackey, 2000; McDonough, 2005; Spada & Lightbown, 1993). Development of L2 questions was evidenced, for example, when learners who were at Stage 3 (*Wh*-fronting and *Do*-fronting) on the pretests moved to Stage 4 (Pseudo-inversion/yes-no inversion) or Stage 5 (aux-second) as determined by the posttests.

### **Target structure**

L2 English question formation was selected as the target structure for both theoretical and practical reasons. First, previous studies showed that question formation represents L2 acquisition in general (Pienemann, 1998, 2007), and question developmental stages (Pienemann & Johnston, 1987; Pieneman, Johnston & Brindley, 1988; Spada & Lightbown, 1999) have been tested in empirical research that reported relatively robust results. Second,

questions were one of the target structures in the participants' syllabus. In addition, the previous English teacher who taught the participants reported that the learners at this level had difficulty producing wh-questions.

### **Materials**

The materials consisted of five communicative tasks that were designed to elicit questions (Appendix 1). The first task was a true/false statement that required learners to ask different questions to decide whether their partner's statements were true or false. The second task was a vacation task in which learners asked questions about their last vacation and discussed whether their partner should visit that place. The third task was an honesty task that required the learners to ask questions to decide whether their partners were honest about their excuses for their mistakes. The fourth task was called a fear task that asked the learners to ask questions about their phobia experience and discuss how to overcome these fears. The last task was a job interview task in which two learners took turns to play the role of the interviewer (employer) and the interviewee (job candidate) based on given job ads. The interviewer was asked to make a decision whether the candidate was a good fit for the job.

The pretests and posttest tasks were a biography task and an interrogation task (Appendix 1). For the biography task, one learner played a role of a reporter interviewing another learner who played a role of a famous person in order to write a newspaper article. For the interrogation task, each learner was given a scenario, e.g., a theft or a murder. One learner played a police officer wanting to find out the murder or thief and interrogated another learner, who played a suspect, about their alibi. Two similar versions of a biography task and an interrogation task were created and used for the pre-test and posttest.

The materials also consisted of an emotional engagement questionnaire that asked the learners to rate their emotional level based on a 10-point scale (Appendix 2). This emotional engagement questionnaire was taken from Study 1 and Study 2, so they consisted of the same five items that asked the learners about their enjoyment, interest, excitement and pleasure while doing the tasks.

### **Procedure**

Data were collected during the participant's regularly scheduled EFL classes over a five-week period. The participants had two scheduled classes per week. Table 3 illustrates the data collection procedure. The participants carried out tasks in pairs, and their interactions were audio-recorded using a portable recorder.

Table 3

### *Procedure*

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Week 1	Day 1	Introduction of the study, consent form and background questionnaire Regular class activities
Week 2	Day 2	A pre-test: a biography task and an interrogation task Regular class activities
	Day 3	Task 1: True/False statement (10 minutes) and emotion questionnaire Regular class activities
Week 3	Day 4	Task 2: Vacation (10 minutes) and emotion questionnaire Regular class activities
	Day 5	Task 3: Honesty task (10 minutes) and emotion questionnaire Regular class activities
Week 4	Day 6	Task 4: Fear task (10 minutes) and emotion questionnaire Regular class activities
	Day 7	Task 5: Job interview task (10 minutes) and emotion questionnaire Regular class activities
Week 5	Day 8	A post-test: a biography task and an interrogation task Regular task activities

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### **Analysis**

The audio-recorded interactions of the pre-test and post-test were transcribed by a research assistant and verified by the researcher. Questions generated in the interactions were identified and assigned to a developmental stage based on Pieneman and Johnston's framework (1987). Based on these results, each learner was given a developmental stage of L2 questions at the pre-test and at the post-test. Learners were then classified into two categories based on the pre-test and post-test scores: *developed* and *not developed*. The *developed* category included learners who moved to a higher stage in the sequence of English question development after completing the tasks. Previous research reported that tasks designed to elicit questions could help learners reach higher developmental stage of questions without explicit intervention (Mackey & Philp, 1998). The *not developed* category included learners whose question development stage was the same between the pre-test and the post-test.

Learners' interactions of the five tasks were transcribed and coded for cognitive, emotional and social engagement. Cognitive engagement was operationalized as the question

idea units, answer idea units, and LREs following the guideline in Study 1 and Study 2.

Excerpt 1 taken from Pair 08 in Job interview task illustrates two question idea units.

Excerpt 1. Cognitive engagement: Question idea units

- 1 P1: Where you attending study now?
- 2 P2: Uh I attending study in big school at HCM university about feature design
- 3 P1: What prelevant [relevant] experience you have?
- 4 P2: I have many ideas ...and I update modern and I uh I have look good fashion

In Excerpt 1, the learner P1 produced two question idea units: *where you attending study now* (line 1) and *what prelevant [relevant] experience you have* (line 3).

Excerpt 2 taken from Pair 02 in the Fear task gives examples of answer idea units. In Excerpt 2, the learner P2 produced two instances of answer idea units: *I fear most dog bites* (line 2) and *I have been bite by dogs* (line 2).

Excerpt 2. Cognitive engagement: Answer idea units

- 1 P1: What are you fear?
- 2 P2: I fear most dog bites...uh...I have been bite by dogs

Excerpt 3 taken from the Vacation task shows a LRE where learners discussed a lexical item *fruit jam*. In Excerpt 3, when the learner P1 encountered difficulty remembering the lexical item, he used his L1 and asked for help from his partner (line 1), but his partner could not provide an answer (line 2). The learner P1 then switched to use another word *sweeties* (line 3).

Excerpt 3. Cognitive engagement: A LRE

- 1 P1: I eat strawberry...I drink milk and uh .... mức trái cây [fruit jam] you know?
- 2 P2: Mức uh...
- 3 P1 Uh maybe sweeties and uh I eat uh I uh eat fried meat

Emotional engagement was learners' positive emotions operationalized as instances of laughs. Excerpt 4 taken Pair 07 in Job interview task shows an instance of laugh. When the learner P2 responded that she had IELTS band score 7, she laughed (line 2). Her partner expressed surprise and laughed accordingly (line 3). The learner 2 later said she lied (line 4).

Excerpt 4. Emotional engagement: A laugh episode

- 1 P1: What's certificate do you have?
- 2 P2: I have English IETLS 7 certificate [laugh]
- 3 P1: Wow [laugh]
- 4 P2: I fake [laugh]

Finally, social engagement was learners' social relationship operationalized as learners' responsiveness in interaction. The learners' responsiveness referred to the case where the learner commented, developed partner's idea by completing partner's utterance or adding information, acknowledged as reflected in backchannels or repetition of partner's words, and encouraged each other to talk. Excerpt 5, taken from Pair 06 (Fear task) illustrates learners' responsiveness through comment. In Excerpt 5, the learner 1 expressed that she has been scared of her bad experience until now (line 1), the learner 2 commented *that's so terrible* (line 2)

Excerpt 5. Responsiveness: Comment

- 1 P1: Don't uh remember because I am afraid [afraid] I was afraid [afraid] bad experience ...till now
- 2 P2: That's so terrible and uh...

Excerpt 6 taken from Pair 11, Vacation task, shows an instance of responsiveness where the learner completed partner's utterance by adding information. In Excerpt 6, the learner 1 paused during her utterance when describing her bad experience (line 1), her partner completed it by adding *wall* (line 2), which was repeated by the learner 1 (line 3)

Excerpt 6. Responsiveness: completing partners' utterance

- 1 P1: ...my scare experience during vacation that uh... when I uh I driving on street ...suddenly I uh uh...crush the ...
- 2 P2: Wall
- 3 P1: Yes yes wall ...

Excerpt 7, taken from Pair 1, Job interview task, illustrates a responsiveness instance where the learner 1 provided backchannels and repeated her partner's words (line 2)

Excerpt 7. Responsiveness: backchannels and repetition

- 1 P1: And my education ah uh your uh...I graduate...bachelor
- 2 P2: Ah ok ...bachelor

Finally, Excerpt 8 taken from Pair 02, True/False statement, shows a case where the learner encouraged each other to talk. In Excerpt 8, when the learner 1 paused for a long time while formulating a question, her partner encouraged her to talk by repeating a question word (line 2). As result, the learner 1 produced a question (line 3) followed by an answer from her partner (line 4).

Excerpt 8. Responsiveness: encouragement

- 1 P1: Where...[*long pause*]
- 2 P2: Uh tiếp đi [*continue*] where
- 3 P1: Where you go?
- 4 P2: I go uh went to the to school

For inter-rater reliability, the researcher coded the entire dataset, and then trained the second rater who independently coded all the pretest and posttests, and 25% of interaction data. Kappa  $k$  for pretest and posttest data was .94. Pearson  $r$  showed acceptable agreement between two coders: question idea units (.96), answer idea units (.83), LREs (.91), laugh episodes (.93), responsiveness (.89). A score for each measure per singular participant was obtained by summing all instances in each category. A score for reported emotion from the emotional engagement questionnaire was also obtained by summing all corresponding items. To establish whether learner engagement was predictive of L2 question formation development, a logistic regression was carried out with L2 question development as an outcome variable (i.e., *developed* versus *not developed*) and each measure of learner engagement as a predictor variable.

## Results

To address the research question that asked whether learner engagement predicts learners' L2 question development, a logistic regression was carried out with L2 question development as an outcome variable and each engagement measure as a predictor. In terms of outcome variable, 12 out of 27 participants showed a stage advance in Pieneman and Johnston's L2 question developmental sequence. Specifically, three participants advanced from Stage 3 to Stage 4, and nine participants moved from Stage 4 to Stage 5. In terms of the predictor variables, scores for each measure of engagement are summarized in Table 4.

Table 4

*Descriptive statistics for predictor variables*

Engagement	Measure	$M$	$SD$
Cognitive	Question idea units	52.30	18.07



	Answer idea units	78.96	29.52
	LREs	10.19	5.26
Emotional	Laugh episodes	3.07	5.67
	Reported emotion	39.85	7.12
Social	Responsiveness	14.93	4.59

All predictors met the linearity assumption that requires a linear relationship between the logit of the outcome and the predictors. The collinearity diagnostics test also indicated that there was no multicollinearity problem or dependence between the predictor variables. To assess which predictors were closely associated with the outcome variable, Pearson point-biserial correlational analysis was carried out and the results are summarized in Table 5.

Table 5

*Pearson correlations*

Engagement	Measure	$r_{(bp)}$	Sig.
Cognitive	Question idea units	.65	.01
	Answer idea units	.26	.19
	LREs	.23	.25
Emotional	Laugh episodes	.44	.02
	Reported emotion	.26	.18
Social	Responsiveness	.45	.02

Three predictors that had a significant correlation with the outcome variable were question idea units, laugh episodes and responsiveness. Because the three predictors' correlation coefficients were higher than the benchmark for weak associations ( $\pm .25$ ) in L2 research (Plonsky & Oswald, 2014), they were all included into the regression model using Enter method. The regression model was statically significant,  $\chi^2(3, 27) = 15.38, p = .002$ , showing an overall percentage accuracy of 77.8%,  $R^2 = .43$  (Cox & Snell),  $R^2 = .58$  (Nagelkerke). As shown in Table 6, question idea units were significantly predictive of L2 question development.

Table 6

*Summary of logistic regression*

	<i>B</i>	<i>SE</i>	Odds Ratios	95% CI	Sig
Question idea units	.153	.075	1.17	[1.07, 1.35]	.04

Laugh episodes	.018	.19	1.01	[0.69, 1.48]	.93
Responsiveness	.068	.21	.93	[0.62, 1.41]	.74
Constant	-.814	3.61			

In essence, the positive beta values indicated that while holding all other variables constant, a one-point increase in production of question idea units was .153 times more likely to result in stage increase in L2 question developmental sequence. The laugh episodes and responsiveness were not significant predictors of L2 question development.

### Discussion

The current study investigated the relationship between learner engagement and L2 question development. The results showed that L2 question development was predicted by learners' cognitive engagement, specifically their production of question idea units. In essence, the learners who were more cognitively engaged in producing question idea units were more likely to show stage question development. This result is consistent with previous research showing the positive role of cognitive engagement in language performance (e.g., Lambert et al., 2016; Qiu & Li, 2016) and L2 learning (Storch, 2008). The result also supports the findings of previous research that suggests the benefits of cognitive processes on the development of morphosyntactic features during task-based interaction (Mackey & Sachs, 2012; McDonough, 2005). Thus, the result suggests that what really mattered for L2 question development was learners' cognitive processes such as forming ideas to ask, retrieving appropriate language resources to form questions, and monitoring production of L2 questions.

The results also showed that the cognitive engagement in terms of LREs was not associated with L2 question development. Previous research suggests that LREs promoted learners' awareness of language and enhanced form-meaning relationships (Swain & Lapkin, 1998). Frequent occurrence of LREs has also been shown to facilitate language development such as vocabulary retention (Choi & Iwashita, 2016; Fernández Dobao, 2014; Storch, 2008), and contributed to advancement in question development (Kim, 2012). The lack of association between LREs and L2 question development in this study is possibly due to infrequent occurrence of LREs (Table 4). Only 11.3 % of LREs that occurred in the data concerned the L2 questions, with the rest targeting lexical and other grammatical features. In addition, not all LREs would necessarily drive L2 development if these LREs targeted early-developed form (e.g., Stage 2 and Stage 3) rather than developmentally advanced question form such as Stage 4 or Stage 5 (Kim, 2012). Therefore, an increase in LREs that concerned

advanced question forms would shed more light on the link between learners' discussion of language form and L2 development.

However, the results also revealed that there was no association between cognitive engagement in term of answer idea units and L2 question development. This indicates that idea units reflecting learners' cognitive processes of thinking about the contents and producing ideas/answers in response to questions did not contribute directly to L2 question development, but may contribute to the development of other aspects of the L2 (Gass, 2003; Long, 1996; Mackey, 2012). However, it is unknown about which aspects of L2 other than L2 question development were affected by learners' cognitive engagement with regard to answer idea units.

Another finding was that social engagement did not predict L2 question development. This result supports the argument that the way learners acquire a second language may not be changed by social factors (Long, 1998). Previous research showed that interactions with high responsiveness, indicating high mutuality between learners, were more likely to lead to knowledge transfer (Storch, 2002). However, the findings showed that social engagement did not have a direct role in question development.

Finally, despite a positive correlational relationship, emotional engagement was not a significant predictor of L2 question development. Previous research reported that affective factors affected language production (Imai, 2010) and cognitive process during interaction (Swain, 2013). However, this study found that emotions reflected through laughs were not associated with L2 question development. In addition, methodologically this result confirms findings from Study 1 and Study 2 that additional measures of emotional engagement are needed because laughter is not sufficiently a good indicator of emotional engagement, given its low occurrence (Table 4). Instead, reported emotions might be better indicative of emotional engagement as documented in previous research (Lambert et al., 2016; Phung, 2016).

The current study has limitations that need to be taken into account when interpreting the results. First, the study investigated only one target structure –L2 questions. This selection might have limited the generalization of results. Thus, future research may need to include at least two target structures in order to facilitate the comparison of the relationship between learner engagement on L2 production or development across structures. Second, since laughter did not appear to sufficiently indicate learners' emotions in interaction, future research may need to use other measures, for example, analyzing facial expressions by using video data in order to capture more accurately this type of engagement. In addition, even

though reported emotions used in the current study might have revealed learners' emotion, they did not reflect the fluctuating nature of emotions that have been documented in previous research (MacIntyre & Legatto, 2011). Thus, measure of reported emotions in future research may need to take this aspect into account. Additionally, the current study examined social engagement through only responsiveness episodes. In order to investigate the direct relationship between this engagement type and L2 question development, additional data such as stimulated recall, interviews, and post-task questionnaire (as used in Study 2), could help to shed more light on learners' social engagement (Baralt et al., 2016). Finally, the sample size of the current study was small due to approximately 25% data loss caused by technical problems, which might have affected the statistical power of the analysis. Thus, it is possible that the true relationship between emotional and social engagement (predictors) and L2 question development (outcome variables) remained undetected.

### **Conclusion**

This study attempted to link cognitive, emotional and social factors to L2 development by investigating the relationship between different types of learner engagement and L2 question development. The results showed that only learners' cognitive engagement in terms of question idea units predicted L2 question development. Emotional and social engagement was not significant predictors of L2 question development. Although further experimental research is needed to compare and determine the relationship between learner engagement and L2 development across different target structures, learner groups, and L2 learning settings, the current study provides some empirical evidence for the directly positive role of cognitive engagement in L2 question development.

## **Chapter 5. General discussion and conclusion**

This dissertation has contributed to our increasing understanding of how peer task-based interaction benefits L2 learning by providing some evidence on the role of learner engagement in task performance and in L2 question development. Much of the previous interaction research has tended to take solely one among different approaches (e.g., the cognitive, social or affective/emotional approaches) to investigate the impacts of peer interaction on L2 learning. This dissertation has brought together cognitive, affective and social perspectives to examine L2 task-based interaction by conceptualizing and investigating a multidimensional construct ‘learner engagement’ that arguably comprises cognitive, emotional and social components.

More specifically, the dissertation addressed three major objectives: (a) conceptualize the construct learner engagement based on models of task engagement and engagement with language, (b) understand how task implementation and task features affect learner engagement, and (c) identify the link between different aspects of task-based interaction and L2 language development. Based on these objectives, the three studies were designed, with each having its own specific goals but connected with each other. In the next section, I will evaluate the usefulness of the learner engagement model, and discuss key findings of the three studies that used this model with specific regard to the role of learner engagement in L2 question development and the effects of interlocutor proficiency and task outcome on learner engagement. Then, I will draw conclusions from the studies, suggest pedagogical implications as well as directions for future research, and conclude with a final remark.

### **Model of learner engagement**

As discussed in the Introduction Chapter, the current dissertation has brought cognitive, emotional and social factors altogether to investigate L2 task-based interaction. To achieve this, the dissertation has proposed a model of learner engagement, operationalized its sub-components, and tested it in three different empirical studies. The goal of the studies was not only to evaluate the proposed model but also to examine the role of engagement in task performance and L2 learning, which has recently become one of the focuses in L2 interaction research (Baralt et al., 2016; Lambert et al., 2016; Phung, 2016; Qiu & Lo, 2016).

Conceptually, the learner engagement model appeared to be useful for investigating different aspects of peer task-based interaction. For instance, the model allowed the three studies to confirm that L2 interaction is a multidimensional phenomenon reflecting cognitive, emotional and social dimensions. For instance, by using learner engagement as a multifaceted

construct, Study 1 and Study 2 identified specific aspects of interaction such as cognitive and social dimensions that were influenced by interlocutor proficiency and task outcome. Further, following the model Study 3 highlighted the significant role of cognitive engagement in predicting L2 question development, but indicated that emotional and social engagement were not predictive of L2 question development. Together with previous models of task engagement (Philp & Dusesne, 2016) and engagement with language (Svalberg, 2009), the learner engagement model suggests that investigating different dimensions of peer task-based interaction altogether provides a more comprehensive picture of peer task-based interaction and its relationship with task performance as shown in Study 1 and Study 2. However, the role of cognitive engagement in L2 learning is more important because social and emotional engagement did not predict L2 development as documented in Study 3.

In addition, the model of learner engagement has addressed some issues that remain unresolved in the previous models of engagement. For instance, the learner engagement model provided a specific description of each sub-component of learner engagement, which was to address the difficulties in describing the construct engagement with language (Baralt, 2016; Svalberg, 2009). That is, terms used to describe each sub-component were theoretically based on previous research findings, such as cognitive engagement perceived as thinking about task contents (Helme & Clarke, 2001; Shin, Lidster et al., 2016; McCarthy, 1991) and attention to language (Baralt et al., 2016), emotional engagement reflected as laugh episodes (Glenn & Holt, 2013), and social engagement considered as learners' responsiveness (Damon & Phelps, 1989; Storch, 2002). Additionally, the conceptualization of social engagement as responsiveness reflected in learners' acknowledgement, repetition and development of previous turns was to add to the discussion of social subcomponent of task engagement that used back channels as its main indicator (Lambert et al., 2016; Philp & Dusesne, 2016). Moreover, although sub-components of learner engagement are interdependent, they were conceptualized separately in order to allow for an independent operationalization of each sub-component.

Methodologically, the model of learner engagement showed an improvement in terms of operationalizing the sub-components of learner engagement. For instance, the studies suggested ways of operationalizing learner engagement such as idea units and LREs as cognitive engagement, and responsiveness as social engagement. These suggestions contribute to an expansion of the current ways of operationalizing cognitive and social engagement, which rely exclusively on common constructs such as negotiation for meaning, amount of speech (words/turns), backchannels, and collaborative dynamics.

However, the studies suggest that laugh episodes did not seem to indicate sufficiently learners' emotional engagement. In the learner engagement model, laugh episodes were operationalized as emotional engagement. However, findings from Study 1 showed that learners might have hidden their actual emotions in interaction. Recognizing this issue, Study 2 modified its method by combining laugh episodes, reported emotions, and qualitative measures (i.e., exit questionnaire) to measure emotional engagement. Different sources of data in Study 2 were to help triangulate results for emotional engagement. However, it should be noted that these measures especially laugh episodes just indicated the positive emotions, therefore they did not provide insight into learners' negative emotions. Findings of Study 3 also showed that laugh episodes were not a significant predictor of L2 question development, suggesting the need of using other measures for emotional engagement.

Despite not including qualitative measures due to its longitudinal nature and learners' report of getting bored after completing the questionnaire repeatedly, Study 3 was also adjusted following Study 1 and Study 2 to keep laugh episodes and reported emotion as two indicators of emotional engagement. Findings of the three studies showed that laugh episodes, reported emotions and qualitative responses could indicate learners' emotional engagement. However, because of the low incidence of laugh episodes observed in the studies and the fact that qualitative responses were not included in the statistical tests, it is necessary to devise more quantitative measures such as counting learners' emotional reactions based on facial expressions or posture to better describe this type of engagement.

Overall, the studies in this dissertation suggest that learner engagement, perceived as a multifaceted construct, is a useful variable for L2 research. Thus, this dissertation added learner engagement to the current set of variables such as recast, modified out, LREs, and collaborative dynamics that could be used to explore the relationship between peer task-based interaction and task performance or L2 acquisition. In addition, the studies shed light on different ways of operationalizing learner engagement and suggest further modification of measures to better capture the emotional engagement construct. Finally, the proposal of learner engagement and the results of the studies point out that to gain insights into the impact of different factors on task performance, it is important to apply a model that could reflect cognitive, emotional and social dimensions of interaction, for example, by utilizing multifaceted constructs such as learner engagement used in this dissertation.

### **The role of learner engagement**

Study 1 and Study 2 highlight that using convergent tasks and pairing low proficiency learners with higher proficiency partners showed to be effective ways to promote learner engagement during task performance. Although both of these studies and previous research emphasize the important role of engagement in L2 task performance (Lambert et al., 2016; Philp & Duschense, 2016), what still remained unknown was whether learner engagement had a direct role in L2 learning. Findings of Study 3 showed that cognitive engagement measured by question idea units was associated with L2 question development. This emphasizes that cognitive processes involved in producing L2 question idea units were the main factor driving L2 question development. Thus, promoting these cognitive processes in task performance appears to be significant in facilitating L2 development.

Methodologically, one could argue that it was the production of questions that drove question development because the number of question idea units simply reflected the production practice of questions, but not evidence of cognitive engagement. Although this interpretation is reasonable, it is arguable that question idea units could reflect learners' cognitive engagement. That is, question idea units could be a result of different cognitive processes that learners went through before producing questions in order to complete the tasks. These cognitive processes could include conceptualizing ideas for asking questions, retrieving syntactical and lexical recourses to form questions, and monitoring speech production of questions. However, it should be noted that the question idea units did not tap directly into these cognitive processes, indicating that the claim is simply speculative. In addition, as in Study 3, question idea units were just one among different measures (e.g., answer idea units, and LREs) used in combination to measure cognitive engagement. Thus, question idea units could just reflect partially the learners' cognitive engagement.

In addition, findings of Study 3 did not show a direct role of social and emotional engagement in L2 question development. Speculatively, there were two possibilities regarding the relationship between social and emotional engagement and L2 question development. First, social and emotional engagement did not contribute directly to L2 development. Instead, they would have affected the degree of cognitive processes that drive L2 learning (Swain, 2013). Theoretically, when negative emotions are high, they constrain or “keep out input”, indicating that less L2 learning take place (Swain, 2013, p. 198). In addition, when learners are not socially affiliated, they are more likely to withdraw from interaction, leading to less L2 learning (Philp & Duschene, 2016). Thus, maintaining high social and emotional engagement seems to create a beneficial context for increasing cognitive engagement (Philp



& Duschesne, 2016). Second, social and emotional factors just affected task performance as suggested in previous research (Storch, 2001; Phung, 2016), but did not seem to contribute to L2 learning. This suggests that focusing on promoting cognitive processes would be more beneficial to L2 development.

### **Overall pedagogical implications**

Apart from conceptualizing learner engagement and contributing to the increased understanding of benefits of peer task-based interaction to task performance and L2 development, the current dissertation also aims to provide teachers with pedagogical implications. Despite differences in the research focus, the studies shared a common goal that suggests ways to implement effective peer task-based interaction, particularly focusing on manipulating the implementation conditions, task features, and using communicative tasks to promote learner engagement and L2 development.

With regard to task implementation condition, it seems that language classrooms often comprise learners of different proficiency levels. Teachers are therefore concerned about how to pair them in order to achieve the best outcome from pair work. Findings of Study 1 suggest that one possible way to enhance lower proficiency learners' cognitive and social engagement is to pair them with higher proficiency partners. However, it is important to maintain the collaboration of higher proficiency peers in mixed proficiency pairs, who do not always assume the collaborative stance (Dao & McDonough, 2017; Sato & Viveros, 2016; Watanabe & Swain, 2007). As mentioned in Study 1, possible ways to enhance higher proficiency learners' collaboration suggested in previous research include training them on how to interact (Fujii et al., 2016), provide feedback (Sato & Lyster, 2012) or model the interaction (Kim & McDonough, 2008).

Different from Study 1 that suggests ways of implementing productive peer task-based interaction, Study 2 showed that selecting or designing task features also played an important role in task performance. Results of Study 2 suggest that teacher could use convergent tasks to promote learners' cognitive and social engagement. However, divergent tasks could negatively affect learners' engagement due to the likelihood that they induce frequent disagreement and conflicts. Thus, it is suggested that teachers need to explain to students to make sure that they perceive the divergent outcome meaningfully, which could encourage their investment (Egbert, 2003; Maehr, 1984), and avoid negative impacts on engagement as documented in Study 2.

Finally, although Study 3 did not provide concrete pedagogical implications as compared to Study 1 and Study 2, its results showed that using different communicative tasks

could develop learners' acquisition of structures if the learners engaged in cognitive processes of forming, monitoring and producing the target structures. Teachers, especially those who are asked to follow the linguistic syllabus as was the teachers of the current participants, are often concerned that communicative tasks may not produce better results in students' learning of target structures at the end of the course. Thus, the tendency of practicing mechanically the target structure in a non-communicative context is more likely. Results of Study 3 encouraged the teachers to use communicative tasks that were shown to be effective in developing learners' L2 questions. Thus, teachers could experience with different communicative tasks that elicit target structures required in their linguistic syllabus in order to design their teaching activities.

### **Overarching limitations**

Despite discussing the limitations previously in each study, the three studies share similar limitations that need to be addressed. First, although Study 1 documented the impact of proficiency on learner engagement, it did not indicate whether this impact maintains across tasks. Meanwhile, Study 2 indicated that task outcome affected learner engagement, but it did not take proficiency into account. Thus, it is important that future research need to combine both the implementation condition (i.e., proficiency) and task features (i.e., task outcome) in order to determine whether they moderate the effects that were reported in both studies.

Second, both Study 1 and Study 2 reported the impact of proficiency and task outcome on learner engagement, but they did not show how learner engagement was linked to L2 learning. Study 3 addressed this problem by identifying the relationship between learner engagement and L2 question development. However, the communicative tasks in Study 3 featured different characteristics, and the proficiency pairing was not controlled. Thus, it is unknown how these task characteristics and implementation condition affected learner engagement, which then in turn determined the degree of learners' acquisition of the target structure. Future research may need to select tasks that have features promoting learner engagement, and implement these tasks in pairs of mixed proficiency learners as in Study 2, and test how they together affects learner engagement and whether the degree of engagement would predict the L2 development.

Third, the three studies used learner engagement as a central construct. However, measures of each component need to be further modified. For instance, additional measures for emotional engagement are clearly needed in addition to episodes of laughs. Both Study 1 and Study 2 used learners' report for emotional engagement, but qualitative measures such as open-ended questionnaires used in Study 2 are necessary to complement the quantitative

results. Additionally, for research that employs statistical tests, quantitative measures need to be devised, possibly using technological innovations that allow for tracking learners' heartbeats and sweats to indicate learners' emotions (Mauss, & Robinson, 2009; Jonckheer, Rommel, Nandrino, Jeanne & Logier, 2012). Besides, with regard to operationalization of cognitive engagement, the studies operationalized this type of engagement as learner attention to task content and language. Thus, this did not cover a wide range of other cognitive processes. In addition, in Study 3 question idea units as the only measure of cognitive engagement was a significant predictor of question development. As discussed earlier, this measure could be interpreted as production practice. Therefore, measures of cognitive engagement need to be added to complement this measure in order to reflect more the construct more comprehensively and accurately.

Finally, the three studies clearly had a small sample size, which therefore requires future research with larger sample sizes to confirm the results found in this dissertation. The resulting small sample size of three studies in this dissertation was mainly due to the technical problems, which suggests that recruiting more participants to compensate for loss data is needed to ensure the power analysis of statistical tests.

### **Concluding remarks**

I started my professional career by teaching EFL to Vietnamese children and teenagers at a private foreign language center nine years ago. Although I was happy teaching them, I found difficulties in designing teaching activities that were effective for these two types of learners. When I taught EFL at a university level, I even struggled more in terms of finding ways to teach English effectively. Recalling that time, I just selected and designed tasks that I intuitively felt that they would work well. Also, I paired and grouped learners based on my subjective judgment. However, the results of these courses did not turn out well as I expected. This struck me to find ways to improve my teaching practice, which therefore motivated me to do a PhD where I could experiment with what I did not know. Although the studies were theoretically motivated, they represented what I experimented with my previous EFL classes, and reflected the teaching practice that was taking place at my university in Vietnam. Thus, the results of the studies could shed some light on the issues that I was concerned, and I also hope that they could provide useful information for other teachers who are also seeking ways to improve their language teaching practice.

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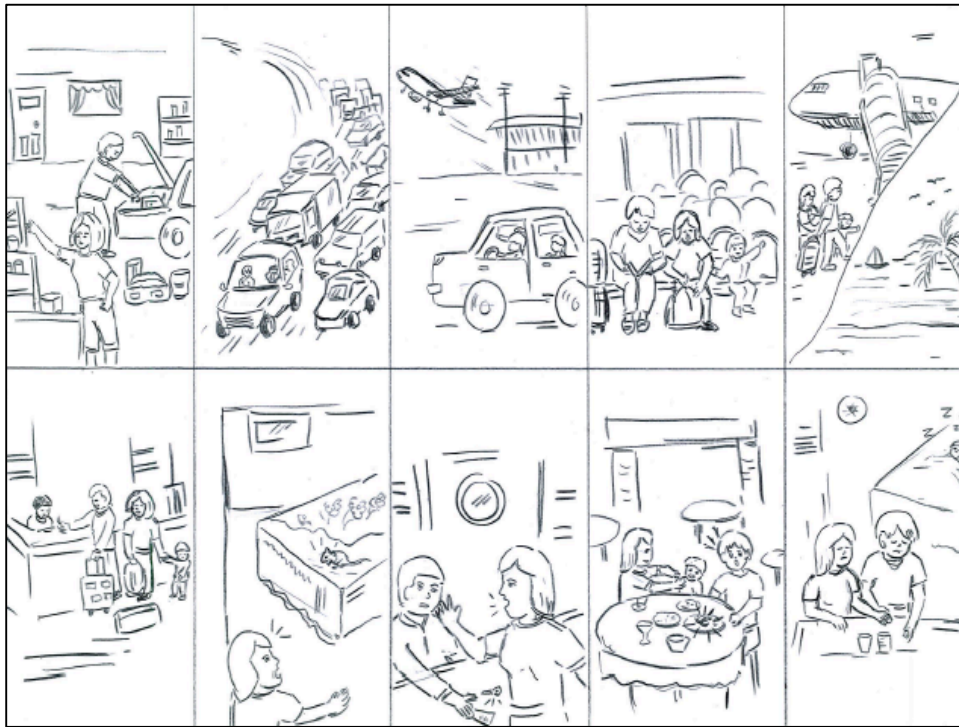
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## Appendix 1. Tasks

Picture sequencing task: Two sets of ten pictures – Study 1

Set 1



Set 2



*Convergent and divergent tasks –Study 2*

Convergent task: University problems and solutions

Instruction:

- Work in pairs within 10 minutes.
- Discuss to find out the problems that exist in your university.
- Discuss to propose solutions to the problems that you have identified.
- Submit a list of problems and solutions that you have agreed on during the discussion.
- You will be given some extra minutes at the end of the activity to write the problems and proposed solutions.

Divergent task: Shopping preference—online shopping versus shopping at the store/market

Instruction:

- Work in pairs within 10 minutes.
- Debate by arguing for your shopping preference that is either online shopping or shopping at the store/market. You are expected to argue that your shopping method is better than the other.
- Submit a list of reasons to explain your preference as well as reasons to argue against your partner's choice of shopping method.
- You will be given some extra minutes at the end of the activity to write the reasons to argue for your shopping preference as well as reasons to argue against your partner's choice of shopping method.

*Communicative tasks designed to elicit L2 questions – Study 3*

*A true/false statement:*

- Work in pairs within 10 minutes.
- Write down three statements/facts about yourself that can be either true or false. Make sure that you have both true and false statements. Do not show those statements to your partner.
- Take turns and ask each other as many questions as possible to determine whether your partner's statements are true or false.

*A vacation task*

- Work in pairs within 10 minutes.
- Interview each other about destinations where you spent your last vacations. You are expected to ask as many questions as possible to gain information about places so that you can compare two places.
- Discuss which places are better and decide whether it is worth visiting that place again. State reasons why or why not.

*An honesty task*

- Work in pairs within 10 minutes.
- Take turn to ask each other about the mistakes that were made.
- Provide excuses for these mistakes. You are allowed to make up excuses or state the 'real' excuses.
- Ask each other further questions to determine whether your partner is honest about their excuses. State the reasons why they are honest or dishonest.

*A fear task*

- Work in pairs within 10 minutes.
- Interview each other about their phobia/fear. You are expected to ask as many questions as possible to gain information about their fear and experiences associated with that fear.
- Discuss with each other about how to overcome the phobia.
- At the end of the activity, you will be given some extra minutes to list suggestions to overcome the phobia and prepare to present in the whole class why these suggestions would work.

*A job interview (Role play)*

- Work in pairs within 10 minutes.
- One student will be an interviewer (employer) and another will be an interviewee (job candidate).
- You have two minutes to look at the job ad (below). Or, you can think of another job vacancy on your own and do the task based on that proposed job.

<b>Teachers in all cities</b>
<p>AGPS is looking for English instructor who can teach a variety of English courses at three levels: beginner, intermediate and advanced.</p> <p><b>Interested teachers will get:</b></p> <ul style="list-style-type: none"> <li>- Short training by experts in the field of language teaching</li> <li>- Opportunity to join overseas exchange programs for practitioners in USA</li> <li>- Experience of working with an international language institutes</li> </ul> <p><b>Requirements</b></p> <p>Have extensive English teaching experience</p> <p>Hold a degree or a certificate in language teaching</p> <p>Possess enthusiastic, responsible and helpful characteristics</p>



- If you are the employer, think of questions to ask. If you are a job candidate, you will prepare answers to possible questions from the employer and also prepare questions if you want to ask when allowed to ask question at the end of the interview
- Finally, decide whether the job candidate is qualified for the job. State reasons why or why not.

***Pre- and posttest tasks***

*A biography task*

- Work in pairs within 10 minutes.
- One student will play a role of a reporter and another student will play a role of a famous person (you can decide whom you want to be).
- The reporter will interview the famous person in order to write an article about his/her life experience.
- Make sure each student will have a chance to play both a reporter and a famous person. That is, you switch the roles when the first interview is done.
- At the end of the activity, note down all information that you have asked in order to write an article.

*An interrogation task*

- Work in pairs within 10 minutes.
- One student will play a role of a police and another student will play a role of a suspect.



- Carry out two interviews based on the two following scenarios:
  - a. Theft scenario: This morning, a theft occurred in Hall of student residency at your university. Lots of students' belongings disappeared. Police are interviewing a number of students about the case.
  - b. Murder scenario: Last night, a murder took place on the busiest street in downtown. Police are interrogating different people about the murder.
- You are expected to ask different questions to gain information about the suspect's alibi.
- Make sure each student will have a chance to play both a reporter and a famous person. That is, you switch the roles when the interview is done.
- The one who play the role of a police is required to write a report about the interview.

## Appendix 2. Questionnaires

### Emotional engagement questionnaire

Instruction: Indicate whether you agree with the following statements. Circle the number in the scale										
	Strongly disagree					Strongly agree				
	1	2	3	4	5	6	7	8	9	10
I felt enjoyable when interaction and doing the task.	1	2	3	4	5	6	7	8	9	10
I felt pleased when interaction and doing the task.	1	2	3	4	5	6	7	8	9	10
I felt interested when interaction and doing the task.	1	2	3	4	5	6	7	8	9	10
I felt enthusiastic when interaction and doing the task.	1	2	3	4	5	6	7	8	9	10
I felt excited when interaction and doing the task.	1	2	3	4	5	6	7	8	9	10

### Exit questionnaire

Instruction: Read the questions and provide answers in the boxes next to each question		
Open questions	Conversation 1	Conversation 2
What was your overall perception of the task that you just did with your partner?		
What was your thinking about the task outcome? And how did it affect your interaction?		
What features of language did you notice during the task? Apart from that, what else did you pay attention to?		
How important and/or helpful was working with your partner in order to do the task?		
Did your partner help you? If so, how?		
Provide three adjectives to describe how you felt when working with your partner in the interaction?		
Provide three adjectives to describe how you felt during the task?		
Do you think that you and your partner were both equally willing to contribute to the task? Explain?		
Other comments about the task, your partner, you interaction etc.?		

### Appendix 3. Question developmental sequence

Stages	Description	Examples
1	Single word or formulae	
2	Rising-intonation SVO? (Subject/verb/complement)	You using facebook? You like what animal? You born in this city?
3	Fronting Wh/Do/-Q-word	What you have experience in this? What you learn in university? Do you know the symbol of Hue city? When your phobia start?
4	Pseudo Inversion: Yes/No and Wh-question with copular	Can you speak a foreign language? What is your phobia? Do you achieve singing awards? Have you gone there?
5	Do/Auxiliary verbs and modals	Who did you go with? Where did you attend your study? What relevant experience have you gained?
6	Cancel inversion, negation question, tag question	