Accepted: 14/01/2019 Published on line. 31/01/2019

Cited as:
Dao, P. Effects of task goal orientation on learner engagement in task performance. *International Review of Applied Linguistics in Language Teaching*.

Effects of task goal orientation on learner engagement in task performance

Abstract

The study investigated the potential impact of task goal orientation on cognitive, social and emotional aspects of task performance through the lens of learner engagement. Sixteen EFL learner dyads completed a convergent decision-making task and a divergent opinion-exchange task. Their audio-recorded interactions were transcribed and coded for evidence of engagement, including idea units and language-related-episodes (cognitive engagement), instances of explicit task enjoyment, reported emotions (emotional engagement), and responsiveness (social engagement). To determine the effects of task goal orientation on learner engagement, scores for engagement types were compared between two tasks. To understand learners' perception about their engagement, posttask exit questionnaire responses were analyzed using content-analysis approach. Findings showed that learners showed greater cognitive and social engagement in the convergent than divergent tasks. No differences were observed in learners' emotional engagement. Results are discussed in terms of the role of task goal orientation in promoting learners' cognitive and social engagement.

Key words: task goal orientation, convergent, divergent, learner engagement, task-based interaction

Cited as:
Dao, P. Effects of task goal orientation on learner engagement in task performance. *International Review of Applied Linguistics in Language Teaching*.

Effects of task goal orientation on learner engagement in task performance

Introduction

Tasks are often used as the main means to get second language (L2) learners to interact with each other in the classroom. 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 (e.g., Baralt, Gurzynski-Weiss, & Kim, 2016; Lambert, Philp, & Nakamura, 2017; Skehan, 2014). Among the numerous features of tasks examined in previous research, task goal orientation has drawn much attention among L2 researchers (Lambert & Engler, 2007; Pica, Kanagy & Falodun, 1993). Task goal is an important feature of a task because the ultimate purpose of getting L2 learners to carry out tasks is to achieve a non-linguistic task goal through interaction (Ellis, 2003; Erlam, 2016; Long, 2015; Skehan, 2014). Based on Pica et al.'s (1993) taxonomy, task goal can be manipulated along the communication purpose and is classified as having either convergent or divergent goals. Convergent tasks require learners to arrive at a consensus in order to achieve the task goal. In contrast, divergent tasks diverge learners towards the task goal during task performance. Two typical tasks representing this classification include decision-making task (convergent task) and opinion-exchange task (divergent task).

Previous research has shown that learners' orientation towards the convergent and divergent task goals affected task performance differently in terms of qualitative and quantitative uses of language (see Bygate & Samuda, 2009; Jackson, 2007; Keller-Lally, 2006) and learners' opportunities to receive input, provide feedback, and modify language production (Duff, 1986; Pica et al., 1993). While a majority of studies on convergent/divergent tasks have focused on the impact of task goal orientation on learners' linguistic behavior of language production and cognitive processes (e.g., negotiation of meaning), little is known about whether the task goal orientation affects emotional and social aspects of task performance. The current study,

therefore, took social and emotional aspects into consideration by investigating the potential effects of task goal orientation on multiple aspects of task performance (i.e., cognitive, emotional and social) through the lens of engagement.

Task goal orientation

Previous research has showed that task goal orientation manipulated along convergent and divergent goals impacted the occurrence of negotiation for meaning, an interactional feature central to L2 learning (Mackey, 2012; Long, 1996). Tasks with a convergent outcome enhanced turn exchanges, encouraged learners to engage more in negotiation for meaning (Duff, 1986; Jackson, 2007; Keller-Lally, 2006), 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 complex syntactic structures in their language production than were convergent tasks (Skehan & Foster, 2001). Despite providing insights into the different kinds of interaction that each task goal promoted, this body of research examined only the impact of convergent/divergent task goals on negotiation for meaning (i.e., cognitive aspect) and language production such as words and turns (i.e., behavioral aspect).

Considering interaction as a cognitive, emotional and social phenomenon (Batstone, 2010; Swain, 2013; van Lier, 2002), recent task research has expanded to explore several different aspects of task-based interaction. One of the research lines in response to this trend is research that has used the multidimensional methodological framework of engagement (Philp & Duchesne, 2016; Svalberg, 2009, 2017), which is discussed in the next section.

Engagement in task-based interaction

Task research has recognized the importance of considering various aspects of interaction when investigating the impacts of task features on task performance (Authors, XXXX; Baralt et al., 2016; Philp & Duchesne, 2016; Svalberg, 2009, 2017). Much of the recent research on task engagement has therefore followed the multidimensional framework of engagement. One of the

influential frameworks is Philp and Duchesne's model (2016) that conceptualizes task engagement as "a state of heightened attention and involvement" (p. 51), consisting of four sub-components: cognitive, behavioral, emotional and social. Specifically, cognitive engagement is described as learners' sustained attention, mental effort, and self-regulation strategies. Emotional engagement refers to learners' affective responses during task interaction, with indicators including enthusiasm, interest, enjoyment, or disaffection, anxiety, frustration and boredom (Skinner, Kindermann & Furrer, 2009). Behavioral engagement is learners' on-task or off-task participation that could be measured through language output. Social engagement reflects learners' reciprocity and mutuality in interaction (Storch, 2001).

Task research that followed Philp and Duchesne's model has documented the effects of task design and implementation condition on engagement. For example, comparing tasks with teacher-generated content and those with learner-generated content, Lambert et al. (2017) found that learners produced greater elaborative talk and negotiation for meaning (i.e., cognitive engagement), more backchannels (i.e., social engagement), more language production and time-on task (i.e., behavioral engagement) in the learner- than teacher-generated content tasks. Using similar measures of task engagement, Phung (2017) reported that learners were more cognitively, socially and behaviorally engaged in tasks that they preferred compared to less-preferred tasks. Regarding task implementation condition, previous research showed that learners were less engaged in tasks that were administered repeatedly, but showed greater cognitive and behavioral engagement in tasks that have familiar topics (Qiu & Lo, 2017). In addition, paring low proficiency learners with higher proficiency partners promoted greater production of ideas units (i.e., cognitive engagement) and responsiveness (i.e., social engagement) (Authors, XXXX).

Following previous research that has emphasized the multifacetedness of interaction and interconnectedness of sub-components of task engagement, the current study adopted a

multidimensional methodological framework of engagement. However, given the overlap between the behavioral engagement and other types of engagement (Oga-Baldwin & Nakata, 2017; Reeve, 2012; Reeve & Tseng, 2011), engagement has been conceptualized as consisting of cognitive, social and emotional dimensions that were described through behavioral indicators (Authors, XXXX). In addition, indicators of learner engagement may vary depending on task types, suggesting that more measures are needed to capture fully different aspects of engagement (Philp & Duchesne, 2016). Thus, different measures of engagement are used, including idea units and language-related episodes (LREs) as measures of cognitive engagement (Baralt et al., 2016; Helme & Clarke, 2001; Toth, Wagner & Moranski, 2013), instances of responsiveness as a measure of social engagement (Authors, XXXX), and instances of explicit task enjoyment and emotion questionnaire as measures of emotional engagement (see Skinner, Kindermann & Furrer, 2009).

To summarize, divergent/convergent task goals have shown to affect learners' negotiation for meaning and language production (Duff, 1986; Jackson, 2007; Keller-Lally, 2006; Skehan & Foster, 2001; Smith, 2003). Little research has investigated whether learners' orientation towards these convergent/divergent task goals affect emotional and social aspects of interaction. Thus, the current study explores the potential impact of task goal orientation on different aspects of learner engagement. As discussed earlier, convergent/divergent task goal orientation has been shown to promote different kinds of interaction. It was proposed that learner engagement would possibly differ as a function of learners' orientation toward these task goals. The current study addresses the two following research questions.

1. Is there a difference in learner engagement between the convergent decision-making task and the divergent opinion-exchange task?
2. What are learners' perceptions about their task engagement in relation to task goal orientation?

Method

Participants

The participants were sixteen dyads formed by 32 Vietnamese undergraduate students (26 females and 6 males) at a university in Vietnam. Although they were recruited from two English as a Foreign Language (EFL) classes, they knew each other well because they were classmates in other courses. They ranged in age from 20 to 25 years old (M=22.44; SD= 1.13). They were enrolled in the same undergraduate program at the time of data collection. Their average English proficiency based on paper-based TOEFL test was 479.82 (SD = 58.84). They reported to have studied English at a mean of 8.72 years (SD = 1.98), and did not travel or study in any English-speaking countries.

Design

A within-groups design was used to examine the effect of task goal orientation on learner engagement. The independent variable was the task goal orientation operationalized in terms of convergent versus divergent outcomes. While the convergent outcome was manipulated by asking learners to discuss to come at a consensus on solutions to problems of a university, the divergent outcome required learners to defend their opinions and argue against partner's viewpoint on the topic of shopping online versus at the store. The dependent variable was learner engagement measured through three subcomponents: cognitive, emotional and social engagement (Authors, XXXX). Cognitive engagement was learners' attention and discussion about task content and language aspects. Social engagement was degree of learners' responsiveness during interaction. Finally, emotional engagement was learners' emotions aroused during interaction, for example, enjoyment, interest, excitement, enthusiasm or boredom (Philp & Duchesne, 2016; Phung, 2016).

The tasks

Two different tasks were used in the study. The decision-making task with a convergent goal orientation asked the learners to discuss with their partners in order to identify the problems existing in their university and decide on solutions to these problems. At the end of the task, the learners submitted a list of problems and solutions that they agreed on, which they used later to write a report. The opinion-exchange task with a divergent goal orientation asked the learners to debate in order to defend their opinion of developing either an online-shopping website or a store-based system for their newly co-owned business. That is, one learner needed to defend the opinion that "online shopping is more advantageous and convenient than shopping at the store, and therefore investment in an online shopping website for their newly co-owned business would be more profit-beneficial", while the other student had to defend the opinion that "shopping at the store is more advantageous and convenient than online shopping, and therefore investment in a store-based system for their newly co-owned business would be more profit-beneficial". At the end of the task, the learners wrote down a list of reasons to defend their opinions and explanation to address their partner's counter-arguments. The reasons and explanation were then used in order to write a report that suggests why investment in either an online-shopping website or a store-based system is a good proposal. More details regarding the convergent decision-making and the divergent opinion-exchange tasks following Pica et al.'s (1993) task typology are presented in Table 1.

Table 1.

Comparison between divergent decision-making task and convergent opinion-exchange task

Features	Decision-making task	Opinion-exchange task
Goal orientation	Convergent	Divergent
Outcome option	Opened outcomes (i.e., lists of problems and solutions)	Opened outcomes (i.e., lists of reasons and explanations to address counter-arguments)

Information requester-supplier relationship	Two-way information exchange	Two-way information exchange
Interaction nature	Discussion-based nature, towards agreement	Argumentation-based nature, towards debate/argument

The convergent decision-making and divergent opinion-exchange tasks were selected because of both theoretical and practical reasons. In terms of theoretical reasons, the convergent decision-making and divergent opinion-exchange tasks shared both similarities and differences in task parameters as shown in Table 1. Based on Pica et al.'s (1993) task taxonomy, both convergent decision-making and divergent opinion-exchange tasks were two-way information tasks, requiring interlocutors to exchange information during the interaction. The outcome options of both tasks involved a range of acceptable task outcomes (i.e., possibility for many opened outcomes instead of a single and predetermined answer). However, the two tasks differed in terms of the goal orientation (i.e., achieve consensus on the shared outcome versus diverge to meet the task goal). In addition to the different goal orientation, the convergent decision-making task was likely to promote discussion-based interaction with the inclination toward agreement, whereas the divergent opinion exchange task was supposed to promote argumentation-based interaction with the inclination toward debate or disagreement.

With regard to practical reasons, both tasks were included in the learners' syllabus and course materials, and the teachers of the participants reported to have used them frequently in their previous teaching activities. The two task topics (university issues and shopping) matched the themes covered in the learners' theme-based course materials. To reduce a possibility that task topic might have impacted learner engagement, the two topics were selected based on the informal survey that reported university and shopping topics as the learners' two most favorite topics.

Questionnaire materials

The materials included an exit questionnaire and an emotional engagement questionnaire. The exit questionnaire required learners to provide descriptive answers to ten open-ended questions adapted from Baralt et al.'s (2016) study. The goal of the exit questionnaire was to gain insight into learners' perceptions about their own engagement (cognitive, social, and emotional) in relation to the perceived task goal orientation and the task topics. All questions were piloted and revised accordingly, and the pilot participants reported that questions were clear and easy to understand. To facilitate comparison of the effects of task type on learner engagement, the instructions emphasized that the participants had to compare the two tasks when providing written responses. Thus, each question included two answer boxes next to each other so that the participants could compare their answers to the same question for each task.

An emotional engagement questionnaire was included because previous research showed few instances of explicitly expressed emotions in the interactions (Authors, XXXX). The emotional engagement questionnaire consisted of five Likert scale questions that investigated learners' reported emotions during their interaction with partners. The five questions asked learners to indicate, using a 10-point scale, how much they felt enjoyable, interested, excited, enthusiastic and bored. Questionnaire items were 'I felt enjoyable when interacting and doing the task', 'I felt interested when interacting and doing the task', 'I felt excited when interacting and doing the task', 'I felt enthusiastic when interacting and doing the task', and 'I felt bored when interacting and doing the task'. The reliability of the questionnaire items using Cronbach's alpha was .88.

Procedure

The learners carried out the two tasks during their regularly scheduled English class meetings. An equal number of 16 pairs had their class in the morning and in the afternoon. First, the researcher introduced the research project and answered questions from the participants (5

minutes) who completed the consent form and the background information questionnaire (10 minutes). Then, the participants selected their partners and formed dyads to carry out the tasks within 10 minutes. Each pair's interaction was audio-recorded using a portable voice recorder. To counterbalance task sequence, pairs from the morning class were asked to do the decision-making task first and then the opinion-exchange task, whereas pairs in the afternoon class did the two tasks in the opposite order. The learners completed the emotional engagement questionnaire twice (after each interaction), and filled out the exit questionnaire once. The researcher also talked informally to learners about their answers in the exit questionnaire with the main goal of clarifying their answers in order to gain better understanding of their perceptions about their engagement in relation to task goal orientation.

Analysis

To address the first research question that asked whether there was difference in learner engagement between two tasks, the audio-recordings were first transcribed by a research assistant and verified by the researcher who later coded all dialogues for three types of engagement. Cognitive engagement was operationalized as learners' discussion of task content and formal aspects of languages, consequently measured by idea units and LREs, respectively. Idea units that taped into learners' production of task content were defined as a segment of information, idea or comment about the theme under discussion (Ellis & Barkhuizen, 2005; Lambert et al., 2016; McCarthy, 1991; Shin, Lidster, Sabraw, & Yeager, 2016). An example of idea units taken from Pair 02 in the divergent opinion-exchange task is shown in Excerpt 1

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 the benefits shopping online: *you can also purchase price with the sale off.*

Following Swain and Lapkin's (1998), LREs were defined as talk episodes where "learners talk about the language they are producing, question their language use, or correct themselves or others" (p. 326). Excerpt 2 taken from Pair 10 in the convergent decision-making task shows an LRE.

Excerpt 2. An LRE

1 P1: Actually you know we are last year student so I think that there are many of our friends they drop out of out this school can you can you tell me the reason of this?

2 P2: Drop out what do you mean?

3 P1: Oh it means they cut they cut the class and they don't want to learn any more.

4 P2: Ah ….I think maybe they have their own…

In Excerpt 2, Learner 2 did not understand the lexical item *drop out*, so asked for clarification *drop out what do you mean* (line 2). Learner 1 responded by explaining the meaning of the lexical item *it means they cut the class and they don't wan to learn any more* (line 3). Learner 2 acknowledged *ah* and continued the task *I think maybe they have their own* (line 4). Since both learners were involved in the LRE, it was counted that each learner had one instance of LRE in this excerpt.

Emotional engagement was operationalized as learners' positive emotions measured by instances of explicit task enjoyment (Authors, XXXX). Excerpt 3 taken from Pair 01 in the divergent opinion-exchange task illustrates an instance of learners' task enjoyment.

Excerpt 3. An instance of task enjoyment

1 P1: Because you cannot support your idea [*laughing*]

2 P2 [*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 learner 2 had difficulties to explain why shopping at the traditional market is more suitable to people in the area, learner 1 laughed and commented that her partner did not have strong rationales for his opinion (line 1). This comment also made the learner 2 laugh accordingly (line 2). Because both learners expressed having fun when doing the task, it was coded that each learner had one instance of task enjoyment.

Social engagement was operationalized as leaners' social relationship measured by instances of responsiveness that was based on the concept of mutuality (Storch, 2001). An instance of responsiveness was a talk episode in which learners responded and engaged with their partner's contribution, as demonstrated through acknowledging, repeating, commenting, developing each other's idea or providing backchannels. Excerpt 4 taken from Pair 10, convergent decision-making task, illustrates an instance of learner 2's social engagement with learner 1.

Excerpt 4. An instance of responsiveness

1 P1: Teachers friendly ya maybe sometimes unfair

2 P2: Unfair yes

In Excerpt 4, the learners discussed about the teachers at their university. When learner 1 said that the teachers were *unfair* (line 1), learner 2 responded by repeating *unfair* to show agreement *yes* (line 2).

For inter-reliability of the coding, a second rater coded independently 25% of the data. Pearson correlation *r* was .92 for idea units, .86 for LREs, .96 for task enjoyment episodes, and .97 for responsiveness instances. Identified instances of idea units, LREs, positive emotions, and responsiveness were summed per interaction across two tasks. Although time allotted for each interaction was restricted to ten minutes, to further control the effect of difference in speech quantities, a ratio of instances for each engagement measure to total turns was calculated by dividing the total number of instances of idea unit, LREs, positive emotions, and responsiveness by total turns. Due to non-normal distribution of the data, Wilcoxon signed-rank tests were performed to compare the ratios of instances in all coding categories between the two tasks. For the emotional engagement questionnaire, a mean score for each learner was obtained by averaging the five items on each questionnaire, and then compared between two tasks. To answer the second research question, which asked learners about their cognitive, social and emotional engagement in relation to task goal orientation, learners' responses in the exit questionnaire were qualitatively analyzed using content-analysis method (Braun & Clark, 2006).

Results

Learner engagement by task goal orientation

To investigate whether there is a difference in learner engagement in the convergent decision-making task and divergent opinion-exchange task, instances of idea units, LREs, task enjoyment episodes, and instances of responsiveness were identified. Frequency counts of instances for each engagement type per interaction across the two tasks were conducted and presented in Table 2.

Table 2

Learner engagement by task goal orientation

Engagement	Decision-making task				Opinion exchange task				Wilcoxon signed-rank tests		
	Sum		By turns		Sum		By turns				
	M	SD	M	SD	M	SD	M	SD	z	*p*	*d*
Cognitive:											
Idea units	42.22	18.76	1.60	1.01	30.97	14.04	.97	.68	4.64	.01	.82
LREs	2.44	2.257	.09	.08	1.63	1.56	.07	.06	2.33	.02	.41
Emotional:											
Task enjoyment	3.56	3.23	.11	.10	2.59	2.93	.08	.14	1.57	.13	.27
Social:											
Responsiveness	24.91	13.97	.89	.56	14.22	9.59	.42	.33	4.73	.01	.83

As shown in Table 2, the descriptive data showed that the learners demonstrated greater cognitive, emotional and social engagement in the convergent decision-making task than the divergent opinion-exchange task across all engagement measures. The Wilcoxon signed-rank tests showed that there were significant differences in the two measures of cognitive engagement (i.e., idea units and LREs) and in the measure of social engagement (i.e., responsiveness). However, no significant difference was observed in the measure of emotional engagement (i.e., explicit positive emotion instances).

Table 3 presents the summary of quantitative results from the posttask emotional engagement questionnaire. The dependent *t*-test showed no difference in the learners' reported emotions between the two tasks.

Table 3

Learners' reported emotions between two tasks

	M	SD	*t*	*df*	*p*	*d*
Decision-making task	8.45	5.17	.925	31	.36	.16
Opinion exchange task	8.29	5.04				

Learners' perceptions about engagement

To investigate the learners' perceptions about their engagement in the convergent decision-making and the divergent opinion-exchange tasks, the learners' responses from the exit questionnaire were qualitatively analyzed using the content analysis approach. The results showed that learners reported differences in their attention level to each other's ideas (an indicator of cognitive engagement) due to the task goal orientation. For instance, in the convergent decision-making task, learners were asked to identify problems and converge to decide on solutions to these problems. They appeared to have paid more attention to their partner's opinions, as shown in Comment 1 below.

> '*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…'* [Comment 1, Pair 05, Decision-making task].

However, when the learners were asked to defend their opinions in the divergent opinion-exchange task, they did not seem to pay much attention to each other's ideas, but just focused on their own argument. Comment 2 below illustrates this tendency.

> *"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"* [Comment 2, Pair 16, Opinion exchange task]

Learner's reports in the exit questionnaire also suggested that the convergent decision-making task encouraged them to engage more socially with each other. Comment 3 from one learner in the convergent decision-making task reflects 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'* [Comment 3, Pair 10, Decision-making 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 a lot of reasons especially for students' dropout at our university…"* [Comment 4, Pair 10, Decision-making task].

In contrast, the divergent opinion-exchange 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* [Comment 5, Pair 07, Opinion exchange task].

Another learner also reported the difficulties in connecting socially with her partner in the divergent opinion-exchange task when they were required to defend their opinions and address the partner's counter-arguments.

> '*Sometimes I agreed with my partner but because I had to argue for my shopping preference/proposal 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' [Comment 6, Opinion exchange task].

Learners' responses in the exit questionnaire also revealed information about their emotions. The majority of the learners reported that they had positive emotions when carrying out the two tasks. Only two learners such as the learner in Comment 6 expressed explicitly her negative emotions due to the divergent task goal. That is, she felt bored when defending her opinions and argued against her partner. When asked about their perception towards the task topics, all of the learners reported positive emotions toward the topics of the two tasks. All the learners used positive adjectives to describe the task topics: university topic (e.g., very fun and hilarious, exciting, interestingly 'hot and realistic' topic) and shopping topic (e.g., exciting, curious, familiar topic but interesting). In sum, the qualitative data showed that task goal orientation affected how the learners were engaged in the tasks.

Discussion

The goal of the current study was to investigate whether task goal orientation had an impact on learner engagement in terms of the cognitive, social and emotional dimensions. The quantitative results showed that the learners produced more idea units, and were engaged in more LREs and responsiveness instances, showing that they were more cognitively and socially engaged in the convergent decision-making task than the divergent opinion-exchange task. However, no significant difference was observed for instances of task enjoyment (an indicator of emotional engagement) and scores of reported emotions between two tasks. The qualitative analysis also revealed similar results that the learners were more cognitively and socially engaged in the convergent decision-making task than the divergent opinion-exchange task.

The learners' higher generation of idea units in the convergent decision-making task suggests that when the learners converged on the same task goal, they were more likely to pay attention each other's ideas and produced task contents (see Comment 1). This finding supports

previous research suggesting that tasks with a convergent goal orientation encouraged learners to talk, negotiate for meaning, and exchange more turns (Jackson, 2007; Keller-Lally, 2016; Smith, 2003). The smaller number of idea units generated in the divergent opinion-exchange task suggests that the divergent goal orientation tasks tended to encourage less production of idea units than the convergent goal orientation tasks. This corroborated Pica et al.' (1993) suggestion that the divergent opinion-exchange task is the least effective type of task for promoting learners' interaction, as compared to other task types such as the convergent decision-making task. In sum, tasks that are manipulated along the task goal orientation affected learners' attention and mental effort (i.e., cognitive engagement) when producing task content.

The greater production of LREs in the convergent decision-making task also showed that convergent goal orientation tasks promoted greater learners' attention to language form than divergent goal orientation tasks. However, it should be noted that the number of LREs observed in both tasks was small (i.e., fewer than three instances per interaction). This finding supports previous research suggesting that learners tended to focus on conveying the messages rather than attending to language form in meaning-focused tasks (Authors, XXX; Storch & Aldosari, 2013; Young & Tedick, 2016). The small number of LREs in both tasks also corroborates previous research findings that learners rarely generated LREs in purely communicative tasks (Philp, Walter, & Basturkmen; 2010; Williams, 2001).

Another finding was that the learners demonstrated greater responsiveness to partners in the convergent decision-making task than the divergent opinion-exchange task. These results suggest that the learners were more socially engaged with each other in the tasks with convergent goal orientation than those with the divergent goal orientation. The learners' greater social engagement in the convergent decision-making task – indicated by greater numbers of instances of responsiveness – also corroborated with the learners' self-report (see Comments 3, 4 and 5). These comments highlight that the convergent decision-making task promotes learners'

social engagement such as their willingness to listen to each other (Baralt et al., 2016; Svalberg, 2009), reciprocity (Author, XXXX; Damon & Phelp, 1989), and mutual support (Philp & Duchesne, 2016; Storch, 2008).

In contrast, the divergent opinion-exchange task did not seem to encourage learners' social engagement as reflected in fewer instances of responsiveness and the learners' Comment 6. It seems that the learners in the divergent opinion-exchange task did not perceive the divergent task goal to be meaningful when asked to defend their opinions and argue against each other. When task goals are not perceived to be meaningful, the learners might not feel encouraged, thus invested less in doing the task (Egbert, 2003; Lambert & Minn, 2007; Maehr, 1984), and failed to use all available resources to complete the task (Bygate & Samuda, 2009). Therefore, the learners' negative perception toward the meaning of the task goal orientation in the divergent opinion-exchange task might have affected the degree of their willingness to interact with the partners (Baralt et al., 2016; Svalberg, 2017), suggesting the low mutuality (Author, XXXX; Galaczi, 2008) and the mechanic interaction in which learners passively received information/ideas from their partners (Reeve, 2012).

With regard to the learners' emotions, the learners reported positive emotions by using positive adjectives to describe the tasks. The quantitative results also showed that there were no differences between the two tasks in terms of instances of task enjoyment and learners' reported emotions. The learners' positive reactions to both tasks suggest that task goal orientation did not affect learners' emotional engagement significantly. However, it should be noted that the learner cited in Comment 6 (divergent opinion-exchange task) reported negative emotions, such as boredom, which suggests that there was a case where the divergent opinion-exchange task invoked negative emotions.

Finally, one may argue that task topics might influence the extent to which learners are engaged in tasks (Phung, 2017). The learners in the current study reported that that task topics

did not affect their interaction. It was possible that the topics for the two tasks were selected based on learners' preference, so they did not appear to affect their engagement in tasks.

The results suggested some pedagogical implications. First, since task goal orientation affected learners' cognitive and social engagement, it is important to take this factor into consideration when designing tasks for language classroom activities. Second, the learners reported positive emotions about task topics that were selected based on their suggestion or preferences. Accordingly, L2 teachers should consider learners' preferences in selecting the topics in order to create positive impacts on their performance (Egbert, 2003; Lambert et al., 2017; Phung, 2017). One possible way to elicit information about the task topics that 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. First, 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 used in the program. Thus, it is worth exploring different types of tasks to determine the impacts of each particular type of task in relation to task goal orientation on learner engagement. Second, the study did not explore the individual differences such as learners' belief or mindset (Sato, 2017) as well as the contextual factors that may also play a role in affecting how they engage in tasks, particularly for those tasks that require the interactants to defend their arguments (i.e., divergent goal or debate tasks). Thus, future research may need to explore the impact of these factors in combination with task goal orientation to shed light on their possible combined effect on learner engagement.

Conclusion

The current study provides evidence that task goal orientation operationalized as divergent versus convergent task outcomes affected the learner's cognitive and social engagement. Findings suggest that designing tasks with a convergent goal orientation is

potentially effective in enhancing greater cognitive engagement (i.e., production of idea units and LREs) and promoting better responsiveness between learners (i.e., social engagement). The results also point to the importance of considering task goal orientation, 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 goal orientation affecting cognitive and social aspects of interaction.

References

Baralt, M., Gurzynski-Weiss, L., & Kim, Y. (2016). The effects of task complexity and classroom environment on learners' engagement with the language. In M. Sato & S. Ballinger (Eds.), *Peer interaction and second language learning: Pedagogical potential and research agenda*, (pp. 209–239). Amsterdam: John Benjamins.

Batstone, R. (2010). Issues and options in sociocognition. In R. Batstone (Ed.), *Sociocognitive perspective on language use and language learning,* (pp. 3–23). Oxford: OxFord University Press.

Braun, V. & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*, 77-101.

Bygate, M., & Samuda, V. (2009). Creating pressure in task pedagogy: The joint roles of field, purpose, and engagement within the interaction approach. In A. Mackey & C. Polio (Eds.), *Multiple perspectives on interaction: Second language research in honour of Susan M. Gass* (pp. 90–116). New York, NY: Taylor and Francis/Routledge.

Damon, W., & Phelps, E. (1989). Critical distinctions among three approaches to peer education. *International Journal of Educational Research, 58*, 9–19.

Duff, P. A. (1986). Another look at interlanguage talk: Taking task to task. In R. R. Day (Ed.), *Talking to learn: Conversation in second language acquisition* (pp. 147–181). Cambridge, MA: Newbury House.

Egbert, J. (2003). A study of flow theory in the foreign language classroom. *Modern Language Journal, 87*, 499–518.

Ellis, R. (2003). *Task-based Language Learning and Teaching*. Oxford, New York: Oxford Applied Linguistics.

Ellis, R., & Barkhuizen, G. (2005). *AnalyzingLlearner Language*. Oxford: Oxford University Press.

Erlam, R. (2016). I'm still not sure what a task is: Teachers designing language tasks. *Language Teaching Research, 20*, 279–299.

Galaczi, E. D. (2008). Peer–peer interaction in a speaking test: The case of the First Certificate in English examination. *Language Assessment Quarterly, 5*, 89-119.

Helme, S., & Clarke, D. (2001). Identifying cognitive engagement in the Mathematics classroom. *Mathematics Education Research Journal, 13,* 133–153.

Jackson, D., (2007). *Another look at convergent and divergent tasks: evidence from synchronous computer-mediated communication.* Presentation at Second International Conference on Task-Based Language Teaching, University of Hawai'i.

Keller-Lally, A. (2006). *Effect of task-type and group size on foreign language learner output in synchronous computer-mediated communication*. Unpublished PhD Dissertation: University of Texas at Austin.

Lambert, C., & Engler, S. (2007). Information distribution and goal orientation in second language task design. In M. P. G. Mayo (Ed.), *Investigating Tasks in formal language learning,* (pp. 25-43). Clevedon: Multilingual Matters.

Lambert, C., & Minn, D. (2007). Personal investment in L2 task design and learning: A case study of two Japanese learners of English. *ELIA, 7,* 127–148.

Lambert, C., Philp, J., & Nakamura, S. (2017). Learner-generated content and engagement in second language task performance. *Language Teaching Research, 6,* 665–680.

Leeser, M. (2004). Learner proficiency and focus on form during collaborative dialogue. *Language Teaching Research, 8*, 55-81.

Long, M. (1996). The role of the linguistic environment in second language acquisition. In W. C. Ritchie & T. K. Bahatia (Eds.), *Handbook of Research on Language Acquisition* (pp. 413–468). NY: Academic Press.

Long, M. (2015). *Second Language Acquisition and Task-Based Language Teaching*. Chichester: Wiley-Blackwell.

Mackey, A. (2012). *Input, interaction and corrective feedback in L2 classroom.* Oxford: Oxford University Press.

Maehr, M. (1984). Meaning and motivation: Toward a theory of personal investment. In R. Ames, & C. Ames (Eds.), *Motivation in Education: Student Motivation* (pp. 115–144). San Diego, CA: Academic Press.

McCarthy, M. (1991). *Discourse Analysis for Language Teachers.* Cambridge: Cambridge University Press.

Oga-Baldwin, W., & Nakata, Y. (2017). Engagement, gender, and motivation: A predictive model for Japanese young language learners. *System, 65,* 151–163.

Philp, J., & Duchesne, S. (2016). Exploring engagement in tasks in the language classroom. *Annual Review of Applied Linguistics, 36,* 50 –72.

Philp, J., Walter, S. & Basturkmen, H. (2010). Peer interaction in the foreign language classroom: what factor foster a focus on form? *Language Awareness, 19*, 261-279.

Pica, T., Kanagy, R. & Falodun, J. (1993). Choosing and using communication tasks for second language instruction and research. In G. Crookes & S. M. Gass (Eds.), *Tasks and language learning: Integrating theory and practice* (pp. 9-34). Clevedon: Multilingual Matters.

Phung, L. (2017). Task preference, affective response, and engagement in L2 use in a US university context. *Language Teaching Research, 21,* 75 –766.

Qiu, X. & Lo, Y. Y. (2017) Content familiarity, task repetition and Chinese EFL learners' engagement in second language use. *Language Teaching Research, 21,* 681 –698.

Reeve, J. (2012). A self-determination theory perspective on student engagement. In S.L. Christenson, A.L. Reschly & C. Wylie (Eds.), *Handbook of research on student engagement* (pp. 149–172). New York: Springer.

Reeve, J., & Tseng, C. (2011). Agency as a fourth aspect of students' engagement during learning activities. *Contemporary Educational Psychology, 36*, 257–267.

Sato, M. (2017). Interaction Mindsets, Interactional Behaviors, and L2 Development: An Affective-Social-Cognitive Model. *Language Learning, 67*, 249-283.

Shin, S-Y., Lidster R, Sabraw. S., Yeager, R. (2016). The effects of L2 proficiency differences in pairs on idea units in a collaborative text reconstruction task. *Language Teaching Research, 20*, 366-386.

Skehan, P. (2001). A framework for implementation of task-based instruction. *Applied Linguistics, 17*, 38–62.

Skehan, P. (2014). *Processing perspectives on task performance*. Philadelphia, PA: John Benjamins.

Skehan, P. & Foster, P. (2001). Cognition and tasks. In P. Robinson (Ed.), *Cognition and Second Language Instruction,* (pp. 183 –205). Cambridge: Cambridge University Press.

Skinner, E., Kindermann, T., & Furrer, C. (2009). A motivational perspective on engagement and disaffection: Conceptualization and assessment of children's behavioral and emotional participation in academic activities in the classroom. *Educational and Psychological Measurement, 69*, 493–525.

Smith, B. (2003). Computer-mediated negotiated interaction: An expanded model. *Modern Language Journal, 87*, 38-57.

Storch, N. (2001). How collaborative is pair work? ESL tertiary students composing in pairs. *Language Teaching Research, 5*, 29 -53.

Storch, N. (2008). Metatalk in a pair work activity: Level of engagement and implications for

language development. *Language Awareness, 17*, 95-114.

Storch, N., & Aldosari, A. (2013). Pairing learners in pair work activity. *Language Teaching Research, 17*, 31-48.

Swain, M. (2013). The inseparability of cognition and emotion in second language learning. *Language Teaching, 46,* 195 –207.

Swain, M., & Lapkin, S. (1998). Interaction and second language learning: Two adolescent French immersion students working together. *Modern Language Journal, 82*, 320–337.

Svalberg, A. M. L. (2017). Researching language engagement; current trends and future directions. *Language Awareness,* 1-19.

Svalberg, A. (2009). Engagement with language: Interrogating a construct. *Language Awareness, 18,* 242 –258.

Toth, P. D., Wagner, E., & Moranski, K. (2013). Co-constructing explicit L2 knowledge with high school Spanish learners through guided induction. *Applied Linguistics, 34*, 255-278.

van Lier, L. (2002). An ecological-semiotic perspective on language and linguistics. In Kramsch, C. (Ed.), *Language acquisition and language socialization: Ecological perspective.* London: Continuum.

Wegerif, R., Mercer, N., & Dawes, L. (1999). From social interaction to individual reasoning: An empirical investigation of a possible sociocultural model of cognitive development. *Learning and Instruction, 9*, 493–516.

Williams, J. (2001). Learner-generated attention to form. Language Learning, 51, 303- 34.

Young, A., & Tedick, D. (2016) Collaborative dialogue in a two-way Spanish/English immersion classroom: Does heterogeneous grouping promote peer linguistics scaffolding. In Sato, M. & Ballinger, S. (Eds.) *Peer interaction and second language learning: Pedagogical potential and research agenda*, (pp. 135 –160). Amsterdam: John Benjamins.

Accepted: 14/01/2019 Published on line. 31/01/2019

Cited as:
Dao, P. Effects of task goal orientation on learner engagement in task performance. *International Review of Applied Linguistics in Language Teaching*.

Appendix

Exit posttask questionnaires

Instruction: Read the questions and provide answers in the boxes next to each question		
Questions	Conversation 1	Conversation 2
What was your thinking about the task goal/outcome? And how did it affect your interaction?		
What was your overall perception of the task that you just did with your partner?		
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?		
Do you think that you and your partner were both equally willing to contribute to the task? Explain?		
Provide three adjectives to describe how you felt during the task?		
Do task topics affect your interaction?		
Other comments about the task, your partner, your interaction, task topics etc.?		