

The Effects of Task Modality and Type on Korean EFL Learners' Interactions

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Exploring ways to use mobile chatting as a viable tool for interaction in EFL settings, this study investigated whether and how task modality (face-to-face conversations vs. mobile chatting) and task type (convergent vs. divergent task) affect L2 English interactions. Sixteen Korean college students participated in this study. Half of them performed convergent decision-making tasks, once in face-to-face (F2F) interaction and once in text-based interaction using a mobile social software (*Kakao Talk*). The other half performed divergent opinion-exchange tasks in the two modes. Their recorded F2F conversations and mobile chatting scripts were collected and analyzed in terms of interactional patterns including task completion time, number of words, number of turns, and occurrence of meaning negotiation devices. Also pre- and post-questionnaires were implemented to investigate the participants' background and perceptions on task performance under the different modes. The results overall confirmed the effects of both modality and task type on interactional modifications. The participants used more meaning negotiation devices in the F2F mode and on convergent tasks. Yet, they perceived mobile chatting as easier to perform a task, although they still preferred F2F. Based on the results, this study discusses both challenges and benefits of mobile-interaction for L2 learning.

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Introduction

L2 researchers have argued that interaction plays a significant role in second language acquisition (SLA) by providing L2 learners with opportunities for meaning negotiation (Long, 1996) and interlanguage hypothesis testing (Swain, 2000). These claims on the beneficial roles of interaction in SLA were widely tested and supported by a number of L2 studies (Gass & Varonis, 1986, 1989, 1994; Long & Porter, 1985; Mayo & Pica, 2000; Pica & Doughty, 1985; Porter, 1986). This has naturally led to a pedagogical implication that L2 learners should be provided with ample opportunities to interact in L2.

In Korean EFL settings, however, chances for learners to interact in L2 are only sparse. They rarely need to use English outside the classroom, and their interaction with the teacher in the classroom is also limited in terms of quantity and quality because of large class sizes, time constraint, and learners' lack of participation (Kim, 2008; Kim, 2009; Kim, 2013; Ko, 2009). Under these circumstances, to encourage learner-learner interaction can be a viable solution to increase L2 interaction and thereby foster L2 learning (Ko, 2008; Lee & Lee, 2013; Ryoo, 2009; Shim, 2014). Currently, interaction between L2 learners is possible even beyond the classroom, thanks to the rapidly increasing ownership of smart phones. Many people are engaging in mobile chatting via social networking sites (SNS) as everyday practices. While a majority of this interaction is done in their L1, an increasing number of people use L2 as well to communicate with speakers of other languages (Ota, 2011). This opens a new possibility to make use of mobile chatting as an opportunity to interact in L2. The characteristics of mobile devices such as mobility, accessibility, and connectivity can expand time and space for interaction to a great extent.

Although it resembles face-to-face (F2F) conversations, text-based mobile chatting has unique characteristics in terms of interactivity. For instance, mobile chatting is not always instant and synchronous. Participants, if they want, can think over the message for some time while postponing their response. Also, they tend to speak (in the form of writing) less on smart phones than in F2F conversations. These unique characteristics of MALL raise a question whether a new mode of interaction via smart phones can induce interactional patterns conducive to L2 learning as observed in F2F interaction. This question can be answered by studies which compare L2 interactions in the F2F mode and in the mobile mode.

It is also necessary to explore the role of factors affecting mobile-based interaction. It is well known that L2 learners' performance is strongly affected by various factors such as task type, gender, proficiency, and familiarity (Gass, 1997). Of them, task type, is probably one of the most widely explored factors in SLA research. The previous studies showed that L2 learners perform better on convergent tasks where participants have to reach an agreement (e.g., a problem-solving task) than divergent tasks where no agreement is required (e.g., a debate) (Duff, 1986; Pica, 1987). However, these studies mostly investigated the effect of task type in F2F interactions. Still less explored is whether task type affects mobile-based interaction in the same manner. Research on this question is of pedagogical significance because it can provide useful guidance for designing effective mobile-based tasks facilitating L2 learning.

This study investigated the effects of task modality and task type on Korean college EFL learners' interaction. The effect of task modality was examined by comparing individuals' interaction in F2F conversations and in mobile chatting (i.e., a within-group variable). The effect of task type was examined by comparing interaction of two groups who performed a convergent task and a divergent task, respectively (i.e., a between-group variable). Finally, the participants' perception on their task performance in different modes was investigated. This study addressed three research questions:

- 1) Are there any differences in Korean college EFL learners' interaction in F2F conversations and in mobile chatting?
- 2) Are there any differences in Korean college EFL learners' interaction on convergent tasks and on divergent tasks?
- 3) What is Korean college EFL learners' perception on their task performance in different modes?

Literature Review

Potencies and Challenges of MALL

For the past two decades or so, the use of mobile devices for language learning has been widely researched and exploited for its value as an ideal learning tool for ESL/EFL learners. According to Burston's (2013) annotated bibliography of mobile-assisted language learning (MALL), nearly three hundred fifty publications have been produced from 1994 to 2012. These studies have highlighted key features of MALL such as mobility (Kukulska-Hulme, 2009; Kukulska-Hulme & Shield, 2008; Traxler, 2007), accessibility (Cho, 2007; Kim & Kwon, 2012; Kukulska-Hulme & Shield, 2008), and connectivity (Chinnery, 2006; Sussex, 2012), all of which can be said to contribute to L2 learning in significant ways. Mobility can expand the possibility of language learning outside the classroom. Using mobile devices, L2 learners can learn English anytime and anywhere. Accessibility can also facilitate L2 learning by drastically increasing the amount and diversity of L2 input. Finally, connectivity can provide L2 learners with increased opportunities to interact with others in meaningful contexts. Given that input and interaction are crucial factors in L2 learning (Gass, 1997; Long, 1996), the potential benefits of MALL cannot be underestimated. This is particularly so in EFL settings where English learning is mostly confined to the classroom and input and interaction are generally sparse.

Yet, there are some issues and concerns in implementing MALL in EFL class. For instance, Colpaert (2004) points out that the multimodal

dimensions of MALL environments may not help L2 learners improve verbal communication skills because they heavily rely on nonverbal information such as images and sounds. This is further aggravated by inconvenience in reading and writing due to the discomfort of the small screen size. Another issue is what Stockwell and Hubbard (2013) call “psycho-social challenges.” The portability of smart phones does not necessarily guarantee L2 learning because L2 learners may have difficulty in accepting the idea of using smart phones for the purpose of learning rather than socializing and entertaining. More seriously, some researchers address concerns about technology-driven pedagogy (Salaberry, 2000). Arguing that mobile devices are not substitutes for teachers but just instructional tools, Kim and Kwon (2012) suggest that more diverse SLA approaches and methods should be integrated into designing effective tasks and materials for MALL. In the same vein, Doughty and Long (2003) suggest that rational choices of technological options for L2 learning should be based on psychological considerations which are guided by theory and research in SLA and other related fields such as educational psychology and cognitive science. Following this suggestion, the present study adopted the interactionists’ perspectives on SLA to explore sustainability of MALL particularly in EFL settings.

Interaction and Task Type in SLA

One of the strongest advantages smart phones can bring into SLA is to enable interaction without being limited by time and space. In his Interaction Hypothesis, Long (1996) argued that negotiation for meaning in conversation triggers interactional adjustments and consequently facilitates SLA “because it connects input, internal learner capacities, particularly selective attention, and output in productive ways” (p. 452). Interactional adjustments are made in various forms such as clarification requests, confirmation checks, and comprehension checks. For instance, when communication problems occur, an interlocutor may use clarification requests such as “what do you mean?” or “I don’t get the meaning.” to ask for help in understanding the interlocutors’ preceding utterances. Confirmation checks are also used to

illicit confirmation that the utterance has been delivered and understood correctly. They usually involve “you mean X?” or repetitions of all or part of others' utterances with rising intonations. Sometimes an interlocutor uses preemptive devices to prevent miscommunication in advance. Comprehension checks such as “Ok?” or “Do you want me to repeat?” belong to this category.

L2 researchers have paid attention to describing negotiation for meaning during L2 interaction (Gass & Varonis, 1986, 1994; Pica, 1994; Porter, 1986), and more importantly testifying its effect on SLA (Gass & Varonis, 1989, 1994; Long & Porter, 1985; Mackey, 1999; Pica & Doughty, 1985; Shehadeh, 1999). These descriptive and empirical studies overall have confirmed beneficial roles of interaction by showing that more negotiation for meaning leads to better comprehension, which in turn results in better SLA.

The connection between interaction and SLA motivated L2 researchers to find factors which stimulate more negotiation for meaning. In particular, there has been much research on the effect of task type. Duff (1986) found that participants produced more turn takings, questions, and c-units on problem-solving tasks than on debate tasks. She considered the former as a convergent task in that participants have to come to agreement, while referring to the latter as a divergent task because no agreement is required. Pica (1987) also investigated the effect of task type along with the effect of teacher presence. The results showed that an information exchange task which requires a single resolution elicited more interactional modification than a decision-making discussion, particularly when the teacher was not present. Put together, previous studies have suggested that convergent tasks are likely to induce greater negotiation for meaning and interactional modifications.

More recently, the effect of task type has been explored in Computer-Mediated Communication (CMC). Similar to the findings in F2F interaction, Blake (2000) found that negotiation for meaning was the most active in jigsaw tasks due to their convergent nature compared to other types of tasks. Yet, Brandl (2012) reported the opposite result that optional information

exchange tasks induced more target-like c-units than jigsaw tasks requiring mandatory information exchange. Similarly, Lee (2001, 2002) found that negotiation for meaning occurs frequently in open-ended discussion tasks where participants use a wide range of communication strategies such as requests for meaning and clarification. On the other hand, in the studies by Smith (2003) and Kim (2006), participants showed the most active meaning negotiation on decision-making tasks. Overall, the results on the effect of task type in CMC interaction are still inconclusive.

The disparity in the findings on the effect of task type in F2F interaction and in CMC interaction indicates the possibility that the effect of task type varies depending on task modality. If this is the case, the effect of task type needs to be explored in MALL independently. Although a lot of research has been conducted on MALL recently, its main interest has been on proposing new MALL models (Kim & Kim, 2012; Kim, & Yoon, 2014; Lee & Bae, 2004) or on L2 learning outcomes of MALL (Kim, 2011; Lu, 2008; Moon & Kim, 2011; Stockwell, 2010). Relatively little attention has been given to interactional modifications and the effect of task type on mobile-based interaction. The present study was set out to fill the research gap in the MALL literature.

Method

Participants

Sixteen Korean college students, majoring in English Education at a university in Seoul, voluntarily participated in this study. Since they had experiences of taking the same courses, they were well acquainted with one another. Table 1 presents their background information. There were twelve female students and four male students. Their age ranged from 20 to 24 years. The participants were screened not to have more than one year of ESL immersion experiences abroad. All of them reported their scores of standardized English proficiency tests, which were in the range of 81-109 out

of 120 TOEFL, 800-900 out of 990 in TOEIC, and 850-885 out of 990 in TEPS (Test of English Proficiency developed by Seoul National University). Based on the scores, their English proficiency is estimated to belong to an intermediate-high to advanced level.

TABLE 1
Participants' Background Information (n=16)

Task type	Dyad	ID	Gender	Age	English score	Stay abroad (months)
Decision-making	A	S1	F	22	91 (TOEFL)	-
		S2	F	22	900 (TOEIC)	-
	B	S3	F	20	850 (TEPS)	-
		S4	M	20	89 (TOEFL)	2
	C	S5	F	22	91 (TOEFL)	-
		S6	F	21	850 (TEPS)	-
	D	S7	F	21	100 (TOEFL)	5
		S8	M	23	855(TOEIC)	7
Opinion exchange	E	S9	F	24	89 (TOEFL)	9
		S10	F	24	109 (TOEFL)	7
	F	S11	F	20	900 (TOEIC)	-
		S12	M	20	885 (TEPS)	-
	G	S13	F	21	850 (TOEIC)	-
		S14	F	21	81 (TOEFL)	-
	H	S15	F	20	100 (TOEFL)	-
		S16	M	20	800 (TOEIC)	-

The participants were paired into four female-male dyads and four female-female dyads. Half of the dyads performed a decision-making task and the other half performed an opinion exchange task. Each dyad performed the same type of task twice, once in a F2F mode and once in chatting on their mobile phones. Thus, this study was designed with task type as a between-group variable and task mode as a within-group variable.

Tasks and Instruments

To explore the effect of task type, two types of communicative tasks were adopted for this study: a decision-making task and an opinion exchange task. The two tasks differ in goal orientation (Pica, Kanagy, & Falodun, 2009). A decision-making task is considered a convergent type because it requires dyads to reach an agreed outcome upon the task completion. On the other hand, an opinion exchange task is considered a divergent type because it does not limit the number of outcomes, allowing the participants to express and incorporate their ideas freely.

Once the two task types were chosen, task prompts were developed. Since the participants in this study had to perform each type of task under the two different modes (i.e., in F2F conversation and in mobile chatting), two prompts were prepared for each task type (see Appendix A). The tasks assigned to the decision-making task group were i) to choose three items to bring to a deserted island (D-Prompt 1) and ii) to recommend three activities for a foreign friend to do in Korea (D-Prompt 2). The opinion exchange task group was asked to share their opinions on i) likes and dislike in college life (O-Prompt 1) and ii) the meaning of English and English learning to them (O-Prompt 2).

The participants' task performance on mobile chatting was investigated by *Kakao Talk*, one of the most widely used mobile social software (MoSoSo) in Korea. *Kakao Talk* is a free-of-charge mobile messenger application, which can be run on both Android and iOS smart phones (see Figure 1).

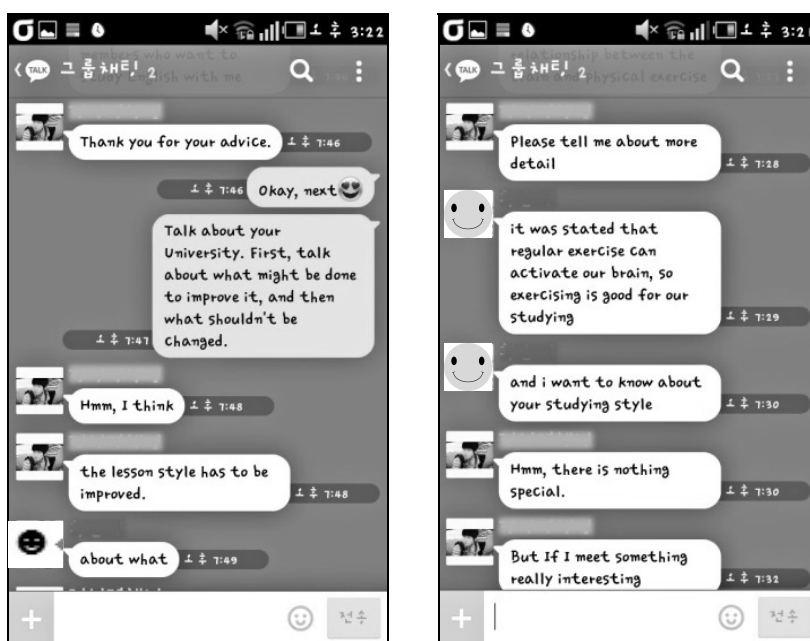


Figure 1. The screenshots of Kakao Talk

The participants' familiarity with *Kakao Talk* was examined by pre-questionnaire survey (see Appendix B) because it can affect their task performance on mobile chatting. All the participants responded that they usually used *Kakao Talk* for mobile SNS activities. However, only 37.5% (6 out of 16) of them were using English in chatting through *Kakao Talk*. The participants' level of comfort and speed in English typing on smart phones was also checked by using a five-point Likert scale (1 strongly disagree, 5 strongly agree).

Finally a post-questionnaire survey was conducted right after each task completion in order to investigate and compare the participants' respective perceptions on F2F interactions and mobile interactions (see Appendix C). The survey asked two questions on "ease" and "fun" of F2F or mobile task performance. Each item consisted of a five-point Likert scale, followed by an

open-ended question asking reasons for their choice.

Procedures

The experiment consisted of the pre-questionnaire survey, an orientation, and two rounds of task performance including the post-questionnaire survey. First, the pre-questionnaire survey was conducted by email to collect the participants' background information and to check their familiarity with *Kakao Talk* and English typing. Based on the information, dyads were formed, and two task type groups were made so that the two groups were as comparable as possible.

Then, an orientation session was held on campus. The participants were informed of the results of the pair and group assignment, which was followed by the introduction to the type of task they were supposed to perform. One group was given convergent decision-making tasks and the other was given divergent opinion exchange tasks. Each group was supposed to perform the assigned type of task twice, once face to face and once on *Kakao Talk*, using different prompts. The sequence of presenting task prompts and task modes were counterbalanced in each group, as illustrated in Table 2.

Right after the orientation session, four dyads (Dyads A, B, E, and F) began their F2F task performance in quiet places without any time limit. They were asked to audio-record the whole process and fill in the post-questionnaire upon completion. The second task on *Kakao Talk* was performed at their own designated time. Again, at the end of the task, they completed the post-questionnaire on their task performance. The other four dyads (Dyads C, D, G, and H) performed the assigned task first in mobile chatting and then face to face on the following day. They were required to perform all the tasks in English only. Indeed, except for names of people, food, or places, the participants used English throughout their performance.

All the dyads were required to submit, via email, the audio-files of their F2F conversations, the chatting scripts on *Kakao Talk*, and the post-questionnaire upon the task completion.

TABLE 2
Task Performance Schedules for Counterbalancing

Task type	Modality	F2F (Prompt 1)		<i>Kakao Talk</i> (Prompt 1)	
		→ <i>Kakao Talk</i> (Prompt 2)		→ F2F (Prompt 2)	
Decision-making task group		Dyad A (female-female)	Dyad B (female-male)	Dyad C (female-female)	Dyad D (female-male)
Opinion exchange task group		Dyad E (female-female)	Dyad F (female-male)	Dyad G (female-female)	Dyad H (female-male)

Data Analysis

Data were collected from multiple sources: pre- and post-questionnaires, chatting scripts on *Kakao Talk*, and audio-recorded F2F interaction transcripts from eight dyads. The chatting scripts from *Kakao Talk* and the transcribed F2F conversations were first analyzed with regard to time spent on each task, the total number of words, and the total number of turns. Then, in order to capture any meaningful interactional patterns, an analysis was made on the occurrence of meaning negotiation devices such as confirmation checks, clarification requests, and comprehension checks. The investigation into the interactional patterns of each dyad was followed by a qualitative analysis of participants' opinions centering on the ease of task completion and the interest in task engagement by the differences in modality and task type.

Results

The Effect of Modality on Task Performance: F2F vs. Mobile Mode

To investigate the effect of modality on task performance, the participants' performances in F2F conversations and on *Kakao Talk* were compared within each group. Table 3 presents the results of the four dyads who performed decision-making tasks.

In the F2F mode, all the four dyads finished their tasks in less than eight

minutes. On the other hand, the time spent completing the same type of task in the mobile mode widely varied among the dyads, ranging from 22 minutes to 1385 minutes. This is probably due to the intrinsic nature of MoSoSo which allows intermittent interactions. The participants were not pressured with time constraint, and most of them chose to continue their conversations at long intervals.

Although the participants spent longer time in the mobile mode, they tended to produce a smaller number of words and turns than in the F2F mode. This was particularly so in Dyads C and D. In the case of Dyad A, they sent very short messages frequently in the mobile mode, which resulted in a higher number of turns but a smaller number of words. Dyad B showed the opposite pattern. They made a small number of very lengthy turns in mobile chatting, while actively exchanging short turns in the F2F mode.

TABLE 3

Decision-making Task Performance in F2F and Mobile Modes

Dyad	Mode	Time (min:sec)	<i>n</i> of turns	<i>n</i> of words	CFC	CLR	CPC
A	F2F	4:03	27	368	5	2	0
	Mobile	22:00	70	294	3	0	0
B	F2F	4:23	40	338	3	0	0
	Mobile	299:00	7	391	1	0	0
C	F2F	6:44	91	602	4	1	1
	Mobile	47:00	59	368	0	2	0
D	F2F	7:30	87	653	9	3	5
	Mobile	1385:00	53	341	5	0	0
Total	F2F	5:30	61.25	490.25	5.30	1.50	1.50
	Mobile	430:15	47.25	348.50	2.25	0.50	0

Note. CFC=Confirmation Checks, CLR=Clarification Requests, CPC=Comprehension Checks

The participants' interactional modifications such as confirmation checks, clarification requests, and comprehension checks were also compared between the two modes. The dyads made more frequent and more diverse interactional adjustments when they performed the task in the F2F mode than in the mobile mode. For instance, Dyad C used six modifications in three types in the F2F mode. However, when they had to perform the same type of task on *Kakao Talk*, they made only two modifications in one type.

A close look at their excerpts further reveals the difference in Dyad C's interaction across the two task modes.

(1) Dyad C's F2F performance (D-Prompt 2)

...

12 S5: There are many delicious food to eat.

13 S6: Ah really?

14 S5: Yes.

15 S6: We...

16 S5: We went to there last time.

17 S6: Where? (<= **Clarification Request**)

18 S5: Don't you remember? Didn't, don't you remember?

19 S6: What, what did we eat?

20 S5: Uh...

21 S6: Ah... that's not...

22 S5: Not you. Hahaha. Minji.

23 S6: Okay. What did you guys eat?

...

51 S6: Yes. Yes. True. I will bring him to, uhh *tteokbokkijip* (the name of a stir-fried rice cake restaurant). Because I think, I want to introduce him our traditional food like tteokbokki (stir-fried rice cakes), gimbap (rice rolls), bunsik (snacks). And I have a *tteokbokkijip* (the name of a stir-fried rice cake restaurant). I, uh, go often. So I will bring him ... (inaudible) restaurant.

52 S5: Oh *tobogetji* tteokbokki (*tobogetji* stir-fried rice cake restaurant)? Do you know that?
53 S6: No no no.
54 S5: It's delicious. And,
55 S6: *Tteokbokkijip* tteokbokki (*tteokbokkijip* stir-fried rice cake restaurant)? (<= **Confirmation Check**)
56 S5: *tobogetji*.
57 S6: *tobogetji*. Oh I want to go there.
...

In Excerpt (1), the participants show several instances of negotiation for meaning. The first communication problem occurred in Line 17, where S6 did not get the meaning of S5's "there" in Line 16 and thus requested clarification. In the following interactions, S5 realized that she confused S6 with another friend, finally resulting in a resolution in Line 23. Another communication breakdown was observed in Line 55, where S6 was not sure of the name of the Korean spicy rice cake restaurant S5 had mentioned in Line 52 (*tobogetji*). In response to S6's confirmation check, S5 provided the restaurant name again in Line 56 and S6 got the correct name in Line 57. In this way, Dyad C had several occasions of communication problems, but they resolved them by negotiating for meaning and modifying their interactions.

However, their interaction on smart phones was somewhat different as shown in Excerpt (2).

(2) Dyad C's mobile-based performance (D-Prompt 1)

...
20 S5: then there are only one item left:(
21 S6: And the last thing I would bring....
Is!!!!
Mmmmmmm
22 S5: my item is the opposite!!!!
23 S6: Oh!!!!
What's Yours ????????

24 S5: i focused on my survival:D

25 S6: Oh~~~~~

Grandmother!!!!

26 S5: first

27 S6: Yep!!!!

28 S5: knife!!!!

...

In Excerpt (2), S6's utterance in Line 25 seems totally irrelevant to the preceding utterances because from Line 22, S5 was talking about her chosen items to bring to a deserted island. Thus, Line 25 is highly likely to cause a communication problem. Nevertheless, no negotiation for meaning was observed in the following utterances. S5, instead, continued to talk about her items in Line 26 and thereafter. There can be two possibilities for the lack of interactional modifications here. It is possible that S5 was simply focused on delivering her messages and therefore overlooked Line 25. The other possibility is that S5 did not need to resort to negotiation for meaning because she could refer to the previous texts. Indeed, Line 25 was the continuation of S6's incomplete utterance in Line 21 and thus, by skimming through the previous texts, she could have grasped the meaning of Line 25. For whichever reason, Dyad C did not get into negotiation for meaning even though a communication problem might have been present, showing a sharp contrast with their interaction in the F2F mode.

Table 4 presents the results from the other group who performed opinion exchange tasks. Overall, this group showed a similar pattern to that of the decision-making task group. All four dyads took longer to complete the opinion exchange task in the mobile mode than in the F2F mode. While they spent less than 11 minutes in the F2F mode, they used 14 to 529 minutes in the mobile mode. Yet, they produced a higher number of turns and words in the F2F mode, with the exception of Dyad H.

This group also tended to employ more interactional modifications in the F2F mode. For instance, Dyad E adopted a total of 17 negotiation devices in

three types in the F2F mode while they used no interactional modifications of any kind in the mobile mode. Although less drastic, a similar pattern was observed in Dyad H, as well. On the other hand, Dyads F and G showed no or only marginal difference in the use of meaning negotiation devices between the two modes.

TABLE 4
Opinion Exchange Task Performance in F2F and Mobile Modes

Dyad	Mode	Time (min:sec)	<i>n</i> of turns	<i>n</i> of words	CFC	CLR	CPC
E	F2F	10:00	105	1022	11	4	2
	Mobile	14:00	23	287	0	0	0
F	F2F	2:15	5	231	0	0	0
	Mobile	529:00	3	198	0	0	0
G	F2F	3:12	35	303	0	0	0
	Mobile	94:00	28	287	1	0	0
H	F2F	10:21	54	1169	4	0	0
	Mobile	69:00	92	1350	2	0	0
Total	F2F	6:27	49.75	681.25	3.75	1.00	0.50
	Mobile	176:30	36.50	530.50	0.75	0	0

Note. CFC=Confirmation Checks, CLR=Clarification Requests, CPC=Comprehension Checks

The results above indicate that the participants in this study used less interactional modifications in the mobile-based task performance. This seems to be related to the fact that the participants could access and reflect on the direct references of the interlocutor's text messages. In such circumstances, the participants may have felt less need to check the interlocutor's comprehension or request confirmation and clarification from the interlocutor.

The Effect of Task Type: Convergent vs. Divergent Task

In order to investigate the effect of task type, a comparison was made

between the two groups who performed decision-making tasks and opinion exchange tasks, respectively. For this purpose, the data in Tables 3 and 4 were reorganized and presented in Table 5.

TABLE 5
Participants' Task Performance by Task Type

Measure	Mode	Decision-making task			Opinion exchange task		
		Min.	Max.	<i>M</i>	Min.	Max.	<i>M</i>
Time	F2F	4:03	7:30	5:30	2:15	10:21	6:27
	Mobile	22:00	1385:00	430:15	14:00	529:00	176:30
<i>n</i> of turns	F2F	27	91	61.25	5	105	49.75
	Mobile	7	70	47.25	3	92	36.50
<i>n</i> of words	F2F	338	653	490.25	231	1169	681.25
	Mobile	294	391	348.50	198	1350	530.50
CFC	F2F	3	9	5.30	0	11	3.75
	Mobile	0	5	2.25	0	2	0.75
CLR	F2F	0	3	1.50	0	4	1.00
	Mobile	0	2	0.50	0	0	0
CPC	F2F	0	5	1.50	0	2	0.50
	Mobile	0	0	0	0	0	0

Note. CFC=Confirmation Checks, CLR=Clarification Requests, CPC=Comprehension Checks

The two groups showed different results in task completion time depending on modality. In the F2F mode, there was little difference between the two groups, although the opinion exchange task showed a wider variation among the dyads. In the mobile mode, the decision-making task group took longer to complete the task. This result, however, is least likely to be attributed to task type because in mobile chatting participants can choose to postpone and resume their participation in task performance any time.

In contrast, the number of turns and words suggests the effect of task type. On average the decision-making task group produced more turns but fewer

words than the opinion exchange task group, and this was so in both task modes. This indicates that the former group tended to produce more frequent, but shorter utterances than the latter. Yet, given the limited number of dyads for each group, a caveat is warranted until this result is supported by more data.

A stronger effect of task type is observed in the use of interactional modifications. The mean scores showed that the decision-making tasks induced more interactional modifications than the opinion exchange tasks, regardless of modality. For instance, the decision-making task group produced on average 5.30 and 2.25 confirmation checks in the F2F and mobile mode, respectively, while the opinion exchange task group made 3.75 and 0.75 confirmation checks.

The more frequent use of interactional modifications on the decision-making tasks is further supported by the individual dyads' data in Tables 3 and 4. Since four dyads performed a type of task twice (in two modes), there were a total of eight task performance data in each group. In the decision-making task group, all the data included negotiation devices. In the opinion exchange task group, however, negotiation devices were observed only in four of them, two from the F2F mode (Dyads E and H) and two from the mobile mode (Dyads G and H). The overall less interactional modification in the opinion exchange tasks is well manifested in Excerpt (3), in comparison with Excerpt (1) earlier.

(3) Dyad G's F2F performance (O-Prompt 1)

...

13 S14: What does English means to you? Umm, I mean, umm, I study English for my academic achievement like final exam and for my exchange, for be a exchange student in another country, so, umm, English is very important to me.

14 S13: Umm.

15 S14: Also, I want to study more because umm English is very fun to study sometimes,

16 S13: really?

17 S14: Yeah. Because umm Americans or many foreigners communicate with English. So umm it's not, so, bored to me.

18 S13: Umm.

19 S14: What does English means to you?

20 S13: Ahh me too. I have studied English for my academic purpose like getting a high score in exam, however, these days, I want to be an English teacher, so I think English is very important because I have to teach English to children and students, so I want to, I hope to speak and communicate in English very well.

21 S14: Umm.

...

While the participants in Excerpt (1) were actively sharing ideas and engaging in negotiation for meaning to reach an agreement as required by the decision-making task, the participants in Excerpt (3) mostly concentrated on expressing their personal opinions. Since they did not have to yield any agreed opinions, they rarely asked for further information or argued on the interlocutor's opinion, but simply showed recognition or acceptance in the forms of "really?" or "Umm"

To summarize, the effect of task type, although restricted by the sample size, was indicated in the number of turns and words L2 learners produced. The decision-making tasks seemed to elicit shorter utterances in more turns than the opinion exchange tasks. It was also observed that task type affected the way the participants negotiated for meaning. They tended to use more negotiation devices when the task has a convergent goal orientation as in decision-making tasks.

Participants' Perception on Task-based Communication in Different Modes

The participants' perception on communication face to face and on *Kakao*

Task was investigated by the post-questionnaire right after their task completion in each mode. Table 6 presents individual participants' responses along with their degree of comfort and speed in English typing on smart phones.

TABLE 6
Participants' Perception on Ease and Fun of Communication Between Two Task Types

	Decision-making task						Opinion exchange task						
	Typing		F2F		Mobile		Typing		F2F		Mobile		
ID	comfort	speed	ease	fun	ease	fun	ID	comfort	speed	ease	fun	ease	fun
S1	4	4	3	4	4	4	S9	4	4	4	3	5	4
S2	3	3	3	4	2	3	S10	2	4	4	4	3	2
S3	3	3	2	5	4	5	S11	3	3	2	3	4	3
S4	4	3	2	3	3	4	S12	3	3	2	4	3	2
S5	1	1	2	3	3	4	S13	1	1	2	3	3	4
S6	2	2	4	5	5	5	S14	2	2	4	4	2	3
S7	3	2	3	4	3	3	S15	3	4	3	4	3	4
S8	3	3	3	4	4	3	S16	3	2	2	4	3	4
<i>M</i>	2.88	2.63	2.75	4.00	3.50	3.88	<i>M</i>	2.63	2.88	2.88	3.63	3.25	3.25

The participants' perception on the ease of communication was different depending on modality. The degree of ease to complete a task was generally higher in the mobile mode than in the F2F mode. In the decision-making task group, the mean score was 2.75 in the F2F mode and 3.50 in the mobile mode. Individual data also show that six out of eight participants rated the ease of communication in the mobile mode higher. In the opinion exchange task group, the difference was smaller but the general pattern was in the same direction. The mean score was 2.88 in the F2F mode and 3.25 in the mobile mode, and five out of eight participants gave a higher score to the mobile communication. Put together, eleven out of sixteen participants felt mobile-based task performance easier than F2F task performance, while three responded in the opposite way and two did not show any preference.

The participants' responses to the subsequent open-ended question revealed that their perception on the relative ease of mobile-based task performance mainly came from two sources: time allowed for thinking and revising their utterances, and reflectivity achieved by text messages, as shown in (1) and (2).

- (1) First of all, I had a lot more time on my side to think before writing and even think while writing. Besides, I felt more at ease for the fact that I could have chances to check and correct my own errors and mistakes. [S1, Mobile mode]
- (2) I felt at ease when text messaging allowed me more time to think. [S4, Mobile mode]

In mobile chatting, a participant can have sufficient time to process input, conceptualize meanings, and plan before they respond to their interlocutor. In addition, once they type their utterances, they can have a chance to check and correct them before they send the message. According to the participants in this study, this nature of mobile chatting contributed to relieving difficulty of interaction. This also explains why the participants whose English typing skills were relatively low (e.g., S5, S6, and S13) still rated mobile-based interaction easier than F2F interaction.

Conversely, the lack of time to think and prepare their utterances made F2F interaction relatively difficult. This was particularly so when combined with limited English proficiency, nervousness or awkwardness of conversing in English with Korean interlocutors, as illustrated in (3), (4), (5), and (6).

- (3) I feel sorry that I could not come up with quality responses. That was because of the fact that the topic was thrown abruptly at the beginning of the task and that I had to produce impromptu ideas without enough time for consideration. [S15, F2F mode]
- (4) The task was not easy for me because I suffered difficulty in having myself understood to my heart's content due to my limited proficiency in English speaking. [S5, F2F mode]
- (5) Compared to interactions on Kakao Talk, conversations in person

seemed to me more tough. And, I rather found it more burdensome to converse in English with Korean interlocutors. [S8, F2F mode]

- (6) I often got frustrated because I couldn't fully express myself in English; and, yes, I suffered from feeling nervous and abashed to some degree. [S13, F2F mode]

There was one participant, however, who showed the opposite opinion on the relative difficulty of interaction between the two modes, as illustrated in (7).

- (7) Face to face, it was easier for me to proceed with a conversation. Probably, one of the reasons should be that you can speak more freely with less constraint when compared to the task on Kakao Talk. [S9, F2F mode]

Although her English typing skills were very high, she perceived that F2F interaction was easier than mobile-based interaction because it allows instant and free interactions. This rather unusual response seems to be partially related to her previous experience of study abroad for nine months, which was the longest among the participants (see Table 1). Probably because of her relatively ample chances to speak and communicate in English in ESL settings, she may have felt more at ease in F2F interaction, compared to the other participants.

Apart from ease/difficulty of communication, this study also asked to what degree the participants liked each mode of interaction. The difference between the two modes was not big, but overall, the participants showed a tendency to rate interactions in F2F conversations more fun than their engagement in mobile chatting. This was so in both groups (4.00 vs. 3.88 in the decision-making task group, and 3.63 vs. 3.25 in the opinion exchange task group).

The analysis of responses to the open-ended question further revealed reasons for the participants' higher rating for F2F interaction in terms of a fun factor. Many participants welcomed the opportunities to speak (as opposed to write) English in F2F interaction, as mentioned below.

- (8) You become more involved in a conversation when speaking while looking at each other. [S14, F2F mode]
- (9) I have accomplished the task with pleasure because I tend to hold high interest in English speaking and enjoy sharing ideas with others. [S15, F2F mode]
- (10) I enjoyed the process of speaking on a very easy topic while tackling with difficulties such as grammar points. [S3, F2F mode]
- (11) Conversing in person was obviously more stressful than in Kakao Talk; but, come to think of it, I enjoyed the processes of conversing face to face. [S8, F2F mode]

Particularly interesting in the above excerpts is that the participants in (10) and (11) are addressing difficulty and stress of communicating face to face, corroborating the results on the ease/difficulty of the two modes of interaction. The difficulty of F2F interaction, however, did not reduce the participants' interest in F2F interaction in this study. Although they had to struggle with grammar and psychological factors such as stress, they still welcomed opportunities to interact face to face with their interlocutors, and when such opportunities were given, they enjoyed them. This is quite encouraging, in that L2 learners not only distinguish ease and value of L2 tasks, but also prioritize value over ease.

Meanwhile, some participants provided reasons why they could not enjoy mobile interaction, which are presented below.

- (12) Because I find the English keyboard inconvenient, I often just pass some grammatical errors I find in my own writing. [S14, Mobile mode]
- (13) I made a lot of typing errors on English Kakao Talk because I wanted to type in my responses as fast as possible as in my usual Korean Kakao Talk rituals. [S15, Mobile mode]
- (14) I didn't enjoy the task because I found the topic awkward to be handled on Kakao Talk. [S10, Mobile mode]
- (15) I think that a little more casual topics fit well for the conversations on

Kakao Talk; on the other hand, more serious topics fit for the conversations face to face. [SI, F2F mode]

First of all, the inconvenience of English typing on smart phones was reported as a factor preventing some participants from engaging in mobile interaction, as shown in (12) and (13). Another factor reducing the participants' interest in mobile interaction was topic. For instance, S10 in (14) considered the topic of expressing their own meaning of English and English learning was too formal to be dealt with on *Kakao Talk*. In the same vein, S1 in (15) suggested that a more casual topic would be appropriate for mobile chatting, while a more formal topic would be suitable for F2F interaction.

To summarize, the participants tended to perceive that mobile interaction was easier while they liked F2F interaction better. This pattern was the same regardless of task type.

Discussion and Conclusion

Recent research on MALL has put much emphasis on collaborative tasks in informal learning contexts which can be spurred by the mobility of smart phones. It has been argued that the implementation of task-based mobile chatting may provide EFL learners with invaluable opportunities to interact in English, bearing its resemblance to authentic F2F interactions. The present study empirically tested this claim, with a particular focus on interactional modifications which is known to facilitate SLA.

Eight dyads of Korean college EFL learners' task performances in the F2F mode and in the mobile mode were compared in terms of task completion time, the number of words, and the number of turns, and the frequency of meaning negotiation devices such as confirmation checks, clarification requests, and comprehension checks. First of all, the participants spent much longer time completing a task in the mobile mode probably because they could freely choose to continue interaction at their own convenience. Yet, the length of mobile chatting, measured by the number of words and turns, was shorter than that of

F2F conversations. More importantly, the participants tended to use meaning negotiation devices less frequently in the mobile mode than in the F2F mode. Perhaps due to the availability of text messages on smart phones, the participants may not have needed to confirm, clarify, or check utterances as much as they would in F2F interaction.

This result reveals both possibilities and challenges in implementing L2 tasks on mobile devices. While text-based interaction in the mobile mode can relieve learners of cognitive loads of memorizing and processing input, at the same time it reduces the need to negotiate for meaning. This means that simply to assign learners a mobile-based task does not guarantee interactional modifications which are facilitative of SLA. It is necessary to explore ways to enhance the effect of interaction in the mobile mode. One of the ways is to manipulate design features of a task. Thus, this study investigated the effect of task type on interactional patterns.

The participants in two groups performed decision-making tasks and opinion exchange tasks, respectively. The two types of tasks were differentiated in terms of goal orientation. The comparison of the two groups' task performances revealed that task type had little influence on task completion time. However, task type was found to affect the length of interaction and interactional modifications. Not only in F2F interaction, but also in mobile chatting, the group who performed convergent decision-making tasks tended to produce shorter utterances in more frequent turns. They also used more meaning negotiation devices than the group who performed divergent opinion exchange tasks. This result is in line with the findings of Duff (1986) and Pica (1987) who investigated the effect of task type in F2F environment. Similar results were also reported by researchers who investigated the same issue in CMC (Blake, 2000; Kim, 2006; Smith, 2003). Therefore, it can be said that regardless of whether a task is performed face to face, through CMC, or through mobile-based communication, as in this study, task type seems to play a significant role in inducing negotiation for meaning which is necessary for SLA. Specifically, a convergent type of task seems to encourage learners to engage in more active interactional modifications. With a shared goal orientation, learners may feel stronger need to check the

interlocutor's understanding, and confirm and clarify the intended meanings so that they can reach the goal successfully. This notion held true for the mobile-based task performance in this study, opening the possibility of being able to enhance the effect of mobile-based interaction by manipulating task design and features.

Finally, this study investigated the participants' perception on their task performance in different modes. The degree of ease the participants felt during task-based communication was higher in the mobile mode than in the F2F mode, regardless of task type. According to the participants, this was mainly due to reflectivity of text-based mobile chatting and time allowed for planning and correcting. Since the participants could refer to previous text messages, they could feel relieved of cognitive and affective loads to store and process the continuous inflow of input. Furthermore, they could control time in terms of when to resume the interaction, while securing sufficient time to prepare and check their utterances.

A downside of this self-paced "speak-writing" on smart phones is that it loses the spontaneous and synchronistic nature of offline F2F communication. In fact, many participants in this study spent a number of hours in completing their tasks. This indicates that the any time and any place nature of MALL which is argued to be beneficial to SLA can sometimes work adversely. This resonates with Stockwell and Hubbard's (2013) psycho-social challenges, which states that L2 learners tend to perceive smart phones as a tool for socializing and entertaining rather than a tool for learning. When learners can choose when and to what degree to participate in task-based communication on mobiles, the qualities of conversations are highly affected by each individual's attitude and motivation toward L2 interactions. In this regard, the participants' responses on their favor of task modality are noteworthy. A majority of the participants expressed a higher degree of fun and enjoyment in F2F conversations than in mobile chatting. This was partly because the participants were frustrated over the frequently misspelled words on smart phones. The main reason, however, lay in the participants' eagerness to engage in spoken forms of L2 communication, which they lack in Korean EFL contexts. Even though they were experiencing

difficulty with F2F interaction sometimes due to limited English proficiency and sometimes due to heightened anxiety caused by pressure to respond instantly, they still welcomed opportunities to speak rather than write English with interlocutors.

This study revealed both possibilities and challenges in designing and implementing task-based mobile chatting. It is obvious that the self-paced "speak-writing" via their own smart phones has considerable cognitive and affective advantages in performing a task, in that it allows L2 learners to refer to the interlocutor's text messages for comprehension and to have time to plan for their utterances. In this sense, it is recommendable to incorporate mobile-based task performance particularly for learners with a relatively limited level of English proficiency who often have great difficulty in performing a task face to face synchronously. It should be noted, however, this study showed that mobile interaction often involves less interactional modification than F2F interaction. Therefore, it is needed to provide additional intervention to task-based mobile communication. According to the results of this study, to assign a convergent type of tasks could facilitate interactional modification between the learners. Also, it would be helpful to limit time for task completion so that L2 learners can concentrate more on task-based interaction, and avoid a tendency to diffuse interactions. Finally, in tandem with ensuring effective task-based mobile interaction by manipulating task design and features, L2 teachers need to provide ample opportunities for learners to interact face to face. "Speak-writing" via smart phones can be a useful tool for practicing task-based interaction, but it does not automatically guarantee L2 speaking ability. Furthermore, it should be remembered that even when they experience difficulty, L2 learners still want to have chances to test and improve their English speaking ability. Therefore, when L2 learners become comfortable with task performance by practicing mobile-based interaction, they need to be induced to interact face to face.

Despite meaningful findings and significant pedagogical implications, this study has several limitations. First of all, the number of the participants is too limited to generalize the findings of this study, calling for a study with a larger population. Also, as adequately addressed by a reviewer and some participants in

this study as well, the tasks and topics chosen for this study might have been less appropriate for mobile communication than F2F communication. For instance, the task of sharing opinions on the meaning of English and English learning, which was used in this study, might be too formal to be dealt with on mobile devices. Therefore, future studies need to employ different tasks and topics in investigating the effect of task modality and task type.

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References

- Blake, R. (2000). Computer mediated communication: A window on L2 Spanish interlanguage. *Language Learning & Technology*, 4(1), 120-136.
- Brandl, K. (2012). Effects of required and optional exchange tasks in online language learning environments. *ReCALL*, 24(1), 85-107.
- Burston, J. (2013). Mobile-assisted language learning: A selected annotated bibliography of implementation studies 1994-2012. *Language Learning & Technology*, 17(3), 157-225.
- Chinnery, G. M. (2006). Emerging technologies going to the MALL: Mobile assisted language learning. *Language Learning & Technology*, 10(1), 9-16.
- Cho, S. (2007). Current status and future of MALL. *Multimedia-Assisted Language Learning*, 10(3), 187-201.
- Colpaert, J. (2004). From courseware to coursewear? *Computer Assisted Language Learning*, 17(3), 261-266.
- Doughty, C., & Long, M. (2003). Optimal psycholinguistic environments for distance foreign language learning. *Language Learning & Technology*, 7(3), 50-80.
- Duff, P. (1986). Another look at interlanguage talk: Taking task to task. In R. Day (Ed.), *Talking to learn: Conversation in second language acquisition* (pp. 147-181). Rowley, MA: Newbury House.
- Gass, S. (1997). *Input, interaction, and the second language learner*. Mahwa, NJ: Lawrence Erlbaum Associates.
- Gass, S., & Varonis, E. (1986). Sex differences in nonnative speaker-nonnative speaker interactions. In R. Day (Ed.), *Talking to learn: Conversation in second language acquisition* (pp. 327-351). Rowley, MA: Newbury House.
- Gass, S., & Varonis, E. (1989). Incorporated repairs in non-native discourse. In M. Eisenstein (Ed.), *The dynamic interlanguage: Empirical studies in second language variation* (pp. 71-86). New York:

Plenum Press.

- Gass, S., & Varonis, E. (1994). Input, interaction and second language production. *Studies in Second Language Acquisition*, 16(3), 283-302.
- Kim, H., & Kwon, Y. (2012). Exploring smartphone applications for effective mobile-assisted language learning. *Multimedia-Assisted Language Learning*, 15(1), 31-57.
- Kim, H., & Yoon, M. (2014). Adopting smartphone-based blended learning: An experimental study of the implementation of Kakao Talk and Mocafé. *Multimedia-Assisted Language Learning*, 17(2), 86-111.
- Kim, H. S. (2011). Effects of SMS text messaging on vocabulary learning. *Multimedia-Assisted Language Learning*, 14(2), 159-180.
- Kim, J. (2013). On the directions of improving EFL learners' interactional competence in the primary classroom discourse. *Korean Journal of Linguistics*, 38(4), 875-893.
- Kim, S. (2006). Korean sixth grade elementary school students' meaning negotiation in task-based CMC. *Multimedia-Assisted Language Learning*, 9(2), 99-127.
- Kim, S.-H. (2009). Communicative language teaching in college English conversation class. *Foreign Languages Education*, 16(1), 291-314.
- Kim, S. H. (2008). Types and characteristics of classroom exchanges in Korean middle school TETE classes: A discourse analysis and its pedagogical implication. *The SNU Journal of Education Research*, 17, 71-94.
- Kim, S. J., & Kim, K. S. (2012). Design and implementation learning English words smart-phone application for elementary school students on Android platform by focus on form. *Korea Association of Information Education*, 16(2), 223-231.
- Ko, J. (2009). The characteristics of teacher talk and interaction with students in teaching English in English classes. *Foreign Languages Education*, 16(3), 377-400.
- Ko, M. H. (2008). Investigation of small group interaction in a Korean university EFL classroom. *English Teaching*, 63(4), 167-189.

- Kukulska-Hulme, A. (2009). Will mobile learning change language learning? *ReCALL*, 21(2), 157-165.
- Kukulska-Hulme, A., & Shield, L. (2008). An overview of mobile assisted language learning: From content delivery to supported collaboration an interaction. *ReCALL*, 20(3), 271-289.
- Lee, J., & Lee, J.-H. (2013). Effects of role assignment and proficiency difference in low level learners' pair interaction in English. *English Teaching*, 68(4), 193-216.
- Lee, J. S., & Bae, I. H. (2004). Design and implementation of mobile contents for learning English vocabulary. *Korean Society for Internet Information*, 5(4), 43-51.
- Lee, L. (2001). Online interaction: Negotiation of meaning and strategies used among learners of Spanish. *ReCALL*, 13(2), 232-244.
- Lee, L. (2002). Synchronous online exchanges: A study of modification devices on non-native discourse. *System*, 30(3), 275-88.
- Long, M. (1996). The role of the linguistic environment in second language acquisition. In W. C. Ritchie & T. K. Bhatia (Eds.), *Handbook of second language acquisition* (pp. 413-468). San Diego: Academic Press.
- Long, M., & Porter, P. A. (1985). Group work, interlanguage talk, and second language acquisition. *TESOL Quarterly*, 19(2), 207-228.
- Lu, M. (2008). Effectiveness of vocabulary learning via mobile phone. *Journal of Computer Assisted Learning*, 24(6), 515-525.
- Mackey, A. (1999). Input, interaction and second language development. *Studies in Second Language Acquisition*, 21(4), 557-587.
- Mayo, M., & Pica, T. (2000). Is the EFL environment a language learning environment? *Working Papers in Educational Linguistics*, 16(1), 1-24.
- Moon, E. J., & Kim, J. K. (2011). Effects of web-based and mobile bloggings on Korean college students' writing. *Multimedia-Assisted Language Learning*, 14(3), 225-243.
- Ota, F. (2011). A study of social networking sites for learners of Japanese.

- New Voices*, 4, 144-167.
- Pica, T. (1987). Interlanguage adjustments as an outcome of NS-NNS negotiated interaction. *Language Learning*, 38(1), 45-73.
- Pica, T. (1994). Research on negotiation: What does it reveal about second-language learning conditions, processes, and outcomes? *Language Learning*, 44(3), 493-527.
- Pica, T., & Doughty, C. (1985). The role of group work in classroom second language acquisition. *Studies in Second Language Acquisition*, 7(2), 233-246.
- Pica, T., Kanagy, R., & Falodun, J. (2009). Choosing and using communication tasks for second language instruction. In K. V. Branden, M. Bygate, & J. M. Norris (Eds.), *Task-based language teaching: A reader* (pp. 171-192). Amsterdam: John Benjamins Publishing Company.
- Porter, P. (1986). How learners talk to each other: Input and interaction in task-centered discussions. In R. Day (Ed.), *Talking to learn: Conversation in second language acquisition* (pp. 200-222). Rowley, MA: Newbury House.
- Ryoo, H.-K. (2009). Language related episode (LRE) in learner interactions as an opportunity for language learning. *English Teaching*, 64(4), 315-335.
- Salaberry, M. R. (2000). Pedagogical design of computer mediated communication tasks: Learning objectives and technological capabilities. *The Modern Language Journal*, 84(1), 28-37.
- Shehadeh, A. (1999). Non-native speakers' production of modified comprehensible output and second language learning. *Language Learning*, 49(4), 627-675.
- Shim, S.-J. (2014). NNS-NNS interaction via a text reconstruction task: Proficiency differences and learning moments. *Studies in Linguistics* 33, 197-231.
- Smith, B. (2003). The use of communication strategies in computer-mediated communication. *System*, 31(1), 29-53.

- Stockwell, G. (2010). Using mobile phones for vocabulary activities: Examining the effect of the platform. *Language Learning & Technology, 14*(2), 95-110.
- Stockwell, G., & Hubbard, P. (2013). *Some emerging principles for mobile-assisted language learning*. Monterey, CA: The International Research Foundation for English Language Education. Retrieved from http://www.tirfonline.org/wp-content/uploads/2013/11/TIRF_MALL_Papers_StockwellHubbard.pdf
- Sussex, R. (2012). Text input and editing as a bottleneck in mobile devices for language learning. In F. Zhang (Ed.), *Computer-enhanced and mobile-assisted language learning: Emerging issues and trends* (pp. 220-234). Hershey, PA: Information Science Reference.
- Swain, M. (2000). The output hypothesis and beyond: Mediating acquisition through collaborative dialogue. In J. P. Lantolf (Ed.), *Sociocultural theory and second language learning* (pp. 97-114). Oxford: Oxford University Press.
- Traxler, J. (2007). Defining, discussing and evaluating mobile learning: The moving finger writes and having writ.... *International Review of Research in Open and Distance Learning, 8*(2), 1-12. Retrieved from <http://www.irrodl.org/index.php/irrodl/article/viewArticle/346>

Appendix A

Prompts for Tasks

1. Decision-making task

D-Prompt 1)

If you were stranded on a deserted island, what three items would you bring with you? You should agree on these three items.

D-Prompt 2)

Tom, one of your foreign friends, sent you an email last night, saying that he's coming to visit Korea for a business trip. He will only have twenty four hours of free time for sightseeing in Korea. What three activities in three different places would you recommend for Tom to do? You should agree on these three activities.

2. Opinion exchange task

O-Prompt 1)

Share your opinions with your partner about likes or dislikes in college life. (e.g., good things, differences from secondary school experiences, changes to be made)

O-Prompt 2)

Share your opinions with your partner about what English (or learning English) personally means to you. (e.g., academic achievement, career, social, cultural, self-actualization)

Appendix B

Pre-questionnaires (presented in Korean)

☞ Your responses will remain confidential and will be used only for research purposes. Please answer the following questions as frankly as you can.

<input type="checkbox"/> Name:	<input type="checkbox"/> Gender: ① Male ② Female
<input type="checkbox"/> Major:	<input type="checkbox"/> Age:
<input type="checkbox"/> Experience in staying abroad:	
① Yes (Country _____: Length _____ months)	
② No	
<input type="checkbox"/> English Test Score:	
① Yes (TOEIC, TOEFL, TEPS, IELTS: _____)	
② No	
<input type="checkbox"/> I am close to my interlocutor in the given tasks.	
① Strongly disagree ② Disagree ③ Neutral ④ Agree	
⑤ Strongly agree	

1. I usually use *Kakao Talk* for chatting. ① Yes ② No
2. I occasionally use English when chatting on *Kakao Talk*. ① Yes ② No
3. I feel comfortable with typing text messages in English on my smart phones.
① Strongly disagree ② Disagree ③ Neutral ④ Agree
⑤ Strongly agree
4. I tend to type in English rather fast on my smart phones.
① Strongly disagree ② Disagree ③ Neutral ④ Agree
⑤ Strongly agree

Appendix C

Post-questionnaires (presented in Korean)

1. It was easy to communicate in English with my interlocutor face-to-face /on *Kakao Talk*.

- ① Strongly disagree ② Disagree ③ Neutral ④ Agree
⑤ Strongly agree

Reason:

2. It was fun to communicate in English with my interlocutor face-to-face/on *Kakao Talk*.

- ① Strongly disagree ② Disagree ③ Neutral ④ Agree
⑤ Strongly agree

Reason: