Voice-based Computer-mediated Communication (VCMC): An Exploratory Study on EFL Students' Perceptions and the First Language Use for Oral Practice

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Abstract: A consideration to gradually boost students' willingness to communicate in the target language (L2) within the EFL instruction is seen to be an important preliminary to encourage EFL students to be able to have more English oral practice and product. While EFL students are in sharing and discussion in pairs or in groups, the intervention of the mother tongue (L1) use, as well as their background information in terms of confidence in English use and challenge in English use, might affect students' perceptions for English oral practice. In order to provide an efficient English speaking setting, a means of integrating synchronous computer-mediated communication in the instructional setting is employed to facilitate pairs and groups sharing. To this end, the aim of the study is to examine the relations of students' perceptions on oral practice within their background and the intervention of L1 use in the integrated EFL learning setting. 195 senior high school students were recruited after engaging in the semester-long English speaking class. Based on a prior study qualitatively conducting students' feedback in this learning process, a questionnaire, Perception for Synchronous Oral Computer-mediated Communication Questionnaire (PSOCMC) is developed. The findings demonstrate six factors revealed in terms of interactiveness, autonomy in English use, clarity of audio processing, intermediary of technology, instant support, and efficiency are analyzed and adopted for investigation. It shows the L1 use in students' sharing would affect them being autonomous in English use, and an indispensable role of confidence in English use in the EFL in-class environment.

Keywords: EFL, perception, mother tongue, synchronous, voice-based computer-mediated communication (VCMC)

Introduction

In English as a Foreign Language (EFL) learning environment, the four language skills are regarded as a means to effectively and distinctly train students to gain sufficient practice in English (Dekeyser, 2001). However, a happening reveals that although most of the EFL students are able to comprehend and produce English (L2) in written forms, it is hardly to see the equal output within oral structure. The difficulty of producing English speaking might further cause an incident of unwillingness for English communication. Then those circumstances might affect their willingness to communicate in English afterward. As a result, a means to promote students to be willing to communicate in English should be the primary consideration in the L2 instruction due to its profound influence of language learning (Léger & Storch, 2009). Also, being in the EFL setting, a condition of mother tongue (L1) use in the L2 affiliation of learning might unwittingly affect students'

willingness in L2 speaking since all the interlocutors speak the same language, but are instructed to interact with others in L2 for learning (MacIntyre et al., 1998).

On the other hand, even though EFL students are willing to do English communication, a conventional learning environment setting might illustrates some problems. These problems could interrupt the opportunities and occasions for EFL students to not be able to actively engage in the English speaking setting and insufficient oral practice in class. To this end, an English speaking environment within ICT support in terms of a voice-based synchronous computer-mediated communication (CMC) is employed as an English enclosure to inspirit EFL students for English oral practice. Thus, the study aims to examine the relations of students' perceptions on oral practice within their background, as well as the intervention of L1 use underlying the context.

1. Literature review

1.1. Student perception toward English speaking

English speaking skill is an output process for students while learning the language. In EFL learning setting, students are used to being guided to receive the language knowledge in terms of reading and listening skills (Dekeyser, 1998, 2001), an inactive means to acquire the L2. Also, the outputting progress in terms of speaking skill is arranged as a follow-up L2 learning since without sufficient input knowledge, students rarely to make a proper oral production afterward. Due to the EFL circumstance, students merely are able to gain L2 knowledge in the classroom; and most of the class time is contributed for obtainment of knowledge (Cheon, 2003), yet, the time for appropriately generating output seems to be unwittingly overlooked. Meanwhile, an intervention of L1 or L2 use might alter and affect EFL students' perceptions on speaking performance and willingness (Carless, 2008; Mak, 2011; Storch & Aldosari, 2010). In order to encourage EFL students not only to acquire L2 knowledge but also to be able to yield more oral practice in class, their perceptions toward English speaking should be taken into a premier consideration to understand causes of their willingness to communicate to each other.

1.2. Oral computer-mediated communication

Engaging facilitation for classroom instruction based on pedagogical design tends to have a potential of benefiting efficient L2 learning (Zou, 2011). From dissimilarity on a conventional classroom environment, an oral or voice-based computer-mediated communication (OCMC) (VCMC) is implemented in English speaking classroom setting via a variety of instructional design (Alastuey, 2011; Ko, 2012; Yanguas, 2010). In terms of those recent studies on how synchronous VCMC effect students learning a foreign language in class, learning environments are set as audio or video CMC, and a comparison as the conventional face-to-face (FTF) interaction. The results are various; on the one hand, based on the VCMC support, it not only reveals a significant contribution to the foreign language acquisition but also provides competence of different interaction patterns as well as reducing defects that students might encounter in the conventional FTF speaking class (Alastuey, 2011; Yanguas, 2010). On the other hand, although the conventional FTF setting seems to have a weaker position than the VCMC setting for EFL oral development in class, the study suggested that the affiliated components, such as pedagogical design and strategy use should be generated into consideration as a whole perspective as well (Ko, 2012). The environment setting itself would not display a maximum of effective influence on oral foreign language learning without applicable elements.

2. Methodology

2.1. Participants

195 senior high school (grade 10) students who were male were recruited to participate in and give their feedback following a semester long English speaking class. They did not have any experience of a formal English speaking class at school prior instead of a general English class.

2.2. Instruments

The study is based on an extension of a prior study on three explored subscales of students' perceptions after one-month instruction of the synchronous English speaking class setting (Shih & Yang, 2012). The three subscales of perception were in terms of ability, interaction, and attitude. A questionnaire, Perception for Synchronous Oral Computer-mediated Communication Questionnaire (PSOCMC), was developed by the three subscale criteria, which contained 32 items for examination.

2.3. Procedure

An English speaking class was instructed during a semester long period. Via a theme-based English speaking instruction every other week, students were not only taught relevant vocabulary, phrases, and sentence structures but also asked to think aloud the guided questions towards the subject within the thematic context. Then, students were distributed randomly into pairing or a group for sharing their personal opinions via OCMC supports. Meanwhile, the instructor was able to join each pairing or group for assistance. The questionnaire was completed at the end of the semester to assemble students' perceived feedback to the OCMC-based English speaking class.

2.4. Data analysis

The questionnaire data was analyzed via the statistical analysis computer package SPSS within exploratory factor analysis which was able to illustrate and investigate the description of factors. The questionnaire of the study was based on five-point Likert scale to allow students to rate their agreement of scale on each item, in terms of 1= strongly disagree, 2= disagree, 3= neutrally, 4= agree, 5= strongly agree. The descriptive analysis was also engaged in to explicitly delineate the factors and relevant students' background information.

3. Results and discussion

The findings display a variety of factors revealed students' perceptions within distinct subcategories, and the interrelationship between their background information. Kaiser-Meyer-Olkin measure of sampling adequacy (KMO) = .822 as well as Bartlett's test of sphericity= 2140.964 ($p=.000<.05$) were revealed from PSOCMC which showed an appropriateness for factor analysis. The results extracted six factors via principal axis factoring show the eigenvalues which were F1= 7.301, F2= 2.048, F3= 1.792, F4= 1.329, F5= 1.207, F6= 1.038, and relatively refer to 31.340, 7.832, 6.595, 4.519, 3.465, 2.927 % of variance. It leads to a significant validity of PSOCMC. The six extracted factors were characterized as F1: interactiveness, F2: autonomy in English use, F3: clarity of audio processing, F4: intermediary of technology, F5: instant support, F6: efficiency. The

reliability of each factor displayed F1= .854, F2= .783, F3= .829, F4= .851, F5= .611, and F6= .751 which in total presents a significant reliability (.897>.07). Moreover, the mean score and standard deviation are described for the six factors and students' background information. First, it was accumulated as the representative of factor scores among each factor, which is F1 (M=4.10, SD=.724), F2 (M=4.06, SD=.675), F3 (M=4.23, SD=.687), F4 (M=3.55, SD=1.083), F5 (M=3.70, SD=.800), and F6 (M=3.60, SD=.721). Meanwhile, the background information of students, in terms of (1) mainly use Chinese to talk and discuss while sharing (Main_in_C) (M=2.16, SD=.992); (2) be confident to talk and discuss in English (Confidence) (M=3.16, SD=1.076); (3) feel challenged while talking and discussing in English (Challenge) (M=3.94, SD=1.085), were also investigated to refer to the correlation within PSOCMC.

Pearson correlation was utilized as a means to analyze the correlation among the six factors and the students' background information. Table 1 demonstrates the correlations between six factors and students' background information. Among six factors, it showed positive correlations between each factor ($p<.01$). Along with the students' background, it showed a negative correlation between Main_in_C to F2 (autonomy in English use) ($p<.01$) and F5 (instant support) ($p<.05$). Confidence revealed a positive correlation among the six factors; Challenge revealed a positive correlation between F4 (intermediary of technology) ($p<.05$). Within background information, it presented negative correlations between Confidence to Main_in_C ($p<.01$) and Challenge ($p<.01$).

Table 1: The correlations among six factors and students' background information

		F1	F2	F3	F4	F5	F6	Main_in_C	Confidence	Challenge
Pearson Correlation	F1	1								
	F2	.446**	1							
	F3	.466**	.409**	1						
	F4	.273**	.401**	.175*	1					
	F5	.313**	.463**	.377**	.259**	1				
	F6	.571**	.436**	.469**	.382**	.373**	1			
	Main_in_C	-.105	-.415**	-.133	-.106	-.146*	-.091	1		
	Confidence	.386**	.436**	.256**	.148*	.278**	.448**	-.291**	1	
	Challenge	-.019	.096	-.028	.176*	-.071	-.076	.109	-.323**	1

It is interesting to see that all the six factors explaining a positive interaction between either two factors among all. The interplay between the six factors of students' perceptions and their background information shows a number of different considerations. Students who mainly talked in Chinese while in pairs or group discussion seem not to be able to hold the autonomy in English use while discussing with other students. Even more, it also shows that the instant support, such as an immediate oral modification from the instructor or be able to check online dictionary for understanding does not favored much by those students who particularly did the discussion mainly in Chinese (L1) instead of in English (L2) to other students in pairs or group discussion. Due to the reluctant willingness to communicate to each other in L2, as well as the disfavor of instant supports within sharing, it might be worth of further investigating on the reasons of the unwillingness of communicating in L2 for oral sharing in class, as well as a concern on analyzing their discourse while in sharing to distinguish the cause of L1 use within L2 oral practice setting.

Meanwhile, on the one hand, as the students who have more confident in English discussion, it seems that they would hold more autonomous in English use, enjoy the interaction with others, and be more efficient in sharing their ideas in English via the facilitation of technology intermediary. On the other hand, the students who feel challenged to discuss in English in pairs or among groups incline to need the aid or intermediary in terms of headsets in this study to facilitate for a more comfortable English oral practice progress. The intervention of medium seems to lessen some concerns which allow students

to be able to have less confrontation while doing oral practice in pairs and groups in L2. Thus, the confidence in English (L2) speaking ability appears to play an essential role while students are doing English oral discussion in class; as long as they are able to gain sufficient confidence in English use, they are more likely to neither use much Chinese (L1) in sharing nor feel it is challenges on using English (L2) to do the speaking practice in class setting.

4. Conclusion

It is a continuous progress for the instructors to consider an optimal EFL learning setting to inspire and boost EFL students' willingness to communicate in L2 for speaking instruction. According to this study, it tends to reveal that the intervention of L1 use in the EFL speaking environment causes students to be less autonomous in English speaking; it seems to be less necessary for students to adopt instant supports while the discussion. Last but not least, a hold of confidence in English oral use might need to be concerned precursory due to its significant influence on all perceived factors from EFL students, as well as the role of intermediary is able to ease off the uncomfortableness of English speaking in the EFL setting. In sum, the study suggests that the instructors should keep an awareness on students' perceptions and their willingness towards the speaking skill learning in EFL instruction since it is able to not only have a thorough understanding on students' perceived learning feedback but also allow the instructors to realize what the students might encounter while having oral practice in L2 and further adapt the speaking instructional design.

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