The Role of Social Presence in a Flipped Classroom to Facilitate Oral Skills of Language Learners

Ming-Yi Scott CHEN HSIEH^a, Wen-Chi Vivian WU^b & Shu-Mei Gloria CHWO^c

^aGraduate Institute of Network Learning Technology, National Central University, Taiwan ^bDepartment of English Language, Literature, and Linguistics, Providence University, Taiwan ^cDepartment of Applied English, Hungkuang University, Taiwan *curtis3883@gmail.com

Abstract: With the invention of new technologies, issues and studies concerning how the emerging technologies can be applied into educational settings to facilitate language teaching and learning have gained its prominence. While a plethora of studies have supported the application of technologies to language education, there has been little research into the effects of mobile-assisted language learning and flipped learning on EFL learners' oral proficiency. In view of this, the current study attempted to examine the impact of an online learning community in a flipped classroom, specifically via mobile platforms, on EFL learners' oral proficiency and their perceptions of the social as well as interpersonal communication in a flipped instruction. The subjects of this empirical study were 50 English-majored sophomores enrolled in two required oral training classes at a four-year comprehensive university in central Taiwan. Dual sources of data collection were used to analyze quantitative data, including pre- and post-tests on oral reading and comprehension questions, and a "Community of Inquiry" (CoI) questionnaire. The results revealed that the online learning community in a flipped instruction created a learning setting that not only supported social and interpersonal communication and collaboration but also significantly enhanced the participants' oral proficiency, making them more competent and motivated in highly interactive learning activities, such as online or in-class interaction, collaboration, and discussion.

Keywords: flipped learning, social presence, online learning community, oral proficiency

1. Introduction

With regard to language teaching and learning, English has become one of the primary languages in many fields, including academic discourse, business, technology, and international relations (Sun, Huang, & Liu, 2011; Wu, Sung, Huang, Yang, & Yang, 2011). While traditional EFL instruction has focused on vocabulary, grammar, and sentence structure, the mastery of oral ability holds the key to successful interaction in an international society, as language learning is all about learning to communicate and interact. However, the significance of speaking is not reflected at most of the instances in EFL settings, as reading and writing are highly emphasized than speaking and listening (Cheon, 2003; Tsou, 2005) and limited opportunities to speak English in non-English-speaking countries (such as Taiwan, South Korea, and Japan) remain prevalent.

Nevertheless, with technological advances that contribute to education transformation (Bishop & Verleger, 2013), technologies have become much more available and integrated into the field of language teaching and learning, with their distinctive features such as mobility, reachability, personalization, spontaneity, and ubiquity. Consequently, technology-enhanced language learning (TELL) and mobile-assisted language learning (MALL) has increasingly been the mainstream in recent years, as documented in Kiernan & Aizawa (2004). One of the alternative approaches that integrates technology into language learning and that contributes to ample opportunities for students to learn is the flipped learning (Hung, 2015; McLaughlin, Roth, Glatt, Gharkholonarehe, Davidson, Griffin, Esserman, & Mumper, 2014), where technologies (such as mobile devices) are employed to make efficient use of class time and students are given more opportunities to participate in meaningful engaging activities in an learning community, thus enhancing the learning outcomes.

In an online learning community, a learner constructs knowledge gradually as the result of interaction with the environment and with both internal and external influences (Zhang &Kou, 2012), meaning that learners develop strong relationships with others in the online setting (Murdock & Williams, 2011), where "active interaction is not listening and mirroring the correct realities, but rather participating in and interacting with the learning situation and environment in order to create a personal view of the world" (Janassen, Davidson, Collins, Campbell, & Haag, 1995, p. 20).

The flipped instruction shifts from teacher-centered lectures to student-centered learning. Instructors devote class time to creating engaging learning environments and students develop solutions via interaction with their peers, echoing the previous studies that students construct meaning and confirm knowledge in the presence of peers during online student discussions (Akyol & Garrison, 2011a, b). Online learning communities are successful and effective when "participants work in groups to solve authentic problems; participants have shared learning goals; knowledge is emergent and experts in the group are facilitators; group members operate at varying levels of mastery; there is a commitment on the part of group members to participation in the community" (Cowan, 2012, p. 12). As the educational field gradually moves toward the constructivist approach, student-centered learning, and technology-integrated pedagogy, traditional lecture-based instruction has been criticized for its sheer ignorance of leaners' active participation and its unidirectional installment of knowledge to learners.

However, there has been little investigation into English oral proficiency via MALL in an EFL setting. In light of the widespread social and educational use, what research evidences are there to indicate whether the integration of mobile technology into flipped learning can enhance students' oral proficiency? Furthermore, most online learning theories focus on the examination of structural issues rather than the probe into teaching and learning (Garrison, 2000), let alone an in-depth investigation into how social and interpersonal communication affected learning outcomes. To optimize the benefits and affordances of mobile technology and flipped learning, the current study aimed to examine the effects of an online learning community via LINE for flipped learning in an EFL oral training class.

2. Methods

2.1 Participants

The participants included 50 sophomore English-majors in two required English Oral Training classes at a four-year university in central Taiwan, mostly female and between the ages of 20 and 21. The participants had studied English for around 8 years through high school and their English proficiency was considered to be at the upper-intermediate level.

2.2 Data collection and analysis

Dual sources of data collection were employed to examine the participants' oral proficiency as the result of the online learning community and perceptions of the flipped learning experience, including (1) pre- and post-tests of oral reading and comprehension questions, and (2) Community of Inquiry survey. Figure 1 shows the issues and instruments involved in the current study, and Figure 2 displays the entire instructional and data collection process.

The pre-tests and the post-tests, respectively for the traditional instruction and the flipped learning instruction, were identical in content and the participants were asked to respond orally to paragraph reading and comprehension questions. The means of the pre- and post-tests were calculated to compare the instructional differences (i.e., flipped versus traditional). To assure higher inter-rater reliability, the current researchers adopted the *IELTS Assessment Criteria: Speaking* to evaluate against the participants' oral performance, focusing on (1) fluency and coherence, (2) lexical resource, (3) grammatical range and accuracy, and (4) pronunciation. Furthermore, a Paired-Samples *t*-Test was employed to investigate the participants' oral learning outcomes in two different instructions.

To compare the differences in social and interpersonal communication between the flipped learning and past lecture-based learning experiences, the social presence in the Community of Inquiry survey (Arbaugh, Cleveland-Innes, Diaz, Garrison, Ice, Richardson, & Swan, 2008) in the form of a 5-point Likert scale was employed.



Figure 2. Procedures of the current study.

3. Results and Discussion

With respect to the evaluation of the participants' oral performance on the pre- and post-tests (i.e., oral reading and reading comprehension), the results revealed that that in both types of instruction, the mean score of the post-test was higher than that of the pre-test (see Table 1). In the post-test comparison, the mean score of the flipped learning (M=85.98) was much higher than that of the traditional instruction (M=66.6).

Test	Instruction	Ν	Mean	SD	Min.	Max.
Pre-test	Flipped	50	69.94	5.80	59	83
	Traditional	50	59.29	5.98	48	74
Post-test	Flipped	50	85.98	5.58	75	95
	Traditional	50	66.6	5.92	55	82

Table 1. Descriptive statistics of the pre-test and the post-test

Furthermore, in both forms of instruction, the participants performed significantly better on the post-test compared to the pre-test, and that the post-test of the flipped instruction was significantly higher than that of the traditional instruction, suggesting that the flipped instruction contributed to significantly better learning outcomes than the traditional lecture-based instruction. Such results were in line with the findings of previous studies that have shown the benefits of flipped instruction on students' learning outcomes (Hung, 2015; Strayer, 2012).

	Paired Differences							
				95% Confidence				
				Interval of the				
			Difference				a:	
		CD	Std. Error	Ŧ			10	Sig.
	Mean	SD	Mean	Lower	Upper	t	df	(2-tailed)
Post (flipped) to Pre (flipped)	16.04	1.64	.24	15.57	16.52	67.901**	47	.000
Post (traditional) to Pre (traditional)	7.31	1.34	.20	6.92	7.70	37.826**	47	.000
Post (flipped) to Post (traditional)	19.38	1.32	.20	18.99	19.76	102.094**	47	.000

Table 2. Paired-Samples t-Test of the pre-test and the post-test

The results in Table 3 indicated that significant differences in the social presence were found between the flipped instruction and the traditional lecture-based instruction, as students expressed significantly positive perception of the flipped learning compared with past traditional learning, highlighting the supportive interactive context created in the flipped instruction for comfortable discussion and interaction. Therefore, the participants shared related experiences to reach a shared understanding in a collaborative learning context.

Table 3. Paired-Samples t-Test of the pre-survey and the post-survey of the social presence in CoI

		Р	aired Differe	ences				
				95% Confidence				
				Interval of the				
				Difference				
			Std. Error					Sig.
	Mean	SD	Mean	Lower	Upper	t	df	(2-tailed)
Post to Pre	.63	.55	.08	.46	.81	7.516**	49	.000

4. Conclusions

The results of the current study revealed that overall, the participants held positive perception of the flipped learning adopted in the current study. The participants benefited from the online learning community in a flipped instruction for it created a supportive learning setting that allowed for comfortable social and interpersonal communication and collaboration. Furthermore, such instructional design significantly improved the participants' oral proficiency, leading to higher competence in interactive and collaborative learning activities, such as online or in-class interaction and discussion.

References

- Akyol, Z., & Garrison, D.R. (2011a). Assessing metacognition in an online community of inquiry. *The Internet & Higher Education*, 14, 183-190.
- Akyol, Z., & Garrison, D.R. (2011b). Understanding cognitive presence in an online and blended community of inquiry: Assessing outcomes and processes for deep approaches to learning. *British Journal of Educational Technology*, 42(2), 233-250.
- Arbaugh, J. B., Cleveland-Innes, M., Diaz, S. R., Garrison, D. R., Ice, P., Richardson, J. C., & Swan, K. P. (2008). Developing a community of inquiry instrument: Testing a measure of Community of Inquiry framework using a multi-institutional sample. *The Internet and Higher Education*, 11(3-4), 133-136.
- Bishop, J. L., & Verleger, M. A. (2013). The flipped classroom: A survey of the research. In ASEE National Conference Proceedings, Atlanta, GA.
- Cheon, H. (2003). The viability of computer mediated communication in the Korean secondary EFL classroom. *Asian EFL Journal*, 5(1), 1-61.
- Cowan, J.E. (2012). Strategies for developing a community of practice: Nine years of lessons learned in a hybrid technology education master's program. *TechTrends*, *56*(1), 12-18.
- Garrison, D. R. (2000). Theoretical challenges for distance education in the 21st century: A shift from structural to transactional issues. *International Review of Research in Open and Distance Learning*, 1(1), 1-17.
- Hung, H. T. (2015). Flipping the classroom for English language learners to foster active learning. *Computer* Assisted Language Learning, 28(1), 81-96. DOI: 10.1080/09588221.2014.967701
- Jonassen, D., Davidson, M., Collins, M., Campbell, J., & Haag, B. (1995). Constructivism and computer-mediated communication in distance education. *American Journal of Distance Education*, 9(2), 7-26.
- Kiernan, P. J., & Aizawa, K. (2004). Cell phones in task based learning Are cell phones useful language learning tools? *ReCALL*, *16*(1), 71-84.
- McLaughlin, J. E., Roth, M. T., Glatt, D. M., Gharkholonarehe, N., Davidson, C. A., Griffin, L. M., Esserman, D. A., & Mumper, R. J. (2014). The flipped classroom: A course redesign to foster learning and engagement in a health professions school. *Academic Medicine*, 89(2), 236-243.
- Murdock, J. L., & Williams, A. M. (2011). Creating an online learning community: Is it possible? *Innovative Higher Education*, *36*(5), 305-315.
- Strayer, J. (2012). How learning in an inverted classroom influences cooperation, innovation and task orientation. *Learning Environments Research*, 15, 171-193.
- Sun, K. T., Huang, Y. M., & Liu, M. C. (2011). A WordNet-based near-synonyms and similar-looking word learning system. *Educational Technology & Society*, 14(1), 121-134.
- Tsou, W. (2005). Improving speaking skills through instruction in oral classroom participation. *Foreign Language Annals*, 38, 46-55.
- Wu, T. T., Sung, T. W., Huang, Y. M., Yang, C. S., & Yang, J. T. (2011). Ubiquitous English learning system with dynamic personalized guidance of learning portfolio. *Educational Technology & Society*, 14(4), 164-180.
- Zhang, Q., & Kuo, Q. (2012). The course research for the software program based on the Constructivism teaching theories. *Physics Procedia*, 25, 2294-2297.