

Learners' Attitudes to Language-Productive Tasks via Internet Relay Chat

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Abstract

Based on the theories from social constructivism, task-based learning, and social psychology on attitudes, this paper reports and analyzes an investigation into learners' attitudes to language-productive tasks via Internet relay chat (A-LPT via IRC). Data were collected by questionnaires and interviews from international students learning English language in a British university. Results reveal learners hold positive A-LPT via IRC, which can be developed with the lack of any component(s) of attitudes and be influenced by many factors via the social interaction. It is also shown that learners' A-LPT via IRC are strongly related to the attitudes to Internet relay chat in language-productive tasks (A-IRC in LPT), weakly to the frequency of IRC, computer or Internet in everyday use, and rarely to the history of IRC everyday use. Simultaneously, learners hold positive attitudes to most of the task-criterial features, especially the interactive, authentic and interesting tasks and those with native speakers' participation, multi-skill and multi-ability involvement, and comfortable engagement.

Keywords: Social constructivism; Language-productive tasks; Internet Relay Chat; Learners' attitudes; Task features

Introduction

The design and implementation of language-learning tasks has gained considerable momentum in the field of language education since 1980s (Nunan, 1989, 2004; Ellis, 2003;

Van den Branden, Bygate, & Norris, 2009). With the pervasive influence of technology on language education, the prominence of language-learning tasks in conceptualizing computer assisted language learning (CALL) is also evident in much research (Meskill, 1999; Chapelle, 2003; Levy & Stockwell, 2006; Thomas & Reinders, 2010), especially the emphasis on collaborative exchanges and co-construction of learning with technical advances (Blake, 2017). Meanwhile, the importance of learners' attitudes towards language and language learning (Baker, 1992) and then to language tasks within a communicative framework (Léger & Storch, 2009) has been highlighted in the research and theoretical discussions.

Social Constructivist Approach to CALL

Generally speaking, with the tremendous evolvement from computer-fed drills to long-distance communication and collaboration (Warschauer & Healey, 1998), CALL research has been shifting from a behavioristic approach to a social constructivist one. The Social Development Theory of Vygotsky (1978) states that every function in a learning process appears twice: first, between people, interpsychologically; later, at the individual level, intrapsychologically. With growing interest in collaborative language learning via computer-mediated communication (CMC), the social constructivist approach illuminates the significant role of social interaction in learners' individual cognitive constructs during a learning process, thus changing the role that the computers play in interaction among the language learners from human-computer interaction to human-to-human interaction via the computer (Hampel, 2006; Warschauer, 1997).

IRC Language-Learning Tasks

IRC has been defined as the real-time "chat" system for online users that replicates "everyone's input to the others whose computers are 'tuned' to the same topical 'channel'" (Dern, 1992), enabling " 'conversations' to take place in real time via the medium of written language" (Werry, 1996). As one type of synchronous CMC, it was restricted to

text-relay chat only and developed into three types of interactive written discourse: textual communication used by individuals to speak to one another privately; by groups of people engaging in role-playing adventure games; and by members of the “Chat” social spaces on bulletin boards (Werry, 1996). Nowadays, with the large-scale social networking, media or documents sharing and mobile applications reshaping our understanding, IRC can be sketched as a synchronously-interactive written discourse applied in forms of instant messaging (IM), social networking, and online role-playing games.

As Chapelle (2003) suggested, the study of the features of CALL tasks that promote learning should be a concern for teachers and researchers. In spite of various interpretations of features that a language task should have, Ellis' six “criterial features” (2003) is widely accepted as follows: *(i)* tasks involve a plan for learner activity; *(ii)* they have a primary focus on making meaning; *(iii)* they engage with real-world authentic language use; *(iv)* they focus on any or all of the four language skills; *(v)* they engage learners in cognitive skills in order to accomplish them; *(vi)* they have a defined communication-based learning outcome.

It seems that an IRC task should have its specific features. In order to study more about the features, we can refer to Meskill's (1999) notion: *(a)* having more than one answer or more than one way to solve the problem; *(b)* being intrinsically interesting and rewarding; *(c)* allowing different students to make different contributions; *(d)* using multimedia; *(e)* involving sight, sound, and touch; *(f)* requiring a variety of skills and behaviors; *(g)* requiring reading and writing; *(h)* being challenging.

Learners' Attitudes as a Variable in Language-Learning Tasks

The research on language-learning tasks has been mainly aimed at discovering how certain variables affect the interaction when learners attempt to perform a task (Ellis, 1994). The variables can be broadly classified into those related to the task and those related to the learner (Levy & Stockwell, 2006). The close connection of attitude “to individual construct

systems, its value as an indicator of viewpoints in the community and its centrality in psychological theory and research” (Baker, 1992) make it a critical variable in the design and implementation of language tasks.

In the social and psychological science about attitudes, according to Rosenberg and Hovland (1960), there is a three-component model of attitude with cognition (thoughts and beliefs), affect (feelings towards the object) and action (a readiness for action) merging into a single construct at a higher level of abstraction.

Crisp and Turner (2014) suggests four ways through which attitudes can be formed which are by exposure, associative learning, self-perception and for functional reasons. Factors causing the change of attitudes include cognitive dissonance and self-perception as well as external pressures from persuasive messages.

According to Rogers' premise (1995), each member of the social system follows a 5-step process to face a personal decision: having the knowledge; forming attitudes; making a choice of adoption or rejection; putting the decision into use; and evaluating the results of a decision already made. It corroborates the general and widely accepted belief that attitudes affect behavior directly or indirectly (Zimbardo, Ebbesen, & Maslach, 1977).

Regarding the social constructivist approach to CALL, the research on task-based learning and teaching, and psychological theories about attitudes enable the paper to bring together these three major concepts that are interdisciplinary and international. The following questions guide the research:

1. What is the nature of learners' A- LPT via IRC?
2. Which IRC-relevant variable is most related to learners' A-LPT via IRC?
3. What features of LPT via IRC do learners hold more positive attitudes to?

Methodology

Participants

Ninety eight international students learning English language in a British university participated in the questionnaire survey voluntarily. They were from China, Thailand, Poland, Spain, Oman, Cyprus, Mexico and Malaysia, and were aged between twenty and forty. From those participants who expressed the willingness to be interviewed, twelve were randomly-selected to be interviewed for more detailed survey.

Most participants had similar experience of Internet use: 92.9% had over five years of using the Internet and 87.8% stayed online more than three hours a day. Among the participants, 84.7% had over nine years' English language learning experience.

Instruments

Questionnaire

The questionnaire consisted of three sections. The first section was the background of participants including personal information, language learning background, their history of IRC and Internet use, and the frequency of IRC (including chatting via IM, social networking and online role-play games), computer (including entertainment, word processing and picture/video editing) and Internet (including email, information searching and online shopping) everyday use.

The second section was to examine the learners' attitudes to IRC in LPT (A-IRC in LPT) from linguistic, social, psychological, and technological dimensions. There were ten items and each of them was rated on a five-point Likert scale ranging from 1 (strongly disagree), 3 (neutral) to 5 (strongly agree).

The third section was to examine the A- LPT via IRC, consisting of two sets of items respectively for IRC speaking tasks and IRC writing tasks. Each set was composed of ten items rated on a five-point Likert scale as that in the second section.

Interview

According to the results from questionnaire survey, interviews focused on the A-LPT via IM and social network. The first section of the interview was their IRC experience and the general ideas about A-IRC in LPT and A- LPT via IRC.

In the second section, they conducted two LPT via IRC in pairs. Three pairs undertook two oral report speaking tasks and the other three pairs undertook two news release writing tasks. In both speaking and writing tasks, one of the tasks comprises information-gap and discussion activities, including sharing the output audio files and commenting on each other in pairs, and the other, more project-like, includes consensus activities and more discussions, with uploading the output and giving feedback in groups. After each task, they were interviewed about their general attitudes based on the experience.

The last section was to compare the two tasks they had conducted and expressed their A-LPT via IRC in detail from the aspects of cognition, affect and action.

Data analysis

All the questionnaires were coded for the analysis, which was conducted with the help of SPSS Statistics, applying means, one sample t-test and correlation method. Furthermore, considering the integrative approach to using technology in language learning (Warschauer, 2004), the frequency of IRC, computer and Internet everyday use was dealt with as one variable. For the interviews, qualitative analysis was applied with every word being recorded.

Results and Discussion

Results

Questionnaire

The results from one-sample t-test (Test Value=3) showed the participants held positive A-LPT via IRC (n=98, Mean=3.45, t=10.595, df=97, p=.000). Respectively, the positive attitudes were found towards IRC speaking tasks (n=98, Mean=3.50, t=10.069,

df=97, $p=.000$) and IRC writing tasks (n=98, Mean=3.39, $t=8.072$, df=97, $p=.000$). However, the participants had more positive attitudes to IRC speaking tasks.

Table 1

Means Analysis of Items on A-IRC in LPT & A-LPT via IRC

A-IRC in LPT			A-LPT via IRC (Speaking)			A-LPT via IRC (Writing)		
Item	Mean	σ	Item	Mean	σ	Item	Mean	σ
No			No			No		
10	3.54	.921	20	3.00	.908	30	2.93	.933
11	3.46	.839	21	3.31	.968	31	3.18	.889
12	3.71	.952	22	3.27	.990	32	3.38	.891
13	3.31	.957	23	3.05	.946	33	3.19	.949
14	3.57	.885	24	3.58	.984	34	3.17	.931
15	3.30	1.007	25	3.79	.803	35	3.55	.775
16	3.31	.878	26	3.62	.806	36	3.61	.782
17	3.57	.919	27	3.81	.821	37	3.81	.821
18	3.50	.977	28	3.92	.728	38	3.58	.907
19	2.91	1.122	29	3.66	.849	39	3.50	.815

For the insight into the variable most related to learners' A-LPT via IRC, participants' A-IRC in LPT was analyzed before employing correlation technique. It showed that they also held similarly positive A-IRC in LPT (n=98, Mean=3.42, $t=8.020$, df=97, $p=.000$). From more details of means analysis in Table 1, the items about A-IRC in LPT participants were found to hold the most positive attitudes: item 12 ("IRC can be more expressive by using

abbreviations and emoticons”), 14 (“My performance in IRC will be decided a lot by whom I speak or write to”) and 17 (“IRC with pictures and videos is likely to inspire me to express more in LPT”). The least positive attitudes were item 19 (“It will be more interesting via online games”), but with much variation being observed.

Table 2

Pearson Correlations among Variables

		A-LPT via IRC	A-IRC in LPT	Frequency of IRC, Computer & Internet Everyday Use	History of IRC Everyday Use
A-LPT via IRC		1	.705**	.173*	.072
	Sig. (1-tailed)		.000	.045	.240
	N	98	98	98	98
A-IRC in LPT		.705**	1	.213*	.134
	Sig. (1-tailed)	.000		.017	.094
	N	98	98	98	98

** . Correlation (r) is significant at the 0.01 level (1-tailed).

* . Correlation (r) is significant at the 0.05 level (1-tailed).

The results from the analysis of correlations in Table 2 revealed a significant correlation between participants' A-LPT via IRC and A-IRC in LPT ($r=0.705$, $p=.000$), which was the strongest among all the variables. Though weak, the relationship between A-LPT via IRC and the frequency of IRC, computer and Internet everyday use was also significant and positive ($r=0.173$, $p=.045$), which is a bit stronger related to A-IRC in LPT ($r=0.213$, $p=.017$). However, no significant relation was found between A-LPT via IRC and the history of IRC everyday use ($r=0.072$, $p=.240$), which was not significantly related to A-IRC in LPT either ($r=0.134$, $p=.094$). All indicated A-LPT via IRC would be most related to A-IRC in LPT, weakly to how often the learners had been using IRC, computer and Internet in daily lives, which was slightly more related to A-IRC in LPT, and rarely to how long the learners had been chatting via IRC for everyday use.

The general description of the features of LPT via IRC to which participants held the most positive attitudes was provided by the top four among the items about A-LPT via IRC in the means analysis in Table 1: item 28 ("IRC speaking tasks will be better if including the speaking skills in different cultural interactions"), 27 ("IRC speaking tasks must be more popular if I can get more response or feedback to my speech"), 37 ("IRC writing tasks will be more popular because I can search information or look up vocabulary online anytime during writing") and 25 ("IRC speaking tasks will be more interesting if combined with other tasks to form a learning project").

These item statements suggested that learners held more positive attitudes to the tasks with online productive skills' involvement in authentically cultural context (item 28), more interaction as the response or feedback (item 27), comfortable engagement with the aids of Internet (item 37) and interesting designs as a learning project (item 25).

Interview

Generally speaking, the interviewees held positive A-LPT via IRC. Before conducting

the tasks in the second section, seven interviewees held positive attitudes and five out of twelve, however, were neutral to LPT via IRC: two had comparatively shorter history of IRC use in daily lives and three had much more. After the task performance, nine of the interviewees had positive attitudes to conducting IRC speaking and writing tasks. This finding agreed with the results from the questionnaire survey in that participants held positive A-PLT via IRC, which would have little relation to the history of IRC everyday use.

Since it showed a stronger relationship between A-IRC in LPT and A-LPT via IRC, more ideas about IRC forms in LPT were elicited in the interview. As only one interviewee believed online role-playing games should be a better form in LPT, the others were positive to social networking or IM from three attitudinal components of cognition, affect and action. Cognitively, seven interviewees believed social networking was the better form in LPT, three more than those more positive to IM; however, nine out of twelve preferred IM from affective perspective; and two more interviewees were ready to perform LPT via IM, compared to those positive to social networking. Reasons for positive attitudes to IRC form(s) in LPT and least positive attitudes to online role-playing games in LPT were respectively illustrated in Table 3 and Table 4.

Table 3

Reasons for Positive Attitudes to IRC Form(s) in LPT

Reasons	Quotes
a. more users in daily lives	<p>“I think Facebook should be best but Chinese students are accustomed to QQ, like me.”</p> <p>“I’d like WhatsApp, because all my friends are using it.”</p> <p>“There are many more foreign friends on Facebook.”</p> <p>“Skype is the most appropriate because I can IM my Facebook</p>

- friends by Skype.”
- “Because I use QQ most frequently. I can chat with many friends and even my mom uses it.”
- “QQ is common in China. All of my friends use QQ.”
- “Most people around me chose Facebook, so I have to use it.”
- b. no technology anxiety
- “I can use QQ better than Facebook.”
- “I’m more familiar with MSN.”
- “WhatsApp is the most convenient form to use.”
- “Facebook might be most appropriate for productive tasks coz it makes me more relaxed.”
- c. more collaborations
- “QQ is also a good way coz it can set up discussion groups. We can collaborate to finish tasks.”
- “I can create a group via Facebook. It provides a foundation for the members to conduct tasks at the same time.
- “I can ask questions and discuss with classmates by using it.”
- d. more responses
- “More ideas can be exchanged among users and I can get more responses.”
- “I can write something to a native speaker, and get more feedbacks on Facebook.”
- e. being interesting
- “I think Facebook is the best way because I find it’s more interesting.”
- “I think maybe online games could be the most appropriate coz games have lots of tasks to fulfill and they are interesting, I mean, appealing and attractive.”
- f. more communication
- “I prefer WhatsApp because it makes me communicate more.”

	“Everyone chats in English on my Facebook. So, more communication in English there.”
g. being more useful	“Facebook is more useful in practicing English.”
h. more resources	“Social networking has more resources, compared to MSN.”

Table 4

Reasons for Least Positive Attitudes to Online Role-Playing Games in LPT

Reasons	Quotes
a. less experience for no interests	<p>“I don’t play online games. No interests.”</p> <p>“I’m not interested in online games, so I don’t play online games often.”</p> <p>“I’ve never played online games and don’t like them.”</p>
b. being appropriate for young learners instead of adults	<p>“Yeah, I play online games...It may be a good way for young learners. But for me, not good.”</p>

In order to find more about the features of LPT via IRC which learners hold positive attitudes, the specific information from interviews was deconstructed as in Table 5. Many interviewees believed a good LPT via IRC should be authentic, while those with native speakers’ participation and of comfortable engagement shared the most preferred features. Far more interviewees were ready to conduct that with more interaction.

Table 5

Specific A-LPT via IRC

Summary of the Statements	Frequency of Interviewees
Cognition: The interviewees believe a good task	
should be —	5
a. of authenticity	4
b. with online speaking and/or writing skills'	4
involvement	3
c. with native speakers' participation	2
d. with interesting designs	2
e. to develop multiple ability	1
f. with more interaction	1
g. with every learner's involvement	
h. of comfortable engagement	
Affect: The interviewees prefer a task —	
a. of comfortable engagement	5
b. with native speakers' participation	5
c. of authenticity	3
d. with more interaction	3
e. with interesting designs	3
f. contributing to productive-skill improvement	2
Readiness for action:	
The interviewees are more likely to conduct a	
task —	7
a. with more interaction	3

Summary of the Statements	Frequency of Interviewees
b.with interesting designs	2
c.contributing to productive-skill improvement	2
d.with native speakers' participation	1
e. with online speaking and/or writing skills' involvement	1
f. of authenticity	1
g.of comfortable engagement	
h.to develop multiple ability	

Discussion

Learners' A-LPT via IRC Formation and Change

Though the three-component model of attitude is appealing because of its neat and distinct construction, the results from the questionnaires and interviews provide evidence that any component(s) can develop learners' A-LPT via IRC. For example, it was noticed that A-LPT via IRC can be different in three components. As Table 5 illustrates, four interviewees believed "good LPT via IRC should be with online speaking and/or writing skills involvement". However, none of the interviewees preferred such tasks and only one interviewee was ready to conduct a task which involves online productive skills. The results from the questionnaire survey showed that attitudes to the tasks with online productive skills' involvement were relatively more positive (item 29 & 36, Table 1). This suggests that in this case, cognition plays a more important part, with the lack of affect and less contributions from action, in the formation of positive attitudes.

Meanwhile, in questionnaire survey, few of the participants have the experience of conducting LPT via IRC in language learning though most of them have experience of social

interaction via IRC. However, they have attitudes to those explicit statements. In this case, we do not require any behaviors related with LPT via IRC but we need to form the attitudes through “internal associative learning (Crisp & Turner, 2014)”, that is, by associating their knowledge of IRC with that of LPT.

More evidence can be seen in the interview. Two interviewees, S3 and S5, whose A-LPT via IRC changed from neutral attitudes before conducting the tasks to positive attitudes after conducting the tasks, were asked why they changed their attitudes. S3 responded: “*I haven't conducted such kinds of tasks before. Now, I think it can be interesting and creative.*” S5 stated: “*I did produce more in the task*”. What made them change the attitudes is the factor of self-perception.

Experience of IRC, Computer or Internet; A-IRC in LPT; and A-LPT via IRC

According to the survey results, the experience of IRC, computer or Internet use in daily lives, more from the frequency than the history, can say something in A-LPT via IRC as well as A-IRC in LPT. In the interviews, we can find from Table 3 that some reasons for positive A-IRC in LPT are based on the knowledge and/or experience of the everyday use of IRC, especially “more users in daily lives” and “no technology anxiety”. With the frequent social interaction via IRC, computers or Internet in daily lives, learners get one of the outputs, interpsychologically and then intrapsychologically. There is input of attitudes to everyday use of IRC, computer or Internet, all work as well in the three-component constructs of A-IRC in LPT and A-LPT via IRC.

However, the experience of IRC, computer or Internet use in daily lives is not highly related to A-LPT via IRC and even very weakly to A-IRC in LPT. It has been shown in the results from the questionnaire survey that A-LPT via IRC has no significant relationship to the history of IRC everyday use and a low one to the frequency of IRC, computer and Internet everyday use.

The following results from interviews offer evidence that it is also very weak to A-IRC in LPT. Interviewees' least positive attitudes to online role-playing games in LPT tallies with that in questionnaire survey (item 19, Table 1). What should be highlighted is that because of less exposure to online games (resulting from less personal interests) and having more experience (regarding it as the form more appropriate for young learners), both form the least positive A-IRC in online games when conducting LPT (Table 4). In this sense, the experience of everyday technology use says something related to learners' attitudes to technology in everyday use, but not to that applied in LPT. As a result, it is not IRC in daily use but that in LPT that learners should be more exposed to, make more associative uses of, or develop the cognitive modeling in. Thus, it may help to form positive A-IRC in LPT or change the original negative ones, both of which are highly related to learners' positive A-LPT via IRC.

In addition, from Table 3, it can be assumed that the positive attitudes depend more on how the IRC tasks are designed (c, d, e, and f) but not the attributions of IRC in everyday use (a and b), which implies that the formation of A-IRC in LPT is more related to the performance of IRC in LPT but not the experience of IRC in everyday use.

A-IRC in LPT is more related to A- LPT via IRC, as the questionnaire survey shows. We cannot ignore the power of social interactions in LPT as another input, whether it is knowledge or experience. As analyzed, compared to everyday use, the performance of IRC in LPT contributes more in the formation of A-IRC in LPT, which is one of the inputs to the formation of A-LPT via IRC as well. Among the statements in Table 3 and Table 5, there is something in common or relevant to each other, such as the keywords “interesting”, “more interaction”, “more communication”, “more responses”, “more collaborations”, and so on. It suggests there exists something in common between the two variables.

Comparisons between Task-Criterial Features and Learners' Positive Features

The results provide references to considering task features in designing and implementing LPT via IRC. Most contributions come from the highly positive attitudes to combining the LPT via IRC with other tasks to form a learning project (item 25 & 35, Table 1). With reference to the notion of a learning project as “maxi-tasks” (Nunan, 2004) and “complex tasks” (Thomas, Mergendoller, & Michaelson, 1999), some LPT comprise a project which relies on the embedded multiple problem-solving abilities and communicative skills, including receptive, productive and processing (critical and creative thinking) skills, with a focus on language production in authentic or simulated contexts. The questionnaire survey shows that learners believe IRC in LPT can make them express more and understand better (item 10 & 12, Table 1), which gives the same priority to “making meaning” (Ellis, 2003) via IRC.

Simultaneously, we can make comparisons with Table 5. The statements of “a task of authenticity”, “contributing to productive-skill improvement”, “with more interactions” and “with online speaking and/or writing skills involvement”, it is assumable that learners hold positive attitudes to Ellis’(2003) features of focusing on “language skills”, having “communication-based learning outcome” and some aspects of developing “cognitive skills”. According to the descriptions learners mentioned: “with interesting designs”, “with every learner’s involvement”, “with online speaking and/or writing skills involvement” and “to develop multiple ability”, they are positive to Meskill’s (1999) features of being “interesting and rewarding”, “different contributions” from “different students” and various skills and behaviors requirements.

However, in the interview, Meskill’s (1999) features more related to technology seemed to be ignored by the learners. Actually, they preferred a task “with comfortable engagement”, which might include technological comforts together with language comforts or social comforts. In terms of cognition, only one interviewee thought and believed that it

should be the feature of a good task.

According to the comparisons, learners hold positive attitudes to most of the task-criterial features, especially the interactive, authentic and interesting tasks and those with multi-skill and multi-ability involvement, and comfortable engagement as well.

It is important to highlight that this research is just an introduction to investigating learners' attitudes as a variable in IRC tasks for specific skills. With the rapid development of information technology and concern on learners' role in CALL and task-based learning and teaching, further research is required to be conducted on the cognitive and socially interactional processes in different settings to potentially improve learning and pedagogy in the new learning environment.

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