

# The Impact of Online Chatting on EFL Learners' Oral Fluency

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## Abstract

*Teaching how to speak English is of great importance to educational practitioners and thus finding efficient techniques to improve this ability has long been under research. The present study was conducted to investigate the effectiveness of using chat rooms as a newly-developed technique on the oral fluency of EFL learners. To fulfill the purpose of the study, from among 81 junior students of English translation, 52 were selected based on their performances on two proficiency tests and subsequently divided into two control and experimental groups. The only treatment difference between the two groups was using chat rooms among the subjects in the experimental group. After 20 sessions of instruction, the subjects took part in a posttest. The analysis of the data revealed that the learners who underwent the chat room treatment significantly outperformed those who did not in terms of oral fluency. Hence, using chat rooms in the EFL context can be recommended as an efficient technique in improving this attribute among EFL learners.*

**Keywords:** online chatting, oral fluency, chat room, distance education

## Introduction

Distance education practice and theory has evolved through five generations in its 150 years of recorded existence. For most of this time, distance education was an individual pursuit defined by infrequent postal communication between the student and teacher. However, the last half of the 20<sup>th</sup> century witnessed rapid developments and the emergence of three additional generations, one supported by the mass media of television and radio, another by the synchronous tools of video and audio teleconferencing, and yet another based on computer conferencing (Taylor, 2001).

The early 21<sup>st</sup> century has produced the first visions of a yet fourth generation based on autonomous agents and intelligent, database-assisted learning and Web 2.0 (Anderson, 2004). Each of these generations has

followed more quickly upon its predecessor than the previous ones. Moreover, none of these generations has completely displaced previous ones, so that we are left with diverse yet viable systems of distance education that use all four generations in combination. Thus, the field can accurately be described as complex, diverse, and rapidly evolving.

Anderson (2004) states that acknowledging complexity does not excuse inaction. Educators, students, administrators, and parents are routinely forced to make choices regarding the pedagogical, economic, systemic, and political characteristics of the education systems within which they participate. Distance education (of which online learning is a major subset) is one such discipline that subsumes the knowledge and practice of pedagogy, psychology and sociology, economics and business, and production and technology.

Recent years have shown an explosion of interest in using computers and the Internet for language teaching and learning. A decade ago, the use of computers in the language classroom was of concern only to a small number of specialists. However, with the advent of multimedia computing and the Internet, the role of computers in language instruction has now become an important issue confronting large numbers of language teachers throughout the world.

The use of the Internet in English language classes exposes the students to a wider range of English than they usually encounter in their daily lives. Furthermore, the worldwide web is an invaluable source of information both for teachers and students. With respect to other advantages of implementing the Internet it can be stated that real time technology can help solve the problem of insufficient exposure to speaking practice. The Internet as a resource can thus enrich and expand language instruction (Muehleien, 1997). Without a doubt, we are in the center of a monumental technological paradigm shift, one which will eventually change the way that all instructors teach and the way students learn (Jensen, 1993, cited in Singhal, 1997).

## **Online Chatting**

When the Internet was not even born to the lay world and computer technology was only in its infancy, the acclaimed linguist, Halliday (1989) predicted it all too well when he said that the distinction between speech and writing was becoming blurred as a consequence of modern technology. The development of new technologies, widespread use of the global information

network, and the growing number of its users has greatly promoted the teaching methods based on the Internet (Sopromadze, 2008). True it is that technology cannot replace traditional teaching approaches but today's educational system cannot grow and will not succeed without access to computers and the Internet (Kuo, 2008).

Ally (2008) defines online learning as the use of the Internet to access learning materials, to interact with the content, instructor, and other learners, to obtain support during the learning process in order to acquire knowledge, to construct personal meaning, and to grow from the learning experience. One potentially useful Internet activity for language students is chatting, that is, communicating in real time by typing or voicing a message into a computer so that it can immediately be read on other computer screens or heard by users, even in another part of the world. Some sites on the Internet are specifically intended for nonnative English speakers and provide opportunities for them to communicate in English (Kitao & Kitao, 2000; Basabe, Correa, & Castillo, 2004).

Through chatting, learners of a language can communicate inexpensively and quickly with other learners or speakers of the target language all over the world. This communication can be either synchronous with all users logged on and chatting at the same time or asynchronous with a delayed message system such as electronic mail (Warschauer & Healey, 1998).

Hudson and Bruckman (2002) discovered some advantages of chatting in their study. They mentioned that during the regular semester, classroom interaction was largely teacher-oriented, despite the best effort of the teachers involved. Even though teachers initiated online conversations in the same way, the resulting interaction was student-driven and significantly more interactive than the classroom interaction.

A number of computer mediated communication studies have uncovered similarities between text-based interactions via computer and face-to-face interactions (Pellettieri, 2000, cited in Tudini, 2003; Smith, 2003). Also, Tudini (2003) found that learners' chat discourse displays features that according to selected indicators of spoken discourse bring it closer to the oral than written medium. These indicators include repairs and incorporation of target forms, variety of speech acts, discourse markers, and feedback tokens.

Online chat rooms can be incorporated into the course syllabi of foreign language courses as a regular homework assignment to encourage students to use the target language actively and frequently. By scheduling regular

visits to a foreign language specific chat room, the foreign language instructor can greatly increase the amount of time students spend communicating in the target language (Rankin, 1997). Active participants in English learning chat rooms can increase their vocabulary and syntactic knowledge as well as their self-efficacy before using writing and speaking skills in other higher-risk situations such as testing or conversation (Martin, 2008).

Alongside the merits of chat rooms described so far, a multitude of other studies demonstrate their various advantages in ELT. Some such examples are reported below:

- Offering the learner the chance to produce language which is somewhere between everyday spoken English and the language in its written form (Simpson 2008).
- Allowing learners to interact in an authentic context with native speakers (Skinner & Austin, 1999) without being restricted by location (Wilson & Whitelock, 1998).
- Enabling communication to take place in real time (Mynard, 2002).
- Promoting active involvement and being enticed into conversing with others yet being able to withdraw when learners feel like it (Sullivan & Pratt, 1996).
- Encouraging collaborative learning and teamwork among language learners and helping them to develop their group skills (Su, 2007).
- Providing opportunities for negotiation of meaning, thus promoting language acquisition (Hegelheimer & Chapelle, 2000).

The effectiveness of an online course definitely requires from a teacher more than only technical knowledge, but a reflective and innovative attitude that prioritizes the learning process focused on the student (Queiroz & Mustaro, 2003). Accordingly, in network-based language learning, teacher training at universities is essential so that those learning environments can actually be integrated in the classroom and used by as many EFL teachers as possible (Heidelberg, 2007).

## **Oral Fluency**

For most people, the ability to speak a language is synonymous with knowing

that language since speech is the most basic means of human communication. Ironically, speaking in a second or foreign language has often been viewed as the most demanding of the four skills (Lezaraton, 1996).

There is an array of approaches in defining fluency and identifying variables to consider in assessing it (Weaver, 2005). Steele (2009) defines fluency as the quality of speaking so that words and thoughts flow from one's mouth in a gentle stream. Brown (1994) states that fluent speech is marked by containing reduced forms, such as contractions, vowel reduction, and elision. The same can also be said for the use of slang and idioms in speech. Without facility in using these ubiquitous features of spoken language, learners are apt to sound bookish and thus not fluent.

Although the word fluency has long been used in everyday speech to mean speaking rapidly and well, in ELT it has largely come to mean speaking rapidly and smoothly but not necessarily grammatically (Guillot, 1999). Richards and Schmidt (2002) define fluency as the features which give speech the qualities of being natural and normal, including native-like use of pausing, rhythm, intonation, stress, rate of speaking, and use of interjections and interruptions. Colorado (2007) adds that fluency without comprehension will require instructional intervention in vocabulary and comprehension skills.

Lennon (1990) puts forth that fluency is usually used in two senses. In the broad sense, fluency seems to mean global oral proficiency, that is, a fluent speaker has a high command of the foreign or second language. The definition proposed by Sajavaara (1987) can also be regarded as a broad conceptualization of fluency. He defined fluency as "the communicative acceptability of the speech act or communicative fit" (p. 52).

In its narrower sense, however, fluency can be considered as one component of oral proficiency. Lennon (1990) points out that fluency is purely a performance phenomenon and consequently defined fluency as "an impression on the listener's part that the psycholinguistic processes of speech planning and speech production are functioning easily and efficiently" (p. 392). Thus, he argued that fluency reflects the speaker's ability to focus the listener's attention on his/her message by presenting a finished product, rather than inviting the listener to focus on the working of the production mechanisms. In a more recent study, Lennon (2000) synthesized earlier definitions and proposed that a working definition of fluency might be the rapid, smooth, accurate, lucid, and efficient translation of thought or communicative intention into language under the temporal constraints of on-line processing.

One of the most difficult challenges in teaching a foreign language is finding ways to help students improve their oral fluency. This is especially true in countries where students generally share a common mother tongue and have little or no exposure to English outside the classroom. According to Warschauer (1996), student surveys lend support to the assumption that lack of oral fluency (or confidence in oral fluency) and discomfort in speaking out are important factors in determining students' relatively low participation in face-to-face and, to some extent, electronic mode of interaction.

Having in mind the problems of EFL learners concerning their need to improve fluency of speech, on the one hand, and the supposed advantages of the use of the Internet in ELT on the other, the researchers sought to find out whether online chatting could improve EFL learners' oral fluency. With the above mentioned problem in mind, the following question was proposed for the purpose of the present study:

Does online chatting have any significant impact on the oral fluency of intermediate EFL learners?

## **Method**

### **Participants**

Fifty-two junior students participated in this study. This sample was selected from among 81 junior students of English Translation of Islamic Azad University, Gha'emshahr Branch, based on the results of the administration of two tests (as described in the following section). The sample included female and male students with the age range of 20-35.

### **Instrumentation**

The following three tests were used in this study:

#### ***General Proficiency Test***

A Nelson general English proficiency test consisting of 50 items (35 grammar, 10 vocabulary, and five pronunciation items) was used as the first section of the battery for homogenizing the students regarding their

proficiency level prior to the treatment. This test was first piloted among a sample of 20 junior students of English Translation at the same university, and the items which proved to have unacceptable facility and discrimination indices were omitted in the item analysis process. The reliability of the test was estimated to be 0.82.

### ***Test of Oral Fluency***

An oral interview based on the speaking module of the IELTS test was used to homogenize the participants in terms of their oral fluency. Three raters rated the oral fluency of the participants based on the fluency assessment criteria of the IELTS and iBT TOEFL.

### ***Posttest***

At the end of the treatment period, another interview was conducted to see if there existed any significant difference between the students in the control and experimental groups in terms of their oral fluency. Once again another IELTS speaking module was used under the same procedure of scoring described above.

### ***Procedure***

First, the Nelson general proficiency test was administered to the 81 junior students described above to select homogeneous participants for the study. Sixty-eight participants scored one standard deviation below and above the mean on this test and were thus chosen to take the interview (the oral fluency test). The participants' speeches were recorded during the interview. To ensure the reliability of the scorings, an inter-rater reliability was run among the three raters (who were university instructors with at least five years of teaching experience) with a random sample of 20 out of the 68 cases. The two raters among the three for whom the highest inter-rater reliability was obtained were selected for the marking of the interviews as raters. All the interviews were subsequently scored by these two raters using the oral fluency assessment criteria based on the IELTS and iBT TOEFL. The average score given by the two raters to each participant was ultimately calculated as the final score for him/her. As a result, 52 out of 68 students

whose scores fell one standard deviation above and below the mean of the oral fluency scores were finally chosen.

Following the participant selection stage, the 52 students were divided into two equal groups: experimental and control. To doubly make sure that the experimental and control groups were as homogenous as possible, a Levene's test of equality of variance and subsequently a *t*-test were run in order to investigate the homogeneity of the two groups' variances and mean scores, respectively. The results demonstrated the homogeneity required (details appear in the next section).

With the two groups in place, the instruction commenced. Both groups had the same course book: the third volume of *Interchange*. The 90 minutes of each class period was divided into two parts: both groups underwent the first 60 minutes in exactly the same fashion. The new material from the book was taught with not much speaking activity performed by the students. The reason was that the students were involved in the class mostly by listening to the teacher, who defined the meanings of new words and expressions, and doing the assigned exercises.

The next 30 minutes was entirely different for the two groups. In the control group, practicing speaking was the focus varying from telling their ideas about the topic individually in the class to working in pairs or even groups. The role of the teacher was to supervise students' work, listen to them, guide them if necessary, and correct only their universal errors, since fluency, and not accuracy, was at the center of attention. The students were required to consider those corrections in their subsequent speaking.

In the experimental group, however, the class session ended with 60 minutes at the university and the students had to attend the remaining 30 minutes of the period, the night of their class at home in a specific Internet chat room that was introduced and explained to them, in advance. Chat rooms were the virtual classrooms where students had to get online and gather there in order to chat with each other and discuss their ideas about the lesson that had been taught earlier in their university class. Each participant was free to choose a nickname as his/her ID and only the teacher knew which ID belonged to whom. During the chatting, the participants were free to chat in voice, in text, or in both. Generally, learners were very much engaged and excited in using the chat rooms. They eagerly attended the chat rooms even if they were absent in their university class the same day.

At the end of the treatment period of 20 sessions, another interview was conducted as the oral fluency posttest.



## Results

To start with, the researchers had to analyze the data obtained from the administration of the Nelson test. The descriptive statistics of the scores of the 81 students who took the Nelson test are presented in Table 1.

**Table 1 – Descriptive statistics of the Nelson test scores**

N	Mean	Sd error of mean	SD	Range	Min	Max
81	29.60	0.464	4.17	25	17	42
<i>Total: 50</i>						

As described earlier, a value of 0.81 was obtained for the coefficient alpha showing that the test was highly reliable.

The next step in data analysis was computing the inter-rater reliability among the three raters with 20 randomly selected recordings out of the 68 cases. Table 2 below shows the results.

**Table 2 – Inter-rater reliability among the three raters**

	RATER1	RATER2	RATER3
<b>RATER1</b>			
Pearson Corr	1	.890**	.815**
Sig. (2-tailed)		.000	.000
N	20	20	20
<b>RATER2</b>			
Pearson Corr	.890**	1	.781**
Sig. (2-tailed)	.000		.000
N	20	20	20
<b>RATER3</b>			
Pearson Corr	.815**	.781**	1
Sig. (2-tailed)	.000	.000	
N	20	20	20

\*\* Correlation is significant at the 0.01 level (2-tailed).

Accordingly, the researchers chose the first and second raters who enjoyed the highest inter-rater reliability of 0.89 as the raters to rate all the interviews both before and after the treatment. Therefore, all scores and statistical

analyses reported hereunder are based on the mean of the ratings of the first and the second raters.

The descriptive statistics of the scores of the 68 participants taking the oral fluency test before the treatment are presented in Table 3 below.

**Table 3 – Descriptive statistics of the oral fluency test scores before the treatment**

<b>N</b>	<b>Mean</b>	<b>Sd error of mean</b>	<b>SD</b>	<b>Range</b>	<b>Min</b>	<b>Max</b>
68	60.74	1.40	11.54	55	30	85
						<i>Total: 100</i>

Table 4 demonstrates group statistics for the same oral fluency test.

**Table 4 – Descriptive statistics of the two groups on the oral fluency test scores before the treatment**

	<b>N</b>	<b>Mean</b>	<b>SD</b>
<b>Control GROUP</b>	26	60.80	6.403
<b>Experimental GROUP</b>	26	60.74	6.893

The next step was to run an independent *t*-test to compare the mean scores of the two groups on the first interview. In computing the *t*-test for small samples, the condition of homogeneity of variances must be met. Therefore, a Levene’s test of homogeneity of variance was also run. The result, as indicated in Table 5, showed that the variances fulfilled the condition of the homogeneity at 0.05 level of significance ( $F = 0.407, \rho = 0.526 > 0.05$ ).

Since the homogeneity of the variances of the two groups was proved, the results of the *t*-test were claimed to be dependable. Considering the results of the *t*-test ( $t = 0.032, df = 50, \rho = 0.975 > 0.05$ ), it was concluded that there was no significant difference between the two groups’ mean scores on the oral fluency test that was administered prior to the treatment meaning that the two groups were homogeneous in their oral fluency at this stage.

**Table 5 – Comparing two groups’ means and variances on the first oral fluency test**

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Pretest	.407	.526	.032	50	.975	.059	1.849	3.773	3.655
			.032	49.9	.974	.059	1.844	3.763	3.644

Following the treatment, the statistical computations required to respond to the research question and verify the hypothesis were put into effect. To start with, the descriptive statistics of the scores of both groups on the posttest were obtained. Table 6 shows these scores alongside the scores of both groups on the first speaking test.

**Table 6 – Descriptive statistics of the oral fluency tests before and after the treatment**

Test	Groups	N	Mean	SD	Variance
Before treatment	Control group	26	60.80	6.403	40.9984
	Experimental group	26	60.74	6.893	47.5134
	Total	52			
Posttest	Control group	26	70.00	9.274	86.0070
	Experimental group	26	74.81	7.547	56.9572
	Total	52			

It is apparent that the participants in the experimental group obtained a higher mean, which showed that they performed better on the posttest. To detect whether this difference was significant or not, another independent *t*-test were run. As Table 7 below illustrates, the results of the Levene’s test of equality of variance did not turn out to be significant ( $F = 1.128, p = 0.293 > 0.05$ ) and consequently the results of the *t*-test was dependable.

On the other hand, the results of the *t*-test ( $t = 2.05$ ,  $df = 50$ ,  $\rho = 0.046 < 0.05$ ), indicated that there was a significant difference between the groups' mean scores on the oral fluency posttest. Therefore, the null hypothesis was rejected. Moreover, since according to Table 6, the experimental group obtained a higher mean than the control group on the oral fluency posttest (74.81 and 70, respectively) the conclusion is that using online chatting did have a significant impact on improving the oral fluency of the participants.

**Table 7 – *t*-test of the two groups' posttest mean scores**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	<i>t</i>	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Pretest	Equal variances assumed	1.128	.293	2.05	50	.046	4.808	2.345	.098	9.518
	Equal variances not assumed			2.05	48.02	.046	4.808	2.345	.093	9.522

## Conclusion

The purpose of this study was to examine whether using online chat had any significant impact on the oral fluency of Iranian EFL learners. Since at the outset of the study the participants were homogenized with respect to both general proficiency and oral fluency, the significant difference observed between the two groups in terms of their oral fluency at the end of the treatment period could be logically attributed to the impact of online chatting. Therefore, the results of this study indicated that online chatting, including both voice and text chatting, had a significant impact on the oral fluency of the sample of the EFL learners who participated in this study.

The researchers clearly observed that the learners in the experimental group were actively involved in expressing themselves freely in the chat rooms without the very common anxiety and fear of making mistakes; this

sense of security also motivated them to accomplish more as they went along during the course.

Using Internet chat rooms for improving student's fluency is also of great importance due to the opportunity that a chat room naturally gives to its users by combining speaking and writing (more specifically typing) so that all of them can express themselves and type their ideas at the same time without any interference with and interruptions of others' speech. This is not possible in real classes since one cannot understand anything if all learners start talking and saying their ideas. A very prominent advantage of chat room worth mentioning is that whatever is typed there can be saved on disks and further be used by the students to improve their learning and by the teacher to evaluate students and their progress and design better activities and tasks for their improvement.

The bottom-line is that the establishment of the worldwide web in the last two decades marks a very important revolution in the history of human communication. In the third millennium, few people would contest that English is an essential world language today and that the Internet has become a part of modern life. The researchers hope that the results obtained from this study would serve beneficial for all those involved in language learning/teaching to help EFL learners improve a much-coveted goal, i.e. the fluency of their speaking.

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### **References**

Ally, M. (2008). Foundations of educational theory for online learning. In T. Anderson (Ed.), *The theory and practice of online learning* (pp. 15-44). Toronto: AU Press.

- Anderson, T. (2004). The educational semantic web: A vision for the next phase of educational computing. *Educational Technology*, 44(5), 5-9.
- Basabe, L. R., Correa, A. P., & Castillo, J.A.T. (2004). *Language and the Internet: The active role the Internet plays when learning a foreign language nowadays*. Retrieved on March 28, 2006, from: [www.ciget.pinar.cu/No.2004-1/internet.htm](http://www.ciget.pinar.cu/No.2004-1/internet.htm)
- Colorado, C. (2007). Assessing fluency. Retrieved on July 19, 2008, from: [www.colorincolorado.org/educators/teaching/vocabulary/fluency](http://www.colorincolorado.org/educators/teaching/vocabulary/fluency)
- Guillot, M. (1999). *Fluency and its teaching*. Clevedon: Multilingual Matters. Retrieved on October 25, 2005, from: [http://books.google.com/booksUTF-8\\_1\\_7Fluencyanditsteaching](http://books.google.com/booksUTF-8_1_7Fluencyanditsteaching).
- Halliday, M. A. K. (1989). *Spoken and written language*. Oxford: Oxford University Press.
- Hegelheimer, V., & Chapelle, C. (2000). Methodological issues in research on learner-computer interactions in CALL. *Language Learning & Technology*, 4(1), 41-59.
- Heidelberg, A. P. (2007). *The role of the teacher in network-based language learning*. Retrieved on February 9, 2008, from: [www.appserv4.ph-heidelberg.de/wiki/index.php/The\\_Role\\_of\\_the\\_Teacher\\_in\\_Network-based\\_Language\\_Learning](http://www.appserv4.ph-heidelberg.de/wiki/index.php/The_Role_of_the_Teacher_in_Network-based_Language_Learning)
- Hudson, J. M., & Bruckman, A. S. (2002). IRC Français: The creation of an Internet-based SLA community. *Computer Assisted language Learning*, 15(2), 109-134.
- Kitao, S. K., & Kitao, K. (2000). *Using on-line chat in language teaching*. Retrieved on March 28, 2006, from: [www.doshisha.ac.jp/~kkitao/library/article/exeter.doc](http://www.doshisha.ac.jp/~kkitao/library/article/exeter.doc)
- Kuo, M. M. (2008). *Learner to teacher: EFL student teachers' perceptions on Internet-assisted language learning and teaching (Electronic version)*. Washington, DC: ERIC Project c/o Computer Sciences Corporation.
- Lazaraton, A. (1996). Teaching oral skills. In M. Celce-Murcia (Ed.), *Teaching English as a second or foreign language* (pp. 103-115). Boston, MA: Heinle & Heinle.
- Lee, L. (2004). *Online task-based learning: Design, process and assessment*. Retrieved on July 3, 2006, from: <http://www.unh.edu/spanish/lina/CALICO-04.ppt>
- Lennon, P. (1990). Investigating fluency in EFL: A quantitative approach. *Language learning* 40, 387-412.
- Lennon, P. (2000). The lexical element in spoken second language fluency. In H. Riggensbach (Ed.), *Perspectives on fluency* (pp. 25-42). Michigan: The University of Michigan Press.
- Martin, B. J. (2008). *English learning chat rooms*. Retrieved on February 14, 2008, from: [www.ehow.com/about\\_5232129\\_English-learning-chat\\_rooms.html](http://www.ehow.com/about_5232129_English-learning-chat_rooms.html)
- Muehleisen, V. (1997). Projects using the Internet in college English classes. *The Internet TESL Journal*, 3(6). Retrieved on September 25, 2007, from: [www.iteslj.org/Lessons/Muehleisen-Projects.html](http://www.iteslj.org/Lessons/Muehleisen-Projects.html)
- Mynard, J. (2002). Introducing EFL students to chat rooms. *The Internet TESL Journal*, 8(2). Retrieved on September 23, 2005, from: [www.iteslj.org/Lessons/Mynard-Chat.html](http://www.iteslj.org/Lessons/Mynard-Chat.html)
- Queiroz, V., & Mustaro, P. N. (2003). Roles and competencies of online teachers.

- The Internet TESL Journal*, 9(7). Retrieved on September 25, 2007, from:  
[www.iteslj.org/Articles/Queiroz-OnlineTeachers.html](http://www.iteslj.org/Articles/Queiroz-OnlineTeachers.html)
- Rankin, W. (1997). Increasing the communicative competence of foreign language students through the FL chat room. *Foreign Language Annals*, 30(4), 542-546.
- Richards, J. C., & Schmidt, R. (2002). *Longman dictionary of language teaching and applied linguistics*. Malaysia, KVP: Pearson Education Limited.
- Sajavaara, K. (1987). Second language speech production: Factors affecting fluency. In H. W. Dechert & M. Raupach (Eds.), *Psycholinguistics models of production* (pp. 45-65). Norwood: Ablex.
- Simpson, A. (2008). *The internet chat room as a learning tool*. Retrieved on August 21, 2008, from:  
[www.eltworld.net/times/2008/09/the-internet-chat-room-as-a-learning-tool/](http://www.eltworld.net/times/2008/09/the-internet-chat-room-as-a-learning-tool/)
- Singhal, M. (1997). The Internet and foreign language education: Benefits and challenges. *The Internet TESL Journal*, 3(6). Retrieved on September 25, 2005, from: [www.iteslj.org/Articles/Singhal-Internet.html](http://www.iteslj.org/Articles/Singhal-Internet.html)
- Skinner, B., & Austin, R. (1999). Computer conferencing – does it motivate EFL students? *ELT Journal*, 53(4), 270-279.
- Smith, B. (2003). Computer-mediated negotiated interaction: An expanded model. *The Modern Language Journal*, 87(1), 38-57.
- Sopromadze, N. (2008). *The role of the Internet in the English language learning/teaching*. Retrieved on March 12, 2009, from:  
[www.knia.ge/elc/the\\_role\\_of\\_the\\_internet.html](http://www.knia.ge/elc/the_role_of_the_internet.html)
- Steele, J. (2009). *Fluency in public speaking*. Retrieved on March 4, 2009, from:  
[www.speechmastery.com/fluency.html](http://www.speechmastery.com/fluency.html)
- Su, V. (2007). *Chat rooms for language learning*. Retrieved on April 18, 2008, from:  
[www.opensource.idv.tw/paper/chatroom/ChatRoomsforLanguageLearning-1.ppt](http://www.opensource.idv.tw/paper/chatroom/ChatRoomsforLanguageLearning-1.ppt)
- Sullivan, N., & Pratt, E. (1996). A comparative study of two ESL writing environments: A computer-assisted classroom and a traditional oral classroom. *System*, 29(4), 491-501.
- Taylor, J. (2001). The future of learning – learning for the future: Shaping the transition. *Proceedings of the 20<sup>th</sup> ICDE World Congress*. Retrieved on December 26, 2007, from:  
[www.fernuni-hagen.de/ICDE/D-2001/final/keynote\\_speeches/wednesday/taylor\\_keynote.pdf](http://www.fernuni-hagen.de/ICDE/D-2001/final/keynote_speeches/wednesday/taylor_keynote.pdf)
- Tudini, V. (2003). Using native speakers in chat. *Language Learning and Technology*, 7(3), 141-159.
- Warschauer, M. (1996). Comparing face-to-face and electronic discussion in the second language classroom (Electronic version). *CALICO Journal*, 13(1), 7-26.
- Warschauer, M., & Healey, D. (1998). Computers and language learning: An overview. *Language Teaching*, 31, 57-71.
- Weaver, E. C. (2005). *Can you speak English – A look at what fluency really means*. Retrieved on October 26, 2008, from:  
[www.edu-talk.info/wordpress/?tag=esl-speaking-fluency](http://www.edu-talk.info/wordpress/?tag=esl-speaking-fluency)
- Wilson, T., & Whitelock, D. 1998. What are the perceived benefits of participating in a computer-mediated communication (CMC) environment for distance learning computer science students? *Computers Education*, 30(3), 259-269.

