

Effect of Dialogue Journal Writing through the Use of Conventional Tools and E-mail on Writing Anxiety in the ESL Context

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Abstract

ESL/EFL Anxiety has been reported as one of the foremost factors affecting ESL learners' performance. Hence, identifying methods to assist language learners to alleviate their ESL anxiety deserve to be considered by the educators. This study compared the effect of dialogue journal writing (DJW) through two different modes of learning and teaching: conventional (using pen and paper or Microsoft Word) and online (using e-mail) on the writing anxiety. Forty-two students from an intact class undergoing the TESL program participated in the study. After going through seven weeks where students wrote their dialogue journals (using two different tools) in dyadic groups, pre and posttest writing anxiety questionnaire (Second Language Writing Anxiety Inventory) showed statistically no significant difference between groups in terms of writing anxiety, however mean scores revealed that e-mail group's writing anxiety have been alleviated greater than their counterparts in conventional group. It shows e-mail has potential in assisting students in lowering their anxiety towards writing.

Keywords: Dialogue journal writing, E-mail, Conventional tools, Writing anxiety

1. Introduction

Anxiety in language learning has been discussed for many years and a great number of studies have endeavored in identifying factors which contribute to ESL anxiety. Unlike these studies, the current study aims to examine tools in delivering the instructions. Today, as the growing number of technology applications in classes is more observable, identifying their promising effectiveness in language learning seems indisputable. On the basis on this, this study investigated how different modes of writing, conventional (using tools such as pen and paper and Microsoft Word) and online (using e-mail) can affect students' writing anxiety. Therefore, it is hoped that the findings of this study will assist language educators in identifying the effectiveness of applying e-mail in writing classes in order to alleviate students' writing anxiety. In this study, conventional tools are offline tools; such as pen and paper and Microsoft Word Processor which students usually use in writing dialogue journals. E-mail is a type of internet application which provides opportunity for students to send and receive messages online at anytime and anywhere.

2. Background

DJW in the prevailing teaching and learning context has the potential to cater to a non-threatening context for learning where students can communicate with their teacher or other students. Wang (1998) defines dialogue journal as "a daily written communication between two persons." (p. 3). In the classroom setting, these people can be teacher-students or student-student when engaging in the writing activity, topics are not assigned and they are free to write on their preferred topics and concerns. The outputs are not graded or corrected forthrightly; instead the teacher will provide feedback to the students and correct the mistakes indirectly. This reciprocal interaction provides communicative context for English as a Second Language (ESL) learning as the purpose of dialogue journal writing is not focusing on forms, but communication (Wang, 1998). Besides that, one of the most notable benefits of using

dialogue journal writing in classes is providing low anxiety conditions for learners (Holmes and Moulton, 1995). According to the prior studies in language learning, anxiety has the essential role in language learning due to its negative relationship to learners' language learning performance (Atay and Kurt, 2006). On the contrary, "positive affective states (i.e., enjoyment) can provide additional incentive for students to learn and could help increase student enthusiasm for a subject matter" (Liu et al. (2003, p. 263). In this aspect, the role of anxiety in learning can be evidently appreciated.

In the past, using pen and paper was the primary mode of journal writing. Nevertheless, current advances in computer technology have brought breakthrough and undeniable opportunities in language learning which have radically affected the way English is taught and learnt. With the advent of e-mail and its mass use by the general public in the 1990s (Baron, 2001), sending and receiving the e-mails accomplished so fast and it brought an interest for educators and teachers to use this medium in their classes (Biesenbach-Lucas, 2001). A great body of research has been devoted to examine the use of e-mail in learning and recognized it as a suitable pedagogical tool in teaching and learning. Belisle (1996) believes by accessing the world around them, students can easily interact with each other and strengthen their social relationship. Consequently, students' confidence will improve while they are free from the limitations of conventional writing tools; pen and paper, which often create problems in their writing processes (Belisle, 1996). Belisle further asserted that as the role of the teacher has changed to a facilitator who guides students in their learning, thus changing the learning environment from a traditional passive-listening to the world of stimulation and investigation should be demanded.

In fact, although ample studies on the effect of e-mail on FL learning has been conducted and it is recognized as a tool for improving authentic communication situations in the class, but still the environment is sadly lacking in opportunities for using this media, while most of these studies are not research-based and academic research. Moreover, the most important issue is that few studies (Albakri, et al., 2003; González-Bueno and Perez, 2000; Wang, 1998) have been conducted in the effectiveness use of e-mail dialogue journal in decreasing anxiety. Thus, it is appropriate that more research-based studies on the effect of e-mail dialogue journal in ESL writing anxiety is carried out and compare this technical tool with the conventional tools such as pen-and-paper in writing dialogue journals to determine the differences in reducing anxiety.

3. Literature Review

3.1 Anxiety and Language Learning

A growing body of research since the 1970 onwards acknowledges that language learning anxiety affects learners' language learning. Language learning has been considered as the most anxiety provoking contexts which has negative effects on language learning achievement (MacIntyre and Gardner, 1991, 1989, 1988; Horwitz, Horwitz, and Cope, 1986). As a matter of fact, anxiety is an area widely researched where the literature in the field of psychology is still uncertain and has some controversial ideas on its definition. Anxiety usually interchanges with fear, stress, phobia and neurosis which in the language learning context it can stem from three major sources: communication apprehension, test anxiety and fear of negative evaluation (Horwitz, et al. 1986). Foss and Reitzel (1988) declared that "the symptoms of tension, fear, or panic that accompany some students' efforts to study the new language may render their efforts at learning ineffective" (p. 443). MacIntyre and Gardner (1991) also mention since anxiety can block the processes in language acquisition, retention and production of a new language, as a result, foreign or second language learners experience anxiety more than others. A research by Price (1991) shows how language anxiety affected French learners' attitudes and their performance negatively. Krashen (1982) also postulates that anxiety interferes with the learner's ability to acquire a new language. He adds that the interaction among anxiety, learner's ability and task difficulty can impede the input, processing, retrieval and finally the output level. If anxiety affects cognitive function, anxious students probably learn less and cannot progress in their learning, and in consequence they will be frustrated in learning. Foreign language anxiety has been attributed to the learner's inability to present his/her viewpoints and ideas and consequently undermines learner's self-esteem (Horwitz, et al., 1986). In fact, the level of relaxation is related to fluency (Koichi, 2003) and when student's anxiety is in lower level and experience self-confidence, the probability for having fluency in his skills is higher (Katchen, 1996). Learner's beliefs about language learning can also contribute to their frustration and tension in the class (Horwitz et al. 1986). Horwitz (1988) pointed out to some beliefs which derived from learner's unrealistic viewpoints about language learning, such as 1) some learners believe on accuracy before saying sentences in the target language, 2) some regard speaking with perfect native-like accent the most important factor, 3) some believe that guessing an unfamiliar second or foreign language is not correct, 4) some of them argue that language learning is in fact translating from one language to another language, 5) some claim that two years of learning another language are enough to gain fluency, 6) some view language learning as a gift that not everyone has this gift. Therefore these unrealistic points of view on language learning and performance can lead students to frustration towards their own

learning.

In general, all four skills in foreign language (FL) can cause anxiety. Recently, researchers have sought to investigate writing anxiety in the context of FL learning and recognized anxiety as a source which causes obstacles for ESL writers (Fu-lan, 2006 and Chaudron, 1988). Although ample studies on L1 writing anxiety have been conducted, research on L2 writing anxiety has been scant. Daly and Miller's (1975) study revealed that students refused to enroll and attend those courses that required writing assignments. Baxter (1987) mentioned that having difficulties in L2 writing is not sometimes on account of students' lack of specific skills, but it is due to the fear of failure or feeling anxious. He further emphasizes that basic writers often have poor self esteem; and as a result, this feeling interferes with their ability in producing work based on their actual capabilities. Lan (2006) also argues that anxiety in writing can happens under two conditions: first, when students are asked to write about a special topic and second, when students consciously or unconsciously turn "the writing process into a creative translating process" (p. 97). Likewise, Elias, Akmaliah, and Mahyuddin (2005) declared that anxiety and frustration in writing may be caused by excessive and improper stress on superficial errors in spelling and grammar, and not due to content.

Past studies on writing anxiety revealed that anxiety can cause frustrations among students in producing good writing outputs. For example, Holladay (1981) found that one of the reasons that students become frustrated in writing is due to their fear of the demand of writing competency. Students are often afraid when their writing output is being evaluated and in conclusion behave in a negative manner which causes avoidance in writing. Elias, et al. (2005) also pointed out to another reason for being frustrated and having anxiety in writing as lack of motivation and enthusiasm. In order to reduce anxiety in writing for students, writing should be considered as a pleasure instead of a task. Elias, et al. (2005)'s study results showed there was a correlation between anxiety and motivation. Students, who had higher desire and motivation in learning English, had lower anxiety or apprehension in learning.

Baxter (1987) suggests some methods for teachers to reduce students' anxiety and fear of writing, such as; providing student-centered environment in the class, use of concrete materials, arranging students in small groups by using instructional tools which increase students' interest and also using freewriting as a technique in classes in which provides opportunity for students to reveal their feelings about any topic to their counterpart and eventually alleviate their anxiety. Hence, one of the greatest challenges for L2 teachers should be providing this comfortable and low-anxiety environment for their learners. In their challenges, teachers need to search for the best methods to aid students to overcome their fears and anxieties towards writing and create enthusiasm among learners. One of the proposed methods for alleviating students' anxiety is through free-writing and dialogue journal writing. It is assumed that e-mails have the potential to lower students' anxiety when compared to the conventional tools. Therefore, in this research, two tools in writing dialogue journals and their influence on writing anxiety were compared and results were reported.

3.2 Theories

3.2.1 Constructivism Theory

One way of approaching dialogue journals is through a constructivist framework. Constructivism is originated from Vygotsky's view point in learning. Hein (1991) stated that the term constructivism refers to "the idea that learners construct knowledge for themselves—each learner individually (and socially) constructs meaning—as he or she learns" (p. 1). Based on this theory, learning activities should encompass the real world, worthwhile results and authentic experiences (Mynard, 2003). This theory emphasizes on the creation of a conducive learning environment where encourage the learners to construct their own perception of reality based on their experience and beliefs as well as dialogues with others (Razak and Asmawi, 2004). Wen, Tsai, Lin, and Chuang. (2003) asserted that by following this theory, the instruction should encourage students to be self-reliant, challenge students' prior knowledge, and facilitate student-to-student and student-to-teacher interactions.

3.2.2 Affective Filter Hypothesis

Krashen (1982) articulates that variables such as motivation, self-confidence and anxiety have essential roles in second language acquisition. On the one hand, learners who are highly motivated, self-confident and low anxious have better opportunity in second language acquisition and on the other hand, low motivation, low self-esteem, and anxiety will raise the effective filter, contribute to 'mental block' and eventually impede comprehensible input. It is assumed that each of these variables, i.e. motivation, self-confidence and anxiety, can predict another one. For instance, increased self-confidence can lead to increased motivation (MacIntyre and Gardner, 1991) and high motivation can bring about low anxiety (Elias, et al., 2005) in second language acquisition. Krashen emphasizes that pedagogical goals should not just focus on providing comprehensive input for students, but they are also responsible for encouraging low filter conditions. This theory acknowledges the role of dialogue journal writing as a

motivational method for learning

4. Research Questions

Basically, there are two modes of teaching and learning in dialogue journal writing: conventional (using tools such as pen and paper and Microsoft Word) versus online (using e-mail). The aim of the current study is to identify how these modes of teaching and learning in dialogue journal writing can affect students' writing anxiety. Therefore, specifically, the following questions are addressed:

1. Is there any difference between the pre and posttest mean scores of conventional group in writing anxiety level?
2. Is there any difference between the pre and posttest mean scores of e-mail group in writing anxiety level?
3. Is there any difference between conventional and e-mail group writing anxiety posttest mean scores?

5. Method

5.1 Participants, Setting and Data Collection

The present study took place in the first semester of 2009-2010 academic year and lasted for seven weeks. The population in this study included ESL undergraduate students at Universiti Putra Malaysia (UPM), Malaysia, having intermediate writing skill proficiencies. Forty-two English major students, 12 males and 30 females, from an intact TESL (Teaching as a Second Language) class at UPM, who had taken writing class previously and had intermediate level of writing proficiency, participated in this study. These students were asked to fill in a demographic questionnaire to get some information related to their gender, age, nationality and also to ensure that e-mail group has the required knowledge in using e-mail. A research by Lightfoot (2006) indicated that females tend to put more thought into e-mail communication as compared to male participants. Hence, to have a more homogenous group and to control the extraneous variables, participants' gender and race were considered when assigning them into two groups. Finally, the students in this intact class based on their previous writing scores, genders and races were assigned into two groups namely: Conventional group and E-mail group.

Data for the present study were collected by using the Second Language Writing Anxiety Inventory (SLWAI) (Appendix) adapted from Cheng (2004). The SLWAI measures the degree of anxiety which one will experience when writing in a second or foreign language. It contains 22 items on a five-point Likert Scale, ranging from 'strongly agree' to 'strongly disagree'. The Cronbach alpha coefficient reported by Cheng (2004) was .91 and it was .86 for the current study.

The SLWAI was administered to the students in both groups at the beginning and at the end of the study and paired sample and independent sample t-tests were run in order to find out the differences between two groups (conventional and e-mail) in their writing anxiety levels.

The first session of the study was allocated to instruct students how to write their dialogue journals to their peers. During the process, which took seven weeks, each group were asked to write their dialogue journals to their secret pals using two different tools. For both groups, anonymous IDs were administered in order to encourage students in expressing their feelings and ideas more openly (Worthington, 1997). In every session, students could be paired with anyone in the class (either female or male) by chance; therefore, it would get them more interested to know more about their partner. As suggested by Kim (2005) in order to engage students in the practice of reflecting on their experience and knowledge in a collective way, each week a variety of topics like family, historical events, sports, social issues and etc. were introduced to the students and they were asked to select one of their favorite journals to share their ideas with their secret pals in the class. One of the effective methods in using dialogue journal writing and motivating students in their learning is to have them decide on their own favorite topics. Each group met on different days for 2 hours once a week for seven weeks. In every session, students had to write two entries: one entry on their own dialogue journal and one reply to their friend's entry. The time allocated for their entries was the whole 2-hour class period. After going through the process of seven weeks, writing anxiety questionnaire was administered to collect the posttest data from both groups.

6. Results

To compare the groups' writing anxiety levels in finding out whether there is difference between pre-SLWAI and post-SLWAI (inter groups) and between conventional and e-mail group (intra groups), a paired-sample t-test and an independent-sample t-test were conducted. The following sections describe and analyze the obtained results.

To ensure that the results after the treatments would not be due to the differences of the groups before the treatment, independent sample t-test for pre-SLWAI was run. The obtained result showed no significant difference ($p < .218$) between the groups in their writing anxiety level. As depicted in Table 1, the pre-SLWAI mean score for the conventional group was 59.35 and the standard deviation was 11.64 and for the e-mail group, the mean score was

63.0 and the standard deviation was 6.86. While the mean score of post-SLWAI of conventional group was 58.80, and the standard deviation was 8.39, the mean score and standard deviation score of the e-mail group were 58.86 and 7.56 respectively.

Applying paired sample t-test (Table 2) for each group, conventional ($p < .880$) and e-mail ($p < .093$), results showed there was no significant difference between pre-SLWAI and post-SLWAI mean scores. However, when pre-SLWAI to post-SLWAI mean scores were compared, it showed there was a decrease in the mean scores obtained by two groups. Decrease in the mean scores showed the level of anxiety had been alleviated in both groups.

As suggested by Atay and Kurt (2006) participants were divided into three groups. Those whose mean scores obtained were equal or smaller than 58 were considered as low-anxious (LA) learners; those with mean scores more than 83 were labeled as High-anxious (HA) learners; and those between 58 and 83 were categorized as average anxious learners (AA) in writing. Table 3 shows the participants' level of anxiety in pre-SLWAI and post-SLWAI for each group.

Table 3 shows that while out of 20 participants in conventional group for the pre-SLWAI; 9 (45%), 10 (50%) and 1 (5%), scored as Low-anxious, Average-anxious and High-anxious respectively, out of 22 participants in e-mail group; 5 (22.7%) were labeled as Low-anxious, 17 (77.3%) as Average-anxious and 0(0%) were High-anxious. For post-SLWAI, in conventional group, 8 (40%), 12 (60%) and 0 (0%) and in e-mail group, 8 (36.4%), 14(63.6%) and 0(0%) were categorized in LA, AA and HA respectively. Comparing the frequency of participants in each category in the pre-SLWAI and post-SLWAI, it was evident that the numbers of students with low and average anxiety levels have changed from pre-SLWAI to post-SLWAI for both groups.

The results obtained from the independent-sample t-test for post-SLWAI (refer to Table 4) showed the mean score for the conventional group was 58.80 and standard deviation was 8.39 and also for the e-mail group, the mean score was 58.86 and standard deviation was 7.56. The mean difference for these two groups was -.064. When *Sig.* value (.979) was compared with alpha (.05), it was evident there was no significant difference [$t(40) = -.026, p > .05$] between the groups, conventional and e-mail group, in terms of writing anxiety in post-SLWAI mean scores.

7. Discussion

The merit of this study lies in comparing the effect of two modes of learning and teaching in dialogue journal writing: conventional (using tools such as pen and paper or Microsoft word) and online (using e-mail) on ESL students' writing anxiety level. Independent sample t-test results and comparing the scores between the groups revealed that using two different tools in writing dialogue journals did not affect the level of anxiety. Although statistically by using paired and independent-sample t-tests, the results showed no significant difference within and between groups, but comparing the means of each group in pre-SLWAI and post-SLWAI t (inter group) and also means of groups with each other (intra groups) revealed that the means have decreased from pre-SLWAI to post-SLWAI. The mean difference for the conventional group in pre-SLWAI (2.6977) and post-SLWAI (2.6727) was 0.025 and for the e-mail group in pre-SLWAI (2.8636) and post-SLWAI (2.6756) was 0.188. These differences between the mean scores showed that students' anxiety levels have decreased. The mean scores of each group also shows that the mean score for e-mail group has decreased more than the conventional group since in the pre-SLWAI, e-mail group had higher anxiety compared to conventional group before the treatment started.

In addition, categorizing levels of anxiety to low, average and high anxious (refer to table 3), revealed that majority of students in the pre-SLWAI ($f = 27$) and the post-SLWAI ($f = 26$) were at average anxiety level while the number of low-anxious students increased from 14 to 16 (pre to post test). Frequency of anxiety levels revealed that for the conventional group, 9 participants in the pre-SLWAI were in the low anxiety level, 10 were in average and 1 was in the high anxiety level and in post-SLWAI test, 8, 12 and 0 were in low, average and high respectively, while in the e-mail group for the pre-SLWAI, 5 were in low, 17 in average and 0 in the high anxiety level and in the post-SLWAI, the numbers of low anxious anxiety participants increased to 8, and 14 participants were categorized in average level. When the frequencies were compared, it was evident that more number of low anxious students has increased in the e-mail group than the conventional group after exposure to the treatment. The no significant difference for inter and intra groups for anxiety may be due to lack of time as seven weeks of treatment did not affect students' apprehension towards writing and also the low number of students in each group statistically did not show the differences.

The findings of this study are in accordance with the findings of Sullivan and Pratt (1996) which showed students' anxiety in the computer group decreased more than the traditional group, although there was statistically no significant difference between groups. Similar to Sullivan and Pratt's findings, comparing pre-SLWAI and post-SLWAI within and between groups showed no significant differences, but the researchers claimed that the .08 probability level obtained in the results, due to the small number of subjects, can be considered as important evidence. The results of this study support the previous research on the role of computers on reducing anxiety level.

Williams (2005), for instance, stated that when students write online, they consider themselves as writers and feel more pleasure in what they write on screen than in what they write on paper. Also, Kupelian (2001) postulated that e-mail's delay system reduces anxiety higher than other forms of communication, such as face-to-face or conversations by telephone. Many studies show positive attitudes of students toward technology use (Beauvois, 1994; Liu et al., 2003; Warschauer, 1996). Ritter (1993) reported that majority of the students preferred using a computer-based program in learning new vocabulary because they considered it fun.

8. Conclusion

Recent advances in online technology have made the use of computers a feasible mode in which students can collaboratively work with each other. This collaborative nature of networked computers fits well with the social aspect of writing and the view that interaction and collaboration facilitate the second language learning. Dialogue journal writing through e-mail can be utilized in writing classes to promote social interaction between peers while decreasing their anxiety levels and improving writing performance. Among different users of networked computers including e-mail, ESL writers can benefit more than the native speaker writers since ESL writers have more anxiety toward writing and this anxiety affects their language learning performance. The networked classroom provides more time for a novice speaker (or writer) to think about what to say (or write), therefore reducing anxiety and eventually decreasing the error (Sullivan and Pratt, 1996). Besides, working with computers and internet free students from the superficial emphasize on grammar which causes anxiety in writing. Warschauer and Meskill (2000) suggested that instead of focusing on teaching grammar rules, language educators should find out effective methods that capitalize on the use of technology to teach English. In this way, the Internet can be viewed as a tool which can successfully be woven into the communicative approach in which its focus is not on form but on real communication.

The important point which should bear in mind is that many language learners enter their university dealing with language learning anxiety which this anxiety is most likely hinders their language performance. Therefore, teachers attentively need to find methods to optimize learning by providing less anxiety-provoking situations for their learners. Given the findings of this study, e-mail appears to have the potential in alleviating students' anxiety in writing, since it make them more motivated and enthusiastic into their learning.

It seems appropriate to point out that while technological innovations, including internet, foster changes in the classroom, lower the anxiety, facilitate extensive exchanges, and encourage learner autonomy, they are ultimately tools in the hands of instructors who must utilize them creatively to maximize the students' language learning experiences. These result in preparing and training language teachers in applying technology including computer and the Internet in the classrooms. Warschauer and Meskill (2000) believe that the key in integrating technology into curriculum and getting satisfactory results is appropriate planning and the design on how to use them in the classes. To this end, it is hoped that by applying e-mail in language learning especially ESL writing, students get the most advantage of these innovative instructions in their classes.

Acknowledgements

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References

- Albakri, I. S., Stepa, H., & Din, R. (2003). Using e-mail dialogue writing in ESL classroom: a case study. *VirTEC Journal*, 3(1), 1-13
- Atay, D., & Kurt, G. (2006). Prospective Teachers and L2 Writing Anxiety. *Asian EFL Journal: English language and Research*, 8(4), Article 4
- Baron, N. S. (2001). Why E-mail Looks Like speech-Proofreading, Pedagogy, and Public Face. Paper Presented at "Language, the Media, and International Communication" St. Catherine's College. Oxford, UK. [Online] Available: <http://www.american.edu/uploads/docs/Baron-Naom-cv.pdf> (15th June, 2007)
- Baxter, B. (1987). Basic writing: Breaking through the barriers of apathy and fear. Paper presented at the Annual Meeting of the Southeastern Conference on English in the Two-Year College (22nd, Jackson, MS, February 19-21,

1987).

Beauvois, M. H. (1994). E-talk: Attitudes and motivation in computer-assisted classroom discussion. *Computers and the Humanities*, 28, 177–190. <http://dx.doi.org/10.1007%2F01830738>

Belisle, R. (1996). E-mail activities in the ESL writing class. *The Internet TESL Journal*, 2(12)

Biesenbach Lucas, S., & Weasenforth, D. (2001). E-mail and Word Processing in the ESL Classroom: How the medium affects the message. *Language Learning and Technology*, 5(1), 135-165. [EJ 621 506]

Chaudron, C. (1988). *Second Language Classrooms: Research on Teaching and Learning*. Cambridge University Press.

Cheng, Y. S. (2004). A measure of second language writing anxiety: Scale development and preliminary validation. *Journal of Second Language Writing*, 13, 313-335. <http://dx.doi.org/10.1016%2Fj.jslw.2004.07.001>

Daly, J. A., & Miller, M. D. (1975). Apprehension of writing as a predictor of message intensity. *Journal of psychology*, 89, 75-177. <http://dx.doi.org/10.1080%2F00223980.1975.9915748>

Elias, H., Akmaliah, Z. L. P., & Mahyuddin, R. (2005). Competencies needed by teachers. *Implications for best teaching practices*. Universiti Putra Malaysia Press. Malaysia. Selangor. Serdang.

Foss, K. A., & Reitzel, A. C. (1988). A Relational Model for Managing Second Language Anxiety. *TESOL Quarterly*, 22, 437-454. <http://dx.doi.org/10.2307%2F3587288>

Fu-lan, L. (2006). Using Computer-mediated-communication to Overcome the Anxiety in ESL Writing. *US-China Foreign Language*, 4(11), 97-101

González-Bueno, M., & Perez, L. C. (2000). Electronic Mail in Foreign Language Writing: A study of Grammatical and Lexical Accuracy, and Quantity of Language. *Foreign Language Annals*, 33(2), 189-198. <http://dx.doi.org/10.1111%2Fj.1944-9720.2000.tb00911.x>

Hein, G. (1991). *Constructivist Learning Theory*. CECA (International Committee of Museum Educators) Conference. [Online] Available: <http://www.exploratorium.edu/ifi/resources/museumeducation.html> (May, 2007)

Holladay, S. A. (1981). Writing anxiety: What research tell us. Paper presented in Boston.

Holmes, V. L., & Moulton, M. R. (1995). A contrarian view of dialogue journals: The case of a reluctant participant. *Journal of Second Language Writing*, 4(3), 223-251. <http://dx.doi.org/10.1016%2F1060-3743%2895%2990011-X>

Horwitz, E. K., Horwitz, M. B., & Cope, J. (1986). Foreign language classroom anxiety. *The Modern Language Journal*, 70(2), 125-132. <http://dx.doi.org/10.2307%2F327317>

Horwitz, E. K. (1988). The beliefs about language learning of beginning university foreign language students. *Modern Language Journal*, 72(3), 283-294. <http://dx.doi.org/10.2307%2F327506>

Katchen, J. E. (1996). From Contents to cocktail parties: Strategies for improving speaking. *ERIC Document Reproduction Service*, No. ED 421 008

Kim, J. (2005). A community within the classroom: dialogue journal writing of adult ESL learners. *Adult basic education*, 15(1), 21-32

Koichi, S. (2003). Improving Our Students' Speaking Skills: Using Selective Error Correction and Group Work To Reduce Anxiety and Encourage Real Communication. (ERIC Document Reproduction Service, No. ED 475 518)

Krashen, S. D. (1982). *Principles and Practice in Second Language Acquisition*. Pergamon Press Ltd., England.

Kupelian, M. (2001). The use of email in the L2 classroom: An overview. *Second Language Learning & Teaching*, 1(1)

Liu, M., Moore, Z., Graham, L., & Lee, S. (2003). A look at the research on computer-based technology use in second language learning: A review of the literature from 1990 – 2000. *Journal of Research on Technology in Education*, 34(3), 250–273

MacIntyre, P. D., & Gardner, R. C. (1991). Methods and results in the study of anxiety and language learning: A review of the literature. *Language Learning*, 41, 85-117. <http://dx.doi.org/10.1111%2Fj.1467-1770.1991.tb00677.x>

MacIntyre, P. D., & Gardner, R. C. (1988). The measurement of anxiety and applications to second language learning: An annotated bibliography. *Research Bulletin*, No. 672. London, Ontario: The University of Western Ontario. (ERIC Document Reproduction Service No. FL017649)

MacIntyre, P. D., & Gardner, R. C. (1989). Anxiety and second language learning: Toward a theoretical clarification.

Language Learning, 39, 251-275. <http://dx.doi.org/10.1111%2Fj.1467-1770.1989.tb00423.x>

Price, M. L. (1991). The subjective experience of foreign language anxiety: Interviews with anxious students. In E. K. Horwitz, & D. J. Young (Eds.), *Language anxiety: From theory and research to classroom implications*. Upper Saddle River, NJ: Prentice Hall. pp. 101-108

Razak, R., & Asmawi, A. (2004). The use of Dialogue Journal through E-mail Technology in Developing Writing Internet and Skills. *Malaysian Online Journal of Instructional Technology*, 1(2), 14-24

Ritter, M. (1993). That's us! A book about ourselves: An EFL project with intermediate learners, incorporating the computer as a tool. *CALICO Journal*, 10(4), 57 – 69

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. <http://dx.doi.org/10.1016%2FS0346-251X%2896%2900044-9>

Wang, Y. M. (1998). E-mail dialogue journaling in an ESL reading and writing classroom. *International JI of Educational Telecommunications*, 4 (2/3), 263-287

Warschauer, M. (1996). Comparing face-to-face and electronic discussion in the second language classroom. *CALICO Journal*, 13(2), 7–26

Warschauer, M., & Meskill, C. (2000). Technology and second language learning. In J. Rosenthal (Ed.), *Handbook of undergraduate second language education*. Mahwah, New Jersey: Lawrence Erlbaum. pp. 303-318

Wen, L. M., Tsai, C., Lin, H., & Chuang, S. (2003). Cognitive–metacognitive and content-technical aspects of constructivist Internet-based learning environments: a LISREL analysis. *Computers & Education*, 43, 237–248

Williams, T. (2005). Leading double lives: Literacy and technology in and out of school. *Journal of Adolescent and Adult Literacy*, 48 (7), 702-706. <http://dx.doi.org/10.1598%2FJAAL.48.8.7>

Worthington, L. (1997). Let's Not Show the Teacher. EFL Students' Secret Exchange Journals. *Forum*, 35(3), 2

Table 1. Comparing groups on pre-SLWAI writing anxiety scores

	Mean	SD	t	p.
Pen-and-paper	59.35	11.64	-1.252	.218
E-mail	63.00	6.86		

Table 2. Comparing pre-SLWAI and post-SLWAI mean scores in writing anxiety for each group

	Test	Mean	SD	t	p.
Conventional tools	Pre- SLWAI	59.35	11.64	-1.252	.880
	Post-SLWAI	58.80	8.39		
E-mail	Pre-SLWAI	63.00	6.86	-.026	.093
	Post-SLWAI	58.86	7.56		

Table 3. Frequency and percentage of participants in three Anxiety levels in each group

		Pre-anxiety level	post-anxiety level
Conventional tools	Low Anxious	9 (45.0%)	8 (40.0%)
	Average Anxious	10 (50.0%)	12 (60.0%)
	High Anxious	1 (5.0%)	0 (0.0%)
E-mail	Low Anxious	5 (22.7%)	8 (36.4%)
	Average Anxious	17 (77.3%)	14 (63.6%)
	High Anxious	0 (0.0%)	0 (0.0%)

Table 4. Comparing groups on post-SLWAI writing anxiety scores

Groups	Mean	SD	<i>t</i>	<i>p.</i>
Conventional tools	58.80	8.39	-.026	.979
E-mail	58.86	7.56		

Appendix: Second Language Writing Anxiety Inventory (SLWAI)*

This questionnaire has been arranged to observe how you feel about writing in English as a second language. Read each statement carefully and rate your feelings about ESL writing. Please consider that the information is confidential and will be used just for analyzing the data for this research. Use the scale below to answer the questions.

1. I strongly disagree (SD)

2. I disagree (D)

3. I have no strong feelings either way (N)

4. I agree (A)

5. I strongly agree (SA)

1. While writing in English, I am not nervous at all.

1 2 3 4 5

2. I feel my heart pounding when I write English compositions under time constraint.

1 2 3 4 5

3. While writing English compositions, I feel worried and uneasy if I know they will be evaluated.

1 2 3 4 5

4. I often choose to write down my thoughts in English.

1 2 3 4 5

5. I usually do my best to avoid writing English compositions.

1 2 3 4 5

6. My mind often goes blank when I start to work on an English composition.

1 2 3 4 5

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7. I don't worry that my English compositions are a lot worse than others.

1 2 3 4 5

8. I tremble or perspire when I write English compositions under time pressure.

1 2 3 4 5

9. If my English composition is to be evaluated, I would worry about getting a very poor grade.

1 2 3 4 5

10. I do my best to avoid situations in which I have to write in English.

1 2 3 4 5

11. My thoughts become jumbled up when I write English compositions under time constraint.

1 2 3 4 5

12. Unless I have no choice, I would not use English to write compositions.

1 2 3 4 5

13. I often feel panic when I write English compositions under time constraint.

- 1 2 3 4 5
14. I am afraid that the other students would deride my English composition if they read it.
- 1 2 3 4 5
15. I freeze up when unexpectedly asked to write English compositions.
- 1 2 3 4 5
16. I would do my best to excuse myself if asked to write English compositions.
- 1 2 3 4 5
17. I don't worry at all about what other people would think of my English compositions.
- 1 2 3 4 5
18. I usually seek every possible chance to write English compositions outside of class.
- 1 2 3 4 5
19. I usually feel my whole body rigid and tense when write English compositions.
- 1 2 3 4 5
20. I am afraid of my English composition being chosen as a sample for discussion in class.
- 1 2 3 4 5
21. I am not afraid at all that my English compositions would be rated as very poor.
- 1 2 3 4 5
22. Whenever possible, I would use English to write compositions.
- 1 2 3 4 5