The Effect of Conventional Tools and E-mail on Writing Anxiety of Iranian EFL Students

Maryam Ezhdehakosh
Department of English Language, Shiraz Branch, Islamic Azad University Shiraz, Iran
Email: maryamezhdehakosh@gmail.com

Mostafa Zamanian
Department of English Language, Shiraz Branch, Islamic Azad University Shiraz, Iran

Abstract. The purpose of the present study was to investigate the effect of conventional tools (such as pen and paper) and e-mail on students’ writing anxiety. To fulfill the goals of the research, sixty M. A. students majoring in teaching English at Shiraz Azad University participated in this study. The participants consisted of twenty-three males and thirty-seven females. During the process which took place two months, the students were taught advanced essay writing and each student was asked to write one essay for every session. The students wrote on papers and handed them to the instructor for the first month. After going through the process of one month, writing anxiety questionnaire was administered to collect the data to analyze the conventional tools. Then they sent their essays to the instructor by e-mail during the following month and again writing anxiety questionnaire was administered to collect the data to analyze using e-mail. The comparison of the conventional and e-mail groups’ gain scores revealed that e-mail has the potential in assisting students lower their anxiety toward writing.

Keywords: Conventional tools, E-mail, writing anxiety.

Received: July 2014; Accepted: September 2014
*Corresponding author
1. Introduction

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 & 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, Moore, Graham, & Lee, 2003). In this respect, the role of anxiety in learning can be evidently appreciated.

In the past, using pen and paper was the primary mode of 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 & Weasenforth, 2001). A great body of research has been devoted to examining the use of e-mail in learning and has 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). In 1996, Belisle further asserted that as the role of the teacher has changed to a facilitator who guides students in their learning, changing the learning environment from a traditional passive-listening to the world of stimulation and investigation should be demanded.

2. Objectives of the Study

This study will investigate how different modes of writing, conventional tools such as pen and paper and e-mail can affect students’ writing anxiety. Therefore, it is hoped that the findings of this study will assist language teachers in identifying the effectiveness of applying e-mail in writing classes in order to alleviate students’ writing anxiety.
3. Research Question

The present study tried to answer the following question:

Is there any difference between conventional and e-mail group writing anxiety?

4. Literature Review

4.1 Writing anxiety

Writing anxiety is unique to the language-particular skill of writing (Bline, Lowe, Meixner, Nouri, & Pearc, 2001). It is defined as the fear of the writing process that outweighs the projected gain from ability to write (Thompson, 1980).

L2 writing anxiety is found to lead to difficulties in producing effective and coherent written pieces, as well as with problems in writing simple letters or complex reports (Schweiker-Marra & Marra, 2000). This is the reason why L2 writers produce shorter compositions and use less-intense words (Daly & Miller, 1985; Steinberg & Horwitz, 1986).

Some argued that people with high oral communication anxiety tended to compensate by writing, and others claimed the links between the oral and the writing anxiety did not exist (Hassan, 2001). Cheng, Horwitz and Schallert (1999) attempted to differentiate the components of general oral language anxiety and second language writing anxiety. They found that second language writing anxiety is distinguishable from oral communication anxiety; at the same time, they found underlying similarities between the two specific facets of language anxieties.

The study of writing anxiety has its roots in first-language acquisition. As such, first-language acquisition research plays an important role in understanding second-language writing anxiety. Hyland (2002) stated that the field of first-language writing has informed much of what we know about texts and composition and has provided a theoretical basis for L2 composing pedagogy and research.

Daly and Miller (1975b) pioneered writing anxiety research with native English speakers writing in their first-language. Daly and Miller (1975b) stated, “no matter how skilled or capable the individual is in writing, if he believes he will do poorly or if he doesn’t want to take
courses that stress writing then those skills or capabilities matter little" (p. 255). Basically, even if a student has the potential to develop into a brilliant writer, writing anxiety may inhibit this by dissuading the student to practice writing skills. Writing anxiety is common among first, second, and foreign language writers (Daly & Miller, 1975a; Daly & Miller, 1975b; Cheng, 2004). Writing anxiety manifests itself much as general language anxiety: through excessive worry, self-evaluation, fear of others’ judgments, and avoidance or excessive time spent on the composition process (Horwitz, Horwitz & Cope, 1986; MacIntyre & Gardner, 1994; Cheng, 2004).

In terms of writing, Abu-Rabia and Argaman (2002) investigated the role of language anxiety in the English writing achievement of 70 junior high school EFL students. They found that students with higher language anxiety were inclined to have lower writing achievement.

4.1.1 Effects of writing anxiety on writing performance

Two effects of L2 writing anxiety consistently found in previous works concerning second language anxiety were “distress associated with writing and a profound distaste for the process” (Madigan, Linton, & Johnson, 1996; Cheng, 2002). For instance, research showed that higher anxious writers tend to avoid taking writing courses and prefer academic majors and careers that are perceived as having relatively little to do with writing (Cheng, 2002).

Daud and Abu Kassim (2005) discovered that low apprehensive students tend to achieve higher grades in composition courses than high apprehensive students. In addition, low apprehensive students were found to write three times more words than high apprehensive students (Book, 1976). Other than that, according to Book (1976) low apprehensive students also wrote significantly more paragraphs, more words per paragraph, more sentences, more nouns, pronouns, adjectives and prepositional phrases than the high apprehensive students. Finally, Book noted that essays written by low apprehensive students had significantly more information than their high counterparts. In terms of writing quality, Daly (1978) had similar view as that held by Book, 1976 where his study showed a significant relationship between apprehension and qual-
ity evaluations. He also found that essays written by low apprehensive students were significantly better in quality than those written by high apprehensive students.

With respect to the relationship between ESL writing anxiety and writing performance, recent studies suggested significant negative correlations between them with several varied measures. Hassan (2001) used both Writing Quality Task and Writing Quantity Task to find out that low anxious students write better quality composition than their high anxious counterparts. Previous work also suggested that the detrimental effect of writing anxiety is most likely to be manifested when the anxious writer composes under time pressure (Kean, Glyn, & Britton, 1987; Cheng, 2002). Cheng (2004) specified the effects of writing anxiety on writing processes and behaviors, such as physiological effects as reflected in unpleasant feelings of tension or nervousness, cognitive interference in writing process, and avoidance of writing. He also used the participants' performance on a timed English essay writing task as an index of their English writing performance to measure the correlations between the specific writing anxiety and writing performance. The findings showed a significant negative correlation between anxiety and performance.

4.1.2 Possible causes of writing anxiety

The reasons why the second language learners feel anxious when writing might be different and multiple, but some general causes ranging from highly personal (such as self-confidence) to procedural (such as classroom activities and teaching methods) can be found on the basis of the previous studies in the field of L2 writing as well as writing anxiety. Some studies in writing have found that there are many causes of writing apprehension. It was found that these causes have been detected as originating from several sources ranging from an individual's ability to write, the amount of preparation the student put in to complete the writing task, the fear of being assessed and judged on the basis of writing tasks, to the mixed messages students receive from their teachers through the direct and indirect feedback in their class (Leki, 1999; Pajare & Johnson, 1994).
Daly (1978) suggested that wholly negative comments written by teachers on their students’ essays resulted in reduced confidence, reinforcement and satisfaction. On the contrary, Daly and Wilson (1983) found that teachers who wrote positive comments on their students’ essays tend to encourage their students to develop positive attitudes toward writing. Horwitz et al. (1986) discussed the roles of fear of test and fear of negative evaluation in second language anxiety; his discussion is applicable to the specific situations of second language writing as well.

Lack of revision and revision skills can lead to the writer’s block, as the writer tries to achieve perfection in the initial draft (Fritzsche, Young & Hickson, 2003). Abdel Latif (2007) further provides the following factors accounting for high English writing apprehension: lack of linguistic knowledge, low foreign language self-esteem, poor history of writing achievement and perceived writing performance improvement, low English writing self-efficacy and instructional practice of English writing tutors such as:

a. Teachers’ focus on teaching the theoretical concepts of writing and neglect of practical aspects.

b. Lack of feedback given by the teachers on the essays students write.

c. Teachers’ overuse of criticism when commenting on the essays presented at the lecture.

Similarly, Daly (1978) suggested nine other causes of writing apprehension including the kind of writing tasks given, not enough writing skills, teachers’ reactions to mechanical problems, the inclination to link writing with negative outcomes, apprehensive writers think their teachers are keen to punish them, scorn and embarrassment when a writer’s work is compared with others publicly, teachers giving negative feedback with regard to the content of essays, writers perceive themselves poorly, and inadequate role models especially in a weak class. Hassan (2001) pointed out some possible causes of writing anxiety from a linguistic and cognitive perspective, such as poor skill development, inadequate role models, lack of understanding of the composing process, and authoritative, teacher-centered, product-based model of teaching. Some studies showed that no matter how skilled or capable individuals are in
writing if they believe they will do poorly or if they do not want to take courses that stress writing, then their skills or capabilities matter little (Holladay, 1981, cited by Hassan, 2001).

Previous works about second language writing pointed out that time, topic and language might be important factors of poor ESL writing as well as writing anxiety (Leki & Carson, 1997; Hyland, 2003). ESL writers often carry the burden of learning to write in English; particularly they themselves identify language difficulties, such as an inadequate grasp of vocabulary and grammar as their main problems with English writing and as the main sources of frustration when being unable to express their ideas in appropriate and correct English (Hyland, 2003). The level and specificity of topical knowledge (sometimes referred to as knowledge schemata or real-world knowledge can be loosely thought of as knowledge structures in long-term memory) presupposed or required of the language learners can also have an influence in their affective responses to the writing tasks (Bachman & Palmer, 1996). The writers who have the relevant and sufficient topical knowledge may generally be expected to have positive affective responses to the writing tasks while those who do not may feel much nervous and anxious. In addition, the types of feedback the writers receive on their writing performance are likely to affect their emotions directly (Bachman & Palmer, 1996; Cheng, 2002; Hyland, 2003).

The role of the teacher may also affect the student’s writing apprehension. In this respect, Grundy (1985) reported that the situation where teachers fail to write their feedback may become another major cause of writing anxiety. This is proved by situations where students with high writing apprehension had reported that positive comments from their teachers instilled confidence in their writing. Other apprehensive writers may think that their teachers forced them to write as a form of punishment because they could not write well, or they fear and resent past experiences of struggling to complete writing tasks with difficult formats and discouraging writing evaluations. All these causes surfaced due to the fact that most teachers are constrained by the education institution’s curriculum requirements to focus on teaching the theoretical concepts of writing and ignoring its practical aspects (Grundy, 1985; Borich, 2004).
4.2 Learning and teaching strategies for coping with writing anxiety

Strategies for coping with second language writing anxiety can be explored from the scope of learners as well as the scope of teachers.

4.2.1 Learning strategies

Oxford (2001) discussed types of language learning strategies. Three learning strategies, such as meta-cognitive strategies, cognitive strategies and affective strategies may be useful to reduce L2 writing anxiety. Meta-cognitive strategies include identifying one’s own interests, needs and learning style preferences, which help the learner to have a self-knowledge about his learning style as well as its advantages and disadvantages, so as to choose strategies that comfortably fit with his learning style (Oxford, 2001).

Reid’s (1987) self-report survey of the perceptual learning style preferences of ESL students provided a good example of learning style preferences, which include visual vs. auditory vs. kinesthetic vs. tactile vs. group vs. individual (Reid, 1987; Hyland, 2003). Reid (1987) made a brief explanation to four basic perceptual learning style preferences: visual learning is focused on reading and studying charts; auditory learning prefers listening to lectures and audiotapes; kinesthetic learning is experiential learning that involves physical activities in learning situations; tactile learning is “hands-on” learning, such as building models and doing experiments (Reid, 1987).

Self-knowledge about one’s learning style preferences will help ESL learners and teachers to use various and suitable learning strategies to accommodate these preferences in ESL writing class. For instance, as Hyland discussed, students with an auditory preference work better on tasks like listening to lectures, conversations, or taped material as sources for writing and tasks that require interaction with others, such as group or pair work involving information transfer, reasoning and discussion (Hyland, 2003). Visual learners, on the other hand, may respond well to reading source texts, writing class journals, and transferring information from graphic, textual, or video material. Tactile students may work well with the tasks that involve writing reports on testing mod-
els. Kinesthetic students like to participate actively in the tasks like role-plays, and projects involving data collection (Hyland, 2003).

Research showed that college students who were taught in preferred learning styles scored higher in tests, fact knowledge, attitudes and efficiency than those taught in instructional styles different from their preferred styles (Reid, 1987). Cognitive strategies involve interactions with the material to be learned (O’Malley & Chamot, 1990). According to the studies of O’Malley and Chamot (1990) cognitive strategies, such as repetition (repeating a chunk of language, such as a word or a phrase, in the course of performing a language task), rehearsal (rehearsing the language needed, with attention to meaning, for a written task), translation (using the first language as a base for understanding and/or producing the second language) and transfer (using previously acquired linguistic knowledge to facilitate a language task) might be useful for reducing ESL writing anxiety caused by linguistic difficulties.

Oxford (1990) claimed that practice is the first and most important set of cognitive strategies, which include five techniques such as repeating, formally practicing with sounds and writing system, recognizing and using formulas and patterns, recombining, and practicing naturally. He also pointed out that imitation of native users of the language is another repeating technique used for L2 writing. Learners can improve their use of structures, vocabulary, idioms, and styles in writing by imitation. Teachers could help students by providing different examples of target language writing for them to imitate. In writing, revising is another use of repeating technique, that is going through a written draft (usually more than once) in order to correct or amend it (Oxford, 1990).

Teachers could help students by providing adequate and effective feedback for them to improve their writing. Studies show that ESL writers prefer teacher written feedback (Hyland, 1998; Hyland, 2003), and many learners particularly favor feedback on their grammar (Leki, 1990; Hyland, 2003), or content-specific comments with specific strategies for revising (Zamel, 1985; Hyland, 2003). Affective strategies include identifying one’s feelings, anxiety or contentment, and becoming aware of the learning circumstances or tasks that evoke them (Oxford, 2001, p. 168; Arnold, 1999), which helps learners deal with anxiety.
successfully. Using a diary to record feelings about language learning was suggested as a very helpful strategy (Chamot, Kupper, & Impink-Hernandez, 1988). O’Malley and Chamot (1990) also offered some affective strategies, such as questioning for clarification (asking for clarification or verification about the task), cooperation (working together with peers to solve a problem, pool information, check a learning task, model a language activity, or get feedback on written performance), self-talk (reducing anxiety by using mental techniques that make one feel competent to do the learning tasks), and self-reinforcement (providing personal motivation by arranging rewards for oneself when a language learning activity has been successfully completed). Oxford (1990) also offered some specific affective strategies that can be applied to L2 writing, such as lowering writing anxiety by using progressive relaxation, deep breathing, or meditation, encouraging oneself by making positive statements or self-rewarding, and taking one’s emotional temperature by writing a language learning diary, using a checklist of their own emotional state, or discussing one’s feelings with someone else. All these strategies could be used flexibly in coping with ESL writing anxiety.

4.2.2 Teaching strategies

Educators, in general, have two options when dealing with anxious students; one is to help them to cope with the existing anxiety-provoking situation, and the other is to make the learning contexts less stressful (Horwitz et al. 1986). All these techniques suit the theory of process-oriented approach in L2 writing, which focuses more on the various classroom activities that are believed to promote the development of skilled language use (Nunan, 1995). For instance, when applying the process-oriented approach, teachers of writing become much more interested in the processes that writers go through in composing texts rather than the result of the learning process whether the writer could do as a fluent and competent user of the language. Some studies indicated that even students of high L2 competence may not necessarily perceive themselves as competent language learners and may not be free from anxiety in using that L2 (Cheng, 2002).

Accordingly, writing teachers are advised to assess students’ writing
confidence according to the standards they use when assessing their students’ writing competence. Cheng suggested that the teacher should pay as much attention to instilling in their students a positive and realistic perception of their writing competence as to the development of their writing skills; they should help students learn to face difficulties, even failures without losing confidence (Cheng, 2002).

Actually, reducing second language writing anxiety by changing the context of learning is the most important and considerably the most challenging task. Teachers might monitor a positive, learner-centered classroom climate in order to identify specific sources of students’ L2 writing anxiety (Aoki, 1999; Horwitz et al. 1986; Hassan, 2001), to build confidence in their L2 writing skills because inaccurate self-evaluation of writing competence, rather than lack of writing skill, is identified as responsible for students’ experience of L2 writing anxiety (Cheng, 2002).

To minimize L2 writing anxiety in the learner-centered classroom, certain teaching techniques were recommended, such as write more; talk about past writing experience; find patterns in students’ writing errors; conference during drafting stages; collaborate with students for evaluation criteria; encourage positive self-talk; vary writing modes; monitor attitudes, etc. (Reeves, 1997; Hassan, 2001). Cheng (2002) suggested that it is critical to establish a learning environment where students can write in their flawed L2 without embarrassment, where every student writer’s contribution is adequately valued, where activities and writing tasks lead to feelings of achievement, not failure, and where self-confidence is built up. Teachers may need to offer more encouragement and positive feedback, focus more on contents instead of forms, such as giving fair credit for good ideas even if the writing shows flaws in linguistic forms, mark surface errors such as spelling and punctuation mistakes sparingly in early drafts, and even from time to time allow experimentation without evaluation (Cheng, 2002).

4.3 Characteristics of E-mail in an educational setting
E-mail is an electronic communication tool that predates the Internet. It was used initially for intra-corporate communication via mainframes and later by private dial-up networks. Following this, the U.S. Department of
Defense set up the first operational packet switching network, known as the Advanced Research Projects Agency Network (ARPANET), specifically for the purpose of providing a robust communication medium. Once ARPANET was developed, the tool was widely used by scientists and academics (Hauben, 2000). As the Internet grew and the notion of a world-wide web became reality, e-mail was joined by a host of other, richer, media for communication. These included (but are not limited to) online text chat, audio chat, list serves, bulletin boards, streaming video, live web-casting, and video conferencing. Today, despite competition from these newer high-bandwidth media, e-mail is still one of the most widely used communication tools in education (Le & Le, 2002). Herring (2002) stated that the first electronic mail or “e-mail” message to be transmitted between two networked computers was sent in 1971 by Ray Tomlinson who saw a potential for transmission of data and computer programs. Some research has gone so far as to conclude that e-mail is more popular than face-to-face interaction between students and instructors (Berge, 1997; Sherry, 2000; Gustafson, 2004).

E-mail is used for a wide range of tasks and has become not only an application but also a habitat. According to Ducheneaut and Bellotti (2001), e-mail is not only the place in which a great deal of work is received and delegated, it is also increasingly used as a portal for access to online publications and information services. It has become the place where personal computer (PC) users spend much of their workdays. The application is always on and is often the focus of attention.

E-mail breaks down the barriers of distance and time by allowing students to communicate with the instructor and their peers when and where it is convenient. With this tool, it is no longer necessary for students to make appointments or queue up between classes at the instructor’s office. A simple e-mail question can be sent instead. From the teacher’s perspective, e-mail is also valuable because it helps leverage the instructor’s efforts. It is impractical to expect an instructor who teaches several hundred students to have a face-to-face conference with each student (Le & Le, 2002).

Quite often, students seeking these conferences all have the same basic questions and information needs. It is much more efficient for the
instructor to write a general purpose global message that answers these common concerns and send it to all students. This leaves more time to deal with the problems that actually require individual attention (Martin, 1996; Sharp, 2000; Zhang, Zhao, Zhou, & Nunamaker, 2004).

5. Methodology

5.1 Participants
The present study took place in the first semester of 1391-1392 academic year. The population in this study included English major students of the Islamic Azad University of Shiraz. They were 60 students of Teaching English, 23 males and 37 females. The course was Essay writing. All the students were native speakers of Persian. The students were asked to ensure that they all have the required knowledge in using e-mail.

5.2 Instrumentation
The instrument used in this study was Second Language Writing Anxiety Inventory (SLWAI) adapted from Cheng (2004). The original version of the SLWAI, developed by Cheng (2004), is an instrument that measures the degree to which a student feels anxious in L2 writing. The SLWAI was assessed and proved by means of correlation and factor analysis to be valid and reliable (Cheng, 2004), and has been adopted in many studies related to second language writing anxiety.

5.3 Data collection
The procedures of data collection including the administration and scoring procedure are presented as follows:

5.3.1 Administration procedures
Data for the present study were collected by using Second Language Writing Anxiety Inventory (SLWAI) two times. The SLWAI measures the degree of anxiety which one will experience when writing in a second or foreign language. During the process which took place two months, the students were taught advanced essay writing, and each student was asked to write one essay with at least 150 words for every session. The students wrote on papers and handed them to the instructor for the first month. After going through the process for one month, writing anxiety
questionnaire was administered to collect the data to analyze the conventional tools. In order to motivate the students to fill in the questionnaires, the objectives of the study were explained to them. Then, they sent their essays to the instructor by e-mails during the following month and again writing anxiety questionnaire was administered to collect the data to analyze using e-mails.

5.3.2 Scoring procedures
Data for the present study were collected by using Second Language Writing Anxiety Inventory (SLWAI). The SLWAI consists of 22 items, scored on a five-point Likert response scale ranging from 1 (strongly disagree) to 5 (strongly agree). Five of the items (1, 4, 17, 18, 22) are negatively worded and require reverse scoring before being summed up to yield total scores. The possible scores on the SLWAI range from 22 to 110. The obtained scores were divided by the total number of questions to have scores from 1 to 5 for better understanding. A higher score obtained thereupon indicates a higher level of ESL writing anxiety.

6. Data Analysis
In order to analyze the data, SPSS software was used to obtain the levels of ESL writing anxiety experienced by the students and to measure if there is a significant difference in the levels of anxiety between the conventional tools and e-mail. The SLWAI was administered to the students two times and paired sample t-test was run in order to find out the differences between two groups (conventional and e-mail) in their writing anxiety levels. The SLWAI was analyzed by summing the subjects’ ratings of the 22-items.

7. Results
To compare the students’ writing anxiety levels in finding out whether there is a significant difference between conventional and e-mail writing mean scores, paired sample t-test was conducted. As depicted in Table 1, the pretest (conventional group) mean score is 3.31, and the standard deviation is .47 and for posttest (e-mail group), the mean score is 2.51
and the standard deviation is .34. Table 1 displays that the mean score obtained from e-mail group is larger than the mean score obtained from conventional group. The comparison of the mean scores of conventional group and e-mail group shows there is a decrease in the mean scores. Decrease in the mean scores shows the level of anxiety had been alleviated.

**Table 1.** Descriptive statistics of the pretest & posttest

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>pretest</td>
<td>3.3185</td>
<td>60</td>
<td>.47234</td>
<td>.06098</td>
</tr>
<tr>
<td>posttest</td>
<td>2.5138</td>
<td>60</td>
<td>.34101</td>
<td>.04402</td>
</tr>
</tbody>
</table>

Applying paired sample t-test for each group (Table 1), the significance level for conventional and e-mail groups (p= .000) is lower than .05; therefore, it can be concluded that there is a significance difference between conventional and e-mail groups. It is evident there is significant difference \[t(60) = 20.2, p > .05\] between conventional and e-mail group in terms of writing anxiety.

**Table 2.** Comparing means of the pretest & posttest

<table>
<thead>
<tr>
<th>Paired Differences</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval of the Difference</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>pretest – posttest</td>
<td>.80467</td>
<td>.30827</td>
<td>.03980</td>
<td>.72503 – .88430</td>
<td>20.219</td>
<td>59</td>
<td>.000</td>
</tr>
</tbody>
</table>

**8. Discussion**

The main focus of this study lies in comparing the effect of two modes of learning and teaching in writing: conventional tools (such as pen and paper) and e-mail on ESL students’ writing anxiety level. Paired sample t-test results reveal that using two different tools in writing affects the level of anxiety. The results showed significant difference between mean
scores. According to Table 2, the significance level for conventional and e-mail groups ($p = .000$) is lower than .05. Comparing the means of each group in conventional and e-mail group reveals that the means have decreased.

According to Table 1, the mean for the conventional group in the pretest is 3.31 and for the e-mail group in the posttest is 2.51. These differences between the mean scores show that students’ anxiety levels have decreased. So, conventional group had higher anxiety compared to e-mail group.

The results of this study support the previous research on the role of computers in 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 showed positive attitudes of students toward technology use (Beauvois, 1994; Warschauer, 1996; Liu et al. 2003). Ritter (1993) reported that majority of the students preferred using a computer-based program in learning new vocabulary because they considered it fun.

**9. Conclusion**

Recent advances in online technology have made the use of e-mail a feasible mode in which students can collaboratively work with each other. E-mail can be utilized in writing classes to decrease their anxiety levels. Besides, working with computers and the internet free students from the superficial emphasis on grammar which causes anxiety in writing.

The important point which we should bear in mind is that many language learners enter their university dealing with language learning anxiety which 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 to alleviate students’ anxiety in writing, since it makes them more motivated and enthusiastic about their learning.
It seems appropriate to point out that while technological innovations, including e-mail 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, the Internet and e-mail 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.

10. Pedagogical Implications

Based on the results of this study, language teachers can be assured of the positive role of technology in decreasing their student’s writing anxiety. They can design their course instruction in a way that students are encouraged to use e-mails for their learning. Sufficient practice with appropriate use of e-mail can have positive effects on EFL writing improvement so as to reduce students’ English writing anxiety. For this process, the teacher should provide students with adequate opportunities for guided practice. Those who are responsible for developing students’ language learning can provide the teachers with programs in which they are informed about the importance of using e-mail in decreasing anxiety and provide facilities so that students can take advantages of using e-mail.

References


