The Effect of Text Chat Assisted with Word Processors on Saudi English Major Students' Writing Accuracy and Productivity of Authentic Texts

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Abstract—This study explored the effects of using online chat and word processors on students' writing skills that include; organizing a text, spelling, punctuation, grammar, phrasal verbs, idioms, idiomatic expressions, pragmatics, creativity, vocabulary growth, content, relational words, conjunctions, authenticity, figures of speech, imagination, coherence, style, socio-cultural aspects, language use, and the production of authentic text. The study group consisted of students in the Department of Languages and Translation at Taibah University who registered for the Writing Two course in the first semester of the 2012 - 2013 academic year. Forty subjects were divided into two sections: section one was assigned as an experimental group (supported by Facebook and Skype) and section two was assigned as a control group and was asked to write their essays with paper and pencil. Facebook and Skype accounts were created for every student in the experimental group. Data was analyzed from pre-test and post-test results to evaluate the question posed by the study: Does the use of online text chat assisted with word processors help undergraduate students develop their writing skills more than traditional methods of teaching? The results revealed that students who worked with Facebook and Skype showed a significant improvement in their writing skills when compared to the control group. In light of these findings, it is recommended that online discussions via Facebook, Skype, and other social media sites should be utilized when teaching writing and the other language skills.

Index Terms—Text Chat, Word Processor, CMC, Writing Accuracy, Authenticity, Productivity and Creativity of Authentic Texts, Facebook and Skype.

I. INTRODUCTION

Social networking sites such as Facebook and Skype enrich students' creativity and enhance their ability to produce authentic oral and graphic texts. They offer educators a contemporary method of delivering teaching and learning materials, allowing for the flexibility to learn from home or at work. (Kerwin, 2012)

Currently, university lecturers have the necessary training and strategies needed to utilize social media. More and more, people are finding these sites approachable and less technical than expected. Such platforms open new opportunities for education to move online by facilitating communication among learners at home and overcoming the time and travel constraints associated with conventional location-based and face-to-face educational models. Thus, internet-driven online multimedia is paving the way for off-campus education and allowing students to use computers to access educational materials.(Romoszowski & Mason 2004).

Educators constantly look for more innovative techniques and strive to create an interactive learning environment that attracts students and encourages them to collaborate and exchange ideas and experiences. Online chat is one of the most effective means of providing such rich and versatile learning environments. Digital tools allow for cooperative projects between various schools and accelerate students’ development through contact with colleagues and experts with similar interests. The communication facilitated by these international social networking sites develops students’ writing skills by giving them exposure to English text written by writers of varying levels addressing a variety of topics. (Tanti, 2012)

As for the teachers, social networking sites enable them to access educational materials that are difficult to connect to in other ways. The strength of sites like Facebook and Skype lies in their ability to create a link between people and sources of information across vast distances. The use of these technologies greatly increases opportunities for education to extend beyond the scope of schools (Satar, 2008).

In the last two decades, online technologies have affected almost every aspect of our life and have become a major factor in our interactions, both in study and work environments. These online interactions are held through either one-to-one (individual) or group communication (Blau& Barak, 2012).

II. BACKGROUND OF THE STUDY AND STATEMENT OF THE PROBLEM

The past several decades have shown an increase in the use of, and consequent research of internet-based language teaching and learning. Recently, emphasis has shifted away from Computer Assisted Language Learning (CALL) packages towards the use of Computer Mediated Communication (CMC) for authentic language learning. Although internet communication is well established in western educational institutions, this is not the case everywhere. The absence of widespread, reliable, and affordable audio/video conferencing has given written communication a central role in CMC languageing. Amongst other applications, synchronous text chat
has been seen as an option to prepare students for spontaneous thinking and speaking in foreign languages (Stickler, 2008).

To keep up with evolving global trends, foreign language learners must make changes to their reading and writing practices. Around the world, writing is consistently given little focus in foreign language courses. However, the rise of information technologies coupled with the widespread use of computers and the internet has emphasized the importance of writing as a central form of communication. (Karakas, 2011)

What distinguishes Facebook and Skype is that they provide everyone with the ability to be a publisher. Teachers and students can exchange information with other sources (peers, experts, enthusiasts) in order to improve the quality of their work. When they are ready, social media sites provide an excellent platform to publish and distribute ideas that would have otherwise remained unseen in a world separated by distance.

CMC creates a learning environment that is not restricted to the classroom by providing an opportunity to learn at any time and in any place. This freedom simplifies and stimulates relations with others and allows for the exchange of feedback, suggestions, and other beneficial information. (Lin, 2008)

Daiute (1985) summarized some of the benefits of CMC on writing skills as follows:

- They provide learners with a communication channel through which they interact with classmates and friends.
- They make learning interesting and motivating.

More importantly, CMC provides new opportunities to teach, learn, and use English in practical, authentic, and interesting ways (Zhao, 2009).

Liang, M. (2006) suggests that online chat enables learners to participate in real–time collaborative conversations by making text comprehensible and allowing participants to respond to messages and resolve miscommunications. Unlike face–to–face communication, online chats promote textual interactions and give learners time to read, write, and avoid misunderstandings by pushing them to type short messages and follow online netiquette. Although characteristics of the text chat might impact the process of reading and learning, little research has been done to examine their influence in relation to L2 context typographical errors (Jepson, K., 2005).

Word processors are another indispensable tool for learning a foreign language. They provide students with valuable information regarding all aspects of language, including phonological, morphological, syntactic, semantic, and etymological knowledge. This helps users understand and utilize language to its full potential (Hamouda, 2013). Undoubtedly, the word processor is one of the most important computer technologies adopted by foreign language teachers. Through it, computers can enrich all aspects of the writing process, allowing for easy revision, spellchecking, and grammatical advice (Hanson and Smith, 2001).

One aspect of using digital environments in language learning is computer-mediated communication (CMC) such as email, text messaging, instant messaging, blogs and journaling. CMC relates to the use of these online resources to compose and exchange information through networked telecommunication systems. These systems make communication significantly easier and allow for the relatively uninhibited flow of ideas from person to person. Online communication can be synchronous or asynchronous. Synchronous communication happens in real time when a user logs in and communicates directly with others in real time. Asynchronous communication occurs outside of real time (i.e. email). (Satar, 2006)

A comprehensive look at existing studies shows that computer-mediated communication is influencing writing in positive and progressive ways. When composing text in a digital environment, students are required to employ a number of skills that traditional writing practices fail to engage. Considering the unanimous shift towards digital platforms, traditional writing practices neglect to teach students the skills necessary to function in the modern world. CMC is highly recommended for writers because it facilitates collaboration and improves students’ motivation and participation. (Dansieh, 2011)

Contemporary research shows that students who use word processors produce longer, more refined texts than more traditional writers. When using computers, students show greater interest in the writing process and more enthusiasm for revision. This makes them more likely to devote additional time and effort into their text. (Behjat, 2011)

During the past decade, many researchers have underscored the importance of interaction in second language (L2) learning. In the context of text-based, computer-mediated communication, interaction can occur between the learner and the text (in the form of textual interactions), between learner and learner (in the form of social interaction), or between learner and technology (in the form of technological interaction). (Freemans, 1986)

Technologies have created interactive environments for language learning and have raised essential questions concerning whether networked technology facilitates interaction and influences reading and learning processes. Scholars point out that web-based group learning activities, such as real-time chats and asynchronous discussions, can promote interactive reading and learning. Several studies have suggested that text chats have a unique potential for enhancing social interaction and language learning (Liang, 2006).

CMC offers a fruitful learning environment in which students can receive authentic feedback. Chapelle (2004) reviewed a number of studies that employed CMC for language learning and concluded that linguistic, semantic, syntactic, pragmatic, and intercultural competencies could be developed through the use of this technology. Other researchers of applied linguistics demonstrated that chatting provides an opportunity for educators to teach writing skills effectively, innovatively, and efficiently (Russell, 2010).

The researchers’ extensive experience working as a foreign language teacher, supervising curriculum, textbook writer, and lecturer at BA, MA, and PhD levels, has shown that FL students exhibit weakness in their writing skills. This may be attributed to the failure of traditional teaching methods to help students and teachers learn and share these skills efficiently. The researcher examined the effects of using social networking sites, such as Facebook and Skype, along with word processors to improve foreign
language students' writing performance. The belief is that
such technology can save time and effort while producing
better results, because teachers frequently lack the time
necessary to give individual feedback and teach authentic
English writing styles.

The researcher’s experience and review of related lit-
erature on the subject shows that EFL learners face many
difficulties in mastering language skills such as writing.
One of the difficulties is that regular scheduled instruction
provides limited time to create and explore real life situa-
tions that demand the use of relevant language skills.
Moreover, writing is a productive act, which makes it
more difficult to master than receptive skills such as read-
ing and listening. Consequently, there is a need to develop
up-to-date methods and strategies that teach productive
skills such as writing. One of these methods is the use of
text chat. Text chat can benefit language students in a
variety of ways, including reducing anxiety and stress by
allowing the user to remain anonymous and feel sheltered
from criticism.

Millions of texts messages, chats, and emails are ex-
changed every second via thousands of programs and
online platforms. It is clear that there is an urgent need and
opportunity for modern instructional methods to be de-
veloped in order to teach students language skills. Various
researchers have documented the many benefits that text
chat can provide for both teachers and students (Cho,
2009). This study aims to expand on that research and
contribute to the better understanding of the evolving
digital landscape and its relationship to the learning pro-
cess.

More importantly, as an educator working in different
teaching environments, the researcher has noticed that
students lack the adequate competencies in English writ-
ing. The use of text chat as an instructional method has
proven to be effective, but has not been widely utilized in
Arab countries. Educators and teachers working in the
field of English as a second language should consider this
resource as a way to enhance their students’ writing skills.

In an effort to help writers from all walks of life, this
research paper explores the ways in which online chat and
word processors affect the writing skills of a sample of
Saudi English major students at Taibah University.

Basing on the previously stated problem, this study
aims to explore the effect of using social networking sites
and word processors on the writing performance of for-

glerng about language students. The study looks at individual
components of the writing process (spelling, vocabulary,
content, organization, punctuation, language use, gram-
mar, and authenticity) to evaluate the impact of technol-
ogy on specific aspects of language mastery.

The significance of the present study stems from the
fact that it may be the first study on teaching writing with
the help of the social networking sites (i.e. Facebook and
Skype) at a Saudi University. The researcher hoped that
this study might add to the understanding of using chat
rooms as a resource in language education and in develop-
ing the process of teaching writing at Arab universities in
particular.

The study may show the importance of using text chat
to develop writing skills and prepare students to face ex-
ams with confidence.

More importantly, the study introduced CMC applica-
tions to EFL classes. This can be beneficial for curricula
designers and the Ministry of Education. Various types of
text chat may be integrated to teach different skills, me-
chanics, components, and competencies of language in the
syllabus.

This study can benefit textbook writers, teachers, and
supervisors and has already had a positive, motivating
effect on the Saudi students at Taibah University.

The results obtained in this study may encourage and
help English curricula developers use more text chat ap-
lications in their lesson plans.

A. Questions of the study
This study aims to answer the following two research ques-
tions:

- Are there any statistically significant differences be-
tween the mean scores of the experimental and con-
trol group students’ writing performance?
- In which specific writing skill or activity (spelling,
organization, language use, vocabulary, authenticity,
content, punctuation, grammar, stylistics, productivi-
ty, and creativity) did the experimental group's stu-
dents show the greatest change?

B. Hypotheses of the study
The study assumed the following:

- There will be statistical differences in the mean
scores of the experimental and control group’s over-
all writing performance.
- There will be statistically significant differences in
the mean scores of the experimental group’s perfor-
mance in the specific writing skills observed.

C. Operational definitions of terms
The following terms have designated meanings when-
ever they are used in the study:

- Writing skills: they include; punctuation, spilling,
coherence, authenticity, idioms, idiomatic expres-
sions, pragmatics, text organization, figures of
speech, language use, creativity, conjunction, and
related words.
- Regular instruction: The non–computerized method
that is traditionally used by teachers.
- English as a Foreign Language (EFL): The use of the
English language by non-native speakers in countries
where English is not the first language.
- Writing Performance: The knowledge gain observed
through repeated writing tasks (Nelson, 2007).
- Traditional Classroom Setting: In a traditional clas-
sroom setting, university students usually meet for an
hour, listen to the lecture, and get intervention
through an established routine. In this setting, the
teacher decides methods, activities, and techniques
that are to be learned, and how the class is to be run
(Freeman, 2000).
- Web page: A web document of varying lengths that
is accessed online (Atkinson, 1998).
- Web site: A number of interlinked web pages related
by a common subject or purpose. (Atkinson, 1998).
- Writing Courses: The writing courses offered by the
English Department at Taibah University: Writing
One and Writing Two.
• Traditional teaching method: The use of non-digital methods of delivering learning material.
• Word processor: A literacy tool with many features that allow users to compose text on a computer.
• Computer Mediated Communications (CMC): Blake (2009, p. 227) defined CMC as "all text-based, video-based, and voice-over communication". CMC also includes asynchronous forms of communication such as discussion boards and email messages.
• Text Chat: A form of synchronous CMC. Text chat refers to interactions via typed text (Levy, 2009). In the context of the current study, text chat is defined as the use of text messages as a way to improve the writing skills of students.

III. REVIEW OF RELATED LITERATURE
In this experimental study, the researcher reviewed the related literature regarding CMC chat and its effect on writing accuracy, mechanics, and productivity of authentic texts. They are listed from the oldest to the most recent.

In a study aimed at discussing the advantages of using online resources in language learning, Kovarova (2008) explored the benefits and possibilities created by using text chat with EFL students. She examined possible difficulties in implementing text chat into EFL classrooms in primary schools and pointed out that both teachers and learners are able to utilize text chat to generate ideas and content individually or collaboratively. The study employed a survey to measure teachers’ perceptions on the effectiveness of Paragraph Punch as a writing tool for beginner writers. The participants consisted of 30 third-year TESL undergraduate students enrolled in the "Teaching Writing in an ESL Context" course at the University of Kebangsaan Malaysia (UKM). All participants have acquired at least Band 4 and above in MUET (Malaysian University English Test). They can be considered competent or modest users of English and were familiar with the use of ICT since most of them utilize the internet for gathering information, emailing, social networking, etc. The participants ranged from 21 to 28 years of age. The analysis of the data showed that (i) the respondents have positive a view of Paragraph Punch as a potential writing tool, (ii) Paragraph Punch is more suited for beginner writers, and (iii) the software can still be improved in terms of interactivity and layout. The findings show that teachers see Paragraph Punch as an effective resource that can be utilized to teach writing. It can be particularly beneficial for beginner writers because it provides a basic understanding of the construction of a paragraph through a step-by-step writing process, which includes selecting a topic, constructing a topic sentence, generating supporting ideas, and writing a conclusion. Students’ online interaction in the chat room appeared to be a mix of different levels of textual, social, and technological interaction. In this study, the writers of the summaries did most of the “talking” about their text, and their peers often chatted socially without responding to text messages. As a result, these learners gained few benefits from the online interaction. Language teachers should be aware of the consequences of varying degrees and types of interaction that occur online and focus on guiding L2 students’ textual interactions in online learning environments.

Schultz (2000) investigated the effect of computer-networked collaboration on the French L2 writing process by comparing the number and types of changes that took place from the first to the final draft in the SCMC and face-to-face editing environments. The lower proficiency students were observed making significantly more content-level changes in the traditional face-to-face editing environment, whereas the higher proficiency students produced more content-level changes in a mixed environment involving both SCMC and face-to-face forms of collaboration.

Alkahtani (1999) reviewed ninety studies from different countries on the role of CMC in education. It became apparent that this technology has a positive impact on students’ ability to learn and improve communication and writing skills.

Other studies (e.g. Liang, 2006) and many others have also indicated that text chat can facilitate interactive reading and learning processes that improve the writing skills of students.

Lin and Overbaugh (2007) conducted a study that examined whether providing students with the choice of chat versus threaded discussion boards for online discourse is an effective instructional strategy. The sample consisted of teacher-education students enrolled in face-to-face (FTF) and online sections of an undergraduate foundations course. Both sections required participation in an online text-based discussion. Comparison factors included course format (FTF vs. online), discussion format (chat vs. discussion board), and discussion format option (choice vs. no choice). Results revealed that students' choice of discussion format was influenced by their level of academic introversion/extroversion and not by the instructional environment in which they were enrolled. In addition, providing a choice of discussion format to students enhanced course satisfaction and improved the overall writing quality.

In his study, Zhao (2009) investigated meaning negotiation and communication strategy among non-native English speakers through text chat and videoconferencing. Learners in Chinese and Japanese universities participated in text chats and videoconferences to discuss culture-related topics using English as a common language. Text chat scripts and videoconferencing transcripts were analyzed using a simplified version of the meaning negotiation model developed by Smith (2003). A survey was conducted on communication strategy use. Results of the discourse analysis and the survey indicate that both text chat and videoconferencing are valuable tools to assist meaning negotiation and facilitate second language acquisition. Compared to videoconferencing, text chat has the potential of promoting lexical acquisition.

Watson (2009), an online instructor at Coastline Community College, discussed the use of text chat in an online French course. In addition to text chat, Watson also advocated the use of live audio chat sessions. She felt that text chat explored more regions of the brain than audio chat. These observations enabled her to compare how students wrote in chats versus how they wrote in formal assignments to give an indication of whether the student sought outside help or not.

Sauro and Smith (2010) examined the linguistic complexity and lexical diversity of both overt and covert L2 output produced during synchronous written computer-mediated communication. Video-enhanced chat scripts, produced by 23 university level German language students...
engaged in dyadic task-based chat interaction, were coded and analyzed for syntactic complexity (ratio of clauses to c-units), productive use of grammatical gender, and lexical diversity.

Yanus, Salehi, Yen, Anua, & Hisham (2011) conducted a study investigating the effect of using Paragraph Punch on teaching ESL writing to explore the perceptions of perservice teachers in the University Kebangsaan Malaysia (UKM). The research provides an overview of the development of computer-assisted language learning (CALL) over the years. A survey questionnaire was used to elicit the participants’ views on the use of Paragraph Punch as a potential writing tool.

In their research, Sullivan and Pratt (2011) asserted that the primary objective of communicative language teaching is “the ability not only to communicate using rules of grammar, but also to use language appropriately in social contexts and to employ verbal and nonverbal strategies to overcome breakdowns in communication. The collaborative nature of networked computing fits well with the social view of writing and with the generally accepted view that interaction and group work facilitate the second language acquisition process.”

Behjat (2011) asserted that computers have found their way into language classrooms. One of the most beneficial tools made possible by computers for mechanical and grammatical language refinement is the word processor. This study was done to see if there are any significant differences in the Larnian ESL learners’ writing when using a word processor. For this purpose, 60 sophomore EFL students at Shiraze Islamic Azad University were chosen. The comparison between the students’ scores showed that there was a significant difference in the final performance of the two groups. Therefore, this study supported the idea that word processors improve the ESL learners’ writing quality.

Tanti (2012) demonstrated that digital technologies like blogging, wikis, and social networking platforms have a role to play in the development of literacy skills in primary education classrooms. The results of the study suggested that in this instance, blogging was successfully integrated into the teaching and learning process to achieve numerous English writing syllabus outcomes. The study also demonstrated that, in addition to the development of traditional literacy skills concerned mainly with the ability to construct well-structured and well-presented texts, the collaborative use of a classroom blog provided students with the opportunity to develop critical literacy skills by interacting with an audience and with each other. It was concluded that the art and skills required of students when blogging resulted in a marked improvement in the quality of their writing.

Sauro (2012) built upon research on the CAF (complexity, accuracy, fluency) framework, a method for examining learner performance, to compare the lexical and syntactic complexity of learner output in spoken discourse and synchronous computer mediated communication (SCMC) during the completion of narrative tasks. Data was generated from transcripts and video-enhanced chat scripts for (N = 21) university level English students from linguistically, educationally, and digitally diverse backgrounds. Results showed no significant difference in either the lexical or syntactic complexity of the narratives generated using these two modalities, and instead found evidence that different types of learners in this heterogeneous population were able to demonstrate a more complex usage of language predominantly in one context over the other.

Ochonogor, Alakpodia & Achugbue (2012) studied the impact of text or chat room slang on students’ academic performance. An unstructured language violates the standard rules of English. Research in this field is necessitated by the fact that students in recent times have resorted to the use of slang in their class work and examinations. If the use of slang is not moderated, it will completely erode proper use of the English language in the subsequent generations of Nigerians. This research, therefore, sought to examine the effects of improper language on students’ academic performance. Descriptive research methodology was adopted and, to gather information from the respondents, a questionnaire was constructed and distributed to students immediately after their classes. A total of three hundred and thirty (330) questionnaires were administered and three hundred and twenty-four (324) were determined usable.

Grosz-Glunchman (2013) examined the utility of text chat as an instructional tool for limited-English-proficient (LEP) adult females who have made little progress learning writing in English as a Second Language (ESL). Six subjects, age 30-50, enrolled in a university ESL program and produced 25 email exchanges with the researcher over a 5-week period. The subjects in this study fell into two categories: a younger group of learners under the age of 40 with electronic mail experience and an older group between the ages of 40 and 50 who were not familiar with email. Progress in their writing skills was judged by examining (a) the number of their messages, (b) their length in terms of word counts, (c) the acquisition of new vocabulary directly related to comprehensible input, and (d) the syntactical complexity that resulted from the use of connectors in the subordination of clauses. The subjects responded to the comprehensive input of the researcher’s electronic messages and established an exchange of written communication by asking for and volunteering information. Although all the subjects who used the electronic medium successfully increased their output towards the end of the study, progress was more pronounced in the older subjects since their participation in the study represented a double effort, demanding that they improve their writing skills and learn to use email.

This study differs from the related research in that it is more comprehensive. It examines the effects of text chat and word processors on developing students’ writing accuracy and their production of authentic texts.

IV. METHODOLOGY AND PROCEDURES

A. Participants of the study

The study consisted of undergraduate English major students enrolled in the Writing Two Course at Taibah University. Section one studied the course using regular instruction. Section two studied it via text chat.

B. Instrument of the study

This study sought to identify differences in the learning outcomes of the two groups of participants. Both groups were taught using the same syllabus, text, and assignments. However, one group relied on the textbook and traditional teaching methods (paper, pencil, and white
board), while the other group incorporated the use of text chat with native English speakers. The experimental group met in a computer lab for half of the class sessions, while the control group continued to meet in a regular classroom for all its sessions. Assignments for both groups were given throughout the semester and focused on technical paragraph writing competency.

The researcher designed an achievement test in which students could earn a maximum of 100 points to measure their performance in writing before and after participating in the study. The achievement test consisted of four essays. 25 scores were allocated for each essay to measure a variety of aspects of writing and ability to create authentic text infused with socio-cultural aspects of the English language. In the first week of the semester, both groups were asked to take a pretest to determine their skill level before the experiment. After two months, a post-test was administered to see if text chat and word processors had any effect on students’ writing performance.

To eliminate subjectivity, two native speaking English teachers scored the test. The inter-rater reliability between them was 89, which is statistically acceptable. The following table shows the marking scale for the distribution of scores among the measured variables. An objective and valid marking scale was used and modified to suit this study after being validated.

C. Variables of the study

The study had two variables: independent and dependent.

1) The dependent variables
   - Students’ performance on the writing post-test.
   - Students’ performance on each of the measured variables on the post-test.

2) The independent variables
   - Teaching writing using text chat and Word Processors.
   - Teaching writing traditionally.

D. Design of the study

The experiment was conducted for 12 weeks during the first semester of the 2012-2013 academic year. The sample of the study consisted of 38 undergraduate EFL students.

E. Data collection procedures

- A pre-test was administered at the beginning of the experiment for both groups.
- Assignment notebooks were used to document and verify events that took place during the composing process.

The students were given a pre-test to assess their level in writing. One group proceeded to learn by integrating text chat into their curriculum. The teacher continuously evaluated their writing and gave notes and advice on how to write more accurately and productively. The other (control) group learned to write in a traditional way: the teacher gave them a topic and asked them to write a paragraph. Their performances were scored traditionally and they were given notes. After twelve weeks, a post-test was administered to the two groups of students. The test was scored, and the data was tabulated and prepared for statistical analysis.

F. Limitation of the study

This study was limited by the following:

- The sample group consisted of 38 students majoring in English at Taibah University enrolled in the Writing Two course during the first semester of the 2012-2013 academic year.
- There are limitations related to the difference in the number of students in the control group (18) and the experimental (20) as well as the number of students taking the pre-test and post-test due to registration policies at the university.
- Both the control group and the experimental group were taught by the same teacher, who presented the same concept, assigned the same work, and had the same criterion for assessment and evaluation. However, the tests were scored by native English speakers with extensive experience teaching non-native speakers.
- The study was limited to measuring the effect of using two different instructional methods on FL students' mastery of writing (spelling, language use, authenticity of ideas, punctuation, grammar, organization of text, coherence of written paragraphs).

G. The pilot study

Decision-making should rely on accurate information. To get accurate information, the investigation tools must be sharp, valid, and reliable. Therefore, the purpose of carrying out the pilot study is to make sure that the investigation tool possesses all the above-mentioned qualities. The investigation is limited to measuring the effect of text chat on language accuracy and the production of authentic texts including: organization of text, coherence of paragraphs, grammar, vocabulary growth, punctuation, spelling, ideas, authenticity, language use, creativity, and utilization of English within its cultural context.

1) The Jury

Having finished the preparation stage, the researcher gave the final version of the test and the table of specifications to a jury of twelve people who are well known for their extensive experience in teaching EFL.

The jury members were asked to decide on:

- The validity of the test.
- The suitability of the distribution of scores among the various aspects of writing.

All the jury members decided that the test was valid and that the test items, including organization of the text, coherence of paragraphs, grammar, vocabulary, authenticity, language use, punctuation, spelling, and the use of English within appropriate cultural contexts were skillfully selected and organized.

2) Validity of the Instrument

Prior to the administration of a test, a pilot study is needed. It was conducted on a group of subjects with similar backgrounds as those who took the final examination. The pilot study provided valuable information about the ease of administering the test, the time necessary to answer the open ended questions, the marking scales, and so on. The results showed many unforeseen flaws and saved time and effort when the main trials were run. The pilot study is also useful in determining the difficulty level and discriminatory power of the test items.
Once approved, the initial form of the test was administered to a sample of 15 students from the same population. An item analysis was used to distribute the weight of the scores logically among the various aforementioned aspects of writing and modifications were made to reflect the recommendations of experts who judged the accuracy, clarity, validity, and appropriateness of the test.

3) Reliability of the Test

A reliable experiment is one that produces consistent results on different occasions under identical conditions (Hamash et al., 1982). One method that can be used to determine reliability is the test-retest method. Therefore, to establish the reliability of the experiment, a random sample of 10 students from the same population as the original participants was selected to take the test. Two weeks later, the pilot group was given the same test. In both administrations, favorable and identical conditions were secured including the location, the time, the explanation of each test item, and discipline. By using Pearson's formula, the pilot test demonstrated that the correlation coefficient between students' ranks on both occasions was found to be 0.85 (Pearson states that a correlation coefficient that is greater than .5 is considered to be acceptable). Thus, the test can be described as highly reliable.

H. Implementation

During the second week of the first semester of the 2012-2013 academic year, students took a paragraph writing test to determine their actual skill level before they began learning new aspects of effective, culturally appropriate writing.

To avoid bias, the compositions written by the end of the course were scored using the same scale used at the beginning of the course. After the students' performances were measured in the pretest, the researcher wrote reports documenting the actual levels of every student to aid in tracking their progress objectively throughout the course.

Students produced a number of written assignments over the term. Then, an average of every student's performance was measured to see if any changes occurred. If changes did occur, the extent and variability among the groups was noted.

The experimental group chatted daily with native English speakers of different ages, sexes, social classes, and professions to aid in the completion of their assignments. The control group worked on and submitted their assignments traditionally, without the use of computers. In both cases, the teacher evaluated and commented on their writing. Finally, a post-test was conducted and students were asked to write on the same topics as the pre-test within a two hours' time frame.

V. RESULTS AND DISCUSSION

Students who were taught while integrating text chats and word processors advanced their skills and scored significantly higher than the control group. The elements that seemed to account for the greatest difference in scores were spelling, grammar, and punctuation. Moreover, those in the experimental group expanded on their ideas to a greater extent than the students in the control group. Table 1 presents this difference in the results.

Table II shows that there were differences between both pre and post tests. These differences were in favor of the experimental group.

These results agree with the views of Schultz, 2000; Cha, 2009; Cho, 2009; Levy, 2009; Russell, 2010; Danzie, 2011; Kerwin, 2012; Hsu, 2012; Foroutan, 2013; Grosz-Glunchman, 2013; and others who strongly believe in the effect of instructional technologies on language learning in general and on FL students' writing performance in particular. They emphasized the view that text chat enhances the efficacy of FL classes especially when teaching writing.

It was clear from both groups' mean scores that students who were taught using text chat and word processors scored significantly higher than the control group in all aspects of writing. The differences were especially pronounced in grammar, spelling, punctuation, vocabulary growth, and the production of authentic text. These differences may be attributed to the effect of chatting with native speakers on different topics and the potential for word processors to help develop and refine their writing.

Additionally, results show that there was a significant increase in the pretest to post test results. This indicates that the students' writing accuracy has developed a lot through both traditional and contemporary methods. Although there was no significant difference in cultural aspects, style, figures of speech, and imagination between the two groups, a comparison of the post-test overall mean scores revealed that there was a significant difference between these two groups.

VI. CONCLUSION

The results mentioned above showed that students who studied writing while utilizing text chat and word processors performed higher in the post-test than those who learned in the traditional way, so the hypothesis of the study is confirmed. As a result, the researcher can conclude that integrating technology like text chat and word processors has a significant effect on students' writing skills and ability to produce authentic text.

The following conclusions are drawn from the study: CMC has positive effects on students' writing accuracy and ability to produce authentic texts.

A total of 94% used their cell-phones to send text messages, revealing that adolescents are utilizing a variety of digital tools to compose and communicate ideas. However, the majority of these adolescents do not view their digital communication as "writing". While 78% of students noted that their writing could be improved by integrating computer-based technology, they make a distinction between what they write outside of the academic structure and what they produce as part of their university curriculum. Thus, there is a perceptual disconnect between the two forms of writing. This occurs because most universities do not yet implement computer-based writing tools into their teaching methodology.

Overall, these findings support previous studies showing the positive effects of CMC on teaching writing. The students in the experimental group showed more motivation and less anxiety. Moreover, they showed increased enjoyment and a consequent improvement in writing quality when asked to write about topics that were of interest to them. In conclusion, technology provides many opportunities for both students and teachers to improve the conditions and quality of learning.
TABLE I.
The Pre-Post Test Results of Both Groups’ Students in the Aspects of Writing Accuracy

| Aspects of writing accuracy and productivity of authentic texts | Control Group | | | | Experimental Group | | | |
|---|---|---|---|---|---|---|---|---|
| | Pre | Post | Effect | Pre | Post | Effect |
| Organizing a text | 3.6 | 3.8 | +0.2 | 3.5 | 4.5 | +1.0 |
| Writing coherent paragraphs | 3.6 | 3.9 | +0.3 | 3.3 | 4.1 | +0.8 |
| Syntactic well-formedness | 5.5 | 6.6 | +1.1 | 5.2 | 7.3 | +2.1 |
| Vocabulary growth | 5.7 | 6.3 | +0.6 | 5.4 | 7.3 | +1.9 |
| Semantic well-formedness | 4.4 | 5.2 | +0.8 | 4.6 | 7.6 | +3.0 |
| Morphological well-formedness | 3.5 | 4.1 | +0.6 | 3.3 | 4.5 | +1.2 |
| Style | 2.4 | 2.6 | +0.2 | 2.3 | 3.5 | +1.2 |
| Imagination | 2.3 | 2.5 | +0.2 | 2.2 | 3.0 | +0.8 |
| Punctuation | 5.0 | 6.2 | +1.2 | 5.2 | 7.5 | +2.1 |
| Spelling | 5.5 | 6.3 | +0.8 | 5.2 | 8.0 | +2.8 |
| Socio-cultural aspects | 2.0 | 2.3 | +0.3 | 2.1 | 3.1 | +1.0 |
| Pragmaties | 2.3 | 3.8 | +1.5 | 2.5 | 3.8 | +1.3 |
| Discourse and strategic competence | 4.2 | 4.8 | +0.6 | 4.4 | 6.5 | +2.1 |
| Idiomatic expressions | 2.1 | 2.3 | +0.2 | 2.0 | 3.0 | +1.0 |
| Figures of speech and the aesthetic aspects of language | 2.3 | 2.3 | +0.0 | 2.2 | 3.3 | +1.1 |
| Idioms | 3.2 | 3.5 | +0.3 | 3.4 | 4.6 | +1.2 |
| Ideas and content | 2.2 | 2.7 | +0.5 | 2.4 | 3.3 | +0.9 |
| Authenticity | 3.1 | 3.2 | +0.1 | 3.3 | 4.4 | +1.1 |
| Creativity and productivity | 4.3 | 4.5 | +0.2 | 4.5 | 5.0 | +0.5 |
| Relational words and conjunctions | 3.7 | 3.8 | +0.1 | 3.6 | 4.2 | +0.6 |
| Means out of 100% | 55.23 | 56.14 | +0.91 | 55.98 | 70.12 | +14.14 |

TABLE II.
Mean and Standard Deviations of Scores for Both Groups (Experimental and Control) on the Post-Test

| Group | N | Mean | Std | T-Value | d.f | Sig. |
|---|---|---|---|---|---|---|
| Control group | 20 | 56.14 | 8.67 | 3.187 | 38 | 0.003 |
| Experimental group | 20 | 70.12 | 10.09 | | | |

VII. RECOMMENDATIONS

Other studies could be conducted to explore different language skills such as reading, speaking, and listening.

The researcher believes that there is a need to revise and modify the English language curricula by incorporating new tools such as text/web-cam chat, word processors, and social networking.

Studies should investigate the ways in which traditional and contemporary methods of education can work together to better serve teachers and student.

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