The Attitudes of Using Computer-Assisted Writing on Tenth Grade Students' Writing skill

By

Dr. Thekrayat Ali Subaihat

The Ministry of Education / Jordan

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Abstract:

This study aimed to investigate students' attitude toward using CAW in writing and if there is any correlation between their attitude and performance in writing aspects and creative writing activities.21 Item students' questionnaire was distributed to 25 students of tenth grade in Safia bint abd almutalib school who were the experimental group. A pre-post test to measure students' performance in creative writing activities was administered to all students who participated in the study. Its validity and reliability were verified. Results of the study showed that CAW provided a great opportunity in teaching and learning writing in English in comparison to regular instruction. Moreover, the results showed that the experimental groups that were taught using CAW hold highly positive overall attitude regarding using CAW in creative writing and advantages of CAW, writing aspects and writing activities. Finally, the findings revealed that there was correlation between students' attitude, and their performance in writing aspects and creative writing activities.

Keywords: CAW, Writing Aspects , Creative writing

Background of the Study

Writing has been an important professional educational matter that serves different educational aims and satisfies certain learning needs upon.

Dr.Thekrayat Ali Subaihat

which the foreign language learner's progress, at various domains including the professional domain, sometimes depends. English writing is a fundamental language learning skill for hundreds of thousands of international students who spend many years outside their countries learning at universities in which English is the language of teaching. Additionally, English writing plays significant intercultural roles in business, work places, and governmental activities worldwide (Parks, 2000).

Writing in general is a process through which writers articulate their thoughts and ideas, and communicate them to their audiences. It is a difficult skill for native and nonnative speakers and writers. Therefore, different elements such as organization, purpose, content, audience, punctuation, vocabulary, spelling, and mechanics of writing should be attended to and taken into consideration. Writing is especially difficult for students who are expected to provide written products that demonstrate their control of all elements in a new language (Abu–Rass, 2001).

Moreover, Gray (2010) points out that technology influentially helps in project work; it encourages learners to learn about things; it links different classes around the world; technology also offers support for the teacher; it also improves the learners' skills and gives feedback about the answer, and, finally, using tools such as video conferencing may stimulate the learner to ask a question and seek an answer.

Computer – assisted writing (CAW) is particularly considered a very useful tool for teaching and learning English by the students. CAW may enhance the learner's autonomy in learning a foreign language, particularly in the field of EFL writing. According to Williams (2005), using CAW provides students with both assistance and autonomy in the writing process, moreover; the use of CAW serves the aim of autonomous improvement of writing skills, especially among EFL writers (Milton, 1997).

Synder (1993) thinks that the word processor aids students in revision to have fewer mistakes and more correction of them. In

addition, when the use of word processing is linked and complemented with an effective teaching model, students tend to achieve a higher level than those who are not using a word processor. The present study focuses on using the word processor in developing students' creative writing activities.

Statement of the Problem

Based on the his experience as a teacher of English language at the secondary stage, the researcher observed that students have problems while writing such as supporting the topic with relevant ideas, building right sentences, using rules of grammar correctly, practicing capitalization and punctuation correctly, writing coherent sentences and spelling words correctly, and writing creatively.

Purpose of the Study

The purpose of the study is to determine if there is any effect of CAW on students' creative writing development. It investigates students' attitude toward using CAW in creative writing and if there is any correlation between their attitude and performance in writing aspects and creative writing activities.

Questions of the Study

More specifically, this study aims to answer the following four research questions:

- Are there any statistically significant differences between the mean scores of the experimental and control groups due to the method of teaching (CAW vs. regular instruction) on the 10th grade students' performance in creative writing?
- What is students' attitude toward using CAW in writing?
- Is there any correlation between students' attitude, and their performance in writing aspects and creative writing activities?

Significance of the Study

To the researcher knowledge, this is among the first few studies in Jordan about using a computer for teaching creative writing to the tenth grade students. The study tries to investigate the effect of CAW

method using a word processor as a useful tool on teaching EFL writing. The results of the study may benefit the students because the various applications of the word processor used in this study may support them to develop their creative writing skill.

Theoretical Background

Creative Writing

The invention of writing is one of the most important stages of civilized human transformation; it has the biggest impact on his life. It is the first qualitative move that gave it the humanitarian characteristic through communication achieved with other assets, on the one hand, and with dimensions of time and history of his ancestors and descendants, on the other hand. This invention enabled humans to expand their knowledge, and helped him to take the advantage of the accumulation of knowledge and expertise after the codification process in order to use it in multiple proper areas. The importance of writing is showed clearly in considering it as a historically and culturally unique event in human life. When looking at the ancient civilizations of the past nations, it is stated that they did not register the history only through using writing and blogging, neither by using the symbolic language such as drawings and archaeological carvings which oversaw the important aspect of the history of these civilizations, nor through the written language which settled later in several patterns of characters (Calderon, Nussbaum, Carmach, Diaz, & Villalta, 2014).

Creative writing is intended to show emotion and disclosure of self-sentiment. It is the translation of various sensations by pronouncing words such as writing articles, stories, and poetry. Therefore, the term 'creative writing' defined as "Having the power to create an fanciful, original literary production or composition" (Ramet, 2004, 11). Creative writing is a means of expression, and developing the students' reading and writing skills, as well as the confidence in the classroom. It also enhances self-confidence and

enables the contact between learners and teachers (Castillo & Hillman, 1995).

Kelly (2002) claimed that CAW has shown a proof to improve the students' writing skills. It has made revision, editing, and publishing easier, and it has encouraged students to participate in this experiment with different styles of writing. It allows for a continuous flow of ideas, and it encourages collaboration with their peers in the writing process. Komagata (1998) mentioned that text coherence and readability in English can be significantly affected by the organization of information in an utterance. Dunsmuir and Clifford (2010) outlined some issues surrounding what students may face in learning, how to write and how technology can help them in the learning process. They pointed out that teachers lack the programming skills to develop educational software.

The Effectiveness of CAW

Lichtenstein (1996) investigated the effect of word processing on the quality of children's writing. Subjects were 32 fifth-graders in a public school. One sample had access to computers in their classroom every day for writing. The other sample group used computers once a week in the lab; their daily writing instruments were a piece of paper and a pencil. Writing samples were taken as a pre-test and post-test and scored holistically. Findings supported the hypothesis that there would be no significant difference in the achievement between the samples of students' writing. It should be noted, however, that the difference in the mean scores approached significance. The implication may be that if this study had been conducted over a longer period of time, the experimental sample that used computers may have shown more significant gains over the control group. This study, along with others previously conducted on this subject, does not provide statistical evidence for the advantage of writing on a computer over traditional methods.

Braine (2001) described Cantonese speaking EFL undergraduates writing classes at a Hong Kong university. The study was conducted over a 3-week period during three semesters, and it compared the holistic scores of first drafts and final versions of students' papers. The study aimed to determine which context – LANS CAW application or traditional writing classes produced better writing and more improvement in writing. Although first drafts in LAN's classes were qualitatively higher than in traditional classes final drafts in traditional classes were of a higher quality. Further, drafts in traditional classes moved more. The overwhelming quantity of writing produced and the disjointed nature of LAN discussions where seen as obstacles to the enhancement of EFL students' writing on LAN.

Sullivan & Lindgren (2002) investigated the promotion of self-assessment and reflection in the adult second language (L2) classroom. A method is proposed in which the computer is used first to record a writing session, and later to replay the entire text production in retrospective peer sessions. The method provides the students with an opportunity to look into their own composing processes both linguistically and holistically, as they view and discuss the reasons behind the different actions during the writing process. Results show that after using the method, all writers experienced useful, although different, insights into their own writing behaviors. Furthermore, this method is not restricted to an L 2 environment, but is likely to be effective in other learning situations where reflection is useful for the acquisition process.

Al-Menei (2008) investigated the effect of CAW on Saudi students' writing skill in English. A quasi-experimental study was conducted. The sample of the study was divided into two groups: the experimental group which was taught writing via computer, and the control group which was taught the same skill in the traditional method. The study hypothesized that CAW had a significant effect on Saudi EFL learners' writing skill through investigating four areas

of writing: writing a paragraph, correcting grammar, style, and spelling errors. The instrument of the study was the word processor, WinWord 2003, which was used to check and correct grammar, style, and spelling errors. Other several computer-based techniques, methods, and activities were used to achieve the goal of the study. In addition, a test was made to find the effect of the experiment. The findings of the study revealed that: there were statistically significant differences between the mean scores of the experimental group and the control group in their post-test. The differences were in favor of the experimental group which was taught writing via computer. CAW has a significant effect on Saudi EFL learners' writing ability in two areas of writing: paragraph writing and correcting grammar errors. The results did not reveal considerable differences between the two groups in correcting style errors.

Raheem & Ashraf (2011) examined the effect of using computer edutainment on developing 2nd graders' writing skills. The study comprised thirty-second year primary stage enrolled in Bani Hamad basic public school. The study adopted the quasi-experimental design. Thirty participants were randomly assigned to one group and they were taught through a suggested computer edutainment program. Data were gathered and analyzed using both quantitative and qualitative instruments. A pre post electronic writing test, a pre post paper and pencil writing test, a writing scoring rubric, a vocabulary acquisition test, a self-assessment checklist, a writing skills strategies and concepts checklist, writing samples, a writing development record, and reflection logs were used in the study. Findings indicated that participants showed significantly higher levels of writing samples in the area of content and ideas, organization and form, style, and convention. Participants' writing samples and the writing development record showed that they internalized the writing strategies and concepts they were taught, and transferred them to their independent writing. Participants also

showed that they moved from the emergent stage of writing to the conventional one. The improvement of pupils writing as demonstrated by multiple measures suggests that computer edutainment is an effective way for developing 2nd primary graders' writing skills in one of the public schools.

Studies Related to the Attitude towards CAW

Eastman, Hollingsworth, Hong, Bhatia and Agostino (1989) conducted a study to examine the efficacy of microcomputers in the teaching of writing in the regular school classroom and combine experimental and observational methods to develop a model of effective application of computers to the eighth-grade writing skills situation. Divided into control, mixed, and experimental classes, 281 students in six classes using computers were compared with 231 students in nine classes using paper and pencil and 212 students in nine classes in a mixed treatment, using computers as well as paper-and-pencil. Results showed that a computer was needed for each individual student during every class meeting to maximize the value of using word processing. In the fully computerized treatment, students demonstrated greater use of high-level editing than in the paper-and-pencil or mixed treatments, and students who used computers developed more positive attitudes toward revision, drafting, and learning to use computers than those who had only brief or no exposure. Results suggested that student work was initially slower and more asynchronous among members of a class, and teaching was most effective using process-based and cooperative learning strategies.

Batschelet & Woodson (1991) conducted a study to measure changes in attitudes towards writing and the writing process among basic writing students taught in an electronic classroom (consisting of 25 networked computers). Students in six sections of basic writing which used the electronic classroom for at least 50% of their classroom time, and six control sections which did not use computers were surveyed. Results indicated that: (1) there was no great change

during the course of the semester in the writing process the students claimed to use in the non-computer classes;(2) most students had either negative or neutral feelings before writing and felt satisfied after writing both at the beginning and the end of the semester; (3) students in the experimental groups expressed positive attitudes towards writing papers on a computer; (4) most computer class students said drafting was easier on the computer; and (5) a majority of computer class students felt that their writing had been positively influenced by using computers. Findings also suggest that these basic writers made a distinction between the process of writing and writing on computers: while they felt positive about writing on computers, their attitudes toward the writing process did not improve appreciably.

Allen & Thompson (1994) examined the effects of a computer-mediated networked learning environment on the writing of the fifth grade students who used word processing to write four texts collaboratively during an 8-week period. A telecommunication network was utilized to allow the students in the experimental group to send their work via e-mail to an audience of readers who read and responded to their writing. Findings suggest that when students knew they would be sending their writing to an outside reader and when they received a prompt response, there was a positive effect on the quality of writing. Results also suggest females used the computer technology when the environment was cooperative and they had equal access to the equipment. There is also indication that writing to communicate to an authentic audience outside the classroom may have contributed to the males in the experimental group scoring higher on the writing assignments than the males in the control.

Pavia (2004) conducted teacher research in a basic writing computer classroom to discover what two basic writers brought to the computer classroom that could complicate their interactions with technology and their ability to write with computers during our class.

His discussion is twofold: First, he explored the writers' differing attitudes towards computers, writing, and writing with computers and the effects of these attitudes on my pedagogy. Second, in the guise of presenting opportunity, the computers accentuated the differences in the students' past technological opportunities. The computers empowered the two students by giving them access to the technology for their writing, yet the students were at a disadvantage when compared to their classmates who were more experienced in using computers. He concluded by discussing the effects that these case studies and the issues that emerged from them have had on his pedagogy.

Wah (2006) conducted a study to investigate how computer-based instruction should be designed and used to improve the way students' process information to improve writing in the composing process. The sampling population consisted of twenty students, randomly selected from a secondary school. The study employed a one-sample pre- and post-treatment design. Overall, findings show that students considered the topics on writing skills, the language items, and the types of language lessons and practices as aspects of instructional process beneficial to their English writing process. Findings also indicate students considered the instructional design principles pertaining to phase 1 (presenting information) and phase 3 (practicing by the students) less helpful in the composing process. Analysis of data obtained from phase 4 (assessing student learning) indicates incomplete mastery of higher order thinking skills needed for quality writing. However, the students regarded the instructional design principles for phase 2 of instruction (guiding the students) beneficial.

Fang (2010) investigated the perceptions of a computer-assisted writing program among EFL learners in a composition class. A mixed method research design was employed combining both qualitative and qualitative techniques, forty-five junior students in a Taiwanese college writing class were introduced to the computer-

assisted writing program My Access. After using the program in class, students completed a survey questionnaire and nine students were selected for follow-up interviews based on their writing proficiency. Survey results showed that the majority of students held favorable attitudes towards using My Access as a writing tool. Evidence obtained from a multiple choice question in the survey showed that a majority of the students benefited by using the computer-mediated feedback to revise their essays. Moreover, interview data revealed that the computer-mediated feedback had a positive effect on writing skill development, particularly in suggesting changes for form rather than for content.

Lan; Yu-Feng; Hung; Chun-Ling; Hsu, and Hung-Ju (2011) aimed to develop different guided writing strategies based on media richness theory and further evaluate the effects of these writing strategies on younger students' writing attitudes in terms of motivation, enjoyment and anxiety. A total of 66 sixth-grade elementary students with an average age of twelve were invited to join the experiment for a period of twelve weeks. A repeated-measure one-way ANOVA analysis was utilized to examine the differences among the three strategies including a rich media guided writing strategy, lean media guided writing strategy, and pen-and-paper guided writing strategy. The findings showed the rich media guided writing strategy had higher significant differences than the pen-and-paper guided writing strategy in terms of writing attitudes toward motivation, enjoyment and anxiety. The findings imply that providing a web-based learning environment with high richness media could guide students to write and achieve more positive writing attitudes in terms of motivation, enjoyment and anxiety.

The Questionnaire

The researcher constructed a 21-item questionnaire to investigate the students' opinions about the use of CAW in creative writing activities. This questionnaire was developed only for the

students in the experimental group. The researcher constructed this questionnaire to find students' attitude concerning the use of CAW because it is significant to know how students feel about the process. Another driving motive behind the use of this questionnaire is to measure the extent to which students benefited from the CAW method. To ensure the content validity and reliability of the questionnaire, it was given to a team of two expert professors, and two English language lecturers . They suggested specific changes related to the number of items, length of some items, omitting some repeated items and some remarks were given concerning the accuracy of items. Their suggestions were taken into account in modifying the questionnaire before implementing it. The reliability of the questionnaire was established by finding its internal consistency using Kuder Richardson 20 formula. It was found to be 0.82 which is suitable for the purpose of this study.

Findings

Findings Related to the First Question

The first question focused on whether there were statistically significant differences between the mean score of the experimental and the control group due to the method of teaching (CAW vs. regular instruction) on students' creative writing at p. ≤ 0.05 level. To answer this question, descriptive statistics related to the method of teaching were calculated as shown .

Table 1: Means and Standard Deviations of Method (CAW vs. Regular Instruction) on the Post-test in Creative Writing

Group	Method	N	Mean*	Standard Deviation
Experimental	CAW	25	86.94	9.10
Control	Regular Instruction	25	75.54	4.02

According to Table, the mean scores of the experimental and the control groups were 86.94 and 75.54 respectively. It is obvious that the mean scores of the experimental group on the post-test were higher than those of the control group in creative writing. The difference in this finding may be attributed to the method of

teaching, suggesting that students in the CAW condition outperformed their peers who used the regular instruction method. To find whether these findings were significant, the T-test was calculated. Table 2 below illustrates the results.

Table 2: Result of the T-Test of Students' Post-test Mean Scores by Method of Teaching

Variable	T	Df	Sig.
Creative Writing	9.31	46	.00*

*The results are significant at p. ≤ .05 level

Table 2 shows that there were significant differences due to the method of teaching (CAW vs. regular instruction). Students' performance was the best in CAW method, suggesting that students who used CAW method obtained higher significant mean scores than the control group which used regular instruction.

Findings Related to the Third Question

The third question focused on investigating the experimental group students' attitude toward using CAW in creative writing and developing writing aspects. To answer this question, descriptive statistics related to the students' attitude toward CAW were calculated for the experimental group as stated in Table 3

Table 3: The Experimental Students' Attitude toward CAW

No	Item	Mean*	Std. Dev.	Degree
1	CAW encouraged me to try with different styles of writing.	4.40	0.95	High
2	CAW made revising, editing and publishing easier.	4.16	1.02	High
3	CAW encouraged collaboration with peers in the writing process.	4.16	1.24	High
4	CAW helped me in generating mental schemes using different materials.	3.76	1.30	High
5	CAW helped me to explore the new learning.	4.72	0.54	High
6	CAW helped me to use new words	4.24	1.16	High

	from the module correctly.			
7	CAW motivated me to learn the new subject.	4.84	0.96	High
8	CAW helped me in checking and correcting errors.	4.36	1.15	High
9	CAW provided me with both assistance and autonomy in the writing process.	3.68	1.02	High
10	CAW encouraged me to spend more time working on my papers than I write with a pen.	3.92	1.15	High
	Total	4.22	1.049	High

*Out of 5

Table 3 reveals that the experimental group that was taught using CAW hold highly positive overall attitude regarding using CAW in creative writing and advantages of CAW (total mean = 4.22). The results of this study disclosed that the item "CAW motivated me to learn the new subject" had the highest mean score (4.84). It was followed by the items "CAW helped me to explore the new learning", "CAW encouraged me to try with different styles of writing", " CAW helped me in checking and correcting errors", and "CAW helped me to use new words from the module correctly") "with mean scores of 4.72, 4.40, 4.36, 4.24 respectively). The items "CAW made revising, editing and publishing easier" and "CAW encouraged collaboration with peers in the writing process" had the same mean score (4.16). The item " CAW encouraged me to spend more time working on my papers than I write with a pen " had the same mean score (3.92). "CAW helped me in generating mental schemes using different materials" "had a little bit lower mean score (3.76). "CAW provided me with both assistance and autonomy in the writing process" obtained the lowest mean score (3.68). This could be due to the belief among learners that controlling the students is the role of teacher. This could be because CAW offers an opportunity for students to be motivated.

To find whether CAW helped the students in developing the writing aspects, the students' attitude toward developing the writing aspects was calculated for the experimental group as stated in Table 11.

Table 5: Means, Standard Deviations and Degree of Students' Attitude toward Developing the Writing Aspects

No	Item	Mean*	Std. Dev.	Degree
1	Punctuation	4.08	0.70	High
2	Content	3.72	1.24	High
3	Spelling	4.00	1.17	High
4	Grammatical accuracy	4.20	0.95	High

*Out of 5

Table 5 reveals that the experimental group that was taught using CAW hold positive overall attitude toward using CAW in creative writing and developing the writing aspects. The results of this study disclosed that the item "grammatical accuracy" had the highest mean score (4.20). This could be due to the assumption that CAW can correct grammatical mistakes.

Discussion of the Results of the First Question

The first question investigated if there were any statistically significant differences between the mean scores of the experimental group and control group due to the method of teaching (CAW vs. regular instruction) on the 10th grade students' performance in creative writing. According to the findings of this study, CAW is found to be very helpful in teaching creative writing activities. Students in the experimental group achieved better results on the creative writing test than the other group which was taught creative writing using regular instruction.

The t- test results revealed that there were statistically significant differences between the mean scores for the experimental group and the control group in favor of the experimental group. The differences between the experimental group and the control group

may be attributed to the fact that each group was subjected to a different method of teaching; the experimental group was subjected to CAW while the control group was exposed to regular instruction. Students in the experimental group seemed to have improved their creative writing through using CAW. Therefore, CAW may be regarded as an effective tool in facilitating creative writing in the learning process which led to increasing students' performance in creative writing.

These findings are similar to Al-Menei (2008) who showed that CAW has a significant effect on Saudi EFL learners' writing ability in paragraph writing and correcting grammar errors. In addition, the result came in harmony with Kelly (2002) who claimed that CAW improves the students' writing skills. It is very motivational for students in typing. It has made revision, editing, and publishing easier, and it has encouraged students to participate in the experiment with different styles of writing. It is fast and allows for a continuous flow of ideas, and it encourages collaboration with their peers in the writing process

Discussion of the Results of the Second Question

The third question examined students' attitude toward using CAW in creative writing. The findings revealed that the experimental group that was taught using CAW hold highly positive overall attitude regarding using CAW in creative writing, writing aspects and writing activities. These findings agree with Batschelet & Woodson (1991) who concluded that the students felt positive about writing on computers. A majority of computer class students felt that their writing had been positively influenced by using computers. Moreover, the findings of this study came in harmony with Hung (2012) who revealed that students consider CAW to be helpful in the following areas: completing sentences, well-organized story structures; clear text/picture color contrast; coherence in text font, color, size, position; sentence number; appropriate display speed; and good picture quality throughout the films. The results of

this study also agreed with Agostino (1989) who showed that a computer was needed for each individual student during every class meeting to maximize the value of using word processing, and students who used computers developed more positive attitudes toward revision, drafting, and learning to use computers than those in the control group. These findings were in line with the results reported by Allen & Thompson (1994) that CAW had a positive effect on the quality of writings. The results were in harmony with what was reported by Lan, Yu-Feng, Hung, Chun-Ling, Hsu, & Hung-Ju (2011) that providing a web-based learning environment with high richness media could guide students to write and achieve more positive writing attitudes in terms of motivation, enjoyment and anxiety. Moreover, interview data revealed that the computer-mediated feedback had a positive effect on writing skill development, particularly in suggesting changes for form rather than for content.

Discussion of the Results of the Third Question

The fourth question examined if there was any correlation between students' attitude and their performance in writing aspects, and creative writing activities. The findings revealed there was correlation between students' attitude, and their performance in writing aspects, and creative writing activities. students had a positive attitude toward CALL in four language skills. However, the findings disagree with them that the study did not yield any significant relationship between student attitude toward CALL for language skills and their achievement.

Conclusion

The following conclusions could be derived from this study:

- Students can use CAW in practicing creative writing activities as it enables them to develop certain creative skills more than the others. Attention should also be paid to creative writing activities. Students often perform better thorough and meaningful

practice in the language they need to master in order to be able to perform important creative writing.

- Learning through CAW is more useful in learning creative writing than regular instruction. CAW offers more opportunities to the students to practice creative writing activities by themselves.

References:

Abu Rass, R. (2001). Integrating reading and writing for effective language teaching**.** *The English Teaching Forum***,** 39 (1), 30-39.

Al-Menei, A.M.O.(2008). *An investigation of the effect of computer-assisted writing instruction on EFL Saudi learners' ability*, Kingdom of Saudi Arabia , King Suad University .

Batschelet, M., & Woodson, L. (1991). *The Effects of an Electronic Classroom on the Attitudes of Basic Writers.Paper presented at the Annual Meeting of the National Council of Teachers of English,* 81stSeattle,WA, November,22-27.ERIC ED 344206. 1991, 22-27.

Braine, G. (2001). A study of English as a foreign language (EFL) Writers on a local-area network (LAN) and in traditional classes. *Computers and Composition*,18, 275-292.

Calderon, J. F., Nussbaum, M., Carmach, I., Díaz, J. J., & Villalta, M. (2014). A single-display groupware collaborative language laboratory. *Interactive Learning Environments*, (ahead-of-print), 1-26.

Dunsmuir, S. & Clifford, V. (2010), Children's writing and the use of information and communications technology. *Educational Psychology in Practice*, 19 (3),170-187.

Fang. (2010). Perception of the Computer- Assisted Program writing program among EFL College Learners. *Education Technology α Societ*y, 13(3), 246-256.

Gray, L., Thomas, M., & Lewis, L. (2010). Teachers' use of educational technology in US public Schools: 2009 (NCES

2010-040). Washington, DC: National Center for Education Statistics, Institute for Education Sciences, U.S. Department of Education. Retrieved on *30 January 2013*http://nces.ed.gov/pubs2010/2010040.pd.

Huang, Yu. (2012). EFL students' views on writing with pictures, sound, and music. *English Teaching & Learning,* 36 (2) 79-123.

Kelly, K. (2002), Computer-Assisted Writing Instruction: A Marriage of Effective Instruction and Technology, 1(2)1-12. Retrieved on 16 February, 2015 *http: www.chiron.valdosta.edu.*

Lan, Y.F.,Hung, C.L.,& Hsu, H.J.(2011).Effects of Guided Writing Strategies on Students' Writing Attitudes Based on Media Richness Theory. *Turkish Online Journal of Educational Technology-TOJET,10(4),148-164. Turkish Online Journal of Educational Technology - TOJET*, 10 (4), 148-164.

Lichtenstein N. (1996). The Effect of Word Processing on Writing Achievement [e-book]. Available from: *ERIC,* Ipswich, MA. Accessed April 11, 2015.

Milton, J. (1997). Providing computerized self access opportunities for the development of writing skills. In p. *Benson,&p. Voller (Eds.), Autonomy and independence in language learning* (PP.237-263). London: Longman.

Parks, S. (2000). Professional writing and the role of incidental collaboration. Evidence from a medical setting. *Journal of Second Language Writing*, 9(2),101-122.

Pavia, C. (2004), Issues of attitude and access: A case study of basic writers in a computer classroom. *Journal of Basic Writing*, 23 (2) 4-22.

Raheem, M. & Ashraf A. (2011). The effect of using computer edutainment on developing 2nd primary graders' writing skills. *ERIC*.

Snyder, I. (1993). Writing with word processors: A research overview.Review of *Educational Research*, 35(1), 49-69.

Sullivan, K., & Lindgren, E. (2002). Self-assessment in Autonomous computer-aided L2 writing. *ELT Journal:* , *56*(3), 258-266.

Wah, Ch. (2006).A study of students' perceptions and attitudes towards ESL writing using computer-based learning materials. *Internet Journal of e-Language Learning & Teaching,* 3(1) 26-48.

Williams, J. (2005). Teaching writing in second and foreign language classrooms. Boston: Mc *Graw-Hill.*