

The impact of blended learning in developing students' writing skills: Hawassa University in focus

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ABSTRACT

The objectives of this study were to examine the impact of blended learning in developing English writing performance of first year students and to determine the level of computer attitudes of English language instructors towards using blended learning approach to teach English writing. The research design of the study was quasi-experimental research. The experimental group were taught using blended learning instruction while the control group were taught using traditional lecture method. A sample of 80 students (48 male, 32 female) and 50 English language instructors (40 male, 10 female) was selected. The pre-test and posttest were used as instruments for data collection for students whereas questionnaire and FGD were used for data collection for instructors. Students' test scores were analyzed using ANCOVA procedure. The instructors' questionnaire data were analyzed using descriptive statistics, whereas FGD outcomes were qualitatively evaluated. A statistically significant difference was observed between the groups in posttest scores of writing course ($F = 275.22$, $df = 1,77$, $p < 0.01$). Conclusion is that students of experimental group performed better in writing skills course than students of control group. Instructors' attitudes towards computers were positive but their actual use of computers was moderate. Finally, it was recommended among others that university instructors should willingly restructure their programs, courses and assessment procedures to host BL and that the academic officials provide for the appropriate staff training and technical infrastructure for the implementation of BL.

Keywords: Blended learning, quasi-experimental research design, instructional technology, online teaching, face-to-face teaching, computer assisted language learning, English writing skills.

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INTRODUCTION

The knowledge economy depends on the creation of a critical mass of capable and competent scholars that will not only produce knowledge, but also acquire, develop, adapt and adopt knowledge that is produced elsewhere. There is a consensus that information and communication technologies (ICTs) have a tendency to contribute to economic growth and social development and improve quality of life (Owen-Smith, 2002). ICTs are becoming learning media in both formal and non-formal education being used as individual business tools of local farmers as well as instructional technologies of university teaching.

Nowadays, higher education institutions make quick leap in using ICT to boost up their academic endeavors.

Researchers (Jones and Bonanno, 1995; Mapuva, 2010) suggest that the transformation of the education sector is being driven by a number of broad economic, technological, and social changes that have accelerated in recent years. Some of the key trends of change are the significant increase in the demand for higher education and consequential expansion of universities and student enrolments in both developed and developing countries (Graham, 2006). Traditional approaches to language instruction have been challenged by new and innovative approaches based on the latest advances in computer and internet technology (National Quality School Framework (NQS), 1989). The vast resources and opportunities that computers and internet technology

provide have brought about new tools, approaches, and strategies in language instruction. In these innovative instructional approaches, both virtual learning and conventional teaching can be combined (Graham, 2006; Laurillard, 2007; House, 2003; Wang and Yang, 2002).

This study was conducted at Hawassa University (HwU) in Southern Nations Nationalities and Peoples Regional State in the Federal Democratic Republic of Ethiopia. HwU has been trying to diversify its programs in order to meet the 21st century needs of the country. One of the programs in HwU is Teaching English as Foreign Language (TEFL) as an area of specialization within Language and Communication Studies program and it aspired to renovate the teaching-learning of English writing skill (EWS) through the support of computer-based instructional process. In this context, examining the advantages of using computers and internet technology to augment face-to-face (FTF) teaching of writing skills in blended learning (BL) instruction seems to be a necessary innovation. Hence, it is imperative that our conventional teaching of English writing need to make appropriate changes in order to cope with the limitations in the conventional methods of English instruction.

BL is conceived as using a new way of instruction, that is, amalgamating in an appropriate mix both FTF and virtual learning in the course delivery process (Badii, 2008). It was assumed to support students in developing their EWS and help them solve their writing problems and enhance learning through innovative blend of teaching methods (ibid). In other studies BL was coined as blended e-learning (Be-L) and defined as teaching and learning that are delivered, supported, and enhanced through the use of digital technologies and media along with FTF learning (Wang and Gearhart, 2006). According to Wang and Gearhart, Be-L denotes "information and communications technology enhanced learning by delivering learning contents and activities via internet, intranet/extranet, audio/video, that is, via an environment consisting of hardware, software and personnel". Tomadaki and Scott (2006) also described Be-L as a hybrid of traditional FTF and online learning so that instruction occurs both in the classroom and online, and where the online component becomes a natural extension of the traditional classroom teaching. On the other hand, Garrison and Anderson (2003:11) characterized e-learning as "*learning facilitated online through network technologies*". Since these definitions did not show significant divergence, the researchers decided to use Atta Badii's definition above.

Thus, BL in this study brings a shift from a solely conventional mode of teaching to student-based learning by combining the conventional FTF and e-learning in an appropriate mix. Despite the different reasons for adopting e-learning in its blended form within higher education institutions across the globe, the underlying end-result of its use has been seen in the institutions

(Govindasammy, 2002; Wilson, 2001). BL has helped to transform education and has become associated with, and interpreted in a variety of contexts such as distance learning, online learning and networked learning (ibid). The obvious limitation that challenges the use of BL is that academic institutions may lag behind the need for setting up technology-based education infrastructure and culture in their instructional systems.

Statement of the problem

Language is a necessary aspect of educational system, and quality language teaching decisions need to be taken within a broader framework of the aim of education (Brumfit and Mitchell, 2002). As English language is the medium of instruction in Ethiopia, university and preparatory school students use the language as means of communication in their academic endeavors. To this effect, providing quality language education and producing internationally competent and employable graduates in higher education institutions is crucial. English writing competency highly contributes to efficiency, productivity, versatility, and employability of our graduates in the world of work (Hailemichael, 1993).

Regarding the current status of the English medium, researchers contend that quality of the English language instruction has deteriorated due to a number of factors, such as inadequately skilled teachers, shortage of facilities, and insufficient infrastructure. Another important factor that could have possibly obstructed the quality of English language education is conventional instructional approaches (NQSF, 1989). The same is true in Ethiopia where English is a medium of instruction and is being taught as a foreign language. Lack of ability to communicate and learn effectively in English is a serious problem for the great majority of students. Studies have shown that students' performance in EWSs is generally too inadequate (Haregewoin 2008; Damtew, 2003; Kitila, 2000; Italo, 1999; Gebremedhin, 1993; Italo, 1990; Hailemichael, 1993).

To great extent, the anticipated causes of low English proficiency being related to how English was taught in the traditional classroom, English language teaching need to deal with it. Yizengaw (2003) opined that English has been taught in a teacher-centered and less student-centered environment where students were passive, dependent and less self-initiated to learn. He farther asserted that students consequently depend on teachers, textbooks and formal courses instead of taking their own initiatives to learn the language by listening, writing and speaking in a self-regulated effort.

The other side of the coin is to empower students to be independent learners who can browse information through multiple media and build on their experience, construct knowledge and evaluate its merits. It seems that computer and internet technology can play an

assisting role in improving English language teaching (Graham, 2006). Computers and Internet technology have provided with huge resources and opportunities that have yielded new tools, approaches, and strategies in language teaching. These innovative approaches can be hybridized to the FTF instruction to maximize students' exposure to information and interaction (Badii, 2008).

In the light of the above, this study aimed at using blended learning (BL) as an innovation in Ethiopian context to bridge the gap between the conventional teaching and virtual learning. The study also examined how teachers perceive the incorporation and use of computers and Internet technology resources in the mode of delivery using BL because in the case of HwU it becomes important to know and enhance instructors' attitudes towards using BL. It also explored the factors that affect teachers' use of computer technology resources for BL purposes in HwU.

Objectives of the study

The general objective of this study was to address the effect of the BL approach in developing students' writing skills of first year students. More specific objectives of the study include:

1. To examine the difference between writing efficiency and achievement of first year students who took BL writing course and those who took conventional writing course.
2. To look into how teachers perceive the use of BL in teaching EWs.
3. To explore the factors that affect instructors' use of computer resources for BL implementation.

Hypotheses

The researchers had a pilot study and rejected the null hypothesis that there was no significant difference between experimental and control groups in posttest writing skills performance by using similar cohorts of 2011. The following directional hypotheses were set for this study.

H₁: The students who participated in BL writing course score higher in the performance test of writing than students who attended FTF writing class.

H₂: Teachers perception towards using BL in teaching English writing skills is low.

Theoretical framework

Much research has been done in the field of learning, and

suggestions as to what factors intervene in learning among humans and how most effective learning occurs are plentiful in the literature. Postmodern learning theorists, especially the connectivists (Siemens, 2005; Mayer, 2005), suggest that today's student requires a pedagogy [that] should be open, inclusive, and non-hierarchical, consensus based and process oriented. Such learning environment can contrasted with the depositing practice of traditional instruction, where knowledge is a gift bestowed by the teacher as dispenser of the knowledge and where students are the 'depositories' (Bruner, 1996; Li and Tongue, 2007). Thus, the goal of student-centered instruction is to make a pedagogical shift from passive listening to active learning experience leading students to being more challenged and intrinsically more motivated to learn (Wilson and Corpus, 2005).

The pedagogical shift

Based on the narrative above, Siemens characterized the following principles of learning in connectivist theory: learning and knowledge rest in diversity of opinions; it is a process of connecting specialized nodes or information sources; it may reside in non-human appliances (in electrical device); capacity to know more is more critical than what is currently known; nurturing and maintaining connections is needed to facilitate continual learning; and ability to see connections between fields, ideas, and concepts is a core skill. He also emphasized that currency (accurate and up-to-date knowledge) is the intent of all learning activities (ibid.). The connectivist theory highly depends on technology based education called *network theory*. With the web-based education, students can access the material on net connected system at their own time and place (Barker and Kemp, 1990; Wang and Gearhart, 2006).

In contrast, constructivists maintain that individuals construct their own new understanding through the interaction of what they know and believe, and the ideas, events, and activities with which they come in contact (Smith, 2001; Brophy, 1991; Siemens, 2005). They suggest that learners construct knowledge out of their experiences. Progress is often associated with pedagogic approaches that promote active learning. The learner selects and transforms information, constructs, hypotheses, and makes decisions, relying on a cognitive structure. The constructivist learning theory describes a learning process whereby students work individually or in small groups to explore, investigate and solve authentic problems and become actively engaged in seeking knowledge and information, rather than being passive recipients. As indicated concurrently, this constructivist learning approach has its foundations in cognitive learning theories (Vygotsky, 1978; Dewey, 1896; Mayer, 2005).

Constructivist learning theory stresses the learner's active construction of meaning in a social context, so the content needs to be relevant, realistic and engaging for the learner. Thus learning programs aligned with constructivist learning theory should: encourage students to link information from one context to another; emphasize active participation using simulation; contain context-rich material with hypermedia; support learner meaning-making; require the learner to explore and interpret material using hyperlinks; incorporate a social dimension to learning; challenge the mental constructs of the learner; adapt to a range of learner styles; include realistic problems; and incorporate authentic assessment that includes the learner's views (Rogers, 1994; Siemens, 2005). Instructors are assumed to be designers and facilitators of the learning scenario. They collaborate with other instructors, learners and evaluators in orchestrating the learning environment at cognitive and pedagogical level to address the needs and desire of the learners.

The cognitive theory of multimedia learning (Mayer, 2005, 1997) is based on three cognitive science principles of learning: the human information processing system includes dual channels (visual/pictorial and auditory/verbal); each channel has limited capacity for processing; and active learning entails carrying out a coordinated set of cognitive processes during learning. It specifies five cognitive processes in multimedia learning: selecting relevant words from the presented text or narration, selecting relevant images from the presented illustrations, organizing the selected words into a coherent verbal representation, organizing selected images into a coherent pictorial representation, and integrating the pictorial and verbal representations to prior knowledge. The rationale for the cognitive theory of multimedia learning is that people learn more deeply from words and pictures than from words alone.

The emergence of connectivist, constructivist, and cognitivist theories have coincided with the shift in pedagogy away from teacher-centered information transmission models toward knowledge-centered approaches that focus on cognitive and social processes in learning. Therefore, the main implications of constructivists approach for instruction are collaboration, diverse perspectives, and authentic context. On the other hand, the cognitive theory (Mayer, 1997, 2005) proposed that there are two separate channels (auditory and visual), each with limited capacity and that learning is an active process of filtering, selecting, organizing and integrating information based on prior experience resulting in logical mental construct. Thus, cognitivists suggest multiple sources of information for learning whereas the connectivists extend these sources to computers and internet technology resources. In the field of instruction, this could be considered as conceptual revolution (Jonassen, 1994; Mayer, 1997; Bruner, 1996).

In a nutshell, according to the constructivist approach to learning, learners should be given ownership of their

learning, encouraged to explore, provided with meaningful real-world learning tasks, and should collaborate with educators. Language learning is not exceptional and it employs much of this approach that encourages independent and active learning. To meet these demands, it is imperative to develop effective instruction in English as Foreign Language by applying appropriate educational theories and technologies. Thus, the theoretical basis of this study is the constructivist, connectivist, and cognitivist theories of learning, which articulates that learning is to bring changes in knowledge, skills, and beliefs that may occur through active learning in a net connected interaction of learners with teachers and resources using multiple channels of information.

Blended learning

The definition of BL as simple blending of classroom teaching with synchronous or asynchronous e-learning is commonly accepted. Graham (2006) argued that BL is the convergence of training, information repositories, communities and networks, experts and expertise, and performance. According to Graham, this definition addresses the following three categories: combination of different instructional media (online and FTF instruction), combination of different instructional methods (lecture, cooperative learning, project work and computer-assisted learning, etc) and combination of different theoretical motivations (networked learning of connectivists, autonomous and self-regulated active learning of constructivists).

This working definition reflects the idea that BL is the combination of instruction from two historically separate models of teaching and learning. As shown in Figure 1, it also emphasizes the central role of computer-based technologies in BL. Figure 1 represents this blending of media, methods and theories of learning as suggested by Badii (2008).

Teachers' attitude towards BL

In many developed countries, nearly all universities are equipped with the infrastructure to conduct ICT mediated instruction (Siemens, 2005). However, the use of ICT mediated instruction is not common as expected. Positive teacher attitudes towards computing are critical if computers are to be effectively integrated into the school curriculum. These existing attitudes and beliefs of academic officials and instructors must be changed to best serve the needs of the 21st-century students. A major reason for studying teachers' attitude towards computer use is that it is a major forecaster for future computer use in the classroom.

A study undertaken by Abdullah et al. (2006) elucidated the level of the attitude and motivation of English

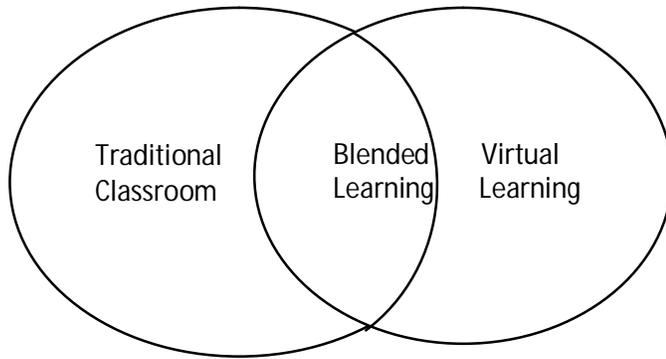


Figure 1. BL in an EFL writing class (Adapted from Badii, 2008).

teachers in the usage of the computer for the delivery of the English course and the associated problems and constraints faced by them. They reported that teachers had a positive attitude, were highly motivated towards the use of computers to teach English and actually used them for teaching and learning purposes. The findings also revealed that intrinsic rewards, such as responsibilities, a sense of self-worth and accomplishments teachers gained when they used computers in classroom, played an important role in enhancing the positive attitude and motivation. Positive attitude and intrinsic motivation of teachers in this regard seem to be critical and the university support for teachers would play vital role in developing strongly motivated teachers in use of computer and internet technology.

Conceptual framework of the study

The conceptual framework of this research is based on the constructivist learning modes (Haile Michael, 1993; Neo, 2003) in combination to computer and internet mediated use of resources. BL combines different aspects of motivating teaching and learning: theoretical, methodical and level of media. The theoretical level motivation combines different theories of learning as suggested by constructivists, cognitivists, and behaviorists (Haile Michael, 1993; Smith, 2001). The methodological level of motivation combines autonomous learning with instructor-led learning, individual with cooperative learning, and receptive with explorative learning (Brophy, 1991); the level of media switches between FTF and on-line elements of communication as deemed best to realize a given learning activity as connectivists advocate (Dailey, 1991).

The instructional relationship between the teacher and the students becomes quite different. The role of the teacher becomes more complex as it involves the management of the learning environment, providing instruction and scaffolding learning activities, monitoring feedback and progress of the learner, and assessing learners' performance. Students, on the other hand, play

Conventional Learning Template

Teacher: merely lecturing, the only dispenser of knowledge.	Media: Face-to-face, Books, magazines, lecture notes, etc	Student: passively listening, less responsible for learning, receiver of knowledge.
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Blended Learning Template

Teacher: facilitating learning, scaffolding knowledge creation process.	Media: Face-to-face + Computer-based internet learning	Student: active, autonomous and responsible for learning, constructing knowledge.
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Figure 2. Blended learning model (adopted from Mapuva, 2010).

active part and assume more responsibility for their own learning. They seek information and construct knowledge on their own based on their previous experience and interact actively with their peers, teachers and learning materials to enhance their learning process. The technology used plays the role of an enabler, providing sufficient resources to ensure successful establishment of the learning environment (Siemens, 2005; Mapuva, 2010). Mapuva strongly advanced the change from the conventional to the BL model as sketched in Figure 2.

With BL, the emphasis in learning is upon the students who are active learners, seeking information and knowledge on their own, determining how to reach the desired learning outcomes themselves and not only relying on teachers to supply them with information. Here, students become active participants in their own learning processes and learn to solve problems and work collaboratively with their peers. Learning takes place in a meaningful, authentic context and is a social, collaborative activity, where peers play an important role in encouraging learning. In this respect, the teacher is no longer perceived as the sole authority of learning, rather as the person to facilitate learning, guiding and supporting learners' own construction of knowledge (Warschauer, 2004; Siemens, 2005). In this study, the concept of theoretical, methodological and media level dichotomy has been bridged and integrated through the BL approach in the context of teaching-learning process of the writing skill course. Thus, the two templates of learning, conventional learning model and BL model were compared in their effects on the learning outcomes of

control and experimental groups in the study.

METHODOLOGY

Research design

The study employed a quasi-experimental research design, in which the experimental group received BL and control group received FTF lecture in learning writing. This research design is used because the researchers did not randomly assign students to the different groups; rather they used the existing sections of Computers Science Department taking the writing course. Neither did they randomly assign treatments (mode of delivery) to the groups. They used intact groups. Quasi-experimental research, according to Melton et al. (2009), is a type of design where random assignment of students to groups is not employed for either ethical or practical reasons, but certain methods of control are employed and the mode of delivery as independent variable is manipulated. To investigate the level of attitudes of English instructors towards using computers for BL, qualitative approaches were employed along with some quantitative methods.

Subjects

Based on the objectives and research questions of the study, the researchers used quantitative data from freshman students in existing groups identified from students registered for English writing skills course with code EnLa 202. The research was conducted involving first year students of the School of Computer Science of HwU taking the course. The conventional writing skills class students of two existing sections of the year 2012 were taken as control and experimental groups. Teacher participants were 50 instructors of English Language in the Department of Language and Literature.

Samples and sampling techniques

The study population was 250 freshman students who registered for English writing skills course in 2012. Among these students 80 (48 male, 32 female) from the Department of Computer Science participated in the study, which makes the sample 32% of the population. These students were placed to their school by the criteria of admission and placement as it applied for all freshman students. Hence, the study used two existing sections of the writing course by cluster sampling. Teacher participants of the study were 50 (40 male, 10 female) instructors of the Department of English Language and Literature in HwU, because it was a manageable sample size. Tables 1 and 2, present samples of student and instructor participants. Besides, four of English instructors and three e-learning instructors and ICT experts took part in a Focus Group Discussion (FGD).

The treatments: Modes of delivery for control and experimental groups

The process writing approach pre-test was administered to eighty students of both control and experimental groups. The test emphasized stages of writing process (drafting, writing, editing, and re-writing). Participants in both groups were given five writing tasks requiring them to produce paragraph writing. The tasks focused on, organization, grammar, vocabulary, content, mechanics, etc. The two modes of learning, BL and FTF were implemented during the semester of the experiment. The FTF learning group or the control

group focused on normal classroom lecture that was conducted three times a week, for an hour each time, in a conventional manner supported by the usual handouts and exercises. The teaching materials were distributed for the group in the form of hard copy, named EnLa 202. On the other hand, the BL group or experimental group had two contact times a week, for an hour each time, conducted in computer laboratory using intranet and internet access supported by customized online exercise materials (Appendix A). The writing skill course consisted of six units: sentence structure, paragraph writing, description, narration, exposition, and argument and persuasion, focusing on content, organization of ideas and cohesion, language, and style (accuracy of grammar, vocabulary, and spelling). For each unit there are 5 to 7 exercise materials covering over 70 pages. Students were given personal accounts and password to access materials from the HwU server.

Instruments of data collection

The main study variables were English writing skills performance test scores and attitude scores. To obtain the actual data from participants, the researchers used pretest and posttest scores of students on writing performance and attitude scale scores of teachers. The pre- and posttests were constructed based on table of specifications in relation to the intended and covered contents of the writing course (Appendix B).

To measure the instructors' attitude towards BL in English language in general and in EFL skills development courses in particular, 40 attitude items were developed by acclimatizing the Computer Attitude Scale (CAS) as presented in Appendix C. CAS was used at different levels by researchers (Loyd and Loyd, 1985). It consisted of 5 different sections: (i) Background Information (including experience in using computer and frequency of use); (ii) Perceived Computer Usefulness (CU); (iii) Perceived Computer Liking (CL), (iv) Perceived Computer Confidence (CC) and (v) Perceived Computer Anxiety (CA). Each subscale of CAS consisted of 10 items. The items were adapted and structured by drawing on the relevant literature on teachers' perceptions of attitudes toward the use of computer technology in instruction (ibid).

In the adaptation of CAS, the clarity and simplicity matters were considered important. Given that the items did not present any difficulty which might inhibit understanding, the scale was worded in the English. Participants responded to CAS using a five-point Likert scale: strongly disagree (1), disagree (2), undecided (3), agree (4), and strongly agree (5). Among the forty items, thirty were with positive polarity and ten with negative polarity. The negative polarity items were reversed and coded in order that meaningful analyses at the sub-scale level could be conducted. The scale was pilot-tested with teachers of other departments. The alpha coefficients of over .67 were obtained for each subscale. Hence, it was considered to be a reliable instrument to measure attitude towards computer among instructors.

An FGD was organized for four selected teachers and three e-learning experts to investigate concerns, experiences, or perceptions related to clearly defined topics of BL. The objectives of the FGD were to know: the use of e-learning in English language context; the benefit of using BL for students; the benefit of using BL for instructors; and the basic problems and challenges in using BL in HwU. In relation to the facts mentioned above, FGD seems to be an appropriate tool to surface concerns, experiences, or perceptions among purposely selected instructors and e-learning expertise of HwU (Barnett, 2002).

Procedures of data collection

Data were collected from the participants on a voluntary basis

Table 1. Student sample by gender and grouping.

Parameter		Male	Female	Total
Age	18 - 20	27	13	40
	21 - 25	29	11	40
Group	Experimental	25	15	40
	Control	23	17	40
Computer experience in years	1 - 2	-	-	-
	2 - 3	1	2	3
	3 - 4	8	2	10
	4 - 5	14	13	27

Table 2. Sample instructors by age and experience.

Parameter	Male	Female	Total
Age			
20 - 25	2	2	4
26 - 30	10	8	18
31 - 35	11	0	11
36 - 40	10	0	10
41 - 45	7	0	7
Above 45	4	0	4
Teaching experience			
1 - 4	13	0	13
5 - 8	6	5	11
9 - 12	10	0	10
13 - 16	8	0	8
Above 17	8	0	8

during the second semester of the 2012 academic year. Participants were told that their human and privacy rights would be protected and that all information they provide would be kept confidential. At all events, one of the researchers was present throughout the data collection process. Participants were told that they could withdraw their participation during or after the data collection. How the questionnaires and FGD were administered and how measurements were scored for tests is reported in this section.

The CAS questionnaires were distributed to instructors in their offices after a brief introduction about the research. They were asked to be accurate and frank in their answers and express their true opinions. It was possible for them to ask about any item unclear to them. On the average, they took about 30 min to complete the survey questionnaires.

The researchers conducted the FGD once within the data collection period. The sessions began with a brief presentation of the research highlighting the major insights of the literature review, the pilot study and the survey. The FGD session was then structured by a series of questions posing issues such as advantages and disadvantages of BL instruction, basic anticipated problems, and teachers' and students' attitudes towards BL. In each round of answers each participant was able to contribute to the discussion and comment on the reflections of the other participants. These questions began with the definition of terms, especially, e-learning, BL, conventional teaching/learning, etc. They

were encouraged to talk: ask questions, exchange anecdotes, and comment on each others' views and suggestions, and thus generating data through interaction. The FGD took 90 min of intensive discussion.

During the FGD under the moderation of the researchers, the participants shared insights, concerns and experiences about issues such as knowledge and innovation of instructional technology, institutional infrastructure, factors influencing the use of instructional technology, barriers to the use of instructional technology, and professional experience in education. Consensus points and directions were charted by moderators for latter analyses. There was video recording during the discussion.

In scoring writing skills performance, marking students' compositions was a crucial issue for instructors. Heaton (1990) argues that to mark students' composition important features, such as organization, grammar, vocabulary, content, mechanics etc. call for special attention. Analytic method of scoring composition was considered in this study because it was much pertinent to get better reliability and validity of writing tests (Weir, 1990).

The marking scheme of pre- and posttests (Appendix D) focused on accuracy of grammar, vocabulary, and spelling. Data were taken from the participants' writing involving the seven writing tasks: content, organization of ideas, language (grammar, vocabulary, and spelling), and style (originality and creativity). These entities were multiple rated from excellent- to very poor (Schuljahr, 2008) with corresponding scores earned. The four larger tasks, that is, content, organization of ideas, language and style were assigned 40, 30, 20 and 10 out of 100, respectively. Two most senior colleagues scored the pre- and post-test papers. The scoring procedures were explained to them, and they followed the same scoring procedures and used the same answer key that the author utilized. The marks given by the raters were correlated with each other. Finally, the average of the two scores was taken as a test score for the individual.

Multiple rating has more benefits than a single rater. First, it could reduce blind spots and omissions of any given rater, because more reviews will mean that more errors are caught. Second, multiple raters could reduce the negative impact of incorrect feedback. Third, multiple reviewers may be in agreement on some septic problems, and this multiplicity of comments may be more persuasive or salient to improve writing. Finally, multiple ratings may enhance the validity and reliability of the grades (Cho and Schunn, 2007).

Data analysis

The independent-samples t-test was used to compare the two groups (control and experimental) mean scores of pretest

performance. On the other hand, the paired-sample t-test was also conducted to examine whether there was significant difference between the pre-test and the post-test performances of each group. Controlling for the initial difference in pre-test, the ANCOVA procedure was conducted to determine if there was a significant difference between the two groups' post-test performances.

The inter-rater correlation coefficients were computed using Pearson's Product Moment Correlation to ensure the consistency of scoring the writing tests. The qualitative and quantitative data were used to look into the attitudes of instructors towards BL. The CAS measured instructors' psychological dispositions about use of computers in BL. The data were analyzed using descriptive statistics, that is, mean, standard deviation and percentage. Actually, the scores from the items on each component or subscale were aggregated to provide individual scores on each component of the scale.

The FGD results were qualitatively analyzed in the following ways. First, video recorded data were transcribed, similar responses of a question, and key words and phrases were categorized into certain themes: (a) attitudes and beliefs, (b) knowledge and skills, (c) institutional issues, (d) responsibilities (e) student assessment, and (f) instructional resources. Then convincing directions were charted and narrated according to the discussion in order to build evidences to answer relevant research questions.

RESULTS AND DISCUSSION

The objectives of the study were to examine the difference between writing efficiency and achievement of students who took writing course in BL and conventional modes of delivery, and to investigate how teachers perceive the use of BL in teaching English writing skills. Results of pilot and main studies were presented in this part of the paper by way answering the basic research questions.

Pilot study

The pilot study has been done with major objective of checking up the research tools, the experimental procedures and the instruction materials prepared for the study for validity, reliability and usability. In this regard, the pre and post writing performance tests for students, computer attitude scale instrument for instructors were evaluated. The second objective was to use the result as a baseline benchmark so as to carry out the main study. Accordingly, the null hypotheses were first tested to check existence of significant performance difference between experimental and control groups in both pretest and posttest results of students in each group. This was done with the intention that if the null hypothesis on posttest score was rejected in the pilot study, the researchers would further test the directional hypotheses depending on the direction the pilot data showed. The null hypothesis was actually rejected for posttest and not for the pre-test. This led the researchers to setting the directional hypothesis for the posttest in the main study.

The CAS instrument for instructors was evaluated

against their reliability coefficients reported in previous research and were found to be acceptable. The pre and post writing performance tests for students were also reliable and valid with the inter-rater reliability coefficient .86.

Based on insights gained from the pilot study, the researchers rejected the null hypothesis and set the directional hypothesis that the experimental group perform better in English writing skill than the control group. The guiding hypothesis concerning instructors' computer attitude was that they have low attitude towards using computers in the BL. According to the main study, the analyses of the study variables were done in the following manner. They included pre and post-instruction writing performance test scores of the students, attitude scores of instructors and the results of the FGD.

English writing performance

This study investigated the students' pre and post tests of English writing skills. Based on the results from pilot study, the directional hypothesis that experimental group students perform better in post-instruction writing performance was tested (one-tail) at 5% of level of significance.

First, the pre-test scores of the two groups were compared by the independent samples t-test and the results showed that there was no significant difference between the means. To check the effects of the instruction in each group, paired t-test was conducted in each group separately and the results showed that both modes had significant difference in mean scores between pre-test and posttest (Table 3).

However, our main task was to know if the experimental group performed writing better than the control group in the posttest by statistically controlling for the covariate pre-test. The ANCOVA procedure was conducted for this purpose. This procedure is equivalent to conducting ANOVA on the adjusted posttest scores. The ANOVA summary for the dependent variable posttest score adjusted for initial difference in the covariate pre-test score is presented in Table 4. According to the results, the students who participated in BL recorded higher scores in the posttest than students who attended to a FTF writing course ($F = 275.22$, $df = (1, 77)$, $p < 0.01$).

This may be because computers make writers' job easier in the writing process (Yang, 2001). In the drafting and composing phase, word processors can give writers more freedom than paper and pencil based writing, because writers can compose text sequentially, follow an outline, or insert ideas at any point in a text (Warschauer, 2004; Wang and Yang, 2002). Computers can also simplify the revising process. Computer literacy enhanced motivations of both learners and facilitators in their responsibilities (Varank, 2006). Thus, it was not

Table 3. T-tests summary.

Group		N	M	SD	t	df	p
Independent samples t-test for pre-test scores							
Experimental		40	64.66	4.36	-.02	78	.99
Control		40	64.68	3.05			
Paired t-tests							
Experimental	Posttest	40	77.59	4.41	29.01**	39	.000
	Pre-test	40	64.66	4.36			
Control	Posttest	40	68.49	2.53	9.45**	39	.000
	Pre-test	40	64.68	3.05			

Table 4. Group statistics and ANOVA summary for adjusted posttest scores group statistics.

Group	Mean	SD	N
Experimental	77.59	4.41	40
Control	68.49	2.53	40
Total	73.04	5.81	80

ANOVA table for adjusted posttest score				
Source	SS	Df	MS	F
Between Groups	1600.02	1	1600.02	275.22**
Within Group	464.43	77	6.03	-
Total	2064.45	78		

** p<.01; The F tests the effect of treatment on posttest score controlling for pre-test score.

surprising that the features of the BL might have stimulated the students' learning motivation for English writing and improved their performance as shown in Table 4.

The significant gain of the experimental group may be attributed to the following features of BL as applied to teaching of the EWSs. First, the BL created on-going interactive and a non-threatening learning environment that encouraged interactions between students and teachers, enhanced communication, cooperation and teamwork and encouraged active participation which may have increased their motivation and interest in learning (Smith, 2001; Brophy, 1991; Rogers, 1994; Simens, 2005). This means that the BL instruction program might have developed students' communication skills and their interaction with peers, instructors and the presented educational materials. Co-operation among students, seeking relevant information, independent processing of the information and self-evaluation of one's progress may have enabled students to gain confidence and competence (Mayer et al., 2004), which lack in the traditional method.

Secondly, employing more than one sense and addressing the students' different learning styles through

variety of activities, techniques and multi-media such audios, animation, videos, texts, and power point slides may have enhanced learning (Mayer, 1997, 2005). Besides, the BL also offered continuous feedback which reflected in students' progress in learning if the answers were right or modifying them if they were wrong. The progress in learning should emerge as the integration of what student have selected and organized as new information and what they knew and experienced before (ibid).

Third, the BL arrangement may have helped students develop self-learning strategies in an interesting way, recognize the relations between the content components, re-organize the information presented in various forms, and give deductions from the available information, such as searching for additional information about the writing skill from the searching drives on the internet (Simens, 2005; Mayer et al., 2004; Mayer, 2005).

Computer attitudes

Positive attitudes of instructors towards using the BL for teaching EWSs is crucial for its implementation even in a

Table 5. Instructors level of use of computers (N = 50).

SN	Use type	N	Yes	Never		Rarely		Sometimes		Frequently	
				F	P	F	P	F	P	F	P
1	E-mail	7	43	7	14%	25	50%	12	24%	6	12%
2	Games	45	5	45	90%	3	6%	2	4%	-	-
3	Sur. IN	0	50	-	-	23	46%	7	14%	20	40%
4	Typing & KLP	5	35	5	10%	7	14%	2	4%	19	38%
5	Office work	26	24	26	52%	8	16%	10	20%	6	12%
6	Chat rooms	45	5	45	90%	2	4%	1	2%	2	4%
7	Materials design	47	3	47	94%	1	2%	2	4%	-	-
8	Web-page design	48	2	48	96%	1	2%	1	2%	-	-
9	Ass. & check.	48	2	48	96%	1	2%	1	2%	-	2%
10	H.W via e-mail	6	4	6	12%	2	4%	1	2%	1	

N = number of participants who did not tick the item; Yes = number of participants who ticked the item; F = frequency; P = percentage; KLP = keeping lesson plans; H.W = homework; Sur. IN = surfing internet; Ass. & check = Assessing & checking students' work.

situation where the instructors know the advantages of the BL over the traditional method. It takes both knowledge and attitude to put a given innovation into practice. This is why this study investigated the computer attitudes of English instructors at HwU towards implementing the BL. It is important to know how instructors feel about computer use in their classrooms because computer technology has become an important and useful tool in the learning process in the schools and universities today.

The use and experience of instructors with computers were assessed and data are presented in Table 5. The results show that instructors frequently (12 to 40% of time) use computers for electronic mail, office work, internet, and typing and keeping lesson plans, and keeping materials and student records. On the other hand, high percentage (90 to 96%) of instructors never used computers to chat, design materials, design web-pages, or to assess and check students' work. One can observe that computer use for more sophisticated tasks was at relatively low level among instructors of the department. This is in a stark contrast to the results in other similar studies (Abdullah et. al., 2006). Hence, their computer confidence needs to be enhanced to the level of using computers for more advanced purposes such as designing materials for teaching as well as developing web-pages for instructional goals.

Based on insights gained from pilot study, the hypothesis that instructors had low attitudes towards computer use for teaching was set. It was assumed that there would be positive perception towards the BL instruction. Computers can make instructors' task easier in the tutorial of writing process, that is, in the drafting and composing phase, word processors can give writers more freedom than paper and pencil based writing. The results showed that computer use and liking among instructors was quite above the moderate level (mean values 41.40 and 37.92 for CU and CL, respectively). For

Table 6. Instructors' attitudes towards the use of computers in language instruction (N = 50).

Attitudes	N	Mean	SD
CU	50	41.40	1.69
CL	50	37.92	3.10
CC	50	35.96	1.70
CA	50	34.12	2.43
Overall attitude	50	37.35	2.23

CU = computer use, CL = computer liking, CC = computer confidence, CA = computer anxiety.

each subscale, the minimum and maximum values are 10 and 50, respectively. This may be due to the fact that most instructors frequently use computers only for general purposes such as e-mail, internet, office work, typing and keeping lesson plans, teaching materials and student records (Table 6).

Although few instructors stated that they perceive computers as pedagogical tools, a considerably high number of instructors remained unsure whether they have confidence to use computers (mean value for CC = 35.96). Using computers for the resources in the internet for language teaching purposes requires some confidence in computer skills. Similarly, teachers feel that they were not sure about having computer anxiety (mean for CA = 34.12). However, studies showed that anxiety declines in a situation where computers are liked and used more frequently (Smith, 2001), and in turn computer confidence and competence may rise. Overall, most instructors reported that they have positive attitudes towards computers (overall mean value for attitudes = 37.35), which is marginally above moderate attitude level.

The study also suggested that there were three key factors affecting the use of BL in the classroom, namely, instructors' personal interest in internet use, instructors'

abilities to integrate internet resources into classroom activities, and availability of computer facilities and technical support for instructors on campus. More specifically, as the FGD participants articulated in their discussion, the issues on benefits and challenges of using BL were thematically summarized as follows: 1) use of BL would improve instructors' and students' attitude towards English language teaching through BL; 2) ICT investment would positively impact educational standards and student performance in BL form, especially in English language writing course; 3) there is positive association between the length of time of ICT use and computer confidence and negative association with computer anxiety. Besides the FGD indicated general observation that institutions with good ICT resources and technical support system would achieve better results than those that are poorly equipped and supported and investment on ICT would positively impact educational quality.

These issues regarding potential benefits and challenges, if properly handled, could speed up the effectiveness of BL in developing students' language learning in general and their EWSs in particular. They can as well influence teacher behavior in handling technology enhanced learning process (McLaren et al., 2011). Today's students live in a global and knowledge-based age and they deserve instructors whose instructional practice embraces the best that technology and innovative pedagogy can offer. Consequently, the inclusion of instructional technology and innovative pedagogy as an area of focus in teacher preparation programs has evolved significantly to the point of having regional and national standards for program accreditation (Akkoyunlu and Soylu, 2008). However, teacher preparation in Ethiopia has not yet included the integration of ICT and instruction into teacher training programs (Abate, 2008). As a result, our teacher candidates fail to effectively use ICT for teaching.

Among the factors that affect the successful use of computers in the classroom are teachers' attitudes towards computers. Positive teacher attitudes towards computing are critical if computers are to be effectively integrated into the school curriculum. Attitudes constitute various dimensions, some examples of which are perceived usefulness, computer confidence, training, knowledge about computers, anxiety, confidence, and liking (Yang, 2001). The existing attitudes and beliefs of instructors and academic officials need to be changed to improve the level of use of computers for teaching. Helping technology users while they are actively engaged with it at their work location is probably the most meaningful, essential and appreciated support that can be provided (Varank, 2006).

Summary of findings

In the light of the statistical results and qualitative data,

the researchers reached at the following findings:

1. The experimental students, who attended English writing skills course through the BL, performed better in the posttest achievement than the control group students, who attended a traditional lecture-based course.
2. The better performance of experimental students could be attributed to the following BL features according to language instructors:

- a) Exposing students to different activities such as techniques and multi-media, audio, texts, animation, videos, and PowerPoint slides addressed the students' different learning styles;
- b) Creating on-going interactive and a non-threatening learning environment encouraged interactions between students and teachers, enhanced communication, cooperation and teamwork and encouraged active participation and hence increased motivation and interest in learning;
- c) Offering continuous feedback reflected students' progress in learning;
- d) Helping students develop self-learning strategies encouraged independent learning and enabled students to express themselves freely via writing; and
- e) Developing students' information and communication skills through their interaction with educational materials, self-evaluation tools, and informational search and training opportunities empowered students to achieve learning goals.

3. Computer use and computer liking were well above moderate level. However, most instructors use computers only for general purposes such as e-mail, internet, office work, typing and keeping lesson plans and teaching materials, and student records.

4. Although some instructors perceived computers as pedagogical tools, many instructors were not sure whether they have confidence to use computers for internet resources useful in language teaching. Similarly, teachers were not sure about having computer anxiety. Instructors overall exhibited positive attitudes towards computers.

CONCLUSIONS

In this study, the students who participated in BL recorded higher scores on the post-test than the students who attended a FTF writing course. The written results of English writing course after blended learning instruction showed that the students improved their organization, grammar and structure, content, vocabulary, and spelling. BL stimulated students to move towards independent practice of English writing instead of depending on direct instruction. It was very effective in motivating shy students and low achievers towards participation and interaction both in synchronous and asynchronous

activities because they were not criticized. It provided students with mechanisms and enthusiasm for learning, thus, affecting their achievement positively. Evaluation and self-evaluation tasks with immediate feedback gave students a chance for confidence and supported self-learning strategies. Hence, the use of BL for English writing courses can be an effective intervention.

Instructors showed moderate level of computer use and experience due to different factors. The three key factors affecting the use of computers in the BL classroom were instructors' personal interest in internet use, instructors' abilities to integrate internet resources into classroom activities, and the availability of computer facilities and technical supports for instructors. Yet, instructors displayed positive attitudes towards computer use in teaching.

RECOMMENDATIONS

Based on the findings, the following recommendations were forwarded:

1. Action priorities that ensure quality education through technology enhanced learning should be set in higher education institutions. The foundation of basic computer skills of students should be laid at all levels, from KG to graduate stage. Government should commit more funding for higher education institutions to enable them to undertake training programs for students and academic staff, develop ICT infrastructures and facilities, and procure more computers and other related materials necessary for a reliable internet and network system.
2. The universities should open a dialogue within the academic community about the BL and its merits. Academic staff must bear a particular responsibility for beginning a dialogue about their own educational programs, examining their willingness and ability to restructure their programs, courses, and assessment procedures in hosting BL.
3. The provision of the appropriate technical infrastructure and support staff may make the success of ICT use in teaching a reality at the learning institutions. When teachers try to use technology in their classrooms and they encounter difficulties, they need immediate help and support from administration wing without which technology integration in the classroom will never be satisfactorily achieved.
4. Teacher preparation in the different subject areas may be better informed and challenged by these findings in order to incorporate the innovations in the teaching methods through the use of BL. Hence, teacher training colleges and universities may include in their curricula the teaching methods employing use of computers and internet technology for enhancing learning.
5. Clearly, more research is needed to confirm these findings and conclusions. More extensive analysis with

larger sample size would serve to strengthen understandings on BL for language studies. Future research can also examine the effects of BL on students' performance in different discipline areas.

PEDAGOGICAL IMPLICATIONS

In the light of the study results, the researchers suggest the following:

1. Teachers should be aware of their students' needs and abilities and train them on self-learning strategies to enhance BL potentials.
2. Active learning of students and continuous assessment approach may be more effective through the use of BL and this in turn may help ensure the quality of education. Teachers should avoid teacher-centered class and move towards student-centered and technology-mediated classes.
3. Institutional overhaul of the BL in courses and programs may have accelerating effect on bringing quality of education and transforming teaching-learning process. Academic officials should strategically create infrastructure and facilities that enable BL to be used in teaching learning environment. Besides, curricula could be revisited with regard to integration of BL in course delivery system of the different disciplines.

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Appendix A: Sample Exercise Materials Online on Unit 1: Sentence Structure
(There are 6 units and for each unit there are 5-7 such exercises in 70 pages)



Exercises 2

1. Rewrite these sentences, correcting the inconsistencies in point of view.
 - a. Almost everyone in the group wanted to discuss their own problems first.
 - b. Each witness gave a report on what they thought had actually happened.
 - c. My uncle saw the president of the company when he was in Boston.
 - d. Peter bent down to pick up the coin, his spectacles dropped on the ground.
 - e. Intellectuals are the light of the nation; you should live up to the nation's expectation.
 - f. Our soldiers fought their enemies courageously, but the battle was not won by them.
 - g. Last semester the exam started early but ends late.
2. Supply the punctuation needed in these sentences to make the meaning immediately clear to the reader.
 - a. Without advertising our radio and television stations would not be readily available for announcements of public interest.
 - b. His encouragement produced good results for many people took his advice and became more useful citizens.
 - c. For a good while after he begins painting the novice may still have trouble with perspective.
 - d. After graduation time seemed to pass slowly for me from June to September I stayed on the farm and helped my grandmother.
 - e. The system is still inefficient for two channels are needed to transmit one program.
 - f. My uncle is paying for my educational needs except for tuition he does not expect me to be reimbursed when I have an income of my own.
3. Rewrite these sentences, correcting the dangling modifiers. Explain briefly what each correction consists of and why it was necessary.
 - a. Crossing to the West side of Main Street, the bus station can be seen.
 - b. Shining brightly through the window, John could see the sun.
 - c. By purring softly, the little girl was shown gratitude by the kitten.
 - d. To do an author's job, Mathematical skill is needed.
 - e. To be an author, Mathematical skin is needed.
 - f. Walking along the top of the hill, parts of the distant city can be seen
4. Rewrite the following statements by attaching them to the adjacent sentences
 - a. A number of students failed their exams. Having not studied hard.
 - b. Stephen goes to prison every summer. For disobeying his immediate bosses.
 - c. My grandfather used to remember this old school
 - d. The school which had shaped his personality tremendously.



Submit and click the button to see the answers

Appendix B: PRE-TEST & POST TEST

Name: ----- Age: ----- Sex: ----- ID.:----- Department: -----

This test is designed to understand the student's Basic writing proficiency level.

Time allowed: 2hrs: 30 min.

Instruction I: Write appropriate sentences based on the following information

1. When and where were you born?
2. Who are the other people in your family?
3. Which member of your family are you most like? Why? How?
4. In what places have you lived?
5. What schools have you attended?
6. What is your father's occupation?
8. What is your mother's occupation?
9. Who is your best friend? Tell about him or her.
10. What books and magazines do you like to read?
11. What person has had the most influence on you? How?
12. Describe your hobbies
13. Describe your pets, domestic animal you like most.
14. Describe what you like to do in your spare time and on weekends.
15. What is your favorite TV program? Why?
16. What kind of music do you like?

Instruction II: Using the above information write a descriptive paragraph.

Instruction III: Punctuate the following paragraph by adding capital letters, commas and full stops.

people travel more today than at any time in history more and more people are travelling by air space planes are being developed which will be able to travel at five times the speed of the sound however planes like this will use huge amounts of fuel and may damage the atmosphere

many governments are worried about the pollution which is caused by petrol driven cars and lorries traffic fumes are often a serious problem in big cities these fumes can damage people's health as the result the petrol companies have developed a clear type of petrol which does not lead electronic cars are also being built these do not produce any exhaust fumes in the future most forms of land sea and air transport will use less fuel

Instruction IV: Read the information below about Kolasso, a young man from Wolaita.

1. Name: Kolasso
 2. Age: 19
 3. Appearance: tall & thin, wears glasses, short black hair
 4. Hobbies: cooking, reading historical books, running
 5. Hometown: Wolaita Sodoo
 6. Job: works part-time in Balome's shop, Soddo town.
 7. Personality: good sense of humour
 8. Other nickname is: "running man" (he loves running)
- Now write the information as sentence level, the first one is done for you.

1. His name is Kolasso.

- 2. _____
- 3. _____
- 4. _____
- 5. _____
- 6. _____
- 7. _____
- 8. _____

Then re-write the above sentences as one paragraph

Instruction V: Describing a person/things

Choose two pictures among the following ones and describe them in the way you understand



3(A)The first picture

i. First draft

The second picture

ii. Final Draft

Instruction VI: Narrative Essay: Personal story

Your University has organized a story competition: "Focus on a moment in your life that is very significant (funny, embarrassing, journey, important learning experience etc.)". Write your story for the competition.

Appendix C: Computer Attitude Scale

Hawassa University
 Department of English
 Computer Attitude Scale
 To be filled by English instructors

Dear Instructors: This questionnaire is designed for the study purpose. It has a series of statements about English language instructor's attitudes towards computers in general, and using computer technology in English language writing skills instruction in particular. The success of this study depends on your genuine responses to this questionnaire. All the information you provide in this questionnaire is confidential and will only be used for research purpose.

Thank you for your cooperation in this matter.

Mulu Geta, Contact Address: E-mail: Yabiyemulu45@yahoo.com

Part I 1. What do you use computers for? Please tick the appropriate option(s), and also indicate your frequency of use
 1=never 2= rarely 3= sometimes 4= often

Part II 1. How often do you use computers? Please tick the appropriate option.

Never Sometimes Frequently Always

Part III For the following items, please circle the answer that best shows your opinion.

1. E- mail [1 2 3 4]
2. Games [1 2 3 4]
3. Materials design [1 2 3 4]
4. Typing and maintaining lesson plans [1 2 3 4]
5. Office work: student records, administrative [1 2 3 4]
6. Assigning and checking reports (e.g., word, excel) [1 2 3 4]
7. Homework via e-mail [1 2 3 4]
8. Chat rooms [1 2 3 4]
9. Surfing the Internet [1 2 3 4]
10. Web page design [1 2 3 4]
11. How often do you use computers? [1 2 3 4]
12. Other

Part IV : Please indicate the degree to which each statement applies to you by circling whether you (1) Strongly disagree (2) Disagree (3) No opinion (4) Agree or (5) strongly agree.

Computer usefulness	1	The use of e-learning creates more interaction between students and instructors participated in the course.	1	2	3	4	5
	2	Using computers makes me more efficient in my writing skills	1	2	3	4	5
	3	Communicating with others over the computer network can help me to be a more effective teacher.	1	2	3	4	5
	4	Computer technologies are more useful to assist me in classroom management techniques.	1	2	3	4	5
	5	I believe that computer is very important for me to learn English writing skills.	1	2	3	4	5
	6	Collaborative writing in e-Blended learning was helpful for my writing skill development	1	2	3	4	5
	7	E- Blended learning provides better access to the instructor so as to develop students' writing skills.	1	2	3	4	5
	8	Using computers make student more likely to Write better because they can revise and edit easily	1	2	3	4	5
	9	using computers make student more likely to Communicate well	1	2	3	4	5
	10	using computers makes student more likely to Take short cuts and not put efforts into writing	1	2	3	4	5

Computer Liking	11	I like using computers to develop my English writing skills	1	2	3	4	5
	12	I generally have positive attitudes towards computer technology in teaching & learning writing skills	1	2	3	4	5
	13	I like computers to do more English language writing skills activities	1	2	3	4	5
	14	I like searching the internet for teaching resources.	1	2	3	4	5
	15	Working with a computer makes the writing activities more attractive and faster than working with the conventional hand writing mode.	1	2	3	4	5
	16	I don't see how computer technologies can help me learn new skills.	1	2	3	4	5
	17	If I have time, I would like to try out instructional computer technology, e-blended learning Innovations, in my teaching.	1	2	3	4	5
	18	The use of e- Blended learning creates more interaction between student and instructor in learning writing skills.	1	2	3	4	5
Computer Confidence	19	Using computers generally makes completing writing tasks easier.	1	2	3	4	5
	20	I am not prepared to integrate instructional computer technology in my teaching	1	2	3	4	5
	21	I can bring more changes in using e-blended learning than using merely conventional face-to-face instruction.	1	2	3	4	5
	22	I hesitate to use a computer for fear of making mistakes that I can't correct	1	2	3	4	5
	23	If I have access to resources, I would like to try out instructional computer technology innovations in my teaching.	1	2	3	4	5
	24	If I get training, I will like to try out instructional computer technology innovations in my teaching.	1	2	3	4	5
	25	If I use word processing software, I can be a more productive teacher	1	2	3	4	5
	26	I feel confident using a word processing program to exercise writing activities/ skills	1	2	3	4	5
	27	I feel confident using the spell checker while word processing.	1	2	3	4	5
	28	If given the opportunity to use a computer, I feel fear that I might damage it in some	1	2	3	4	5
	29	I can manipulate e-blended learning resources effectively and efficiently	1	2	3	4	5
	30	I can be more productive in using computers at my work	1	2	3	4	5
Computer Anxiety	31	Computers make me feel uncomfortable	1	2	3	4	5
	32	Computers can allow me to do more interesting and imaginative work	1	2	3	4	5
	33	I am afraid that continuous work with the computer may harm me physically	1	2	3	4	5
	34	Perceiving computers as pedagogical tools may harm me mentally.	1	2	3	4	5
	35	The thought of using computer technologies frightens me	1	2	3	4	5
	36	I hesitate to use a computer for fear of making mistakes I can't correct	1	2	3	4	5
	38	Computer technologies are confusing to me.	1	2	3	4	5
	39	I don't feel worried about using a computer	1	2	3	4	5
40	I feel overloaded when using computer technologies in my classes.	1	2	3	4	5	

Note: CL= Computer Liking; CA = Computer Anxiety; CI = Computer Importance; CC = Computer Confidence.

Appendix D: The Marking Scheme of Pre/post Writing Tests

No.	Criteria	Marks	Rating Scales				
			Excellent (5)	Good (4)	Fair (3)	Poor (2)	Very poor (1)
1	Content	40	32 - 40	24 - 31	16 - 23	8 - 15	0 - 7
2	Organization of Ideas	30	28 - 30	21 - 27	14 - 20	7 - 13	0 - 6
3	Language	20	18 - 20	14 - 17	9 - 13	4 - 8	0 - 3
4	Style	10	10	7 - 9	5 - 7	2 - 4	0 - 2
Total		100					

Rating scales

Rating	Descriptors
Excellent	<p>Content: Very clear and substantive /related to the real fact understanding of the topic given in terms of the length/scope of the essay, well-developed, thoughtfully and thoroughly supported, very reasonably and relevantly-presented, excellent awareness of audience and purpose.</p> <p>Organization of Ideas: A very convincing and clear thesis statement, very coherent and well-organized in an introduction, development, and a conclusion with excellent use of cohesive devices (paragraphs at the essay level; sentences at the paragraph level), very appropriate and logical structure both within the essay as a whole and within the paragraph, excellent main ideas at the paragraph level, very well-informed.</p> <p>Language: Excellent command of English, excellent control of language usage, very frequent use of excellent complex and compound sentences without any errors, impressive range of appropriate vocabulary and idiomatic language.</p> <p>Style: Evident stylistic control and display of impressive creativity and flair as well as originality throughout the essay.</p>
Good	<p>Content: Clear and substantial understanding of the topic given in terms of the length/scope of the essay, well-developed, thoughtfully and thoroughly supported. reasonably and relevantly-presented, good awareness of audience and purpose.</p> <p>Organization of Ideas: A convincing and clear thesis statement, coherent and well-organized in an introduction, development, and a conclusion with good use of cohesive devices (paragraphs at the essay level; sentences at the paragraph level), appropriate and logical structure both within the essay as a whole and within the paragraph, good main ideas at the paragraph level, well-informed.</p> <p>Language: Good command of English, good control of language usage, frequent use of good complex and compound sentences with insignificant errors, good range of appropriate vocabulary and idiomatic language.</p> <p>Style: Good stylistic control and display of creativity and flair as well as originality throughout the essay.</p>

Fair	<p>Content: Fairly clear and substantive understanding of the topic given in terms of the length/scope of the essay, sufficiently-developed, satisfactorily supported and presented, satisfactory awareness of audience and purpose.</p> <p>Organization of Ideas: A fairly convincing and clear thesis statement, coherent and satisfactorily-organized in an introduction, development, and a conclusion with satisfactory use of cohesive devices (paragraphs at the essay level; sentences at the paragraph level), fairly appropriate and logical structure both within the essay as a whole and within the paragraph, satisfactory main ideas at the paragraph level, fairly-informed.</p> <p>Language: Satisfactory command of English, satisfactory control of language usage, fairly frequent use of satisfactory complex and compound sentences with a few errors, a satisfactory range of appropriate vocabulary and idiomatic language.</p> <p>Style: Satisfactory stylistic control and display of creativity and flair as well as originality throughout the essay.</p>
Poor	<p>Content: Poor understanding of the topic given in terms of the length/scope of the essay, occasionally irrelevant and poorly-developed as well as supported, dissatisfactory-presented, poor awareness of audience and purpose.</p> <p>Organization of Ideas: A barely convincing and less clear thesis statement, less coherent and poorly-organized in an introduction, development, and a conclusion with poor use of cohesive devices (paragraphs at the essay level; sentences at the paragraph level), less appropriate and logical structure both within the essay as a whole and within the paragraph, poor main ideas at the paragraph level, poorly-informed.</p> <p>Language: Poor command of English, poor control of language usage, frequent use of poor complex and compound sentences with many errors, poor range of appropriate vocabulary and idiomatic language.</p> <p>Style: Poor stylistic control and display of creativity and flair as well as originality throughout the essay.</p>
Very poor	<p>Content: Barely clear understanding of the topic given in terms of the length/scope of the essay, irrelevant and lack of logic, little/no evidence of ability to generate ideas, little/no attempts to address appropriate audience and purpose.</p> <p>Organization of Ideas: A unclear thesis statement, incoherent and pointless in an introduction, development, and a conclusion without use of cohesive devices (paragraphs at the essay level; sentences at the paragraph level), inappropriate and illogical structure both within the essay as a whole and within the paragraph, no main ideas at the paragraph level.</p> <p>Language: Very poor command of English, very dissatisfactory control of language usage, very frequent use of very poor simple and compound sentences with numerous errors, a very considerable range of inappropriate vocabulary and idiomatic language.</p> <p>Style: Hardly any stylistic control and display of creativity and flair as well as originality throughout the essay.</p>