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AN EXPERIMENTAL STUDY INTO THE USE OF COMPUTERS FOR TEACHING OF COMPOSITION WRITING IN ENGLISH AT PRINCE EDWARD SCHOOL IN HARARE

L. Tatira, N. Sithole, B.C. Manyarara and R. Gora

Department of Curriculum and Arts Department, University of Zimbabwe

Abstract

This study was an experimental study which sought to establish how English language teachers used computers for teaching composition writing at Prince Edward High School in Harare. The findings of the study show that computers were rarely used in the teaching of composition despite the observation that the school appeared to be adequately equipped with computers. Teachers appear to prefer their traditional way of teaching, perhaps because of conservatism on their part. The study goes further to recommend that English teachers should be taught how to use computers at a general level then they should develop skills that enable them to use computers as a teaching tool in their subject area

Introduction and Background to the Study

As long ago as 1982, the Faculty of Education at the University of Zimbabwe was already articulating the role of micro-computers in our classrooms (Dickson and Touse, 1982). However, little had been said about information technology in the language classroom. An unpublished pilot study (Manyarara and Nyota, 2004), at a Harare school was instituted to find out whether a computer is viewed merely as an end in itself or as a means to achieving wider educational objectives, specifically as it affects English language learning and teaching. The unpublished pilot study established that the school was aware of the language teaching potential of computers and was piloting its own study in teaching English and Mathematics using computers.

The school also had an ICDL programme in place for training teachers without basic computer skills. On the whole, everyone was enthusiastic about the use of computers beyond mere Computer Science as a subject. Thus, the current study seeks to establish how English language teachers use computers in teaching the composing skill at Prince Edward School. Composition work

engages students in listening, speaking, reading and writing, so it was found particularly appropriate to research into how this specific skill is developed and how computers are used to enhance the quality of the students' composition at this school.

This research was carried out by a team of four language specialists in English, Ndebele and Shona. The research team, in their data gathering, interviewed nine English teachers, and the Deputy Head at Prince Edward School in Harare, Zimbabwe. The interviews were meant to find out the extent of computer use in the teaching of English composition as well as the school policy on computer use.

Teachers' documents, namely, schemes of work and the school syllabi were scrutinised. Teachers' schemes of work were scrutinised in order to find out if in their schemes of work there was evidence of computer use in their teaching. The objectives of the study were as follows:-

1. to identify suitable teaching methods in teaching composition through computers;
2. to assess the effectiveness of using computers in teaching English composition.
3. to suggest ways of improving teaching composition through computers

Literature Review

Introduction

Composition writing is important in language teaching. As Tatira (2005:99) notes,

composition teaching is central to language teaching in Zimbabwe. Most importantly, examinations in Zimbabwe are tested through writing. Composition, among other things, promotes the writing skills which are not only necessary but vital in tackling examinations.

When teaching composition, it is prudent that all the four skills of language teaching, which are: speaking, listening, reading and writing, be made use of. Teaching of composition involves different approaches and techniques, ranging from simulation, brainstorming, discussions, response group technique and group work.

Although teaching in some schools has moved from the chalk and talk approach to electronic learning, for example, computer-assisted language learning, (hereafter referred to as CALL). The skills in language learning and approaches to composition teaching should still find space in the electronic teaching in order for teaching to remain effective.

Learning theories and ICT use

Computer-Assisted Language Learning (CALL), as did the ordinary language learning theories, has gone through three phases, namely, behaviourist, communicative and integrative (Warschauer, 1997).

Behaviouristic computer assisted language learning

This is the initial phase of CALL. It was conceived in the 1950s and 70s (Warschauer, 1997), based on behaviourist theories of learning. The approach entailed repetitive language drills – 'drill and practice'. The thrust is on doing things over and over again in order to make things stick in the minds of the learners. In CALL, the computer takes over the role of the teacher as it produces repeated drills to the learner, becoming, itself, the tutor (Taylor, 1980). It delivers instructional materials to the student.

The rationale behind using this approach is as follows:

- Repeated exposure to same material is essential to learning.
- The computer is ideal for repeating drills, since it is not bored by that process.
- The computer can provide immediate, non-judgemental feedback.
- Material can be presented on an individual basis, so learners can proceed at their own pace.

The behaviourist approach used the Plato CALL tutoring system which included vocabulary drills, translation tests, brief grammar explanations and drills at intervals. By the late 1970s and early 80s, this approach had lost currency in language teaching. It was undermined by two important factors, namely:

- Behaviouristic approaches to language learning had been rejected for ordinary language teaching.

- The introduction of the microcomputer which allowed a new range of possibilities for the language classroom.

Communicative CALL

The Communicative Computer Assisted Language Learning approach was based on communicative approach to language teaching and became prominent in the 70s and 80s. Proponents of this approach felt that drill and practice programmes did not allow enough authentic communication. The aim is to develop communication through use of language in context. Emphasis is on contextual and functional use.

Underwood (1984), who is one of the proponents of this approach advances the following rationale for this approach:

- It focuses more on using forms rather than on the forms themselves.
- It teaches grammar implicitly rather than explicitly.
- It allows and encourages students to generate original utterances rather than memorised language.
- It does not judge or evaluate everything.
- It is flexible to a variety of student responses and avoids telling students they are wrong.
- It uses the target language exclusively, and attempts to create a natural environment for the use of target language.

In this CALL communicative approach, there is creation of a variety of programmes to provide skill practice (but not drill format), for example, paced reading, text reconstruction, language games (Healey and Johnson, 1995b). In this case, the computer is the stimulus (Taylor and Perez, 1989). It stimulates the students into discussion and critical thinking. It remains the knower of the answer, although the student chooses, controls and interacts in the target language.

The approach lost popularity towards the end of the 80s because language educators felt that the computer was failing to live up to its potential. There was need to develop models which could help integrate the various aspects of the language learning process rather than compartmentalising skills.

Integrative CALL: Multimedia

This approach currently seems to be the most advanced approach in the teaching of composition using the computer. It is based on two technological developments, namely, multimedia computers and the internet.

As its name implies, multimedia means that more than one medium is used. Through the use of the machine, a learner can access a variety of media, ranging from sound to animation. It allows for texts, graphics, sound, animation and video to be accessed on a single machine. Learners navigate their own way by use of the mouse-click.

Through multi-media, listening skills can be developed as the programme can provide audio as well as simulation (Smith, 1999). Pupils can be tasked to write essays or numerous other composing tasks responding to the images on the computer.

The rationale behind this approach is as follows:

- Listening is combined with seeing;
- Skills are easily integrated in a single activity;
- Students have greater control over their learning; and
- It facilitates a principled focus on content.

Smith (1999:91) observes,

...opportunities for speaking and listening arise when pupils use I.T-based models or simulations to explore aspects of real and imaginary situations.

Indeed, computer-based explorations and interactive stories are excellent stimulations for the development of speaking and listening skills.

However, it should be pointed out that the programme has its own problems, namely:

- Most classroom teachers lack the training to use even simple programmes;

- The cost of developing quality programmes is high;
- Today's computer programmes are not yet intelligent enough to be truly interactive.

Thus, these factors continue to limit the usefulness of computers in language teaching.

Integrative CALL: The Internet

This system allows asynchronous (delayed) and synchronous (real time) communication. There are many advantages to using the internet in CALL. These are:

- Communication is direct, inexpensive and convenient.
- It allows one-to-many communication.
- Using the World Wide Web, students can search through millions of files, for example, newspaper, radio broadcasts, book excerpts.
- It facilitates collaborative writing since it allows users to share messages.

Teachers, who are willing no matter their own level of proficiency, can find some use for computers in their language classes. Whether they employ it as a tutor, stimulus or tool, this technology would be put to good use in any language learning context.

Thus, the effectiveness of Computer Assisted Language Learning resides in how the computer is put to use. The right use of computers can benefit learners. Good pedagogy can enrich educational programmes and the learning opportunities for students. Teachers can tailor software programmes either by inserting new texts or by modifying activities. Authoring can also allow teachers to design their own multimedia courses.

In order for CALL to be effective, the teacher should be computer literate and compatible with the use of a computer in his/her subject of specialisation. It should be noted that E-learning should not lead to the teacher's abrogation of duty by turning the computer into a fully fledged teacher. The teacher should remain the director and controller of all the activities in his/her class, assisted by the computer. This research, therefore, sought to do an experimental study in the use of computers for the teaching of composition writing at Prince Edward School in Harare, Zimbabwe.

Below are the findings of the study. These findings are responses from interview questions asked to teachers, document analysis and responses from questionnaires administered to teachers.

Research Findings

Findings from interviews: Interview with the school administrator, the deputy head.

The deputy head of the school was interviewed in order to find out how well the school administration supports computer assisted learning at the school. The following five questions were asked,

1. What policies are in place for computer use?
2. Who is directly responsible for computer services?
3. Are you convinced of the usefulness of computers as a learning and teaching tool?
4. Are teachers adequately prepared for using CALL materials?
5. Do you think computers can replace the teacher at all?

The following responses were obtained from the deputy head:

In terms of policy, it was established that all pupils are required to take computer appreciation lessons. Some classes go on to sit public examinations in Computer Science. Thus, it is up to the individual subject teachers to apply specific skills in computer use according to their needs.

On question 2, the deputy head said there is a director for computers. This means that teachers and students can work with the director to make use of computer skills to develop their teaching and learning of composition writing by computer.

On question 3, the deputy head said he was aware of the usefulness of computers as a learning and teaching tool, and he confirmed that teachers were in the process of being taught basic computer skills. From this response it could be deduced that there is a gap between policy and implementation. It appears teachers were still not computer literate and, therefore, were still handicapped in lesson delivery through computers.

In question 4 which sought to find the availability of computers, the deputy head said that all departments had a computer or two. From the deputy head's response the computers are fairly adequate considering that the English department has nine teachers. On the last question, 5, the deputy head said that computers cannot replace teachers because pupils and teachers are still learning the skills for using them.

Findings from Document Analysis

Teaching documents are important tools which teachers use in their lesson delivery. These documents are vital to the researcher in order for one to find out what happens in the classroom. A scheme book, for example, is one of such important documents. This document articulates what is going to be taught and how it is going to be taught over a term, for example. Therefore, the schemes of work were analysed in order to find out if they reflected the use of computers in teachers' lessons. The following phenomenon emerged:

Level taught, topics and strategies

a) 'A' Level

i) General Paper

Some of the topics dealt with facts and opinions, for instance, they looked at the constitutional commission. The writing tasks were also based on facts and opinions as a topic. Specialist vocabulary was also provided. Discursive topics, such as "Demos are acceptable, even admirable, provided they are not accompanied by violence;" and "The environment is being harmed more by human activity rather than natural disasters," were done. Tasks done dealt with the choosing and planning of compositions from past examination papers.

b) 'O' Level

Note-writing featured prominently, and it is a skill being taught at Prince Edward. For example, in 2 classes there was note writing on characterisation. Most of the writing was based on the literary text current being studied, namely, *Waiting for the Rain* by Charles Mungoshi, a Zimbabwean writer. At Form 3 students were writing humorous articles based on textbook material. They also wrote reports on given notes and guided letter writing is prominent. One teacher had a wide variety of essay topics. These included situational essays, reports, letters and articles. The situational compositions were a good

selection. The guided writing included friendly letters and replies to original letters. There was specific instruction on the letter format.

Descriptions of past events were written. Poems were also written, for example, one was based on sounds around the school and then students would write a poem from that. There was an examination revision exercise which included paragraph writing, sentence construction and correction of examination errors. Writing of introductions was also done.

c) **Zimbabwe Junior Certificate**

Narratives such as, 'Pretend you are lost,' and 'The music concert that I attended,' were given. Guided compositions are also taught from a book. An effort is made to train students in the use of topic sentence, developers and paragraph writing. The teacher provides information in some cases. Writing of reports is also prominent at this level. Both the informal and formal letters were taught.

Time Allocation

Some classes have 6 periods for English per week, while others have 5 periods across the form levels. The lesson duration also varies in that some are 30 minutes long while others are 35 minutes long. A good amount of time is spent on composition writing and one can see that, generally, composition writing is not a neglected skill. How well it is done is something else.

Sources of composition topics

It was observed that in the documents, preparation for composition writing was done without taking note of the presence of computers. Everything was done in the traditional way without use of computers. Composition topics are drawn from

- a) Textbooks;
- b) literature texts;
- c) teacher's suggestions;
- d) civic education (especially at 'A' level);
- e) comprehension passages.

There seems to be a variety of topics at all the three form levels. However, one needs not to be an expert to see that there is no link between the teaching of composition and computer use. The teaching continues to use chalk and talk.

In addition to document analysis, a questionnaire was administered to English teachers.

Findings from teacher questionnaire

The teacher questionnaire sought information about teachers' personal language teaching and learning experience, their competence in the use of computers and whether they had ever used computers in English language teaching.

On the question of competence in the use of computers, five respondents indicated that they were comfortable using computers as a tool in teaching. The other five indicated that they were not.

On whether they had ever used computers in English language teaching, only one respondent answered in the affirmative while seven respondents indicated that they had never used them. Two respondents did not answer the question. The respondent who uses computers indicated that she uses them in oral practice and composition. It is clear from the foregoing that there is minimal use of computers in the teaching of English language at school.

Question two sought information about teachers' beliefs about the benefits of using computer systems for language learning. The following are the benefits for a teacher in using computer systems, as listed below;

- Enhances the learning experience through exposure, at a low cost;
- Might be of benefit if it relieves marking loads; helps in vocabulary, syntax and parts of speech;
- Less work for the teacher;
- Allows pupils of different abilities to work together;
- Offers a wide range of guides on essay writing;

- One gets a sample of some of the best works in English, world over;
- Moving with time in technology.

As can be seen from the above, the respondents believe that there are many benefits to be accrued through using computer systems for language learning. On whether they found it possible to teach composition writing effectively through the computer, four respondents answered in the affirmative, five did not commit themselves and one indicated NO.

The respondents who did not commit themselves either indicated N/A or left the section blank. That so many respondents did not commit themselves is not surprising, given that only one indicated that she used computers in English language teaching.

Question three sought information on the elements of language learning that can best be taught through computers, as well as problems experienced in teaching composition through computers. Three respondents either left the section blank or indicated N/A. The following are the elements of language learning that some said can best be taught through computers, as indicated by the seven respondents who answered the question:

Spelling;

Sentence construction;

Grammar;

Composition writing;

Essay writing;

Punctuation;

Summary writing;

Word classes, formations;

Comprehension exercises;

Discourse, registers.

The following are the problems experienced in teaching compositions through computers, as listed by the respondents:

- May not conform to syllabi;
- No communication between student and teacher;
- Might cramp the natural flow of words if the learner felt obliged to follow a programme.

Question four sought information on the availability of computer-assisted language learning (CALL) materials and the CALL software which they were using at the time of research. Eight respondents either indicated N/A or left the section blank. One respondent indicated that she was using lexis-nexus dictionary and butterworths software. Another respondent indicated that she used internet explorer; Microsoft word. Both respondents indicated that they found the software useful.

As can be seen from the above, only two respondents out of ten (20%) indicated that at the time of this research they were using CALL software and that they found it useful. Available CALL materials appeared to be greatly underutilised. Only twenty percent (20%) of the staff that could be using it were doing so.

The questions which sought information on considerations that guide choice of CALL materials, successes, usefulness and problems with CALL on composition did not elicit informative responses from all the respondents. Four respondents indicated N/A under the section concerned, four left the section blank, one indicated nil and one just wrote 'can't say'.

One might infer from the above that there is not much use of CALL materials in composition teaching at Prince Edward School in Harare, Zimbabwe, hence, the lack of informative responses to questions that required a comprehensive evaluation of CALL implementation.

Findings from Interviews

A group interview was held with teachers in the English department to find out:

- whether there was a programme for training teachers without computer skills in the school;
- teachers' views on the benefits of using computers as a teaching aid;
- Whether they encountered any problems in using computers in teaching composition.

The responses were that a programme was there for training teachers without computer skills in the school and that computers represented an advantage for the improvement of the teaching and learning of language in the environment. On problems encountered, not much information was gathered as it appeared that little use was made of computers in the teaching of English language at the school.

Recommendations

An unexpected situation emerged at Prince Edward School. The researchers thought they would find teachers and pupils using computers in the learning and teaching of composition but this was not the case, and as a result the study makes the following recommendations:

The teachers should be exposed to general computer use and then subject specific computer use in order for them to teach composition through computers. At the moment, there is a gap between computer use and the standing school policy. It would be helpful for the administrators, teachers and the director of computers to form a tripartite forum to brainstorm and close this gap which currently exists. The school administration should find a way of dispelling the techno-phobic attitude which is currently gripping teachers. This can be done by training teachers in small groups and if funds permit, installing computer facilities in a number of offices where such groups can have more practice.

There seems to be an over presence of computers which are not used and as a result the teachers resort to their traditional way of teaching as though computers do not exist. This is so largely because of conservatism among teachers as they are not computer literate at the moment. Training teachers in small groups as recommended above would help solve this problem.

Courses by language specialists on the use of computers in teaching language especially composition are vital to awaken the teachers on the importance of teaching composition through computers. The software on how to teach composition through computers should be installed in the teachers' computers in the hope that teachers as experts in the subject would modify or adapt the programmes to suit what they want to teach. In the long run teachers are expected to develop their own software.

This situation at Prince Edward might be similar to many schools around Zimbabwe that benefited from the President of Zimbabwe's computer donation programme. Therefore, computers in such schools might be gathering dust. If computer courses for teachers are not instituted as a matter of urgency in all schools, all the effort and expense put to this programme might come to nothing. Further research needs to be carried out to determine the number of schools that are using computers in the teaching and learning of their different subject areas. The results could be stunning!

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Appendix A**School Administrator Questionnaire**

1. What policies are in place for computer use?
2. Who is directly responsible for computer service?
3. Are you convinced of the usefulness of computers as learning and teaching tools?
4. Are teachers adequately prepared for using CALL materials?
5. Do you think a computer can replace a teacher at all?

Appendix B**Teacher Questionnaire****Personal language teaching and learning experience**

- a) Which is your first language?
- b) Which other language can you speak? (Indicate degree of fluency)
- c) What other subjects are you trained to teach besides English?
- d) How many years have you taught English in this school?
- e) At which level do you usually teach English?
- f) Are you comfortable using computers as a tool in teaching? If yes, where did you receive your computer training?
- g) Would you say you are personally compatible with computers?
- h) Have you ever used computers in English language teaching?
- i) If yes, which aspects in particular? ?
- j) How many times per week do you spend on the listed aspects?

Teachers' beliefs

- a) What are the benefits for a teacher in using computer system for language learning? Please list.
- b) Do you find it possible to teach composition writing effectively through the computer?

The nature of human-computer interface

- a) Would you say the effect of bringing computers into the language classroom is to:
- I. replace teachers?
 - II. maximise their experience?
 - III. both I and II?
- b) identify three elements of language learning that can be best taught through computers?
- c) List any problems experienced in teaching compositions through computers.

Availability of Computer-assisted language learning (CALL) materials

- a) What CALL software are you currently using? ?
- b) Do you find the software useful?
- c) Are you able to create your own software materials?
- d) Give reasons for what ever response you make for composition teaching.

Considerations

- a) What considerations guide your choice of CALL materials for composition teaching? Please list these in their order of importance.

Learning and teaching aspects of English as a Second Language

- a) Do you find CALL materials adaptable to the current approaches to composition teaching?

Success, usefulness, problems with Call

- a) What would you say is the key to success in using CALL material in composition teaching?

- b) What problems have you experienced in using computers for composition teaching with:
- I. the materials themselves?
 - II. the students?