ICT and English Language Teaching and Learning in Cameroonian Secondary Schools

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Abstract

This work investigates ICTs and its crucial role in ameliorating knowledge acquisition in general and enhancing English Language mastering in particular. There is an assessment of the level of applicability of the level of ICT tools in facilitating English language teaching/learning amongst final year students in Anglophone secondary schools in Cameroon. It further emphasises the use of ICTs and heightens awareness of the crucial role ICTs play in ameliorating learning in general and language in particular. Findings in this study reveal that ICTs are not employed in our school system to enhance language learning. The work concludes by recommending the implementation and use of ICT tools in the fostering of English language teaching/learning.

Index terms— ICT, english language, teaching/learning, assessment, proficiency.

1 Introduction

he role of ICT (Information Communication Technology) in the 21 st Century educational set up cannot be overemphasized. Its relevance in the teaching/learning process in general is crucial and its application in the teaching and learning of English is imperative. This is essentially associated with the acquisition and proficiency of the language at different levels and for different purposes.

English language has assumed a hegemonic role in the global village world as it is spoken in all the continents. A mastery of the language guarantees communication openings to every part of the globe. It is one of the official languages of Cameroon and constitutes the medium of instruction in the Anglophone subsystem of education. Therefore it is of great necessity to address problems linked to the mastery of English Language at various levels.

The multilingual nature of Cameroon with the need for everyone to function in at least two or three languages whereby English constitutes a second language to Anglophones; the pivotal role of the language as a medium of instruction and the gross lack of mastery of the language, contribute to learning problems associated with low proficiency in this medium of instruction.

These problems have increased over the years and have resulted to the cumulative deficiencies evident in our educational system. In a bid to curb and correct this situation, there is a dire need to foster and ameliorate the teaching and learning of English language. To this effect, various methods have been sought and implemented with different degrees of successes. From this backdrop therefore, with the advent of the ICT, there is every reason to investigate its use in the teaching of English language in our secondary schools.

Hartoyo (2010) opines, and strongly too, that the integration of ICT in the field of language learning is inevitable. He further states that, the ICT and language learning are two aspects which support each other like two sides of a coin. This is also the stand point of many experts and educational practitioners who strongly advocate for the integration of ICT in language learning. They inform that, the integration of ICT will improve efficiency and effectiveness of learning and enhance the quality of understanding and mastery of the language.

2   a) What is Ict?

Simply put, ICT include any product which will store, retrieve, manipulate, transmit or receive information electronically in a digital form. These include personal computers, digital television, email, robots, etc.

3   b) Advantages of Ict in Language Learning

From research, it is suggested that incorporating ICT into the English curriculum can improve writing and reading skills, develop speaking and listening skills and support collaboration, creativity, independent learning and reflection **??**Becta, 2003a **??** Becta, 2003b **??** VTC, 2003 **??**cited in Becta 2005).

Furthermore, as an interactive and collaborative medium, ICT gives students the opportunity to easily share responses, composures and publications as well as the avenue to explore the language of texts more According to Herington ICT has several advantages ranging from facilitating exposure to authentic language to providing access to wider sources of informational varieties of language. It also creates opportunities for people to communicate world-wide and allows for a learner-centred approach in the teaching, learning business. It enhances development of learners' autonomy and creates avenue for people to get information and communicate with each other in a wider range. On a more specific note, in the English language classroom ICT address key outcomes of the syllables, and allows students to become competent users as well as consumers in English.

creatively and to develop as efficient and fluent speakers, great writers and focused readers for an ever widening range of purposes and audiences. Summarily, ICT can enable students to: ? Access information and respond to a widening range of texts.

? Organise and present information in a variety of forms ? Broaden the range of audiences for their work.

? Compose a widening range of texts for a broad range of purposes.

4   ? Compose for real audiences

? Support in the choice of genre for audience and purpose.

? Identify key characteristics and features of texts.

? Develop understanding of language and critical literacy , ICT in curriculum.)

Specifically, dealing with ICT and the teaching and learning of English in Information Communication Technology Assisted Language Learning (ICTALL) which includes computers, the internet and electronic delivery systems such as radios, televisions, and projectors, among others, as is widely used in today's educational field, teaching and learning no longer depend exclusively on printed materials. Multiple resources are abundant on the Internet, and knowledge can be acquired through video clips, audio sounds, and visual presentation just to name a few. Current research has indicated that ICTALL insist in transforming a teaching environment into a learner centred one **??**Castro Sanchez and Alleman, 2011) since learners are actively involved in the learning processes in ICT classrooms, they are authorized by the teacher to make decisions, plans and so forth (Lu, Hou and Huang 2010). ICTALL therefore provides both learners and instructors with more educational affordances and possibilities.

From the foregoing, it is evident that the range and coverage of ICT is broad or wide, and very relevant in knowledge acquisition in general and specifically for our English language proficiency quest.

5   c) Theoritical Framework

The theoretical frame work of this study is based on some learning theories which have been integrated and applied to information and Communication Technology Assisted Language Learning. These include; the behaviourist, the cognitive and the constructivist theories. Each of these theories will be explained in turn and associated to ICT assisted language learning. In the Behaviourist theory, a central premise of behaviourism as popularized by both the Russian and American psychologists, Ivan Pavlov and B.F. Skinner respectively is the notion of learning by conditioning.

The idea is that, it is possible to explain human behaviour in terms of responses to stimuli and that is dependent on the nature of the stimulus, varying kinds of human responses can be provoked.

If a behaviour is positive, it is rewarded hence it will recur and be reinforced. On the other hand, if a behaviour is not positive, it is punished or not rewarded. Hence, it is discarded. Behaviourist theory thus came to explain learning in terms of operant conditioning. It is believed that language is acquired through principles of conditioning, including association, imitation and reinforcement. Thus language acquisition is viewed as a cognitive behaviour. Therefore, children learn words by associating sounds with objects, actions, and events. They also learn words and syntax by imitating others. Adults enable children to learn words and syntax by reinforcing correct speech. The use of ICTs fit into this theory in that the computer and other ICT tools provide avenue for imitation repetition which enhances acquisition and proficiency.

In other words, repeated drills can be carried out on the computer whereby the machine does not get bored or tired with presenting the same material over and over again.

A computer can present such material on an individualised basis, allowing students to proceed at their own pace and freeing up class time for other activities **??**Warchauer 1996).

As far as cognitive theory is concerned, as stated by Piaget, Cognitive development results from the interactions that children have with their physical and social environments. As a child explores his world, eventually they

begin to discover that they hold a perspective of the world uniquely of their own. Cognitivist focuses on the inner mental activities involving the mental processes such as thinking, memory, knowing, and problem-solving needed to be explored.

6   (G)

Piaget saw cognitive development as essentially a process of maturation, within which genetics and experience interact. The developing mind is viewed as constantly seeking equilibration, i.e. a balance between what is known and what is currently being experienced. This accomplished by the complimentary processes of assimilation and accommodation. Put simply, assimilation is the process by which incoming information is changed or modified in our minds so that we can fit it in with what we already know. Accommodation, on the other hand, is the process by which we modify what we already know to take into account new information. Working in conjunction, these two processes contribute to what Piaget terms the central process of cognitive adaptation.

In ICTALL terms, the theories of cognitive psychologists can be seen to inform software following the "revelatory" paradigm of discovery-based and problem-solving oriented learning and stimulation. The Theories of cognitive thinking allow us to understand the impact of applications and tools which help us process information, engage them in abstract thinking, allow them to make the knowledge and help them to build classificatory systems. Generic software such as word processors, databases, spreadsheets, falls into this category. There is some consensus that these applications are liberating and empower the user to engage in cognitive and creative thinking.

Cognitivist learning can be acquired through listening, watching, touching, reading and then processing and remembering the information. Therefore, there is various range of software which can be used for this learning theory.

With regards to the Constructivist theory, constructivism refers to the epistemological consideration focusing exclusively on the meaningmaking activity of the individual mind. It is a theory to guide understanding of how students acquire critical questioning skills. It can become a guiding theoretical foundation and provide a theory of cognitive growth and learning that can be applied to several learning goals. In constructivist learning environment, the role of the teacher shifts from being a source of knowledge to facilitating learning.

Constructivism or Constructivist learning is based on students' active participation in problem-solving and critical thinking regarding a learning activity which they find relevant and engaging. They are "constructing" their own knowledge by testing ideas and approaches based on their prior knowledge and experience, applying these to a new situation, and integrating the new knowledge gained with pre-existing intellectual constructs.

The term refers to the idea that learners construct knowledge for themselves. Each learner individually (and socially) constructs meaning as he or she learns. In ICT usage, the web is where constructivist learning can take place. It provides access to rich source of information, encourages meaningful interactions with contents and brings people together to challenge support or respond to each other.

The essence of this study is to carry out an assessment of the level of applicability and effectiveness of the use of ICTALL in the teaching/learning of English language in our secondary schools. It also emphasizes and heightens awareness of the relevance of ICTs in the fostering of English language proficiency and consequently, knowledge acquisition in general. The research population for this study comprised 1000 form five students and forty English language teachers drawn from ten Secondary schools, five each from the North West and South West Regions which constitute the Anglophone regions of Cameroon. The details of the population and schools for this study are presented on table 1 below.

7   School

No of Students No of English Form 5 English teachers TOTAL 3465/1000 40 ALL From 3,465 Form five students in ten schools used for this study, 1000 (200 students each from the different schools) were selected, representing 28.8% using the simple random sampling technique and given questionnaires to fill which was later analysed and used for this study. Also, forty questionnaires were given to forty form five teachers of all the schools under study which were also filled and analysed in this study. Form five students were selected because they were in the final class of the Ordinary Level and were set for GCE Ordinary Level examinations in English language which have experienced a decline in performance for a while.

The schools selected here were also equipped with multimedia centre facilities which could be exploited for English language teaching/learning purposes. It is important to note here that, apart from GBHS Mbengwi's multimedia centre which was established by MTN Cameroon, the other centres had been established by the government. There were interviews with the Heads or Principals of these institutions as well as observations in these schools. Two Regional Inspectors from the North West and South West for English were interviewed as well as two of the technical inspectors charged with the responsibility of running of the multimedia centres. ? Whether they encouraged students to make research using ICT ? The aspects of English language that could best be taught using ICT ? The difficulties faced in teaching English language using ICTs II.

8   Results and Discussions

Students' interest in English language and strategies used by teachers in teaching From the above table, it is evident that most students have a very high interest level in English language. This is exemplified by 677 students out of 1000 representing 67.7% indicating a high interest level; 301 students out of 1000 representing 30.1% indicating a moderate level and just 22 students out of 1000 representing 2.2% indicating a low level of interest in English language. This can be explained by the fact that English language is one of the most determining factors or criteria for admission into the University and other High institutions of learning. The Anglophone Universities of Buea and Bamenda do not admit any Anglophone student without a pass mark in English language GCE O'level examination.

Since the students are very interested in English language, there is every need for the teachers to consider the integration of ICTs in the teaching of English. This will go a long way to enhance their performance in the subject.

9   Strategies used by teachers in teaching English

When asked the different strategies used in teaching English language to the learners, the most recurrent strategies stated by the teachers included the following: relating subject matter of lesson to real life situations, relating the lesson to performance outcomes, constant use of teaching aids and dramatizing. Other strategies also included language games, exposes, dialogue, interaction, repetition and the use of text books, journals and charts. It is obvious from this presentation that no teacher cited the use of ICTs as a strategy for teaching English language. To confirm the fact that teachers did not generally employ ICTs in teaching English the next question requested the extent of the use of ICTALL by Teachers and Students in the teaching and learning of English language.

Therefore, questions were asked to teachers to understand whether or not they use ICTALL in teaching English Language, while on the part of the students, they were asked if their teachers use computers or other ICT tool when teaching them. Apart from two teachers from GBHS Mbengwi, no other teacher cited the use of ICT tool in teaching English language.

On the part of the students, we have the following response represented on table 3 below. interviews were conducted amongst students to clarify this point. It was discovered that some teachers actually used dictionaries on their smart phones to handle various vocabulary items like spelling, pronunciation of words and grammatical aspects like tenses. In fact, it was also revealed that students were asked by teachers to "Google" up various texts for comprehension exercises and other grammatical analysis. The teachers who used this method didn't report because as far as they were concerned, they saw this as some kind of passive activity and they didn't probably consider the keyboard on the phone as ICT gadget. The student on their part took this very seriously and for them, it was quite exciting. To follow up on this, the next question was on the frequency of the teachers' use of ICTs to teach. The response reported here are those of the students because, apart from two teachers of GBHS Mbengwi, the other teachers indicated that they did not use ICTs to teach. Further investigation revealed that the MTN Cameroon (A telecommunication network company) donated a computer laboratory with twenty Personal Computers to GBHS Mbengwi. This got everyone excited and keen to learn to maximize the use of the computers. Moreover, during a competition organized to assess ICTs Operators from the different schools in the North West Region this year in Bamenda by MTN Cameroon, the best Operator came from GBHS Mbengwi. This to an extent, explains the application of computers by teachers of this institution.

The next set of questions investigated the use of Cyber Space by students in general and the work they undertook in the internet. This is indicative of the fact that if ICTs were formally introduced for teaching in general and English Language in particular, a majority of the students will embrace it with relative ease. The next question was to find out the kind of work students engage in when they use Cyber Space. The activities will be presented and given values in numbers to facilitate presentation on the table. From table 6 above, a total population of 400 students representing 40% use cyber space to navigate Yahoo Messenger and Face book while 206 students book and83 students representing 8.3% use the internet to navigate Yahoo messenger. This shows that up to 68.9% of the total population use cyber space for activities other than class assignment. There are just about 12% of the students who use cyber space who actually engage in class assignment and research. This situation, calls for reorientation such that more students should be counselled and helped to actually use Cyber Space for class assignments and research which will be much more beneficial for their progress.

The next question looked at the use of other technologies for research apart from Computers. It is obvious from table 7 that various gadgets are used for research. Interviews indicated that many students enjoy using various gadgets for studies.

The next question dealt with difficulties faced by teachers and students when using ICTs gadget in the teaching and learning of English Language. When asked the difficulties, teachers and students faced in using ICTSLL in the teaching and learning process of English language, the teachers gave the following responses: low levels of computer literacy by teachers, slow connectivity, constant power failure, lack of trained ICT teachers, unavailability of computers, lack of electricity in classes, limited computers to so many students, difficulties in usage by physically challenged and lack of gadgets.

The difficulties faced by the students included; low level of computer literacy, problems with downloading documents, not knowing important websites, slow typing speed etc. These difficulties are very obvious since students are not even taught using ICTALL. If they were taught using these new technologies, obviously this

will improve on their technology skills but nevertheless, I think if they were well trained on how to effectively use ICTALL, these problems will be solved. In any case, the students indicated that they also faced problems when using the internet for research. These problems ranged from detailed information not given on some topics, difficulty with access to the computer room, difficulty with reading on computer/phone screens, distractions from some websites, difficulty in downloading documents, internet packages are expensive, lack of computer skills, slow internet speed, to slow typing speed.

10   a) Analysis of Participant Observation and Interviews

Interviews conducted with various stakeholders generally point to the fact that ICTs were not utilised in teaching English language. The pedagogic inspectors indicated that ICT gadgets were very expensive to acquire and moreover, there was no time allocated in the time table to adequately use the method and the skim of work did not permit teachers to employ the ICTs. They further explained that the large classrooms and the limited gadgets did not envisage the use of ICTs. The technical inspectors complained that some of the gadgets were bad due to lack of maintenance. They complained that no motivation was provided to those who managed the centres and there were no replacements of damaged gadgets. On the other hand, students generally indicated that they would enjoy learning English language with the integration of ICTs. A good number of them indicated that, it would be quite exciting and they also believed that it would facilitate their understanding and proficiency in the different skills of listening, speaking, reading and writing of English language.

III.

11   Recommendations

Throughout this study, we have been able to understand the vital place of English language acquisition. This is a pointer to the fact that enormous pedagogical benefits could accrue with the reinforcement of strategies that enhance the acquisition of English language skills. Thus, the following recommendations have therefore been made to the following groups of people. Marshall and Rossman define observation as "the systematic description of events, behaviours, and artefacts in the social setting chosen for study." Observation enables the researcher to describe existing situations using the five senses, providing a "written photograph" of the situation under study. It connects the researcher to the most basic of human experiences, discovering through immersion and participation the how and why of human behaviour in a particular context. An observation guide was used to help or guide in assessing the use of ITCs in the teaching and learning process of English language in the different schools investigated. From what was observed, little or no attention was generally paid on the use of ICTs in the teaching and learning process. English language is not generally taught using ICTs tools. The traditional methods are highly used which brings about passive participation of students and the teacher assume the position of sole owner of knowledge. representing 20.6% use cyber space to do only face a) To The Government ? The government should train and retain teachers on how to use ICT devices so as to facilitate access to a variety of teaching/learning techniques.

? The government should put in place English language laboratories and library centres with ICT devices in schools as well as ensure that they contain fast network and fast connectivity.

? The government should also ensure that there should be electricity in all classes because sometimes a teacher might want to use a computer but will not find electricity in the class.

? The government should construct and equip ICT centres in all schools even those in remote areas so as to give students all over the country an equal opportunity to use ICTs. It should ensure that, these centres have enough computers for the students and even teachers. That is, one student per computer.

12   b) To Curriculum Designers

? The curriculum designers should implement Information and Communication Technology as a compulsory school subject at all levels of education, especially at the nursery and primary levels where the foundation of knowledge begins and needs to be solid.

13   c) To Educational Authorities

? Educational authorities should organise refresh course and pedagogic seminars on the importance of Information and Communication Technology in the teaching and learning process of English language. These seminars should be organised to effectively demonstrate how ICTs could be managed and adapted to suit our local realities.

? Educational authorities should also include in school time tables periods for training students on how to use ICTs. Show them important websites where they can carry out their school research and educate them on the importance of ICT in learning not only English language but other school subjects. Thus they should make the use and mastery of ICT tools compulsory to each and every students as well as teachers.

? Educational authorities should encourage text book writers to upload their books on the internet. This will go a long way to encourage and motivate students to be visiting the cyber space.

14   d) To Teachers

? Teachers should diversify teaching and include ICT tools in their teaching aids. This will go a long way to reduce their work load transmitting and communicating knowledge. Teachers are facilitators and should therefore, organise a healthy teaching and learning environment. They should attend pedagogic seminars so as to improve on their teaching skills.

15   e) To Learners

? It is high time learners embrace the offer of this new technology, "the cyber space" as the learner through this or through connected computers if they have, will assume more responsibility over their learning process otherwise known as the constructivist approach where the model is studentcentred with end results also being positive.

16   f) To Parents

? Parents should endeavour to provide their children with money to meet up with the demands of the cyber space education. This is because the cyber space has a lot to offer. They should also consider the need to provide computers for their children, they as well as endeavour to provide them with connectivity so that they can carry out their research without any major problems. From time to time they should also check whether these children are using educational websites.

IV.

17   Conclusion

This study has proven that, Information and Communication Technology Assisted Language Learning (ICTALL) can positively influence students' performance if being used effectively by; teachers in the teaching/learning process of English language. The findings thus imply that, Information and Communication Technology Assisted Learning has come to be a solution to academic problems and therefore needs to be fully implemented as far as the teaching and learning of English language is concerned. We believe that if the educational system has a goal to better prepare its citizens for future challenges, it will have to favour an in depth, daily and regular integration of Information and Communication Technology Assisted Language Learning which will be very profitable not only to teachers and students of English language, but to the society as a whole as these students are the leaders of tomorrow and need to be trained using the best technologies available. Thus Information and Communication Technology Assisted Language Learning which has new, inviting, promising and diversified possibilities are indispensable in the teaching/learning process, it is a valuable tool to enhance teaching and learning.

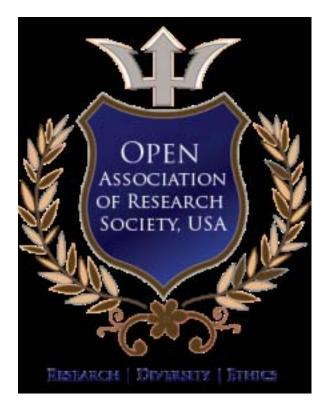Figure 1:

2

Interest level	No of Students	% per level
High	677	67.7%
Moderate	301	30.1%
Low	22	2.2%
Total	1000	100%

Figure 2: Table 2 :

3

From table 3 above, 967 students representing 96.7% of the total number of students indicated that no teacher used ICTs to teach English language. However, 33 students representing 3.3% (with 13 from schools in the South West region and 20 from schools in the North West Region) affirmed the use of ICTs in the teaching of English by teachers.
This was controversial with the teachers' responses because only two teachers from GBHS Mbengwi indicated the use of ICTs for teaching English language. As a result of this controversy, some

Figure 3: Table 3 :

4

School	Always	Sometimes	Never
GHS Tiko	0	2	348
GBHS Limbe	0	3	367
BGS Molyko (Buea)	0	5	475
GBHS Buea	0	1	249
CCAS Kumba	0	2	310
GBHS Bamenda	0	5	498
GBHS Down Town	0	3	367
GBHS Atiela	0	1	299
GBHS Ndop	0	2	226
GBHS Mbengwi	2	7	293
TOTAL	2	31	967

From table 4 above, it is realized as indicated that only two teachers from GBHS Mbengwi were consistent with the employment of ICT gadgets to teach English Language. 31 teachers sometimes employed Computers and 967 never employed computers or any other ICT tool.

Figure 4: Table 4 :

5

Use of Cyber Space	Population Number	Percentage of Total Population
Always	350	35%
Sometimes	556	55.6%
Never	94	9.4%
Total	1000	100%

From table 5 above it is evident that many
students are exposed to the internet and actually use it.
350 students representing 35% of the total population
investigated, use the internet always. 556 students

Figure 5: Table 5 :

6

Different types of Activities	Population	Percentage
1 only	83	8.3%
2 only	206	20.6%
3 only	10	1%
1+2	400	40%
1+2+3	200	20%
2+3	05	0.5%
1+3	02	0.2%

Figure 6: Table 6 :

7

Other Technology	No of Students	Percentage of Total Population
Phone	254	25.4%
Phone + Television	241	24.1%
Phone + Radio	220	22%
Television + Radio	163	16.3%
Television + Phone + Radio	122	12.2%
TOTAL	1000	100%

Figure 7: Table 7

17   CONCLUSION

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