

Perception of Nigerian Students toward the Role of Information and Communication Technology (ICT) in Enhancing Language Learning

Wasila Lawal Gadanya

Department of Languages,
Faculty of Humanities, Northwest University, Kano,
PMB 3220, Kano State, Nigeria.

Abstract

The 21st century has come with rapid advancement of technology. This has brought many changes into various spheres of our lives. ICT plays an important role in ensuring that the needs for these new changes are met. Consequently, many language educators are urged to integrate ICT into their language classes. One of the purpose of this, is for it to serve as a means of creating experiences for enhancing learning. This paper, therefore, tries to find out the perception of students towards the use of ICT in enhancing learning and English as Second Language (ESL) learning in particular. The challenges in using ICT for language learning in Nigeria are also examined. Four out of the 16 institutions existing in Kano state have been randomly selected. Then 140 students have also been randomly selected. A questionnaire is used. The data is analyzed using simple percentage and descriptive analysis. The findings have shown that the respondents believe that ICT can be used to enhance communicative competence and develop more language skills. Some of the challenges for using it in Nigeria are problems of power/electricity failure and of connectivity.

Keywords: perception, learners, ICT, Nigeria, language learning

INTRODUCTION

“The use of computers and the internet no longer need to be positioned in fixed places, mobile technologies allow interaction via text messaging and access to the internet wherever and whenever one wants” (Lim and Oakley, 2013).

It is largely agreed, today, that ICT has become an essentially significant tool to be utilized not only by teachers but also by learners in order to ensure a better and more effective language learning experience. In fact, its correct manipulation in language learning experience can be stimulating and engaging for learners, thereby empowering them to control the experience themselves. However, certain factors may serve as barriers to its effective implementation in the learning (and teaching) process(es). With this in mind, this study attempts to find out the perception of Nigerian students towards its role in enhancing learning in general and language (English) learning in specific. It is also going to unfold the factors affecting its proper utilization in the learning process in Nigeria.

STATEMENT OF THE PROBLEM

In many Nigerian institutions of learning, particularly at the secondary and primary schools levels, the outdated methods of chalk-blackboard teaching and paper-pencil learning still operate. There is no innovation in the teaching and learning processes despite the fact that

today ICT is providing many teaching and learning opportunities that affect learning in many positive ways. This is to say that while other teachers and learners in many countries are already benefitting from this age of technology those in Nigeria are left behind.

PURPOSE

This study examines:

1. The perception of Nigerian students towards the role of ICT in enhancing learning and ESL learning in particular.
2. The factors affecting the use of ICT in the learning process in Nigeria.

RESEARCH QUESTIONS

1. What are the perceptions of Nigerian students towards the role of ICT in enhancing learning and ESL learning in particular?
2. What are the factors affecting proper integration of ICT in the learning process in Nigeria?

SIGNIFICANCE OF THE STUDY

The human aspects of sustainable development depends on people understanding each other, sharing experiences and ideas. Hence, communication is the key to any form of development and this is achieved through language. In most cases development comes not from the effort of

a single person but rather from the combined efforts of many individuals. Language is the only sustainable weapon that can bind people from different nationalities together to work as one in order to achieve many developments. English language, being an international language, is crucial in sustainable development in Nigeria and globally. It is a key factor to unending developments in the area of education, economy, agriculture, technology et cetera. One of the purpose of education is development (technical development and professional enhancement, for example) and education in many countries such as Nigeria can be achieved through English language. This is the reason why in Nigeria, for example, a firm knowledge of English language is an assurance of 'climbing the ladder of success'. In fact it is one of the two subjects (the other being Mathematics) that is made compulsory for every student to pass in the West African School Certificate examination for him/her to be admitted into any Nigerian university and subsequently offers a speed access to employment. Also in the economic sector, for example, English is crucial for economic growth as it can help economists to trade more widely on an international scale. Today, there is an increased need for English language skills not only to students offering English as a course but to others in, for example the banking, film and pharmaceutical industries and even those vocational workers such as electricians, carpenters et cetera. This study may help people from different fields to engage in independently learning the English language through different ICT resources in order to acquire the basic language skills and increase their competence in the language which can lead to sustained developments in various fields and alleviation of poverty.

In language education specifically, the findings of this study are expected to be of relevance to policy makers, curriculum planners, language educators and language learners. This is because it will provide useful insights into the positive (and perhaps, negative) impacts of ICT on language learning.

Hence, the findings can encourage policy makers to include its use in educational policies for improving the quality of education. Curriculum planners can use the findings to plan for its proper integration in the curriculum. To language educators, the study will serve as an eye-opener on the relative influence of ICT in language learning thereby helping them to prepare for its proper implementation in classroom teaching. More importantly, the language (ESL) learners may use it to decide on when, where and how to use it in the learning process.

LITERATURE REVIEW

Potentials of ICT in Enhancing Language Learning

According to Adomi and Kpangban (2010), the adoption and use of ICTs in schools have a positive impacts on teaching, learning and research. It is widely used in the teaching and learning of ESL. English teachers all over the world are trying to involve ICT in their teaching in order to make students' learning more effective and motivating, (Yang, 2001; Young, 2003). This is because ICT has been found to have the potentials of building intrinsic (and extrinsic) motivation and fostering interactivity, (Warschauer and Meskil, 2000; Cannizzaro and Daniella, 2001; Gambrell, 2006; Oakley and Jay, 2008).

The American Psychological Association; APA (2005) has stated that when learners are exposed to learning tasks using ICT, positive attitudes can be triggered towards language learning. This is almost similar to the findings of a study conducted by Norlida and Supyan (2002) which shows that there are positive changes in the students' motivation, anxiety level and confidence when they are exposed to learning via ICT. These might have been due to the fact that ICT provides a variety of learning opportunities, (Yunus, 2007).

Educators, according to Ahmad (2010), recognize its ability to create both independent and collaborative learning environment in which students can learn English more easily. In fact, the finding of a study conducted by Yunus, Salehi and John (2013) has shown that teachers have a positive perception that the use of visual aids in reading literary texts arouse students' interests towards reading such texts. Moreover, ICT is of great importance in improving communication skills for Computer-mediated communication (CMC) provides ESL learners with the opportunities to communicate not only locally (nationally) but globally for they feel less threatened to communicate, (Gonglewski, 2003 in Ngoa, 2005; Tu et al, 2007; Larson, 2008; Sweeny, 2010; Gumbo and Mawire, 2013).

In the area of language learning, Melor (2007) in Yunus et al (2014) has claimed that the internet and the World Wide Web are able to provide supplemental language activities which assist students with learning specific language areas. With regard to this, many studies have shown that ICT can play an important role in helping ESL learners to improve their spelling (Torgeson and Elbourne, 2002), reading (Wise, Ring and Olson, 2000; Fasting and Lyster, 2005; Brooks et al, 2006), writing (Goldberg, Russell and Cook, 2003; Hartley, 2007; Shang, 2007; Handsfield et al, 2009; Rathore, 2011), speaking and listening (Warchauer and Healey, 1998).

Grammar will be learnt subconsciously by ESL learners through the use of ICT (Gumbo and Mawire, 2013). Pronunciation and vocabulary quizzes, games and puzzles in ICT virtual library catalyzes ESL learning by students, (ibid).

These two writers' study has summed it up by showing that with proper utilization of ICT by English language teachers, students' language learning experiences can be enhanced thereby preparing them for successful live careers.

Factors Affecting the Use of ICT in Learning

Many factors affect the use of ICT in the learning (and teaching) process(es) despite its positive impacts on and its potentials in enhancing learning. Various studies have identified numerous factors/reasons that slowed the adoption of ICT in the learning process.

A study conducted by Bozdogan and Ozen (2014) shows that lack of knowledge skills, technical problems and lack of confidence negatively influence its use in teaching and learning. In somewhat similar views, lack of confidence, lack of access to resources, problems of connectivity and affordability are seen as obstacles to proper utilization of ICT in the learning process, (Davis and Danning, 2001; Oliver, Bradley and Boyle, 2007; Bingimlas, 2009). Another study conducted by Khan, Hasan and Clement (2012) on barriers to the introduction of ICT into education in developing countries shows that lack of ICT supported infrastructure, insufficient funds, poor government/school vision and plan, political factors such as lack of interest in allocation of fund to ICT by political leaders, negative teachers' attitude/beliefs are major hindrances to the use of ICT in education. In yet another study conducted in Harare secondary school, lack of clear sense of direction on how to use ICT to enhance the learning of students, inadequate resources and support as well as lack of technological skills among teachers have been identified as barriers to effective integration of ICT in the school, (Ndawi, Thomas and Nyaruwata, 2013).

In Nigeria, Kadiri (2012), in his study, claims that the inherent challenges to the use of ICT in education are due to the fact that educational policy and planning as well as contents have not been reviewed to suit the computerized world of the 21st century. Other factors as identified by him are capacity building and financing. However, the findings of Maduekwe's (2006) study show many barriers affecting the use of ICT in education among which are power factor, which ranked first and attitudinal factors, which ranked least. Other factors arranged according to their rankings arranged to their rankings in the study include: economic, political,

socio-economic, health, training, personal, psychological and cultural.

METHODOLOGY

The study is purposively conducted in Kano state of Nigeria, this being for convenience. Students from tertiary institutions have been selected because of their intellectual maturity and level of exposure to ICT infrastructures due to the time-period they have been in the educational system. There are fourteen (14) higher institutions of learning in the state out of which four (4) are randomly selected. One hundred and forty (140) students ---thirty-five (35) from each institution--- have been randomly selected.

The researcher uses a self- structured questionnaire in order to generate information related to the study. The ratings in the questionnaire are made on a 5-point Likert-type scale. The data collected are analyzed using simple-percentage and description analysis.

DATA PRESENTATION AND ANALYSIS

In this section, strongly agreed and agreed are regarded as simply agreed and strongly disagreed and disagreed are regarded as disagreed in the description of the findings. Likewise very frequently and frequently are presented as frequently and very rarely and rarely as simply rarely.

Table 1: Students' perspectives on the most common use of ICT by learners

ITEM	SA	A	U	D	SD
Communicating with friends, colleagues and others	72 51%	47 34%	- 0%	19 14%	2 1%
Surfing the internet to get information	54 39%	49 35%	- 0%	20 14%	17 12%
Learning (through online courses, reference tool etc)	19 14%	20 15%	6 4%	51 36%	44 31%

Table 1 shows that students perceive the most common use of ICT to be communication. As many as 119 (85%) agreed that ICT is mostly used for communication with only 21 (15%) disagreeing. A good number (103/74%) also agreed that ICT is used for getting information while 37 (26%) disagreed to that. On the contrary, only few students (39/29%) agreed that ICT is commonly used for learning with as much as 95 (67%) having an opposite view while 6 (4%) are undecided. This shows that most students use ICT for communication and searching for information and not for learning as more than 70% use it for the first two purposes with less than 30% using it for the latter.

Table 2: Students’ perspectives on the general impacts of ICT on learning

ITEM	SA	A	U	D	SD
increases motivation	35 25%	88 63%	- 0%	11 8%	6 4%
building learner’s confidence	18 13%	36 26%	42 30%	39 28%	5 4%
promotes independent learning	26 19%	81 58%	12 9%	20 14%	1 1%
increases active involvement of learners	26 19%	83 59%	11 8%	19 14%	1 1%
makes learning convenient/easy for learners	38 27%	80 57%	2 1%	15 11%	5 4%
increases learner’s interest in the learning task	27 19%	91 65%	- 0%	22 16%	- 0%
leads to better academic performances	17 12%	63 45%	20 14%	38 27%	2 1%
makes learning difficult	5 4%	7 5%	5 4%	82 59%	41 29%
makes learning boring	3 2%	9 6%	5 4%	88 63%	35 25%
promotes time-wasting	- 0%	12 9%	8 6%	92 66%	28 20%

The above table shows students’ perspectives on the general impacts of ICT on learning. Most of the respondents have positive perception on the impacts of ICT on learning as follows: 123 (88%), 118(84%), 118 (84%), 109 (78%), 107 (77%), 80(57%) and 54 (39%) have agreed that ICT can increase learners, motivation, makes learning convenient/easy, increases learners’ interest in the learning task, increase active involvement of learners, promotes independent learning, leads to better academic performance and build learners’

confidence respectively. Others disagreed to the above with 42 (30%), 12 (9%), 11 (8%), 2 (1%) and 20 (14%) undecided as regards items number 2,3,4,5 and 7 respectively. On the other the only few that agreed that ICT makes learning difficult, boring and time- wasting constitute only 8/9% but almost all other respondents disagreed with 5 (4%), 5(4%) and 8(6%) undecided respectively. This shows that students believe that ICT has more positive impacts than negative ones.

Table 3: Frequency for the use of ICT in learning

ITEM	VERY FREQUENT	FREQUENT	RARE	VERY RARE	NEVER
searching for word meaning	26 19%	92 66%	12 9%	7 5%	3 2%
practicing vocabulary exercise	15 11%	49 35%	49 35%	16 11%	11 8%
writing blogs in English	2 1%	4 3%	9 6%	30 21%	95 68%
reading news in English/English newspaper	33 24%	41 29%	27 19%	21 15%	18 13%
searching for sample of English essays	11 8%	32 23%	54 39%	43 31%	- 0%
checking for pronunciation of English words	2 1%	16 11%	63 45%	27 19%	32 23%
learning grammar	13 9%	46 33%	49 35%	21 15%	11 8%

The findings in this table show how frequent students use ICT in learning ESL. As many as 118 (85%) respondents use ICT to search for word meaning, 19 (14%) rarely use it for that while 3 (2%) do not use it at all. Those who frequently use it to practice vocabulary exercise constitute 46%, 49 (35%) never use it while 27 (19%) rarely use it for that purpose. Very few (6/4%) frequently use it to write blogs in English, 39 (27%) rarely use it while as many as 95 (68%) never use it for that. 74 (53%), 48 (34%) and 18 (13%) frequently,

rarely and never use ICT for reading news in English/English newspaper respectively. The responses as regard the use of ICT to search for sample of English essay show that the same number (43/31%) frequently and rarely use it for that purpose with as many as 54 (39%) not using it at all to do same. Also, 18 (12%) and 59 (42%) frequently use ICT to learn pronunciation and grammar respectively. However, 90 (64%) and 70 (50%) rarely use it while 32 (23%) and 11 (8%) use it for those purposes accordingly. The table confirmed

what was obtained in table 1, that students do not normally use ICT for learning. In learning ESL, the most common use of ICT is to search for word meaning as more than 80% frequently used it for that purpose. Next to this use, is the use of ICT for reading news in English/English newspaper as a little above 50% used it to do so. However, the use of ICT for all other purposes listed in the table is below average, that is, below 50%.

Table 4: Students’ perspective on the benefits of ICT in learning ESL

ITEM	SA	A	U	D	SD
helps improve both English and ICT skills	24 17%	93 66%	- 0%	17 12%	6 4%
convenience to get information related to English language	31 22%	87 62%	6 4%	13 9%	3 2%
increases motivation towards learning ESL	18 13%	93 66%	- 0%	24 17%	5 4%
builds ESL learners’ confidence in using English to communicate	29 21%	76 54%	12 9%	19 14%	4 3%
improves reading skills	28 20%	67 48%	6 4%	27 19%	12 9%
enhances learners’ English writing ability	33 24%	71 51%	5 4%	29 21%	2 1%
improves ESL learners’ grammar	13 9%	68 49%	4 3%	39 28%	6 4%
develops learners’ listening skills	16 11%	83 59%	6 4%	20 14%	15 11%
increases ESL learners’ English vocabulary	20 14%	92 66%	- 0%	27 19%	1 1%
enhances communicative competence	23 16%	101 72%	- 0%	14 10%	2 1%

Results tabulated in table 4 show that most of the respondents believe that ICT is beneficial in the process of learning ESL. Some of the benefits as indicated by respondents’ agreement are: helps improve both English language and ICT skills (117/83%), convenience to get information related to English language (118/84%), increases motivation towards learning ESL (111/79%), builds ESL learners’ confidence in using English to communicate (105/75%), improves reading skills (95/68%), enhances learners’ English writing ability (104/75%), improves ESL learners’ grammar (81/58%), develops learners’ listening skills (99/70%), increases ESL learners’ English vocabulary knowledge (112/80%), enhances communicative competence (124/88%) respectively. However, the following numbers/percentages disagreed accordingly to the preceding statements: 23 (16%), 16 (11%), 29 (21%), 23 (17%), 39 (28%), 31 (22%), 45 (32%), 35 (25%), 28 (20%) and 16 (11%). Some of the respondents, 6 (4%), 12 (9%), 6(4%), 5 (4%), 4 (3%) and 6 (4%) are undecided as regard to the statements in items 2, 4, 5, 6, 7 and 8 respectively.

Table 5: Students’ perspectives on the factors affecting effective use of ICT in language (ESL) learning

ITEM	SA	A	U	D	SD
lack of access to infrastructure	22 16%	84 60%	- 0%	32 23%	2 1%
lack of/inadequate ICT facilities	19 14%	77 55%	- 0%	42 30%	2 1%
frequent power/electricity interruption	43 31%	86 61%	- 0%	11 8%	- 0%
high cost of ICT facilities	11 8%	67 48%	- 0%	36 26%	26 19%
lack of technology skills	28 20%	63 45%	11 8%	29 21%	9 6%
lack of computer literacy	13 9%	24 17%	15 11%	58 41%	30 21%
problem of (internet) connectivity	31 22%	69 49%	- 0%	35 25%	5 4%
poor ICT policy	16 11%	40 29%	49 35%	26 19%	9 6%
non-integration of ICT into the school curriculum	21 15%	67 48%	8 6%	32 23%	12 9%
lack of proper of guidance from teachers	28 20%	89 64%	- 0%	23 16%	- 0%
lack of learners’ self-motivation and interest	- 0%	18 13%	20 14%	80 57%	22 16%

Table 5 illustrates the percentage of respondents on statements related to their perspectives on the factors affecting effective use of ICT in language learning. Many respondents, 106 (76%) agreed that lack of access to infrastructure in an obstacle to the use of ICT in language learning while 34 (24%) disagreed to that. As many as 96 (69%) are of the view that lack of/inadequate ICT facilities is the factor affecting the use of ICT in language learning while 44 (31%) are of the opposite view. Most of the respondents (129/92%) believe that frequent power/electricity interruption is a problem to the proper utilization of ICT in language learning while only 11 (8%) disagreed. High cost of ICT facilities and lack of technology skills are seen as barriers to effective use of ICT in language learning by 78 (56%) and 91 (65%) respondents respectively while 62 (45%) and 38 (27%) have opposite views accordingly as regard to that. 11 (8%) of them are, however, undecided as to whether lack of technology skill is a factor worth considering. 100 (71%) agreed that problem of internet connectivity is a factor affecting the use of ICT in language learning while only 40 (29%) disagreed. Poor ICT policy, non-integration of ICT into the school curriculum and lack of proper guidance from teachers are agreed, by the respondents, to be barriers to the proper utilization of ICT in language learning by 56 (40%), 88(63%) and 117 (84%) respondents respectively while 35 (25%), 44 (32%) and 23 (16%) disagreed accordingly. 49 (35%) and 8 (6%) are undecided to the first two views above respectively. However, lack of learners’ self-motivation and interest is not regarded as a factor affecting the use of ICT in language learning for as many as 102 (73%) disagreed to the statement while only 18 (13%) agreed with 20 (14%) undecided.

CONCLUSION

The findings of the study has shown that most students do not use ICT for learning, however, a lot of them have positive perceptions that ICT can be used to create new experiences thereby enhancing learning in general and ESL learning in particular. They believe that ICT can be used to increase motivation and interest in learning, promote independent learning and active involvement of learners in the learning process. Moreover, in ESL learning students have a good perception that ICT can enhance communicative competence, develop more language skills such as writing, reading, listening and speaking and also very much develop learners' vocabulary. On the other hand, students have identified many factors that affect the use of ICT in learning. The most prominent ones are frequent power/electricity interruption, lack of proper guidance from teachers, lack of access to infrastructure and problem of internet connectivity. The researcher is of the opinion that these factors might have been the reason why students, in Nigeria, do not use ICT for the purpose of learning. But then, the researcher again poses the question: if these factors are the ones affecting the use of ICT in the learning process why not in communication since most of the respondents use it for the latter purpose? Further studies may explore this.

There should be an integration of ICT into the language classroom. Various projects (including students' centred ones) which integrate English for international communication with education for sustainable development and the use of information technology should be implemented by those with the authority to so. This will help to develop the capacity of people to communicate on individual and cooperative actions that can work toward an economically buoyant and environmentally sound future for all.

REFERENCES

Adomi, E.E. & Kpangba, E., (2010). Application of ICTs in Nigerian Secondary School. *Library Philosophy and Practice* 2010 ISSN 1522-0222

Ahmad, J., (2010).Media Technology and English Language Teaching. In Raval, M. R. (2014). Use of ICT in Language Teaching. In: *International Journal of Research in all Subjects in Multi-language*, vol.2 issue 2

Bingimlas, K. A., (2009). Barriers to the Successful Integration of ICT in Teaching & Learning Environment: A Review of the Literature. *Eurasia Journal of Mathematics, Science and Technology*, 2009, 5 (3) 235-245. Retrieved from <http://www.ejmste.com/v5n3/eurasia-v5n3-bingimlas-on-10/2/2015>

Bozdogan, D. and Ozen, R. (2014). Use of ICT Technologies and Factors Affecting Pre-service ELT Teachers' Perceived ICT Self-efficacy. In: *The Turkish Online Journal of Educational Technology* vol. 13 issue 2. Retrieved from <http://www.toject.net/articles/v13:2/13219.pdf> on 10/2/2015

Brooks, G., Miles, J. Torgeson, C. and Torgeson, D. (2006). Is an Intervention Using Computer Software Effective in Literacy Learning? A Randomized Controlled Trial. *Educational Studies*, 32(1), pp133-143.

Cannizzaro, I. & Danniella, I. (2001). The Rationale: ICT in Language Learning in 6 points. Retrieved from <http://www.itiscannizzaro.net/ianni/articles/rationale.htm> on 11/2/2006

Davis, M. & Danning, K. (2001). Transition to Virtual Learning. *Association for Learning Technology Journal*, 9 (2), pp 64-75.

Fasting, R. B & Lyster, S. H. (2005). The Effects of Computer Technology in Assisting the Development of Literacy in Young Struggling Readers and Spellers. *European Journal of Special Needs Education*, 20(1), pp21-40.

Gambrel, L.B., (2006).Technology and the Engaged Literacy Learner. In McKenna, M.C., Labbo, L., Kieffer, R.D. & Reinking, D. (eds). *International Handbook of Literacy and Technology*, vol.2, pp 289-294. Mahwah, NJ: Lawrence Elbaum and Associates Publishers.

Goldberg, A., Russel, M. & Cook, A., (2003). The Effect of Computers on Students' writing: A Meta-analysis of Studies from 1992-2002. *Journal of Technology, Learning and Assessment*, 2(1). <http://ejournals.bc.edu/ojs/index.php/jtla/article/view/1661/1503>

Gumbo, L. and Mawire, P.R., (2013). Harnessing and Utilizing Information and Communication Technology (ICT) as an Aid in Teaching English as a Second Language (ESL): A Case Study of Midlands State University, (MSU). In: *Research Journal in Engineering and Applied Sciences* 2 (5), pp 402-405

Handsfield, L.J., Dean, T.R. & Cielocha, C.M., (2009). Becoming Critical Consumers and Producers of Text: Teaching Literacy with Web 1.0 and Web 2.0. *The Reading Teacher*, 63(1), pp 40-50

Hartley, J., (2007), Teaching, learning and new technology: A review for teachers for teachers. *British Journal of Educational Technology*, 38(1), 42-62

- Kadiri, G. C., (2012). The Role of Information and Communication Technology in Language Teaching and Learning in University Education. In: the Journal of Liberal studies (JLS) University of Nsukka. Retrieved from [http://jls-online.com/article-content-15\(1\)](http://jls-online.com/article-content-15(1))
- Khan, Md. S. H., Hasan, M. & Clement, C.K., (2012). Barriers to the introduction of ICT into Education in Developing Countries: The Example of Bangladesh. In: *International Journal of Instruction*, 5(2), pp 1-20
- Larson, L. C., (2008). Electronic Reading Workshop: Beyond Books with New Literacies and Instructional Technologies. In: *Journal of Adolesc. Adult., Lit.*, 52(2): 121-131
- Lim, C.P. & Oakley, G., (2013). Information and Communication Technology (ICT) in Primary Education: Opportunities and Supporting Conditions. In: Tay, L. Y. and Lim, C.P. (Eds.) (2013), *Creating Holistic Technology- enhanced Learning Experiences*
- Maduekwe, A. N., (2006). Obstacles to the Use of ICT in Humanities Education in Nigeria: Transforming Practice for Improved Learning. Retrieved from <http://www.google.com.ng/url?sa=t&rct=j&q=&e> on 10/2/2015
- Ndawi, V.E., Thomas, K.A. & Nyaruwata, T. L., (2013). Barriers to Effective Integration of Informal and Communication Technology in Harare Secondary Schools. In: *International Journal of Science and Research (IJSR)*, India Online ISSN2319-7064. Retrieved from <http://www.ijsr.net/archive/v2i9/MDcwOTEzMDQ%3C> on 10/2/2015
- Ngoa, H. T. B., (2005). Advantages of Using Computer Network Technology in Language Teaching. Retrieved from <http://www.englishtime.us/learningenglish/LearningEnglish.aspx> on 24 August,2008
- Norlida, A. & Supyan.H. (2002). E-learning in a Writing Course at Tenaga National University. *TEFL Web Journal*, 1(3). <http://www.teflweb-j.org/v1n3/AliasHussin.htm>
- Oakley, G. & Jay, J. (2008). Making time for reading: factors that influence the success of multi –media reading in the home. *The reading teacher*, 62(3), pp 246-255
- Oliver, M., Bradley, C. & Boyle, T. (2001). The Distributed Development of Quality Courses for a Virtual University. *Association of Learning Technology Journal*, 9(2), pp16-27
- Rathore, B., (2011). Language learning through ICT. *Journal of Technology for ELT 1.1* <<https://sites.google.com/site/journaloftechnologyforelt/archive/january2011/languagelearningthroughict>>
- Shang, H., (2007). An Exploratory Study of E-mail Application on FL Writing Performance. *Computer Assisted Language Learning*, 20(1), pp79-96
- Sweeny, S.M., (2010). Writing for the instant messaging and text messaging generation: using new literacies to support writing instruction. *J. Adolesc. Adult Lit.* 54(2) pp 121-130
- Torgesen,J.K. & Elbourne, D. (2002). A systematic Review and Meta-analysis of the Effectiveness of Information and Communication Technology (ICT) on the teaching of spelling. *Journal of Research in Reading* 125, pp 129-143
- Tu, C.C., Chen, P.C. and Lee, M.Y., (2007). Fostering EFL Learners' Writing Competence through Web-based guided Writing. *WHAMPOA Interdisciplinary Journal*, 53:225-244
- Warchauer, M. & Healey, D., (1998). Computers and Language Learning: An Overview. In: *Language Teaching*, 31:57-71
- Warchauer, M. & Meskill, C., (2000). Technology and Second Language Learning. In J. Rosenthal (eds), *Handbook of Undergraduate Second Language Education*, pp 303-318
- Wise, B., Ring, J. & Olson, R. K., (2000). Individual Differences in Gains from Computer-assisted Remedial Reading. *Journal of Experimental Child Psychology*, 77, 197-235
- Yang, S.C., (2007). A Case Study of Technology-enhanced Historical Inquiry. *Innovations in Education and Teaching International*, 46(2), 237-248
- Young, S.S.C., (2003). Integrating ICT into Second Language Education in a Vocational High School. *Journal of Computer Assisted Learning*, 19: 447-461
- Yunus, M. Md, (2007). Malaysian ESL Teachers' Use of ICT in their Classrooms: Expectations and Realities. *RECALL: The Journal of EUROCALL*. 9 (1), PP 79-95
- Yunus, M. Md, Nordin, N., Salehi, H., Embi, M. A. and Salehi, Z., (2014). Future of ICT as a Pedagogical Tool in ESL Teaching and Learning. In: *Research Journal of Applied Sciences, Engineering Technology*, 7 (4), pp 764-770

Yunus, M. Md., Nordin, N., Salehi, H., Sun, C.H. and Embi, M.A. (2013). Pros and Cons of Using ICT in Teaching ESL Reading and Writing. In: *International Education Studies*, 6 (7)

Yunus, M. Md, Salehi, H. & John, D. S.A., (2013). Using Visual Aids as a Motivational Tool in Enhancing Students' Interest in Reading Literary Text. <http://arxiv.org/ftp/arxiv/papers/1305/1305.6360.pdf>