



Original Article

International Journal of Educational Research and Technology

P-ISSN 0976-4089; E-ISSN 2277-1557

IJERT: Volume 5 [4] December 2014: 19–24

© All Rights Reserved Society of Education, India

ISO 9001: 2008 Certified Organization

Website: www.soeagra.com/ijert.html

Tech-obsessed Learners, Techno-phobic Teachers: Critical Analysis of Certain CALL tools

Ameena Aziz Afshan

Lecturer – Communication and Language Department

Bahrain Training Institute, Isa Town, Bahrain

Email: ameenaaziz@hotmail.com, ameena.zakirhussain@gmail.com

ABSTRACT

Invasion of technology in every aspect of life has changed the dynamics of society. The education sector has not been spared of this “technology invasion” and technology has made its way into the classrooms across the globe. Technology has been adopted in one form or the other by educational institutions. Several multimedia teaching tools have been developed and are currently being used by teachers. However, every development has its limitations; also the usage of technology in classrooms is not fool proof. This study critically analyzes some of the latest and popularly used CALL tools and issues arising out of their usage. The study points out issues related to using popular tools like word processors, forums, WebQuests, emails and blogs. This paper details out major pedagogical and methodological issues like learning styles, skill development, and professional strategies that have to be adopted by both learners and teachers. The study conclusively suggests some measures which can be adopted by teachers who are intellectually and technologically competent. The study indirectly aids in the professional development of teachers and helps in their change of role from “an instructor” to “a facilitator” in digital teaching environment.

Key phrases : digital education, blended learning, teaching tools, digital teaching methodology, integrating technology, role of facilitator.

Received 02.09.2014

Revised 12.10. 2014

Accepted 18.10.2014

How to cite this article: Ameena Aziz Afshan. Tech-obsessed Learners, Techno-phobic Teachers: Critical Analysis of Certain CALL tools. Inter. J. Edu. Res. Technol. 5[4] 2014; 19-24. DOI: 10.15515/ijert.0976-4089.5.4.1924

INTRODUCTION

Technology has become an integral part of the education system. There is no denial that even the traditional teachers find technology useful in many aspects. Present day learners as Marc Prensky (2001) calls them “digital natives” are far more techno friendly and adept in using digital aids than their teachers who are “digital immigrants”. The digital natives readily adapt the latest technology and find online classes or virtual classes as simple as the face-to-face ones. Many of the current and certainly most of the next, generation of students who reach college age are remarkably immersed in technology, far more so than we or other member of any older generation can likely fathom (Brown, 2001). Regardless of the term definition “using technology in classrooms” involves usage of computers in teaching. The major concern of the present day teachers is the question of how, why and when to integrate these technologies within the lesson delivery scope.

Literacy and pedagogy are undergoing a major transition from traditional to digital methodology. The digital educational tools that are used within the classrooms and outside the classrooms have a major impact on literacy development and practices of young learners. Educators and researchers have to determine the following :

- Are these digital tools improving the learning outcomes and aid in achieving the desired objectives?
- Which of these tools are faring well and which of them are not doing so well?
- Are the gaps between “knowledge absorption” and “put-into-practice” increasing or diminishing?
- How can educators contribute to the development of quality and help in customization?

Worldwide Web is inundated with teaching tools, educational websites, educational games, various LMS with complete classroom management features and obviously highlights the benefits of using such tools and sites. The literature on using technology in classrooms has focused on the benefits of using techno aids. Several studies and projects have been undertaken to bring to attention the uniqueness, benefits and easy accessibility of digital tools, Learning Management Systems (LMS) and the availability of teaching material on the internet. Even though the benefits outweigh the shortcomings to a great extent, the

shortcomings however can't be ignored. With the explosion of technology in the classrooms it has become imperative to critically analyze the tools that will be used for teaching. Although there are a few concerns about the learning approach in technology blended classes, there are major technical concerns that need to be addressed.

CRITICAL ANALYSIS OF CALL (Computer Assisted Language Learning) TOOLS

USAGE OF "GOOGLE"

The search engine "Google" has evolved as one of the most sought after information seeking channel – both for learners and educators. Google has several apps like Google Books, Google Translator, Google Scholar etc. Google actually is a storehouse of information and when prompted for a search it displays the links where that particular word / phrase appears maximum number of times. The reliability of prompts, links and suggestions given by Google while searching for vital information needs to be verified.

There have been several instances of weird information generation – this study highlights some of such instances. The classic case is of the usage of word "pussy". The word "pussy" when googled with "safe search turned off" displays extremely inappropriate content that is objectionable in the teaching environment. Similarly the word "turkey" when googled in *Images* category first displays pictures of the bird turkey and only when prompted as "turkey country" displays the pictures of country Turkey. This clarifies that Google contains content, information and resources that are aimed at a global audience irrespective of age and maturity factors. Safe searching ability and responsibility cannot be expected from young learners. Parents, teachers and adults in society have to ensure the appropriateness of content hence the goal of independent learning by using digital tools takes a setback. Specific instructions, guided browsing and supervised learning are required while using Google with young learners.

Google Translator is one major application that is regularly used by L2 digital learners. The young learners who are digitally well equipped often use this handy tool to translate texts, messages, emails and such other information. Google Translate translates word-by-word of the text without considering the grammatical structure while translating. The translated text often lacks orderliness as expected from grammatically correct sentences. Google Translator is useful while checking meanings of words or phrases but translation of an entire piece of text from one language to another generates confusing and misleading content.

USAGE OF FORUMS

Forums traditionally refer to a meeting or medium where opinions and ideas related to a particular topic can be shared with experts and non-experts. The message boards, bulletin boards, blogs, chat rooms are common platforms on the internet for people to start a discussion and share views as threads. In digital learning, forums are commonly used for peer reviewing. Forums act as virtual learning place where a learner can take part in active and discursive learning. The major disadvantage is when a personalized opinion becomes the center of discussion. Forums related to science topics can be supported through proofs but English language learning forums are majorly related to general discussions, current issues and usually contain personal opinions. Moderation of presentation intensity, content vocabulary and language and monitoring of conflicts arising out of contradicting ideas are necessary to control the tone of the forum. Interaction, comments and responses have to be closely monitored especially if they attract many comments, sub-comments and secondary responses. When the activity of interaction and cross commenting begins the teacher is forced to focus on moderation and her / his role as an educator takes a backseat. Teachers are burdened with the additional role of monitoring and moderation, lack of which can lead to things getting out of control.

Cooperation, pair work and teamwork in a good spirit are vital for child's development. Some students are far enthusiastic in playing a lead role and becoming information relay centers in learning groups. Such students hinder the intellectual development of other weaker team mates especially in issues of working with technology. Students strong in technical skills exceed far more than those who lack it.

USAGE OF WEBQUEST

The WebQuest have the basic structure of introduction to the theme, task, process, evaluation and conclusion. They assist in the guided methodology of learning and teaching a particular topic. By using the WebQuest students enjoy reading on computer with colorful and live pictures instead of reading information in black and white from the books. Since all the pictures are easily available excessive usage of WebQuest fails their imagination skills. A student is not given a chance to visualize images in his mind while reading the text. This affects the creativity level and imaginative abilities. The target language is

provided by teachers rather than being explored by the students. Students have to find their way into the intellectual societies and this can be achieved only by independent learning rather than guided learning. Most Web Quest are based on simple activities of matching pictures with related words, identifying activities in the pictures etc. Teachers need to evaluate and design Web Quest which increases the learning levels. The methodology of matching pictures with names and answering simple questions is at the low level of thinking. Teaching should focus on high level thinking order. Most researchers (Zheng et al, 2007) argue that instead of focusing on critical thinking, emphasis could be placed on constructive learning that incorporates critical thinking and knowledge application.

USAGE OF WORDPROCESSOR

Word Processor is the most easily accessible, highly flexible and effectively versatile tool that has replaced the skill of writing on a paper. Learners as well educators are abusing this tool to its maximum potential. With the increase in demand for more flexibility, more tools and options have been incorporated in Word Processor since its evolution. It requires minimum instructions from the user but thoroughly guides the user in every aspect of language usage like spelling errors, grammatical errors, syntactic errors etc.

Learners who use Word Processor have the advantage of revising / editing their work frequently, sharing and seeking opinion from experts and others, and incorporating feedback offered by the reviewers. The final piece of text that is produced by the learners sometimes is far different from their first draft. This change is not limited to language or writing structure but extends to change in ideas, perceptions, expressions and evidences that completely modify the first personally developed draft. Constructivism views learning as a personal, reflective, and transformative process where ideas, experiences, and points of view are processed into something new. In this philosophy, teachers are the facilitators for the students' learning (Sandholtz et al., 1997) but while using the word processor the inbuilt tools suggest grammar correction, spelling correction and word order in a sentence. The entire cycle of using wordprocessor and sharing with peers is an enriching experience of words and opinions but fails the knowledge exploration, knowledge implementation and creative ability of the learner. Expectedly learners who use Word Processor for essay writing score better than those who handwrite their essays.

However, results of studies of the effects of word processing on quality and quantity of writing are mixed (Bangert-Drowns, 1993). Three reviews of research (Bangert-Drowns, 1993; Hawisher, 1989; Snyder, 1993) found that these differences in findings may reflect differences in researchers' choices of types of word processing systems, prior experience and writing ability of students, and types of writing instruction evaluated. Therefore, this study maintains that by using Word Processor the higher order of cognitive learning which emphasizes on critical thinking, problem solving and offering solutions takes a setback with early learners.

USAGE OF WEB APPLICATIONS LIKE WIKIS, BLOGS

Presently, web applications like wikis, blogs and podcasts are extensively used in classrooms as educational tools. Wikipedia is an information centre, more like an encyclopedia, and provides information on almost every topic that one can think of. Although Wikis are a powerful source of information the major issue is the option of collaboration of information by the users. Wikis can be easily edited by users who have access to internet and have basic computer operation skills. With virtually anybody able to alter, edit or otherwise contribute to the collaborative Web pages, it can be problematic to gauge the reliability and accuracy of such resources (Maged, Inocencio & Steve, 2006). Comparatively books in the library are better source of authentic information that learners can lay their hands on.

Wikis and blogs engage the learners' attention by the use of catchy phrases, interesting links and engaging images. They enhance learner's ability of engagement, collaboration and integration but they also limit his ability to implement knowledge / experience based practices and produce critical analysis.

Apart from the tools themselves, there are other factors that need to be considered in digital teaching environment. The study identifies such issues as below:

DOMINANCE OF TECHNOLOGY OVER LEARNING OBJECTIVES

Professional people view computer as "work tool" rather than as "resource of learning". While using computers the focus of teachers and students mainly remains to be the technical know-how and abilities of the user. Concentration on technical skills leads to impeding the learning task rather than enhancing the learning experience. Learning becomes demanding, time consuming and frustrating at times because both teacher and student are learners of technology and further students are also learners of the

projected tasks. The focus should rather remain fixed on to the learning objectives and analysis of content while underplaying the technical ability. The role of teacher is very instrumental in guiding learners through this phase, teachers have to initially master a technical skill before introducing it to the learners. The gap between expert-user and novice-user appears very prominently if the teacher practices technical skills along with the learners more so when the learners are very young kids. Teachers play a crucial role in creating environments to facilitate and motivate learners to take responsibility for their learning objectives, develop good learning habits, become independent learners and be better able to control learning environments to practice language skills and communicate with others both in and out of the classroom (Shih-Yin Hsu, 2005). Teachers can use the computer as a part of their pedagogy without letting it take over their lesson plans (Chapelle & Jamieson, 2008).

Learners have the compounded responsibility of learning the subject knowledge as well as the technical knowledge. They are required to develop their technical skills as these are prerequisites for building online network, for sharing information, for analyzing opinions and comments, for bookmarking various sites, and for developing their own virtual identity. Additionally the learners and the educators have to continuously get trained in using the ever emerging digital educational tools, software and operating systems.

AUTHENTICITY AND APPROPRIATENESS OF LEARNING MATERIAL

Chapelle & Jamieson (2008), mention that examples of English should be carefully selected to provide learners with useful models. These models must include the target language that the learners need to learn, and they must also have a level of difficulty that is appropriate for the learners' level of development (Chapelle & Jamieson, 2008). It is difficult for beginners and intermediate learners to judge the appropriateness and authenticity of the learning material that is available to them. These learners lack the analytical skills for interpreting the styles, genre and accurateness of grammar and vocabulary used in the learning material. The role of the teacher here widens to that of "content controller" who selects material and designs activities for learning. Comparatively when books are used as learning material there is a certain benchmark and authenticity that preexists. Usage of material from internet has to be monitored and blocking of objectionable category of websites is mandatory. The teacher has to clearly select an authentic site with least navigation issues and minimum layout distractions. The learning task has to be well defined for maximum learning impact.

Active knowledge synthesis is one of the key features of digital learning environments. The learners at their personal levels and on a boarder level are not just seekers of information or knowledge on the web. They are in a way even producers of this information. The digitally active schools and learning groups emphasize learners to post their content on the web. The content and information is usually verified by teachers before uploading, but on critical examination the factor of "expert opinion" is always missing. While searching such specific projects other learners can access the material available and claim ownership thereby increasing the rate of plagiarism.

Traditionally, even the additional / further reading was also highly guided by the teachers. During the class teaching, the teacher would suggest a few useful books for reading and these cross references would be normally available in the library. The learners would look up for information in the specific chapters and the information available was specific, authentic and classified. So, the learners almost had the right amount of right content. Learners completely relied on the information given by the author.

Comparatively, in digital searching the learner has to first select the right search engine that will yield maximum results. The learner then searches for information by using some key words or terms. Huge and unclassified information is generated from such searches. It is essential for the learner to classify the information as being authentic, biased and distorted, not factual, experimental and personal opinions. Hence it is important to look at the credentials of the source. Learners thereby examine various sources including blogs and discussions, this ensures that they are exposed to latest viewpoints of different people and can explore for possibilities to frame new ideas. This learning aspect of classifying information, applying logical rationale, making presumptions from others viewpoint and finally framing one's own hypothesis is a high order thinking task for adults and this cannot be expected from young learners.

TECHNICAL ABILITIES OF TEACHERS AND NEED FOR FURTHER TRAINING

The most important factor while transitioning from traditional teaching to digital teaching is the shift over of teachers from one medium to another. Teachers' belief and attitude towards educational technology in relation to social psychology prevent them from integrating technology into their classrooms. To encourage teachers to integrate technology into teaching, studies suggest that, today's

pre-service teachers should be trained in such environments (Delfino & Persico, 2007, Hua and Peggy 2008). However, there is no agreement on the type of content and methodology to support their classroom because changing their attitude is more essential than simply integrating technology to educate those (Delfino & Persico, 2007).

It is logical that any new theory whether it is in science, applied arts or any other subjects when discovered has to be percolated to the next generation through teaching. Similarly for teachers of older generation there should be essentially a course to learn about the usage of computers and new generation technology. Although computer is a tool that is easily available and accessible it is wise to complete a course that teaches operating a computer, storing, retrieving and managing data, using operating systems, data processing, connecting, disconnecting and troubleshooting, using basic storage devices, and using input, output devices. There is a major variation in using computers and technology in personal life and using them as tools for teaching. The "trial and error" method can be applied while using a new software or system in personal life but while using them as tools for teaching it is essentially recommended for a teacher to have some hands-on experience. It is highly recommended and logical for teachers to initially learn the application and management of a digital tool to an extent that they can be competent enough to act as *troubleshooters* when their learners use the recommended tool.

RECONSIDERATION OF TEACHING METHODOLOGY

An experiment carried out by Hui et al.(2008) showed that technology assisted learning improves student's acquisition of the kind of knowledge which requires abstract conceptualization and reflective observation, but adversely affects students' ability to obtain knowledge which requires concrete experience. The learners sometimes lack focus on the required lesson as there are many distractions while they are being online. If learners have regular and continuous exposure to websites for references, Google for information seeking and images for recognition, it is expected that their personal ability to retain knowledge will significantly reduce. Teaching methodology needs to be modified in a way that would help the students gain most from the learning medium. It is commonly observed that students who use computers proficiently find note-taking very tedious with the passage of time. With the easy access of sound recording option in the computers students prefer to record lectures rather than write lecture notes. This makes them passive learners and doesn't motivate them to perform the multitasking of listening, understanding, noting and questioning while learning. Hence teachers have to remodel their lectures and digital teaching in a way that helps in the overall development of the student.

The learners of digital age do not exclusively look at text in the course books. With the usage of technology there is additional learning through images and video clips. Digital learners navigate further on links for more information and their learning brain cells tend to look for various sources. The teacher of digital age is expected to extensively browse through potential learning / information websites. This is way different than the methodology of book teaching while referring back to hardly two-three more books of the library for references. This shifts the learning methodology from authority based lecture model to discovery based learning. Learners initially require lessons on using critical skills like skimming, scanning, discriminating and categorizing information. An unstructured and unguided attempt while using this technique leads to poor quality of self-studying.

Language teaching is a process where teacher develops the ability of a learner through real time interaction, by inspiring the thinking process and by improving the communication strategy. Unlike the teaching of science subjects, language teaching doesn't involve teaching of process and procedure. In a blended teaching environment if the module delivery is highly pre-arranged, it restricts the exploration boundaries and hinders the capability of a learner to understand, think, analyze and finally express. It is not simply a question of retaining traditional teaching methods such as the master class and applying e-learning techniques to gain access to more information; nor does it mean involving the students in the same learning methodology using a different medium (Diaz & Entonado, 2009). A blended classroom suggests teaching quality should be improved using technology. Teachers can use the learning material related to the listening, reading and vocabulary available through various modes of technology, but speaking and writing skills require more of thinking and expressing rather than technology. Teachers have to consider all these options before using a particular digital tool or aid in their classrooms.

CONCLUSION

As the world looks towards future classrooms which will be dominated by technology rather than by human teachers, issues related to usage of technology need to be seriously considered. All the schools around the world are dedicated to improving learning and teaching methodology and promoting quality of education for all learners. Continual changes in technology and society mean that literacy tasks are

themselves always changing (Colombi and Schleppegrell, 2002). It requires an additional effort on the part of teachers, educational organizations, education management systems and to an extent the learners themselves to make technology a natural part of the learning process. Since technology will be an essential part of all future classrooms, teachers should anticipate distraction and delay issues while designing lesson plans. Task timing, task outcomes, task monitoring and technical challenges have to be considered while developing lesson plans. Teachers have to make an extra effort of learning, practicing and integrating technology in their lessons while the learners have to develop sensitivity towards the learning tools. The cycle of appropriate selection, pedagogical relevance, benefits or usage, anticipated problems and easy replacement or shift over should be followed before integrating any teaching tool in the daily lessons.

REFERENCES

1. Alonso Diaz L., Blazquez Entonado F. (2009), Are the Functions in e-Learning and Face-to-Face Learning Environments Really Different? *Educational Technology and Society*, 12(4), pg.331-343.
2. Delfino, M. & Persico, D. (2007). Online or face-to-face? Experimenting with different techniques in teacher training. *Journal of Computer Assisted Learning*, 23 (5), 351-365.
3. John Seeley Brown and Maureen Devlin, Learning in the Digital Age, The Internet and The University Forum 2001. www.educause.edu/forum
4. Maged N Kamel Boulos, Inocencio Maramba, Steve Wheeler (2006), Wikis, blogs and podcasts: a new generation of Web-based tools for virtual collaborative clinical practice and education, *BMC Medical Education* 2006, 6:41 doi : 10.1186/1472-6920-6-41
5. Marc Prensky, Digital Natives, Digital Immigrants, (2001) NCB University Press, Vol. 9 No. 5, October 2001
6. National Policy on Information and Communication Technology (ICT) in School Education, Department of School Education and Literacy, Ministry of Human Resource Development, Government of India, 2009.
7. Richard Beach, Gerald Campano, Brian Edmiston, Melissa Borgmann (2010), Teachers College, Columbia University, ISBN 978-0-8077-5056-8
8. Sandholtz, J., Ringstaff, C., & Dwyer, D. (1997). *Teaching with technology: creating student-centered classrooms*. New York: Teachers College Press.
9. Shih-Yin Stella Hsu, Building Language Learning Environments to Help Technological University Students Develop English Independent Learning, *The JALT CALL Journal*, 2005, Vol. 1, No. 2, pp. 51-66.
10. Solanki D. Shyamlee, "Use of Technology in English Language Teaching and Learning – An Analysis", *International Conference on Language, Medias and Culture IPEDR vol.33, 2012, IACSIT Press, Singapore*.
11. Tara Barbazon, *Digital Hemlock : Internet Education and the Poisoning of Teaching*, University of New South Wales Press, 2002.
12. Victoria Carrington, Muriel Robinson (2009), *Digital Literacies – Social Learning and Classroom Practices*, SAGE Publications Ltd., ISBN 978-1-84787-037-7