Computer Science Technology: Tutor, Tool and to explore Language Teaching

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"Technology catalyzes changes not only in what we do but in how we think."
- Sherry Turkle

Abstract: Computer Technology is now being used in all facets of Teaching in English language classroom. It gives wide range of scope for discussions on usage of Computer Technology in Language class room. The application of Technology on Language study raises questions like what role should these technology plays in Teaching and Learning. This paper discusses the Application of Computer Technology in Language Class room with different roles. As there are many roles to play, this paper limits only to Computer Technology as Tutor, Tool and Ways to explore language.

Keywords: Computer Technology, Language Class room, applications, roles and limits.

INTRODUCTION

Now a day, the definition of illiteracy is changed. Earlier one who is not capable of writing and reading is called as illiterate. In India such type of people are labeled as “Nishani” (instead of giving signature, using thumb impression). But now the time, atmosphere and attitude of everyone is changed. Those who did not posses the knowledge of Computer is called as “Illiterate”. From lay man to intellectual everyone, in one way or the other, acquainted the knowledge of computers. So it is not a surprising thing to introduce computers in teaching Language. There are so many discussions and researches went on using computer technology in teaching language. Every coin has two faces. In the same way every discussion has positive and negative. Looking at things depend on the nature of individual. In the present paper titled: “Computer Science Technology: Tutor and Tool to explore Language Teaching” focuses on how the processes of Computer Technology generate ideas and organize text by commenting and suggesting necessary corrections. Computer Technology is now being used in versatile ways of language teaching. Syntactical, semantic, topographical corrections are made with the help of a text editor. Thus it extends its hands to Language teacher in saving time and showing concentration in maintaining the class room. By using these computer devices Language teacher can get more time to explain the given topic in detail with further explanations. Slide presentations through computer, PPT, Image processing and other techniques create interest in the mind of the student to show more interest and attention on the topic that the language teacher discussing. The knowledge of computer to language teacher widens the outlook of the teacher at...
the teaching components like tools, designing an intelligent tutoring system for language usage, word processing programs and viewing texts from different vantage points.

**Aspects of the Computer Technology**

21st century class rooms are designed with computers for instructions in many components of language teaching like composition, literature, comprehension, spelling, vocabulary, grammar, study skills, and so on. These wide ranges of applications of computer technology raise various questions. But there are so many language programmers already created by the teacher keeping in their mind the cognitive level of the students. So Language teacher’s usage of computer Technology in English Language class room provides multipurpose like English as a second language, foreign language, and bilingual and special needs classes. In “The Second Self”, Sherry Turkle (1984) looks at the computer “Not as a "tool," but as part of our social and psychological lives;”

She looks beyond how we use computer games and spreadsheets to explore how the computer affects our awareness of ourselves, of one another, and of our relationship with the world. Some of the most important research on the use of computers in teaching English language has paralleled that of other research on computers in education. The role of computer Technology in Language class room created many conceptions. Some of the linguists raised the doubts regarding whether, why and how computers are useful for teaching in language class room. Depending upon the assumptions on teaching and learning process, the use of computer technology plays many roles in the class room. The researcher limit to Computer as Tutor, Computer as Tool for learning Language and Computer – ways to explore Language. Computer works as a Tutor in the sense that they can personalize instruction, provide teaching and learning material at a limited pace and useful in evaluation of the progress of the student. The Second one is Computer works as a Tool where they help in reading, give scope to the students to create and format the texts, aid the students in acclimate of texts, correct the spelling mistakes. They keep safe in a compact and flexible way whenever the learner wants it will help him. The Third one is computer helps the learners in finding the ways to explore language. In order to cope with many language problems faced by the student, the computer with its programming finds solutions, makes easy for difficult issues related syntax and adds beautiful works in semantic to make our language attractive.

**Computer as Tutor**

Tutor has the capacity to finish the task being taught and to discuss it answer to the point. Thus, a spelling tutor is able to correct misspellings and to identify them as general spelling rules. Evaluation of student’s knowledge is an important requirement. It will be clearly diagnosed and attended properly through the computer technology. Another important thing is that the system should have strategies for teaching and support for student-directed inquiry. It is very difficult to design and intelligent tutor for language. A very little research is done in this area. One of such Computer program for language is Iliad.

Examination of current research indicates caution in drawing conclusions about the benefits of the use of word processors, especially in elementary school. A variety of factors (e.g., keyboarding skill, technology aptitude, familiarity with the language of the word processor) might influence these benefits. This paper focused on the effects of writing with word processors for students with varying proficiency in English. Knapp, L. R. (1986).

For example, from the sentence “Ramu brought a mango” Iliad might generate what did Ramu bring? Who ate the mango? etc. The computer questions the learner to rewrite and comment on the alterations made in the sentences. Iliad could, in principle, be extended to allow children to design their own transformation rules, either using a simple grammar notation or by using examples. Thus, the child would type “Somu looked at picture,” and the system would use the rule to produce “Which picture did Somu Look?” It includes an apparent model of the student’s developing grammar. Hundreds of tutoring programs are available that do not qualify as intelligent tutoring systems. These programs are created to teach letters of the alphabet, spelling, vocabulary, synonyms and antonyms, grammar, punctuation, capitalization, and word usage. They are helpful for improving skills in these areas, but extensive trust on them may interfere with addressing a greater need: helping students to learn purposeful use of language in its complete forms. Warren and Rosebery says;
“Psychological theory has influenced the use of computers in reading instruction. In particular, we look at two competing theories, the componential and the constructivist, and the implications that each carries for computer-based practice”(Warren & Rosebery; 1988)

In order to make these perspectives clear he examines two computer environments, RACER and the Reader's Assistant. He concludes by putting forward the notion of “contextualization” as a basis for integrating the componential and constructivist approaches into a sensible model of computer use in the special education classroom.

Computers as Tools

Word processing facilitates as an important function of Computer technology within a classroom. Moreover, there are some evidences that in making it easier to construct and revise text. Students learn to be better writers and readers by sharing texts. Plenty of word processing programs are now available that allow writers to enter and revise text. Some like scholastic and word bench allow writers to control details of text format, permit access to indexed notes, and have capabilities for tables of contents, lists, footnotes and endnotes, bibliographies, and indexes.

But word processing is only one of the ways computers serve as tools for writing and reading. McConkie & Zola, while presenting a paper on Computer aided reading: an environment for developmental research in 1985 at Society for Research on Child Development Toronto, Canada opines that programs with speech synthesizers, or stored speech, now assist readers who encounter unfamiliar words. The storage of multiple texts is allowed by the Hypertext systems. They linked texts can provide further explanations, additional examples, or commentaries on the text at hand. It is in the area of writing that we find the widest range of tool-like uses of computers. Several software programs have been designed to help with the tasks of planning and generating ideas For example, a student might ask for suggestion about selecting the next sentence. The computer gives actions based on keywords which are found in the preceding text written by the student. Several word processing programs have an option to turn off the screen when text is being entered, so that the student is not distracted by the visual image of what is written. This technique is called “invisible writing” said by Marcus and Blau. It is one way of providing “free writing” and inspires students not to focus on premature editing.

The Next generation computers are produced with their in-built library which covers a dictionary and the Oxford Complete Works of Shakespeare. There are also many microcomputer-based data bases which aids the developing poet by displaying a line of a poem in a specified meter. For example, the first line of Shakespeare's Sonnet 130 would appear as:

My mistRESS' eyes are noTHING like the SUN;
Coral is far more red than her lips' red;
If a student’s wanted to see the same line in different style, it would show:
My mistress' EYES are nothing LIKE the sun;
Coral is far more red than her lips' red;
After reading the line, the student might try to rewrite the line or change the style of reading

Computers as Ways to Explore Language

Science and Mathematics students are already provided with computer based Micro systems. It helped them to find new domains, and test hypotheses, create new models and so on. The same technology can be used to create micro worlds for language. Researches in these micro systems are highly motivating for students. They encourage the students to think deeply about language parameters, theoretical relationships, and the structure of ideas. An example of this approach is the use of the programming language to construct models of language structure and use. Goldenberg and Feurzeig opine that Students work within any genre, or mode of discourse, to build up their theories about meaning and form. There is a predication about a subject. In Logo, this might be expressed by the following procedure:

Lewis loves to walk a mile every day

TO GOSSIP OUTPUT (SENTENCE LEWIS DOES WHAT) END

There are so many software's used in Language teaching and learning programs. In the software the procedure is very minute to explain which, when executed a sentence and how it composed
of the first part of the sentence which indicate the name of a person

C:\snr\way2java\net>java GossipServer
Server ready for chatting

C:\snr\way2java\net>java GossipClient
Start the chitchat, type and press enter key

The first procedure, Lewis and DOESWHAT, are clearly mentioned. With these procedures, the learner starts the computer to chat. It creates an interest in the learner through play way methods. As it continues to find out new procedures and dimensions which are supplied through data student can modify the original procedures to create more fresh and multifaceted programs.

CONCLUSION:

Use of Computer Technology became an essential tool in Language teaching process. Computers can help the Language teacher where the teacher time and attention are insufficient. They can also facilitate the processes of generating ideas and organization of text. Unlike teachers, Computer can offer feedback at any convenient time. They can also comment on features of written text. With the aid of this text editor, revision of text is more efficient. They can also lessen the teaching load on the teacher. Thus they can create time and opportunity to Language teacher’s involvement with essential aspects of computer technology for reading and writing process. There is further scope of research on using computer technology in designing the language curriculum, communications skill development activities, proficiency in speaking and in other areas of Language teaching.

WORKS CITED: