



TECHNICAL MATURITY AND FUNCTIONAL DISABILITIES: ESL FOR VISUALLY CHALLENGED LEARNERS

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ABSTRACT



It is a known fact that, technical devices have been ruling the present-day world. One of them is Computer. Computer assisted language learning (CALL) has been used as pedagogy in English language teaching and learning in several institutions. It has reduced learning difficulties in numerous ways. More than ever, this has paved a way for visually challenged learners (VCLS) to participate in the learning process. In other sense, it has provided 'opportunity to learn (OTL)' (2009), to VCL to participate fearlessly in all the academic activities like reading, writing and teaching English. Moreover, it enables VCL to develop their competence level in all aspects of English language. However, it has some functional disabilities to be rectified as well.

Keywords: *Technical Devices; Visually Challenged; Disabilities; English Language Learning; Screen Readers; Screen Magnifiers.*

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Education is common for all. Any kind of new development in education is expected to be common for each and every individual learner at all levels. Technology assisted learning is the newly introduced concept in the English education. Hence, the purpose of this study is to encourage VCLS to exploit ATS in English language classrooms. Besides, it will ensure the Engineers' participation to rectify the technical disabilities.

English as a language of opportunities has yet to get a proper slot in the curriculum and 'decent'

treatment in the classroom. Teachers, in general cannot focus on all the students in the class. It creates a gap between the teacher and learners. Thus the learners struggle in the process of learning. Especially VCLS, who are in less numbers in the integrated institutions find it more difficult than other learners; because of the 'visual' treatment that has been practiced in the curriculum of English teaching. Since (VCLS) have become technical assisted learners, they can be permitted to use ATS in the English language classrooms to sharpen their



English language skills. Hence, this research brings in ATS to solve the problems and explains the ways to sharpen the language skills of VCLS. Moreover, this paper will gradually explicate the functionality of all available technical devices in connection with VCLS. Some of the available ATs are:

Braille, Stylus, Braille books, Braille dictionaries, Braille printers, Braille Embosser, refreshable Braille displays, Talking Typer, Screen reading software, Speech recognition software, Text-to-speech software, (TTS) Optical character recognition (OCR) software, Braille translation software, alternative keyboard, Audio players, Digital books, large monitors, Closed circuit television, (CCTV), Job access with speech (JAWS), Non Visual Desktop Application (NVDA), Forty cells, Talking dictionaries, Screen magnifiers, Hand held electronic magnifiers, Dictation devices and transcriptions, Scanners, Standalone reading machines, Fusers and swell papers, pen drive box, angel reader are some of the technical devices that are available for the VCLS to sharpen the English language skills (2015). Some of them are already in use. But, many are recently modified devices, with which 'scribe system' can also be replaced. (2005)

In foreign countries, numerous researchers have already been carried out about the use of assistive technology (ATS) in English language classrooms to sharpen the various aspects of English language. In India, only expository writings have been produced with regard to the Functionality of screen readers installed technical devices in connection with VCLS. So, central focus of this paper will be on ATS in English language classrooms for VCLS in India to sharpen their English language skills. The researcher believes that, the increase of 'Visual treatment' of subjects in English language classroom does not assist VCLS to understand and develop their competency over English language. There are several institutions have been giving proper training to VCLS to handle technical devices. some of the well known organizations are: Indian association for the blind (IAB,) Madurai, national institute for visually handicap (NIVH)Chennai, NIB Delhi and Mumbai, TNAB and KVTC Chennai, MRCDA ETC.

TECHNICAL ACCESSIBILITIES

There are different kinds of screen readers and screen magnifiers that assist VCLS to develop their acquaintance with all aspects of English language. Speech recognition software allows VCL to operate their computer and enter data using voice rather than a mouse or a keyboard. Text-to-speech software converts written text such as, text files, web pages, PDFs and emails into audio files that can play on a wide range of devices, such as computers, MP3 players, iPods and CD players. (2015). Job Access with speech (JAWS), assists VCL to read materials in English and 30 different foreign languages (Freedom scientific 2016). Non visual desktop application (NVDA) can assist VCL to read materials that are in vernaculars. These screen readers have been established in some of the special schools that are meant for VCLS to stimulate the learning interest of VCLS.

Do these screen readers really have the Capability to teach LSRW to VCLS?

LISTENING SKILLS

Since VCLS cannot visualize things, they usually listen to the voices/ noises that represent the visual materials. In other sense, screen readers, unlike manual readers, they persuade VCL in the learning process. They can listen to any number of times. the researcher interviewed one of the VCLS named Sankar, S. currently pursuing Second M.A. English at Madurai Kamaraj university, he said that ' technical devices help him to improve his listening a lot.'

SPEAKING SKILLS

It is a proved fact that learners who are exposed to technical devices own more vocabularies than other learners. Hence, their speaking skill is much better than actual learners. Since, screen readers like JAWS and NVDA are developed in the English speaking countries, VCLS can listen to native English. Thus, their accuracy and fluency and other sub skills will be fairly improved. Besides, it motivates them to play a part in the classroom discussions as well. By this means they will never be left unchallenged in all fields.

**READING SKILL AS A PART OF LISTENING**

There are 4 kinds of VCLs. They are: partially, totally, low vision and legal VCLs. Except the second category, other 3 can participate in the act of reading to some extent. Since sounds and graphics are the taxonomy of every language, totally VCLs cannot recognize the graphical representation of any language. They cannot read materials that are in printed form. Hence they listen to the accessible screen readers.

WRITING / TYPING SKILLS

As for as writing is concerned, Braille method, 'a tactile writing system' has been the widely used method by VCLs. In recent years, as there are several shortcomings in this method, this has been replaced by Technical devices that enable VCLs to write/type things and take notes on their own. Furthermore, this system could replace 'manual regular scribing system' to ensure the English language competence level of VCLs.

FUNCTIONAL DISABILITIES AND NATURAL DEFECTS

Technology as a pedagogical tool has yet to wait to give proper support to VCLs in learning of English language skills. There are several shortcomings like: (1) Technical Devices (TD) will not guide VCLs for proper document alignment; (2) TDs would be decelerated as the screen readers are installed on it; (3) High cost of screen readers; (4) poor knowledge about TD; (5) less exposure to TD; (6) poor performance of text, JPEG, and PDF converters; (7) over reliance on auto spelling correction, grammar correction and copy paste options make VCLs to consider while learning language through this pedagogy.

CONCLUSION

Visually challenged learners have become technical assisted learners. All VCLs have been given proper training by the special educators in the special schools. All of them can effortlessly work on their own with the assistance of screen readers. None would find hard to exploit TD as they get in to the integrated institutions, unless one is not blind by birth and has not learned it properly. Besides, there are several shortcomings as mentioned above. If those functional disabilities would be rectified, VCLs

would not depend on other learners for any assistance. And of course, they can be permitted to use ATs in English language classroom.

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