

Scope of Technology in English Language Teaching

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Abstract

In this fast-growing and evolving world, usage, and adoption of technology both in and out of the class have displayed an essential component of the learning process and incorporates almost every domain of the learning aspects. It aids in learning distinct entities irrespective of their levels of challenges by incorporating both viewpoints of learning i.e., competence as well as performances of the learner. Through multiple experimentations, observations and case studies, various researchers established their point of view that how technological aids enhance language pedagogy and learning. This paper mostly concentrates on the survey of the literature which extensively illustrates the usage of various emerging technologies in the domain of English as a second/foreign language teaching and also examined the outlook for employing technology in English language teaching classes. This paper also proposes some recommendations for more conforming applications of technologies in distinct language learning scenarios. The literature review indicates that the successful integration of technology will heighten the language learning experiences.

Keywords: Technology, language learning, language skills, integration, English language teaching

Introduction

Technology is something that is defined by different experts and scholars in different ways. (İşman, 2012) said that technology is something that employs the functional application of consciousness, especially in a definite area and it is a process of arranging any task using technical methods, processes, or knowledge. Its practice does not only incorporate machines and instruments, but also includes properly structured relations with different humans, devices, and the environment. Technology determines its significance and that is why it is appreciated by various educators to be an important element for providing high-quality education. In today's world where technology inscribes in every field, educators necessitate going in hand with the latest trends to impart better teaching methodologies and formulate a productive learning curriculum for the learners. Technology plays an influential role in devising the teaching and learning environment. It emerges as an essential part of developing learning and teaching modules through which learners' learning can easily be facilitated. It plays an

indispensable role in improving the learning experience from the commencement program to finally delivering it (Eady & Lockyer, 2013).

Research Methodology

The study implemented in teaching English as a second/foreign language with the proper integration of technological aids is remarkably compelling and compels a systematic literature review. All the recommendations, detailed studies and literature that were included in this paper are from refereed journals and authentic sources. The data is collected and filtered for apprehending the refined data which incorporates all the relevant topic as comprehensively as feasible. While drafting this paper all the abstracts, readings, case studies, results, limitations, and recommendations were scrutinised thoroughly and documented accordingly so that it renders the most relevant information and can promptly present the main intent.

Technology and Language Learning

Due to the advent of technology the entire curriculum of the class shifts dramatically. Now numerous technologies are accessible for all those who desire to learn a foreign language. These technological advancements promptly support them in enhancing their learning capabilities. It involves learners by accommodating them to the authentic examples from the target language culture. It also possesses the endowment of consolidating their classrooms undeviating to the country whose language they are drilling to learn. It is now an obvious fact that technology functions as an influential medium that promote all types of language learning skills. Listening, Speaking, Reading, and Writing are the language skills which needs to be mastered. To accomplish personal, organizational, professional goals and to maintain perfect living conditions in every circumstances appropriately, the individuals need to bring about improvements in LSRW skills. Numerous technologies are there which acts as a catalyst that facilitates the language learning experience and can be included in various types of technology (e.g., Skype, e-Book, Social Medias, E-portals, Forums, Wiki, Blogs, etc.) into the language learning curriculum. In today's world where human beings are surrounded by various types of technology especially in this crucial period of a pandemic the technology becomes more and more popular, it gives rise to the use of various forms of technology in the learning module which enhances the skills of the learners. Various tools and applications are there which enhances language learning such as: Computers, Mobiles, Laptops, Kindle, Tablets, Over-head projectors, Radios, Televisions, Internet, ICT. Various mediums are there to help learners in learning new language skills, such as: Social Media, Online equipment for English language learning, Numerous Online language-related courses, multiple feature films in English Teaching.

Various available tools help the trainer to make a learning environment by cultivating a sense related to the target language community accompanying with numerous interactive training activities that promote foreign language learning skills. It entitles the learners to engage in learning activities and expedites the learners in eliminating multiple barriers of time and space. Technology-based language learning stimulates consonant engagement among

learners by giving them freedom of learning and allowing them to explore a module of learning where they actually can experience learning round the clock regardless of their location and status.

Technological Integration and Language Learning

Dockstader (2008) said that integration of technology assists in improving the educational environment. According to (Hennessy et al., 2005) technology is actually an amalgamation of how educators employ them to deliver everyday activities more efficiently and how practicing technical advancements in various domains can aid in re-shaping these day-to-day activities. Due to technological advancement, various tools are readily available which empowers the instructors to deliver their instruction and differentiate their pedagogical approaches which will go hand in hand with the situation, and also reasonably accommodate the competence level of the learners. It also facilitates the various classroom activities that mainly focus on the learners' performance and other practical aspects. It plays a vital role in improving learners' language knowledge and skills, and also contributes equity of opportunity, regardless background of the learner. Born into a technologically advanced world and providing the top-notch technically advanced environment is not enough, learners should be taught and impart all the instruction in such a way and mode that they became familiar toward the existing technology and can access all the available resources readily, only then they can understand all the skills quickly and can maximize their learning to the fullest (Bennett et al., 2008). In a modern time when human civilization is pacing toward advancement in every domain of their life, how a core field like education remains untouched by this aspect. The emergence of technology is the result of progression in the human civilisation. It has the potential to modify existing language teaching methodologies when blended with the language learning practices and aids the teaching module and surmount all the complications faced by both learner and educator by delivering an accessible way for every single mind. The foremost advantage of technology integration with the traditional module of teaching practices is that now it has been utilized for both assistance as well as enhancing all the language learning skills. (Shyamlee & Phil, n.d.) supported this view that the methodology for English language teaching has been immensely transformed due to the advent of technology.

Ahmadi, 2017 asserted that one of the essential components for learning is the methodology that instructors practice in their classes to expedite the language learning process. Becker, 2000 also adds notable fact regarding technology in English language teaching he stated that computers are considered as an influential instructional device in language classes that is readily accessed by teachers as well as learners and provide convenient access to language learning to both instructors as well as learners. It allows flexibility in teaching modules and methodologies by imparting remarkable freedom in the core curriculum. According to Lam & Lawrence, 2002 and Gilakjani, 2013, technology assists learners from various backgrounds in numerous ways, it also aids in enhancing their learning capabilities by providing them an engaging approach to learning. It assists their learning process by rendering them with innumerable resources for their aspired information that is just a click away from them. They advocated that in today's era technology is hard-wired in the core curriculum of

language learning, educators as well as learners are somehow using it consciously or unconsciously. It is unusual to locate any class which exercises language learning and refrains from employing any technology.

Technology also ensure Learners' active participation and cooperation that is one of the most influential media for language learning. Learners can work collectively with mutual understanding to comprehend the given assignments and learn cooperatively through understanding their peers' work (Keser et al., 2011). Technology opens many gates for the learners through which they can learn whatever they want to in an effective way, it proves itself a powerful mechanism for learners to master the unknown desired field of expertise. Today number of Learners across the globe expedited by the application of latest relevant technology which seems like a catalyst in their learning module. As a teacher one should illustrate the effectiveness of technology to strengthen the curriculum in a way that a learner can enhance the accurate employment of technology in acquiring their language skills (Costley, n.d.), (Murphy et al., 2003). Technology extends its area and emerges as a medium that possesses the potential which can readily develop the interest of the learner, and also operates as a mechanism that can undoubtedly support both learners and educators promoting language learning skills for their students. Honey et al., 2000 stated that by using various computer led technology benefits the learner as well as teacher in improving teaching and learning. Employment of computer technology benefits teachers in meeting their learners' educational needs. According to Bransford et al., 2000, computer technology actually supports in developing and devising global societies which have both learners as well as educators who connect regularly for an immeasurable comprehension of language learning, it also uncovers various paths for numerous opportunities, through which every member got benefitted. Unquestionably technology can execute an essential purpose in promoting and enhancing language learning skills, but at the same time, the effectiveness of all those technological intermediaries entirely endures on the acquaintance, expertise and knowledge of the language trainer who practices it in his classroom or teaching practices and promotes the environment of language learning. Larsen-Freeman and Anderson, 2011 backed the possibility that technology contributes to teaching and promotes the learners in employing their competence into performance in a real-life scenario. Moreover, Tomlison, 2009 and Genç İter, 2015 stated that computer-based activities support learners in finding suitable and authentic materials. It also aids in obtaining rapid information. All these supporting means motivate them to learn more. Harmer, 2007 and Genç İter, 2015 stressed that educators should go in pace with technology and motivate learners to do so as it the future of education which is going to replace the traditional approach of language teaching. They emphasized that educators should encourage learners in finding relevant projects by employing computer technology. By applying these methods, one should organize a successful language learning program. According to Bull and Ma, 2001, technology renders unlimited support and provides various resources to language learners. Clements & Sarama, n.d. indicate that the effectiveness of relevant technological materials can be valuable for language learners. Harmer, 2007 stated that computer-based language learning programs can be very impactful in developing

cooperative language learning in learners. Use of Information Communication Technology operates as an incentive in stimulating learners and teachers to operate in innovative ways. The instructor can undoubtedly be comprehended that as their students develop competence, they necessitate an autonomous system that promotes self-relying language learning system, in that case they have numerous alternatives to suggest their learners to choose from, which renders them self-paced learning module, and also imparts instructors an option to track their learners' activities. Successful integration of technology has various positive aspects of language learning skills. It encourages learners to participate in the classroom and proffer them confidence to practice language in a real-life scenario, through this it makes learners active and strengthens their language learning capacity, and also aid them in retaining further knowledge which supports in making them more independent. There are various ways through which technology can be integrated into language learning classrooms. The cognitive approach suggested that the learners have an advantage in capturing an opportunity that enhances their susceptibility to the target language meaningfully. In the social approach, learners are provided with numerous possibilities and opportunities that can enhance their performances in social interactions and also assist them in practicing real-life skills. The employment of technology in the classroom completely transforms the pedagogy scenarios across the globe. It promotes the curriculum in a way that completely transformed the long continued predominated traditional method of teaching where the teacher functions as the nucleus of the classroom and whole class were teacher-centric. But now the inclinations have completely shifted from teacher-centric to learner-centric. In the learner-centric classroom, teacher act as a facilitator and their main motive is to guide their learners' in learning the required skills. This conversion determined to be extremely beneficial for learners as it adds their competence level and promotes their real-life performances.

Language Skills and Technological Integration

Listening: Listening is an influential language skill that necessarily be comprehended at a very initial spot, it aids in decoding the encrypted message and accommodates the listener with more immeasurable understanding to respond suitably and assist in explaining the significance of the conversation. The use of technology in listening originated as simple audio, which was recorded on an audio cassette, from there it expanded gradually and develops as an influential shift in the domain of language learning skill. In today's scenario when most of the learners grappled in mastering the skill of speaking and ascertain it as a challenging aspect of learning English, but when it comes to advancing both speaking skills as well as comprehension, comprehensive listening is something which is highly recommended. Listening and reading text simultaneously is an excellent technique to commence advanced listening skills. Whispersync, a technique developed by Kindle, is intended for this purpose. This technology boosts the learners' listening ability considerably faster than the traditional method which beforehand used for developing high-grade listening skills among the learners. Whispersync includes the audio with some selected books, so anyone can listen and follow the text as they read. Through this their listening as well as speaking heightens up at the same time. Earlier people used to listen to radios which now somehow superseded by Podcasts up to a

large extent, the reason behind this is remarkably simple, as podcasts are easy to access and provide users bunch of the options to choose from. It also helps in language learning by delivering a seamless experience as one can listen to it anywhere and at any point of time. They are available in numerous language options and language podcasts are an exceptional method that can enhance listening skills.

Speaking: Speaking is the most necessitated language learning skill among various learners worldwide. One constantly craved to comprehend some distinct language and can communicate in that language to socialize themselves and camouflaged in new situations conveniently. It is also a universal fact that language serves as a medium that enabled a person to manifest whatever they feel and think. It essentially renders the words to our thought and emotion. Technology supported learners to master this skill by giving learners the convenience of real-time interaction with the speakers speaking the target language is seemingly the most compelling technique and the product of technological progression. Various tools like Skype, Zoom, Google Meet and FaceTime accommodate users to offer real-time conversation. Various tools used by trainers for video-conferencing also propose them the possibility to connect various classes around the globe which stimulate the learner to directly interact with subject expert and give them the privilege to study and gain further assistance from other learners and trainers. There are countless new applications that are easily accessible and readily available in the market which help learners in enhancing their speaking skills. Applications like Hangout by Google and various applications that actually allow users to connect with other participants instantly and render a real-time one to one conversation with them enhance their speaking ability and also provide the confidence at the same time. It supported them in conversing with the native language speakers right from their phones or PCs.

Reading: With the acceleration in technology, we have now witnessed a whole new era where the learning modules evolved completely. Now, most of the learners can effortlessly access the latest technology like Kindle, iPad, Tablets, Mobile, Laptops, etc. They have become habitual to an interactive reading experience, which is a pleasant experience for all language learners. Technology provides us numerous features that heighten the reading experience various technological integration with simple and common concepts that makes the reading experience pleasant for the readers. Features like an online dictionary, thesaurus, vocabulary builders, notetaking software, click-to-define, pdf downloader, vocabulary builders are some of the examples that prove to be a beneficial tool for various learners. It encourages them to increase their vocabulary by exhibiting them to diverse sentence structures used in the target language culture in a different scenario.

Writing: Technology has completely revolutionized the process of learning and modified the way in which language skills can be learned. Due to technological advancements, various tools and mechanisms are introduced and favourably interjected in the system which can assist us by proffering our writing skills more streamlined and smoother. Benefits of learning writing by writing on a sheet of paper cannot be neglected, it has a designated place

which cannot be altered. But digital writing is something which develops in a way that helps all type of learners and emerges out as an advantageous tool for various learners. It facilitates learning to those who have some problem or face any difficulty in paper pen writing mode. Digital writing assisted learners by rendering them with immediate feedback in various ways. Numerous grammar-checking websites and applications are available that can undoubtedly be employed by various students to proofread their work. Various web extensions are there for web browsers which can easily suggest the grammatical mistakes and synonyms of the word, through which one can improve their writing skills. Employing technology allows all learners admittance to various other useful resources which help in enhancing their writing skills, such as various online multilingual thesauruses and dictionaries.

Technology has a lot to offer if handled properly, it allows learners to access numerous tools that will assist them in real-time. Like they can access simplified and explained dictionaries, create flashcards readily, and also can browse the internet and surf online in whatever language they want or choose language which they are learning. They can easily explore various cultures from the comfort of their home just by a click, get the opportunity to discover and chat by finding desired conversation partners who can enhance their language learning experience and can hire or find online tutors. By using technology and various social medias like Instagram, Facebook, LinkedIn, Twitter, etc., they can encounter the rich patterns of the languages by chatting with the person sitting miles away and using that language as their mother tongue which is practised by the learner as foreign language, usage and performance aspect of the language is always beneficial for them rather than being restricted to static models from traditional textbooks.

Limitations

All the literature that was discussed above simply indicate that technological advancement undoubtedly intensifies the language learning process. Unquestionably technologies perform an essential function in language learning classrooms as it proffers the liberty of self-paced learning, which encourages and fosters the habit of self-understanding and formulates the motivation in the mind of the learners which prompts better language learning skills. It also helps learners in enhancing various language skills as it performs a significant part in strengthening the creativity of learners by providing them enjoyable, delightful, engaging and interesting alternatives to study any new language. But upholding the fact that technological resources are the sole approach that assures learners' learning as well as teachers' teaching, is not entirely valid. Educator's satisfaction and agreement with the technological resources cannot be overlooked and discarded. They should be persuaded by the usefulness and benefits of the technology in improving their learners' learning. The above mentioned circumstance advocates that the educator must be supported and equipped in a way that they can easily integrate the relevant technology into their language teaching. An abundance of anything is unhealthy no matter how propitious it was, if used beyond the edge it will nevermore prompt the positive influence, same case goes with the technology, if it is practiced

appropriately within limits it unquestionably yields positive outcomes for teachers as well as learners.

Successful Integration of Technology in Language Class

Given below are some of the recommendations to enhance language learning skills through the successful integration of technology:

1. Trainers should execute an overall strategic plan to integrate the technology that examines all sorts of technical integration and accurately plans the decisions for purchasing the kind of technology they need for a particular purpose (Gilakjani, 2013)
2. Modules are designed in a way that encourages all modes of professional development and should be uniquely analysed in a way that not only ensures the learning processes but also modifies the attitudes of the trainers and makes them familiar with all the conveniences that technology renders (Gilakjani, 2013).
3. The plan for executing technical advancement should be designed beforehand and it should be outlined in a way that necessarily be closely followed by the core curriculum and should obey all the criteria anchored by the institutions (Gilakjani, 2013).
4. Trainers should be adequately cognizant of all the pros and cons of the technology which they planned to integrate into the learning modules for their learners and should hold a sound knowledge about what educational strategy will be the most efficient one when it comes to the integration of the technologies in the classroom.
5. It is a well-proven fact that modern computer-driven technology is now an indispensable element of the learning exercise, by using a suitable technique, language skills can easily be taught. It is the accountability of the trainers that they should assist and encourage their learners to employ the latest technology in a way that it avails the maximum learning outcomes (MEB, 2008) (Gilakjani, 2013).
6. To universalize the effectiveness of technology, Educational Institutions should appreciate technological integration with their core curriculum as a notable component of pedagogy and various learning programs. Barely proposing technological advancements to the trainers and learners is not sufficient they should implement some additional guiding course to the users with some extra tips and tricks and preferably hire some technology experts who should offer some additional support to those who are not that much accustomed to the technology.
7. Teachers should take accountability to outline a syllabus that includes various technology-integrated lesson materials. They have to make sure that the materials which were exercised in the lesson should concentrate on both pedagogy as well as learning and not merely on the technological concerns (Riasati et al., 2012); (Gilakjani, 2013).

8. In today's' world the mode and module of educational instructions shifted entirely. Classes which happened to be based on only chalk and talk method is now no longer functional. Trainers as well learners investigate new approaches and techniques which will promote the pedagogy and proffers enduring learning results. Due to the integration of technology, trainers invariably find an innovative way of training as a result, the pedagogical approaches shifted completely and make the classes learner centred. It acknowledges the puzzle of all trainers that how they can conceive classes less concentrated toward the teacher and more focused on learners.

9. Technological Integration proffers the teachers in apprehending their tangible roles in the classroom which is not the one who prepares all the lesson and instruct all the time and make all the efforts, rather they have a different purpose to serve and some other operation to perform in the classroom. They are the one who facilitates the learner in their learning activities thus they act as a facilitator.

10. Proper training must be offered to all the teachers and let them explore new approaches to practice and influence their learners positively by employing the latest technology. They should query the issues which they faced while using the technology.

Conclusion

To sum up, all the findings of the above mentioned literature revealed that like every other thing technology also has two perspectives. It has positive as well as a negative impact on the user. It entirely depends upon the users that how they are maintaining their relationship with the accessed technology and utilize it to fulfil their needs and achieve their goals. It has the capacity which can easily afford intercommunication among teachers and learners and renders coherent input that can readily be delivered by educators as well as obtained by learners in a way that it neither troubles educator nor learner. It serves most beneficial when one uses it as the intermediary tool that actually can facilitate the language learning process and resolve the problems readily. Technology assists language learners to strengthen their reasoning skills and aid in promoting more learner-centred classes that will encourage the learners' liberty and offer them a more confident nature that will support learners' motivation for learning a foreign language more productively.

References

- Addison, S., Wright, A., & Milner, R. (2009). Using clickers to improve student engagement and performance in an introductory biochemistry class. *Biochemistry and molecular Biology Education*, 37(2), 84-91.
- Ahmadi, M. R. (2017). The impact of motivation on reading comprehension. *International Journal of Research in English Education*. <http://www.ijreeonline.com>

- Becker, H. J. (2000). Findings from the teaching, learning, and computing survey: Is Larry Cuban right? *Education Policy Analysis Archives*, 8(51). doi: <http://dx.doi.org/10.14507/epaa.v8n51.2000>
- Bennett, D., Culp, K. M., Honey, M., Tally, B., & Spielvogel, B. (2000). It all depends: Strategies for designing technologies for educational change. Paper presented at the International Conference on Learning Technology, Philadelphia, PA.
- Bransford, J., Brown, A., & Cocking, R. (2000). *How people learn: Brain, mind, experience, and school*. Washington, DC: National Academic Press.
- Bull, S., & Ma, Y. (2001) Raising learner awareness of language learning strategies in situations of limited recourses. *Interactive Learning Environments*, 9(2), 171-200. doi: 10.1076/ilee.9.2.171.7439
- Burak, L. (2012). Multitasking in the university classroom. *International Journal for the Scholarship of Teaching and Learning*, 6(2), Article 8. <http://digitalcommons.georgiasouthern.edu/ij-sotl/vol6/iss2/8>
- Clements, D. H., & Sarama, J. (2003). Strip mining for gold; research and policy in educational technology-a response to fool's gold. *Educational Technology Review*, 11(1), 7-69. <https://eric.ed.gov/?id=EJ673505>
- Colvin, A. & Bullock, A. (2014). Technology acceptance in social work education: Implications for field practicum, *Journal of Teaching in Social Work*, 34(5), 496-513.
- Costley, K. C. (2014). *The positive effects of technology on teaching and student learning*. Arkansas Tech University.
- Dockstader, J. (2008). Teachers of the 21st century know the what, why, and how of technology integration. Retrieved from <http://the-tech.mit.edu/Chemicool/>
- Eady, M. J., & Lockyer, L. (2013). *Tools for learning: technology and teaching strategies: Learning to teach in the primary school*. Queensland University of Technology, Australia. pp. 71-89. <https://scholars.uow.edu.au/display/publication76376>
- Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D.F., Spitz, A. M., Edwards, V., Koss, P.; Marks, J. S. (1998). Adverse childhood experiences, *American Journal of Preventive Medicine*, 14(4): 245–258. doi:10.1016/S0749-3797(98)00017-8. • Hitchcock, L. (2016). My guidelines for using digital & social tech in the classroom and beyond. Retrieved from: <http://www.laureliversonhitchcock.org/2016/02/12/myguidelines-for-using-digital-social-tech-in-the-classroom-and-beyond/>
- Grabe, W., & Stoller, F. L. (2002). *Teaching and researching reading*. New York: Pearson Education. doi: 10.4324/9781315833743
- Harmer, J. (2007). *The practice of English language teaching*. England: Pearson. www.worldcat.org/title/practice-of-english-language-teaching/oclc/149005881
- Hennessy, S., Ruthven, K., & Brindley, S. (2005). Teacher perspectives on integrating ICT into subject teaching: Commitment, constraints, caution, and change. *Journal of Curriculum Studies*, 37(2), 155-192.
- İŞMAN, A. (2012). Technology and technique: An educational perspective. *TOJET: The Turkish Online Journal of Educational Technology*, 11(2), 207-213. tojet.net/articles/v11i2/11222.pdf

- Keser, H., Uzunboylu, H., & Ozdamli, F. (2012). The trends in technology supported collaborative learning studies in 21st century. *World Journal on Educational Technology*, 3(2), 103-119.
- Lam, Y., & Lawrence, G. (2002). Teacher-student role redefinition during a computerbased second language project: Are computers catalysts for empowering change? *Computer Assisted Language Learning*, 15(3), 295-315. <https://doi.org/10.1076/call.15.3.295.8185>
- Larsen- Freeman, D., & Anderson, M. (2011). *Techniques and principles in language teaching*. Oxford: OUP.
- Smith, A. (2015). U.S. Smartphone Use in 2015.** Pew Research Center, April, 2015. Retrieved from: <http://www.pewinternet.org/2015/04/01/us-smartphone-use-in-2015/> retrieved 8/10/2015
- Murphy, K., DePasquale, R., & McNamara, E. (2003). Meaningful Connections: Using Technology in Primary Classrooms. *Young Children*, 58(6), 12-18. Retrieved June 17, 2018 from <https://www.learntechlib.org/p/101494/>.
- Murphy, K., DePasquale, R., & McNamara, E. (2003). Meaningful Connections: Using Technology in Primary Classrooms. *Young Children*, 58(6), 12-18. Retrieved June 17, 2018 from <https://www.learntechlib.org/p/101494/>.
- Pourhossein Gilakjani, A. (2013). Factors contributing to teachers' use of computer technology in the classroom. *Universal Journal of Educational Research*, 1(3), 262-267. doi: 10.13189/ujer.2013.010317
- Samson, P. J. (2010). Deliberate engagement of laptops in large lecture classes to improve attentiveness and engagement. *Computers in Education*, 1(2), April-June, 2010. Retrieved
- Solanki, D., & Shyamlee1, M. P. (2012). Use of technology in English language teaching and learning: An analysis. 2012International Conference on Language, Medias and Culture IPEDR vol. 33(2012) © (2012) IACSIT Press, Singapore. 150-156.
- Wennersten, M., Quraishy, Z., & Velamuri, M. (2015). Improving student learning via mobile phone video content: Evidence from the BridgeIT India project. *International Review of Education / Internationale Zeitschrift Für Erziehungswissenschaft / Revue Internationale De L'Education*, 61(4), 503-528. Retrieved August 3, 2020, from www.jstor.org/stable/24637282