

The Impact of ICT on Academic Achievement of Senior Secondary Students

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Abstract

The impact of ICT on knowledge is currently in relation to the use of digital media, primarily computers and the internet to grease training and enhancing knowledge. This study explores the impact of ICT on the academic achievement of senior secondary students. The use of Information Communication Technology (ICT) in education, especially with the integration of computers with multimedia, has led to a new form of learning called e-learning. Because of advancements in the field of technology, ICT has become popular in formal education. Information Communication Technology has played a major role in the innovative applications of radio and television, computer technology, telecommunication networks, Internet and Intranet in teaching-learning situations. The physical classes in the seminaries have been replaced by online live-listed sessions at home. still, this unforeseen change has made it hard for preceptors to educate their scholars. Scheduling classes and managing schoolwork becomes quite a hassle on a videotape call. ICT is among the rearmost inventions that have revolutionized colorful operations in the world. It's particularly important in the field of education since it has lately created similar platforms and openings that have eased to some extent the accession of knowledge. This study has been conducted to check the impact of ICT tools on the academic achievement of senior secondary students. This study delved into the general perception of preceptors on the use of information communication technology.

Keywords: ICT, education, academic achievement, Information communication technology

Introduction

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ICT come to an important source of invention and enhancement of effectiveness in education. It has come a critical part of learning for scholars. The act of integrating Information Communication Technology into tutoring and literacy is a complex process whose success depends on a number of factors. These factors may generally be distributed into schoolteacher factors and academy factors. ICT has the implicit to transform the nature of education Where and how knowledge takes place and the places of scholars and instructors in the knowledge process. The epidemic has significantly changed the way scholars are tutored. A variety of models of exercises can be linked leading to the same outgrowth. ICT brings widened possibilities for knowledge processes that are independent of place and space. So, the original thing that a schoolteacher should negotiate is seeing that the ideas of the scholars are expressed by using any combination of the product tools to explain or show a commodity of interest. ICTs are the technologies used in conveying, manipulating, and storage of data by electronic means, they give an array of important tools that may help in converting the present insulated teacher-centered and text-bound classrooms into rich, pupil-concentrated, interactive knowledge surroundings. A society with a high position of technology would also be regarded as being developed, which is a major factor in enhancing technology development. The outgrowth of this study aims at determining whether or not the use of ICT has any significant influence on the academic performance of scholars. The use of information and communication technology (ICT) as an aid to tutoring and literacy, and the impact it has on students' academic performance.

Leuven et al. (2004) stated that there's no substantiation for a relationship between increased educational use of ICT and scholar's performance. Chang and Lee (2010) state that the smart classroom has come to a favored type of classroom because of its integration of so numerous types of media and IT technologies. The explanation of academic achievement and the examination of the factors relating to academic achievement are motifs of topmost significance in different educational situations. Studies have shown that previous academic performance is an important predictor of performance in other situations of education. also, the cognitive capability was set up as the strongest predictor of academic performance. still, some studies confirm that the correlation between cognitive capability and academic performance tends to decline as scholars progress in the educational system. therefore, numerous preceptors have emphasized the need to include on-cognitive factors similar to personality, provocation, learning strategies, and beliefs in examinations of individual differences in academic achievement. This miracle has been

stressed in this study which indicates how scholars view ICT as an element of their study program. likewise, numerous studies conducted on this subject are grounded on scientific studies of comparison. These studies establish that the relinquishment of ICT technology in institutions of literacy could ameliorate the separate institution. Also, utmost of the studies have concentrated on cognitive results, including many recent studies that have encountered effective results and a positive station towards ICT development. A society with a high position of technology would also be regarded as being developed. Adegun (2003) find out that a lesser proportion of educational expenditure will be devoted to wisdom and technology. The development of any society is judged by the technological position and the order of the people that inhabit it. Leuven et al.(2004) stated that there's no substantiation for a relationship between increased educational use of ICT and pupil performance. Young (2008) concluded that the impressive development of communication technology has given more chances for scholars to share in cordial communities, access information, and communicate with people globally. Guzeller and Akin (2014) explored that by using internet-based tasks, the students boost their knowledge and get higher rankxs with confidence. ICT-based tasks have accurate knowledge. Many studies have focused on the gap between girls and boys in to use of ICT and literacy, it concluded that girls Managed conducted greater than boys.

Information Communication Technology (ICT) &Academic Achievement

ICT is now extensively used in the education sector. The positive influence of ICT on scholarly achievement is what the instructor would like to have in the event that is going to happen anyway. Due to many walls, it is not easy for preceptors to borrow effective integration strategies in their teaching practice. It is not a straightforward process for students to achieve better through ICT integration (Fairlie & Robinson, 2013; Cener & Acun, 2014). Information and Communications Technology (ICT) is the confluence of computing, telecommunication, and governance programs for how information should be penetrated, secured, reused, transmitted, and stored. Academic achievement has come as an indicator of a child's future in this largely competitive world. Academic achievement has been one of the most important pretensions of the educational process. It's also a major thing, which every existent is anticipated to perform in all societies.

Academic achievement is a crucial medium through which adolescents learn about their bents, capacities, and capabilities which are an important part of developing career bournes. In ICT, audio-visual aids are the educational system of education that uses audio and visual as a mode of literacy. Audio- Visual aids are biased that are used in the classroom to make literacy engaging and easy. These can also help preceptors to communicate dispatches or information in places where regular tutoring fails. Audio- Visual aids motivate scholars towards the subjects they don't find intriguing. ICT tools encourage scholars to active participation in the classroom. It enhances pupils' performance through proper and transparent communication and helps preceptors in developing assignment plans for better tutoring-learning gests. By using ICT scholars encourage to come good spectators. ICT tools for tutoring and literacy cover everything from digital architectures similar to printers, computers, laptops, tablets, etc., to software tools similar to Google Meet, Google Spreadsheets, etc. still, we won't cover any of this introductory software or tackle tools similar as laptops and computers. Information and communication technology contributes greatly to education because it provides a better educational terrain.

ICT facilitates the communication of information to scholars through the use of computers, tablets, data displays, interactive electronic boards, and other formats. Scholten, Velde & Manen,(2009) concluded that the part of ICT is vital in storing, reacquiring, manipulating, and transmission of information by electronic means in digital shape. They're formally called particular computers, digital boxes, emails, and android systems. Computer moxie has told scholars' learning new guests for the entire world. In history, the intention to integrate computer technology in classes was more precious and preceptors and institutions use cheaper and accessible coffers for information sharing and technological communication problems were common due to lack of moxie and coffers. Lack of planning, lower backing, and academic appreciation are major foreign factors that minimize ICT use in classrooms. Neyland (2011), linked factors like institutional support, learners' station as well as preceptors' capabilities to influence online literacy in classrooms. Utmost of educationists defined the objectification of ICT in education as the mode of effective and effective of tutoring literacy process that includes class, structure, literacy, and tutoring terrain in classrooms. ICT enhances the scholars' achievement when preceptors apply inordinate use of technology. Cole (2000) explored that ICT had an impact on the tutoring and literacy processes when empowering scholars and preceptors with ICT coffers. ICT involves bringing real-life issues into the

classroom in a way that was previously not possible in a traditional classroom setting. The flexible nature of ICT and the internet in particular provides opportunities for research, commerce, collaboration, and cooperation among students. A number of former studies show that system of tutoring has a significant effect on the achievement of scholars in any position. Sevindik (2010) showed that lectures given through smart classrooms significantly increase the academic achievement of scholars. Aksoy, Can & Kocberber (2011) determined that vitality fashion is more effective than traditional tutoring styles in terms of enhancing scholars' achievement. Ganyaupfu (2013) demonstrated that the teacher-pupil interactive system was the most effective tutoring system, followed by the pupil-centered system while the school-teacher-centered approach was the least effective tutoring system. Chachra (2015) showed that tutoring through a smart classroom is more effective than conventional tutoring in all three intelligence situations. Liao & Chuang (2007) explored a meta-analysis study regarding the relationship between ICT and pupils' achievement showing that ICT has a positive impact on pupils' achievement status compared to traditional instruction.

Conclusion

The foreground of the study is to establish how frequently and how well the scholars used various ICTs, similar to word processing, spread wastes, and editing for transmitting digital information, or other communication equipment. ICT develops fleetly and supports scholars' learning surroundings. Scholars' commitment to ICT conditioning gives them an opportunity to learn more about ICT knowledge, tools, and chops and make an appreciable impact on their lives. still, noting that scholars in academia have access to computers and the internet, ICT use is particularly beneficial to issues, particularly academic achievement also explored. nearly most of the studies indicate that new technology can initiate, stimulate and expand how we increase pupils' academic achievement. The significance of ICT in education also has a significant impact on tutoring and literacy. Smart class terrain improves academic achievement. Several studies have concentrated on the finding of the effectiveness of smart classes over the traditional classroom in favor of academic achievement. Smart classrooms are helpful to score better academic achievement than the scholars who tutored through the traditional system. Smart class is help to develop their cognitive dimension. A smart classroom isn't only good for scholars but also for educators. It increases moment scholars' learning styles and the tutoring style of a

schoolteacher. ICT also allows more flexible and further personalized knowledge. The smart classroom has come to a favored type of classroom because of its integration of so numerous types of media and IT technologies. Digital knowledge is the capability to be dexterous in opting for ICT, as a medium tool that will help the way scholars enjoy in which ideas are constructed. There's a contradiction among the experimenters regarding the conception of the relationship between ICT and academic achievement. Several studies revealed that there's a positive relationship between ICT and academic achievement and the relationship depends upon intelligence but many studies also revealed that there's no significant relationship between ICT and academic achievement.

References

- Adegun O A (2003). Students' Participation in Governance and Organizational Effectiveness in Universities in Nigeria, *Mediterranean Journal of Social Sciences* 5(9):400-404
- Aksoy,C. Can,F. & Kocerberber ,S. (2011) Novelty detection for topic tracking, *Journal of the American Society for Information Science and Technology*,Vol.63 (4)
- Cener,E. Acun,I & Demirhan,G. (2015). The Impact of ICT on Pupils' Achievement and Attitudes in Social Studies, *Journal of Social Studies Education Research*,Vol.6(1)
Retrieved from www.sosyalbilgiler.org
- Chachra, I. K. (2015). Effect of smart classroom assisted teaching on academic achievement of students of different intelligence level in social science. Abhinav National Monthly Refereed *Journal of Research in Arts and Education*, 4(6), 4-10.
- Chen, CL.D., Chang, YH., Chien, YT. et al. (2015). Incorporating a smart classroom 2.0 Speech-Driven PowerPoint System (SDPPT) into university teaching. *Smart Learn. Environment*. 2, 7 <https://doi.org/10.1186/s40561-015-0010-2>
- Fairlie & Robinson (2013) Experimental Evidence on the Effects of Home Computers on Academic Achievement among Schoolchildren, *American Economic Journal: Applied Economics*, VOL. 5, NO. 3

- Ganyaupfu, E. M. (2013). Factors Influencing Academic Achievement in Quantitative Courses among Business Students of Private Higher Education Institutions. *Journal of Education and Practice*, 4(15), 57-65.
- Güzeller, C. O., & Akin, A. (2014). Relationship between ICT variables and mathematics achievement based on PISA 2006 database: International evidence. *Turkish Online Journal of Educational Technology*, 13(1), 184-192.
- Liao, H., & Chuang, A. (2007). Transforming service employees and climate: A multilevel, multisource examination of transformational leadership in building long-term service relationships. *Journal of Applied Psychology*, 92(4), 1006–1019.
- Liao, Y. C. (2007). Effects of computer-assisted instruction on students' achievement in Taiwan: A meta-analysis. *Computers & Education*. 48, 216-233.
- Neyland, E. (2011). Integrating online learning in NSW secondary schools: Three schools' perspectives on ICT adoption. *Australia Journal of Educational Technology*, 27(1), 152-173.
- Sevindik, T. (2010). Future's learning environment in health education: The effects of smart classrooms on the academic achievement of the students at Health College. *Telematics and Informatics*, 27(3), 314-322
- Van Manen, N., Scholten, H.J., van de Velde, R. (2009). Geospatial Technology and the Role of Location in Science. In: Scholten, H.J., van de Velde, R., van Manen, N. (eds) Geospatial Technology and the Role of Location in Science. GeoJournal Library, vol 96. Springer, Dordrecht. https://doi.org/10.1007/978-90-481-2620-0_1