

# Use of Science and Technology in Education on Secondary and Higher Secondary Level of West Bengal

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### ABSTRACT

Technology is being used by children and adults on a daily basis by way of web surfing, texting, social networking, interactive games, and in more ways. We are evolving technological society and in many ways have become dependent on its use. Thus, the use of technology and teaching students have to use it has become a high priority in the public schools. Modern technology tools that enable design, media production, self-expression, research, analysis, communication, collaboration, and computer programming are common place in various professions and disciplines, and facility with these tools is an essential part of becoming ready for college and careers. Interacting with digital learning environments that support the development of deeper learning skills such as problem solving, critical thinking, and inquiry is also crucial. Technology is a factor improving learning is the fact that technology is becoming such an integral part of our everyday world. The most jobs today require some type of technology use. Also, the students and adults are using technology on a daily basis to communicate, get information in multiple ways. The prevalent daily use of technology in people's lives overall makes the use of technology very relevant to the students and provides a connection that will greatly benefit student learning.

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### Introduction

Technology is a powerful contributor to learning if it is used to deepen students' engagement in meaningful and intellectually authentic curriculum. Technology is a tool. It should be selected when it is the best tool for students to learn. Technology can be a particularly effective tool for English language learners and can enhance the participation of children with disabilities. Children in elementary schools should begin to use familiar technology tools as a part of their academic program. Many studies have shown the advantages of using technology in classroom instruction. Technology can be used as a tool for establishing meaningful projects to engage students in critical thinking and problem solving. Technology can be used to restructure and redesign the class room to produce an environment that promotes the development of higher order thinking skills (Kurt, 2010). Technology also increases student collaboration. Collaboration is a highly effective tool for learning. Another study was conducted to examine the experiences of pre-service teachers implementing technology in math lessons. The study shows a positive effect on student learning in mathematics. The pre-service teachers noted that the internet provided math activities at different levels, which gave students an opportunity to choose the level they are comfortable working. Findings showed that students were engaged during the math lessons using technology and students were able to discuss what they learned the following day. The teachers were surprised by the students' recall the lesson. Some students who participated in the lessons believed that the computer helped them understand what teacher was saying about the lesson.

Technology used in these small group discussions of literature includes Wikis, online literature circles, and online book clubs. With these technologies, students were able to connect with readers from other schools, states, and even other countries. This type of technology is an assessable and motivational way to expose students to other ideas and cultures. These online literature discussions have the ability to create a sense of community and foster positive social interaction. The internet is becoming a common learning tool in many classrooms. This means provide a meaningful learning experience for all students. Teachers today have many opportunities for use technology increasing the ways students learn. Using computers and the internet has become an integral part of our daily lives. Therefore, one of the greatest vehicles for the 21<sup>st</sup> country is using technology for effective and permanent learning. The internet affects peoples' lives by increasing communication, expanding educational services, and increasing quality along with personal interaction. More emphasis has been placed on seeking, evaluating, organizing using and sharing information with others.

Information technology penetrates every corner of our world and our individual lives. What does that mean to us? How can we evaluate the legitimacy of the new "information technology era" and realize its promise of greater knowledge for the many? The World Wide Web of our world is so small that it increasingly resembles a small village. Internet users tent to know what is going on in their cyber-neighbours' lives; even when that neighbours is often living on the other side of the world!

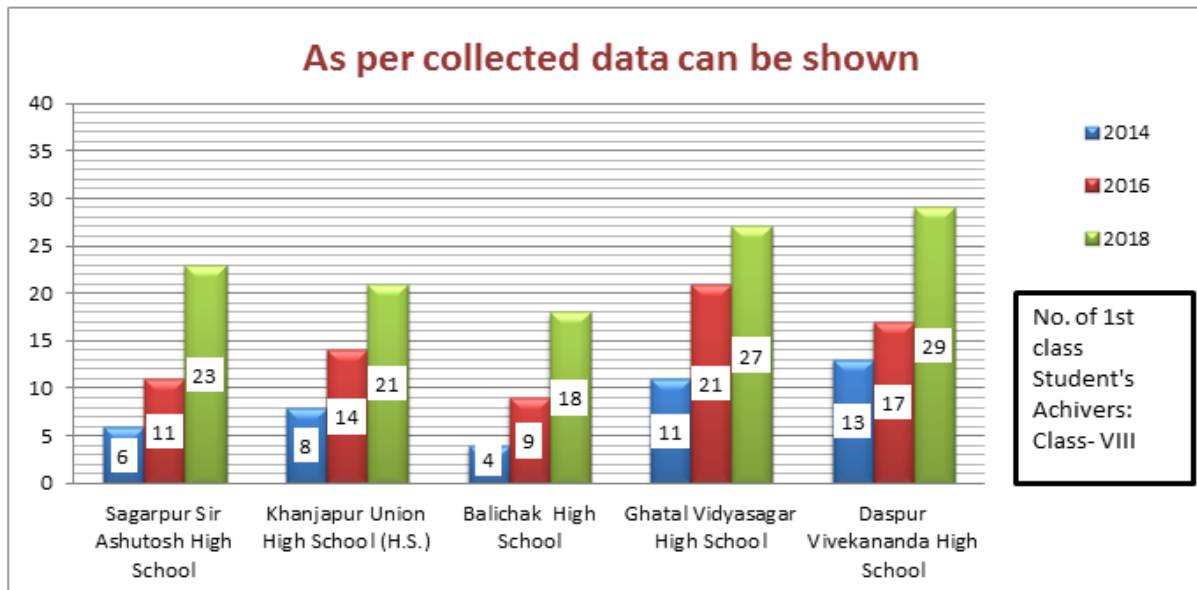
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## Data Collection from Following School

Sl. No	Name of School	Class - VIII 1st Class Achievers			Remarks Improvement
		2014	2016	2018	
1	Sagarpur Sir Ashutosh High School	6	11	23	By the use of Modern Technology, ICT, OHP, Transparent Machine Computer Laboratory etc.
2	Khanjapur Union High School (H.S.)	8	14	21	
3	Balichak High School	4	9	18	
4	Ghatal Vidyasagar High School	11	21	27	
5	Daspur Vivekananda High School	13	17	29	

**Objectives**

The study is based on technology that is a main part of people's daily lives, it is pertinent and vital that children learn how to use it at an early age.

- i) The study is to examine the effects of information and communication technologies on student's math and science achievement to be conducted in the schools of Midnapore District.
- ii) This program is included a practical technology support plan for teachers working with students with special needs.
- iii) The evidence in this paper shows that technology has a positive effect on students learning expectations and outcomes.

**Methodology**

The study is to analyze curriculum documents and textbooks qualitatively. Textbooks are designed and used are descriptive, comparative, and correlational. Both male and female science teachers at the elementary, middle, and high school levels were asked on their use of it in the classroom. Comparisons of their survey responses are made. The relationship between demographic information and science teacher's computer experience to their attitudes toward computers was also determined.

**Result and Discussion**

From the through it has been observed that five schools are gradually becoming more improved by the use of ICT, OHP, Transparent Machine, computer Laboratory etc.

**Conclusion**

From the study at the secondary and the higher levels of education, it can be summed up that the most of the work has been performed on the adoption of e-learning. The challenges and investigation of the rate of adoption of e-learning is a related experience. As discussed risks and shared proposals are related to design e-schools, e-colleges and e-universities. According to the study, the important part of the theories and proposal of models are related to research found generic in

nature like e-learning usage, its role in effective learning, maturity level of e-learning in HE system etc.

The use of technology in education on secondary and higher secondary level has given a board prospective welfare as has been observed in the study of Sagarpur Sir Ashutosh High School, Khanjapur Union High School, Balichak High School, Ghatal Vidyasagar High School, Daspur Vivekananda High School, the 1<sup>st</sup> class achievers are gradually increasing, the result of 2014 and the result of 2018 is absolutely different by the use of modern technology, OHP, ICT has given wide scope of improvement.

**References**

- Alam, S. (1991) Language as political articulation: East Bengal in 1952. *Journal of contemporary Asia*, 21(4), 469-487.
- A1-Moussa, A. (2004). The integration the information technology to Gulf Cooperation council (GCC) contries [Electronic Version]. A1-Riyadh Newspaper, 22 March 2004.
- Bhatt, B.D. & Aggarwal J.C. (1969). *Educational Documents in India 1813-1968*. New Delhi: Arya Book Depot.
- Brush, T. (2003). Preparing tomorrow's teachers to use technology (Pt.3). *Educational Technology Research & Development*, 51 (1), 39-128.
- Courduff, J. (2011). One size never fits all: Tech integration for special needs. *Learning & Leading with technology*, 38 (8), 16-19.
- Dettmer, P. (2006). New blooms in established fields: Four domains of learning and doing. *Roeper Review*, 28 (2), 70-78.
- Kurt, S. (2010). Technology use in elementary education in Turkey: A case study. *New Horizons in Education*, 58 (1), 65-76.
- Mulqueen, W.E. (2001). Technology in the classroom: Lessons learned through professional development. *Education*, 122 (2), 248-256.
- Onyike Maggaret odu, *International Letters of Social and Humanistic Science* 4 (2014) 31-39.