

Computing revolution and ICT Education in K-12 Schools and Future Perspectives



Information and Communication Technology has permeated in every walk of life affecting the technology fields such as launching satellites, managing businesses across the globe and also enabling social networking. The 21st century is characterized by the emergence of knowledge based society wherein ICT plays a pivotal role. (ICT) in schools has led to a major transformation of the educational landscape.

There was a time when students and teachers had to make many trips to the library to find the right books for their homework and lesson plans. Now, with various Information and Communication Technologies (ICT) in the classroom and the computer lab, relevant information is just a click away. Technology has radically modified the way teachers teach and students learn. There is excitement among teachers and students alike to learn computer skills and be techno savvy.

A powerful tool for expanding educational opportunities

1) Anytime, anywhere

One defining feature of ICTs is their ability to transcend time and space. ICTs make possible asynchronous learning, or learning characterized by a time lag between the delivery of instruction and its reception by learners.

2) Access to remote learning resources

Teachers and learners no longer have to rely solely on printed books and other materials in physical media housed in libraries (and available in limited quantities) for their educational needs. ICTs also facilitate access to resource persons, mentors, experts, researchers, professionals, business leaders, and peers—all over the world. One of the most commonly cited reasons for using ICTs in the classroom has been to better prepare the current generation of students for a workplace where ICTs, particularly computers, the Internet and related technologies, are becoming more and more universal. Technological literacy, or the ability to use ICTs effectively and efficiently, is thus seen as representing a competitive edge in an increasingly globalizing job market.

3) ICTs help prepare individuals for the workplace.

ICT provides a platform for innovation

ICT, when used effectively, can provide a platform for innovation in the academic process and bridge the gap caused due to various reasons. At TRIZ k12 platform, we understand that a good ICT solution is based on established learning approaches; it incorporates the perspectives of end users and is organically integrated into the school environment.

Future with endless possibilities

The future of ICT in education is filled with endless possibilities. Comprehensive education and IT policies like CBSE's recent decision to make digital classrooms compulsory, greater focus on integrating ICT as a field of study into the curriculum, using it as a teaching aid, and entry of many private players in this sector will lead to overall improvement in the quality of education and development of the ICT industry.