ICT TOOLS IN EDUCATION

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ABSTRACT

Information and communications technology (ICT) can affect students' learning if teachers know how to incorporate it into the curriculum and are digitally savvy. In this we are going to know about the Indian Government scheme, ICT tools and Predictions.

Keywords: Information | communication | Technology | education | online | digital |

1. INTRODUCTION

With the use of interactive digital whiteboards in place of chalkboards, students using their own smartphones or other devices for learning during class, and the "flipped classroom" model, in which students watch lectures on computers at home and use class time for more interactive exercises, ICT has also become essential to the teaching-learning process.

Indian Government scheme :

The Rashtriya Madhyamik Shiksha Abhiyan (RMSA) now encompasses information and communication technology (ICT) in schools. ICT in Schools is now included in the RMSA. Launched in December 2004 and amended in 2010, the Information and Communication Technology (ICT) in Schools program gives secondary school students the chance to primarily develop their ICT skills and learn through computer-assisted instruction.

There are basically four parts to the scheme:

The first is a collaboration with the administrations of the State and Union Territories to offer computer-assisted instruction to government-aided secondary and higher secondary schools.

The creation of smart schools, which will serve as technology showcases, is the second.

The third component consists of teacher-related interventions, like having a dedicated instructor on staff, giving all teachers access to more ICT training, and offering a national ICT award program as a way to encourage teachers to use ICT.

The fourth one is about the creation of electronic material, which is mostly done by the Central Institute of Education Technologies (CIET), five Regional Institutes of Education (RIEs), six State Institutes of Education Technologies (SIETs), and outsourcing.

ICT tools :

BlackBoard is a well-liked teaching tool with a wide range of features. Test administration, performance monitoring, syllabus management, and grade uploading are all made simple for teachers. Because they can access all the information you post to the platform, including grades, assignments, and attendance, students can gain equal benefits from this technology.

As its name implies, Google Classroom is a virtual classroom that facilitates simple and enjoyable learning. Instructors can build interactive assignments and combine websites or apps with instructive content.

Online, students may simply view their projects, establish due dates, and monitor their progress. In summary, Trello improves children's learning while relieving you of a great deal of load.

One Microsoft Office 365 product is Microsoft Teams. All that means is that you may use Teams to host meetings, communicate, exchange files, and access all Microsoft Office applications. The Class Notebooks from One Note are among the nicest things that Teams comes with. Class notebooks are easier to use and have more functionality than individual student notebooks, however are nevertheless physically similar. Students might be given individual notebooks by their teachers, who can also give them immediate feedback. Exams, handouts, quizzes, and assignments can all be quickly and conveniently distributed to your students.

Make sure learning to code is useful if you want your children or pupils to learn it. It's a waste of time to practice code on paper. Additionally, it destroys the students' creative potential. This is the role of websites like Coderbyte, HackerRank, DataCamp, and so forth. Your kids can apply what they've learned right away by using these websites. These websites also have a number of challenging puzzles that your students will find entertaining. The majority of websites can be accessed for free on any device, which is the nicest part. That essentially means that no laptop or PC will be necessary for any of your pupils to learn how to code. An internet-connected mobile device or a standard PC

would work. Google Maps: Children may use Google Maps to view 360-degree views of locations and calculate the distance between two locations. This can assist your students in familiarizing themselves with a variety of global locales.

CanFigureIt Geometry: This program simplifies the process of learning geometry. Numerous mathematical theorems and proofs can be taught to children in an interesting fashion.

CueThink: This tool can be used to teach children the four processes of problem-solving in arithmetic: comprehend, plan, solve, and review.

Google Forms: MCQ quizzes can be administered online using Google Forms. The data is kept in a spreadsheet that automatically logs the responses. The answers from the survey or quiz are then instantly added to the spreadsheet. Google forms are a useful tool for exchanging feedback with parents and students.

Videoconferencing Platforms: Several free videoconferencing platforms, such as Google Meet, Zoom, and Cisco Webex, were utilized to conduct online classrooms during the COVID-19 epidemic when the globe switched to an online learning environment.

Virtual Labs: These online resources offer remote access to simulation-based labs across multiple science and engineering fields. By using simulation-based experimentation, this student-centered method makes it easier for both fundamental and sophisticated concepts to be internalized. The utilization of extra online resources, video lectures, animated demonstrations, and self-evaluation are all made possible by internet-based experimentation. Any location, any speed, any time, any kind of lab can be a virtual lab. It's a paradigm change in online education that puts the student first. Teachers can use virtual lab sessions from Amrita Vlab portals for microbiology, organic chemistry, and inorganic chemistry practicals as well as sessions from Virtual Labs, a MOE Government of India Initiative for Physical Pharmaceutics, Organic Chemistry, and Inorganic Chemistry subjects. These virtual lab sessions are a useful tool during the online teaching and learning process.

Educational Videos and Animations (YouTube and Internet): YouTube offers a wealth of informative videos on pharmacy-related topics that can aid enhance comprehension of the material.

In the realm of education, e-readers are crucial information and communication technology (ICT) tools. Students can access a wide range of textbooks and other instructional materials with e-readers.

Learning management systems (LMS): By giving teachers a single platform to handle assignments, tests, and course materials, they can lessen their administrative workload and concentrate more on teaching.

2. PREDICTION

With the revolution in information and communication technology, country borders are becoming just lines on maps with no real significance. One of the services in this scenario that must be made available for unrestricted international trade is education. India is becoming more and more of a knowledge economy, and ICT is essential to its operation. The government and educational institutions must develop rules for the more advantageous use of ICT due to the disparity between the supply and demand for education.

3. CONCLUSION

Technology can improve education, but it cannot take the place of teachers' special role in it. Teachers provide individualized help, encouragement, and empathy that is unmatched by technology. They design interactive classes, offer constructive criticism, and modify curriculum to meet the requirements of each student. Although technology can help with material delivery and learning facilitation, students are actually inspired and empowered to succeed by their teachers and their human connections.

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