

A Study on ICT Tools in Teaching and Learning Process

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Abstract

Information and Communications Technology (ICT), frequently used term in today's scenario. Since the entire world is battling with the virus Covid19 all the teaching learning process was affected. ICT was launched in India during the year 2004 in school education and slowly adopted by the people in various sectors. During this pandemic situation ICT is a back boon for all the students and teachers for teaching and learning process. Even though ICT is in existence for past few decades now the usage is bloomed and it's playing a vital role in day today life with various online tools and apps. ICT has grasped the attention of academia, business, government and communities, etc.,

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I. Introduction

Information and communication are important thing where the information comes in many forms such as audio, video, text, image and so on these information's can be processed in the form of some tools such as mobile phones, laptops, desktops, video camera, digital camera etc., all these tools when combine with the information for processing then it is termed as technology. The term ICT is the technology that goes with the information and communication process. The digital infrastructures like laptop, computers, printers, software, scanners, and teaching tools are used in teaching learning process in the education sector and even all the meetings, conferences and communications are through the latest tools, techniques and concepts. Today's all the homes are become smart classrooms and this ICT changed and invaded our lives and the technology is dominating with all the latest software's and communication systems. ICT becomes a part of our lives in all aspects and it also has many pros and cons. There is a lack of security and privacy, social media, unemployment, cyber billing, preparation time, etc.,

II. Need of ICT tools

ICT plays a significant role in education sector as it supports in booming out the activities for presentation, communication, research work, financial analysis, etc., ICT tools will enhance the learning process, improves the efficiency, effectiveness in all aspects. This powerful tool acts as a bridge and adopted by teachers and students in teaching learning process, to promote the business and to attract the customers it plays a vibrant role in modern life. The education system is changing with the online tools and applications and the students are prepared to adopt this latest technology tools for their future study with latest gadgets. This makes the teachers also to align with the state-of-the-art techniques and trends in technology.

III. ICT Tools for Teaching and Learning Process

The learning methodology is enhanced with the inception of ICT tools and the students are simulated with gadgets in learning process. From the primary to higher education ICT serves as a bridge by planning the curriculum and key learning areas are identified and implemented. Many open online MOOC courses are available for learning the latest technology such as Swayam, Udemy, Coursera, Alison, EdX, Future learn, etc., with this we also have many online tutorial websites to learn the courses. Since it facilitates the easy method of learning process and paper less work with direct class room teaching. Web based tools with affordable cost is an added advantage in teaching and learning process. Since many automated solutions are available ICT can be used to promote the digital culture and the social media platform can be used to create awareness with minimum cost and it also save time. The models of access to ICT are Human capacity and training, Physical access to technology, Affordability of technology, public support, relevant content, applications, and services, Social-cultural factors and local economic environment

IV. ICT - Developing Literacy

ICT plays a role in developing literacy with the following tools, Drawing and graphics programs, web creation and design, Digital video, Web searching, Wikis, Word processing, Blogs, email, etc.,

V. ICT Tools - Language Development in Early Childhood Education

For the language development in childhood education the following can be used Word processors, computers, Internet and appropriate programs

VI. ICT Tools - Primary Schools

The various ICT tools that can be adopted in primary schools are listed below,

- Spreadsheets - data entry, tabulation and graph production
- Presentation software - creating handouts and notes pages, setting up animations, designing their own slide designs, images and inserting tables, and smart art graphics.
- Blogging - part of a website which can be updated from time to time with new content
- Animation - formulate a story and develop their higher-order skills
- Making a video - make a video, edit a video and evaluate the video

VII. ICT Tools - Quizzing/Testing/Gaming

- Book Widgets - Games, stimulation, worksheets and more multi-touch books and classrooms.
- Gimkit - ICT tool for gaming students can earn by correctly answering the questions
- Google forms - Quizzes, evaluations can be done
- Class marker - Online testing can be done easily
- Educaplay - Interesting games with instant feedback.
- Flubaroo - assess and evaluate the work/progress of the students online.
- Plickers - Real time data gathered by teachers for formative evaluation MasteryConnect - Identify the levels of comprehension, progress learning and instruction
- Kahoot - Interactive quizzes can be conducted

VIII. ICT Tools – Presentation

- Buncee - Construction and presentation tools
- Prezi – Online slideshow
- Nearpod – Create interactive using quizzes, images, text and questions.
- Lesson up - Digital lessons that are fun and engaging.
- Mentimeter - Input to create graphics in an instant.

IX. ICT Tools - Creative Creations

- Infogram - Responsive, interactive and engaging.
- Storybird - we can create book
- Pixton - used to make comics
- Vizualize - visualize our resume in one click
- Wordle - used to make a poster
- ScribbleMap - drawing and sharing maps.
- Canva - design for print or web: blog graphics, invitations, flyers, presentations, posters, Facebook covers.
- Visme.co - visual communication
- Venngage - build and publish infographics.

X. ICT Tools - Videos/Cartoons

- Animaker - animated characters, maps, properties, icons, BGs
- Dolnk - creativity application to show them what they know in education, such as animation, drawing, and green screen.
- Masher - professional video by combining text, music, and special effects.
- Binumi - video assignment tool
- Clipchamp - free video editor, converter, webcam recorder and compressor.
- GoNoodle - videos which activate your children at home and at school.
- ChatterPix - talk about anything- animals, doodles, and friends.

XI. ICT Tools - Brainstorm/Organizing

- Coggle - Mind -mapping tool
- Mindomo - Mind mapping software for desktop, web, android, and iOS
- Postermywall - create an interactive poster.
- Popplet - organize and capture ideas.
- Tagxedo - word cloud in different interesting shapes
- Huzzaz - collect, and discover the videos.
- ChartGo - online chart maker.
- Xmind - mind mapping and brainstorm
- Timeglinder - web-based timeline software for making and sharing history and planning of the project.
- Note App - sticky notes, in real- time

XII. ICT Tools for Studying

- Cram – Flash card to study
- WRTS – Study of vocabulary
- Cobocards – Online flashcard
- Studyblue – Study guide, notes, etc,

XIII. ICT Tool - Lesson Series

- Gooru - digital content, free tools and data to own their learning.
- GoConqr – Millions of crowdsourced resources.
- ReadWriteThink - good quality materials for reading and language arts instruction
- Showbie - App for assignment and feedback on its classroom device.
- TesTeach – Create digital lessons

XIV. Conclusion

ICT becomes a vital part in present education system and the significance of the internet is much sophisticated than earlier. We are using ICT in all domain of our life since and the whole thing is based on the data. The ICT tool should be used in proper way for communication and we can find easy way for interaction.

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