Understanding the Advantages and Disadvantages of ICT in Theinclusive Education

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Abstract- Inclusive education is most effective way of teaching where all kind of children get education in the same classrooms, with same facilities and opportunities in the schools. Where ICT is the bridge between the student and content. ICT supports the inclusion in education but misuse of gazettes can be menace to students of any age. Due to this there is a lot of change in our system as well as in our students. What these changes are resulting into are the major points to be discussed. This article tries to analyze the impact of ICT on the various aspects of student's life.

Indexed Terms- Advantages, ICT, Inclusive Education, Disadvantages

I. INTRODUCTION

Today's era is the era of technological advancement. The technology is giving ease to all of us in all the fields. On one hand where the technology is bringing speed and accuracy, on other hand it also slows down the mental ability of the people. Education is necessary for the growth of any nation. It is one of the most important part for the wellbeing of people. With passage of time the education has also become high tech. The use of Information and Communication Technology (ICT) has increased in education in the recent past. To enrich, up keep and optimize the delivery of information to all, it is necessary to have best mode of education which is possible with the help of Information and Communication Technology (ICT). It is one of the known fact that ICT can be the prime tool to improve the student's learning and is a better teaching method. ICT can be defined as a unique set of technological tools which are used to generate, deliver, store and exchange information. All students, regardless of any challenges they may have, are placed in age-appropriate general education classes that are in their own neighborhood schools to receive high-quality instruction, interventions, and supports that enable them to meet success in the core curriculum.(Bui, Quirk, Almazan, & Valenti, 2010; Alquraini & Gut, 2012).

It is a well-known fact that many students are being benefited through inclusive education. The school and classroom operate on the premise that students with disabilities are as fundamentally competent as students without disabilities. Therefore, all students can be full participants in their classrooms and in the local school community. The aims of inclusive education are achieved in the schools where digital gazettes are used to make the process of teaching and learning more easy and effective. Students also involve themselves in the learning process by heart if they are studding through these kinds of gazettes. When all children, regardless of their differences, are educated together, everyone benefits—this is the cornerstone of inclusive education.

A major concerns is how ICT can create new, open learning environments and their instrumental role in shifting the emphasis from ateacher-centered to a learner-centered environment; where teachers move from being the key source of information and transmitter of knowledge to becoming a collaborator and co-learner; and where the role of students changes from one of passively receiving information to being actively involved in their own learning.

II. GENERAL ICT TOOLS FOR TEACHING AND LEARNING

Desktop and laptops, Projector, Digital cameras, Printer, Photocopier, Tablets, Popplet, Pen Drive, I pods, I pads, Web boards, Scanners, Microphones, interactive white board, DVDs and CDs, Flash discs, video Games.

Teachers dealing with the SNE (Special Needs Education) can avail special ICT tools like;text magnifier, head wands, keyboard for cerebral Palcy, braille, typing aids, large prints, audio books.

Advantages of ICT in Education-ICT is considered as boon for education. The role of ICT in education can be viewed from various perspective like-

III. EDUCATIONAL ASPECT

- ICT enhanced the modes of communication- Digital teaching has reinvented the modes of teaching and learning. It has become more easy and approachable.
- ICT provides better teaching and learning methods- With the help of this technology a teacher feels more confident because every type of audio-visual aids can be used to teach any concept. It enhances the efficiency of explaining and understanding. It helps in improving their teaching skill and helps in innovative Teaching.
- Easy student management- ICT helps teachers to access up-to-date students and school data, anytime anywhere. It helps them in the preparation for their teaching and provides feedback. ICT helps Teacher to design educational environment in online class also, like he can mute, unmute, include, exclude the students from the class. ICT makes the process easier for teachers to produce and print student reports. Some systems work online which allow parents to see their child's progress from home.
- Interactive and collaborative teaching and learning methods- Interactive teaching methods involve two-way communication whether it is between students-teachers or students-students. This will help to adjust quickly in a process and approaches. With Interactive teaching styles, the learning process can be enhanced and students get benefits out of it. Collaborative learning is the educational approach of using groups to enhance learning through working together. Groups of two or more learners work together to solve problems, complete tasks, or learn new concepts.
- Web-based LMS tools connect students, educators, scholars and researchers, and education personnel together-ICT facilitates all the aspects of education i.e. students, educators, scholars and researchers, and education personnel. It sets a connection among them.
- Enhance E-learning and learning management system (LMS)-ICT has improved maximum areas like E-learning apps and sights from where any student can possess any educational material. It is very beneficial for financially poor students, residing in remote areas. And anyone can see the content or any information at any point of time. For ex.-
  - (i) NEAT –It aims to make learning more personalized and customized as per the requirements of the learner.
  - (ii) Swayam - It provides for an integrated platform for online courses.
  - (iii) MOOC - Massive Open Online Courses
  - (iv) E-PG Pathshala: An initiative of the Ministry of Human Resource Development to provide e-content for studies.
- Teachers can teach better with images, videos and graphics while delivering lessons- Audios and visual pictures helps in explaining and understanding the concept easily and effectively. Educators can engage, make content interesting, and can create well-designed classroom activities. With the help of ICT a teacher can plan his class easily and make it effective.
- Promote Independent learning platforms for students- Students can learn by themselves without a teacher with the help of ICT. Here these gazettes play the role of instructor. These days we can see that today's students has to make less efforts than the older time. We can get any information on any topic without wondering here and there, without any wastage of time.

IV. SOCIAL AND MENTAL ASPECT

- Spread awareness of the social impact of technological change in education- ICT side by side spreads awareness about the social impacts through different ads.
- ICT improves the digital culture in schools, colleges, and universities – These days digitalization has changed the culture of education. All most every teacher as well as students are using digital modes of information. Approach towards work has changed. Digitalization has improved the work culture, administration and enhanced the quality and efficiency of providing education.
- Enhanced data and information security: ICT helps in data enhancement which helps a teacher to collect a huge information and also provides security with strong passwords. The information can be kept secure and secret.
- Use of artificial intelligence- We all know that artificial intelligence has become as the oxygen for humans. Artificial intelligence (AI) makes our life extremely easy because it is possible for machines to learn from experience, adjust to new inputs and perform human-like tasks. Most AI examples that you hear about today – from chess-playing computers to self-driving cars – rely heavily on deep learning and natural language processing. Human are using AI in as much possible ways as it can .So is in the education field. Teaching learning process has become interesting, creative, vast and wide but precise including special children also. Teacher uses it as its major tool. So it can be said that AI is a boon for Inclusive education.

V. FINANCIAL ASPECT

- ICT provides More Cost-Effective learning than Conventional Learning-Lesser monetary investment is there with better results. With the online mode of learning, they do not have thousands of support staff and personnel to pay each month. This allows online colleges and universities to offer cheaper tuition rates compared to traditional brick-and-mortar colleges and universities.

- Minimize cost and save time: ICT minimizes the cost of education in all ways. When you can automate most administrative functions, you require less workforce to complete the tasks. Also, the software can generate analytical reports to assess student performance, reducing the load on reporting and record-keeping and allowing more time to staff to focus on other curricula.

VI. ENVIRONMENTAL ASPECTS

- Paperless Eco-friendly-ICT eliminate the usage of paper. It saves the environment. Usage of paper can be decreased.
- Automatic solutions to manual paper-based processes and procedures- The use of ICT has lessen the use of paper in all areas; especially in the field of education. We all know that during Covid -19 lockdown, everything was refreshing itself, use of paper also decreased a lot. The other ways of presenting or submitting the work is still in practice. Which is helping in saving the environment.

VII. DISADVANTAGES OF ICT IN EDUCATION

Educational Aspect-
- Teachers require training to handle ICT–All teachers require the training time to time for operating new apps and to know the new up comings in the education field. Senior teachers faced a lot of issues regarding using computer or mobile phone for taking an online class. Many of them were not trained for the same. Due to this time and energy was wasted on the both parts i.e. teacher and students. That time students and teachers went through a severe mental pressure. So it becomes very important to train teachers to be familiar with ICT.
- Transformation from chalk and talk to mouse and screen- A teacher talks about its content while using a chalk on the blackboard. Now days it has been replaced by mouse and screen. With mouse and screen a teacher mostly will keep on sitting at one place where with chalk and board he will be moving here and there in the class. This ideas in

teaching will be less interesting. And over it students will act as passive listeners mostly.

- Books replaced by online surfing- We accept that online surfing is time saving but it affects our eyes when we surf every time online. Books are always good .It will not hurt the eyes. We can see the risk to the traditional book and handwriting methods.

- Less use of pen and pencils- Children are finding it hard to hold pens and pencils because of an excessive use of technology. Children are less interested and also facing difficulty in improving their hand writing.

- The conventional education curriculums needs to be changed in accordance with ICT-The contents needs to be revised or updated if we want to use ICT for the benefit of our children.

- Increasing incidents of cheating- With the use of their own computers and other gazettes, students are able to avoid teachers monitoring their activity. Teachers are having difficulty preventing cheating as classroom technology use is increasing.

VIII. SOCIAL AND MENTAL ASPECT

- Outdoor childhood verses indoor childhood – These days children are spending their time by playing games on screen. Most of the children doesnot go to park or ground for playing outdoor games.Because they get virtual incentive in the screen related games and they love to spend much time in them.This is affecting their health specially eyes. Indoor games are vast and safe. These may be associated with screen and may not be. Research suggests that children can't develop to their maximum potential just by playing inside. By missing out on outdoor play children also miss out on the opportunity to connect with nature and socialize and enjoy a good health. At times, indoor play related to screen can be lonely and lack adventure.

- Big Social change- Technology has changed our modes of life. Society is moving towards compact modernization. Technology delays in social and emotional development.

- Away from nature or less connect with nature- People often stay at one place inside home. Going

out is not so interesting idea for children because they would like to play with gazettes more.

- Social Disconnect- Studies have shown that technology distracts people from real world relationships. These gazettes engage people in virtual world and make virtual friends rather than real social connections.

- Downfall in moral, social values- Technology can bring out the worst behaviors because children don't listen to their elders. Lack of important positive characteristics for youth such as self-control, humility, and honesty can be seen rather a lot of anger and hostility

- Lazy buddies- Much use of these gazettes make humans lazy. No one will want to wonder here and there if they get every reading material at one click. This is good for study point of view but not good when we talk about our health. This facility makes each one of us lazy.

- Misuse of technology, Insecure sights and Privacy Concerns- Many sights are insecure and a threat to our security then if it is about finance or about our family members .Small kids are not aware how they should handle it. Many cases we all must have read in newspaper or somewhere else related to this. Much efforts are been made time to time by our govt. but these cyber criminals does not desist.

- Social Alienation and Weakens relationships- Maximum time's children are busy with these gazettes. They don't get involved with their peer group. They even couldn't develop friendship with others because of engagement with the technical things. This leads to social alienation and weakens relationships.

- Culture disaster- Our culture and traditions are getting mixed. So purity of culture is less seen these days. Whether it is about marriage traditions or other ceremonies. On the name of modernization the culture is getting mixed. On one side it can be considered good but when we talk about the cultural purity it is the matter of rethinking and concern.

- Deadly games-Many screen games are just deadly. This way or that way, these games are going to harm. The main thing which is of concern, is that schools are recommending playing this kind of games which are related to

their subject matter. The screen time will be increased again. Gaming has also been associated with psychological problems. Vision problems are common complaints of gamers. The most common vision problem is eye strain, which can lead to headaches and poor concentration. Gaming has been reported to result in seizures, leading to warnings on the packaging.

IX.   PHYSICAL ASPECT

- Threat to eyes and other body organs-Studies have shown that close computer work can cause dry eyes, double vision, light sensitivity, fatigue, and headaches. Additionally, handheld devices demand that users position themselves close to the equipment. This can result in increased use of eye muscles to focus, which leads to more strain.
- Increasing diseases-The use of technology can affect both our physical and mental health. Some of these effects are transient, whereas others may be permanent .Other health effects can be poor sleep quality, such as social incompatibility and anxiety, physical inactivity and obesity.
- Addiction - Humans are getting addicted to these techno gazettes day by day like smoking or alcohol. Which can lead to a disaster.

CONCLUSION

The role of information and communication technologies (ICT) is crucial in inclusive education. It is the demand of the hour to keep with the pace of information and technology. No doubt the use of ICT in education can be a boon but it is also a bane at the same time. Impact of ICT and its potential for the education field is manifold. It has advanced the teaching-learning process on one hand and assessment- evaluation on the other hand. It improves the effectiveness of education. It facilitates research and scholarly communication. The other side of the coin cannot be neglected. The excessive use of ICT increases the social alienation among the students, it creates physical and mental illness. Student teacher gap is also evident in the present era of ICT. It can be concluded that there must be use of ICT in education but in sustainable way so that it may not destroy the aesthetic beauty of teaching and learning.

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