ICT IMPACT ON EDUCATION.

Mrs.Shibali Kumar.

Trainer in English - spoken online, Distinction in Montessori. Also assisted in writing BMM "Introduction to English literature", book of college syllabus of Mumbai University and Well experienced as Research Content online for multinational companies.

Abstract: - ICT **IMPACT ON EDUCATION**.

Information and Communication Technologies (ICT) is a term which refers to technologies which are used for collecting, storing, editing and passing on information in various forms [1]. A personal computer is an example of the use of ICT in education.
ICT enable the transformation of teaching, research and learning processes at all levels. It empowers teachers and students, making significant contributions to the education fraternity.

In general terms, we can categorize functions of the use of ICT in education as:

ICT as object. It's a tool of information gathered in one box connected through internet, the digital connectivity, which gives us the exact information to head towards our accomplishment of goals. This acts as an essential medium of learning and teaching at the same time, where teachers can teach and learners can learn a lot sitting at one place by connecting through whole world information library at once, which helps them to lead in successive manner and step by step. "ICT is a tool in education".
ICT has different impacts on digital learning:" Education".
1. It releases time for more active. Engaging and Interactive forms of learning.
2. Building bridges the digital divides between rural and developed regions.
3. Imparts enhanced communication, interaction and more flexibility.
4. Motivates Students for self paced and self learning.
5. Improves teaching learning processes.
6. Reduces barriers of space and time.
7. Enhances competencies level of teachers and students.

ICT is an effective combination of knowledge between active school and school knowledge. Its an source of enrichment facing the real world with the help of digital movies or audio to deepen understanding. It's also a way to experimental learning and class activities. (After gathering information, students make reports with professionals, help via internet at schools). ICT not only transforms learning but also the learning process. The transformation gets to increase learning gains for students that provide learners an opportunity to develop creativity, communication skills, and other thinking skills. Besides, smart solutions for the future including
Laptop learning, e-learning, smart classrooms, didactic equipment and stimulations is the key to education today. An entire learning environment is needed in which students, teachers, administrators, and parents can easily communicate and collaborate with each other, share secure information around the clock, and, ultimately, access a world of knowledge beyond classroom walls.ICT is enhancing the power of gaining knowledge and converting schools, colleges, organization into a "Smart" sector. ICT gives an student, learner or a teacher an independency of e - learning.ICT gives easy access to a world of knowledge and ICT which including quick guide is to learn 'the basic' of how to use the functions or applications. Teachers also reported that ICT offered them enhanced resources to support learning through teaching. The levels of interaction, the immediacy and the ability to refresh work, were all indicated as ways in which ICT could enhance the range of teaching approaches taken. On the other hand ICT has both the advantages and disadvantages.

The one of the disadvantage could have a bad impact on education system. Teacher, who always show the example of the work from the internet and copy the information, will not show a good example for the students. That may cause the students follow the action of the teacher and start to copy and paste. At the same time, the information and knowledge which come from the internet are not necessary correct. We have to more careful when doing research from the web.

In conclusion, ICT can give both advantages and disadvantages to education. We have to be careful when using it. Internet, TV, radio and others are the ICT that provide the news and information to us. We can increase our vision when we have it. But, when we are too focused on these things, we may suffer health problems by using them. We have to be wise in using the tools of ICT. Therefore any tool when used should be contempt cautiously. Whereas ICT plays an important tool in our society today, the way to developed knowledge efficiently and effectively.

Keywords: ICT, Education, Social Development, Knowledge and Information, ICT tools.

INTRODUCTION:-

ICT plays a very important role in today's changing world at rapid pace. Like: Information with research quotes, Music Creation for song in bands, there is not a single day that goes by not using technology in day to day life in every aspect, in some way or the other. Therefore ICT plays an important role on education too, as a source of information and communication technologies, which refers to technologies which are used for collecting, storing, editing and passing on information in various forms. A personal computer is an example of the use of ICT in education.

ICT enable the transformation of teaching, research and learning processes at all levels. It levels up teachers and students, making appropriate contributions to the education Affiliation.

- **What is ICT?**

- INFORMATION
- COMMUNICATION
- TECHNOLOGIES

ICT are the hardware and software that enable society to create, collect, consolidate and communicate information in multimedia formats and for various purposes.

Meaning : The term "information refers to any communication or representation of knowledge such as facts, data or opinions in any medium or for, including textual, numerical, graphic, Cartographic, narrative or audio visual forms

Technology is the practical form of scientific knowledge or the science of application of knowledge to practical.

- **What is ICT in education?**

Worldwide research has shown that ICT can lead to improved student learning and better teaching methods. A report made by the National Institute of Multimedia Education in Japan, proved that an increase in student exposure to educational ICT through curriculum integration has a significant and positive impact on student achievement, especially in terms of "Knowledge・Comprehension" ・ "Practical skill" and "Presentation skill" in subject areas such as mathematics, science, and social study.

However, you can see that there are many education technology solutions provided in the world which may cause confusion among educators about how to choose the right ICT solution. Let's have a look at the

advantages and disadvantages of ICT tools for education and discover what kind of education ICT solution is suitable for your school needs.

3 MAIN ADVANTAGES OF ICT TOOLS FOR EDUCATION

- 1· Through ICT, images can easily be used in teaching and improving the retentive memory of students.
- 2· Through ICT, teachers can easily explain complex instructions and ensure students' comprehension.
- 3· Through ICT, teachers are able to create interactive classes and make the lessons more enjoyable, which could improve student attendance and concentration.

3 MAIN DISADVANTAGES OF ICT TOOLS FOR EDUCATION

- 1· setting up the devices can be very troublesome.
- 2· Too expensive to afford
- 3· Hard for teachers to use with a lack of experience using ICT tools.

"ICT IS BASICALLY A DIGITAL LEARNING", ALSO KNOWN AS "E-LEARNING "PROCESS.

- **What is E-learning in ICT Education?**

When it comes to online learning in education, the model has been pretty straightforward - up until the early 2000s education was in a classroom of students with a teacher who led the process. Physical presence was a no-brainer, and any other type of learning was questionable at best. Then the internet happened, and the rest is history. E-learning is a rapidly growing industry, the effects of which we can trace back to the 1980s and even well before that (in the form of distance learning and televised courses) – these will be discussed later in this ebook.

Now that affordable e-learning solutions exist for both computers and internet, it only takes a good e-learning tool for education to be facilitated from virtually anywhere. Technology has advanced so much that the geographical gap is bridged with the use of tools that make you feel as if you are inside the classroom. E-learning offers the ability to share material in all kinds of formats such as videos, slideshows, word documents and PDFs. Conducting webinars (live online classes) and communicating with professors via chat and message forums is also an option available to users.

There is a plethora of different e-learning systems (otherwise known as Learning Management Systems, or LMSs for short) and methods, which allow for courses to be delivered. With the right tool various processes can be automated such as a course with set materials and automatically marked tests. E-learning is an affordable (and often free) solution which provides the learners with the ability to fit learning around their lifestyles, effectively allowing even the busiest person to further a career and gain new qualifications.

Some of the most important developments in education have happened since the launch of the internet. These days learners are well versed in the use of smartphones, text messaging and using the internet so participating in and running an online course has become a simple affair. Message boards, social media and various other means of online communication allow learners to keep in touch and discuss course related matters, whilst providing for a sense of community.

In the fast-paced world of e-learning the available technologies to make a course new and exciting are always changing, and course content can and should be updated quickly to give students the very latest information. This is especially important if the e-learning training is being given to employees in a sector where keeping up-to-date on industry developments is of the utmost importance. This is one of the reasons

why many businesses are now offering training via e-learning - other reasons includes low costs and the ability for employees to study in their own time and place.
Overall, traditional learning is expensive, takes a long time and the results can vary. The importance of E-learning is now a given fact and it can offer an alternative that is much faster, cheaper and potentially better.

The history of e-learning
The first online learning systems were really only set up to deliver information to students but as we entered the 70s online learning started to become more interactive. In Britain the Open University was keen to take advantage of e-learning. Their system of education has always been primarily focused on learning at a distance. In the past, course materials were delivered by post and correspondence with tutors was via mail. With the internet the Open University began to offer a wider range of interactive educational experiences as well as faster correspondence with students via email etc.

Online learning today
With the introduction of the computer and internet in the late 20th century, e-learning tools and delivery methods expanded. The first MAC in the 1980′s enabled individuals to have computers in their homes, making it easier for them to learn about particular subjects and develop certain skill sets. Then, in the following decade, virtual learning environments began to truly thrive, with people gaining access to a wealth of online information and e-learning opportunities.

By the early 90s several schools had been set up that delivered courses online only, making the most of the internet and bringing education to people who wouldn't previously have been able to attend a college due to geographical or time constraints. Technological advancements also helped educational establishments reduce the costs of distance learning, a saving that would also be passed on to the students - helping bring education to a wider audience.

In the 2000′s, businesses began using e-learning to train their employees. New and experienced workers alike now had the opportunity to improve upon their industry knowledge base and expand their skill sets. At home individuals were granted access to programs that offered them the ability to earn online degrees and enrich their lives through expanded knowledge.

The benefits and drawbacks of online learning
Whether you're a high-school teacher looking to engage your students in a more interactive way, or a corporate trainer hired by a large company to design training curricula, e-learning packs a punch when it comes to benefits that make the creation and delivery processes easier and hassle-free. Important benefits are outlined below:

No Boundaries, No Restrictions
Along with location restrictions, time is one of the issues that learners and teachers both have to face in learning. In the case of face-to-face learning, the location limits attendance to a group of learners who have the ability to participate in the area, and in the case of time, it limits the crowd to those who can attend at a specific time. E-learning, on the other hand, facilitates learning without having to organize when and where everyone who is interested in a course can be present.

More Fun
Designing a course in a way that makes it interactive and fun through the use of multimedia or the more recently developed methods of gamification (further discussed in later chapters) enhances not only your engagement factor, but also the relative lifetime of the course material in question.

Cost Effective

This is directed to both learners and teachers, but there is a good chance that whatever your role you had to pay exorbitant amounts of money at some point to acquire updated versions of textbooks for school or college. While textbooks often become obsolete after a certain period of time, the need to constantly acquire new editions is not present in e-learning.

It Just Fits!

As companies and organizations adopt technologies to improve the efficiency of day-to-day operations, the use of the internet becomes a necessity. As multinational corporations expand across the globe, the chances of working with people from other countries increases, and training all those parties together is an issue that e-learning successfully addresses. And that's a great advantage of online learning!

Let's blend all of that together and apply it in a real-life scenario:

In an effort to enhance the credibility of course material, oftentimes a professor will summon a field specialist to give a lecture relevant to the topic at hand. In the traditional model of education, the professor would have to extend an invitation to said expert, and incur the costs of his flight, stay and training.

With e-learning:

With e-learning the professor has the ability to host a guest lecture without having to spend much money. It can be done virtually, with cameras for both the lecturer and the students, and with the use of microphones to facilitate the same level of interaction that would be possible if the lecturer were physically present in the room. The added benefit comes in when we are able to replay the lecture and gain even more out of it. Students that missed out can view the recording, or students that attended can watch it again to further their understanding.

Concerns that arise with e-learning

Even given all the benefits of e-learning, one cannot deny there are some drawbacks. A good example of a disadvantage of online learning is that practical skills are somewhat harder to pick up from online resources. For example, although building a wooden table is something you can easily share information about, record videos of and explain, the practical experience is essential. Pottery and car engineering are examples of skills that require hands-on experience.

Isolation

Though e-learning offers ease, flexibility and the ability to remotely access a classroom in the student's own time, learners may feel a sense of isolation. This is because learning online is a solo act for the most part, which may give the learner the feeling that they are acting completely alone. As technology progresses and e-learning benefits from the advancements being made, learners can now engage more actively with professors or other students using tools such as video conferencing, social media, and discussion forums amongst others.

Health Related Concerns

E-learning requires the use of a computer and other such devices; this means that eyestrain, bad posture and other physical problems may affect the learner. When running an online course it's a good practice to send out guidelines about correct sitting posture, desk height, and recommendations for regular breaks.

Best practices of online training

Online learning can offer a wide range of benefits. However, the knowledge that a student is able to acquire this way depends not only on the course material that is offered, but also the practices used to provide them

with this information. Here are just a few of the best practices of online training which help to better facilitate the e-learning process:

A supportive community
Teachers and e-learning establishments should encourage a strong sense of community amongst their online students. This will enable students to interact with one another and the instructors, as well as with the resources provided, making for an enhanced educational experience!

Clear expectations
Students should be aware of what they will be receiving from the virtual class instruction, and both parties should know the preferred method of communication and delivery of the core curriculum. For example, a teacher may prefer to email assignments to students, while another might choose to deliver it via the e-learning site instead. Also, it's best to have clear expectations about how long each item of coursework should take to complete.

Asynchronous and synchronous activities
It's important to incorporate activities that are more interactive, as well as those that require the student to brainstorm and research a topic in depth. This can be an important differentiator in a company's e-learning best practices mindset and thanks to the internet, students can now attend live virtual courses as well as complete coursework offline that can enable them to delve into a specific subject or skill set.

Effective usage of available resources
To get the most out of the online learning experience both the teacher and the student should take full advantage of the vast amount of resources that are available online. There are literally hundreds of online services that offer access to information, with Wikipedia being a prominent example. Instructors should seize the opportunity to enhance their content with online material or redirect students to additional web resources.
Online Learning depends on trainer completely.
Learning is the process of absorbing that information in order to increase skills and abilities and make use of it under a variety of contexts. Whatever the goals, the quality of the learning will rely largely on the quality of the training, and so the role of trainer is very important as it can have a huge effect on the outcome of a course for the learner.
While you do learn to do something specific, you are also inadvertently equipped with the knowledge and/or skills to face future challenges. In essence, learning is all about equipping a person to tackle not just today's issues, but preparing him/her to creatively come up with ways to tackle tomorrow's issues
Ideally, an e-learning environment will utilize both learning and training principles throughout its curriculum. This allows instructors/trainers to provide their learners with the tools to tackle current issues, develop life-long skills, improve on their problem-solving skills and utilize resources to the best of their ability.
E- learning has impact on various fields of corporate sectors also, wherein corporate are trained or educated for " of the job ", faculty to meet company requirements before hand, so corporate once trained by experts may not repeat the mistakes at actual work place and companies reduces the risks of losses and faults by the executive working efficiently as they are now educated by expertise on ICT to the level of achieving targets.
What happens in educational institutes?
In comparison with corporate e-learning, learning in the education sector focuses primarily on knowledge transfer and not on training i.e. in education we mainly strive to learn things with global scope (e.g. a subject such as mathematics) whilst corporate e-learning is more focused on business needs (e.g. new recruit induction). The word education means to gain general theoretical knowledge and this may or may not involve learning how to do any specific practical work, tasks or skills. Please note that there is some overlap and that the word 'education' can also refer to a process of training or receiving tuition. For example, basic

training in a field such as health services is usually a combination of theoretical, educational and practical learning skills.

What is the future of e-learning?
E-learning is here to stay. As computer ownership grows across the globe e-learning becomes increasingly viable and accessible. Internet connection speeds are increasing, and with that, opportunities for more multimedia training methods arise. With the immense improvement of mobile networks in the past few years and the increase in telecommuting, taking all the awesome features of e-learning on the road is a reality with smartphones and other portable devices. Technologies such as social media are also transforming education constantly.

Generally speaking, learning is expensive, takes a long time and the results can vary. E-learning has been trying for years now to complement the way we learn to make it more effective and measurable. The result now being that there are a number of tools that help create interactive courses, standardize the learning process and/or inject informal elements to otherwise formal learning processes. Several e-learning trends can give us a clear view on how the future of e-learning and learning tools will be shaped:

Micro-learning focuses on the design of micro-learning activities through micro-steps in digital media environments, which already is a daily reality for today's knowledge workers. These activities can be incorporated into a learner's daily routines. Unlike "traditional" e-learning approaches, micro-learning often tends towards push technology through push media, which reduces the cognitive load on the learners. Therefore, the selection of micro-learning objects and also pace and timing of micro-learning activities are of importance for didactical designs. Micro-learning is an important paradigm shift that avoids the need to have separate learning sessions since the learning process is embedded in the daily routine of the end-user. It is also perfectly suited for mobile devices where long courses can be overkill.

The Promise of ICTs in Education

For developing countries ICTs have the potential for increasing access to and improving the relevance and quality of education. It thus represents a potentially equalizing strategy for developing countries.

- **How can ICTs help expand access to education?**

ICTs are potentially powerful tool for extending educational opportunities, both formal and non-formal, to previously underserved constituencies—scattered and rural populations, groups traditionally excluded from education due to cultural or social reasons such as ethnic minorities, girls and women, persons with disabilities, and the elderly, as well as all others who for reasons of cost or because of time constraints are unable to enroll on campus.

- *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. Online course materials, for example, may be accessed 24 hours a day, 7 days a week. ICT-based educational delivery (e.g., educational programming broadcast over radio or television) also dispenses with the need for all learners and the instructor to be in one physical location. Additionally, certain types of ICTs, such as teleconferencing technologies, enable instruction to be received simultaneously by multiple, geographically dispersed learners (i.e., synchronous learning).
- *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. With the Internet and the World Wide Web, a wealth of learning materials in almost every subject and in a variety of media can now be accessed from anywhere at

anytime of the day and by an unlimited number of people. This is particularly significant for many schools in developing countries, and even some in developed countries, that have limited and outdated library resources. ICTs also facilitate access to resource persons— mentors, experts, researchers, professionals, business leaders, and peers—all over the world.

- **How does the use of ICTs help prepare individuals for the workplace?**

➢ 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 ubiquitous. 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. Technological literacy, however,is not the only skill well-paying jobs in the new global economy will require. EnGauge of the North Central Regional Educational Laboratory (U.S.) has identified what it calls "21st Century Skills," which includes digital age literacy (consisting of functional literacy, visual literacy, scientific literacy, technological literacy, information literacy, cultural literacy, and global awareness), inventive thinking, higher-order thinking and sound reasoning, effective communication, and high productivity. [13] (See Table 1 for a brief explanation of each skill.)

The potential of ICTs to promote the acquisition of these skills is tied to its use as a tool for raising educational quality, including promoting the shift to a learner-centred environment.

Figure 1: Table 1: Skills Needed in the Workplace of the Future

Digital Age Literacy	
Functional literacy	Ability to decipher meaning and express ideas in a range of media; this includes the use of images, graphics, video, charts and graphs or visual literacy
Scientific literacy	Understanding of both the theoretical and applied aspects of science and mathematics
Technological literacy	Competence in the use of information and communication technologies
Information literacy	Ability to find, evaluate and make appropriate use of information, including via the use of ICTs
Cultural literacy	Appreciation of the diversity of cultures
Global awareness	Understanding of how nations, corporations, and communities all over the world are interrelated
Inventive Thinking	
Adaptability	Ability to adapt and manage in a complex, interdependent world
Curiosity	Desire to know
Creativity	Ability to use imagination to create new things
Risk-taking	Ability to take risks
Higher-Order Thinking	Creative problem-solving and logical thinking that result in soundjudgments
Effective Communication	
Teaming	Ability to work in a team
Collaboration and interpersonal skills	Ability to interact smoothly and work effectively with others
Personal and social responsibility	Be accountable for the way they use ICTs and to learn to use ICTs for the public good
Interactive communication	Competence in conveying, transmitting, accessing and understanding information
High Productivity	Ability to prioritize, plan, and manage programs and projects to achieve the desired resultsAbility to apply what they learn in the classroom to real-life contexts to create relevant, high-quality products

- **How can the use of ICTs help improve the quality of education?**

Improving the quality of education and training is a critical issue, particularly at a time of educational expansion. ICTs can enhance the quality of education in several ways: by increasing learner motivation and engagement, by facilitating the acquisition of basic skills, and by enhancing teacher training. [14] ICTs are also transformational tools which, when used appropriately, can promote the shift to a learner-centered environment.

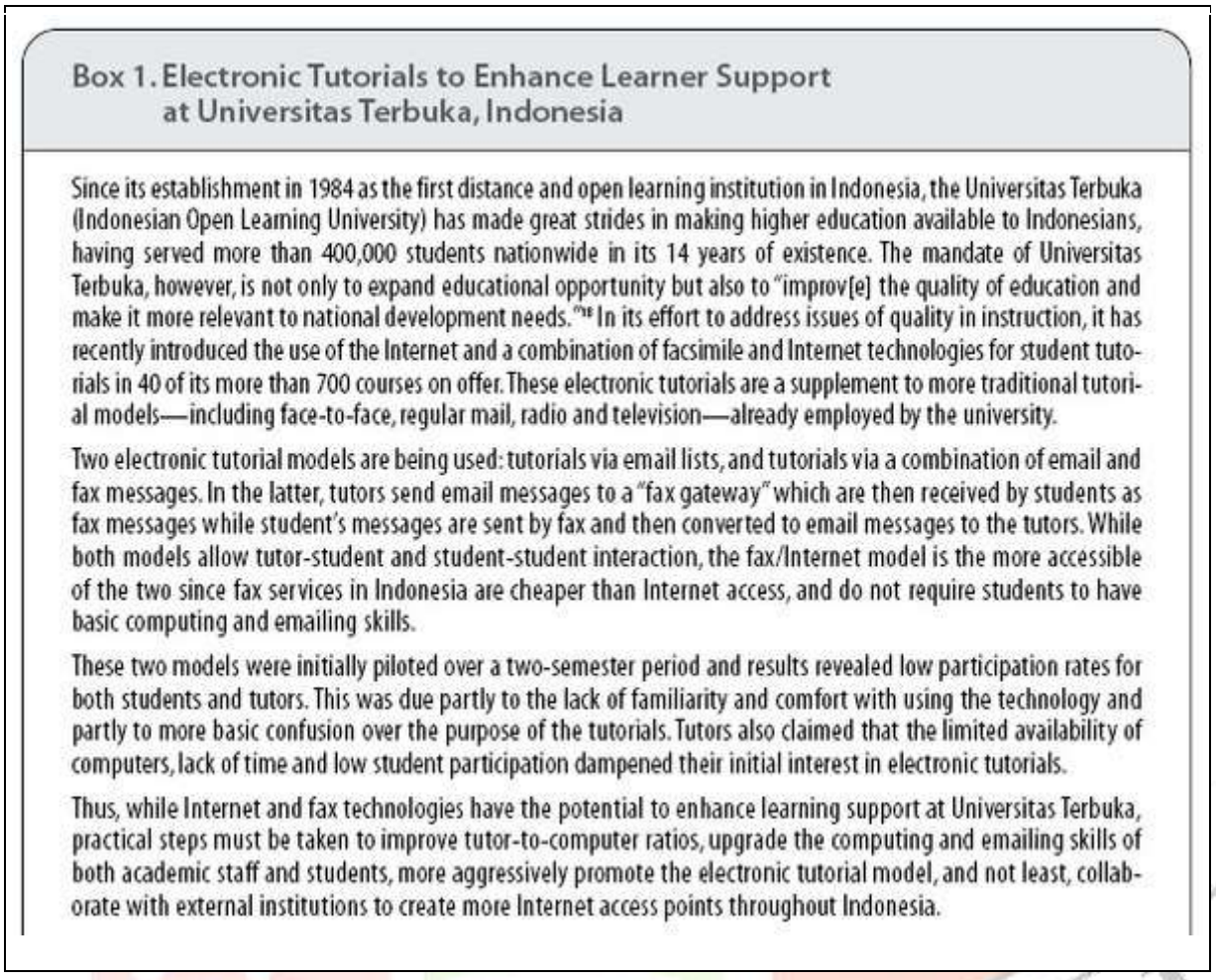
Motivating to learn. ICTs such as videos, television and multimedia computer software that combine text, sound, and colorful, moving images can be used to provide challenging and authentic content that will engage the student in the learning process. Interactive radio likewise makes use of sound effects, songs, dramatizations, comic skits, and other performance conventions to compel the students to listen and become involved in the lessons being delivered. More so than any other type of ICT, networked computers with

Internet connectivity can increase learner motivation as it combines the media richness and interactivity of other ICTs with the opportunity to connect with real people and to participate in real world events.

Facilitating the acquisition of basic skills. The transmission of basic skills and concepts that are the foundation of higher order thinking skills and creativity can be facilitated by ICTs through drill and practice. Educational television programs such as Sesame Street use repetition and reinforcement to teach the alphabet, numbers, colors, shapes and other basic concepts. Most of the early uses of computers were for computer-based learning (also called computer-assisted instruction) that focused on mastery of skills and content through repetition and reinforcement. (See section below on Computer-Based Learning.)

Enhancing teacher training. ICTs have also been used to improve access to and the quality of teacher training. For example, institutions like the Cyber Teacher Training Center (CTTC) in South Korea are taking advantage of the Internet to provide better teacher professional development opportunities to in-service teachers. The government-funded CTTC, established in 1997, offers self-directed, self-paced Web-based courses for primary and secondary school teachers. Courses include "Computers in the Information Society,""Education Reform," and "Future Society and Education." Online tutorials are also offered, with some courses requiring occasional face-to-face meetings. [15] In China, large-scale radio-and television-based teacher education has for many years been conducted by the China Central Radio and TV University, [16] the Shanghai Radio and TV University and many other RTVUs in the country. At Indira Gandhi National Open University, satellite-based one-way video- and two-way audio-conferencing was held in 1996, supplemented by print-materials and recorded video, to train 910 primary school teachers and facilitators from 20 district training institutes in Karnataka State. The teachers interacted with remote lecturers by telephone and fax.

Figure 2



Box 1. Electronic Tutorials to Enhance Learner Support at Universitas Terbuka, Indonesia

Since its establishment in 1984 as the first distance and open learning institution in Indonesia, the Universitas Terbuka (Indonesian Open Learning University) has made great strides in making higher education available to Indonesians, having served more than 400,000 students nationwide in its 14 years of existence. The mandate of Universitas Terbuka, however, is not only to expand educational opportunity but also to "improv[e] the quality of education and make it more relevant to national development needs."[18] In its effort to address issues of quality in instruction, it has recently introduced the use of the Internet and a combination of facsimile and Internet technologies for student tutorials in 40 of its more than 700 courses on offer. These electronic tutorials are a supplement to more traditional tutorial models—including face-to-face, regular mail, radio and television—already employed by the university.

Two electronic tutorial models are being used: tutorials via email lists, and tutorials via a combination of email and fax messages. In the latter, tutors send email messages to a "fax gateway" which are then received by students as fax messages while student's messages are sent by fax and then converted to email messages to the tutors. While both models allow tutor-student and student-student interaction, the fax/Internet model is the more accessible of the two since fax services in Indonesia are cheaper than Internet access, and do not require students to have basic computing and emailing skills.

These two models were initially piloted over a two-semester period and results revealed low participation rates for both students and tutors. This was due partly to the lack of familiarity and comfort with using the technology and partly to more basic confusion over the purpose of the tutorials. Tutors also claimed that the limited availability of computers, lack of time and low student participation dampened their initial interest in electronic tutorials.

Thus, while Internet and fax technologies have the potential to enhance learning support at Universitas Terbuka, practical steps must be taken to improve tutor-to-computer ratios, upgrade the computing and emailing skills of both academic staff and students, more aggressively promote the electronic tutorial model, and not least, collaborate with external institutions to create more Internet access points throughout Indonesia.

- **How can ICTs help transform the learning environment into one that is learner-centered?**

Research has shown that the appropriate use of ICTs can catalyze the paradigmatic shift in both content and pedagogy that is at the heart of education reform in the 21st century. If designed and implemented properly, ICT-supported education can promote the acquisition of the knowledge and skills that will empower students for lifelong learning.

When used appropriately, ICTs—especially computers and Internet technologies— enable new ways of teaching and learning rather than simply allow teachers and students to do what they have done before in a better way. These new ways of teaching and learning are underpinned by constructivist theories of learning and constitute a shift from a teacher-centered pedagogy—in its worst form characterized by memorization and rote learning—to one that is learner-centered. (See Table 2 for a comparison of a traditional pedagogy and an emerging pedagogy enabled by ICTs.)

Active learning. ICT-enhanced learning mobilizes tools for examination, calculation and analysis of information, thus providing a platform for student inquiry, analysis and construction of new information. Learners therefore learn as they do and, whenever appropriate, work on real-life problems in-depth, making learning less abstract and more relevant to the learner's life situation. In this way, and in contrast to memorization-based or rote learning, ICT-enhanced learning promotes increased learner engagement. ICT-

enhanced learning is also "just-in-time" learning in which learners can choose what to learn when they need to learn it.

Collaborative learning. ICT-supported learning encourages interaction and cooperation among students, teachers, and experts regardless of where they are. Apart from modeling real-world interactions, ICT-supported learning provides learners the opportunity to work with people from different cultures, thereby helping to enhance learners' teaming and communicative skills as well as their global awareness. It models learning done throughout the learner's lifetime by expanding the learning space to include not just peers but also mentors and experts from different fields.

Creative Learning. ICT-supported learning promotes the manipulation of existing information and the creation of real-world products rather than the regurgitation of received information.

Integrative learning. ICT-enhanced learning promotes a thematic, integrative approach to teaching and learning. This approach eliminates the artificial separation between the different disciplines and between theory and practice that characterizes the traditional classroom approach.

Evaluative learning. ICT-enhanced learning is student-directed and diagnostic. Unlike static, text- or print-based educational technologies, ICT-enhanced learning recognizes that there are many different learning pathways and many different articulations of knowledge. ICTs allow learners to explore and discover rather than merely listen and remember.

Figure 3. Table 2. Overview of Pedagogy in the Industrial versus the Information Society

Aspect	Less ('traditional pedagogy')	More ('emerging pedagogy' for the information society)
Active	• Activities prescribed by teacher • Whole class instruction • Little variation in activities • Pace determined by the programme	• Activities determined by learners • Small groups • Many different activities • Pace determined by learners
Collaborative	• Individual • Homogenous groups • Everyone for him/herself	• Working in teams • Heterogeneous groups • Supporting each other
Creative	• Reproductive learning • Apply known solutions to problems	• Productive learning • Find new solutions to problems
Integrative	• No link between theory and practice • Separate subjects • Discipline-based • Individual teachers	• Integrating theory and practice • Relations between subjects • Thematic • Teams of teachers
Evaluative	• Teacher-directed • Summative	• Student-directed • Diagnostic

As the above written piece of knowledge shows, how ICT is impacting on education in our day to day life in all sectors, as it's the effective source of Information at ease to explore and learn effectively all types of mass information within no time. With less disadvantages then advantages mentioned above.