ICT BUSINESS ERA

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Abstract

The level of education of a nation's people determines how economically and socially successful that nation will be. Therefore, it is crucial to find strategies to guarantee that education is of a high standard, accessible to everyone, and affordable using the most up-to-date technologies available. Over the past 20 years, the ICT sector has experienced rapid expansion. ICT has impacted several industries' dynamics as well as how individuals interact and work in society. Both at work and at home, internet usage has substantially increased. ICT has the power to remove obstacles and improve educational outcomes in every country. It can be used as a strategy to get around problems including cost, a lack of teachers, poor educational quality, and time and distance constraints. In recent decades, India has focused on expanding its educational sector. Higher education is the main driver of India's competitiveness and employment development. There is a severe shortage of skilled labour. There are social, cultural, time, and geographic obstacles for those who want to pursue higher education. Innovation in ICT might be able to solve this problem.

Keywords: ICT, Education… etc.

ICT-Based High-Quality Education:

Both absolute and relative meanings can be applied to quality. The idea of ultimate quality raises the spirit of our educational system among both the institutions that offer it and the students who receive it. Functionality of the output and compliance with fundamental standards appear to be two implications of quality aspects. Therefore, the effectiveness of our educational system can be evaluated in terms of norms and standards, which may change in response to changing conditions. It is critical to recognise the relative norms for the various parts of our educational system in the twenty-first century. It is essential to consider alternative dynamics for teacher preparation and maintaining the quality of teacher input, such as curriculum design and development, curriculum practises in relation to new pedagogical principles, learner performance and progress evaluation in relation to curriculum evaluation, and quality management practises. Additionally, the calibre of these elements may vary from one

school to another. As a result, the exchange of quality-related experiences among institutions may inspire the development of new standards and tactics for the quality assurance of management practises, curricular inputs and procedures, and assessment systems. The use of information and communications technologies (ICT) in education has recently led to a number of developments in quality assurance, including the networking of open learning systems with traditional universities, interdisciplinary interactions at the intra- and inter-institutional levels, global institution networking, data-based management of higher education, and the reorientation of institutions by incorporating self-financing.

Education Challenges:

The main challenge facing the Indian educational system is ensuring that all citizens have equitable access to high-quality education. This has a greater impact on students in rural, semi-urban, and urban areas since these students also want to be able to participate in the new economic revolution. The rapid breakthroughs in science and technology, as well as the issues associated with globalisation, are posing new challenges for the nation's educational system. Furthermore, at this point, parental interest in the children is beginning to wane. There is mounting evidence that the media harms young people's moral development and mental development in all facets of life. People's viewpoints have been distorted by gross materialism to the point where they now connect prosperity with things. Exploitation of natural

resources is happening without taking sustainability into account. Between the wealthy and the poor, there is a rising wealth disparity. The educational system must keep up with advances in science and technology in order to acquire skills and knowledge, but it also needs to address more fundamental issues like the social and moral fallout from such uncontrolled activity. Given this, there is growing support for emphasising education more in order to instil, promote, and develop values, particularly in the nation's youth.

The state of the world economy is currently undergoing unprecedented transformation. Due to new developments in science and technology, media reevaluation, internationalisation of education, and the ever-expanding competitive environment, the education sector is undergoing a revolution. With the transition from "national education" to "global education," from "lifelong education for all" to "lifelong education for all," and from "teacher-centric education" to "learner-centric education," higher education has undergone a paradigm shift recently. These changes put new demands and issues on the nation's long-standing educational systems and practises. Providing skilled human power at all levels with the breadth of knowledge and the confidence to successfully tackle the social and economic realities is the new role and challenge facing the Indian higher education system. This is a result of how interconnected and integrated the global economy has become in recent years.

ICT-Based Innovative Teaching and Learning

It's commonly stated that if a person from the 19th century travelled through time, they would see revolutionary changes in almost every aspect of society—except for the classroom, where students sat in rows of desks to take notes and a teacher wrote on a board in the front. Traditional teaching methods continue to be supported by our educational systems. To change this, leaders will need to create a compelling vision of 21st-century learning, passionately articulate it, and make sure it is implemented at all levels of the system. The transition must involve all facets of government, including principals and teachers in the classroom. In order to align incentives and provide resources for teacher training, curriculum creation, accountability, and assessment, a comprehensive reform of education delivery will also be necessary.

The key global drivers include the quickening pace of economic integration, technological advancements, the global race for talent, the persistence of underachievement, particularly among marginalised and minority populations, the diversifying nature of classrooms, and the raised expectations for education among important stakeholders. We have called attention to the variations in setting, societal trends and problems, culture, and educational history at the national level. National school systems must simultaneously address local educational difficulties while ensuring that best practises and worldwide research on enduring educational concerns can be applied to local issues. We should expect significant changes in the way we educate teachers as a result of education reform, new chances for more active learning, increased involvement of important stakeholders, and other factors. How well our societies are able to educate our children for complicated and challenging futures will depend on how well the education and policy community rises to this task. The plan panel has however set challenging goals. By March 2017, the goal is to increase gross enrollment in higher education to 20%, universalize secondary education, and achieve 100% adult literacy.
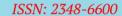
Revolutionized by ICT:

The rapid development of a worldwide "information society" is altering how people interact, study, work, and live. Many millions of individuals now have access to knowledge and its numerous uses thanks to an explosion in the free movement of information and ideas. This has opened up a variety of new options and opportunities in some of the most important fields of human endeavour. But the vast majority of people on earth are still unaffected by this transformation. The "digital divide" poses a potential to widen wealth disparities both inside and across nations. The stakes are really high. Access to news and information at the right time can help to advance trade, employment, education, health, and wealth. Openness is one of the defining characteristics of the information society and a key component of democracy and sound government. The core of attempts to increase tolerance, understanding, and respect for variety is information and knowledge. The

only long-term solution to closing the digital divide is to eradicate poverty. In the long run, governments must do a lot to improve access to health care and education through telemedicine and distant learning. Poor rural communities without access to basic amenities can live better thanks to ICT. The world is currently experiencing an information revolution, which is being accompanied by the emergence of completely new communication technology horizons. Information and communication technology has seen some truly remarkable recent advances. Spending hundreds of millions of dollars on information and communication technology shows a strong belief in these technologies on a global scale. Information and communication technologies are, by definition, a broad range of technological instruments and resources used to produce, transmit, store, add value to, and manage information. ICT is an intriguing instrument for combining community-based local knowledge with publicly available information from distant databases, assuring the emergence of a new type of society called the Knowledge Society. With the potential for further enrichment, the global knowledge pool becomes the primary resource for all economic and developmental activities in the knowledge society of the people, laying the groundwork for knowledge networking. A new channel of interactive contact between governmental agencies, non-governmental organisations, academic institutions, and the civil society is made possible via knowledge networking. It aids communities, including both men and women, in taking the necessary actions to acknowledge and record the knowledge they possess, as well as in reflecting this knowledge in a larger social domain for the purpose of directed change through the use of information and communication technology.

The Access of ICT:

In terms of ICT infrastructure, India is a significant contributor and developed country. Numerous customers were drawn to the mobile age by the dramatically lowered telephone price and taxes. By attracting more users to the network, these lower prices had revolutionised mobile phones and internet access. India had made significant progress toward the development of rural people after realising the necessity to develop the rural sector. All around the nation, community Internet hubs were set up to link the remote people to the knowledge base. A mix of information technology (IT) and communication technology (CT), information and communication technology (ICT) now includes a number of computer and internet technologies as well as associated software and applications. Together, we can save, retrieve, process, analyse, and send information thanks to ICT. ICT development and adoption have started to alter the stereotype of the traditional class. ICT is viewed as a crucial element of curricular and educational innovations. It enables the creation of learner-cantered classrooms as an alternative to conventional teacher-centered classrooms. It has altered not only the ways in which students learn, but also the ways in which teachers teach. ICT is a tool

that can be employed in a variety of courses or throughout the curriculum where the focus is on the advancement of ICT-related abilities, know-how, procedures, and attitudes. Within the constraints of the current curriculum, it improves student learning results. Additionally, it has the ability to change teacher-based classrooms into learner-centered, engaging, and dynamic learning spaces. In this change based on the implementation of ICT learning and teaching technologies in schools, teachers are the important component. ICT integration into the curriculum necessitates both financial and human resource investments.

Technologies for online Education:

Digital technologies are essential to contemporary knowledge management-based education, and the relevance of e-learning cannot be overstated. Of course, it does not alter traditional education; rather, it just diversifies and enhances it. Between students and professors, technology acts as a mediator. ICTs can improve education quality in a number of ways, including by boosting learner motivation and engagement, enabling the acquisition of fundamental skills, and improving teacher preparation. ICTs are transformational resources that, when properly applied, can support the transition to a learner-centered environment. E-learning is defined in a variety of ways. In the past, it was mostly connected with multimedia CD-ROMs; today, e-learning courses frequently use internet technologies. The computer is a constant. E-learning is defined as long-term, systematic learning conducted through

computer use. The only difference between traditional instruction and e-learning is the type of materials employed; all other elements, such as goals, guiding principles, curricula, methodologies, and formats, can remain the same. Based on this information, we can say that using e-learning raises a new issue that needs to be resolved: pupils who are not sufficiently computer literate. When it comes to the collection, storage, processing, verification, evaluation, selection, distribution, and presentation of information in the required form and quality to achieve their relevance to a given destination, computer literacy refers to the human competency to use one's own knowledge, skills, and abilities from the close sphere of the hardware and software computer equipment as well as from the wider sphere of ICT. Online students should be encouraged to have a strong sense of community through their instructors and the e-learning environment. This will allow for greater interaction between the students, the teachers, and the resources offered, improving the educational experience.

Mobile Learning Applications for Smartphones:

The process by which the wisdom, knowledge, and abilities of one generation are transferred to the following is known as education and training. The two types of education and training available today are traditional education and online education. Modern methods of supporting the learning process with mobile devices, such as MP3 players, smart phones, mobile phones, and

portable and tablet computers are provided by mobile learning, or "M-Learning." In particular, m-learning content is delivered using applications (i.e., apps) made for smartphones. The provision of on-demand learning and enhanced communication are just two of the numerous observed advantages and affordances of mobile learning. Designers and developers may create tools that can be used everywhere thanks to smartphone applications. Since most smartphones are found to fit comfortably in an adult's hand. By boosting existing methods and enabling access to study from your pocket, the usage of applications has the potential to change conventional classrooms. The portability of smart phones is greatly enhanced by their size and light weight. The user can enjoy apps that are similar to those on a desktop computer without being limited by static location thanks to access to Rich Internet Applications (RIAs). The majority of smartphones come equipped with a camera, recording capabilities for video and audio, and GPS (i.e., global positing system). M-Learning is centred on the learner's mobility, interacting with portable technologies, and learning that considers how society and its institutions can serve a population that is becoming more mobile.

This is due to the characteristics and functionality that mobile devices have for aiding learners. For instance, it is possible to offer lecture podcasts for download. The use of these learning resources by students outside of typical learning environments is to be expected. Mobile learning has evolved over the past 10 years from a minor research interest to a number of substantial projects being implemented in schools, offices, museums, cities, and rural areas all over the world. The M-Learning community continues to be divided due to various national perspectives, gaps between academics and industry, and divisions between the sectors of K–12, tertiary education, and lifelong learning.

Conclusion:

The educational system in place now is learner-centered. Making the teaching and learning process engaging and non-monotonous is our goal. To engage students and increase their level of participation in the teaching and learning process, teachers must utilise interactive teaching techniques. The use of audiovisual aids by teachers allows them to place a greater emphasis on thinking than just teaching. One must not limit themselves to comprehensive or knowledge-only levels. To reach excellence and invent something new, one must be able to apply knowledge. Teachers should be particularly aware of Bloom's taxonomy, learning levels, and how to help their pupils succeed. In a sense, we are compelled to collaborate in order to attain perfection, and utilising ICTs, excellence is possible. The Government of India established a National Education Mission through information and communication technology (ICT) during the XI Five Year Plan, which will give Broadband connectivity to all higher education institutions and make high quality e-content accessible for distribution. Using ICTs to achieve the dual objectives of increasing access and enhancing education quality is one of the key concerns the

World Bank cites for boosting India's educational system. The advantages of an ICT-mediated higher education, such as autonomous learning and communicative skills, are discussed in this exploratory paper along with a variety of utilisation and benefit-related difficulties. The field of education has benefited greatly from ICT developments. ICT usage in and for education is increasingly acknowledged on a global scale as both a requirement and an opportunity. ICT includes everything that can save, retrieve, edit, and receive information digitally. Searching for, obtaining, storing, and receiving information has become simpler, more affordable, and quicker because to technology.

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