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Role of E-resources in Education

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Abstract - E-resources are quite new about 20 years of age. At the same time, they have been growing at a fast pace. The components of e-learning, the evidence for its effectiveness, faculty development needs for implementation, evaluation strategies for E-Learning and its technology, and how E-Learning might be considered in academic activities. E-Learning presents numerous research opportunities for faculty, along with continuing challenges for using the resources. Innovations in E-Learning technologies point towards a revolution in education, allowing learning to be individualized (adaptive learning), enhancing learners' interactions with others (collaborative learning), and transforming the role of the teacher. Today's educators are facing different challenges than their predecessors in teaching future students. This work addresses some aspects of e-resources that make them a suitable tool to support education.

***Index Terms*—e-resources, teaching Quality, Rural Divide, , Gender discrimination, Learning outcomes**

I. Introduction

Information, communication and technology has created wonders in computer based education, internet based education and web based education [1]. More and more online educational institutes are emerging and online education degrees are becoming increasingly popular as these institutes are providing affordable higher education with accessibility and flexibility. Online helps in education allow access to specialized subjects in an easy way compared to other resources, which may be difficult to acquire. E-Learning resources can incorporate curriculum with instructions and represents a new model of education that is networked. It can involve revised curricula, professional teacher development, exams and textbooks [2]. Studies suggest only computerization of a school is not enough to impact student learning. E-resources can have a positive impact on attitudes, knowledge and skills. On the teachers it can impact their teaching practices, service and knowledge [3]. Blending technology, content, teaching principles and knowledge will reflect in teacher knowledge based teaching [4]. Such models can be the starting points for analyzing the complexities involved in technology and teaching. E-Learning can shift teacher-centered classrooms to learner - centered environments with effective use of technologies. Teachers on the other hand gain self-esteem, confidence and motivation in E-Learning environments. E-Learning can impact improvements in educational workforce and employment, thus affecting national economy. Educational improvements are definite steps of economic growth, both in terms of an increase in income and effectively GDP in developing countries. E-Learning can reduce the digital divide between the developed and developing countries. Widest digital divides are between rural-urban population and rich-poor in countries. E-Learning has the potential to address this gap by bringing quality education to rural educational institutions. E-Learning can also plays an important role. This gap exists partly due to societal norms and economic conditions. Integrating E-Learning into existing educational systems from curricula to teacher professional development can give e-resources and E-Learning a transformative role in developing 21st century skills. This work details on e-resources as an educational tool for knowledge. Figure 1 depicts the usage of e-resources in classrooms..

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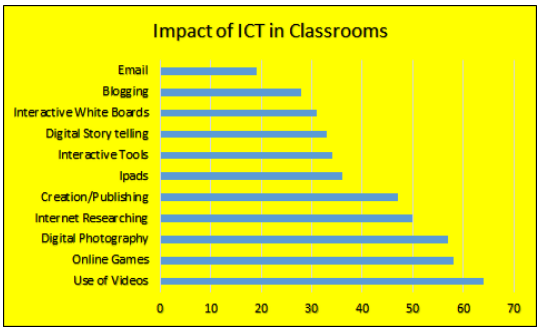

Fig. 1 - Usage of e-resources in classrooms

II. Issues and Challenges in using e-resources for education

E-resources as an educational tool for learning has its own set of unique challenges, once introduced. Critical challenges like improper infrastructure, scarcity of teachers and students who are improperly prepared for these changes. Higher levels of expectations exist. Learning outcomes are creating issues. E-Learning programs in developing countries are pilot projects or minimal projects where history of successes and impacts may not be recorded for analysis and further development. Educational systems which tend to address these challenges improve in quality substantially. Educational systems in developing countries are undergoing rapid change, due to increase in the number of Educational Institutions and increasing student enrolments. Integrating E-Learning into existing educational systems can again be a major challenge. Further, E-Learning encompasses teaching approaches, administration and technologies. E-Learning has the potential to address gaps in imparting quality education to the rural masses, but improper infrastructure and resources are another major challenge. Olson et.al. in their study state the change impacts the teachers in many ways and they often face challenges when beginning to use e-learning. Lack of technical support, make computer malfunctions and necessary technological tools [5]. Different geographies and culture also affect the outcome of learning outcomes. If the culture within an educational institution is supportive to e-learning, it wins. Group and collaboration makes a difference to both the teacher and student. [6] Graduates prepared for jobs usually have a positive effect on the national economy, due to their employment. This is a major challenge in developing countries as governments need to generate jobs in education to absorb this educated workforce. Challenges also exist when educational applications develop rapidly. Moreover, an added challenge is the newness of e-resources which creates an enthusiasm around its utility that are leading to multiple suggestions on its usage. Robert Solow, a Nobel Prize winner stated that computers are everywhere except in productivity [7]. The challenged teachers in developing countries lies in changing their teaching practices to accommodate the use of technology. In spite of the complexities involved in using e-resources as a learning tool, it is an advantage to the society and country in general, once the challenges are countered or methodically addressed. E-resources can bring a transforming effect.

III. Related Studies

Due to the rapid growth of internet technology, universities around the world are investing heavily in E-Learning systems to support their traditional teaching and to improve their students' learning experience and performances. The success of an E-Learning system depends on a few antecedent factors that influence acceptance and usage amongst students. An E-Learning system should consider technological, personal, cultural and environmental factors for success. In spite of the massive growth of E-Learning in education and its apparent benefits, it will not be fully utilized if users inclined do not accept or use these resources. Success of E-Learning also depends appropriate adoption of technology and policy makers need to understand factors affecting user acceptance of web-based learning systems for better learning outcomes [8.] [9]. Recent studies indicate that E-Learning implementation is only a technological solution, but involves different social factors [10.][11], individual factors [12], facilitating organizational conditions [13], behavioural and cultural factors [14]. Fischer et al. in their study examined above 400 scientific articles of German E-Learning conferences and indicate that the proceedings of scientific conferences can become future trends in e-learning. The study also contributed to the distribution higher education using digital media in. The analysis reflected the intensity of scientific discussion in E-Learning trends and technical innovations potential. They observed the development potential of mobile learning, virtual worlds, e-portfolio, learning management and social media and open Online Courses are crucial for E-Learning in German higher education [15]. Moravec et al. studied the impact of E-Learning on student achievements. The study compared questionnaire results from a pool of questions on pilot versions, implemented tools and lack of provisions of e-learning. The study concluded that E-Learning tools do affect student learning outcomes, but have negative effects when materials are disproved [16]. Above ten research studies data

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was used to study Cohen's model for ICT based E-Learning and higher education academic achievements for two years from 2010 by Mothibi [17]. The study inferred on ICTs had a positive influence on E-Learning based students with significant improvements in students overall academic outcomes. Certain studies explored mobile learning approaches for enterprise resource planning systems. Acceptance, usefulness and ease of use in m-learning was considered. They found m-learning systems associated their perceived factors thus stressing the importance of the quality of course content [18] [19]. A study in 2014 proposed a dynamic resource management model to develop the availability and dependability of the E-Learning services in the grid system. This model was a trade-off between cost and the degree of quality of E-Learning services [20]. The challenges associating with mobile usage in adult education have investigated by Ceobanu and Boncu. They contended that mobile learning can be connected with eLearning by mobile computing, differentiating the capability to access learning resources anywhere, anytime. [21] The development of knowledge management and E-Learning unsurprisingly have been evolving as both disciplines deal with knowledge capture, sharing, application and generation and more importantly support integration. [22]. Jakobsone and Cakula studied a novel perspective in knowledge sharing process to understand the future of automated learning support systems with the use of technological opportunities They recommended work-based learning besides encouraging efficient knowledge management technologies. Further, innovations in learning processes needs to be real world and simple to help adults solve their problem [23]. E-LEARNING systems are becoming increasingly popular in educational due to the development of web-based information and new communication technologies. The rapid growth of E-Learning systems has been changed due to the traditional learning behaviour which presents a new situation to students [24].

TABLE I

SAMPLE E-RESOURCES

UGC INFONET ONLINE JOURNALS	Online Database	PAID Online Journals
American Chemical Society American Institute of Physics American Physical Society Annual Reviews Cambridege University Press Economic & Political Weekly Emerald Institute of Physics JSTOR Oxford University Press Project Muse Royal Society of Chemistry ScienceDirect (10 Subject Collection) Springer Link Taylor & Francis Web of Science JGate Indian Citation Index	ISID JCCC Wiley Blackwell Royal Society of Chemistry SCOPUS IEEE Computer Society Digital Library (CSDL) Proceedings of the National Academy of Sciences of the USA(PNAS) Lexisnexis Bentham Science Journals World E-book Library Indian Stat	EBSCO Journals eJurix India's Electronic Law Library ALA e-books (Library Science) SRELS Journal of Information Management The Times of India

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IV. E-Learning in India

E-Learning as the use of any of the new technologies or applications in the service of learning or learner support", and it has been considered as operational definition of E-Learning [25]. E-Learning activities are important for the development of any country. In modern era everybody is thinking about growth and Educational development. If it is planned properly then proper results will come. E-Learning is an effective tool for development of educational sector in India. Figure 2 depicts Students using E-resources.

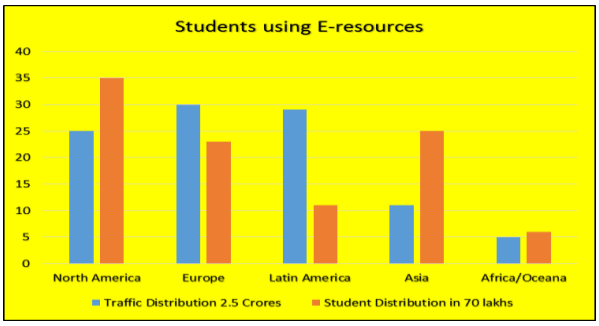

Fig. 2- Traffic Distribution of online education

After independence in 1947, the Govt. of India had the challenge of bringing uniformity in educational system and providing education to large segments of the population [26.]. Due to various schemes undertaken by India to improve the literacy rates, learner's satisfaction rates increase with E-Learning compared to traditional learning, along with perceived ease of use and access, navigation, interactivity, and user-friendly interface design [27]. Figure 3 depicts online educational resources in India.

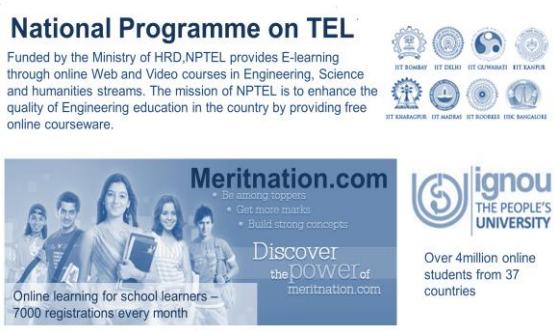

Fig. 3 – Indian online educational resources

According to Marc Prensky's research different learning outcomes are best learning through particular types of learning activities like behaviors through limitation, feedback and practice, creatively through playing, facts through association, drill, memory and questions, language through imitation, practice and impression and reasoning through puzzles, problems and examples [28.]. E-Learning is not a single strand but is multifaceted, covering a wide range of approaches and methods [29]. E-Learning networking can make links between social and legal organizations concerned with legal issues. For example E-Learning networking would establish links between Magalir Sabhas, lawyers and courts. This means by having concentrated efforts of E-Learning we can bridge the gap between social organizations and legal system, between lower and high court, between rural and urban areas, between senior and junior lawyers and so on [30]. Government can make use of e learning medium in various ways. It can help the government to communicate rules and policies effectively. It can create awareness about various schemes and plans among citizens. It will give people an open platform to communicate or learn. E-Learning can manage semi-structured and unstructured information [31]..

V. Approaches in E-Learning

Technologies in E-Learning Classrooms cover teaching, learning and the enabling educational environment. Following are some examples of using technologies in E-Learning

- One-to-Many
- Online classes.
- Distant learning
- One-Alone
- Many -to-Many
- Teacher Training:
- School Administration:

The above list of possible approaches using technology in E-Learning and teaching must, again, be placed into an educational context [32]. Many analyses have found that learning outcomes improve with a teacher combined with technology-mediated learning [33][34] E-Learning can be enhanced by giving students control of their interactions with the media or by embedding feedback mechanisms. Reflection or self-monitoring can have a positive impact on learning, especially when students are individuals [33]. Today, cellular Internet coverage is often available, even in rural areas (especially compared to broadband). With the rapidly

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declining cost and increasing features of mobile phones, there is potential to use mobile phones as a web-based E-Learning technology. They can also, for example, be used by students in the classroom as a virtual clicker (to answer questions teachers ask in class), or for games or quizzes by using text messaging interfaced to an instructor's computer or phone. They may be used as an e-reader, or for communicating with other students or teachers. Figure 4 depicts types of Microcomputer Devices.

Fig. 4 - Types of Microcomputer Device

VI. E-READERS

E-Readers are becoming popular as a relatively low-power, inexpensive replacement for traditional textbooks. Their purchase price is declining. One e-reader could contain multiple textbooks or other readings, and the content could be easily updated. E-readers often have high resolution, monochrome screens making them good for reading text but not for multimedia applications. Where books are expensive, hard to find or need to be frequently updated, e-readers may be very useful. It would be easy to upload in-class "handouts" to student e-readers as well. Copyright agreements and revenue sharing would need to be arranged with the book's publisher. However, the maintenance requirements and lifespan of smart phone and other small devices in difficult environments are not yet known. Similar to laptops, they can be easily lost or stolen, and are prone to accidents. Figure 5 displays an E-reader.

Fig. 5 - E-reader

VII. ANALYSIS OF E-RESOURCES IMPACT ON EDUCATION

Proficiency in modern ICT and the need to improve the quality of education have driven many developing countries to increase their investments in e-learning. The impact of these investments on learning, on the economy and on society is quantified in this work. Most literature consists of expected outcomes from E-Learning programs on marginal amounts of data for solid conclusions about the impact of E-Learning on learning or societal factors [33] [35] [36] This chapter summarizes the information that exists to describe developments that E-Learning is influencing. This work chose to assess the e-learning strategy in rural higher educational institutions survey. In addition, this work attempted to assess the e-learning strategy in rural higher educational institutions among the two different disciplines namely Engineering, Arts and Science. This adopted a probabilistic sampling option, clubbed with literature survey results of similar studies. This work chose to demonstrate many parameters used in assessing the outcomes. The present research felt the population too exhaustive since there are many colleges in India. Rajapalayam in Tamilnadu is a rural area. The study was conducted in and around rajapalayam. Data collected from discipline and courses. Any student using e-resources for learning can have a personalized services during his learning, E-learning can increase the learning curve of students based on the above architecture. The base resources reside in information databases, accessed by their meta-data in searches. The middle layer takes care of authenticated users and data is provided to the students.

A. The Impact of E-Learning on Education

Analysis of several international ICT integration plans and adoption of ICT in education system have been successful when done as an integral part of education. There is a need to address policy, curriculum integration, professional development, infrastructure, and access. A critical area at the system level is in highlighting technology as a tool for learning. It has to be integrated into all aspects teaching and learning. ICT has to be a student's intellectual partner, with focus on learning with technology [37]. Goals of ICT in education has to be on preparing the students for future jobs, improve student achievements, promote learning strategies, individualize student learning experiences and encourage more co-operative and project-based learning. These goals include using E-Learning for more traditional efforts to improve student academic performance as well as newer objectives related to the development of technical and social skills important in the marketplace. Figure 6 detail on the

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growth of Online Education as compared to the Internet fro for five decades.

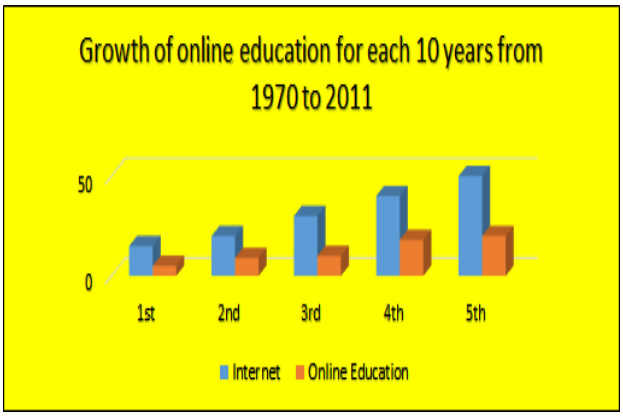

Fig. 6 – Growth of Online Education Industry

It is evident from the above figure that e-education has had a very positive impact on students as more and more of them are learning from online courses.

B. Student and teacher outcomes of e-education

Laptops can be used to reinforce the utilization of successful learning strategies but also enables students to transfer the knowledge across disciplines. Students using laptops are highly engaged and focused activities, frequently apply active learning strategy. interact with each other about work. The students are also adept at solving problems on project-based activities, which involves critical thinking and they regularly find information communicate it to others. The findings of [38] provide the impacts of e -learning on students. The report statistically analyzed the relationship between technology and student achievement for the Program for International Student Assessment (PISA). ICT is being rapidly infused into all aspects of education both in India and globally. Though Technology's integration into the educational system is a complex process, it can be achieved with the support of students, teachers, tech support staff, administrators and others. The use of ICT by teachers has brought about significant changes in classroom practice. E-Learning technologies in a classroom does impact student learning. Previous studies have identified teacher's use of ICT in the classroom [39]. Teachers using computers benefited mainly due to their proficiency and practice. Teachers also feel learners benefit from using computers themselves. The learners were seen to gain confidence, self-esteem and renewed motivation. Technology use in the classroom can be presentations, drills and practice, demonstrations and interactions. The focus shifts from a teacher centered classroom environment to a learner centered environment, thus increasing the effectiveness of ICT. E-resources impacts in motivation of learners by combining text, sound, color, and moving images that enhance content for easier learning, facilitating acquisition of basic skills through drill and practice and enhancing teacher training by improving access to quality training. Teachers also perceive problems in e-education. ICT is not considered useful in many educational institutions. They may not have enough infrastructure and flexibility to take decisions when planning lessons with ICT. Teachers themselves may lack ICT-related skills and confidence to try new approaches alone. In India teachers mostly fall short of time to develop and implement ICT-using activities [40]. Figure 7 depicts a Teachers Quality before e-learning, while Figure 8 depicts their improvements in practices due to e-resources.

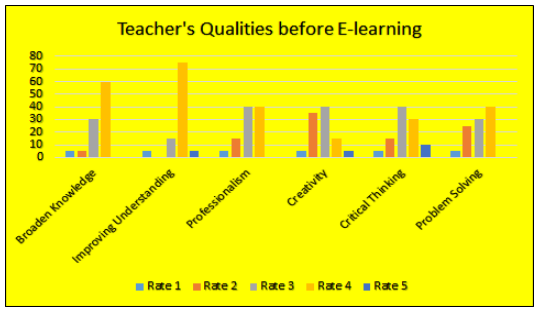

Fig. 7 - Teachers Quality parameters On a Scale of 1-5 with 5 as the highest

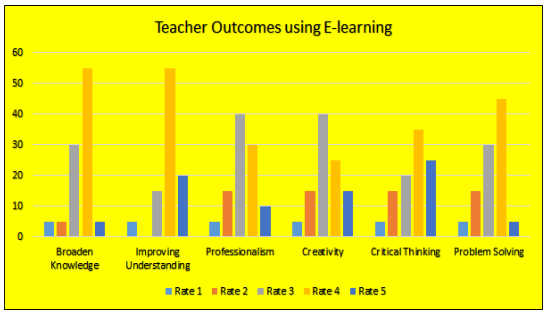

Fig. 8- Teachers Quality on using e-resources On a Scale of 1-5 with 5 as the highest

C. Rural-Urban Divide

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The global digital divide is a term used to describe the gap between well connected and poorly connected nations, while at the national level, there is often a strong urban-rural divide. In developing countries, most Internet users gain access through public access points like Internet cafes. The divide is thus closely related to geographic proximity of venues with technology to access the Internet. There are differences in, the technical devices that people use to access the Internet, location of access, extent of social support network, type of activities the device is used for and a person's level of skill [41]. Infrastructure is a critical factor in the social context, education and technical knowledge of the individual user are main factors. There is a strong correlation between Internet access and national economic development, most users, particularly in rural areas, are young people, especially students. Also, most users are well educated. The use of mobile phones illustrates possible future trends of ICT technologies in urban and rural areas. Mobile penetration in urban centers is near the average penetration of all developing countries, whereas access in rural areas has lagged because of difficulties caused by the lack of distribution channels, education and poverty. Despite these challenges, E-Learning technologies have the potential to significantly improve access particularly to science and mathematics education for rural institutions. These schools often are not able to attract or retain science and mathematics teachers because the schools are in undesirable, isolated rural locations.

D. Gender and e-Learning

ICT can be a strong change agent. Access to ICT can empower social and economic development, as well as provide employment and grow the economy. There is a digital divide between groups in society, and women in developing countries are often "within the deepest part of the divide [42]. There is already evidence that gender inequities are being replicated in schools with girls using computers and the Internet less than boys [43]. Girls and women in developing countries thus need to be specifically written into ICT initiatives, particularly in schools, or their participation in education, the economy and the political debate may decline further relative to boys and men. UNICEF [44] estimates the number of out-of- school children globally at 93 million with the majority being girls. Almost 80 per cent of the out-of-school children live in sub-Saharan Developing countries and South Asia. School attendance is rising rapidly as governments institute new education-for-all initiatives, but attendance in secondary schools is still low. Many factors contribute to the girls' inferior educational opportunities and experiences. In secondary education, issues such as the lack of a safe learning environment, gender-based violence, poor sanitation facilities, the burden of caring for younger siblings or sick family members, early pregnancies, family pressure to get married, and the need to pay school fees acutely constrain girls' ability to remain in school [45]. Governments, international organizations and donors often have programs to improve girl's access to education, with marked success in some countries. The gender gap in access to education is mirrored in a gender gap of access to and using the Internet and other ICT technologies in the wider society. Fewer girls or women in developing countries have mobile phones, for example, or visit Internet cafes. Computer labs in educational institutions being used far more by male students than female students, possibly because of the cultural expectation that girls not push themselves forward [43]. Few gender-disaggregated statistics exist, however, on ICT access and use in developing countries. One Developing countries country that has conducted such a survey, Senegal, found that 11% of men but only 5% of women were Internet users [46]. Gender in secondary educational institutions in developing countries is a large topic of research because of the gap in the access of girls to education. What makes educational technology suitable and attractive to females from a landmark study by the American Association of University Women and other's research [47], it has been found that girls have definite preferences for how they chose to learn with and about technology. For instance, girls prefer collaborative community ways of learning how to use technology, they like to have order and instructions to guide them, they prefer to learn about a subject of interest and then learn to use the technology as a tool rather than it being the focus of study, and finally they prefer to learn from female role models.

VIII. E-Books Vs. Print Books

e-books are outselling printed books and taking publishing by storm. While this is great for publishing, it can be a bit daunting for readers. Most publishers, and nearly all online book retailers, offer the opportunity to "sample" a book before purchase. Both formats have their advantages and disadvantages.

•**Traditional Print Costs**: Publishers have overheads including office space, utilities, benefits and salaries. There is always risk of a new author's books failing. Publishers take an enormous risk by signing an author for distribution after printing, thus incurring costs which add to the final price readers pay for a print book. With the advent of e-books,

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consumers see that there is no printing and distribution involved, so naturally they think the price of an e-book should be 8% lesser. By eliminating this step, the cost of book would only drop about $3.25, bringing the average price of a book down from $26 to $22.75.

•**E-Book Pricing:** Most e-books range in price from $9.99 to 99 cents, and many classic books are free online. Considering books from large publishers, they still have to pay overhead and employees. Also they have multiple editors for the same content, increasing the cost. Then, you have the graphic designer. Any reader will tell you a good cover will make him or her pick up the book. A good graphic designer is necessary; even with e-books, the cover matters. The marketing department creates brochures, magazine ads, posters and ads for online markets. Then, a particular percentage is paid to online outlets such as Amazon and Barnes & Noble for carrying the e-book, which can range as high as 50% of the cover price of the e-book. Comparatively, an author will shell only 15 to 20% to agents for their work. With the exception of ink, printing and shipping, the costs incurred are pretty much the same. Smaller publishers and independent authors do have a more leeway with pricing, but they still have many of these costs. Even if books are converted to e-books, the marketing and promotional costs are required to get their books noticed. e-books are a new way of reading, and publishing hasn't embraced the digital world. Publishing industry has to reassess the "agency model" pricing structure.

IX. RESULTS AND DISCUSSIONS

Technology can be a facilitator for knowledge construction based on the learner's conceptual thinking. E-resources can support learning by constructing needed information, comparing beliefs and views, simulating meaningful real-world problems, collaborating and discussing with others and constructing personal demonstrations of mindful thinking [48]. In Table II the Student distribution constitutes to about one fourth of the Total internet traffic. E-resources are being used by students is substantiated by these figures and specifically in developing countries like India.

TABLE II
INTERNET TRAFFIC DISTRIBUTION

Country	Internet Traffic Distribution	Internet Student Distribution
	(2.5 Crores)	(70 lakhs)
North America	25	35
Europe	30	23
Latin America	29	11
Asia	11	25
Africa/Oceana	5	6

The effectiveness of E-Learning is directly proportional to the way technology is used as a tool for educating students. Technology usage is effectively motivating under-achieving students and generate new found interest in learning subjects. The underachieving students use videos to learn a subject as is evident from Table III. The E-resources used in ICT is listed in Table III.

TABLE III
IMPACT OF ICT IN CLASSROOMS

Activity	Percentage
Use of Videos	64
Online Games	58
Digital Photography	57
Internet Researching	50
Creation/Publishing	47
Ipads	36
Interactive Tools	34
Digital Story telling	33
Interactive White Boards	31
Blogging	28
Email	19

E-earning is the wheel for new innovations. In India, education can be used as a useful tool to raise awareness of environment, peace, culture, social diversity, increased competitiveness and the concept of a global village. In the present world, education is being used as a means of becoming a global citizen. In order to work in this more competitive world, one has to be competent enough to survive. Education gives us that powerful tool by which we can live a life of worthiness. It is only through improving the

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educational condition of a society that the multi-faceted progress of its people can be guaranteed. E-Learning is the best option available to achieve these goals. E-Learning is also a powerful medium to improve inclusiveness of education in our country. There are many benefits of Online education depending upon the type of student. It might be best for students who do not prefer traditional school, sitting hours an attending lectures. Student can learn at a pace suitable to the student. Figure 9 depicts the benefits of online education. Beyond the broad benefits to economic output, technology investment can also create benefits for the worker through higher wages and more prestigious employment.

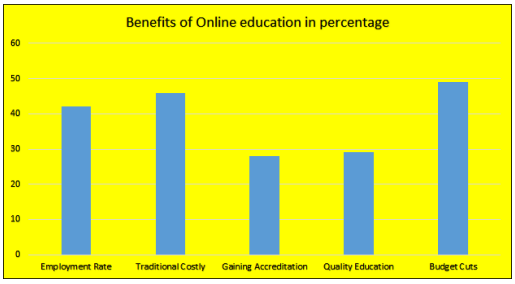

Fig. 9 - Benefits of Online education

E-Learning programs have a great impact on students learning and learning outcomes. Students of science and mathematics score significantly higher on tests compared to students who did not use computers. Similarly, students who used simulation software in science also scored higher. Students learn best when they are actively engaged with curriculum and content. Teachers are challenged to develop curricula of an exploratory nature that engages students with hands-on, inquiry-based learning. This results in students with higher levels of motivation and engagement. Though Technology's integration into the educational system is a complex process, it can achieved with the support of students, teachers, tech support staff, administrators and others. The Student Outcomes due to e-education and e-resources is listed below

- •Leads to more student writings of higher quality
- •Increases access to information
- •Improves research analysis skills.
- •Spend more time engaging in collective work
- •Become more project-based
- •Become collaborators
- •Direct their own learning
- •Rely on parallel learning strategies
- •Readily engage in problem solving and critical thinking
- •Consistently show more flexible uses of technology
- •Spend more time doing their homework on computers.

A main benefit a student can have is employment as indicated in Figure 10 which depicts Growth of employment.

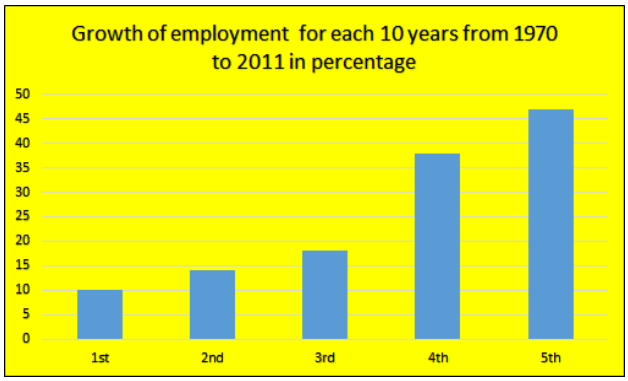

Fig. 10 - Growth of Employment

On Teacher benefits, it is imperative to recognize the need for an effective change transformation program coupled with E-Learning implementation to use ICT. The Teacher Outcomes due to e-education and e-resources is listed below

- •Teachers take a more constructivist approach to teaching
- •Teachers feel more empowered in their classrooms
- •Teachers spend less time lecturing.

On Economic benefits for both developed and developing countries, ICTs affect employment and wages for the evolution of the composition of the labor force: the unskilled workers are the main losers in sectors where investment in technology and greater productivity are high [49]. Expanding E-Learning in developing countries may lead to two opposing outcomes in social benefits namely it may widen the existing inequalities in access to ICT and education, or it may reduce inequalities by providing information and educational opportunities that would otherwise not be available. Ensuring the second outcome requires understanding the current distribution of access to education, ICT and other technologies, and the reasons for the inequitable distribution. Currently, however, most e- learning opportunities tend to be in urban areas due to the infrastructural and other challenges of rural areas. It can provide skills, as well as improved educational content. The students usually have some English language classes in primary school, but many are not well prepared to enter into an English-only mode. The dominant language on the Internet is English, and most software and

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learning content is in English. Students and teachers with limited English may be marginalized [50]. E-Learning can thus require first becoming proficient in reading a second (or third) language before its potential can be met. E-Learning and the Internet are strong motivators for students to learn English. Approaches that are successful in teacher training workshops regarding the sensitive subject of gender bias in education include,

1. Diffuse resentment of teachers (who may think you blame them for the gender gap
2. Explain and emphasize the universality of gender bias
3. Stress the importance of teachers finding out about gender bias themselves (rather than take the presenters word on it) through mini-assignments such as observing eye contact of teachers with girls and boys.
4. Repeated training sessions are better than a one-time approach. Follow up is essential. Development happens over time.
5. Reward teachers who do gender work. Rewards could include access to and training with technology, continuing education credit, drawing for a gift certificate, etc.
6. Be explicit. Have the teachers tell the class what they are changing to ensure gender-fair teaching.

- **Advantages of E-Books:** e-books are usually less expensive. They come with font flexibility making reading easier. Thousands of e-books, magazines and periodicals can be stored on a single device. They save trees and are eco-friendly. Several library books can be checked on the e-reader.
- **Disadvantages of E-Books:** An e-reader must be recharged. Some screens are not easily readable in sunlight. They can cause eye-strain. All digital data has a shelf-life. In Book piracy, it is easy to copy and distribute an e-book and the author receives no pay.
- **Sample E-Resources**
  1. E-resources of a University
  2. E-resourcs for bank examination and other
  3. E-resources for medical practitioners
  4. E-resources for woman
  5. E-resources for children and kids
  6. Alphabetical list of a-z e-resource databases
  7. E-resources for tourist etc

Plenty of e-resources are available to help all categories of people from kids to aged people. These are resources that can be referred for human using devices , elements, objects to quickly give reference through on line

X. Conclusion

This work has discussed and detailed on e-learning, technologies and its impacts. Teacher networking and internet-based networks will provide a critical impetus for teachers and mentors to use the computers in a creative and thoughtful mode, to try new approaches, and to communicate their successes and challenges. These networks have the dual advantage of promoting information exchange among teachers and mentors that is interactive and tailored to individuals' needs, and stimulating the use of ICT by teachers for purposes that go beyond simple cookbook applications. Research indicates that teacher networking significantly increases the interest in and use of new technology and other pedagogical approaches. E-education also has its own impact on the economy and GDP of a nation. E-Learning can be introduced into educational systems in which girl students are often participating less than boy students. Access to and use of ICT technologies in the wider society is also gender-imbalanced in many developing countries. Nevertheless, introducing E-Learning technologies into educational institutions has the potential to assist girl students to improve their ability to participate and thrive in schools, and their new knowledge of computer technologies will certainly place them in a stronger position in their adult lives. This work concludes that E-Learning and resources are available to the users 24 hours anywhere to grow, for many factors like removing poverty, increasing literacy rates and thus increasing the gross GDP of India. E-learning can increase employment opportunities, remove gender-bias, digital divides and narrow the gap between urban and rural education attainments.

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