

Amazing Impact Of E-learning Education In Rural India

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INTRODUCTION

E - LEARNING

Rural students possess a good amount of knowledge. But in the past system of learning, they had knowledge, but did not have adequate channels to express themselves. The present system has ushered in a great change with the help of e-learning. The article aims to learn whether e-learning is impacting the rural students of Nagapattinam district (Tamil Nadu). The research enhances the value of e-learning in the rural students among the Engineering Colleges and Arts & Science Colleges. The 21st century ushered in the revolution of "Telematics" (computers connected to networks). They denote the emergence of new global cultural forms, media, technologies of communication and most significantly, the telematic revolution. Both globalization and computer communication technology have caused and resulted in the growth of each other and they have emerged as two sides of the same coin and have impacted each other in complex and multiple ways. New trends in education have also come about, and new challenges have been thrown up to reckon! At the same time, there is an indisputable need to maintain continuity, change and growth, all at once! The entailing discussion is devoted to analyzing the impact of globalization and the telematic revolution on the educational world and discussing the relevance of the changes against the context of time and space, and the concerns that have emerged in consequence. The core purpose of education has been to ensure that our citizens possess the skills they need to actively participate in a democratic society. As we complete the 20th century and prepare for the 21st, it is important to realize that the world is far different from the one, which existed alongside an emergent industrial economy, powered by muscle, water and steam. In the past, where access was limited, information was treated as a scarce resource, and educators had the task of imparting this information for the benefit of learners. What is scarce today is context and meaning. It used to be the mark of an educated person to have a vast reservoir of facts on which to rely. Today, this skill (literacy, numeracy) is of much less value. Other topics change so rapidly that much of what we are taught in school is rendered obsolete by the time we enter the workforce. Learning technologies have a great potential to spread learning. However, the benefits of these technologies have to reach the rural masses of India, otherwise, they will be one of the causes of the Digital Divide. Learning management system (LMS) or e-learning has resulted in a paradigm shift in education systems. E-Learning is defined as internet enabled learning. The rapid development of the internet has facilitated its growth. E-learning uses the concept of distance learning but at a faster rate. E-Learning should not be just a machine based method for teaching and will be only effective in engaging all the participants when it has a human touch. The learning can be on any level- elementary school, college, or corporate. E-Learning is becoming popular because of the obvious advantages it offers- It is open for working people, career oriented training is easily available, there are no time constraints, little infrastructure is needed to set up an E-Learning centre, and provides innovative and interactive learning. The future looks extremely bright.

LITERATURE REVIEW

✿ **Asia-Pacific Conference on Library & Information Education & Practice, 2006 .E-Learning in LIS education in India, P. S. Kawatra, Division of Library, Documentation and Information, National Council of Educational Research and Training, New Delhi :** E-Learning is leading us to a learning age where knowledge is freely accessed, profoundly abundant, and is offered in a cornucopia of formats. Distance learning has been accepted and recognized as a mode of

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education in LIS (Library Information Science). They also discussed the concept of open and distance learning in LIS. In the changing scenario of the society, the skills required of LIS (Library Information Science) professionals were also identified. The paper also examined the impact of the Internet on the teacher's role and explored the types of skills and strategies that teachers will need to be effective and efficient in online learning environments. The paper provided an insight into the innovative multi channel delivery modes adopted by the different universities and their effectiveness for the LIS (Library Information Science) distance learners. Guidelines for distance learning Library services approved by Association of College and Research Libraries on June 29, 2004 were also discussed. For assessment and accreditation of LIS distance education institutions in India, areas were identified.

✿**E-Learning In India- E-Learning Asia Day Presentation By Dr. Sanjaya Mishra (<http://www.wikieducator.org/User:Missan>)** : In Technology - Over 20 Billion USD software exports to over 100 countries in the world - Market share of above 20% software development world-wide - One third of e-commerce start-ups having Indian connection in the Silicon Valley - 5th Largest telecom network in the world - 2 Million telephone subscribers added every year - **Mobile subscribers:** 233.6 million (Sept 2008)- **Internet Users:** 42 million (3.7% only).**Higher Education in India (2006)** - Central Universities: 20 - State Universities: 217 - Deemed to be Universities: 106 - Private Universities: 10 - Institutes of National Importance: 13- Institutes established under state act: 5 - Colleges: 17625.

✿**Copparapu S.H.N Murthy, Amity School of Communication, Amity University, Noida UP, India:** While the conventional education system with different forms of E-learning and rigid academic instructive curriculum could not bring desired changes in specified timeframe, work at the rural level in the targeted communities and groups, a multipronged sociological approach with a sociable and flexible curriculum in new E-Learning programs becomes the need of the hour. The impact of socializing influence of these E-Learning programs should be properly exploited to motivate and inspire the rural target groups. The benefits of E-learning then becomes extensive and soon integrates with the needs of the lower strata of the society in order for achieving a rapid social transformation in the lives of the farmers, vocational groups, artisans and small income self help groups comprising of women, girls and physically challenged people. The paper suggests a number of new generation E-Learning programs as strategies of development communication with a promise of high returns for the industry for its investment in these programs with socially relevant messages and media convergence.

✿**Learning of English A Must For Rural Students, says Minister, The Hindu, Friday, Feb 29, 2008, Nagapattinam:** Learning of English language by school students, particularly in rural areas, has become very important in the global scenario of getting employment and having contact throughout the world, said Thangam Thennarasu, Minister for School Education, on Thursday. The Minister, who was inaugurating the first computer-aided English language learning laboratory in Anjuham Muthuvelar Government Higher Secondary School at Thirukkuvalai in Nagapattinam district, the birthplace of Chief Minister M.Karunanidhi, said that even though students in rural areas had a good command over all the subjects, they were not able to speak English language fluently compared to city students. The English language is playing a vital role in the world and Mr. Thennarasu stressed on the fact that the students in rural areas should be taught to learn to speak English language fluently to face the challenges in the interviews for employment conducted by several major firms said Minister for School Education, Thangam Thennarasu, interacting with a student after inaugurating the computer-aided English language learning laboratory at Thirukkuvalai in Nagapattinam on Thursday.

✿**E-learning Will Benefit Students From Rural, Remote Areas: ICSI By D. Murali, Business Line, Sunday, November 4, 2007 :** The e-learning portal that the ICSI (Institute of Company Secretaries of India) launched recently will be both asynchronous and synchronous, informs Ms. Preeti Malhotra, President of the institute. She anticipated that the new facility, which would be accessible on home desktops and from Internet cafes, on a 24x7 basis, will especially benefit students from rural, semi-urban and remote areas looking for company secretarial education. *"Their learning, self-evaluation, querying, interactive education needs will all be satisfied through this modern distance learning process,"* said Ms Malhotra, during the course of an e-mail interaction with Business Line.

✿**Challenges of E-learning By Vasanthi Vasudev, The Hindu, Tuesday, September 18, 2001:** The use of technology in education is highly positive but the caveat is to avoid falling through the looking glass. The true challenge is for education to freeze a model that captures quality and computer technology into an integrated communication system.

Such a blend will zoom educational goals to dizzying heights of sublimity. If we bear the key idea in our mind that the true power of educational technology comes not from replicating things that can be done in other ways, but when required, do things that could not be done without it, we realize that most of our concerns are resolved. Technology is no doubt the revitalizing antidote for a stagnating educational system, but the ideal situation would be a judicious blend that optimizes the advantages of both the traditional and telematic educational systems.

✿ **E-Learning Helps Strengthen Education, By R. Rajalakshmi, Director of Software Technology Parks of India (STPI), The Hindu Wednesday, Oct 26, 2005, Namakkal:** The Union Government is encouraging e-learning particularly to benefit the people in rural areas, Director of Software Technology Parks of India (STPI) R. Rajalakshmi said. She was delivering the keynote address at the inaugural of the two-day International Conference on e-learning organized jointly by the PGP College of Engineering and Technology (PGPCET) and the University of West Bohemia, Czech Republic, and supported by the STPI here on Tuesday. She said that the Government was keen on providing computer literacy to the rural people. Already countries such as Singapore, Japan and Indonesia were making a lot of progress in e-learning.

SCOPE OF THE STUDY

✿ The study was conducted to analyze the benefits of E-Learning among the Rural college students of Nagapattinam District in Tamil Nadu and to analyze whether Engineering and Arts & Science students of rural colleges use the E-Learning facilities.

OBJECTIVES OF THE STUDY

- ✿ To find out the students' knowledge about the use of the Internet.
- ✿ To find out whether the students use E-Books and E-Journals.
- ✿ To find out the percentage of rural college students using E-Mail ids for communication.
- ✿ To find out whether the rural students know the English language learning through E-learning to improve their English language.
- ✿ To find out the different approaches adopted by rural college students.
- ✿ To identify different classifications have been used to categorize efforts in learning.

METHODOLOGY

The article is based on exploratory study. The Primary data was collected through questionnaires collected from the students doing courses at Engineering and Arts & Science rural colleges in Nagapattinam District of Tamil Nadu. The secondary data was collected from printed journals and books. Online journals were also referred to for references.

✿ **Sample Design:** Non probability sampling - convenient sampling was adopted in the study. The survey was conducted in two Engineering Colleges and two Arts & Science Colleges in Nagapattinam District, Tamil Nadu. Two hundred sampling from engineering students and 200 sampling from arts & science college students were taken. Total size of sampling was 400. The study adopts percentage model and coefficient of variation.

$$CV = \frac{\sigma}{\bar{X}} \times 100$$

Empirical model was framed for e-learning among rural students and for the classification of learning.

IMPLEMENTATION

- ✿ Selection of participants;
- ✿ Securing operational resources (tutors, facilitates and equipment) ;
- ✿ Course content, scheduling elements of the module;
- ✿ Tutor training approach.

DIFFERENT APPROACHES AMONG RURAL STUDENTS

✿ **The Deep Approach:** Here, the aim of the students is to understand the course in a way that is personally meaningful

to them and which engages their own experiences and previous knowledge through an interactive process with relevant content knowledge and logic. The primary aim is to make personal meanings out of the shared meanings available.

✳ **The Strategic Approach:** This approach is seen as engaging some principles from both of the above approaches. The main concern of the student is to achieve the highest grade and ,therefore, she/he adopts an assessment focused approach. The student is alert to the cues, will have a high degree of contact with staff and will have an exam strategy.

THE PERCENTAGE MODEL OF E-LEARNING AMONG RURAL ARTS & SCIENCE AND ENGINEERING COLLEGE STUDENTS OF NAGAPATTINAM DISTRICT, TAMILNADU

Fig 1 : Knowledge about the use of internet

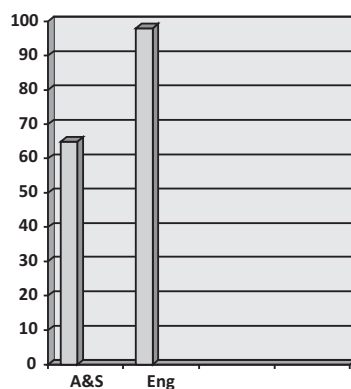


Fig 2: Students use E-books & E-journals

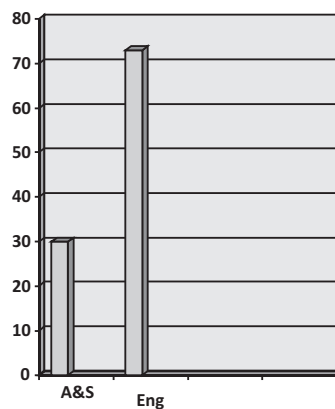


Fig 3: Students using E-mail

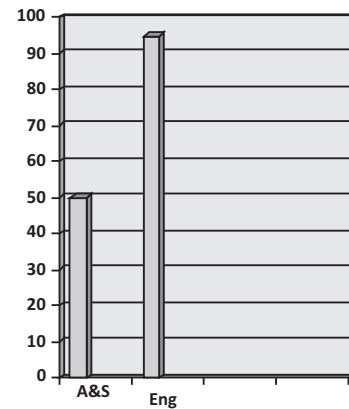


Fig 4: English Language Communication lab

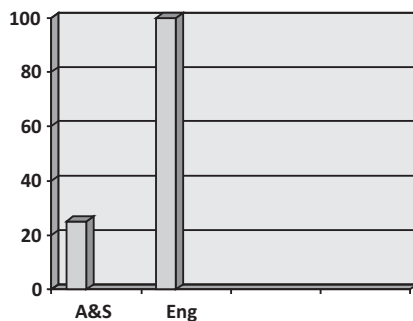


Fig 5: Approaches adopted by students (Strategic and Deep approaches)

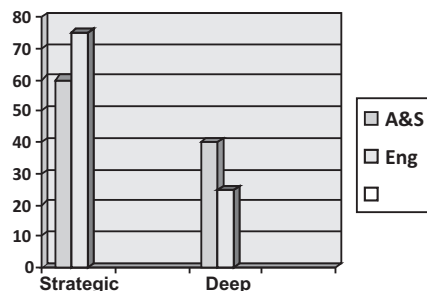
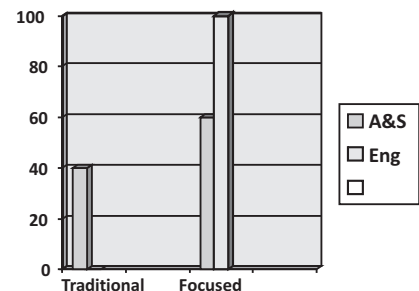


Fig 6: Classification of Learning (Traditional & Focused method)



ANALYSIS

Analysis of Variance :

$$CV = \frac{\sigma}{\bar{X}} \times 100$$

Arts & Science college students: (A)

$$\bar{X}_A = \frac{65+30+50+25+60+40+40+60}{8} = 46.25$$

$$\sigma_A^2 = \frac{(65-46.25)^2 + (30-46.25)^2 + (50-46.25)^2 + (25-46.25)^2 + (60-46.25)^2 + (40-46.25)^2 + (40-46.25)^2 + (60-46.25)^2}{8}$$

$$\sigma^2 = \frac{351.56+264.06+14.06+451.56+189.06+39.06+39.06+189.06}{8}$$

$$\sigma^2 = \frac{1537.48}{8} = 192.19$$

$$\sigma = 13.86$$

$$CV_A = \frac{\sigma}{\bar{X}} \times 100 = \frac{13.86}{46.25} \times 100 = 29.97$$

Engineering College Students: (B)

$$\bar{X}_B = \frac{98+73+95+100+75+25+0+100}{8} = 70.75$$

$$\sigma_A^2 = \frac{(98-70.75)^2 + (73-70.75)^2 + (90-70.75)^2 + (100-70.75)^2 + (75-70.75)^2 + (25-70.75)^2 + (0-70.75)^2 + (100-70.75)^2}{8}$$

$$\sigma^2 = \frac{(27.25)^2 + (2.25)^2 + (19.25)^2 + (29.25)^2 + (4.25)^2 + (-45.25)^2 + (-70.75)^2 + (29.25)^2}{8}$$

$$\sigma^2 = \frac{742.56 + 5.06 + 370.56 + 855.56 + 18.06 + 2.05 + 5005.56 + 855.56}{8}$$

$$\sigma^2 = \frac{7854.97}{8} = 981.87$$

$$\sigma = 31.33$$

$$CV_A = \frac{\sigma}{\bar{X}} \times 100 = \frac{31.33}{70.75} \times 100 = 44.28$$

**Table 1: E-learning Among Rural Students Of Arts & Science College
And Engineering College Students**

E-Learning	Knowledge about the use of internet(%)	Students use e-books & e-journals(%)	Students using e-mail ID(%)	English language learning through communication lab(%)	Approaches adopted by students(%)		Classification of learning(%)	
					Strategic	Deep	Traditional	Focused
Arts & Science College Students	65	30	50	25	60	40	40	60
Engineering	98	73	95	100	75	25	0	100

INFERENCE

The coefficient of variation of the Arts and Science students is less than that of the Engineering College students in E-learning among rural students of Nagapattinam district Tamil Nadu.

FINDINGS

✿ **Knowledge About The Use Of Internet:** 65% of the rural students were having knowledge of the internet in Arts & Science colleges. 98% of the engineering students were having knowledge of the use of internet. Students use e-books and e-journals: 30% of the Arts & Science students were using e-books & e-journals. 73% of the Engineering college students were using e-books and e-journals.

✿ **Students Using E-mail ID:** 50% of the Arts & Science College students were using e-mail. 95% of the Engineering College students using e-mail.

✿ **English Language Learning Through Communication Lab:** 25% of the Arts & Science College students were learning English language through e-learning.

Fig 7 : Empirical Model Of E-Learning Among Rural Students

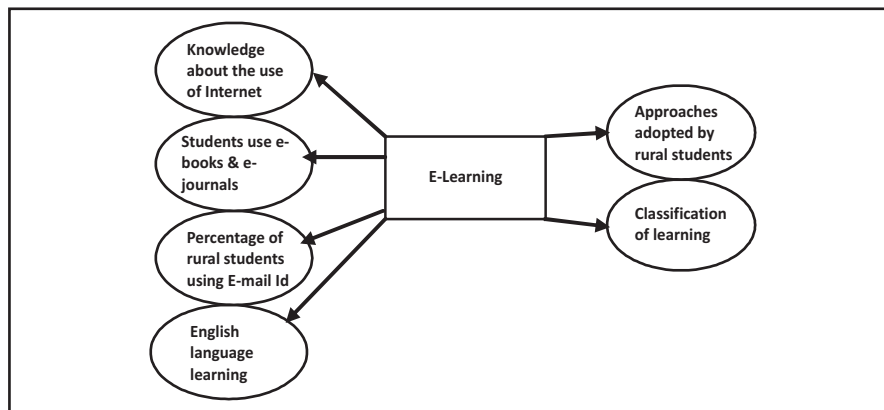
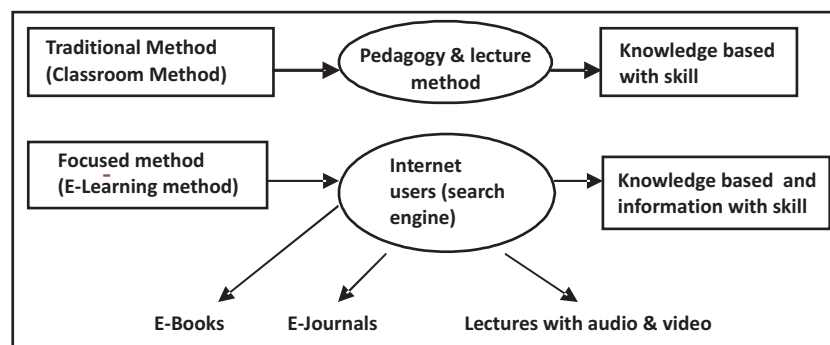


Fig 8: Empirical Model For Classification Of The Learning Process



100% of the Engineering students were learning English language through e-learning.

✿ **Approaches Adopted By Students (Deep And Strategic Approach):** 60% of the students adopted strategic learning approach and 40% of the students adopted deep approach in Arts & Science College. 75% of the Engineering students adopted strategic learning approach and 25% of the students adopted deep learning approach.

✿ **Classification Of Learning (Traditional And Focused):** 60% of the students concentrated on the focused method and 40% of the students concentrated on traditional method among Arts & Science Colleges. 100% of the engineering students concentrated on focused learning. The coefficient of variation of the Arts and Science students (**29.97**) is less than that of the (**44.28**) Engineering College students in E-learning among rural students of Nagapattinam district Tamil Nadu.

CONCLUSION

Nagapattinam is one of the developing districts in Tamil Nadu. It was separated from Thanjavur District a few years ago. The district has many villages and few towns. Many colleges have come up in the District and most of them are rurally based. Internet helps the rural college students for information sources. The rural college students of Nagapattinam district were adept in using the Internet. The Arts And Science college students were not concentrating more on using e-journals and e-books as compared to the Engineering college students. The ratio of E-mail users was high in Engineering colleges as compared to Arts And Science college students. English language learning was fully utilized by the Engineering students as compared to the Arts And Science students. The students of Arts And Science, Strategic Approach of Learning was preferred than the Deep Approach by the students of Engineering colleges. Classification of learning is divided in two types i.e., Traditional learning and Focused learning. The rural students of both Engineering colleges and Arts & Science colleges concentrate more on focused method of learning. There are differentiations among the rural college students between Arts & Science and Engineering colleges. Engineering comes under technical based education. Technology helps the students in their learning through e-learning. The Anna University - Trichy implemented the e-learning system and provided the E-Learning facility to all the affiliated colleges. This was not done by the other non technical universities in the rural Nagapattinam district.

The Government of India and the State Government implemented several Schemes and Projects, related to E-Learning in Rural areas, especially in schools and colleges. The government introduced several projects for focused learning system in rural schools. The government and private schools and then government aided and private colleges practiced E-Learning because E-learning is a vital source of information and provides excellent exposure to students. The faculty and the teachers were well aware about the focused learning systems, so they implemented the benefits of E-learning in their lectures in the form of OHP presentations and LCD presentations. In rural schools, the students were trained to work on computers. At the same time, the classroom teaching methodology was also used along with E-learning practices.

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