



## AWARENESS OF SECONDARY SCHOOL TEACHERS ON E-LEARNING SERVICES

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### Abstract

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*The paper presents the awareness of secondary School teachers on e-learning services. A total of hundred (100) respondents were selected from two secondary schools in Tenali Municipality. A self-developed questionnaire consists of 34 items with two alternatives i.e. Yes and No was used to obtain response from the respondents. The reliability coefficient of the tool was found by Chronbach a method by using the following formula and it was found to be 0.78. The survey method is considered to be the best method for the present study. Mean, SD, % of mean, and 't'-test calculations were done. The result of the study showed that a number of the teachers are not computer literate and are not aware of e-learning resources. The few who are aware and could access e-learning resources are confronted with problems such as lack of internet facilities, poor network, and high cost of e-learning facilities. The study recommended the installation of internet facilities in secondary schools, provision of e-libraries and creation of awareness about e-learning resources and compulsory training of teachers in computer literacy.*

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**Key Words:** Awareness, E-Learning, Internet, Secondary Schools.

### Introduction

The term E-learning means Electronic learning which may be trendy, but the concept itself has been around for decades. It is the training that takes place through a network, usually over the internet or Intranet. It replaces the traditional pattern of teaching, cuts across the barriers of time distance and space. It works with the individual or with the group, and it puts the learner in control of his/her own learning. According to Cisco E-learning, "countries and organizations must adapt to the demands of the internet economy to stay a head in an increasingly competitive world market place".

E-learning use the power of the Internet's reach, scalability and interactive potential to help people learn and describes a wide set of applications and processes, including computer based training, web based learning, virtual classrooms, and digital collaborations.

**E-Learning** is a learning which involves the usage of any electronic device, from computers to mobile phones. It describes e-learning as "the use of networked technology that will make the revolution possible".

The European Commission (2001) elucidates e-learning as: "The usage of new multimedia technologies and the Internet to develop the quality of teaching- learning by easing access to facilities and services in addition to remote exchanges and collaboration".

Oblinger and Hawkins (2005) 'The term e-learning means different things to different people'. They indicate that e-learning has transformed from being a completely online course to use technology to deliver selected parts or the entire course, independent of a fixed place or time. This means that students can be domestic, traveling or can learn at any distance.

**E-Education** involves-teaching, e-learning along with the various administrative and tactical measures needed to support teaching and learning in an internet environment. It will incorporate a regional, national and international view of education.

Early e-learning systems, based on computer based learning/training often attempted to replicate auto critic teaching style. The role of the student consists of learning from reading and preparing assignments. In variance, the new e-learning places increased emphasis on social learning and use of social software such as blogs, wikis, podcasts and virtual works. It delivers accountability, accessibility, opportunity and allows information and organization to keep up with changes in the global economy that now occurs on Internet time.

E-learning also offers the ability to aggregate a large amount of learning material from numerous sources, giving learners access to a vast supply of courses and learning modules. Secondary school teachers can inspire and guide the pupils to create the climate and atmosphere. E-teacher builds and discovers new learning communities and export resources as they interact with information, materials and ideas with their students and colleagues.

### **Approaches to E-Learning Services**

1. Computer Based Learning (CBL) denotes to the use of computers as a key component of the educational environment. The term widely refers to a structured environment in which computers are used for teaching-learning purpose.

2. Computer Based Training (CBT) is self-placed learning activities accessible via a computer. It incorporate activities like reading a book online, assessing learning an assessments are easily scored and recorded via online software, providing immediate feedback and completion status. CBTs are typically to printed material since rich media, including video's or animations can easily be embedded to enhance the learning.

3. Computer supported collaborative learning (CSCL) is a pedagogical approach where in learning takes place via social interaction by using a through the Internet or Computer. In this approach the instructional methods are designed to encourage students to work together in groups on learning tusk.

4. Web Based Training (WBT) uses rich media text and graphics, videos and animations to enhance learning just like CBT but unlike CBT. It is typically deployed via internet which caters to the needs of larger group.

All the approaches discussed above can prove instrumental in creating virtual learning environment in the classrooms. Our teacher education must include any of the above that can possibly be incorporated in class room teaching to develop exciting learning environment.

### **Need and Significance of the Study**

E-teachers are the new generation of teacher who will work in an Internet environment in both regular and virtual class room situations. They will build new concepts of the working in time and space. In the 21 century the teacher faces a lot of problems and challenges to achieve the real objectives of teaching. Teachers should up to date their knowledge to be able to make appropriate use of ICTs either as a teacher who uses (ICT) in class room or as an E-teacher or E-moderator. The teacher should animate, motive and facilitate feedback. In order to fulfill this dynamic role, the teacher should design roles, activities specifically for each objective and content as well as motivating and encouraging the students.

Innovative technologies have provided new dimensions to teaching learning. The Digital Age concerns and commitments at the same time have placed more demands on teachers to learn how to use these technologies in their teaching. The networked environment of this new Internet connected worked has expanded the opportunities for teaching and learning in ways that we are only beginning to understand. What makes the implementation of E-teaching so challenging is that we are asking teachers of the dot.com age to teach in a way in which they have never been taught when they were at school. They will work in an environment in which they have never been learners and may have had few first-hand

experiences. They will have the chance to examine what it means to be a teacher. However, without a history and a wide knowledge base to draw on, e-teachers will have the opportunity to pioneers in their own right as they set sail. They will have the chance to re-examine what it means to be a teacher. The National curriculum Frame Work (2005) was emphasized the need for the teacher to be evolved as self- learners. We need smart teachers with constant updating of skills rather than trained for lifetime teachers. So, an ongoing technical support and mentoring is required for the professional development of would-be teachers. Basing on the importance of e-learning to the teaching situation of this globalized society; teacher should be aware of about e-teaching and e-learning services to prepare the children for cybernetic world therefore the present study intents to find the awareness of secondary school teachers on E- learning.

### **Review of Related Literature**

E- Learning given the new dimension and a new way to Education. The use of e- learning in education has given a great approach to teaching-learning process. It provides itself to more student-centered learning situations. But moving the global world rapidly into digital media, the role of e- learning and ICT in education is becoming more important and this will continue to the future generations also. It is the resource, involves in the educational process in order to gain more knowledge.

Dash (2007), stated that ICT is an important means, which can transfer learning environment from teacher-centered, book-centered into the student-centered. This learning environment is also called an Interactive Learning Environment. According to Cross and Adam (2007), Bhattacharya and Sharma (2007), revealed that ICT removed the geographic, time barriers in education not only for learners but teachers also. Wang, McPherson, Hsu and Tsuei (2008), remarked that teachers need to accomplish more ICT skills to introduce ICTs before their students as well as to develop global awareness. Dr. K.Nachimuthu (2010) conduct a study that the 'Usability of E-learning Resources in Teacher Education of India'. The study reveals that all the institutions are having at least five computer peripherals with 70 per cent Air conditioned facilities in their ICT laboratories. Majority of B.Ed college lecturers and their colloquies are already taking actions regarding some the accepted ways of use of computers in their regular classrooms (32.0), however, they are not prepared to sacrifice their personal comfort for using e-books (in total 45%), they have strong reasons for that. Gulhane (2011), evince that there was no significant difference between the male and female teacher trainees' awareness among the concept of ICT in theoretical and application.

Adebowale (2012) revealed that very low percentage of teachers has high level of awareness on ICT. Beena and Mathur (2012) found the awareness of teacher educators about the use of ICT and its impact on the way programs will be provide and implemented in the teacher training institutions. Suria Ellis (2013) studied that the Looking out and looking in: Exploring a case of faculty perceptions during e-learning staff development-the main findings were the clusters formed the basis of a model for faculty development towards socially transformative learning technology integration for open distance learning. Nabin Thakur (2014) found that the level of ICT awareness was poor, there was no significant difference in the level of ICT awareness among the male and female trained teachers and there was a significant difference between the urban and rural trained teachers. Ugwu, Daniel Aleke<sup>1</sup>, Ohimekpen, Benjamin Akaniyere<sup>2</sup> (2015) found that a number of the teachers are not having computer knowledge and they are not aware of e-learning resources. The few who are aware and could access e- learning resources are face with problems such as lack of internet facilities, poor network, and high cost of e-learning facilities. M. J. Philomina and S. Amutha(2016) revealed that the teacher educators have more awareness towards ICT. When compared with male teacher educators female teacher educators have more awareness towards ICT.

Education is a process of human enlightens and empowerment to achieve the high quality life. Teaching is an ever green profession. The field of education is broadening each year as advancement is made in technology and brain based research. To keep stride with the changing world, teachers must have current knowledge and skills of educational technology. The exigency of ICTs as learning technologies has coincided with a growing awareness and recognition of alternative theories for learning.

### **Research Questions**

1. What is the awareness level of secondary school teachers on e-learning services?
2. Are they having computer knowledge?
3. Is there any significant influence of the variables on the awareness of secondary school teachers on e-learning services?

In order to answer the above questions the study is entitled as follows:

### **Title of the Study**

*“Awareness of secondary school teachers on e-learning services”*

### **Operational Definitions of the Key Terms Used**

**Awareness:** is the ability to directly know and perceive. More broadly, it is the state of being conscious of something.

**E-Learning** is a learning system with the help of electronic resources.

**Internet** is a means of connecting a computer to any other computer anywhere in the world via dedicated routers and servers.

**Secondary School** is a school between elementary to 10<sup>th</sup> class level.

### **Objectives of the Study**

1. To find out awareness of secondary school teachers on e-learning services.
2. To find and compare the awareness of secondary school teachers on e-learning with respect to following variables.
  - a) Gender : Male / Female
  - b) Experience : Below 10 year / Above
  - c) Medium of Instruction : Telugu Medium / English Medium
  - d) Computer Knowledge : Computer knowledge / No Computer knowledge

### **Hypotheses of the Study**

1. There would be no significant difference between the awareness of male and female secondary school teachers on e-learning services.
2. There would be no significant difference between awareness of secondary school teachers on e-learning services with respect to of the experience ie. (Above 10 years and below 10 years.)
3. There would be no significant difference between the awareness of Telugu and English medium secondary school teachers on e-learning services.
4. There would be no significant difference between the awareness of secondary school teachers on e-learning services with respect to their knowledge in computer.

### **Method of the study**

The survey method is considered to be the best method for the present study.

### **Scope and Delimitation of the Study**

- The sample selected for the study was 100 secondary school teachers in Tenali Municipality only.

### Sample and Sampling

A sample of 100 secondary school teachers are randomly selected from the Government, Municipal, Aided and Private Schools.

### Research Tool of the Study

“Awareness of secondary school teachers on e-learning services” questionnaire was designed by the investigator. It consists of 34 items representing 5 different areas of e learning services. All the items in the questionnaire are positive.

### Scoring Procedure

The questionnaire consists of 34 items with two alternative responses i.e. Yes and No. Yes scores 1 and No scores 0.

### Reliability and Validity of the Questionnaire

The reliability coefficient was found by Chronbach  $\alpha$  method by using the following formula and it was found to be 0.78.

### Statistical Techniques Used

Mean, SD, % of mean and ‘t’/ ‘F’ values are computed.

### Data Analysis

**Objective – 1:** To find out the awareness of secondary school teachers on e-learning services and to classify them.

**Table-1: Mean, SD, % of Mean of the Whole Sample**

Whole sample	Mean	SD	% of mean
100	29.666	3.08	87.25294

### Interpretation

The above table inferred that awareness of secondary school teachers on e-learning services is high. The group is said to be homogeneous from mean and standard deviations of the sample. 96% of secondary school teachers have high awareness towards e-learning services. Only 4% of teachers have moderate awareness towards e-learning services. Surprisingly, there are no teachers with poor awareness towards e-learning services.

This result speaks of the awareness of teachers, who are living in the age of information technology. It argues well that the nation builders are breasts with latest innovations in the field of communication technology and e-learning services.

**Objective – 2:** To find and Influence of gender, Experience, Medium of Instruction and computer knowledge on awareness of secondary school teachers on e-learning services.

**Table - 2: Comparison of the Scores w.r.t. different Variables.**

Variable	Type of Variable	No. of Respondents	Mean	SD	SEd	't' / 'F' value
<b>Gender</b>	Male	37	29.472	3.076	0.629	0.473
	Female	63	29.77	2.972	2	
<b>Experience</b>	Above 10 years	62	29.564	3.060	0.632	0.721 <sup>NS</sup>
	Below 10 years	38	30.02	3.077		
<b>Medium of Instruction</b>	Telugu	51	29.843	2.84	0.629	0.5786 <sup>N</sup> s
	English	49	29.479	3.41	0	
<b>Computer knowledge</b>	Computer knowledge	74	30.33	3.30	0.761	2.39*
	No Computer Knowledge	26	28.51	3.42		

**Interpretation**

The above table, we can interpret that there is no significant difference between the awareness of male and female teachers on e-learning services. The variable Gender is not playing and significant influence on awareness of secondary school teachers on e-learning services.

The variable experiences of the teachers having no significant influence on the awareness of secondary school teachers on e-learning services.

From the 't' value of the table we can calculate that there is no significant difference between the awareness of Telugu and English medium secondary school teachers on e-learning services. The variables medium of instruction has no significant influence on awareness of secondary school teachers.

The variable qualification of the teachers also has no significant influence on the awareness of e-learning services.

From the 't' value of the table we can calculate that significant at 0.05 level, the awareness of secondary school teacher on e-learning services with respect to their knowledge in

computer. The knowledge of computer has made a significant influence on the awareness of secondary school teachers on e-learning services.

### **Findings**

- The awareness of secondary school teachers on e-learning services is high i.e. up to 87%
- 96% of teachers are having high awareness towards e-learning services
- There is no significant difference between the awareness of male and female secondary school teachers on e – learning services.
- Significant difference was not found between the awareness of secondary school teachers on e-learning services with respect to the experience of above and below 10 years.
- There is no significant difference between the awareness of Telugu and English medium secondary school teachers on e-learning services.
- Significant difference between the awareness of secondary school teachers on e - learning services with respect to the knowledge in computers.

### **Educational Implications**

- The study is implied to the teachers, administrators, educational authorities to know the awareness regarding e-learning services to improve the teaching-learning situations of different schools of Andhra Pradesh.
- It is also implied to know the awareness of present day teachers on e-learning services.
- It is helpful to know the status of different schools and teachers on e-learning services.
- It is helpful to implement some policy decisions in conduct of orientation and refresher courses to the teaching community.
- It is helpful to know the standard of teachers in the latest technologies like e-learning, e-teaching and e-education.
- Helpful to the authorities to evaluate, analyze and estimate the needs of e-learning.
- It is helpful to the education community to know the Computer Based Learning (CBL), Computer Based Training (CBT), Computer Supported Collaborative Learning (CSCL), and Web Based Training (WBT).

- The study implied to give the detailed picture of e-learning services to the people, teachers and administrators.

### Conclusion

The awareness of e-learning is necessary for teachers. It will become a powerful tool to enhance the outcome of education and breaking the traditional teaching methods of education. It leads the education system to be more productive. Through e-learning, teachers would be able to establish their own concepts and find solutions to the problems. The teachers should be given appropriate training for fostering skills associated to e-learning for its awareness. It is expected that if the teachers are fully aware of e-learning, they will be able to guide their learners for their bright future.

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