

## E-LEARNING FOR PROFESSIONAL DEVELOPMENT OF TEACHERS

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### Abstract

*The quality of education depends upon the quality of teachers. The techno teacher is one who integrates the content with technology in the class room. Education is the medium to achieve the sustainable goals, to secure a sustainable, peaceful and equitable life for everyone now and in the future. There is a need of e-learning for the professional development of teachers and the achievement of sustainable society. The present study aims to study the role of e-learning for professional development of teachers. A total of hundred respondents were selected from secondary schools in Guntur district. A self-developed questionnaire consists of 30 items with two alternatives i.e. Yes and No is used. The reliability coefficient of the tool was found by Chronbach  $\alpha$  method and it was found to be 0.88. 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 majority of the teachers are having positive attitude towards e-learning for their professional development. Male teachers are having more awareness than the females, because of the social environment, economical constraints than females, males have no stress comparing to the females. The study recommended the creation of awareness about e-learning resources. Teachers should develop their teaching skills by undergoing orientation and refresher courses with the help of technology for their professional development.*

**Key Words:** E-Learning, Technology, Professional Development.

### Introduction

In today's education computer has become the new pencil, paper, text book, library and in many cases teacher. The computer and its related technologies are now such an integral part of everyday life that it must be an ingredient in educating for participation in present and future society. Teachers are constantly discovering new ways to integrate computers into their programs. The computer can be a tool for learning in many areas of education. For educators computer is a tool for lesson preparation.

- Helps teachers to collect ideas used by to present lesson.
- Helps to prepare audio/ video lesson presentations.
- Help in research information.

E-learning is commonly referred to the intentional use of networked information and communications technology in teaching and learning. A number of other terms are also used to describe this mode of teaching and learning. They include

- Online learning
- Virtual learning

- Distributed learning
- Network and web based learning

According to Markus(2008) E-learning can be defined as a learning process created by interaction with digitally delivered content, network-based services and tutoring support e-learning is any technologically mediated learning using computers whether from a distance or in face to face classroom setting (computer assisted learning), it is a shift from traditional education or training to ICT-based personalized, flexible, individual, self-organized, collaborative learning based on a community of learners, teachers, facilitators, experts. E-learning is the use of Internet technologies to enhance knowledge and performance. E-learning technologies offer learners control over content, learning sequence, pace of learning, time, and often media, allowing them to tailor their experiences to meet their personal learning objectives. To manage access to e-learning materials, consensus on technical standardization and methods for peer review of these resources.

E-learning refers to the use of Internet technologies to deliver a broad array of solutions that enhance knowledge and performance. E-learning can be used by medical educators to improve the efficiency and effectiveness of educational interventions in the face of the social, scientific, and pedagogical challenges noted above. It has gained popularity in the past decade; however, its use is highly variable among medical schools and appears to be more common in basic science courses than in clinical clerkships.

### **Classroom Learning and E-Learning**

E-learning and classroom learning are not mutually exclusive. In many situations classroom learning can be enhanced by adding e-learning (i.e. a discussion thread to continue dialogue after the session, or a series of online resources to prepare students for classroom learning).

### **The Importance of E-Learning in Learning and Development Models**

In a world where the power of technology resides in our pockets, it is no longer acceptable to train and empower our workforce through out-dated and traditional methods of learning. As the corporate learning culture continues to evolve, employers and managers are now tasked with ensuring current learning and development models keep up with changes in technology and in the workforce.

### **Benefits of E-Learning**

- E-learning is important for education because it can improve the quality of the learning experience, and extend the reach of every lecturer and tutor.

- E-learning can help remove barriers to achievement, by providing new and creative ways of motivating and engaging pupils and learners of all abilities, enabling and inspiring every one to attain their educational potential.
- E-learning can support learning by offering differentiated learning, particularly for those who need support in literacy, numeracy and ICT.
- E-learning offers a wide range of tools to enable teachers and learners to be innovative, creative and resourceful in all learning activities. Teachers and learners can easily customize digital learning resources to suit pace and level, appropriate to any learning style and ability.

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

Education is the medium to achieve the sustainable goals, to secure a sustainable, peaceful and equitable life for everyone now and in the future. There is a need of e-learning for the professional development of teachers and the achievement of sustainable society. The technology helps teachers in utilizing modern accessories in their teaching to include suitable skills and competencies among the students. Educational technology has changed the curriculum transaction drastically with the application of modern day gadgets and e-resources. Technology can motivate the students by gaining their attention and supporting their manual operations during high level learning. Technology can illustrate real world relevance through high level learning and engaging students through productive work. Educational technology can have software which supports instruction, production and administration. Technology can help teachers to learn and sharpen their informational skills. The application of technology has many issues to ponder over such as societal, educational, cultural, equity, legal and ethical. New technology offers many opportunities and challenges before the teacher and the learner.

The study reveals that there have been concerted efforts to encourage e-learning for professional development of teachers, which would lead to technological aspects in education and to improve the skills in the teachers. This shows the need and necessity of e-learning besides this e-learning has reduced the imagination concepts into virtual world of learning. Abacuses of this much importance, the researcher has taken to study.

**Suria Ellis (2013)** studied that the Looking out and looking in: Exploring a case of faculty perceptions during e-learning staff development. Their main finding were. The clusters formed the basis of a model for faculty development towards socially transformative learning technology integration for open distance learning.

**Dr. K.Nachimuthu (2010)** conduct a study that the Usability of eLearning Resources in Teacher Education of India. The study reveals that the 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.

**Dr. Ram Mehar (2011)** studied that the Exploring newer technologies in distance learning.

**Jyoti Bawane (2012)** studied Integrating Technology Education for Professional Development of Teachers: Developmental Experiences.

### **Objectives of the Study**

- 1) To study the role of e-learning for professional development of teachers.
- 2) To the role of e-learning for professional development of teachers with respect to
  - a. Gender : Male / Female
  - b. Location : Rural / Urban
  - d. Medium of instruction : Telugu / English
  - e. Teaching Experience : Above 10 years / Below 10 years

### **Hypotheses of the Study**

1. There is no significant difference between the attitude of male and female teachers towards the role of e-learning.
2. There is no significant difference between the attitude of rural and urban teachers towards the role of e-learning.
3. There is no significant difference between the attitude of Telugu and English medium teachers towards the role of e-learning
4. There is no significant difference between the attitude of above 10 years and below 10 years of teaching experience of teachers towards the role of e-learning.

### **Method of the Study**

The present study falls under normative survey method.

### **Scope of the Study**

The scope of the present study involves role of e-learning for professional development of teachers with regard to areas personal, professional and technical.

### **Delimitations of the Study**

- The study was limited to 100 secondary school teachers only.

- The study was limited to Guntur district only.

### Sample and Sampling

Random samples of 100, 8th, 9th and 10th class teachers were selected from different schools in Guntur district.

### Tool of the Study

The tool consists of 30 statements regarding e-learning for “professional development of teachers” constructed by the researcher.

### Scoring Criteria

For positive item per YES – 1 mark is given and per NO is zero.

For negative item per YES – 0 is given and per NO is 1 mark.

### Reliability of the Study

Reliability is the consistency of a test yielding the same results in measuring, whether it does measure i.e. consistency throughout the series of measurement.

The reliability was found to be 0.88 which indicates the questionnaire was reliable.

### Data Analysis

**Objective:** To find out the role of e-learning for professional development of teachers.

This objective was analyzed by basing on the e-learning for professional development Scores.

The Scores are analyzed by finding Mean, S.D, Percentage of Mean, are tabulated in Table 1.

**Table – 1 E-Learning for Professional Development of Teachers**

Total Sample	Mean	SD	% of Mean
100	24.72	3.61	82.4

### Interpretation

From the above observation it is interpreted that up to 82.4% of the sample of teachers are having positive opinion towards the e-learning for professional development of teachers. It is found that majority of the sample of teachers are having positive attitude towards the e-learning for professional development of teachers.

### Variables Wise Analysis

**Hypothesis -1:** There is no significant difference between the attitude of male and female teachers towards the role of e-learning for professional development.

**Table – 2 Mean, SD, “t’ Value of Male and Female Teachers**

Variable	N	Mean	SD	S.Ed	‘t’ Value
Male	50	25.5	3.02	0.7	2.23*
Female	50	23.94	3.96		

\*Significant at 0.05 level

### Interpretation

The calculated t-value 2.23 is more than the table value at 0.05 level of significance. There is significant difference between male and female teachers on e-learning. Hence the hypothesis is rejected.

From the above findings males are focused to be having more awareness than females because of the social environment, economical constraints than females, males have no stress comparing to the females. Voluntary they seem to have more relationships to the outside environment of the family. Due these reasons it may be stated that males are likely to have more development than females.

**Hypothesis-2:** There is no significant difference between the attitude of rural and urban school teachers role of e-learning for professional development.

**Table – 3 Mean, SD, ‘t’ Value of Rural and Urban School Teachers**

Variable	N	Mean	SD	S.Ed	‘t’ value
Urban	50	24.82	2.95	0.67	0.29NS
Rural	50	24.62	3.74		

NS = Not significant at 0.05 level

### Interpretation

The calculated t-value is 0.29 is less than the table value at 0.05 level of significance. There is no significant difference between rural and urban school teachers on e-learning. Hence the hypothesis is accepted.

As the trends of universalization, globalization facilities even the rural to get equalized regarding e-learning for professional development of teachers.

**Hypothesis -3:** There is no significant difference between the attitude of English and Telugu medium teachers towards the role of e-learning for professional development.

**Table -4 Mean, SD, ‘t’ Value of English and Telugu Medium School Teachers**

Variable	N	Mean	SD	S.Ed	‘t’ value
English	50	24.74	3.27	0.72	0.05NS
Telugu	50	24.7	3.92		

NS = Not significant at 0.05 level

### Interpretation

The calculated 't' value 0.05 is less than the table value at 0.05 level of significance. There is no significant difference between English and Telugu medium teachers. Hence the hypothesis is accepted.

It is found that the teachers of English medium and Telugu medium seem to have similarity regarding e-learning for professional development of teachers because the involvement or use of computers in regional or mother tongue others than English have founds to be in much use. Hence even telugu medium has not gone outdated or old.

**Hypothesis - 4:** There is no significant difference between the attitude of above 10 years and below 10 years towards the role of e-learning for professional development.

**Table – 5 Mean, SD, “t’ value of Above 10 years and Below 10 years Teaching Experience**

Variable	N	Mean	SD	S.Ed	‘t’ value
Above 10 years	52	24.81	3.57	0.72	1.04NS
Below 10 years	48	24.06	3.69		

NS = Not significant at 0.05 level

### Interpretation

The calculated 't' value 1.04 is less than the table value at 0.05 level of significance. There is no significance difference between the attitude of above 10 years and below 10 years of experience of teachers. Hence the hypothesis is accepted.

It is found from the finding that the teachers having above 10 years experience and the teachers who are having below 10 years' experience are similar, because the emerging trends and techniques in the education of below 10 years makes them to cope up with the experienced.

### Findings

- It is found that majority of the sample of teachers are having positive attitude towards the e-learning for professional development of teachers.
- The variable locality has no significant influence on the role of e-learning for professional development of rural and urban school teachers.
- It is found that the teachers of urban and rural comparatively similarly regarding e-learning for professional development of teachers.
- The variable medium of instruction has no significant influence on the e-learning for professional development of English and Telugu medium teachers.

- The variable Teaching experience has no significant influence on the e-learning for professional development of above 10 years and below 10 years teaching experience of teachers.

### Suggestions

- Teachers have to acquire the knowledge of technology from various channels to achieve the sustainable goals, to secure a sustainable and peaceful society.
- As it is the time for technology all the teachers must know about e-learning which helps them to create innovative skills in education. And gaining more knowledge as well as
- Awareness programs and special orientation should be given to the teachers in rural areas more. So that they can develop more interest in e-learning.
- E-learning helps the science teachers more in getting world-wide knowledge within a limited time. So there is a need to develop interest among the science teachers towards e-learning.
- Special orientation should be given to the female teachers about e-learning.

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