THE SCOPE OF E-LEARNING IN THE COMPUTER SCIENCE & TECHNOLOGIES

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ABSTRACT
The E-learning technologies aim to enhance the target of learning outcome in the Education thorough the effective uses of the e-learning technology tools and empower the innovative learning. In the current era E-learning in the computer science playing an effective role to develop the students technical, design and development skills.

KEYWORDS: E-learning, Design and Development Skills & Modes of Communications

INTRODUCTION
The letter “e” in e-learning, what does it mean for learning? The term ‘e’ has many common words like as e-mail and e-commerce, but overall ‘e’ describes as electronic totally based on the computer system. The term “e” explores all the computer hardware and software, but also connected with networking by which it can collect distributed data, information and knowledge to the peoples at the different locations and time. Most we focused only on Personnel computer as a data stream, but nowadays we are not totally dependent on this device, we have many mobility devices like laptops, palmtops, mobile phones, media players and many more devices. Considering e-learning, we have variety of electronically networked devices, where peoples can perform their needed activities.

E learning technology is paperless and global technology. In 1970s computer mediated communication through email, teleconferences and growing use of internet. But some students want degrees not available in their countries in their choice of courses. Then e-learning becomes the suitable technology for those who wants to learn different courses and technology worldwide. The e learning technology can be physical, local and uniform. By using e-learning students improved their knowledge and they had tasks and goals to achieve.

Basically e-learning is an electronic learning, and using a computer to deliver part, or all of a course material/training whether it's in a school/college, business and full distance learning course.

In the early days it received a bad press, as many people thought that bringing computers into the classroom would remove that human interface that some learners required., but as time has passed progressed technology has developed, and now we use smart phones and tablets in the classroom and office.

E-Learning Concepts & Methodologies

- eLearning Fundamentals
- Instructional Design
- Learning Theories & Instructional strategies
- Learning Activities & Assessment Design
- E-Content Development for Mobile
- Social Networks for Learning

**Technical Skills**

- Foundation
- E-Learning Concepts
- Design and editing tools
- Development tools and programming languages
- Soft skills

**E Learning Fundamentals**

Why do we need e-learning? How do I write a storyboard? If you're delving into e-learning and are coming up with more questions than answers, this would be a high-level overview that you have been looking for. E-learning is becoming a valid, fun and realistic way of learning in every country and every sector. There are many ways that we enjoy learning stuff at work. Some of us like only one way to learn and others like a variety. Prioritize the learning methods you prefer.

E-Learning Fundamentals provides the basic knowledge of necessary to tackle everything from early concepts of e-learning down to its execution. Throughout, you'll find vignettes that bring concepts to life as well as checklists and practical tools for designing and developing your first e-learning course.

**Instructional Design**

Instructional design, also known as instructional systems design, is the analysis of learning needs and systematic development of instructions.

**Learning Theories & Instructional Strategies**

The instructional strategies are rooted in established theories and research in human learning. The basis of designing alternative e-learning environments. The primary instructional events prescribed by various instructional strategies. In this human learning every strategy is grouped according to general approaches.

- Adaptive Instructional Design
- Collaborative Problem-Solving
- Experiential Approaches

**Learning Activities & Assessment Design**

- The success criteria for the completed assessment task are:
  - an ability to use ideas in proper design
• an ability to review a design
• an ability to communicate ideas using technically
• an ability to choose appropriate materials
• an ability to show use of strong shapes to strengthen the model
• an ability to use tools and equipment correctly, safely and competently.

E-Content Development for Mobile

However you are running applications with millions of mobile users or you’re supporting the critical operations of your business, the “cloud” provides rapid access to flexible and low cost IT resources. With cloud computing, you don’t need to make large upfront investments in hardware and spend a lot of time on the heavy lifting of managing that hardware. Cloud Computing provides a simple way to access servers, storage, databases and a broad set of application services over the Internet. Cloud Computing providers such as Amazon and Microsoft Azure maintain the network-connected hardware required for these application services, while you provision and use what you need via a web application.

Social Networks for Learning

Social media environments are clearly an important place for young people to interact and socialize,” he said. “It seemed natural to explore the potential for social media environments to help students learn in a more social way.” About 90 percent of young adults use social networking sites regularly, so mixing computer science with social media makes sense, he said. “We are particularly excited about the prospect of students being able to interact with social media environment embedded directly within their computer programming environment.

Modes of Communications

The mode of communication in the e-learning technologies can be in any form.

• E-Learning can also refer to educational web sites such as those offering learning scenarios, worksheets and interactive exercises for children.
• E-learning can also refer to business sector where it generally refers to cost-effective online training.
• screen casts
• e-Portfolios
• EPSS (electronic performance support system)
• web-based teaching materials
• web sites
• discussion boards
• collaborative software
• e-mail
• blogs
• wikis
• text chat
• computer aided assessment
• animation
• simulations and games
• electronic voting systems

![Model of Communication](image)

Figure 1: Model of Communication

Benefits of E-Learning

• It's cost effective and saves time:
• Learning 24/7, anywhere:
• It's discreet:
• It makes tracking of course progress a breeze:

CONCLUSIONS

The above full content is basically is focused on the e-learning medium and technologies. The term content plays a key role in e-learning, but this is not a easy process to have e-learning in all the fields of Computer Science. It needs knowledge of experts in their fields and have different opinion for creating the necessary objects that are useful for making up the quality. Ability and sense of expert is required for developing courseware and necessary structure of the topic. So we can say that e-learning technology is dynamic way for getting knowledge and interaction with the system.

If we have distance education different study programs applied on Computer Science may have several problems and issues, if compared with face to face education.

• There is an essential need to create quality learning material.
The distance mode students may face problem of technically, like internet connectivity in comparison of full time students.

The differences in content of courses bring a need to create original materials for teaching theoretical computer science disciplines like theory of formal languages and automata, logic etc.

REFERENCES


