CHAPTER 1
INTRODUCTION


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1.1 A brief historic background on basic “Learning” for Education

History of Learning

Learning in India through the ages had been prized and pursued not for its own sake, but for the sake, and as a part, of religion. (It was sought as the means of self-realization, as the means to the highest end of life. viz. **Mukti** or Emancipation). Ancient Indian education is also to be understood as being ultimately the outcome of the Indian theory of knowledge as part of the corresponding scheme of life and values.

India was the only country where knowledge was systematized and where provision was made for its imparting at the highest level in remote times. Whatever the discipline of learning, whether it was chemistry, medicine, surgery, the art of painting or sculpture, or dramatics or principles of literary criticism or mechanics or even dancing, everything was reduced to a systematic whole for passing it on to the future generations in a brief and yet detailed manner. University education on almost modern lines existed in India as early as 800 B.C. or even earlier. The learning or culture of ancient India was chiefly the product of her hermitages in the solitude of the forests. It was not of the cities. The learning of the forests was embodied in the books specially designated as **Aranyakas** "belonging to the forests." Indian civilization in its early stages had been mainly a rural, sylvan, and not an urban civilization.
Ancient Learning

Figure 1: Early days of learning on counting with fingers for SamaVeda chanting.

The ideal of education has been very grand, noble and high in ancient India. Its aim, according to Herbert Spencer is the 'training for completeness of life' and the molding of character of men and women for the battle of life. The history of the educational institutions in ancient India shows how old is her cultural history. It points to a long history.

The word Upanishad itself suggests that it is learning got by sitting at the feet of the master. The knowledge was to be got, as the Bhagavad Gita says, by obeisance, by questioning and serving the teacher.

1.2 Evidence of Learning during the Buddhist Education

Buddhist education can be rightly regarded as a phase of the ancient Hindu system of education. Buddhism, itself, especially in its original and ancient form, is, as has been admitted on all hands, rooted deeply in the pre-existing Hindu systems of thought and life.
1.3 E-Learning:
In the field of human resource management, training and development is the field concerned with organizational activity aimed at bettering the performance of individuals and groups in organizational settings. It has been known by several names, including employee development, human resource development, and learning and development and now it is getting changed to Talent Development to achieve and maintain a competitive advantage for the organization.

a) Definitions of E-Learning
E-Learning is defined as “The use of new multimedia technologies and the Internet to improve the quality of learning by facilitating access to resources and services as well as remote exchanges and collaboration” - The E-Learning Action Plan: Designing tomorrow’s education, Commission of the European Communities, March 2001

E-Learning is not just E-training. E-Learning is the overarching umbrella that encompasses education, information, communication, training, knowledge management, and performance management. It is the web-enabled system that makes information and knowledge accessible to those who need it, when they need it — anytime, anywhere -

1.4 Technology support for E-Learning
With the non-stop growth of technology, there is now a need for more advanced and convenient training methods. Synchronous E-Learning is done in real-time with a live instructor facilitating the training. Everyone logs in at a set time and can communicate directly with the instructor and with one another. During Synchronous E-Learning one can raise one’s cyber hand to put questions to the trainer and communicate. This type of training usually takes place via Internet Web sites, Web cast, audio- or video conferencing. This research study was conducted to evaluate how effective is the E-Learning tool to make a process driven and learning organization in the present talent age.
Computers and telecommunications have started having a huge impact on organizations and hence on their managers. Managers are discovering new ways of collaborating with others, exploring new communities, inventing businesses, seeking resources, finding information and learning through interacting electronically on a huge scale. A growing number of countries are focusing their capacities in investing in their human capital as a critical feature of their economic growth (Kamel 1999).

It is important to make some assessment of the state of readiness in terms of developing and implementing E-Learning, **M-Learning** or any advanced ICT applications, especially with reference to our Indian socio political development stage.

E- Learning, M-Learning and there is now a lot of speculation on the development and potential application of wearable devices too.

**a) Indian innovation on E-Learning - Sakshat** is a tablet PC designed in India, a low cost device in order to attempt to bridge the digital divide. A new prototype unveiled in 2010 has been met with enthusiasm. The device has been developed as part of the National Mission on Education through Information and Communication Technology that aims to link 25,000 colleges and 400 universities on the subcontinent in an E-Learning program via an existing Sakshat portal. The tablet would cost $35.

**b) Indian Tablet PC - Adam Tablet** is a table computer is under development by Bangalore based firm Notion Ink. The US launch is expected before 25 December 2010. The device is one of several tablet form-factor devices launching in 2010 to include a dual-core Nvidia Tegra 2 that can support high quality video output.
c) Virtual Learning Environment

Advancement of Technology in Virtual Reality, Immersive Technology E-Learning is getting new shape to support learning process effectively and efficiently. Immersive Digital Environments – Immersive “an artificial, interactive, computer-created scene or "world" within which users can immerse themselves”.

A Goddard technologist in NASA has demonstrated the world’s first X-ray communication system using a Modulated X-ray Source (MXS) developed with Goddard R&D funds... The goal is to someday transmit gigabytes of data per second using minimal power, which could support future E-Learning.

1.5 Synchronous E-Learning

Synchronous E-Learning is done in real-time with a live instructor facilitating the training. Everyone logs in at a set time and can communicate directly with the instructor and with one another. During Synchronous E-Learning one can raise one’s cyber hand to put questions to the trainer and communicate. This type of training usually takes place via Internet Web sites, Web cast, audio- or video-conferencing, VLE (Virtual Learning Environment) – “Second Life”.

Figure 2: First Indian Tablet PC – ADAM.
Synchronous E-Learning is done in real-time with a live instructor facilitating the training. Everyone logs in at a set time and can communicate directly with the instructor and with one another. During Synchronous E-Learning you can raise your cyber hand to put questions to Trainer and communicate. This type of training usually takes place via Internet Websites, Web cast, audio-or video-conferencing, Virtual Learning Environment – “Second Life”.

Synchronous E-Learning lets teachers conduct classes over the Internet. The Synchronous technologies also allow people to interact with students / trainees and also communication between Teacher and students. Virtual classroom provides the following features:

a) Virtual Classroom
b) Audio and Video Conferencing
c) Chat
d) Shared Whiteboard
e) Application Sharing
f) Instant Messaging
1.6 Process of Synchronous E-Learning:

![Diagram of Instructor with Learners in Synchronous E-Learning environment.](image)

*Instructors shares new ideas and information with learners, providing guidance and feedback on student performance.*

**Figure 3:** Instructor with multiple learners in Synchronous E-Learning environment.

![Diagram of how a learner learns from other learners.](image)

*Learners engage with one another on web to collaborate and share knowledge by asking questions, exchanging perspectives and experiences and creatively expressing themselves in Synchronous E-Learning environment.*

**Figure 4:** How Learner learns from other learners in Synchronous E-Learning
1.7 Advantages of Synchronous E-Learning:

- Synchronous E-Learning process – Save money & Time in Human Resource Management in achieving ROI for competitive global business.
- Flexibility for professionals /students (i.e. when to study, at what pace and location with latest application of Technology – Second Life Virtual Learning Environment (VLE)
- Establishment of communication between Trainees / students and tutors / Trainers and trainees.
- Greater access to information; greater flexibility in measuring progress of learning, maintaining and up-dating course documentation.
- Deliver personalized training and learning for more people with less Cost and Time
- Produce effective and streamlined learning and training Experience on-Demand Learning
- Show training proof for accountability of competencies
- Reduce time-to-market and shrink time-to-competency
- Design, launch, and manage training 24/7 - efficiently
- Improve productivity and Achieve a strong competitive advantage

1.8 Objectives of Research

1. To determine what good and better E-Learning systems / Technology are like for Talent Development for Human Resource Management.

2. To evaluate the effectiveness of Synchronous E-Learning tool to make a process driven and learning organization in the present Talent age.

3. To identify promising approaches to E-Learning that may meet present and future business / educational needs on the basis of advancement of Technology like - Virtual Learning Environment (VLE).