



e-learning -The Perfect Way of Learning

By

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Abstract

Today education and domain specific skills are taking more importance than never before. There have been some aspects of our education system that have been ailing the students. Students are worried that the education they get does not result in good jobs. It's the responsibility of Government, universities and Corporations to give the students good education that can get them jobs that satisfy them economically, socially and the work in particular. For a long time now **universities** have given classroom education to students. Teachers try hard to explain the concepts with diagrams and examples. But today there is a need for change in the scenario on how education is conducted. Multimedia based animations can go a long way in making the students understand the three dimensional aspects of a concept. In India more than half of the population are not in a position to attend classrooms. It is extremely necessary for students to break the barriers of time and space with respect to education. Students should have the flexibility to learn at their own pace, in any place.

Corporation bodies provide regular training to their employees. But employees get very little time after they are trained to get into the core activity. Conventional training and CBTs have failed to make the employees acquire the required skills in the available time frame. Training gives them information but it fails in giving the required knowledge. Along with information, employees require interactive education in terms of

assignments, case studies and contact programs with experts.

*This paper explains in detail the architecture and implementation of an innovative education methodology that promotes **interactive education anywhere, anytime on any device in any language.***

Introduction

Education in India can be classified into the following categories.

- Schooling
- University/College (conventional)
 - Pre-university and pure science and courses like BSc, BCom.
- Universities-unconventional
 - Professional courses and autonomous institutes.
- Corporations and Companies
 - Some of the target industries include Information Technology, Biotechnology, Production, and Manufacturing.
- Entrepreneurs
 - Both individuals and various entrepreneurs' groups like DIC and MCC

Later we will see how e-learning fits perfectly to each of the above sectors.

Education with i^olearn

Innovations @ Aditya Software Solutions

The new mode of Education is the hi-tech learning facility operated by individual organizations. It requires the following infrastructure to be set up by individual organizations.

Infrastructure

The organizations new Education Center will operate on the latest e-learning technology. The infrastructure of this center will include the following:

- A server (A computer where all the information and software is loaded) that serves the educational programs to students.
- The server is loaded with the e-learning software (i^elearn provided by Aditya Software Solutions India Pvt Ltd.)
- All the participants of the program must have access to a computer or any other device compatible with i^elearn.
- The continuing education program works on internet/intranet.

Functionality

On the top of all activities is an administrator who manages the education program. He/She uses the Learning management system of i^elearn to

- Register students and faculty into the program.
- Decide on the courses.
- Decide which faculty takes a particular course.
- Manage the course requests from students.
- Manage contact programs through chat, discussion forums or personal contact by scheduling a meeting between faculty and students at the continuing education center.
- Manage events by sending announcements.

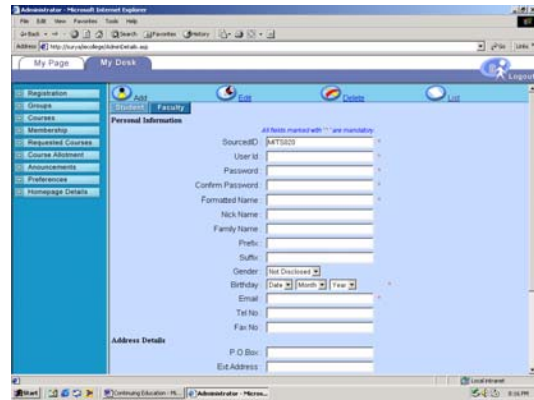


Fig 1: Administrator activity (Copyright © Aditya Software Solutions)

Course Provider

A person appointed by the administrator to develop content for a course. The course content can be put in a CD and delivered to students or the students can take up course from the net on demand. Course provider develops various quizzes, assignments, projects and online tests and puts them on the program website which is accessible by all the students on the Internet. The students take up quizzes, assignments and projects. There will be contact programs where the course provider and students decide when they will meet and discuss assignments and projects. At the end of the course or at some logical point the students can take online tests that are accessible only on a particular date and time. Based on the marks obtained the student can be certified.

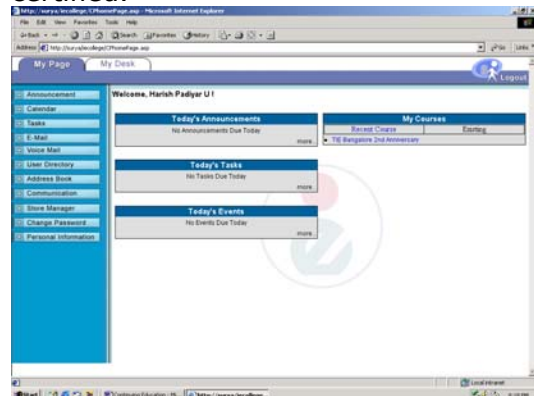


Fig 2: Course Providers Homepage (Copyright © Aditya Software Solutions)

Student

Students of educational organizations / Employees of corporations, who have enrolled for the course in the Education program. On enrolling, the student receives a CD with the course content. On receiving the CD the student can go through the course at his ease like in any text book. The major advantages of a CD are the *video, graphics and animation* that enhance the courses.

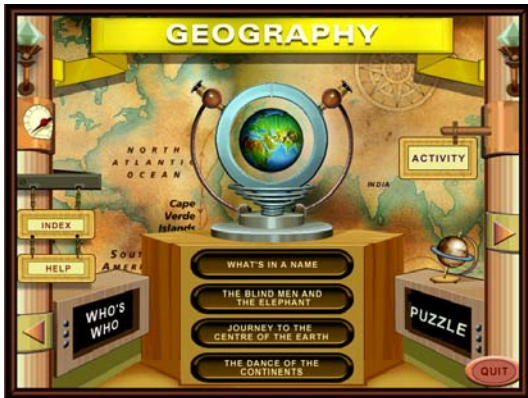


Fig 3: A Geography course on CD with graphics (Copyright © Aditya Software Solutions)

The student can view video based courses that are either put on CD or on video on demand basis from the site of the center.

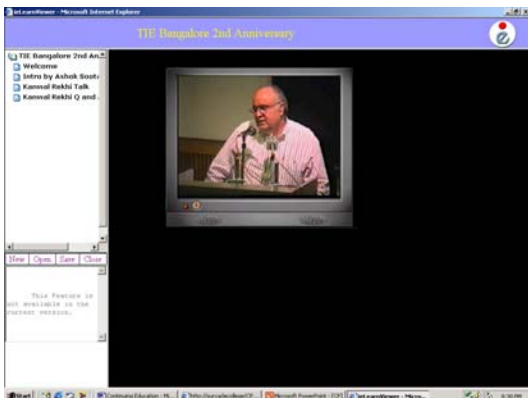


Fig 4: Student viewing a video based course (Copyright © Aditya Software Solutions)

The student logs on to the course site and checks out the activities. Some of the possible activities are listed below.

- View announcements for the day and act correspondingly
- Check out any events and tasks to be done on that day.
- Send out emails to course providers if required.
- Take up online quizzes, assignments or any projects given by the course provider.

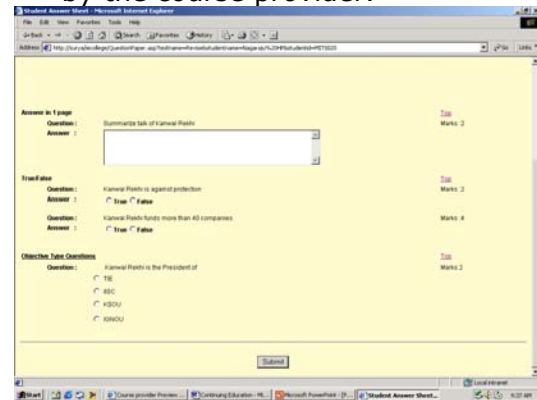


Fig 5: student taking an online test (Copyright © Aditya Software Solutions)

- View the schedule of contact program.
- Answer scheduled online exams.
- Check out his grades in the course.
- Attend scheduled chat sessions.

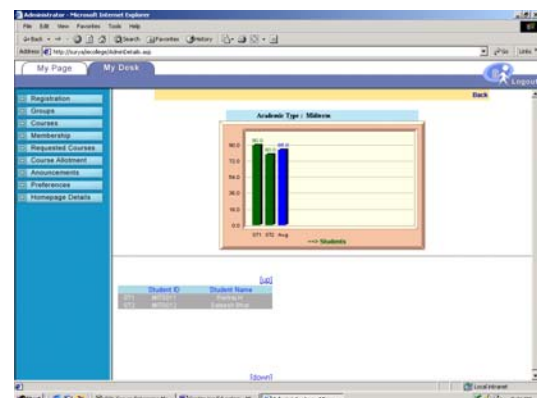


Fig 6: Student checking out the graph of marks for his subjects (Copyright © Aditya Software Solutions)

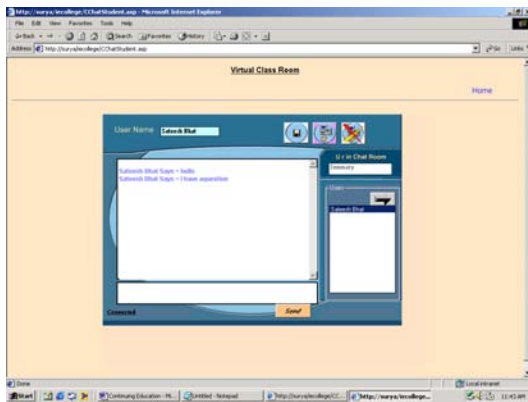


Fig 7: Student chatting with course provider (Copyright © Aditya Software Solutions)



Fig 8: A mentor and a Mentee discussing (Copyright © Aditya Software Solutions)

Individual sectors

Schools

School education is the foundation of any child. If the initial education is sound, the child builds interest in studies. This makes the child at ease when he/she steps into higher studies. The other aspect of schooling is adult education. In India there are millions of adults who would like to take up education if the way it is taught is innovative and interesting. Schooling in India can be classified into two.

- The urban schooling: The child who undergoes schooling in cities has better facilities. In

spite of the good facilities the schools fail to increase the child's interest in a particular subject due to lack of enough expertise by teachers.

- The rural schooling: In rural areas schooling is in a pathetic condition. There are not enough teachers nor good school infrastructure.

For the betterment of the schooling in India we at Aditya software solutions have found out that i^elearn along with i^elearn CDs are the best solution. i^elearn can be used in two ways.

- As a shared platform where there are budget constraints. That is one i^elearn can reside on a computer in mahila sanghs (and similar organizations) and Govt., NGOs and Voluntary organizations can sponsor i^elearn CDs to children and housewives.
- In cities parents have the capability to buy i^elearn CDs for their children/themselves. The i^elearn CDs are not just graphic or video CDs but they activate the child's/adults interest with lot of question and answers along with animations to explain the three dimensional aspects of a concept.

University/College (conventional)

Traditional colleges include pre-university and pure sciences like BSc, BCom. In India most colleges are run by trust or from head of a mutt. There are less budget constraints. Thus all the colleges that come under one trust/mutt can deploy i^elearn and there can be one administrative body managing the educational activities. This removes the lack of good teachers. That is the trust/mutt can select the best teachers from all the



colleges under it and develop courses using authoring tool of i^elearn based on videos, audios, slides and animations. With such an educative model there will be an exponential improvement in understanding of the subjects.

Universities-unconventional

This category includes

- Professional courses like Engineering, Medicine, Dental, Nursing.
- Autonomous institutes providing bank training, health sciences, open universities, management courses.

These educational institutes have students within the campus and also spread across different states in the country. The best way to teach these students is to provide education over the Internet. i^elearn is the best-suited product for such an activity. An administrator manages the students, faculty and the educational programs. All the entities (the administrator, The course provider and students) can be located in different locations and still be part of the educational program. Based on the bandwidth that is available we propose two solutions.

- Live lecture sessions and mentoring sessions when there is enough bandwidth.
- Providing CDs as part of the educational programs when there is not enough bandwidth. The CDs work only when the person using it is an authenticated user. i^elearn that is deployed in a particular organization does this authentication.

In both the cases the quizzes, assignments, exams and contact programs are done over the Internet. Students logon to the net and take up the exams at a particular time. Contact programs are done using the Chat facility provided by i^elearn.

Corporations and Companies

With inflation, competition in all industry sectors is increasing. Human resources and knowledge management have once again taken the top ranking in the "list of importance" in the industry. Today organizations are audited on the basis of quality manpower. To keep up with the international quality standards, imparting knowledge and upgrading and refining their technical and managerial skills has become the very core objective of all departments and organizations. The costs of these activities are competitively high and increasing everyday. All skilled, non-skilled, functional and professional education and re-learning can be done through an e-learning mode that reduces the cost of education drastically and at the same time enhances the quality of content and delivery through multimedia presentations. Above all there are some concepts, which, even with enough teaching cannot be visualized by students. Even textbooks are not successful in giving the three dimensional view of certain concepts. Designing interactive multimedia CDs with three-dimensional views can solve this problem.

Some of the areas where i^elearn can be used include

- Soft skills (effective communication and interpersonal skills)
- Software skills (related to programming and designing)
- Quality related programs (ISO, CMM, Six Sigma).
- Functional skills specific to an industry.
 - Appraisal and recruiting skills
 - Legal and regulatory skills.
 - Market research and survey etc.



eSols worldwide Ltd.

Entrepreneurs

Today we require highly professional and quality entrepreneurs to continue the country's growth in the open market. Competition is global and markets are worldwide. Out of 100 entrepreneurs who can capitalize the idea, only 7% can successfully turn the idea into reality. This is because of the existing systems, procedures and market. To increase this depleting percentage, today the government has incorporated many schemes and incentives for entrepreneurs in different sectors from SMEs to SSIs & cottage industries.

Government bodies like DIC & TEKSOK have continuous "Entrepreneurs Development Programs" which are conducted periodically. There are some premier institutions/organizations like IIM, IIT, IISC & other management education & consulting divisions imparting this type of training programs. However, the quality is questionable with non-premier bodies. STEP with its objectives can fill this requirement with ASSIPL by imparting "Entrepreneurs Development Programs" through an e-learning mode.

Summary

*The potential of e-learning has no bounds. A proper implementation of an e-learning solution can bring about exponential improvement in education as a whole. Aditya Software Solutions is committed to bring about this quality change. We give equal importance to learning management and content management. We assure that Content is given more importance than all other cosmetics that come along with e-learning. We comply to international standards **(IMS)** so that the e-learning content is independent of all proprietary implementations. Thus with this improved education methodology, organizations and*

corporations can hope for better knowledge management that can take them through the competition of the 21st century.

References

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