Technology & Online Distance Mode of Learning

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ABSTRACT: This paper deals with the current state of Distance Education & Suggests the ways in which Online & Distance education courses can be offered / Conducted in a more effective way rather than the conventional methods. This paper deals with – the current state of Distance Education in India; Scope & Market for the online Courses; various Methods of Course Offerings; How I.T. infrastructure can be used to its BEST in order to radicalize the Lesson Delivery; What Kind of Developments can be brought-in in the conduct / offering of Online Courses, etc. issues briefly & suggests various solutions to most of the Common & current problems being faced by many Distance / Online Courses offering Institutes repeatedly & regularly. This paper also suggests – How best the Growing Social Networking Media can be used in order to build a very strong Student (Learner) – Resource Personnel relationship. This paper also suggests – How Chat Rooms can be used as an effective lesson delivery mechanism / Media in online & Distance Mode courses.

Keywords—Distance Education; Online Education; Online Course offering Methods; Scope for Improvement of Online Education; Online Lesson Delivery.

Distance Education

I. INTRODUCTION

Distance Education or Distance Learning is a field of education that focuses on teaching methods and technology with the aim of delivering teaching, often on an individual basis, to students who are not physically present in a traditional educational setting such as a classroom. It has been described as "a process to create and provide access to learning when the source of information and the learners are separated by time and distance, or both."³

Distance education dates to at least as early as 1728, when "an advertisement in the Boston Gazette... [Named] 'Caleb Phillips, Teacher of the new method of Short Hand" was seeking students for lessons to be sent weekly.⁴

Modern distance education initially relied on the development of postal services in the 19th century and has been practised at least since *Isaac Pitman* taught shorthand in Great Britain via correspondence in the 1840s.⁵

The *University of London* claims to be the <u>First University</u> to offer distance learning degrees, establishing its External Programme in 1858. This program is now known as the University of London International Programmes and includes Postgraduate, Undergraduate and Diploma degrees created by colleges such as the London School of Economics, Royal Holloway and Goldsmiths.⁶

⁵Moore, Michael G.; Greg Kearsley (2005)Distance Education: A Systems View(2nd Ed.). Belmont, CA: Wadsworth.

⁶"Key Facts", External Programme, University Of London, http://www.Londoninternational.Ac.Uk/About Us/Facts.Shtml

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³Honeyman, M; Miller, G (December 1993). "Agriculture Distance Education: A Valid Alternative For Higher Education?".Proceedings Of The 20th Annual National Agricultural Education Research Meeting: 67–73.

⁴Holmberg, Börje (2005) (In German). The Evolution, Principles And Practices Of Distance Education

In the United States, William Rainey Harper, First President of the *University of Chicago* developed the concept of extended education, whereby the research university had satellite colleges of education in the wider community, and in 1892 he also encouraged the concept of correspondence school courses to further promote education, an idea that was put into practice by *Columbia University*.⁷

Distance education was initiated in India, in the form of a correspondence course in 1962 by the *Delhi University* as a tertiary level education. Establishment of exclusive institutions called "open universities" for imparting distance education is rather a recent phenomenon.

Andhra Pradesh Government took the first initiative in 1982, to start the Andhra Pradesh Open University (now renamed as Dr. B.R.Ambedkar Open University) at Hyderabad.

In 1985 the Government of India, through an Act of Parliament, established the Indira Gandhi National Open University (IGNOU) for the sole purpose of promoting continuing education all over India. Now there are 14 Open Universities in India - 1 national and 13 state open universities.

The development of computers and the internet have made distance learning distribution easier and faster and have given rise to the '*Virtual University*', the entire educational offerings of which are conducted online.

Online Education

Online Education or Online Learning (Popularly known as – "*E-Learning*") includes all forms of electronically supported learning and teaching, and more recently '*Edtech*'. The information and communication systems, whether networked learning or not, serve as specific media to implement the learning process.⁸The term will still most likely be utilized to reference out-of-classroom and in-classroom educational experiences via technology, even as advances continue in regard to devices and curriculum. Abbreviations like *CBT* (Computer-Based Training), *IBT*(Internet-Based Training) or *WBT* (Web-Based Training) have been used as synonyms to E-learning.

E-learning is the computer and network-enabled transfer of skills and knowledge. E-learning applications and processes include Web-based learning, computer-based learning, virtual education opportunities and digital collaboration. Content is delivered via the Internet, intranet/extranet, audio or video tape, satellite TV, and CD-ROM. It can be self-paced or instructor-led and includes media in the form of text, image, animation, streaming video and audio.

It is commonly thought that new technologies can strongly help in education. In young ages especially, children can use the huge interactivity of new media, and develop their skills, knowledge, perception of the world, under their parents monitoring, of course. Many proponents of e-learning believe that everyone must be equipped with basic knowledge in technology, as well as use it as a medium to reach a particular goal.

In 1996, *Jones International University* was launched and claims to be the *First Fully Online University* accredited by a regional accrediting association in the United States of America (USA).⁹

ADVANTAGES OF DISTANCE / ONLINE EDUCATION (INSTITUTIONAL PERSPECTIVE):

Famous Educationist, **Diana G. Oblinger**, in her article *"The Nature and Purpose of Distance Education"*¹⁰, has identified *FOUR*broad reasons why educational institutions might embrace distance learning:

- **Expanding access:** Distance education can assist in meeting the demand for education and training demand from the general populace and businesses, especially because it offers the possibility of a flexibility to accommodate the many time-constraints imposed by personal responsibilities and commitments.
- Alleviate capacity constraints: Being mostly or entirely conducted off-site, the system reduces the demand on institutional infrastructure such as buildings.
- Making money from emerging markets: she claims an increasing acceptance from the population of the value of lifelong learning, beyond the normal schooling age, and that institutions can benefit financially from this by adopting distance education. She sees sectors of education such as courses for business executives as being "more lucrative than traditional markets".
- **Catalyst for institutional transformation:** the competitive modern marketplace demands rapid change and innovation, for which she believes distance education programs can act as a catalyst.

In addition, the other benefits include --

⁹"Accreditation"Us: Jones International University. Http://Www.International.Edu/About/History/Accreditation ¹⁰Published In The Technology Source (Michigan: Michigan Virtual University) (March/April 2000)

⁷Levinson, David L (2005). Community Colleges: A Reference Handbook. ABC-CLIO.P. 69.

⁸Tavangarian D., Leypold M., Nölting K., Röser M., (2004). Is E-Learning theSolution For Individual Learning? Journal of E-Learning, 2004.

- **Disabilities, Handicaps, or sicknesses:** There are many students that are unable to go to a traditional school setting because they cannot get around easily or a low immune system and get sick from other students. Distance education can help in these cases because the students will not have to leave their home or be around other people. It makes it possible for these students to still learn and to be able to get a good education.
- Equal Opportunity to Education Regardless of Socioeconomic Status: Students have the opportunity to receive equal education regardless of income status, area of residence, gender, race, age, or cost per student.

II. MARKET SIZE OF DISTANCE / ONLINE EDUCATION

In the year 2011, the famous educational Consultant *IDP*, in association with, an independent education research organisation conducted a Global survey to estimate the market size & the market potential of Distance & Online education Worldwide. *USD 3.97 billion (INR 20,000 croresapprox.)* is what is estimated as the market size of INDIA &*USD 196.67 billion (INR 10,00,000Crores approx.)* is the market size worldwide¹¹.

Various govt. reports & the universities official collective figures state that nearly 35% of the market size in India, is only captured by all Govt. universities & open universities together so far which, only clears that a very large portion of the Indian Distance / Online Education Market (*approx. 65%*) remained untapped even today. So is the reason why many private universities are concentrating on the Distance & continuing education programmes and expanding their horizons on pan India basis.

Table 1: TOP 10 universities world Wide by Distance / Online Student Strength			
Rank	University	Country	Student Strength
1	Indira Gandhi National Open University	INDIA	30 lakhs
	(IGNOU), New Delhi		
2	AllamaIqbal Open University	PAKISTHAN	18 lakhs
3	Islamic Azad University	IRAN	13.0 lakhs
4	Anadolu University	TURKEY	8.8 lakhs
5	Bangladesh National University	BANGLADESH	8.0 lakhs
6	Bangladesh Open University	BANGLADESH	6.0 lakhs
7	Ramkhamhaeng University	THAILAND	5.2 lakhs
8	University System of Ohio	USA	4.7 lakhs
9	Dr. B.R. Ambedkar Open University,	INDIA	4.5 lakhs
	Hyderabad		
10	University of Punjab	PAKISTHAN	4.1 lakhs
***	Madurai Kamaraj University, MADURAI	INDIA	1.67 lakhs

Source: IGNOU Online Journal published in its web site in July – 2012.

By 2020, the Market size of Distance & Online education in India is estimated at approx. USD 20 billion (INR 100,000 crores approx.). So, there is no exclamation in saying that those universities who offer maximum value & convenience to the students will remain as the front runners & capture the maximum market share out of this estimated market.

III. METHODS OF DISTANCE / ONLINE EDUCATION

Based on the Learning, the types of available Methods / technologies used in distance / Online education can be broadly divided into **THREE** groups namely –

- 1. Synchronous Learning
- 2. Asynchronous Learning&
- 3. Hybrid / Blended Learning

SYNCHRONOUS LEARNING technology is a mode of delivery where all participants are "present" at the same time. It resembles traditional classroom teaching methods despite the participants being located remotely. It requires a timetable to be organized. Web conferencing, videoconferencing, educational television, Instructional television are examples of synchronous technology, as are direct-broadcast satellite (DBS), internet radio, live streaming, telephone, and web-based VoIP.

¹¹Survey Conducted In 175 Countries Worldwide By Educational Consultant Idp.

ASYNCHRONOUS LEARNING mode of delivery is where participants access course materials on their own schedule and so is more flexible. Students are not required to be together at the same time. Mail correspondence, which is the oldest form of distance education, is an asynchronous delivery technology and others include message board forums, e-mail, video and audio recordings, print materials, voicemail and fax.

HYBRID LEARNING (Also Known popularly as **BLENDED LEARNING**) blend face-to-face interaction such as in-class discussions, active group work, and live lectures with typically web-based educational technologies such as online course cartridges, assignments, discussion boards, and other web-assisted learning tools.

HYBRID (**BLENDED**) **LEARNING** is nothing but a perfect blend of the two methods namely Synchronous & Asynchronous learning which, can be combined in the delivery of one course in a particular ratio so as to increase the liveliness of the programme. For example, some courses offered by The Open University use periodic sessions of residential or day teaching to supplement the remote teaching.



Diagram 1: Hybrid (Blended) Learning Methodology(Diagram Courtesy - Wikipedia)

The degree to which the design of hybrid courses utilize traditional classroom and online learning environments varies, being largely dependent on the subject matter and overall nature of a course. Regardless of design, such courses may be expected to deliver instruction in both an asynchronous and synchronous manner, and are becoming increasingly prevalent in today's society.

Hybrid Courses have been described as "the most prominent instructional delivery solution" since they provide the ever-growing and increasingly diverse academic world with the flexibility of fully online learning along with valuable collaboration achieved through face-to-face student-student and student-instructor interaction.

Institutions of a higher education implement hybrid designs as a cost-effective strategy, utilizing staff and resources as effectively and efficiently as possible while standardizing the learning experience and relieving instructor discomfort generated by the larger traditional classroom environment.

IV. ADVANTAGES OF HYBRID LEARNING

Day by day, more and more universities are increasingly changing their courses to Hybrid Learning from the conventional learning methods. The rationale behind such an increasing shift (could be) is –

1.Hybrid courses appeal to the market of busy working adults who choose to complete their college-level education beyond their late teens and early twenties. Hybrid courses allow these adults to fit occasional class time into their busy schedule while completing the remainder of the course work over the internet.

2.Hybrid courses reduce pressure on university classrooms. The costs to build and maintain a university is high. Hybrid courses provide a solution to crowded classrooms, since much of the course work is completed on a virtual campus.

3.Hybrid Courses bring students together only where & when needed, allowing them to self-study otherwise. For example, a chemistry course may require students to perform experiments in a physical laboratory; but the reading and writing of the course could be completed outside of the classroom.

VARIOUS APPROACHES IN ONLINE (HYBRID) LEARNING:

Though there are too many approaches to Online (Hybrid) learning, based on the software & stream, the following are some of the important approaches in Online learning -

Computer Based Learning (CBL):Computer-based learning, sometimes abbreviated to CBL, refers to the use of computers as a key component of the educational environment. While this can refer to the use of

computers in a classroom, the term more broadly refers to a structured environment in which computers are used for teaching purposes.

Computer / Web Based Training (CBT / WBT):Computer-based trainings (CBTs) are self-paced learning activities accessible via a computer or handheld device. CBTs typically present content in a linear fashion, much like reading an online book or manual. For this reason they are often used to teach static processes, such as using software or completing mathematical equations.

The term Computer-Based Training is often used interchangeably with Web-based training (WBT) with the primary difference being the delivery method. Where CBTs are typically delivered via CD-ROM, WBTs are delivered via the Internet using a web browser. Assessing learning in a CBT usually comes in form of multiple choice questions, or other assessments that can be easily scored by a computer such as drag-and-drop, radio button, simulation or other interactive means. Assessments are easily scored and recorded via online software, providing immediate end-user feedback and completion status. Users are often able to print completion records in the form of certificates.

CBTs provide learning stimulus beyond traditional learning methodology from textbook, manual, or classroom-based instruction. For example, CBTs offer user-friendly solutions for satisfying continuing education requirements. Instead of limiting students to attending courses or reading printed manuals, students are able to acquire knowledge and skills through methods that are much more conducive to individual learning preferences.[citation needed] For example, CBTs offer visual learning benefits through animation or video, not typically offered by any other means.

CBTs can be a good alternative to printed learning materials since rich media, including videos or animations, can easily be embedded to enhance the learning. Another advantage to CBTs is that they can be easily distributed to a wide audience at a relatively low cost once the initial content development is completed.

Computer Supported Collaborative Learning (CSCL): *Computer-supported collaborative learning (CSCL)* is one of the most promising innovations to improve teaching and learning with the help of modern information and communication technology. Most recent developments in CSCL have been called E-Learning 2.0, but the concept of collaborative or group learning whereby instructional methods are designed to encourage or require students to work together on learning tasks has existed much longer. It is widely agreed to distinguish collaborative learning from the traditional 'direct transfer' model in which the instructor is assumed to be the distributor of knowledge and skills, which is often given the neologism E-Learning 1.0, even though this direct transfer method most accurately reflects Computer-Based Learning systems (CBL).

Blogs, Wikis, and Google Docs are commonly used CSCL mediums within the teaching community. The ability to share information in an environment that is becoming easier for the lay person, has caused a major increase of use in the average classroom. One of the main reasons for its usage states that it is "a breeding ground for creative and engaging educational endeavours."

Using Web 2.0 social tools in the classroom allows for students and teachers to work collaboratively, discuss ideas, and promote information. According to Sendall (2008)¹², blogs, wikis, and social networking skills are found to be significantly useful in the classroom. After initial instruction on using the tools, students also reported an increase in knowledge and comfort level for using Web 2.0 tools. The collaborative tools additionally prepare students with technology skills necessary in today's workforce.

Locus of Control remains an important consideration in successful engagement of E-learners. According to the work of Cassandra B. Whyte, the continuing attention to aspects of motivation and success in regard to E-learning should be kept in context and concert with other educational efforts¹³. Information about motivational tendencies can help educators, psychologists, and technologists develop insights to help students perform better academically.

Technology Enhanced Learning (TEL):Technology enhanced learning (TEL) has the goal to provide socio-technical innovations (also improving efficiency and cost effectiveness) for e-learning practices, regarding individuals and organizations, independent of time, place and pace. The field of TEL therefore applies to the support of any learning activity through technology.

ESSENTIALS TO DEVELOP A GOOD ONLINE (HYBRID) LEARNING SYSTEM:

¹²Sendall, P; Ceccucci, W., &Peslak, A. (December 2008). "Web 2.0 Matters: An Analysis Of Implementing Web 2.0 In The Classroom". Information Systems Education Journal 6 (64)

¹³Whyte, Cassandra B. And Lauridsen, Kurt (Editor)(1980). An Integrated Learning Assistance Center.New Directions Sourcebook, Jossey-Bass, Inc..

From the perspective of an institution, In order to develop a Good Online (Hybrid) Learning system, FOUR essential components are required. They are – Hardware, Networking Infrastructure, Software and Record Centre / Data Warehouse.

I. HARDWARE: Desktop computers or Laptops or Tablets or any other device which is capable of accessing the CBTs or WBTs are required to access the learning content. These are also called End user equipment as these systems are directly handled by the students or the Learners themselves with the instructions from the system.

II. NETWORKING INFRASTRUCTURE: To connect all those end user equipment and to make them to communicate with each other, Networking Infrastructure is required. All these end user equipment will be connected using Devices like Switches, Hubs, and Routerswith the help of cable as medium or wirelessly so as to integrate them into the system.

III. SOFTWARE: Though, to integrate and run the learning system properly, a large no. of softwaresare required, the following are the most essential software to run the Hybrid Learning System effectively.

- Admission Management System (AMS): An Admission Management System (AMS) is software used for Processing Student Admissions into a course, Collection of Student Data, Recording, Storage & Retrieval of Student Data which is required at almost every stage until he/she finishes the course.
- **Financial Management System (FMS):** AFinancial Management System (FMS) is software used for collection of fee from students, maintenance of other financial transactions between all possible parties with the system.
- Learning Management System (LMS): ALearning Management System (LMS) is software used for delivering, tracking and managing training/education. LMSs range from systems for managing training/educational records to software for distributing courses over the Internet and offering features for online collaboration.

A LMS allows for teachers and administrators to track attendance, time on task, and student progress. LMS also allows for not only teachers and administrators to track these variables but parents and students as well. Parents can log on to the LMS to track grades. Students log on to the LMS to submit homework and to access the course syllabus and lessons.

- <u>Learning Content Management System (LCMS)</u>: A learning content management system (LCMS) is software for author content (courses, reusable content objects). An LCMS may be solely dedicated to producing and publishing content that is hosted on an LMS, or it can host the content itself.
- <u>Computer Aided Assessment (CAA):</u> Computer Aided Assessment (commonly referred to as Eassessment), ranging from automated multiple-choice tests to more sophisticated systems is becoming increasingly common. With some systems, feedback can be geared towards a student's specific mistakes or the computer can navigate the student through a series of questions adapting to what the student appears to have learned or not learned. The best examples follow a *Formative Assessment* structure and are called "Online Formative Assessment". This involves making an initial formative assessment by sifting out the incorrect answers. The author/teacher will then explain what the pupil should have done with each question. It will then give the pupil at least one practice at each slight variation of sifted out questions. This is the formative learning stage. The next stage is to make a *Summative Assessment* by a new set of questions only covering the topics previously taught.
- <u>Electronic Performance Support Systems (EPSS)</u>:Electronic performance support system (EPSS) is a "computer-based system that improves worker productivity by providing on-the-job access to integrated information, advice, and learning experiences"¹⁴.
- <u>OTHERS:</u> Besides the above software, essential basic software Like Operating Systems, Network Operating Systems, Server Maintenance Software, Simple Network Management Protocol (SNMP) softwares, Content creation Softwares life Acrobat / PDF converter, Flash, etc. are also required to create content, operate systems & the network.
- <u>Integrated Course Management System (ICMS)</u>: *AIntegrated Course Management System (ICMS)* is software which, is very similar to that of the *University Management System* and is used for the total transaction between all possible parties of the system. The above said softwares like AMS, FMS, LMS, LCMS, CAA, and EPSS are all the sub-systems of this main system. In other words, the complete system, the combination of all the above sub-systems with proper hardware, networked in a proper way, attached / connected with an efficient Record Centre or DATA Warehouse is called Integrated Course Management System.

¹⁴Barry Raybould, 1991

IV. RECORD CENTRE / DATA WAREHOUSE¹⁵: Record Centre or DATA Warehouse is a system or a Combination of systems, with the combination of Hardware & Software which, is used to Record, Store, Retrieve & Transact with the DATA that is required to run the systems like LMS, LCMS etc. in order to facilitate the Online Hybrid Learning.

Record Centre or DATA Warehouse is like the Heart of this entire system. However good other infrastructure one may have but, without a proper Record Centre or DATA Warehouse, absolutely nothing can be achieved out of the system and the whole other infrastructure goes idle & waste without a proper Record Centre or Data Warehouse.

LIFE CYCLE OF ONLINE DISTANCE LEARNING – MANAGING IT WITH INTEGRATED COURSE MANAGEMENT SYSTEM (ICMS):

From the perspective of Institutions offering online Distance learning programmes, the whole Life Cycle of Online Distance Learning can be shortened into FOUR important phases namely –

- 1. Admission
- 2. Lesson Delivery
- 3. Exam Conduct & Evaluation
- 4. Award of Certificates& Other Documents

By the installation of *Integrated Course Management System (ICMS)*, all functions of the Hybrid Learning System can be integrated into a single environment and can be brought on to a Single Delivery platform so as to operate the whole learning system effectively & efficiently.

1. Admission: The processes in Admission phase include Registration Of Student, Provisional Admission, Certificate Verification, Fee Collection and Confirming the admission can all be managed through the Admission Management System (AMS) of which, the financial part is being taken care by the Financial Management System (FMS) which, are the integral sub-systems of the ICMS.

2. Lesson Delivery: The processes in Lesson Delivery phase include Academic Calendar Planning, Lesson Creation, Other Content Creation, Preparation of Timetables, Scheduling of classes, organizing seminars & workshops and organizing other learning related activities can all be managed through the Learning Management System (LMS) & Learning Content Management System (LCMS) which are the integral subsystems of the ICMS.

3. Exam Conduct & Evaluation: The processes in this phase include Preparation of Assignments, Delivery of Assignments, Collection of Assignments, Evaluation of Assignments, Conduct of cycle tests and the Conduct of all other exams can be managed with the Computer Aided Assessment system (CAA) which is an integral sub-system of the ICMS.

4. Award of Certificates & Other Documents: The processes in this phase include preparation of report cards, preparation of Marks / Grade Sheets, preparation of Other Certificates and Preparation of other Authentic materials can all be managed through the Electronic Performance Support Systems (EPSS) which is an integral sub-system of the ICMS.

Modern Tools for Online Distance Learning:

- **BLOGS:** Resource personnel can write Blogs which are a free form of expression and less laborious to handle. Blogs serve as the same purpose of Black Board / Notice Board in conventional system but online. *E-Blogger, WordPress* are some of the famous blogging sites.
- **MICRO BLOGS:** Micro Blogging is a recent trend in online education. Authors / Resource Personnel will write short blogs (usually less than 400 characters) here and then on their online wall where the subscribed people can come and read those blogs and even can make comments on them. Sites like *TWITTER* are increasingly getting famous for its ease of updating & subscription.
- **SOCIAL NETWORKING:** With the evolution of High-Speed Data networks & Broad Band Internet on the Indian soil, Social Networking is increasingly getting popular even in rural areas of India. It is believed that almost 60% of the younger generation have their presence in one or many social networking sites. *Facebook*(Popularly known as *FB*) is increasingly becoming a phenomenon with youths. Authors & Resource personnel can use this same medium to communicate, get feedback & even to do one-to-one counselling in cases where it is required.

¹⁵This Topic Is Dealt Extensively In the Paper "*The Need for World Class Documentation, Data and Record Centre In Universities*" By *Venkata Subrahmanyam C. V.&Dr. K. Ravichandran*, published in *IOSR Journal Of Humanities And Social Science (IOSR-JHSS)*e-ISSN: 2279-0837, p-ISSN: 2279-0845. Volume 7, Issue 1 (Jan. - Feb. 2013), PP 49-54

- **CHAT:** With the emergence of Web 2.0, Chat is getting increasingly popular in learning domain too. Different kinds of Chat methods are available like Text Chat (where in 1 or many users communicate through text typing on a common shared wall with each other), Voice Chat (Where in 1 or many users communicate through voice with each other) and Video Chat (where in 1 or many users communicate seeing each other face to face). The same medium can be used effectively to interact with the learners and to give them needed assistance / Guidance.
- **VIDEO CONFERENCING:** With the evolution of Broad Band & 3G networks, Video Conferencing is now a reality in India. This facility can be used to its best in order to deliver lessons, to interact with students etc. The basic advantage of this tool is that same resource personnel can teach in multiple locations at the same time. Due to its high nature of saving money, time, travel etc., this is increasingly becoming popular in learning medium.
- **WEBINARS:** Webinars are nothing but seminars conducted online using all possible multimedia technologies. This is like a Two-way video conferencing only but users are formed as groups restricted with certain activities assigned to each group using something like passwords etc. This concept is increasingly getting popular in education sector very rapidly.
- **ONLINE MAILERS:**This is one of the age old concepts but increasingly becoming popular after the evolvement of Web 2.0 tools. In this a resource personnel can send daily / timely mailers as and when it is required. It is getting popular because of its low-cost/High-yield nature.
- **ONLINE PRESENTATIONS:** Though this is one of the famous & age old concept, it's getting increasingly popular day by day with the Telecomm revolution worldwide. A resource personnel will make an online Presentation or store the presentation in some web location where in the users can watch it according to their own pace. With the evolution of Telecomm & 3g networks in India, people can watch these presentations even on their mobile device like Mobile phones or Tablets etc.
- VIDEO LESSONS THROUGH YOUTUBE & LIKES: This is relatively a new phenomenon as far as India is concerned which is slowly picking up momentum from the past 1 or 2 years. In this method the resource personnel will record his/her lesson and upload it into any online video streaming sites like *Youtube* etc. where in the users can watch them where and when required at their own pace. This concept is increasingly getting popular for the ease & liveliness amongst youths so many institutions are offering these services on experimental basis.

V. SUGGESTIONS

- Universities / Institutions need to spend on I.T. infrastructure in order to get best results and also to keep them inside the competition.
- Universities / Institutions must integrate all their services & offerings and should bring all activities under one platform which gives the maximum convenience to all interested parties with-in & out-side the system.
- Universities / Institutions offering Online Distance Learning courses are advised to embrace the Hybrid Learning system over the conventional asynchronous systems.
- Investing on technology is like investing on our own future. So it is suggested to integrate operations under one platform using all possible technologies speedily and cost effectively.
- Resource personnel can consider Non-Conventional teaching tools like Blogging, Micro Blogging etc. in order to serve to their community in a larger level and with ease.
- Social networking will create better Learner Resource personnel interactions and there by improves the learning capabilities of the learners. So it is suggested to use social networking as an active medium of instruction and communication with the community.

VI. CONCLUSION

Universities or Institutions offering Online Distance Learning can give up the conventional methods and can take up the Hybrid Learning as a tool in their course offerings in order to get the best results. Though, on outset, implementation of Hybrid Learning appears costly, costs can easily be recovered and can easily reach break evens in a short time.

REFERENCES

- Honeyman, M; Miller, G (December 1993). "Agriculture distance education: A valid alternative for higher education?". Proceedings of the 20th Annual National Agricultural Education Research Meeting: 67–73.
- [2]. Tabor, Sharon W (Spring 2007). "Narrowing the Distance: Implementing a Hybrid Learning Model". Quarterly Review of Distance Education (IAP) 8 (1): 48–49. ISSN 1528-3518. Retrieved 23 January 2011.
- [3]. Vaughan, Dr Norman D. (2010). "Blended Learning". In Cleveland-Innes, MF; Garrison, DR. An Introduction to Distance Education: Understanding Teaching and Learning in a New Era. Taylor & Francis. p. 165. ISBN 0-415-99598-1. Retrieved 23 January 2011.

- [4]. Holmberg, Börje (2005) (in German). The evolution, principles and practices of distance education. Studien und Berichte der ArbeitsstelleFernstudienforschung der Carl von Ossietzky Universität Oldenburg [ASF]. 11. Bibliotheks-und Informationssystem der Universitat Oldenburg. p. 13. ISBN 3-8142-0933-8. Retrieved 23 January 2011.
- Moore, Michael G.; Greg Kearsley (2005). Distance Education: A Systems View (2nd ed.). Belmont, CA: Wadsworth. ISBN 0-[5]. 534-50688-7.
- "Key Facts", External Programme, University of London. [6].
- Levinson, David L (2005). Community colleges: a reference handbook. ABC-CLIO. p. 69. ISBN 1-57607-766-7. Retrieved 23 [7]. January 2011.
- White, M (1982). "Distance education in Australian higher education a history". Distance Education 3 (2): 255-278. [8].
- [9]. Moore, Michael G; Greg Kearsley (2005). Distance Education: A Systems View (2nd ed.). Belmont, CA: Wadsworth. pp. 33-36. ISBN 0-534-50688-7
- [10]. Byrne, T. C. (1989). Athabasca University The Evolution of Distance Education. Calgary, Alberta: University of Calgary Press. p. 135. ISBN 0-919813-51-8. "Three Decades". UK: FernUniversität in Hage. Retrieved 23 January 2011.
- [11].
- Daniel, Sir John S (1998). Mega-Universities and Knowledge Media: Technology Strategies for Higher Education. Routledge. [12]. ISBN 0-7494-2634-9. Retrieved 23 January 2011.
- [13]. Gold, Larry; Maitland, Christine (1999). Phipps, Ronald A.; Merisotis, Jamie P..eds. What's the difference? A review of contemporary research on the effectiveness of distance learning in higher education. Washington, DC: Institute for Higher Education Policy. Retrieved 23 January 2011.
- [14]. "Accreditation". US: Jones International University. Retrieved 23 January 2011.
- Allen, I Elaine; Seaman, Jeff (November 2006) (PDF). Making the Grade: Online Education in the United States, 2006. [15]. Needham, MA: The Sloan Consortium. pp. 1-2. ISBN 0-9876543-2-1. Retrieved 23 January 2011.
- [16]. Walton Radford, MPR Associates, Alexandria. "Learning at a Distance: Undergraduate Enrollment in Distance Education Courses and Degree Programs" (PDF). National Center for Education Statistics. Retrieved 30 November 2011.
- [17] "Degree awarding powers and university title". UK: Quality Assurance Agency. Retrieved 23 January 2011.
- [18]. Accreditation, DETC.
- [19]. Lever-Duffy, Judy; McDonald, Jean B (March 2007). Teaching and Learning with Technology. Ana A. Ciereszko, Al P. Mizell (3rd ed.). Allyn& Bacon. p. 377. ISBN 0-205-51191-0. Retrieved 23 January 2011.
- [20]. Dickey, Michele, D (2005). "Three-dimensional virtual worlds and distance learning" (PDF). British Journal of Educational Technology 36 (3): 439-51. Retrieved 20 April 2011.
- [21]. Oblinger, Diana G. (2000). "The Nature and Purpose of Distance Education". The Technology Source (Michigan: Michigan Virtual University) (March/April). Retrieved 23 January 2011.
- [22]. "Cyber-charter Schools: The end of Public Education or a New Beginning".
- Casey, Anne Marie; Lorenzen, Michael (2010). "Untapped Potential: Seeking Library Donors Among Alumni of Distance [23]. Learning Programs". Journal of Library Administration (Routledge) 50 (5): 515-529. doi:10.1080/01930826.2010.48859. Retrieved 23 January 2011.
- [24]. Östlund, Berit. "Stress, disruption and community - Adult learners' experiences of obstacles and opportunities in distance education". Department of Child and Youth Education, Special Education and Counselling, Umea University. Retrieved 3 December 2011.
- [25]. Galusha, Jill M.. "Barriers to Learning in Distance Education". Retrieved 2012-04-10.
- Stephens, D. (July 2007). "Quality issues in distance learning' [26].
- [27]. http://en.wikipedia.org/wiki/Distance_education
- http://en.wikipedia.org/wiki/E-learning [28].
- [29]. http://en.wikipedia.org/wiki/Hybrid_course
- [30]. http://en.wikipedia.org/wiki/Blended_learning
- http://en.wikipedia.org/wiki/Continuing_education [31].