

## **ICT Based Distance e-Learning tools for offering Library Services and Distance Education**

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### **ABSTRACT**

*The communication technology has been made several beneficial advantages in this information and communication era and in present scenario it has become necessary to use the technology in the library information science sector. Because of this technological impact, the LIS sector makes more advancement in LIS services like distance learning (e-learning, web based learning, online learning and virtual learning,), reference services (user orientation and user education), e-content delivery system remote log-in support to his/her users and full fill the goals of the entire library system. The needs of both library administrator and patrons are also changing. Information professionals need comprehensive and more powerful tools to information dissemination and they had always been striving hard to meet the expectations of its users but the initiation of communication of technology meets all the expectations of professionals. For the students or library users, the requirement has been to remove the time barrier and geographical space concept and encourage them for self-study.*

*The information sectors or systems, on the other hand, to provide the maximum level of users satisfaction with the minimum level of investment through the use of distance learning tools in library service like Reference service and other. The author trying to describe some important ICT tools which supported the distance learning service, finally, it focuses the use of similar technologies in the library that offers distance learning. Library information professionals need to be aware prior to using ICT tools like desktop conferencing tools, Distance Learning LMS and apps and their instruction so that library managers can meet all the expectations of the user community.*

**Keywords:** Desktop conferencing tools, reference service, MOOC, Moodle

## **1. Introduction:**

The library and information professionals describe or define the libraries in a different context some define as a collection of the universe of knowledge, the centre of knowledge, ocean of the information. Because the libraries are repositories of information and knowledge. Information is indispensable for any human activity aiming at social and economical development. The scholar, the faculty members of any research and academic institutions, the student, the administrator, the industrial and business manager, the artisan, the entrepreneur, the farmer, the worker in the factory and the field, all need information to equip, themselves better for the fruitful pursuit of their respective vocations. The library is a hub for all relevant information to the information seekers.

The development of information and communication technology (ICT) have brought psychological, sociological as well as technological changes in the field of education through distance mode also called distance learning. The present boon of ICT has its extraordinary impact on distance learning. This impact of ICT is noticeable in formal and informal education, traditional and professional training as well as at all levels of education. The paper tries to describe recent technological trends in distance learning and also describe ICT based distance learning tools which support the distance learning or referencing. The article works to listed advantages of each tool.

**2. ICT tools and distance learning:** The following is the example of ICT based tools/ applications which may be implemented to provide a distance reference service or assist distance learning programme.

### **1.1 2.1 Desktop conference/ Web Conferencing Tools:-**

#### **2.1.1 ZOHO Meeting:**

ZOHO Meeting instantly shares your screen at any time. Multiple platform/browser support with no download or installation process means anyone can join your meeting. Options like desktop plug-in, embed meeting widget, and multi-platform support let you conduct a web meeting from anywhere, desktop, website or any browser.

- Meet Now - Click & Share Instantly
- 100% Browser based
- Multiple Platform & Browsers Supported
- Desktop Plug-in
- Embed Meeting in Website

Avilable on: <https://www.zoho.com/meeting/features.html>

#### **2.1.2 ClickMeeting:**

ClickMeeting support run custom webinars to educate, engage, and convert your audience with ClickMeeting. Pricing model and tree trial also available for this tool.

Avilable on: <https://clickmeeting.com/>

### **2.1.3 Join Me:**

Join Me supports conference calls, Multiple channel access (VoIP, phone line etc.), Live text chat tool, share screens and screen control, share mouse control, multiple screen sharing, pass presenter role, Annotate meetings.

Available on: <https://www.join.me/>

**2.1.4 Adobe Connect:** Adobe Connect is another web conferencing tool that excels when it comes to personalization. Adobe Connect also provides for both mobile and computer access to the virtual events, as well as a customized URL, storage, and recording. You can even edit your recordings directly in the tool. Adobe Connect web conferencing software service offers immersive online meeting experiences for collaboration, virtual classrooms and large scale webinars.

Available on:

[http://www.adobe.com/products/adobeconnect.html?utm\\_campaign=elearningindustry.com&utm\\_source=%2Ftop-10-web-conferencing-software-tools-elearning-professionals&utm\\_medium=link](http://www.adobe.com/products/adobeconnect.html?utm_campaign=elearningindustry.com&utm_source=%2Ftop-10-web-conferencing-software-tools-elearning-professionals&utm_medium=link)

**2.1.5 Cisco WebEx:** Cisco WebEx used for small online meetings with video conferencing and screen sharing. Users can add specialized functionality for webinars, training, or remote technical support. You may need global online meetings with integrated audio that can be joined via telepresence and multiple video systems. Or you might want personal video meeting rooms. Cisco WebEx is all that. WebEx can be used on most devices and platforms. Mobility, ease of use, and compatibility are top priorities for Cisco WebEx product developers.

Available on: <https://www.webex.com>

**2.1.6 eVoice:** eVoice is a great tool for eLearning professionals who need VoIP in combination with video conferencing. It features toll-free dial-in numbers to boost your professional image, screen sharing which supports up to 2,000 users, and a free trial so that you can try out all of its features. The only downside is that they don't offer whiteboard integration.

Available on: <https://www.evoice.com>

**2.1.7 Skype:** Skype is an instant messaging app that provides online text message and video chat services. Users may transmit both text and video messages and may exchange digital documents such as images, text, and video. Skype allows video conference calls.

Available on: <https://www.skype.com>

**2.1.8 Huddle:** Huddle is a cloud platform that lets you collaborate, share files, and manage projects. It offers a huge list of features, plus quite a few unique features that you won't find on other similar services. For instance, their versioning feature allows for collaboration on the same documents, yet it keep tracks of different version of that document so that you can revert back if needed. Documents can be accessed from anywhere including mobile devices

**Pricing:** Huddle comes with a 14-day free trial, after which you'll have to contact them for a quote based on your needs.

Available on: <https://www.huddle.com/>

**2.1.9 TeamViewer:** TeamViewer is easily the best free remote access software I've ever used. There are tons of features, which is always great, but it's also extremely easy to install. No changes to router or firewall configurations are needed. With support for video, voice calls, and text chat, TeamViewer also allows file transfers, supports wake-on-LAN (WOL), and can even remotely reboot a PC into Safe Mode and then reconnect automatically.

Available on: <https://www.teamviewer.com/en/download/windows/>

**2.1.10 RemotePC:** RemotePC allows you to access and manage your far away computers anytime, from any device - given that the computer has an active Internet connection and the RemotePC application is installed on it. You can log in to your office or home computer, manage your files and work on your computer - as though you were sitting right in front of it. You can also invite an associate to access your computer to work on a presentation or help troubleshoot.

Available on: <https://www.remotepc.com>

**2.1.11 Twiddla:** Twiddla is popular web based meeting place for study groups, since it allows you to markup websites, graphics, images, and more via a whiteboard. Not only can you collaborate with others, but you can also browse the web together and hold conference calls. The free account only offers meetings, document and image sharing, screen captures, and voice chat. There are no downloads, plugins, or sign-up required.

**Pricing:** While Twiddla does offer a very limited free account, there are three other plans: Professional (\$14/month), Enterprise (\$49/month), and Universal (\$189/month).

Available on: <http://www.twiddla.com/>

**2.2 Distance Learning Management System:** Distance Education is a part of informal education system; basically it is learning / teaching methodology. The technological advancement also influenced the formal and informal education system through its various technical tools like: Learning Management Systems LMS provides the virtual platform for the e-learning by enabling the virtual classroom management, monitoring student, delivery of lectures and study material, tracking of learning, testing, communication, registration process and scheduling. Some common features of LMSs are:

- The guidance of students in the direction of education,
- The delivery of study material and related information to students in various forms, such as word, word, power-point, flash, video, audio
- The ability of students to do interactive applications,
- Assessment of students via homework's and examinations,
- Delivery of the results to students,
- Communication between student-student vs student-teacher (e.g. discussion, web conferencing, meetings, webinar boards, chat, e-mail etc.)
- Interaction between student-lesson content, registration process (Cavus & Momani, 2009), scheduling,
- Class management (Woods, Baker & Hopper, 2004),
- Keeping records for students, teachers, and system (i.e. logs),
- Entering the examinations and keeping record of the results,
- Collecting the homework's
- Grade keeping
- Reporting
- Student tracking
- Tracing student attendance records,

- Students seeing their own education times,
- Distributing e-learning contents on-line, and sharing knowledge and ideas.

Moodle is the one of the most efficient and most popular LMS amongst the open source free LMS systems. Modular Object Oriented Dynamic Learning Environment (Moodle), is one of the open source LMS systems that can compete with the commercially available LMS systems.

Avilable on: <https://moodle.org/>

### **3.2 Web 2.0 Application in distance learning**

In informal education system which adopt several e-learning methods and different learning forms such as e-learning, web-based learning, online learning and virtual learning for providing interaction to students. These learning enhancements provide number of advantages to the learners. Web 2.0 technologies in teaching and learning. The rapid penetration and use of these technology platforms is also being driven by the rise of affordable handsets (Mutula, 2013). Web 2.0 has the potential to create more interactive and powerful learning environments in which learners become knowledge creators, producers, editors, and evaluators (Richardson, 2009). Following is example of Web 2.0 technology in distance learning programme.

**2.3.1 Blog:** Blogs are also called online diaries which enable users, without requirement of any technical skill, to create, publish and organize their own web pages that contain dated content, entries, comments, discussion etc. An edublog An edublog is a blog created for educational purposes. Edublogs archive and support student and teacher learning by facilitating reflection, questioning by self and others, collaboration.

**2.3.2 Wiki:** According to Leuf and Cunningham, creators of the original wiki concept, “a wiki is a freely expandable collection of interlinked Web pages, a hypertext system for storing and modifying information- a database where each page is easily edited by any user with a form-capable Web browser client” (Schwartz et al., 2004). Users can visit wiki, read and add content to wiki or update and organize content (text, image, video, link) or structure of wiki (Augar et al., 2004).

**2.3.3 Podcast:** The term of podcast is constituted of words of iPod (portable digital audio player form apple) and broadcasting and they are basically digital audio programs that can be subscribed to and downloaded by users via RSS and listened to on either a variety of digital audio services or desktop computer (Petter et al., 2005). With on demand nature and portability features, podcast allows users to catch up on audio content while completing other tasks without having to sit at a computer. They also have some limitations as being linear and one way, which is why they need to be integrated with blogs, online simulations and other more interactive channels (Kaplan-Leiserson, 2005).

**2.3.4 Social Networking:** Social networking is built on the idea of how people know should know and interact with each other. It gives people the power to share, making the world more open and connected.

There are some benefits from using the social networking as educational tool.

- Flexibility to learn, share and publicity,
- repeatable and
- convenience and accessibility

All these functions have a vital influence in the use of social networking in education.

## **2.4 Web based assistance programme**

Many of the web based assistance programme available for e-learnig programme like: NPTEL is an acronym for National Programme on Technology Enhanced Learning. Users can download contents for 100 courses as web based supplements and 100 complete video courses and learn effectively.

MOOCs (Massive Open Online Courses) provide affordable and flexible way to learn new skills, pursue lifelong interests and deliver quality educational experiences at scale. Whether you're interested in learning for yourself, advancing your career or leveraging online courses to educate your workforce

## **3. Conclusion:**

Recent information Communication technology makes lots of efforts to make the learning easier in the way. ICT provides most powerful tools and techniques to share and impart the knowledge. Flexible learning expands choice on what, when, where and how people learn. It supports different styles of learning, including e-learning. Above examples of communication tools makes the stronger understanding and increase retention on the subject , due to using many elements which exist under e-learning, e.g. multimedia, quizzes, interaction ... etc and the ability too retry training and over in order to understand.

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