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Paper: O

ICT for Continuing Professional Education for LIS Professionals

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Abstract

The paper outlines the opportunities that DLE has put forward for teaching and learning. Focusing on a particular aspect of professional development i.e., Continuing Professional Education (CPE) in the light of Information and communication technology (ICT), the paper discusses about the changed scenario. It also presents an Open Access Continuing Education Virtual Classroom, developed to provide a continuing professional education platform to LIS professionals in India.

1. Introduction

"Globalisation, new technologies and demographic developments constitute an enormous challenge; one of the answers to this problem is the access to lifelong learning."

--**Ján Figel** (Commissioner for Education, Training, Culture and Multilingualism, UK)

With the fast changing technologies in the present information age, every profession has to keep pace with the changing scenario in order to maintain its utility to the society. Apart from the exponential growth of knowledge in all domains, some changed trends in learning have been also marked, like (1):

- *Many learners will move into a variety of different, possibly unrelated fields over the course of their lifetime.*
- *Informal learning is a significant aspect of our learning experience. Formal education no longer comprises the majority of our learning. Learning now occurs in a variety of ways – through communities of practice, personal networks, and through completion of work related tasks.*
- *Learning is a continual process, lasting for a lifetime. Learning and work related activities are no longer separate. In many situations, they are the same.*
- *Technology is altering (rewiring) our brains. The tools we use define and shape our thinking.*
- *The organization and the individual are both learning organisms. Increased attention to knowledge management highlights the need for a theory that attempts to explain the link between individual and organizational learning.*

These changing trends are clearly indicating towards continuous or life-long learning. Continuous learning is critical to renewing the expertise and skills needed to assist patrons in this information age. Library workers must continually expand their knowledge in order to keep up with the rate of change (2). Information and Communication Technology (ICT) has revolutionized learning and facilitated a new learning environment i.e. Digital Learning Environment (DLE) for learners of various stages. Continuing/life-long learning is the major facet that has been dramatically facilitated by digital learning environment.

In the old-world learning environment, professional bodies use to conduct continuing professional education programmes in the form of lectures, conferences and refresher courses. But, earlier models and environments of imparting education and training are not efficient enough to meet new learning challenges. We need much faster and collaborative platform for such education programmes to disseminate the new knowledge faster to the professionals. Online continuing education programme can be better option in this regard. Digital learning environment has many advantages, including ease of accessibility and flexibility, enhanced communication and collaboration and facilitating anytime, anywhere type of learning. Online

continuing professional education is much of like a self-directed professional education (3). This paper is focusing on digital learning environment for continuing professional education for Library and Information Science professionals.

2. Continuing Professional Education

In the ALA Second Congress on Professional Education (November 2000) (4), the Steering Committee, has described continuing professional education as one of the major activity for continuing professional development. The phrase "continuing professional education" can be sub-divided into its components, in order to better understand its origins (5):

- *Continuing...*To go on with a particular action or in a particular condition; persist; to exist over a prolonged period;
- *Professional...*Of, relating to, engaged in, or suitable for a profession; engaged in a specific activity as a source of livelihood; performed by persons receiving pay; having great skill or experience in a particular field or activity
- *Education...*the knowledge or skill obtained or developed by a learning process
- *Continuing education...*An educational program that brings participants up to date in a particular area of knowledge or skills

Online continuing education programmes can be of two types: self-paced courses and instructor assisted courses.

3. Major CPE Initiatives in Digital Learning Environment

Across the world, various library associations, individual libraries and some private initiatives are going on for the continuing professional education of LIS professionals. Few such initiatives are as follows:

3.1 Library Association Initiatives

- **ALA Online Continuing Education (American Library Association):** American Association of School Librarians (AASL), a division of American Library Association provides periodic online continuing education programmes for school library media professionals (6).
- **ALA Online Continuing Education Clearing House:** It is a database of continuing education opportunities offered by ALA and its units. It includes face-to-face workshops and conferences, online learning, and workshops that can be licensed by local institutions (7).
- **Library Education at Desktop (LEAD) Online Courses:** The Library Development Division of the Texas State Library has launched *Library Education at Desktop*

(LEAD) program, a pilot program in partnership with the University of North Texas School of Library and Information Sciences. LEAD courses are self-paced Web-delivered courses written for the continuing education of library staff by subject matter experts hired by the University of North Texas School of Library and Information Sciences. These courses typically take one to two hours to complete and are delivered in the WebCT online course environment (8).

- **Special Library Association: Virtual Learning Series:** It presents web-based seminars for SLA members in which live interactive web-based presentations and work sessions are made available for the library professionals using video and audio conferencing means. For those who are unable to join the live presentation, a "REPLAY" is made available within two to three business days whereby the participant is able to hear and see the presentation - just like attending it live (9).
- **The Institute for Continuous Education (ICE):** It is a unique collaboration of the Kansas State Library, the Kansas Library Association, the Kansas Library Trustee Association, and the School of Library and Information Management, Emporia State University. ICE acts as a gateway to all continuing education programmes on LIS themes available on the Web (10).
- **NELINET e-Learning: Web-based Training:** NELINET is a member-owned, member-governed cooperative of more than 600 academic, public, and special libraries in the six New England states. It has developed its new Web-based training program to meet the evolving training needs of the New England library community. All of NELINET's e-learning courses are available to its members as online "Customized Training" course. New topics are being added throughout the year to its online course list (11).
- **Continuing Education Online Training Courses, Nebraska Library Commission:** Library Development staff of the Nebraska Library Commission plans various online training courses addressing topics and issues that library staff encounter in the day-to-day operation of their respective libraries. The topics range from collection development and library management to Internet technology (12).

3.2 Private Initiatives

- **SirsiDynix Institute Web Seminar Archive:** The SirsiDynix Institute is an ongoing forum for professional development in the library community. It archives and provides free access to industry-leading speakers and events, and supports librarianship and helps in the advancement of the work of librarians around the world. The PowerPoint presentation of the event/lecture can be viewed along with its audio recording (13).

- **Web Junction:** An online community where library staff meet to share ideas, solve problems, take online courses etc. Registration to the website is free for all. There is wide variety of online courses available on the site including computer technology, for e.g., operating system, Internet, Web searching & browsing, etc (14).

4. DRTC Virtual Classroom for Continuing Education: a working model

DRTC Virtual Classroom for Continuing Education can be seen as the revival of DRTC refresher course in a new form. Since the inception of DRTC, from time to time such refresher courses were organized to introduce the newer developments in LIS profession to the LIS community in India. In digital learning environment, such events can be replicated, to some extent, in the form of such continuing education portals. Making a better use of the ICT, this Classroom is an effort to share our professional knowledge and experience with the whole community.

This Virtual Classroom is another move towards Open Access (OA) Movement, providing open learning space for LIS professionals. The first initiative towards OA was the establishment of Librarians' Digital Library, an open access digital repository using Open Source Software (OSS) called DSpace digital library software. DRTC-VCCE is been built using Manhattan Virtual Classroom Software, an OSS for setting up a digital learning environment for distance learners.

The Classroom is open for all LIS professionals to take up courses on the available themes. A guest user account has been created which allows professionals to enter into the Classroom without getting enrolled to any course.

To avoid anonymous discussion in the Classroom, the provision of users' enrollment has been made mandatory for each course. The enrollment process involves only Administrator's permission corresponding to the user's request for particular course(s). Enrolled users can communicate with other users and the course instructors of the selected course.

4.1 Scope of CPE Virtual Classroom

The Virtual Classroom contains brief articles, Internet resources, presentation, lab manuals (for OSS software), self assessment tests and many other features on a given contemporary topic in the field of information storage & retrieval, digital libraries, information & communication technology, information management, digital preservation, and so on. The VC is meant for a place of general reference on current LIS themes.

Chat, Post Office and Class Discussion modules available in the Classroom are the tools for the users to communicate with other users of the same course.

4.2 Topic selection process:

1. *Topics of considerable importance:* the topics related to current emerging areas chosen by DRTC faculty members will be included in the portal.

2. *Topics in demand*: the topics that are not been included in the portal can be demanded in the Yahoo! discussion group, created for the discussions on the Virtual Classroom requirements.

4.3 *Type of users in the Virtual Classroom*

1. *Student*: The user those who can take up a course in the portal. Students are of two types: anonymous/guest students and enrolled students.
2. *Instructor*: Topic authors are those professionals who have contributed their course content on a particular subject matter.
3. *Administrator*: An Administrative panel comprising DRTC faculty members and research scholars have the authority to allow the professionals to enroll as student to a particular course. And also, review the content provided by the instructors for a particular course and authorize them to become the part of the author group in the Virtual Classroom.

NOTE:

The authors are responsible for the course content that are uploaded in the Virtual Classroom.

Permission of Classroom administrator is required to become student or author or both. The contents will be open for all users of the Classroom.

4.4 *Process of becoming Student/Instructor*

The Classroom member can either take up a course as a student, or can be an Instructor for another course. In Manhattan Virtual Classroom Software, there is no basic difference between a student and an instructor. An introductory website has been developed to initiate users for the Virtual Classroom.

Those who want to take up a course as students, can request the portal administrator to enroll themselves for the desired courses. To get access to more than one course, the users have to specify each course name in their request to the administrator. Users will get access to those courses only for which they are authorized. Same is the case with authors/instructors, a member has to get administrator's permission to submit a content for a chosen theme.

4.5 *Features of Virtual Classroom:*

4.5.1 *Modules of Virtual Classroom:*

Keeping in view of the objectives of the Virtual Classroom only few modules have been selected. The modules and their functionalities in the Classroom are described below:

- *Lectures and Handouts/Notices*: These two modules provide one-way communication from the instructor to the student. Only the instructor can post messages to these modules. The student can read the messages, but cannot reply or comment on them, within those modules (15).

These two modules have the same utility. But for organizing the course content – lessons, articles, presentation related to the topic has been kept in ‘Lectures’ module. ‘Handouts/Notices’ module is for scope/coverage of the topic in the Classroom, suggested reading lists, announcements, etc for the students.

- *Internet Resources*: In this module, the instructors can list some Web links related to the course.
- *Self-Test*: A set of questions can be given by the instructor to the students in this module. After going through the lessons given in ‘Lectures’ module, students can take up the questions. The questions can be of any type i.e., Multiple-choice, fill-in the blanks, descriptive types etc.
- *Chat*: Very much similar to Internet Chat, where two people can exchange messages in synchronous way.
- *Post Office*: It is analogous to emails wherein private emails can be sent to members of the Virtual Classroom.
- *Student Lounge*: This is a discussion forum for students to share their views and queries. Teachers can also participate in this forum.
- *People*: This module contains student and instructor profiles enrolled in a particular course.

4.5.2 *Login for Students and Teachers*: The login URL for the Virtual Classroom is <http://drtc.isibang.ac.in/manhat2-bin/doorstep>. Both the instructor and student can login through this page itself. The username and password for anonymous student is ‘*guest*’ and ‘*guest123*’ respectively. The administrator will notify the username and password for enrolled user after their enrollment.

4.5.3 *Student's Interface*:

- i. As an Anonymous student:

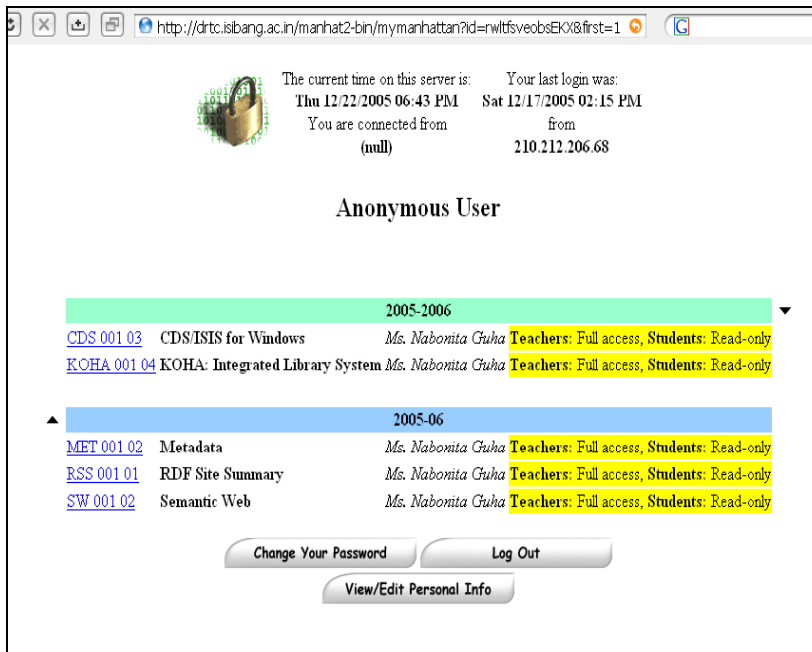


Figure 1: Course list for Guest user

The screenshot shown above is the guest/anonymous user's page where all the courses of the Virtual Classroom are listed. Clicking on to a particular course will lead the student to the course modules (shown in figure 2). The courses available for this user are same as those for enrolled students, only limited modules have been provided as compared to the other ones. Chat, People, Student Lounge, Self-Test have been eliminated to avoid anonymous discussion in the Classroom.

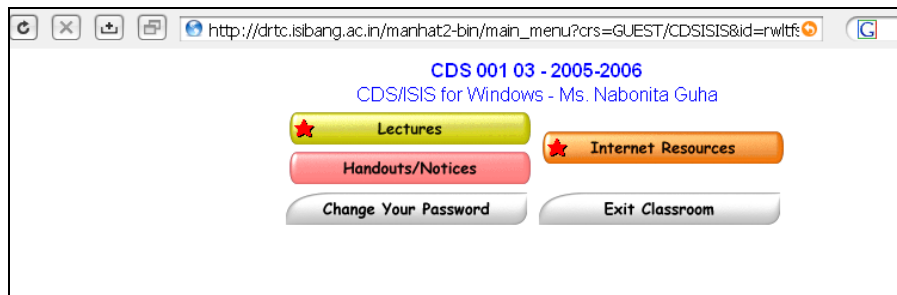


Figure 2: Course Modules for Anonymous Student

ii. Enrolled Students Interface:

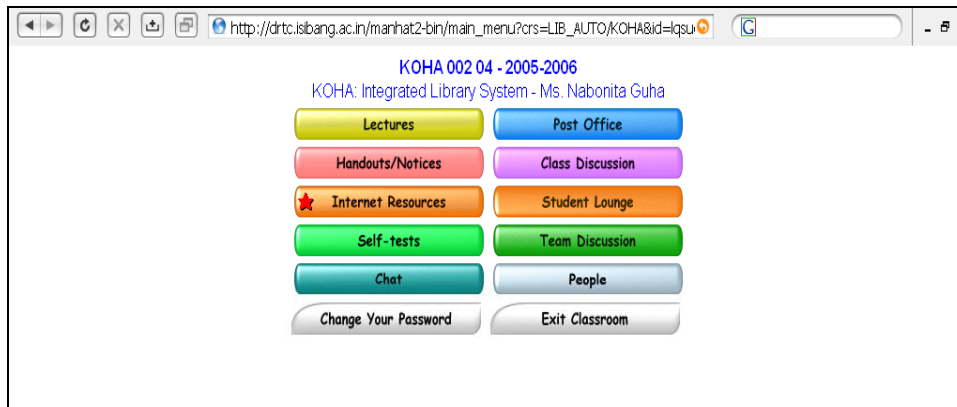


Figure 3: Course modules for Enrolled Students

4.5.4 Teacher's Interface:

Teacher's interface looks very much similar to that of enrolled students, but they have more privileges than students. The teacher can configure the course as given below:

- Uploading/deleting course content – lessons, test papers, Internet resources
- Modifying of course title, viewing password file
- Adding/deleting students/teachers in a course
- Resetting a person's password in a course
- View student login logs and class access statistics

5. LIS Continuing Education Discussion Forum

To know the information needs of LIS professionals, a discussion group (http://groups.yahoo.com/lis_edu) has been set up in Yahoo! Groups. In this discussion group, professionals can send their views suggestions and queries to the Virtual Classroom administrators. The email IDs of the Classroom administrators are lis_edu@groups.yahoo.com (through the discussion group) and drtcadmin@drtc.isibang.ac.in.

6. Conclusion

Digital learning environment is a real boon of ICT application. The notable point here is that the new learning model can co-exist well with the traditional learning environment. DLE not only makes distance learning easy, but also enhances the classroom-based teaching. Better results can be achieved if professional associations, Academic Staff Colleges and other training organizations can supplement the present models for continuing education programmes using ICT-based instructions. But as mentioned in the final report of the Steering Committee for ALA Second Congress on Professional Education (4), for some users, these new formats mean increased convenience. For others—long accustomed to the traditional face-to-face or print-based learning options—the increased use of computer and communications technologies to deliver continuing education serves as a barrier to learning. Hence, for the maximum utility of

any ICT based educational programmes to the target group, the generational receptivity, educational background and user's need should be kept in view.

The online continuing education programmes are very much needed in Indian Universities and other academic institutions. The first prerequisite for starting such programmes is the development of ICT infrastructure in Indian universities. Academic Staff Colleges of all universities conduct continuing education programmes every year. These programmes can be also made available in a digital learning environment to give professionals better accessibility.

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