Motors for Change and Engage - E-learning Programs for Librarians and Library Users by the National Library of China

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Abstract:

This paper provides an overview of the NLC's approaches in e-learning for librarians and library users and summarizes the useful experience of enhancing the LIS education. It aims to examine how the NLC manages the collection-based e-learning resources, to raise discussion about the future perceptions of the development of e-learning in China. It touches on some of the challenges of delivering widely accessible e-learning programs in a developing country, and raises questions of how the national library should respond to changes bringing up by information advancement so as to take the leads in e-learning education.

Keywords: e-learning, National Library of China, information technology, developing country, LIS education

Background

E-learning changes the educational role of national libraries. On one hand, it provides libraries with new opportunities to engage with wider audiences including librarians, lifelong learners and the general public via digital channels, on the other hand it pushes libraries to giving rise to new models of education programs so as to embrace the trends. As a national hub of books, resources and cultural knowledge for the public and a leading institution of library sector in China, the National Library of China (NLC) plays an important role in advancing public learning, promoting nationwide reading and providing training and guidance to other libraries across the nation. In recent years, the NLC launched new models of e-learning to meet a wider spectrum of needs across the nation. With these diversified e-learning programs, the NLC embraces the changing trends in the information age and further engages in LIS education in China.

Motors for the NLC to engage in e-learning

The National Library of China is a comprehensive research library, a repository of publications, a national centre of bibliographies, a centre of library information and a research centre of librarianship development, and it is responsible for training librarians in China and developing the study of library science. At the end of 2018, the NLC had a total collection of more than 39 million items, and received 5.4 million readers in this year; meanwhile, 913 million visits to the library's website and mobile apps were recorded.

As a knowledge institution, one of the core elements of NLC's role is to support learning through the library's collections and everyone who uses the library's collections and services is in some sense a learner. As a developing country, the educational resources are distributed unfairly among different geographic regions in China. In recent years, the government has attached great importance to the development of e-learning and implemented a series of policies, which generates significant achievements in the e-learning arena with respect to infrastructure construction, production of resources, academic education, part-time training, and education for disadvantaged groups. As the national library, the NLC serves not only to preserve the books and resources for the nation, but also to mind the gaps between different educational groups among different regions. The responsibility in the delivering of e-resources, lifting the information literacy and supporting lifelong learning is one of important motors for the NLC to take lead in e-learning initiatives.

To lead the training and education of library and information science (LIS) education among different levels of libraries in China is also one of the core missions of the NLC and education for library and information science (LIS) is an important factor in successful library information service. Education for LIS is an important factor in successful library information service. LIS education in China includes regular curriculum courses and in-service training programs. Regular education usually covers undergraduate and graduate education delivered by colleges and universities. The undergraduate program is a 4-year full time program with core modules covering basic knowledge of the library science, library management, information resource construction, classification, cataloguing, etc. In-service training is carried out by institutions like libraries through the tutorials mainly provided for employees in the library or other information services. For the NLC, the librarian learning programs are delivered in a variety of approaches, including full-time/part-time internship, certification course, on site lectures and tutorials, remote education like e-learning programs on library sciences and short term training classes.

Another motor for the NLC to embrace the e-learning programs is the advances of technology and the increase of online learners. The Internet and electronic resources are opening up new kinds of learning opportunities and new models of learning. There are many different forms, ranging from traditional e-learning closely tied in to school curriculum or university courses, to new learning scopes such as lifelong learners or hobbyists using the Internet to explore topics of interest, including networked learning, multimedia education, online and open education, online virtual exhibitions etc. In some sense, all of these could be said to be examples of e-learning. In order to engage in the latest technology, the NLC is seeing a rapid expansion in all forms of practice.

For the NLC, the e-learning programs are building around its special collection, for example, the digitized Chinese ancient books, the audiovisual recordings of shared memories, and online courses of LIS education and general knowledge as well as information literacy skills. Building

on the diversity of materials in the collections, a common thread running through the e-learning activities is to inspire thinking about diversity and cultural exchange and promote the LIS education in the library sector.

Overview of the E-learning Programs in the NLC

Currently e-learning programs provided by the NLC have three representation forms in general, digital resource delivery, and digitization of the special library collections and innovative forms of e-education.

National Public Digital Culture Project

The rise of the NLC's e-learning is based on the establishment of the national digital library project. In 1995, the 62nd IFLA WLIC took place in Beijing; during the conference the concept of digital libraries received its first widespread attention in China at that time. Beginning in 1990s, the National Library of China has followed the development of digital libraries in the international community, marking the start-up of the national digital library. In 2002, the National Digital Library Project was launched by the NLC with the goal of implementing digital mechanisms and procedures for collection, digitization, and archiving of the information resources, accumulating a very large amount of high quality digital resources and providing a digitized information service. By 2011, the Ministry of Culture launched the National Library Promotion Project, aiming to establish a national digital library system among libraries of different levels in China. By the end of 2018, the total amount of the digital resources acquired by the digital library is more than 1960 TB, covering more than 40 provincial libraries, 500 municipal libraries and 2900 county libraries. Library users from different libraries can access the e-learning resources promoted by the project. For librarians, there are online training programs collaborated by LIS professions across the nation, providing guidance for the application and sharing of the e-learning resources in different regions.

公共数字文化工程
PUBLIC DIGITAL CULTURE PROJECT

With the initial focus on network construction in the implementation of e-learning, recently the emphasis has been on the development of public digital resource platforms. In April 20o2, the National Cultural Information Resources Sharing Project is initiated by the Ministry of Culture and Tourism, with an e-learning network set up among culture centres in China. The project is

set to promote the nationwide sharing of cultural information and the application of digital resources provided by libraries. In order to bring together the e-learning services from the culture centres and libraries in different levels, and offer the learners an comprehensive platform of cultural resources and services, in May 2019, the Implementation of the Integrated and Innovated National Public Digital Culture Project was laid out by the Ministry of Culture and Tourism in P.R China. This project is dedicated to integrate the resources from different cultural platforms with abundant e-resources for life-long learning and intellectual entertainment, etc.

E-learning resources of Digitized Chinese Ancient Books

Chinese ancient books are the historical records and important carriers of Chinese cultural heritage. According to The Standard for the Restoration and Control of Ancient Books by China Ministry of Culture and Tourism (2006), Chinese ancient books are defined as "books written or printed before 1912, with classical binding and layout forms" such as bamboo slips, silk manuscripts, paper transcripts and rubbings, woodblock print books, movable wooden-type books, stone lithograph books and so on. As the largest collector of Chinese ancient books, the NLC holds a collection of 2.9 million volumes, accounting 80 percent of the existing ancient Chinese books. To make these resources accessible on line is a major task of the NLC in recent years, which neatly meets the educational and research demand of the library users and librarians.

In May 2007, the National Preservation Centre for Ancient Books was created as a branch of the National Library of China. The mission of the centre includes conducting a national census of ancient books all over the country, creating Chinese Ancient Book Union Catalogue and promoting the digitization of Chinese ancient books, setting standards for book-stacks for ancient books; training ancient books preservation and restoration professionals (National Library of China, 2007).The NLC has also compiled the MARC Manual of Chinese Ancient Books, participated in the development of Cooperative On-line Cataloguing Rules of China Academic Library &Information System (CALIS), by November 2008. With the Bibliographic Database of General Ancient Books and Bibliographic Database of Rare Books released on line, it gives each ancient book a unique ID and provides powerful search engines for ancient books.

By the year 2015, the National Preservation Centre started to digitalize the ancient books collected by the NLC. In order to protect the ancient books with high archaeological, academic and artistic value, the National Preservation Centre collaborate with the China National Microfilming Centre to make more than 130,000 volumes of rare ancient books digitized from microfilms including one of the NLC's treasury collections Zhao cheng Jin Trip taka. On 28 September, 2016, the Database of Chinese Ancient Books is released by the NLC, providing a valuable research resource for library users and librarians across the nation. With the NLC's leading role in the sharing of its ancient books databases, there are many libraries across the country started to join the program and make more resources accessible on line. By the end of 2018, there are more than 10 libraries released more than 32,000 volumes of digital ancient Chinese books online

In the past ten years, China's Project of Ancient Books' Preservation and Conservation has made significant achievements in the field of ancient book's general census, literature restoration, the construction of database as well as personnel training.

The ancient book restoration technologies of National Library of China have been identified as the second set of National Intangible Culture Heritage (State Council of China, 2008). According to a survey conducted by the NLC, there were less than 100 professional ancient book restorers nationwide before 2007, making it an endangered craft, such as carving techniques, bookbinding designs, restoration skills and identification methods. By then these techniques are on the verge of extinction. Things were turned around when the NLC initiated an ancient books preservation campaign in 2007. Till now, 25 national-level ancient book restoration training institutes have been established, and NLC has collaborated with more than ten colleges and universities with LIS profession to offer related courses. For example, the National Preservation Centre for Ancient Books and Nanjing Library offer several part-time training courses about restoring and preserving ancient books, the undergraduate curriculum of Identification and Preservation of Ancient Books with the Chinese Department of Peking

University.(National Preservation Centre for Ancient Books, 2008).On line e-learning resources are also available at http://www.nlc.cn/pcab/gjbhzs/xf/ with guidance on the restoration, catalogue, identification and the introduction of the hi-techs and tools while restoring the ancient books.

National Library Open Course

E-education has the goal of enlarging the scale of users. In recent years, MOOCs have been particularly creative and effective in fostering sustainable learning communities by connecting learners across a variety of platforms, e.g. Weibo, WeChat and other live and archived learning sites in China. The fact that MOOCs gained so much attention speaks well of the possibilities they offer in extending the reach of learning opportunities. In China, the Ministry of Education of China launched the 'National high-quality open course construction project' in 2011 to promote college and universities to share their e-learning courses to more public learners. By then, more than 200 well-known universities in China participated in the construction of the high-quality open video courses.

In order to engage in the overall e-learning environment, the NLC has launched National Library Open Course on 23 April 2015"World Book Day" as the first open course platform initiated by the library in China. The NLC is building the online learning programs around its unique content, for example special collection, historic documents and sound recordings, etc. With an integration of the NLC collection, the unique and richly diverse materials are something that learners cannot access elsewhere.

The main purpose of the e-learning activities led by the NLC is to inspire general users to thinking about diversity and cultural exchange. There are courses themed like 100 Classic Chinese Books, Chinese Characters and Civilization, Appreciation of Chinese Opera, Talk About the Cultural Heritage, etc. It invited famous library curators and celebrities to share their experience and engaged with sessions led by professional cultural educators challenging learners to think big and think differently about the knowledge contained in our collections. Patrons to the website (http://open.nlc.cn) can use the search facility to look for resources relating to a particular topic (and results can then be sorted by title, date, genre or collection).

Users can also explore the resources which have been specially selected and grouped thematically. There are more than 15 disciplines on the platform in including philosophy, laws, economic, language, arts and LIS education.

Besides general cultural and discipline sessions, there are also courses set for library users to lift their information literacy skills and get to know more about the services provided by the NLC. Librarian Classroom is one of the recorded online courses initiated by the NLC with lectures given by librarians to introduce the services of the library. Each week it focuses on a different aspect of the library service, creating participatory, interactive, user-centred library services with the learners. Up to now, the NLOC has issued more than 1800high-quality lecture courses with a steady 440,000 hits per month.

E-learning Resources of China Memory Project

The basic function of the library is to preserve the shared memories of the nation and to spread humane knowledge. To build the memory collection is one of the major tasks for the NLC in achieving its educational role. The NLC established the China Memory Project in 2012, in brief, it is a freely searchable online collection of oral histories, recorded videos, photos, digital manuscripts, letters and other related history resources, built by the NLC in collaboration with more than 30 member libraries in the China Library Society, focusing on the recording of the historical events and the memories of Chinese celebrities in different walks of life.

The e-learning resources of the China Memory Project provide thousands of historical photographs, as well as a growing collection of videos, e-texts documenting certain topics, such as the Chinese Musicians, the Paintings of Chinese New Year, the Embroidery Arts of Silk, the Art of Chinese Lacquer, etc. For general library users, they can browse the resources online with offline exhibitions held in the library. For researches and historians, it can be a tremendous resource to revisit the thoughts, beliefs and experiences of professionals who have passed away or left an indelible mark on their profession.

However, building resources like oral histories in the digital age and making it easily available and searchable to users has been a challenge, especially for libraries who do not employ trained archivists or oral historians. When the NLC sought to establish the online institutional repository, a partnership with oral history research institutions was forged. With the efforts of the acquisition team of the China Memory Project and the expertise of the cooperated institutions, the NLC provides guidance for other libraries in China to record the national memory and play the educational role in the digital age.

In 2015, a series of recorded memories themed the Famous Librarians and LIS Professions in China was initiated by the NLC. It is a joint collecting project and education initiative cosponsored by the LIS Department of Peking University and Wuhan University. This program engages with oral historians, librarians, museum professionals, scholars, and other researchers to record interviews with 25 famous librarians and LIS professions from 17 libraries universities across the nation. Guided by a list of suggested core questions, interviewers ask librarians about their ambitions and workplace experiences, their education and training. With the interviews and resource acquisition, the recorded videos reflects the experiences , achievements and personal stories of the Chinese librarians and the LIS educators, intimating a contemporary history of the LIS development in China.

During the past 7 years efforts, the China Memory Project collection develops as NLC fulfils its mission to collect shared memory of the nation and the historical events of the Chinese people. The memory allows current and future generations of Chinese to understand different cultures, explore cultural heritage and appreciate who we are and how we became a nation. By now China Memory Project becoming a set of resources and services, an aggregation of Meta data and a growing repository of aggregated e-learning resources for library users and librarians.

The E-learning Programs as a Museum by the NLC

For libraries, the concept of e-learning is not used only in sense of formal curriculum, but in the sense of everyone accessing information, cultural resources or entertainment. In order to support learning more effectively both on and off site, libraries need to remove barriers to access, cater for individual learning styles, innovate leaning methods and reach out to new users. Bearing this in mind, the NLC has reached out part of its role as a museum-- a state museum of classic books. By showcasing its vast and comprehensive collections--ranging from millennia-old oracle bones, the ancient manuscripts of Dun Huang, epigraphs and rubbings, historic documents in the languages of ethnic groups to manuscripts by renowned authors, the NLC reaches a wider audience via the experimental online and offline learning resources.

Besides exhibition of the special collection, the NLC offers onsite education programs which are designed to stimulate library users to engage in operation of the library. It also works in partnership to develop educational resources for use in classrooms. For example, the summer schools ran by the NLC on reading literacy for students from local school. The summer schools

were part of the Young Librarian Project which nurtures children with knowledge about library and information literacy from childhood.

By exhibiting the treasury collections of the library, the NLC is using primary sources as the starting point for individual interpretation and for further research. For example, last year the NLC staged a major exhibition themed Siku Quan Shu , also known as the Imperial Four Collection. It is the largest book collection in Chinese history compiled in Qing Dynasty (1644-1911), consisting of over 3,500 books transcribed by nearly 4,000 employees for 13 years. And audiences can witness the great books in the arrangement exactly the same as in the period of Emperor Qianlong. In order to reach a wider spectrum of audiences, there is also a virtual version of the exhibition online, and some of the most beautifully illustrated pages on the website and pages can be turned in a realistic way with the mouse. Besides exhibitions of the books and manuscripts, audiences are invited to take part in the site workshops to make a copy of the original scripts in the Imperial Four Collection. The workshops develop the calligraphy literacy of the public and help the learners to gain the skills of classic books appreciation with historical and cultural contexts. Young learns can work with a librarian to find more stories behind the great work. The workshop is an excellent partner to the exhibition and a core part of the ongoing education programs.

To draw the e-learning programs back to the core identity of a research library, the main focus of the museum is to develop generic skills through individual research that enable learners to think critically, interpret images, texts and sounds, and acknowledge differences of interpretations. By focusing on these core skills, the e-learning resources will be relevant to both library users and librarians.

Conclusion

The changes brought up by the e-learning are bilateral, it innovate the traditional method for libraries to deliver knowledge and on the contrary e-learning provides new opportunities to engage with wider learners and audiences for libraries. It is proved that the e-learning programs made services of the library stretch further – it is viable for it to reach remote users, lifelong learners, librarians and general public via digital channels, in a way that is not possible through a single physical location. The NLC has taken the challenges of the changing information technology very seriously, and have adapted its operational modes to reflect these changes in e-learning. In the future, there is a greater responsibility on the library to take advantage of these new possibilities to open up the national collection and, through appropriate selection or interpretation, make it accessible to a wide range of people, not just a national audience either, but internationally.

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