# Implementing Online Courses services in academic libraries: New Opportunities for Librarians

**Dr.S. Sundareswari M.A., M.L.I.Sc., M.Phil., Ph.D.**

**Librarian, Thiruvalluvar University College of Arts and Science,**

**Tirupattur – 625901, Vellore (Dt), Tamil Nadu.**

***Abstract***

*The acronym "Online Courses" (NPTEL Online Course) is the latest buzzword in higher education and has generated extensive discussions in both professional and popular media. There is no doubt that Online Courses maximum visibility contributed to democratization of education; in a country like India Online Courses culture has brought tremendous hope for the unprivileged community deprive of formal education. India has second largest audience for Online Courses after US; as such there are tremendous opportunities as well as challenges for the librarians to provide necessary support to the Online Courses educators and learners. The benefits that the library can bring to this burgeoning form of online learning. The successful development of a Online Courses to ensure that those factors usually seen as the remit of the library service to lead on, such as Online Courses production services and guidance. This study may be helpful for those libraries and library and information science professionals who want to seriously get engaged and Implementing with Online Courses and gear up the Online Courses movements through their libraries.*

***Keyword-*** *Online Courses, NPTEL, Online course, Online learning*

.

## Introduction

Different technologies provide deeper impact in all disciplines, education systems and daily lifestyle and so on. On one hand, learning process has existed since long time but on the other hand due to the emergence of internet technologies, especially the World Wide Web (WWW) and other kind of information and communication technologies, learning processes are changing their shapes and modes in a drastic way. Resultant, online learning becomes very popular and nowadays, different online learning platforms are available to the users, which include online education systems, online courses, distance learning and so on. NOCs （NPTEL Online Courses） caused widespread concern of the education circle and the public since 2012 and then entered the stage of rapid development. This new teaching mode has brought huge impact to the higher education and new challenges and opportunities to the academic library.

Now the service mode of academic library has become a hot topic of people debate in the context of NOCs. Academic Library as an auxiliary teaching institution in colleges and universities needs to understand the NOCs well and prepare it. It must consider how to carry on the service innovation, and provides powerful support for NOCs. Play an active role in the reform of the new teaching mode. This paper describes the impact of NOCs' development on academic libraries, puts forward that university library should actively offer the course of information literacy and strengthen the construction of reference resources, the guidance's of copyrights and the services of learning's space to build NOCS and provide innovative services for the teachers and students under NOCs.

## Literature review

Since gaining popularity of Online Course (NOCS) from the year 2012, library and information science professionals started writing research papers and other studies on NOCs and library and information science domain in different library and information science journals in which Kaushik & Kumar explore the periodical literature published on NPTEL Online Courses (NOCs) and library and information science domain in different library and information science journals and magazines and found that most of the articles published by "Public Service Quarterly" on NOCs and library theme, 2013 year noted as most productive year and majority of articles published by foreign journals/ magazines and single 3authors . Celestine urged to have a rid of NOCS into libraries and use NOCS model as to develop the skills of the librarians in respect to implement and successful running the library services 4on NOCS platform. Bond & Leibowitz highlighted the NOCS issues in respect to librarians' participation and opportunities and challenges coped for connecting library resources particularly 5serials to the users in NOCS mode . Massis investigates the current discussions on NOCS particular in the library context and further presents the different roles of librarian in evolving

NOCS movement through libraries . Frederickson study provides a brief description of selected scholarly articles published on NPTEL Online Courses (NOCs) and Library and Information Science domain in variant prestigious journals of library and information science area from the year 2009 to 2013 . Courtney suggests the strategies which can be used by libraries in order to solve the problems of different NOCs syllabus. Sampson & Street explored diverse issues pertaining to NPTEL online courses (NOCs) which include pros and cons, role of law libraries and law librarian in accelerating NOCs movements by contributing serious engagement of law libraries in the preparation and successful delivery of these NOCs . Pujar & Sadanand explored possible areas in which NOCS technique can clubbed and how NOCS platforms will be useful for developing quality of library and information science education by providing opportunities and challenges and examples of some key players in NOCS . Hoy presents concept of NOCs including its features, pros and cons and examines the significance of NPTEL Online Courses (NOCs) in medical education and libraries . Ji-Zhou & Sheng-feng study has focused on patterns of library resources constructions and services to be delivered in NOCS environment and this study is further discussed the knowledge based discovery model that will be beneficial

for library resources construction and services in NOCS setting . Schwartz defines how public libraries affected by NPTEL Online Course (NOCS) environment and how libraries can do to assist in the clearance of copyrighted content and support in creating NOCs contents free from copyright issues and in the preservation of the NOCs contents . Becker defines concepts of NPTEL Online Courses (NOCs) in connection to library services and urges to the university libraries to explore the possibilities to access to open access resources for NOCs . Kohn study is focusing on the creation of NPTEL Online Courses (NOCs) through different colleges and universities.

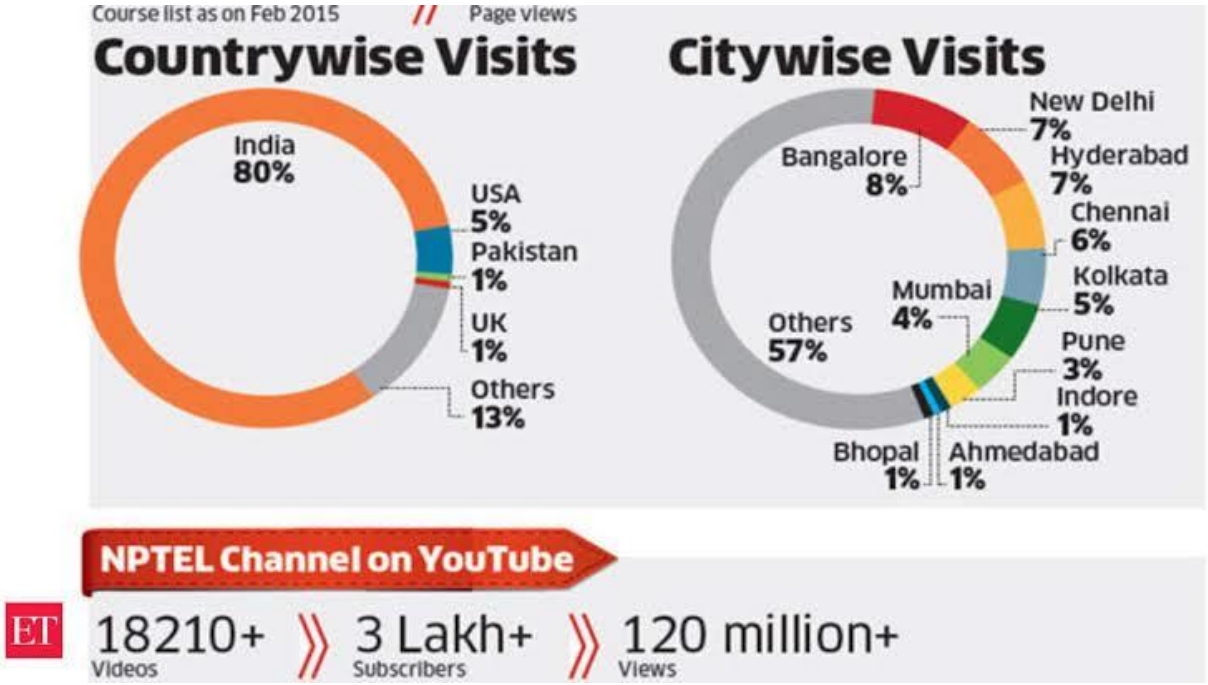
## Objectives

To define the concept of NPTEL Online Course (NOCS).

To discuss about the engagement of libraries in NOCs.

To identify the challenges and possible areas for libraries to support

## NPTEL Channel on YouTube




The majority of NOCS platforms are the not for profit; the course structure consists of a combination of short video lectures, suggested reading list, and assignments; majority of the test and quizzes are automatically graded. The discussion forums are moderated by course developers, teaching assistant or peer moderator, and in most of the cases participants are left NOCS platforms: -SAKAI -MOOKIT -OpenEdx - Course builder Copy right  Fair use, licensing,

open & online learning Support independent study/research, and information literacy skills Course development, content creation, assessment, and preservation process to their own devices. There are numerous stakeholders of NOCs who will have an interest in the massive intellectual property that ultimately resides in libraries' in the form of licensed digital repositories. The librarians have expertise in dealing with legal issues related to NOCs, such as intellectual property rights, privacy issues, and can play active role in sustainable development of NOCs.

## Support and Training of NOCs

NPTEL Online Certification
The objective of enabling students obtains certificates for courses are to make students employable in the industry or pursue a suitable higher education programme.

Through an online portal, 4-, 8-, or 12-week online courses, typically on topics relevant to students in all years of higher education along with basic core courses in sciences and humanities with exposure to relevant tools and technologies, are being offered. The enrolment to and learning from these courses involves no cost. Following these online courses, an in-person, proctored certification exam will be conducted and a certificate is provided through the participating institutions and industry, when applicable.

## Some statistics regarding the open online courses since March 2014 till April 2019

Completed courses: 1300;

Enrollments across courses: 6335382

Number of exam registrations: 627866

All the statistics pertaining to completed courses are available at https://nptel.ac.in/noc/.
All courses are completely free to enrol and learn from. The certification exam is optional and comes at a fee of Rs 1000/course exam.

Different levels of support are available to academic teams looking at a specific module, ranging from a dedicated team mailbox to a fullsupport scheme which includes data support meetings, comprehensive reports and recommendations on possible actions based on documented good practices.

Support and Training Design and the Faculties work together in the selection of the modules that will receive full support. The final decision, informed by Support and Training Design, resides with the Faculty. Based on previous experience, the current Selection criteria goes beyond modules perceived as underperforming in the Annual Quality Review and include new modules, modules with particular pedagogic challenges and/or innovative approaches, modules with high student population, and modules included in key qualifications.

Data support meetings are chaired by Senior Support and Training Design, who bring a wider view as they are exposed to data covering a range of modules and are aware of the design features. Academic staff attending provides a more in-depth knowledge of their modules. Both groups review the data and agree on the issues to be investigated. Support and Training Design may suggest actions from the options available (Rienties et al. 2015) and follow up the implementation. Support and Training Design also prepare comprehensive reports on discussions and agreed actions. These reports are stored in a shared area and are available to Faculty staff. Faculty stakeholders also receive a summary report with key indicators

Common themes investigated at the data support meetings are:

a) Student profile: including demographic and qualification profiles

b) Concurrency: number of modules and credits being studied concurrently, potential clashes at assessment points, alignment with qualifications design and Faculty advice

c) Assessment submission rates: proportion of students submitting each assessment, unexpected rate drops between assessments, average scores, impact of extensions and correspondence with assessment strategy, comparisons with similar modules

d) Withdrawer profiles: who are the students who withdraw, which qualifications are most affected, which groups are more affected

e) On line engagement and tools and resources usage: overall access to the module website, use of specific tools and resources featured in the website, frequency and timing of visits and alignment with design elements, specific tool reports on engagement and formative assessment via electronic quizzes

f) Retention: formal rate of students still registered in the module, passive withdrawers, sudden or accelerated drop rates and correspondence with module design and/or contents

g) Pass and completion rate: historical trends and comparison against similar modules, comparisons against predicted results

The data reviewed at the Data Support Meetings and the corresponding report often result in further and deeper conversations covering wider aspects of the data and in relation to Module Design, leading to more in-depth questions beyond the specific module reviewed.

Support and Training Design also offers regular and ad hoc training sessions that enable staff to get started in using readily available data on their module(s). These training sessions cover the evaluation framework, the Active Presentation Toolkit and the Data sources. The sessions are mostly a hands-on experience in which the users review data relevant to their module(s), helping them develop their data analysis skills with personalized support from instructors. While the

contents of the training are in essence the same, ad hoc training sessions are often adapted to meet the specific requirements of the audience.

Implementing NOCs

i) In Full Support of NOCS Production University Libraries provide access to academic resources and in NOCS production, enriching the content of teachers' curricula and the learning process of students. In NOCs, libraries are embedding resources to teaching process. University Libraries offer guidance and support in multimedia resources utilization in NOCs, including learning resources search, software tools application, and equipment support. Columbia University Libraries/Information Services (CUL/IS), as mentioned in Transitional Strategic Plan of 2014, has supported the development of several innovative online courses, most recently Eric Foner's "The Civil War and Reconstruction." In 2014/15, CUL/IS will continue to explore and develop courses in various digital learning environments, including NOCS platforms, hybrid classroom models, and expanding the use of the Canvas learning management system on campus, among others. Continue to investigate and implement new forms of emerging technologies in support of teaching and learning, including support for 3D visualization, 3D scanning, and 3D printing, among others.

II. Copyright and licensing In an open environment, the use of teaching resources is different from the traditional mode, subject to restrictions of many sorts. University Library Copyright services include: collection of open access academic resources, to replace copyrighted course materials; through negotiations with publishers or database suppliers for more flexible and realistic copyright protection resources licensing; help to determine the legitimacy of fair use of online course materials. The ultimate goal is to ensure that all reasonable and fair use of NOCS courseware via online course materials copyright clearance. In the future, librarians will be playing an more active role in the open access movement for sure. Stanford University Library is the copyright information and education resource centre. It has established partnerships with digital copyright providers SIPX, which grants NOCS platform users permission to remote access of library resources. It participated in the integration of online copyright laws and suggestions in the teaching process, offering copyright laws guidance for NOCs on part of teaching staff. Duke University library has already set up copyright guidance departments in order to give NOCS teachers a reasonable use list concerning fair use of library resources, and consultations on the specific are available as well.

III. Collection, Sorting, Saving, Mining of NOCS Resources Libraries collect, organize and save useful information resources in NOCS production, realizing the full value and long-term availability of the information resources. On NOCS platforms, learners use the academic resources of the library, leaving digital footprint about relevant logs, browsing history, book loan history, geographical location, retrieval information and search time etc. such semi-structured and unstructured data provide feedbacks to librarians about the curricula assessment, for the sake of continuous optimization of the online course content.

IV. Enhance Users ' Information Literacy NOCs put forward higher requirements for learners' evaluation and utilization of information resources. Through education and training programs, libraries are obliged to enhance users ' information literacy and skills to help them identify and fulfill information requirements. Libraries are able to teach course participants in a most direct way by making an information literacy-related NOCS. San Jose' State University (SJSU) on information literacy, library strategic planning includes: Determine feasibility for NOCS for Information Literacy in 2014; Determine information literacy support for University NOCs from 2013 on. E. Space Renovation The Library will be a vibrant learning hub and intellectual crossroads in its physical and virtual spaces. Renovated spaces will provide attractive learning environments conducive to study, collaboration, and cross-disciplinary interaction in close proximity to essential collections. The Library's online presence, customized by its users, will serve as a center for access, research, networking, and learning, both on and off campus.

## Conclusion

Characteristic of a pervasive digital network of the new age, information technologies have penetrated into all fields of library development, increasing its productivity, enhancing comprehensive strength, promoting library development in a dynamic manner. In the recent 10 years, with the mobile terminals, big data concepts, and cloud computing technology all in the fast lane, mobile library service based on metadata resources, along with the discovery system is emerging in university libraries. As a new network teaching modality and education technology, NOCs bring about pedagogical changes, enrollment expansion and resources sharing, prompting university libraries' participation to this universal learning tide. In regard of concept, policy and resources, technologies and services are undergoing a series of significant transformations. University libraries need to explore and establish a new service system in conformity with the NOCS movement, relentlessly enhancing the service capabilities for online education.

## REFERENCES

*1. Bharti, P. (2014, October). Indian HRD Ministry Launches A MOOC Platform - SWAYAM, EdTechReview. Retrieved from http://edtechreview.in/trendsinsights/trends/1598-indian-hrd-ministrylaunches-a-mooc-platform-swayam.*

*2. Kanjlal, U. & Kaul, P. (2016, November).The journey of Swayam: India moocs initiative. Conference proceeding of the 8th Pan-Commonwealth Forum on Open Learning (PCF8). Retrieved from http://oasis.col.org/bitstream/handle/11599 /2592/PDF?sequence=1&isAllowed=y*

*3. Kaveri, A., Gupta, D., Gunasekar, S., & Pratap, M. (2016, December). Convergence or Divergence: MOOCs and Legacy of Higher Education Outcomes. In MOOCs, Innovation and*

*Technology in Education (MITE), 2016 IEEE 4th International Conference on (pp. 20-24). IEEE.*

*4. PM Narendra Modi to launch Swayam massive open online courses platform on august 15 (2017, August 25), Economic Times. Retrieved from http://economictimes.indiatimes.com/industry/services/education/pm-narendramodi-to-launch-swayam-massive-openonline-courses-platform-on-aug15/articleshow/53029959.cms.*

*5. Technology dreams soar with Swayam for poor students (2017, September 11), The Times of India. Retrieved from http://timesofindia.indiatimes.com/city/hy derabad/technology-dreams-soar-withswayam-for-poorstudents/articleshow/56928703.cms.*

*6. Swayam. (2017, August 19). Retrieved from https://swayam.gov.in.*

*[7] Annual Report 2013–2014 [EB/OL].[2016-05-29].http://blogs.library.duke.edu/magazine/files/2015/01/DUL-Annual-Report-2013_2014. pdf.*

*[8] Toward 2015: Cornell University Library Strategic Plan, 2011-20 15[EB/OL].[2016-04-16]. https://www.library.cornell.edu/about/insi de/strategic-plan..*