



NDLIGDAY

RISING TO THE COVID CRISIS









RISING TO A GLOBAL CRISIS WITH A DIGITAL WEAPON

TRANSFORMATIONAL RESTRUCTURING

COVID-19 RESEARCH REPOSITORY

METAMORPHOSIS: TRANSFORMING SCHOOL EDUCATION DIGITALLY

THE ROAD AHEAD









Rising to a Global Crisis with a Digital Weapon

Even in a millennial world which is characterized by disruptive technologies and hi-speed changes, the COVID-19 pandemic came as a shock. It stopped what we had thought was our unstoppable world. From first-world countries to developing nations - one small virus has quarantined the entire human race as we try to combat an invisible enemy that is not even a living being.

Every crisis in human history however, has been solved by creativity, solidarity and research. That is how we have survived these many centuries. We have learnt from our trials, learnt from our gurus, learnt from our failures and learnt from each other.

On 24th March 2020, 900 universities, 40,000 colleges and 1.3 million schools across India went under complete lockdown. As a country of 1.3 billion, we were counting not just human lives lost in death, but also in terms of actual livelihood. At the NDLI, we had not seen darker times. Our actions never felt as important. It mattered not what our plans were for the year, what mattered was what we did at the cusp of change.

Unforeseen challenges bring unexpected opportunities. When the devastation in the Indian economy called for country-wide adaptability, as gatekeepers of India's knowledge economy, our mission was not just to evolve, but also to transform, overnight.

Our first response to the pandemic was the rapid roll-out of our 'Study at Home' segment for schools and universities. A 'COVID-19 Research Repository' soon followed for students, researchers and entrepreneurs across the country seeking to hack the crisis. Next we released exam preparatory for schools, colleges and entrance exams, we parallely ran a nationwide crowd sourcing of educational material, multiple webinars across the country with principals, educators, teachers, social media outreach programs, a Facebook and Youtube online lecture series in collaboration with NPTEL - our 48 million strong repository was overhauled into an ed-tech service platform within a matter of weeks.

Our COVID transformation journey has been driven on the back of day-to-day agility, moving from a repository focus to a service focus. Our resilience in the face of mass closures of educational institutes was met with thunderous solidarity, as daily page views grew to 100,000 and users ranging from school students to educators and life-long learners started tuning in to #FightBackCOVID19!

As India fights COVID as a developing nation of 1.3 billion, we shall need plenty of creative solutions, frugal innovations and deep research to tide us through. The NDLI team is committed to every learner of our country to provide an open national resource that is available to anyone, anywhere in the country who is trying to hack the crisis. To provide a single window access to various types of learning content, education services and portals of opportunity so that not just a privileged some, but ALL of our students, learners, researchers, workers and educators can collectively learn, share and grow.

It is with great hope that I bring to you this special edition of the NDLI newsletter, that captures the essence of NDLI's COVID response, a lot of new learnings that have evolved through our crisis response and how a hopeful team behind a server has been working tirelessly over the last months to bring in evolutionary changes so we can quickly bridge the digital divide and deliver relevant education and skill-training to the last person in the chain to enable our future generations to rise above and beyond the crisis.

> - Prof. Partha Pratim Chakrabarti PL NDI I

NDLI in the News

26th Apr, 2020

National Digital Library opens up its digital contents; builds COVID-19 Research Repository

7th May, 2020

The Hindustan Times in its publication spoke about how NDLI has extended its help to the students across the country.



8th May, 2020

India Today, in its article, spoke about how IIT Kharagpur has prepared a JEE preparation module that students can get for free on the National Digital Library of India platform to study during the COVID -19 lockdown.



19th Jun, 2020

The Indian Express spoke about how NDLI was reaching out to students even amid the lockdown, with the 'Study At Home' feature.



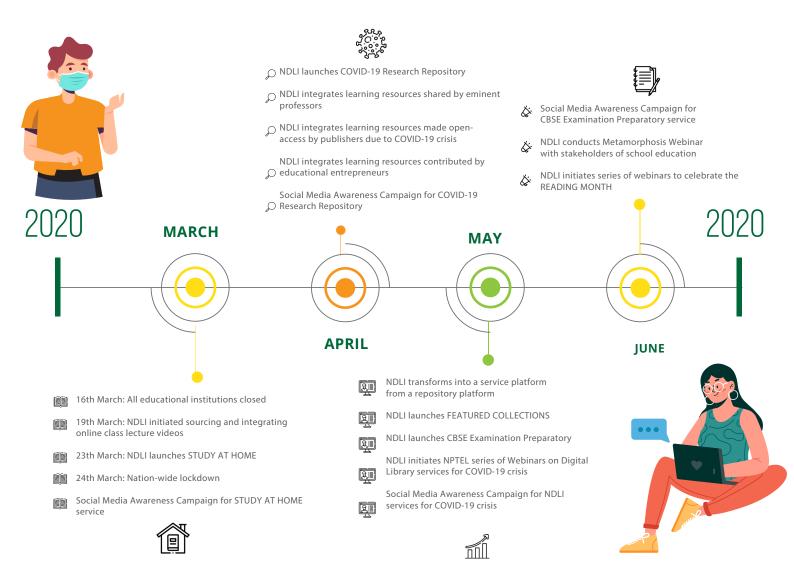
The COVID Challenge Timeline

The diversity of Indian culture has, over centuries, seeped into its educational system. While a large portion of 'what is taught' remains fairly uniform, there is great dissimilitude in 'how it is taught'. With multiple state-boards and other educational formats, catering to the needs of each student is a job well taken care of only in physical schools. Or at least so was the reality till a certain day in the month of March 2020.

Conceived as a pilot project in 2015, the NDLI had intended to follow a steady but gradual growth curve over the years. The intention always was to be able to deliver free knowledge in the model of a planned disruption. However, with COVID-19, every perceivable plan of action was to be caught unawares.

As hundreds of schools, colleges, and universities across the country went under a complete lockdown on 25th March 2020, NDLI was now faced with the colossal responsibility of delivering not just education, but all forms of learning material to all learners across the country. There were students and teachers from different state boards, researchers, and scholars who required adequate material to not just sustain but also uphold the entire educational model of the nation. This, happening a few months away from major competitive and board exams was a factor that needed to be addressed as well. While this situation had the tellings of a challenge, it also was to become a unique opportunity for NDLI to evolve into a digital savior.

Since this was not the premonition of a crisis but a crisis itself, the way NDLI approached content had to keep evolving one day at a time. From being 'data-focused', NDLI had to gradually evolve towards becoming 'agility and service' focused. The liberty of simply being a repository was lost, because as they put it 'With great power comes great responsibilities', and there is no known power that is greater than knowledge. Our strategy throughout has been to promote content, but now we had to put the same content and more under brackets of user-targeted services. Eventually, over a span of time, the NDLI took small but significant steps in constructing a digital universe of education.







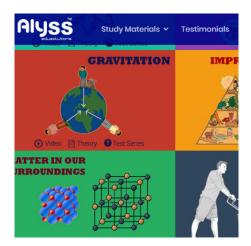
Study At Home

Extending help to all students from school level to UG/PG level, the NDLI opened up its digital content, to help students study at home. For India, the educational system largely relies on physical classrooms and real-time interactions. Come COVID, learning was faced with a challenge that needed quick addressing. The 'Study At Home' module includes a wide range of materials in the form of e-books, audiobooks, lecture materials, thesis, reports, articles, journal papers, questions papers, solutions, data and simulation tools in addition to video lectures and courses.

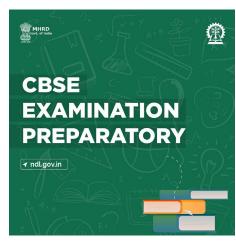
New Additions as COVID Response

During the COVID-19 crisis, several publishers and educational entrepreneurs have made some of their subscribed contents free and openly accessible in order to facilitate learning. The NDLI has sourced such contents from publishers and educational entrepreneurs and made these available to all through its platforms.

- Alyss Edusolutions Pvt Ltd contributed an initial set of valuable school-level content to the repository during the pandemic.
- An additional collection of JEE MAIN and JEE ADVANCED questions and solutions were also added.
- The CBSE Examination Preparatory was also included as a part of content upgradation for the use of the learners.









1.8M+
ANDROID DOWNLOAD



37K+
ios downloads





Over a course of time, the

Study From Home module intends to tackle the challenges surrounding creating, maintaining, and improving distance learning

At a Glance

In the very first week of the lockdown, the NDLI rolled out the 'Study at Home' service for school students, and students pursuing higher education in Engineering, Science, Humanities and the Social Sciences, Law, Accountancy, and Management.



What?

Textbooks of NCERT and 20 other school boards Question papers Video lectures Solutions to questions of JEE Main and JEE Advanced And a lot more

For Whom? School Students,

Teachers



What?

Lecture videos Acts Judgments Articles Notices

For Whom? Law students, Teachers and practitioners

SCIENCE



What?

Books

Making study material easy to search and access

Uninterrupted learning by filling

Improving quality of study-material

Ease of access

Lecture videos and notes from NPTEL/SWAYAM courses Online class lectures Questions & solutions

For Whom? Undergraduate students and teachers across all science disciplines







HUMANITIES 🚟



What?

Books Questions and solutions Video lectures Articles Notes

For Whom? Undergraduate students and teachers of humanities and social sciences

LITERATURE



What?

Books Questions and solutions Video lectures Articles Notes

For Whom? Undergraduate students and teachers of humanities and social sciences

ENGINEERING TO



What?

Lecture videos and notes from NPTEL/SWAYAM courses Presentations used by renowned faculties in classes Online class lectures Ouestions and solutions of common subjects

For Whom? Students and teachers of all engineering disciplines

MANAGEMENT ATA



What?

Management and accounting questions and solutions Video lectures

Books

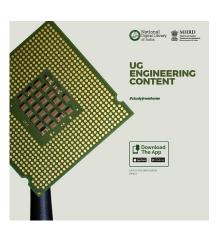
Notes

Articles

Theses

For Whom? Accounting, commerce, and management students and teachers











CBSE Examination Preparatory

As the nation battled the repercussions of COVID-19, CBSE exams were first postponed and then lifted altogether. However, secondary and higher secondary education, with or without examinations, helps in sculpting a student's career decisions and choices.

Hence, to ensure uninterrupted learning even during the times of nationwide lockdown and social distancing, the National Digital Library of India put together a specially curated collection of study materials for the students of class X and XII.

This enabled examinees to access

Books

Notes

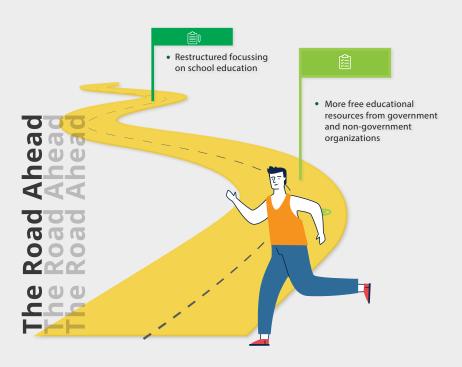
Question papers

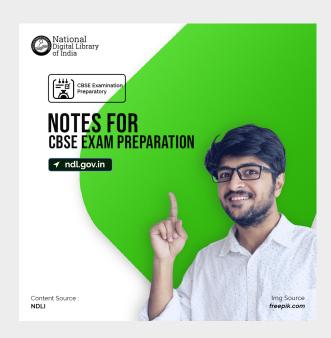
Solutions

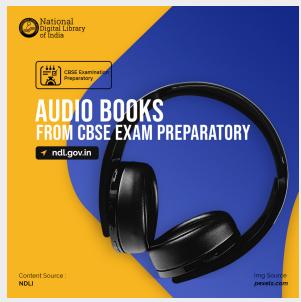
Model Answers

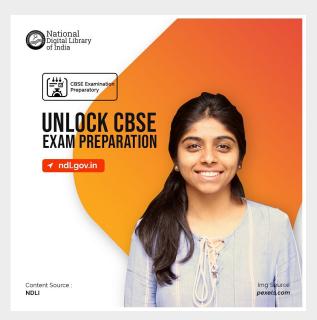
Video lectures

on all subjects from the safety of their homes sitting in any corner of the country. Students from all across India gained 24X7 free access to curated and quality study material from Government bodies, Kendriya Vidyalayas, as well as Non-Government organizations, that they might browse by content type, source, or subject.













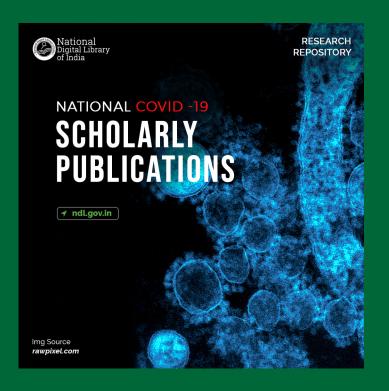
COVID-19 Research Repository

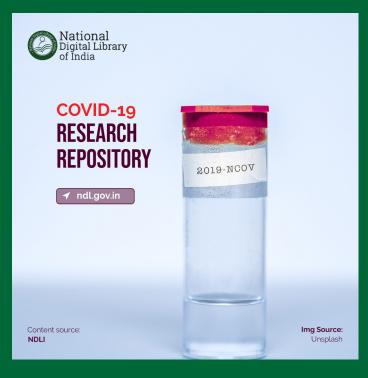


What is COVID-19 Research Repository?

Even amidst the COVID lockdown, medical researchers, members of the response teams, and those researching the non-medical impacts of COVID-19 continue to pursue their quest for the benefit of humanity. While medical impacts are very visible and more talked about, the non-medical impacts such as psychological impact, economic meltdown, and changing education models among others, usually get less attention. Realizing the need for a comprehensive study of the various impacts of the pandemic, NDLI has put together a compendium of over 40,000 resources on COVID research, called the 'COVID-19 Research Repository' for the use of anyone working on COVID solutions. The aim of this research repository is to bring all the many types of COVID-19 research material under one umbrella to create a roadmap of a post COVID world.

These papers may be accessed from our archives at: https://www.ndl.gov.in/corona-research





Scholarly Publications :



Papers on biological, medical, and health aspects of COVID-19, papers on COVID-19 induced problems, challenges, and opportunities in all facets of life, in high-quality peer-reviewed journals and conferences collected from publishers' COVID pages and blogs, indexing pages with COVID, preprint archives, and open search of web and other collections.

This will help the researcher quickly locate related prior research and open issues.

Data Sets:



These are COVID-19 related data sets collated for research and analytics. The data sets may directly relate to coronavirus or to various subsidiary

These data sets and data repositories should help researchers to carry out experiments for their research and identify available data sources for various facets of research.





Documents & Videos:

These are COVID-19 information documents from various nationally and internationally credible organizations. These documents and videos have been collated for research COVID-19 and its induced effects.

This will help researchers locate research-related information published through non-scholarly channels.



Journals & Conferences:

This section collates journals and conferences that focus on COVID-19 and related research in general and/or aggregates such research.

This will help the researchers find suitable dissemination options.



- Ideas & Funding:

This section lists funding options and opportunities being announced by several agencies to support COVID-19 research.

Related news and blogs, that give various ideas which are getting generated around COVID-19 and may trigger thoughts of researchers, are also listed.

This will help the researcher and entrepreneurs find suitable funding options and track interesting ideas.

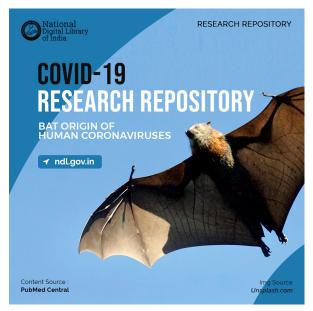


🛓 Challenges & Start-Ups:

As COVID-19 impounds on civilization, several challenges, hackathons, design competitions, etc. are regularly being announced by several agencies to solve small and big problems. Various start-up opportunities are also being explored.

This will help the researcher and entrepreneurs find exciting challenges and start-up ideas.









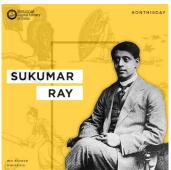


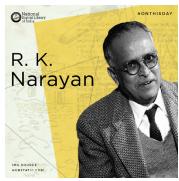
Featured Collections

As NDLI was transforming, our primary focus was to shift our curation focus to usability and ease of learning as fast as humanly possible so that any learner is able to access and find the information that they are looking for at any point in time. With this in mind, we added a new header called the 'Featured Collections' to the home page of the portal which will lead a visitor to a set of curated knowledge. What makes this section more engaging and interesting is that the user will find new information under the header at regular intervals.











ON THIS DAY: Speaks of a relevant, interesting piece of knowledge related to the day



PERSON OF THE WEEK: Provides a short biography or story of an interesting person every week.



TOPIC OF THE WEEK: Talks about a global phenomenon every week

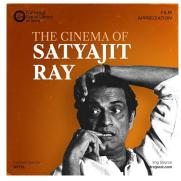


BIRTH CENTENARY OF SATYAJIT RAY: Features a collection containing 38 manuscripts, a couple of books, discussions on the cinemas that he made, and some articles and theses on him



TALKS & WEBINARS: Contains webinars, talks, and lectures by renowned experts on all subjects starting from school-education to disruptive technologies in a post-COVID world

The #OnThisDay Collection from NDLI social media







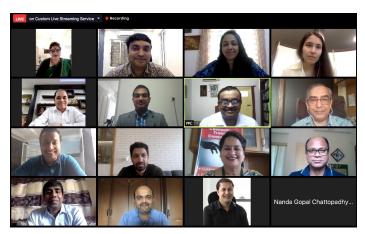


A collection of social media posts honouring the Birth Centenary of Satyajit Ray





Dimensions of Outreach



A moment from Metamorphosis: Transforming School Education Digitally

Digital literacy has been thriving in this era of technology, and now has become even more important as digital communication continues to advance and services continue to migrate online. The way forward involves upgrading yourself while uplifting and empowering an entire community to do the same. NDLI's pursuit is to achieve this degree of Digital Equity by expanding its dimensions of outreach.

NATIONAL DIGITAL OUTREACH

As a part of its nationwide outreach, NDLI has begun hosting, co-presenting, conducting and participating in online talk sessions, webinars and workshops. This initiative helps in building mass awareness about its open access services, and to ensure the continuity of learning during the pandemic. These are tangible awareness structures that NDLI is building at every step.



The social-media banner used across all platforms, for 'Metamorphosis'.

METAMORPHOSIS: TRANSFORMING SCHOOL EDUCATION DIGITALLY

Co-ordinated by IIT Kharagpur and sponsored by the MHRD, this one was a must-attend webinar for principals, administrators, policymakers, teachers, parents, students, and anyone associated with school education. COVID-19 has forced education practitioners to adapt to an unprecedented digital makeover. Education influencers and speakers discussed the challenges faced and the best practices to be adopted for a seamless transition through these uncertain times, along with how NDLI could prove to be a strong partner for learning and collaboration.

METAMORPHOSIS PANELISTS

Biswajit Saha

Director (Training & Skill Education), CBSE

Partha Pratim Chakrabarti

Principal Investigator, NDLI Professor Department of CSE, IIT Kharagpur

Partha Pratim Das

Joint Principal Investigator, NDLI Professor Department of CSE, IIT Kharagpur

Indrani Sanyal

Principal, DPS Megacity, Kolkata

Krishna Damani

Trustee, South Point Education Society, Kolkata

Dinara Akchurina

Assistant Professor, Rotman School of Management, Canada

Abhishek Kumar Yadav

Chairman Griffins International School, Kharagpur

Nirmala Sankaran

Co-Founder, HeyMath!

Abhishek Rungta

Founder & CEO, Indus Net Technologies

Salony Priya

Director, Ummeed

Abbas Gabajiwala

Director, Zephyr Toymakers

Vivek Choudhary

Assistant Professor, College of Business NTU, Singapore





NPTEL LECTURE SERIES: -'INNOVATION AND ENTREPRENEURSHIP IN A POST COVID-19 WORLD'

Com is a

Come COVID, all notions topple. Innovation is now a necessity for survival and thinking-within-box is a self-serving death warrant. Entrepreneurship is no more a matter of choice between the risk-addicts and the risk-averse; it is the only parachute to keep flying, flying high. COVID redefines life and in this series of lectures we take a dig into how Engineering Entrepreneurship can provide a new meaning to this redefinition through appropriate innovation.

Professor Partha Pratim Das,
Head of Rajendra Mishra School of Engineering Entrepreneurship, IIT Kharagpur ***

IIT Kharagpur's Rajendra Mishra School of Engineering Entrepreneurship organized a special online lecture series titled 'Innovation and Entrepreneurship in a Post COVID-19 World' - between 22nd and 27th June through the NPTEL platform. The course presented a set of power-packed online lectures that dealt with several crucial aspects of entrepreneurship in the post-COVID scenario and was backed by the NDLI.

While on one hand, the course aimed to inspire innovative minds to take up challenges in various sectors head-on, by presenting a high-level perspective on exciting opportunities on various fronts like healthcare, education, agri-tech, energy, rural innovation, fintech, supply chain interventions and so on. On the other hand, it also threw light on precautions and strategies related to operations, execution, change in consumer behaviour and short term financial management.

The course had valuable takeaways for young college students who are startup enthusiasts, working professionals and entrepreneurs. Apart from being broadcast on NPTEL channels, the video recordings are now archived on the NDLI platform for future use.



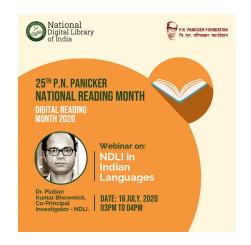


JULY 2020

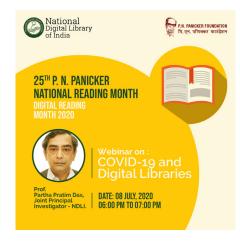
Digital Reading Month 2020

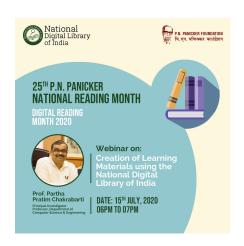
Started as a Reading Day Celebration on 19th June, 1996, the P. N. Panicker National Reading Month has become a mass movement to promote the culture of reading, and in turn, of knowledge and learning. This year, the NDLI in collaboration with the P.N. Panicker Foundation presented an assortment of talks and competitions that dwelled upon the importance of digital literacy. Renowned educators were invited to put forward their valuable perspective on the evolving dynamics of digital awareness.

A total of 31,158 participants took part in the competitions. The NDLI Club, the PSGR Krishnammal College for Women, Coimbatore became the competition partner and created the question banks for guiz competitions and topics for other competitions.

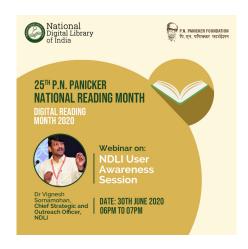
















SOCIAL MEDIA RESPONSE

The COVID-19 pandemic has resulted in the devastation of our economies as a whole, but the human race has survived only because it knows to create, innovate, and disseminate knowledge. The NDLI has been a forerunner in this race to keep the knowledge economy intact and continues to push all boundaries to be able to reach out to more people with more to learn from. However, no effort is significant without awareness of it, and in this, the social media coverage and mentions have played a consequential role in bringing our efforts to light.

The NDLI social media channels were instantly and fully mobilized as the news of the pandemic broke out.

Every change reflected on the portal, found its social media counterpart in the form of well-designed communication on all social media handles while the press took a significant interest in the developments.

COLLECTION FOCUS:

The NDLI Facebook page, which currently has 130K+ followers, shifted its content focus from curation highlights to collections. Instead of pushing our 'On This Day', 'Wonderful Women On Wednesdays', the NDLI started rolling out groups of content based on Physics, Mathematics, Biology, etc. - different days for different grades and different levels of proficiency.





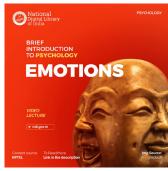




SOFT LEARNING:

As news of rising distress and depression rose from across demographics, affecting adults and children alike, the NDLI focused on collections that would help cope.





USABILITY HIGHLIGHT:

As a crisis response, the NDLI shifted focus from our content to the awareness and usability of the platform in these times of need.



LIVE COURSES AND WEBINARS:

The NDLI ran multiple LIVE sessions on Youtube and Facebook in collaboration with schools, colleges and other stakeholders in the public education sector across the country.





An International Outlook

The NDLI is pursuing a programme of international outreach and expansion through strategic partnerships with (a) Intergovernmental organizations, global consortia and foundations and (b) Foreign universities, higher education institutions and national libraries.

The former include the NDLI's ongoing collaborations with UNESCO, the Wikimedia Foundation and rightsstatemets.org (an international consortium) to strengthen access to knowledge and digital heritage, and to promote multilingualism in cyberspace.

Of the latter, the NDLI has received an enthusiastic response from leading institutions in Asia and Africa, and is currently in talks with several of them to determine the contours of possible partnerships. Partnerships often begin with user engagement and content sharing exercises before expanding into other areas.

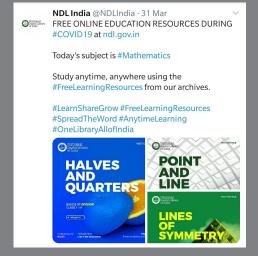
Most recently, for instance, the NDLI was approached by Skyline University in Nigeria to begin a dialogue for cooperation. The initial deliberations between Skyline and the NDLI culminated in a high-level webinar on 5th June, 2020, attended by the Vice-Chancellor of Skyline University, representatives of the Ambassadors of both India and the UAE to Nigeria, senior officials from leading Nigerian universities and polytechnics, and the Principal Investigators of the NDLI. The webinar included a session on building user awareness about the NDLI for university faculty, librarians, researchers and students. The event has led to the use of the NDLI by Skyline and other educational institutions in Nigeria, and has opened possibilities for other forms of collaboration with them.

#NDLISocial

























TESTIMONIALS

MEDIA MENTIONS



Official twitter account of All India Council For Technical Education promotes NDLI April 23, 2020



Digital India promotes NDLI and its free resources April 23, 2020



Doordarshan National promotes NDLI May 08, 2020

EDUCATORS



Tapas Pal, Assistant Professor at Department of Computer Science and Engineering, Bengal College of Engineering and Technology, Durgapur, West Bengal, India



Esha Dutta, Head of the Computer Science Engineering Department at DIATM, West Bengal, India

DIGINITARIES



Minister of State for HRD, Communications, Electronics & IT, Government of India Sanjay Dhotre, talks about NDLI study resources May 09, 2020

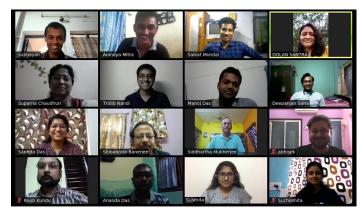


Cabinet Minister for Human Resource Development, Government of India, Dr. Ramesh Pokhriyal - talks about the various NDLI resources June 18, 2020



Dr. Abbhay Jere, Chief Innovation Officer, Ministry of HRD, Govt of India, talks about the enormous effort put forth by NDLI April 19, 2020

TEAM SHOWCASE



A virtual NDLI staff-meeting in progress

With the cautious and collective human effort, put in by every team-member, NDLI marched steadily forward towards establishing a revised, and stronger model of digital learning. Working from home, through night and day - between cyclones, power-cuts, unstable internet connections. demanding house-hold chores, each team member put the purpose of 'Uninterrupted Learning', before themselves.

A large group of dedicated skilled personnel belonging to this resilient digital culture called NDLI, worked towards a common goal. The goal to uphold 'Free and Open Learning', even during the COVID-19 pandemic, against all odds.

PAST EVENTS

14th May'20: Now and Next: Post COVID-19 World for Digital Libraries, NPTEL

24th May'20: Leveraging Digital Initiative of MHRD

and Online Examination

During COVID-19 under TEQIP- III, Himachal Pradesh Technical University

International Webinar 5th Jun'20:

User Workshop-Partner -Skyline University Nigeria

Metamorphosis: Transforming School 20th Jun'20:

Education Digitally,

National Digital Library of India

4th Jul'20: North East Regional Webinar -

> User Workshop, Partner - Jorhat Kendriya Mahavidyalaya, Assam

18th Jul'20: 25th P. N. Panicker National Reading

Reading Month Closing Celebrations

20th Jul'20: 7th International Online Workshop on

Text and Music Digitization-Organizer-Department of Bengali

Rabindra Mahavidyalaya The University of Burdwan

Presenter Prof. Partha Pratim Das

Vijaygarh Jyotish Ray College 24th Jul'20:

organized a webinar entitled 'Awareness Programme on NDLI'. Ms. Sujata Roy and Mr. Anirban Sarma

represented the NDLI.

NATIONAL DIGITAL LIBRARY OF INDIA

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