

ADINET e-News Digest

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How Experts Are Digitizing Ancient Manuscripts Digital preservation is more work than it might seem

In recent years, conservators and preservationists have turned to digital tools to preserve old texts and manuscripts. There are a lot of advantages to these techniques—not only can they be stored and cleaned up even if the originals are too delicate, but digitizing old books can allow more people to read them than if they only existed as physical objects. However, when it comes to restoring these books, it takes a lot more than simply scanning the pages into a computer.

OriginalSource| <http://www.smithsonianmag.com/smart-news/how-experts-are-digitizing-ancient-manuscripts-180960685/?no-ist>

The National Central Library of Rome adds about 2 million records into WorldCat

The [National Central Library of Rome](#) (Biblioteca Nazionale Centrale di Roma) has loaded nearly 2 million records into [WorldCat](#), a comprehensive database of information about library collections, to increase visibility of these Italian collections around the world.

The National Central Library of Rome holds a large number of special collections and print materials dating back to the 15th century with more than 7,000,000 printed volumes, 1,342,154 brochures, 25,000 cinquecentine (16th century books), 20,000 maps, 10,000 drawings, 8,000 manuscripts and 2,000 incunabula. Following the initial load of 2 million records, the National Central Library of Rome will continue to add records to [WorldCat](#).

Press Release Available at <http://www.oclc.org/>

Google launches YouTube Kids in India, a library of learning oriented video content

Making it easier for today's tech savvy kids to find videos on topics they want to explore, popular online video community YouTube on Wednesday launched "YouTube Kids" — a huge library of

learning content for children — in India. "YouTube Kids comes to India at a great time for millions of Indian families, as it provides children access to content that will enrich their lives and create new opportunities for learning," Malik Ducard, YouTube's Global Head of Family and Learning, said in a statement.

Parental Control features of the YouTube Kids app: (Sourced from <http://www.dgindia.com/youtube-kids-app-launched-in-india/>)

Search settings: Automated Prompt allows you to make a choice about how broadly you want your child to explore – turn search *on* to access millions of family-friendly videos, or turn search *off* to restrict your child's experience to a more limited set. Either way, parents decide the right experience for their family from the get-go.

- Timer: Let the app be the bad guy with a built-in timer that lets you limit kids' screen time. The app alerts your child when the session is over, so you don't have to.
- Sound settings: Sometimes you need a little peace and quiet! You have an option to turn off background music and sound effects, so your kids can keep watching while parents catch a breath.
- Passcode and restricting certain content: Parents have the ability to set their own passcode, and to access settings and other parental information in the app.
- YouTube Kids on the big screen: You can now also watch YouTube Kids as a family on your big screen using Chromecast, Apple TV, game consoles or a smart TV.

Source| <http://tech.firstpost.com/news-analysis/google-launches-youtube-kids-in-india-a-library-of-learning-oriented-video-content-346262.html>

Centre to float open-data policy soon

Release in the public domain will enable individuals to build commercial apps/services New Delhi, November 8:

The Centre will soon notify a policy on 'open data' to put more data in the public domain, allowing individuals to build apps or services for commercial purposes.

The government generates a lot of data that many more people can actually use, said a senior official at the Ministry of Electronics & Information Technology. For example, Census data is used by academics, companies, students and politicians.

"We permitted the use of this data only for academic or government purposes. But, recently we have taken a policy decision that we will allow people to create value-added services on a commercial basis," the official told *BusinessLine*.

Data are an important resource. A lot of data with the government can be put in the public domain, he said, adding that the government has started the portal data.gov.in for such purposes and has chosen to put a lot of government data on this platform.

Original Source | Business Line 9 November 2016

"Beyond Books": 3-D Doodling Pens, 3-D Scanner and 3-D Printers

Hubbard library "Makerspace" features 3D-printing, virtual reality

A new "Makerspace" technology room at the Hubbard Public Library is the embodiment of library's tag-line, "Beyond Books."

The library has acquired 3-D doodling pens, a 3-D scanner and two 3-D printers. The printers generate objects using layers of biodegradable plastic in various colors. Makerspace also features technology that will allow users to explore robotics, computer programming and networking.

The mission really is providing free and easy access to information," said Lorena Williams, Hubbard library director. "[It's] inviting people in to explore and create and learn. This is the wave of the future. It's where libraries and technology meet."

Source | <http://www.vindy.com/>

Are libraries going the way of Blockbuster Videos and telephone booths in this digital age? No - Libraries will keep important roles

No, not if they enhance their basic mission with new ways of fulfilling that mission.

That is what the libraries of Berkshire County must do and are doing, as represented by the Lenox Library (Eagle, Nov. 4). The library, housed in a beautiful downtown building, has come through a controversial management change, triggered by reasons that remain unclear, and according to Richard Taylor, outgoing president of the Board of Trustees, has dug itself out of a deficit and is now breaking even financially.

A library's basic mission of collecting books to be read for knowledge, research or pleasure hasn't changed. The demise of the printed book - along with the demise of newspapers and magazines - has long been forecast but is not imminent. People will read books on Kindle and other tablet devices and they will listen to electronic readings of books, but sitting down with a bound copy of a book has been a pleasure for centuries and remains so.

Libraries, of course, must embrace modern technology as well, and Berkshire libraries, like the Lenox Library, have added computer technology to enable patrons to engage in the kind of research that goes beyond the Dewey Decimal System. An online presence is necessary in essentially every field, and the Lenox Library has worked to build its online offerings.

Technology can be isolating, and one of the strengths of libraries is that they bring people together, whether it is to use a computer or sit in a comfortable chair and read a good book. More and

more, libraries are town hubs, and they have branched out to host various organizational meetings and invite speakers on a variety of subjects of interest.

Every library in every Berkshire community is important to that community. Advances in technology won't make them any less important and should in fact make them even more valuable to county towns and cities.

Source | <http://www.berkshireeagle.com/>

Learning & Development UK and India announce educational tie-in

By Part of a statement from The Rt Hon Theresa May MP and Foreign & Commonwealth Office Joint statement between the governments of the UK and India, Prime Minister Theresa May and Prime Minister Narendra Modi set out a bold vision for the India-UK Strategic Partnership. Celebrating culture and education and promoting skills

The two prime ministers noted that 2016 is the India-UK Year of Education, Research and Innovation and welcomed the further investment (£20m) in the UK-India Education Research Initiative (UKIERI) to 2021, creating 50 new partnerships in 2017.

Both prime ministers welcomed first 35 UK faculties visiting India under the Ministry of Human Resource Development funded GIAN programme and 198 new GREAT scholarships for Indian students to study at 40 UK universities. Both leaders welcomed the first batch of TCS sponsored UK interns, under the Generation UK-India programme.

<http://www.thecsuite.co.uk/>

CVC asks HRD Ministry to include anti-graft lessons in text books

A team of representative from the CVC, HRD Ministry, CBSE and NCERT are said to be working out the necessary modalities.

The Central Vigilance Commission has asked Human Resource Development (HRD) Ministry to include lessons on

anti-corruption in text books so that school children can be made aware about the detrimental effect of graft. The Commission has taken up the matter with the Ministry and an exercise is underway to include contents related to integrity and ethics in students text books.

Source | <http://indianexpress.com/>

Are we doing enough to create the best learning opportunities?

The experience from other countries suggest that it will require a carefully designed teacher-education program that develop aspiring pre-school teachers over a period of 2-3 years before they get professional certification that qualifies them to teach and care for preschool children.

And that is something we hardly demand – perhaps it's time?

Daily News Analysis 8 Nov. 2016

Rediscovering repositories of heritage

Often considered dull and uninviting, Indian museums are storehouses of history and culture, and deserve repeat visits says Shailaja Tripathi

e don't go to museums. We prefer malls, cinema halls and restaurants. Visiting a museum is best left to schools, which make it mandatory. After all, it is an academic exercise. And what entertainment can these places possibly offer? I agree that India doesn't boast of the greatest museums, but you can't doubt the collection of artefacts in these repositories of heritage even for a second. Our eventful history has bequeathed us numerous masterpieces, but unfortunately, we don't find them compelling enough. Cultural historian and museologist Jyotindra Jain says that the habit of going to museums has just not been inculcated in us.

Strangely though, during overseas trips, Indians enthusiastically visit The Louvre

(Paris), Victoria and Albert Museum (London), Tate (London), Museum of Modern Art (New York). While a few of them offer free admission to visit their permanent collections, visitors are charged for special exhibitions. At The Louvre and MoMA, tickets are priced at 15 Euros and \$25, respectively. Back home, one of the best museums of the country, National Museum in Delhi, charges a mere Rs. 20.

The Hindu 5 November 2016

Rewritable material could help reduce paper waste

Source: American Chemical Society

Even in today's digital age, the world still relies on paper and ink, most of which ends up in landfills or recycling centers. To reduce this waste, scientists have now developed a low-cost, environmentally friendly way to create printed materials with rewritable paper.

Their report on the material, which is made out of tungsten oxide and a common polymer used in medicines and food, appears in the journal *ACS Applied Materials & Interfaces*.

The U.S. has been working to reduce paper waste by increasing recycling efforts for years. According to the Environmental Protection Agency, more paper is now recovered for recycling than almost all other materials combined. This saves energy, water, landfill space and greenhouse gas emissions. But even more waste could be avoided if consumers could reuse paper many times before recycling or trashing it. So far, however, such products under development often are made with toxic, expensive organic dyes. Ting Wang, Dairong Chen and colleagues wanted to come up with a better solution.

[| https://www.sciencedaily.com/](https://www.sciencedaily.com/)

The Factory model of Education - Like advanced nations, India must delink classroom teaching from student learning

The objective is not to teach to the student, which happens through classroom contact, but to make the student learn, which can happen outside classroom contact too.

At every discussion on education and/or innovation, there is a standard refrain. The education system makes students risk-averse and kills innovative thinking. By forcing students to conform to a standardized template, it discourages failure and thereby discourages deviation from the standardized average.

The refrain is indeed true. Several ingredients result in the outcome the refrain describes, beginning with entry into the education stream at the pre-school level. Let me focus on only one element of that maze — higher education, and within that, on one small aspect. How many hours per week, on average, does a student spend in attending lectures? The answer will be a function of country, course and level of higher education.

[| http://pralhad-fyilibrarian.blogspot.in/2016/10/the-factory-model-of-education-like.html](http://pralhad-fyilibrarian.blogspot.in/2016/10/the-factory-model-of-education-like.html)

Technology is not here to take our jobs

Historical precedents point to technological disruption creating more jobs than it destroys.

Jack Ma knows a thing or two about technological innovation and disruption. The founder and executive chairman of Alibaba Group has built it into the world's fifth-largest Internet company by revenue. In a letter to shareholders earlier this month, he had this to say: "Throughout history, technological disruptions have followed similar trajectories: 20 years of technological disruption followed by 30 years of further rapid change as new technologies are applied throughout society. The Internet revolution is a historical inflection point, much like when electricity was introduced, and it

may have an even greater impact.”

This is in keeping with the commentary in recent years on the rapidly evolving technological—and consequently, economic—landscape. Later in the letter, however, he displays an optimism that runs counter to much of the analysis of the potential impact of those changes: “In 20 years, we hope to...empower 10 million profitable businesses and create 100 million jobs.”

<http://pralhad-fylibrarian.blogspot.in/2016/10/technology-is-not-here-to-take-our-jobs.html>

Libraries provide free access to information: Hamid Ansari

New Delhi, Oct 26 (IANS) Vice President Hamid Ansari on Wednesday said libraries still continued to play a central role in providing open and free access to information and ideas despite the explosion of information now being produced in digital form.

Ansari was speaking after inaugurating the 19th National Convention here on Knowledge, Library and Information Networking (NACLIN 2016) organised jointly by Tezpur University and Developing Library Network (New Delhi).

“With the advent of the internet, the library is no longer a physical place, but has been transformed into a placeless resource. Despite this paradigm shift, it remains true that libraries continue to play a central role in providing open and free access to information and ideas,” Ansari said.

[Access Point | http://pralhad-fylibrarian.blogspot.in/2016/10/libraries-provide-free-access-to.html](http://pralhad-fylibrarian.blogspot.in/2016/10/libraries-provide-free-access-to.html)

Leading STEM Publisher Launches Open Access Platform

New Rochelle, NY, October 17, 2016—**Mary Ann Liebert, Inc., publishers,** announces the launch of its **LiebertOpenAccess.com** platform, featuring the company’s open access

publications and services in one online destination. Using the latest technology, **LiebertOpenAccess.com** offers an intuitive interface and tools to help researchers discover free, open access content and explore the Liebert Open Access publishing services.

The robust **LiebertOpenAccess.com** search feature allows researchers to discover open access content published in Mary Ann Liebert, Inc. peer-reviewed journals. This functionality ensures that researchers will discover and read important articles from all areas of scientific research and medicine. Additionally, users can browse highlighted open access articles published daily, read blog posts, and peruse a portfolio of fully open access journals. The platform provides useful information on open access publishing including Creative Commons licensing, research funder policies, and helpful details about writing and submitting articles for publication.

[Access Point | http://pralhad-fylibrarian.blogspot.in/2016/10/leading-stem-publisher-launches-open.html](http://pralhad-fylibrarian.blogspot.in/2016/10/leading-stem-publisher-launches-open.html)

Model libraries to come up in schools where award-winning teachers serve

The State government has decided to reward award winning teachers by building model libraries in their schools. The department of libraries will set up the libraries in 20 primary schools and 10 high schools across the State, in which state-level award winning teachers serve.

They include five primary schools and two high schools in each of the revenue divisions of Bengaluru, Mysuru, Belagavi and Kalaburgi.

As per plans, the district library will set up a book bank in the school. The school

management and development committee will hand over a room in the school premises for the library. Wherever necessary, the Gram panchayat library will be shifted to the school.

The Hindu | 6 November 2016

Create a library of sounds from all over India - This audiophile is in search of the sounds of India

I began closely observing the sounds I heard around me and became very interested, feeling a deep sense of connection to what I do," says 25-year-old sound designer Raj Kumar. After finding this calling, he didn't have to think too much about what he wanted to do. He graduated from Dr GRD College of Arts and Science, Coimbatore with a Visual Communication degree. There he learnt the basics of sound designing while working on his friends' short films.

Since then, Raj has done more than 30 short films and assisted a senior sound designer in feature films for more than two years. Recently, his debut as an independent sound designer also took flight with the latest Malayalam hit Aanandam, "Even though it was my first film, I had great support and freedom from the entire crew," says Raj, sharing his experiences from the sets.

He says that he has a dream to create a library of sounds from all over India. "India has a lot of rare and unique sounds. Normally, the native sounds of Himachal Pradesh wouldn't be heard anywhere else in the world. My dream is to create a library of such rare sounds from all around India," explains Raj.

He is dedicated to this dream to the extent that he plans to keep adding to the library until his dying breath. He says, "It's also a kind of spiritual sound trippin', what I do with my travels, being in places like Varanasi, Haridwar, and recording the sounds and hymns around me."

<http://www.newindianexpress.com>

Google ties up with ASI for virtual tour of monuments

Google has tied up with Archaeological Survey of India (ASI) for 360 degree virtual tour of 280-odd monuments across the country, an official of the tech giant said.

"We have a tie-up with ASI for 360 degrees virtual tour of 280 monuments across the country of which 30 are in West Bengal," Sanket Gupta, programme manager of Google Maps told reporters here today.

He said ASI had given the permission to Google for creating the virtual tour, which would be available in the maps.

Link | <http://pralhadfyilibrarian.blogspot.in/2016/11/google-ties-up-with-asi-for-virtual.html>

IT@School connects 15,000 Kerala schools on wiki platform

IT@School, a Kerala government initiative to impart IT education in schools, is bringing in 'School Wiki' on the lines of Wikipedia, with an aim to promote knowledge generation and sharing among school students and teachers in the state. IT@School officials here said the revamped 'School Wiki' would be ready by November 1, the state formation day.

Made entirely in Malayalam, School Wiki features a unique content collection jointly undertaken by the students and teachers in 15,000 schools from class 1 to 12 in the state, besides alumni and public.

<http://pralhadfyilibrarian.blogspot.in/2016/11/itschool-connects-15000-kerala-schools.html>

Learning Delight is using modern technology to make the process of learning fun for both students and teachers

Technology and education are a great combination if used together with the right reason and vision. But the sad reality is that technology is touching only urban lives. Lack of teachers, lack of interest, poverty, gender discrimination, lack of infrastructure and old methodologies of teaching are some of the reasons which are holding back progress in rural education.

Learning Delight, a start-up in the rural education space, is trying to change this. It is leveraging modern technology to make the process of learning fun for students and teachers in rural and semi-urban areas. Starting with five schools four years back, it is currently functional in over 8,000 rural government schools spread over 11 districts of Gujarat. "The most unique feature is that it starts at the bottom of the social pyramid, targeting the rural and semi-urban areas," says Harshal Gohil, founder, Learning Delight.

[| http://pralhad-fyilibrarian.blogspot.in/2016/11/learning-delight-making-process-of.html](http://pralhad-fyilibrarian.blogspot.in/2016/11/learning-delight-making-process-of.html)

International Forum on Adopting an ICT Perspective to Education and Learning being held in Delhi

An International Forum on Adopting an ICT Perspective to Education and Learning is being held here from October 31 to November 4.

The forum has been organised by International Bureau of Education (IBE), UNESCO in partnership with Google and in collaboration with the UNESCO International Institute of Technology for Education (IITE) in Moscow along with the National Council for Education Research and Training (NCERT) and the Ministry of Human Resource Development, an official press release said.

[Link | http://pralhad-fyilibrarian.blogspot.in/2016/11/international-forum-on-adopting-ict.html](http://pralhad-fyilibrarian.blogspot.in/2016/11/international-forum-on-adopting-ict.html)

How to spend the first hour of the workday for maximum productivity

Do stuff that matters, in the first hour itself

Let's divide work into two categories. There's work, and then there's real work. `Work' is email correspondence, and group meetings, and other tasks that are necessary, but don't meaningfully contribute to your professional success. Real work, on the

other hand, encompasses those bigger projects and tasks that help you achieve your goals and your organisation's. That is according to Laura Vanderkam, the author of several books on time-management and productivity, including most recently, I Know How She Does It. Vanderkam recently shared a practical tip for doing more real work and less `work'. Put simply, schedule a "power hour" first thing every morning, when you work uninterrupted on a top-priority project.

This isn't as easy as it sounds, especially when you arrive at the office to find your inbox overflowing and your boss on your case about a new assignment.

[Link | http://pralhad-fyilibrarian.blogspot.in/2016/11/how-to-spend-first-hour-of-workday-for.html](http://pralhad-fyilibrarian.blogspot.in/2016/11/how-to-spend-first-hour-of-workday-for.html)

No infringement of copyright on Photocopy of copyrighted study material for educational activities

Brief of the case:

The Hon'ble Delhi HC in the above cited case held that the making of photocopies by the defendant No.2 University will constitute infringement of copyright within the meaning of Section 51 and the photocopies so made constitute infringing copy within the meaning of Section 2(m). However, the photocopying the selected or even substantial parts of purchased books by the University to be used by the students and teachers in educational activity shall not be infringement of copyright as per Sec 52(1)(i).

[Link | http://pralhad-fyilibrarian.blogspot.in/2016/11/no-infringement-of-copyright-on.html](http://pralhad-fyilibrarian.blogspot.in/2016/11/no-infringement-of-copyright-on.html)

American library which will now be known as Dosti House

The library reopening with spacious facilities will now be known as Dosti House

Dharavi Rocks, a rock band of Dharavi ragpicker's children started performing inside the premises of American library on Wednesday. It has opened its door for community events from September

21. The library situated inside the US Consulate General in Bandra-Kurla Complex has reopened after five months for book-lovers, with a twist. Besides the books and e-resources, Dosti House shall now accommodate small community events.

This place is a center for Americans and Indians to connect in order to learn and develop new ideas. Earlier, the books were the centre of attraction inside this library but now on, apart from the books, people will also be joining in."

Talking about the new technology and facilities provided in the library, Consulate's Acting Public Affair Officer, Heidi Hattenbach said, "The books are arranged in the sides while there is open space in the middle which can accommodate around 100 people to have various interactions and other public interest events. We have arranged facilities like the new iMac computers, Audio-Video system and a performance stage to name a few." Expressing her view, the library director, Sushma Karnik said, "The library receives footfall of over 100 people every day. To book an event people can get in touch by mail. We will be happy to welcome and organise various community events which interest the public at large. The events to be organised are free of cost."

Source <http://www.dnaindia.com/mumbai/report-band-performs-inside-american-library-2257525>

Success is achieved by those who are not ready to quit

Our mind is like a bank. Each day we deposit thoughts in this "locker"; it grows and becomes our memories. Always put good thoughts in your mind, which not only keeps our body functioning right but also boosts our confidence. Destroy all negative thoughts before they are deposited and later become mental monsters.

It is our attitude that shapes our future. When our attitude towards ourselves is high, we attract big and positive responses. Hard work and dedication is the price we have to pay for success. Victory or loss is only secondary to this,

because what matters is whether or not we have given our best to the task at hand.

We should always try with a positive attitude because that is what will make us stronger. We should also remember that when things do not go our way, or seem frantic, it is not the end. We should keep hope that better things await us. We should always be focused on the goal we set for ourselves and also be prepared to struggle in order to reach that goal.

Henry Ford decided to develop the now famous motor known as V-8. He wanted to build an entire eight-cylinder cast in one block. He instructed his engineers to produce the design. Though it was impossible to cast an eight-cylinder gasoline engine block in one piece, Ford's vision was clear about his demand. With dedication and optimism this was achieved, and thus was produced one of the most spectacular engines in history.

Success is achieved and maintained by those who keep trying. The journey towards success probably be full of pain, hard work and discouragement, but in the end the successful are rewarded.

Source | Hindustan Times | 21 September 2016

Libraries 2016

Trends in visiting public libraries have steadied, and many Americans have high expectations for what their local libraries should offer. Most Americans view public libraries as important parts of their communities, with a majority reporting that libraries have the resources they need and play at least some role in helping them decide what information they can trust. When asked to think about the things that libraries could do in the future, notable numbers of Americans respond in a way that can be boiled down to one phrase: "Yes, please."

Public libraries, many Americans say, should offer programs to teach people digital skills (80% think libraries should definitely do this) and help patrons learn

how to use new creative technologies like 3-D printers (50%). At the same time, 57% of Americans say libraries should definitely offer more comfortable places for reading, working and relaxing.

Complete Report
| http://www.pewinternet.org/files/2016/09/PI_2016.09.09_Libraries-2016_FINAL.pdf

Lessons beyond the classroom

Kalam Libraries all over India including Gujarat, Delhi, West Bengal, Tamil Nadu, Karnataka and Uttar Pradesh

Author Srijan Pal Singh begins his book *What Can I Give: Life lessons from My Teacher* by saying, "Throughout the rest of 2008, and till my graduation from IIM-A in April 2009, I was in regular touch with Dr Kalam over email and occasional phone calls. We would discuss the topic that we had chosen for research during class — Providing Urban Amenities in Rural Areas (PURA)." Srijan's inspiration behind the book is to bring forth the values of Dr Kalam as seen from the inside — and let readers discover what made him the person we adore.

His philosophy of always asking — 'What Can I Give' inspired the title and much of the content of the book. "His humility, impeccable dedication to integrity, and his ability to let go of short term opportunities for lifelong values influenced me the most. It is a composition from personal experiences I had with Dr Kalam — working with him, learning from him while travelling to many different places across the world," states Srijan.

Dr Kalam always gave a mission to everyone — that of a home library. "He made people take an oath about this — and stressed on the emphasis of it. He told the youth about the importance of reading. His philosophy was that a great society is built upon knowledge-driven citizens. Hence, to take forward his mission to give every youth access to the best of books, my team and I started the Kalam Library Project.

An ardent believer of Kalam's works, Srijan has penned three books with Dr Kalam. Talking about his three books, he adds, "Target 3 Billion (Penguin, 2011) is based on our research work on rural development and innovative solutions to address issues of poverty across the world. Roughly half of the world (3 billion people) is living in moderate or extreme poverty, hence, the name of the book. Reignited (Penguin, 2015) was targeted towards younger readers. It was an account of how the world will shape in terms of science of technology, and how can the youth position their careers in a changing world. Advantage India (2015) was Dr Kalam's final book. It was an account of our ideas on the path India needs to take in its quest to become an economic superpower and a socially equitable nation."

Source | <http://www.asianage.com/life-and-style/lessons-beyond-classroom-521>

Civic school teachers with a mission for quality education!

Rajesh D. Bujad, Principal, Bajaj Road BMC Marathi School, Kandivali West A teacher for the past 24 years, Bujad goes from Aurangabad, Pune, Latur to Karnataka and Tamil Nadu in search of the best ways to teach children in his school. His school is one of the 200-odd BMC schools in the city which have started using the activity-based learning method of **teaching children**.

His chamber has a stock of materials needed for teaching in this method called 'constructivism'. "We teachers mostly spend from our own pockets for getting these materials," he says pointing to jars full of colourful beads of different shapes and colours. He has also made a blog which is useful for **teachers**. Called 'Brihanmumbai Mahanagar Palika Shikshak Mitra', in the two months since the blog has gone online, it has seen 5,000 visitors. It guides fellow municipal school teachers on how to keep records – the municipal schools lack clerks, and teachers have to carry out administrative work in addition to their primary duty of teaching.

A section in his blog guides teachers about the toys to be used to teach children. A recipient of last year's **Mayor's Award** given to model teachers, Bujad is continuously experimenting with technology to develop new ways to teach children. Showing an app in his phone, he says, "I have made all teachers in my school to download such apps in their phone. This app can be used to teach children to write letters," The app works like a slate, only children use their fingers to write the letter, instead of a chalk!

Thinking why municipal schools should lag behind in adopting e-learning methods as compared to private schools, Zeeshan Sheikh took an initiative to start a digital classroom in his school. The children now learn through power-point presentations and videos. They also record their poem recitals. Explaining the difference between the virtual classrooms that many BMC schools already have and a digital classroom, Zeeshan said, "Virtual classrooms are handled by a third person, children can listen to telecasts or interact using a microphone, but in a digital classroom children can create their own media. My children have started showing more interest in projects after the facility."

Source| <http://www.freepressjournal.in/mumbai/civic-school-teachers-with-a-mission-for-quality-education/927010>

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Asian Age | 13 September 2016

DNA is the future of data storage

Some 50 years from now, optical, magnetic and flash drives will become obsolete and deoxyribonucleic acid (DNA) will be used for large-scale data storage. In July 2016, a team from Microsoft Research and the University of Washington along with Twist Bioscience, a San Francisco start-up, reached a milestone by **successfully storing 200 MB of digital data in DNA**. The size of

this synthesized DNA containing data was comparable with the tip of a pencil. DNA possesses some of the attractive properties important for storing data, firstly, it is very stable; synthetic DNA can remain intact for thousands of years. Secondly, DNA is never going to become obsolete as it holds blueprint of the living system. Thirdly, it has high packing density — **1 kg of DNA is enough to store all the data available in the world**.

DNA consists of nucleotides, and each nucleotide, in turn, contains a phosphate group, a sugar group, and a nitrogen base.

The concept of storing data is not new to DNA. In fact, much before the advent of semiconductors, DNA has been carrying genetic data for generations. The only difference is in the format of data. DNA carries data in form of sequence of nitrogen base pair, for example, GATCAG, whereas semiconductors carry data in form of binary digits, for example, 11010.

Let's **understand the mechanism**. Suppose we wish to store an image in DNA. The image is broken down into pixels. The brightness value of each pixel, available in form of binary number is uniquely mapped to nitrogen base pair sequence, for example, 11010 is mapped to GATCAG. Once the complete DNA map is ready, DNA can be artificially synthesized in a laboratory. This process is analogous to writing data in DVD. Once synthesized, DNA can be stored in test tubes for hundreds of years. When we wish to retrieve the data we just have to read the synthesized DNA using a DNA sequencing machine. This process will generate the exact sequence of base pair, which can be translated back into binary data and, in turn, the image can be regenerated.

But, there are few bottlenecks too, semiconductor memories read and write data in microseconds and they are very economical, on the other hand, **encoding and decoding data in DNA is a complex task, it requires more time and money**. In 2013, researchers

at European Bioinformatics Institute (EBI), Hinxton, UK estimated the cost of encoding and decoding data in DNA as \$12,400 per MB and \$220 per MB respectively. Of course, the cost is high when compared with conventional semiconductor memories, but technology is rapidly advancing and cost of DNA synthesis is falling.

About 2.5 quintillion bytes of data are generated every day. While storing data in digital format is easy, data archival is a complex task requiring continuing maintenance and regular transferring between storage media. Ideally, **DNA provides an alternative to conventional semiconductor for secure and long-term data storage.**
The Hindu | 5 September 2016

Mobile access scheme for remote areas soon

More than 55,000 villages will be covered under the plan.

The government will soon unveil a new scheme to provide mobile phone access to over 55,000 villages, particularly those in Border States and in the Himalayan region, to push forward its flagship Digital India programme.

"We are formulating a scheme for making 56,000 villages connected. The scheme will be funded by the Universal Service Obligation Fund (USOF)," a senior telecom ministry official said on condition of anonymity.

The USOF, which is maintained by the government, was formed to help fund projects to boost connectivity in rural areas. The money for this fund comes through a 'Universal Access Levy,' charged from the telecom operators as a percentage of various licenses fees being paid by them.

Fund disbursement

Last month, Telecom Secretary J.S. Deepak had said that about Rs.10,000 crore will be spent in the current financial year from the USO Fund to

execute various digital infrastructure projects to boost connectivity in rural areas. In the last fiscal, about Rs.3,000 crore was spent from the USOF.

The official added that another scheme — funded by the USOF — to connect Left wing extremism (LWE)-affected areas in ten identified states in on the "verge of completion." "Together, these will help take forward the Digital India drive."

As on date, the total available fund in USOF is more than Rs.47,411.56 crore. The total collection since the scheme was started in 2002-03 stands at about Rs.78,587.31 crore, while total amount disbursed for various initiatives to boost rural connectivity is about Rs.31,175.75 crore, according to government data.

No coverage

As per official data about 4,700 villages in Himalayan States (Jammu & Kashmir, Himachal Pradesh and Uttarakhand), and 2,138 villages in Border States (Rajasthan, Gujarat, Punjab and Haryana) are not yet connected.

Further, 5,41,939 villages out of total 5,97,608 villages in the country are already covered with mobile services, leaving 55,669 villages, i.e., 9.31 per cent, without coverage.

The Centre is also in middle of executing the Bharat Net project which aims to connect all of India's households, particularly in rural areas, through broadband by 2017.

The Hindu | 4 September 2016

Varsities must transit to knowledge system: UGC chief

University Grants Commission (UGC) Chairman Ved Prakash on Thursday called on universities to graduate from the 'learning system' to 'knowledge system' to compete at the global ranking level.

During his inaugural address at a two-day national conference on 'Distance Education in India: Emerging Challenges and Prospects,' held in Puducherry on

Thursday, Mr. Prakash said that most of the universities fell under the learning system, which implied that knowledge created elsewhere was translated and certified on the campuses of the universities.

"But, we need to graduate from the learning system to knowledge system to create new knowledge, besides disseminating and certifying this knowledge," he said.

Mr. Prakash underlined that global ranking system had become the seal of approval for quality. At a time when none of the Indian universities figured in the first 100 in the global ranking, the UGC Chairman said: "There are questions as to why Indian universities are not in the first 100 in the global ranking".

Mr. Prakash underlined that even at the national level, the institutions were under pressure for the assessment and accreditation of NAAC and the National Board of Accreditation (NBA) and National Institutional Ranking Framework (NIRF).

ODL system

Talking on the Open and Distance Learning (ODL) system, Mr. Prakash stated that there was trust deficit among people due to some players in the system.

"The resources that are generating through the ODL programmes by way of carrying out massive recruitment of the students are not used for improving the ODL material or the quality of instructional material or faculty development. In many universities, the resources that are generated through ODL programme are used to run the regular programmes of the university because they are not getting adequate support from the state. Therefore, we are suffering from several of problems," he said.

Staff shortage

When asked about the shortage of faculty in Pondicherry Central University, he said that the UGC had sanctioned the

requisite number of posts and it was up to the university to fill up the posts.

The Hindu | 9 September 2016

Today's college library isn't all about the books

With so much online, OSU-Cascades pared down its collection

There's private study rooms, access to online academic journals and a librarian on hand to help you find what you need.

What's missing: The stacks and stacks of books.

When OSU-Cascades asked students what they wanted out of their college library, they said a quiet place to study or work in small groups. Less important to them were the actual books.

So, when the new OSU-Cascades campus on Chandler Avenue opens later this month, it won't have a traditional library. Instead there will be what's dubbed the "learning commons," which will house tutoring services, computers, study space and a small collection of books.

"Since we are doing so much with this one building, Tykeson Hall, we had to be incredibly efficient with the footprint," said librarian Sara Thompson. But not every book was being used. The ones that had been checked out at least five times in the past few years made the move to the new campus; that was about 500 books. Ones that had not been checked out as often stayed behind.

The learning commons also contains a collection of textbooks and materials that will be used in courses this term. And OSU-Cascades students have access to Oregon State's online collection of ebooks, databases and academic journals.

This model — small collection on site, access to information online or materials off site — is common, said Irene Herold, president of the Association of College

and Research Libraries and university librarian at the University of Hawaii at Manoa.

"I would say students still need a library space; it just has a different purpose now," Chadwell said.

That includes having a librarian on hand to help students find, verify and properly cite information online.

"A lot of what librarians, especially at small campuses, do is focus on information literacy skills," Herold said. "That's the key. Without that I think it would be a large study hall."

"So much of library work is technology-driven. Do we need a maker space, a digital lab?" she said, noting other libraries have cameras, tablets, even 3-D printers for patrons to use. "It's a little bit of hurry up and wait and see."

Source| <http://www.bendbulletin.com/localstate/4641770-151/todays-college-library-isnt-all-about-the-books>

Govt relaxes norms for PhD through open universities

NEW DELHI: Open universities, including the Indira Gandhi National Open University (IGNOU), will now be able to offer distance education PhD courses after the University Grants Commission (UGC) allowed them a relaxation for offering non-technical courses.

Source | Hindustan Times | 31 August 2016

Accelerating the impact of digital learning in India

We have to develop an overarching regulatory mechanism to facilitate the growth of digital learning. The industry also needs to play an active role—it should have a say in curriculum, evaluations, accreditation

Has technology made a significant impact in the way our students learn? No. Does it have the potential to change

the learning landscape completely in the future? Yes.

Then why is it taking so much time? A number of possible reasons can be listed, including the cost, willingness, acceptance, fear of the unknown and regulatory challenges, among others. Ironically, this is happening in a country like India which has, over the last two decades, received the unique distinction of being the information technology capital of the world.

Why digital learning?

The use of best-in-class content, real-time learning and feedback methods, and personalised instructions to propel academic success form the basis of this form of learning. The resources, knowledge, tools and even access to the most celebrated teachers can now be shared with anyone rather than being a privilege of a selected few.

The key benefits

The benefits of technology adoption will be accrued to all the stakeholders. Beginning with the student, numerous researches have confirmed that experiential learning—in which one gets to touch and feel concepts/theories—has a far-reaching learning impact than normal classroom training.

The recall and grasping power of a human being goes up significantly if one gets an opportunity to learn a concept through experiencing it even digitally.

Second, gamification of academic content has already started to make its presence felt across the globe. We feel this tool can have a substantial impact on the mode of delivery of educational and vocational training.

Teachers can use technology to optimise their delivery, improve student retention, keep a channel of communication open with students, parents and the institution at all times, relearn and unlearn concepts, and strengthen peer network.

The progress so far

According to the 2015 report of UK-India Business Council, India's e-learning market is the second largest market in the world, after the US. It is expected to grow at a compounded annual growth rate of 17.4% till 2018.

Even though a number of programmes have been announced by the government, there is no separate agency to monitor and evaluate their success. Further, there is no mechanism for students to compare various offerings available in the market and analyse their fitment with their current requirements.

Therefore, given the potential of such offerings, the need of the hour is to develop an overarching regulatory mechanism to facilitate their growth and evolution.

The new ecosystem

Digital learning can open doors to tremendous opportunities for everyone. Teachers, peers, parents, experts, technology providers and employers can join hands effectively to provide a holistic learning experience. The interests and passions of the student are of prime importance; all other stakeholders act as facilitators. The physical classrooms can expand their horizon to join hands with real-life experts aligned with student's interests, with corporates through internships and innovation and training.

Social learning platforms provide another avenue for students to expand their horizon beyond the boundaries of academic institutions. Even a smartphone, which an average student touches over 2,000 times in a day, can become a mentor or coach.

One can improve her understanding of concepts, search for a professional tutor in her locality, study in a virtual classroom, conduct experiments, and undertake mock tests all through the touch of a button. Further, a student can up-skill herself by enrolling in various online courses.

We hope that all roadblocks are effectively tackled to ensure smooth transition into the new ecosystem. A

number of challenges (quality, access and inclusive growth) which our current education system faces will be automatically addressed through such an evolution. The author is director, Deloitte Touche Tohmatsu India LLP

Financial Express | 29 August 2016

LEADERSHIP— A SACRIFICE

Leadership is not dominance, it is a certain sacrifice. Leadership is not about ruling someone, it is about making someone's life. Leadership essentially means that you are capable of creating the necessary atmosphere for people to go beyond the limitations they have set for themselves. In the presence of a leader, people are able to do things they would not have imagined or done by themselves.

The very fundamentals of leadership are that you aspire to achieve certain things, and take people with you towards the goal. And for whatever reason if it does not happen, you don't become a bundle of frustrations. These qualities are most essential for leadership. If you have your own issues and concerns, you will never function to your full capacity.

Whatever sphere we are in, everyone is a leader in some capacity; it is only a question of scale. Whether you are managing and leading two people or one billion people, everyone is some kind of a leader. Any leader who does not feel a certain sense of oneness with the people around him, he cannot be a genuine leader.

A spiritual process is about wanting to know the depth of life. This is very essential for a leader because a leader faces constant challenges. Above all, it is most important that a leader is functioning at his optimal or highest level of potential. If you experience tension, anxiety, stress or anger, your body, mind and emotions will not function properly. When you are peaceful and joyful, everything functions well. It is also a medical reality today. Every doctor will tell you this is true. When this is a fact, it is extremely important that we provide our people with a leadership which is of a certain

quality—people who are in a certain state within themselves so that they function at their optimal level.

Every nation needs a focused and enlightened leadership, not a confused leadership. There was a time when in a society, a few people were spiritual and the rest of the people just went to them for blessings and sustained their lives. Today, with the tools of science and technology, we have brought ourselves to such a threatening situation that everyone in society needs to turn spiritual. Otherwise there is no survival for this world. With the kind of technology and capabilities we have, it just takes one fool to blow it up. And there any number of those fools standing in queue to get to the top.

Spirituality is no longer a fancy pursuit. It is an absolute necessity for our own survival and the planet's survival that every human being brings the spiritual dimension into his life. Unless some sense of oneness touches people, especially the leadership on the planet, self-destruction is a live threat.

Sceptics are quick to ask, "Is such a thing possible?" I want to tell them, do not think of the future of the world on the basis of existing realities. Existing realities on the planet can be changed, because existing realities do not take into consideration people's will and commitment. If only we can stir up what is happening in individual hearts, miracles are possible.

Sadhguru Jaggi Vasudev is the founder of Isha Foundation.

Source | Mint – The Wall Street Journal | 29 July 2016

Online skill initiatives

President Pranab Mukherjee has launched a single window platform to aggregate supply and demand trends in the Indian skill development ecosystem, referred to as the National Labour Market Information System (LMIS) www.lmis.gov.in. India Skills Online (www.indiaskillsonline.com), an online platform for learning skills of

choice has been launched to reach out to millions of job seekers.

The Labour Market Information System (LMIS) would consolidate, monitor and evaluate all skilling programs across ministries and agencies in the country. Through LMIS, the existing knowledge, systems, and technical expertise can be leveraged as much as possible, which would further avoid overlap of generated information and duplication of efforts.

LMIS brings together statistical (quantitative) and non-statistical (qualitative) information concerning labour market actors and their environment and generate key analysis and reports which can be used for various policy interventions by different government stakeholders, as well as by the industry at large.

With the introduction of Online Skill-learning environment, the whole nation potentially becomes a classroom. The audio-video graphical illustrations format will help internalize the concepts for the skill-seekers, faster and longer. Online, the hard skills are supported by soft skill learning opportunities that help candidates become more confident, presentable, professionals. Thus enabling them to become more aware, and better suited for the work environment of the day. The web skilling opportunities, come coupled with the convenience of learning and practicing the skill-nuggets with the convenience of a mobile app.

[| http://www.thehansindia.com/posts/index/Hans-Classroom/2016-07-18/Online-skill-initiatives/242860](http://www.thehansindia.com/posts/index/Hans-Classroom/2016-07-18/Online-skill-initiatives/242860)

CONGRATULATIONS

Mr. Pralhad Jadhav has received a Special Award –“Sh Sukhdev Singh Award” @ for Differently working LIS Professional in India announced by Compact Society for Social Welfare at New Delhi on 22nd October 2016.

For details please see--
ILA Newsletter Vol 32, No 10 2016.

