Is Online Education the Future of Education ?

Ms. Shilpa Indoria
PhD Research scholar at GLS University, Ahmedabad , Gujarat

Abstract

In the present technologically advanced world of 21st century, education has gone beyond the brick and mortar institutions. Students , find it easy to study at home and attend coaching classes online through web portals   like BYJUS or Khan Academy. Professionals, who find it difficult to enrich their degrees through certificate programs , find it convenient to attend online classes , appear for exams online and receive a degree certificate. Online education has carved its niche in the competitive exams also, like the prestigious IIT - JEE , which is conducted online throughout India. Online education has made it possible to reach students across the globe and make learning and teaching happen at a global level. The availability of digitized textbooks and notes across the websites, make it feasible for the students to align their learning at their own pace. Moreover, the ease of educational apps , which can be accessed anywhere , has made access to education on the tips of fingers.

With this technological revolution , which has churned out multitaskers, teaching and learning has also become less time consuming and more goal oriented. The need of the hour is to decide for whom , online education works best and how can the discipline of education be imbibed in online learners.

Key words : online, technology, digitized, professionals, global, teaching, learning

(Source : www.franchiseindia.com)
Introduction

Introduction

" The nature of online education is that it removes me, the instructor, from the center of learning process and allows the students to learn from me and one another."(Judith Mc Daniel – Creating community : Part 3- Hard conversations in an online classroom- Heart of darkness- 2016)

The accelerated economic growth and technological revolution has globalized education in India. Online education in India is defined as ' Learning modules which can be accessed by individuals through internet enabled devices.' [1]

Education is now not limited to closed classroom sessions, with a teacher giving a lecture to a group of 40-50 students. With the increasing number of internet users, online education has revolutionized education in India.

According to the prediction by ' The Future of Internet in India' report by Nasscom and Akamai Technologies , the number of internet users in India will be more than double by 2020. (R Chandrashekhar President, NASSCOM ; Sidharth Malik MD & Vice President, Akamai India, [2]2016, August)

India is now the third largest online market for education in the world. (Sweta Dash, Your Story.com)

1. Online Education Trends

Source : www.totaljobshub.in

1.1 Startups like Khan Academy , By JU's , Toppers Learning , have entered the education scenario by providing meticulously curated content of NCERT Textbooks , making the content in a self explanatory form , available to the student at the ease of their home.

   Online education provides an opportunity to continue education and build a career for   students who might face physical disability or are unable to pursue higher education due to financial constraints.

1.2 Udacity, well known online education portal, has created a ' nanodegree' programme specially customized for the Indian market with discounted prices and appropriate content. Up Grad, Embibe and Simplilearn are examples of online education portals which have carved a niche for themselves in mid-level professional courses.

1.3 Infact, online education will be a two billion dollar industry in India by 2021 (Google, KPMG report, 2017). Ronnie Screwvala launched Rs 100 crore online education scholarship fund. When asked about why he chose this scholarship to only cater to online education, Screwvala said that the offline model is

expensive and the capacity that can be taken by new universities is also limited to 3000-5000. [3]While UpGrad offers several courses to make individuals industry-ready, Screwvala said that the scholarship will be available for pursuing any credible online course. "Where is the trained faculty that can be attracted to join universities in smaller towns. The idea with online is unlike offline, one need not quit their job," he explained. (Ronnie Screwvala, 2017)

1.4 U.S. based Course Era has attracted an astonishing two million learners in India and is taking on 60,000 new learners every month- a scorching pace that surpasses that of its global platform .(Rajiv Rao, 2018, new Tech for Old India)

1.5   Mc Donald's has expanded its college tuition assistance program to eligible workers in all of its US stores. The benefits of an online education compared with an in-person education have been debated for years, notes Jamie Merisotis, president and CEO of the Lumina Foundation, which works to increase access to postsecondary education and helped Starbucks develop its program. But he noted that online programs have improved in quality, and they're a practical way for workers to earn degrees. (The Associated Press, 2015, The Morning Call)

2. Online education has paved a new trend for Massive Open Online Courses

 (MOOC) . MOOC is a free online course offered for an unlimited number of people via the web . [4]MOOC's provide interactive user forums to support community interactions among [5]students , professors and teaching assistants. The terms 'massive', 'open', 'online' and 'course' are defined in more detail below :

<div align="center">Defining Massive Open Online Courses [3]</div>

•M: Massive MOOCs are massive, in theory at least, because they provide unlimited access to courses i.e. anyone with an Internet connection who wishes to participate in a course can do so. The pedagogical model is tailored to accommodate a large number of learners in the sense that an addition of students does not necessarily imply an increase in teachers or student support. A massive number of students is planned for at the outset and during the design of the course.

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[2] www.moneycontrol.com

3. Source: Major and Blackmon (2016)

• O: Open The term 'open' is not so clearly defined. It can mean that the course

1) is free of charge, 2) accessible to anyone with adequate technology and/or 3) there are no enrolment restrictions (i.e. 'open' enrolment). In MOOCs, variations of these terms are possible, for example, when courses are offered for both credit seeking students and anyone else who is interested. Open can also mean open access which implies that some instructors intend for the course materials to be freely available to others to reuse and adapt. These courses and their materials tend to remain open and available after the course ends. Some MOOCs, however, specifically those offered through platforms such as Coursera and edX, are copyrighted and thus access to the course is often closed after its completion, and the materials are removed from public view. Thus there are variations among MOOCs as they relate to this concept of 'open' as well.

• O: Online MOOCs are offered online. That is, the course is delivered completely over the Internet, with no face-to face meetings, allowing students from multiple locations to access the course. Some instructors, however, have begun to offer what they call blended or hybrid MOOCs, in which students do part of the work on campus and other parts online.

• C: Course A MOOC is a course in the sense that it is a self-contained instructional unit with a content organised around a limited amount of information in a specified content area. A MOOC can last from a few weeks to a full semester or longer. In an MOOC there is a syllabus, and students typically engage with content and complete built-in assignments, assessments, and evaluations.

2.1 One such MOOC course is the Course in effective Use of Information and Communication Technology (ICT) delivered by IIT Bombay in collaboration with Next Education. (September, 2017)

2.2 The MOOC revolution began when Stanford University professor Sebastian Thrun offered a free artificial intelligence course online as an experiment. Around , 1.60,000 students from 190 countries enrolled for the course. Since then, Thrun's " Udacity" , has become a major online platform offering free courses in various subjects. (Simon Davies, 2016)

Massive Open Online Courses (MOOCs) have gained a lot of attention in recent years. Since their emergence in 2012, the number of registered users has significantly increased to 35 million students in 2015 up from an estimated 16-18 million in 2014 (Shah, 2015).

2.3 The credibility of such courses has increased in the recent years and even Ivy League Universities have begun offering online educational courses. Harvard University has recently launched an online course in Economics on EdX titled " From Poverty to Prosperity: Understanding Economic Development" (www. Huffingtonpost.com, March 2017)

2.4 Future Learn already awards degrees from various colleges, including University of Leeds, University of Birmingham , Queensland University of Technology , RMIT University. Sir Alan Langlands, Vice-Chancellor of the University of Leeds, said: "The University of Leeds is very proud to be the first Russell Group University to launch a credit bearing online course on the FutureLearn platform. It signifies our on-going commitment to widen access to higher education and desire to offer flexible and inclusive education, and showcases our excellence in research-based learning." (about.futurelearn.com , Luke Nava, 2016)

2.5 Professor Neil Morris, Director of Digital Learning at the University of Leeds, said: "FutureLearn is an important partner in our ambitious digital strategy for student education at Leeds. We are making extensive use of the platform to offer higher education to anyone with access to the Internet and to extend the learning opportunities for our campus-based students." (about.futurelearn.com , Luke Nava, 2016)

Starbucks covers four years of tuition reimbursement for workers to earn an online undergraduate degree from Arizona State University . Starbucks is planning to foot part of the bill for an online bachelor's degree for U.S. employees who work at least 20 hours a week in its cafes, corporate offices and roasting plants.

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The coffee giant is teaming up with Arizona State University to provide tuition reimbursement and financial aid to U.S. employees who enroll in the school's online bachelor's degree program. (Julie Jargon and Douglas Belkin , June, 2014, The Wall street Journal)

2.6   EdX is set to launch a project with the Arizona State University where online course units will count towards a full degree. "We're proud to welcome ASU as an edX Charter member," said Anant Agarwal, edX CEO. "ASU has established itself as a new model for the American research university with a

focus on inclusion and global thinking. This partnership delivers on the founding mission of edX: the promise to transform education while increasing access to high-quality learning. As with other innovative technologies in the digital space, so too will the Global Freshman Academy change the educational opportunities that will help people transform their lives."

The program differs from other digital immersion undergraduate programs in the following ways:

Course Credit for Open Online Courses – By completing the full series of eight Global Freshman Academy courses, students earn full college credit for freshman year; students will also be able to opt for taking individual courses for credit if they prefer.

Cost Effective – Freshman year credit earned through the Global Freshman Academy is a fraction of the cost students typically pay.

Learning Before Payment – Students may decide to take a course for credit at the beginning or after coursework has been completed – reducing financial risk while opening a pathway for exploration and preparation for qualified students who may not otherwise seek a degree.

Unlimited Reach – Because of the open course format, learning takes place while scaling completely – there are no limits to how many learners can take the courses online.

Innovative Admissions Option – The Global Freshman Academy's approach is different from the traditional admissions process of other credit-bearing courses, eliminating such barriers to entry as standardized tests and transcripts that are part of the traditional application process.

Track Record of Success – This partnership brings together a globally recognized online educational platform founded by Harvard University and the Massachusetts Institute of Technology with a university whose innovative online degree programs boast an 89 percent retention rate. (source : www.edX.org, 2015)

3. **Online Education: Pros and Cons**

The decision to pursue an online education course depends on the preference of the student . Online education is well suited for students who prefer to work at their own pace and are self directed . According to Dorie Clark (2017, Harvard Business School) " It's important to understand how you learn best , which

will differ from person to person . Understanding your optimal learning environment will enable you to make better choices, so you don't waste money on an expensive in person program or an online course.

Dhirendra Kumar from North Carolina State University Raleigh,   opined that [46]

Online Education Pros can be divided into

• Convenience

• Less Expensive

• Technology

Online Education Cons can be divided into four groups

• Limited Social Interaction

• Technology Cost and Scheduling

• Effectiveness of Assessments

• Problematic for Instructors

3.1 **Interaction** : A major feature of online education and traditional education is interaction. As compared to traditional learning where constant classroom discussions are conducted and the learner is physically a part of these discussions, on the online learning platform, the learner can either learn in isolation or connect globally , across the world and participate in online discussions and forums.

3.2 **Self Paced Learning** : Online education provides you the convenience of learning at home , so you can devote more time to fruitful self directed learning and can finish your course at your own pace. However, it is easy for the student to put off assignments and become disorganized , when there are no direct instructors to check in person.

3.3 **Scalability** : In a traditional classroom , the reach of the tutor might be limited to a few hundred students , but with an online classroom, scaling up the course batch size is a few clicks away.

3.4 **Global Outreach** : Online courses make education a universally available resource. People currently in the work force can pursue their academic interest while sticking to their work schedules.

Here, is a real life account of how online education is improving lives in India: Dr. Balesh Jindal works as a physician in one of India's small towns . She took the social psychology course offered by Wesleyan

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[4] Pros and Cons of Online Education by Dhirendra Kumar North Carolina State University Raleigh, NC October 2010

university on Course Era. For the course's final ' Day of Compassion' assignment , she decided to make an effort to address sexual violence in her community . She visited a local school and spoke with more than two thousand female students about inappropriate touching and how to report incidents of abuse . She was so moved by this experience that she decided to make this outreach a regular part of her routine.

This essentially says that there is going to be a big future of online education in India, but it definitely has a long way to go. (Sweta Dash, Yourstory.com , 2016)

4. Challenges ;

(Source : *JEFF PACHOUD/AFP/Getty Images)*

Professor Koller , speaking at an educational technology conference in London, said the next stage for online learning would be leading universities offering mainstream undergraduate courses online, with invigilated exams and full degrees. (Sean Coughlan, 2016)

Most of the online courses have been short units that give students a certificate , rather than a degree or credits towards a degree.

Three of the most pressing critiques of an open learning system are :

(a) lack of an effective system to measure and validate the progress of the learners, (b) how to integrate the course credits into the present system so that it counts towards a degree from a college

(c) how do you ensure personalized guidance and mentorship.

The first part is currently being tackled by various MOOC providers. The idea is to have periodic assessments that actually test whether the students have understood the concepts. The key challenge would be to come up with a system wherein the answers are easy to check (multiple choice questions or variants thereof) and also not easily "Google-able".

Coming to the second part, a few Universities have started launching their full-fledged courses online or allowing certain validated MOOCs to contribute credits to their physical courses.

The final issue is the one where a viable solution needs to be found. And quickly. A big plus of a physical learning system is that the teacher gets to know their students - their interests, their strengths, and their aspirations, enabling them to provide nuanced feedback and engage with them more fruitfully. The same model cannot be scaled up for an online course being taken concurrently by thousands of students. May be having a 3-tier pyramid structure with the course professor on top, the students on the bottom, and a middle layer of teaching/research assistants, or doctoral students can help bridge the gap for the time being. (Deepak Mehta,Quora, The Future of MOOCs, May, 2017)

5. Scope of Online education :

John Uebersax, Director, Californians for Higher Education Reform mentions on Quora that the future of online education in India is "**Unlimited**".

He adds, *"The key is to make 'diploma discrimination' — i.e., where employers require degrees from established colleges — illegal. Employers should base hiring on what a person knows, not how or where they learned it. Compulsory accreditation of universities is part of the problem. This is mainly a scheme whereby established institutions limit competition. One current danger (at least in the US) is that greedy corporations are trying to monopolize the online education market. If they have their way, people will be required to take classes from 'accredited' online programs."* (State and Scope of online education in India , Priyanka Gupta, January , 2018)

According to the report by Nasscom and Akamai Technologies on " The Future of Online education in India:, the number of internet users in India will be more than double by 2020. Hence, only online education will gain popularity across the nation.

In countries such as India, with ambitious targets to expand higher education, Professor Koller says the authorities will have to use online universities, because there is insufficient capacity in bricks and mortar institutions (Sean Coughlan, 2016)

By the year 2030, the Indian government aims to increase the enrollment (GER or Gross enrollment ratio)

in universities to 30 % from 23 % in 2014-15 . And this is practically not possible by increasing the

number of traditional classrooms & universities.

Hence, the market size of online education is expected to expand exponentially. (IBEF report)

Nishatha Abraham Bijesh in her article on Online Education Trends to watch in India [57]in 2017 has listed

the following trends :

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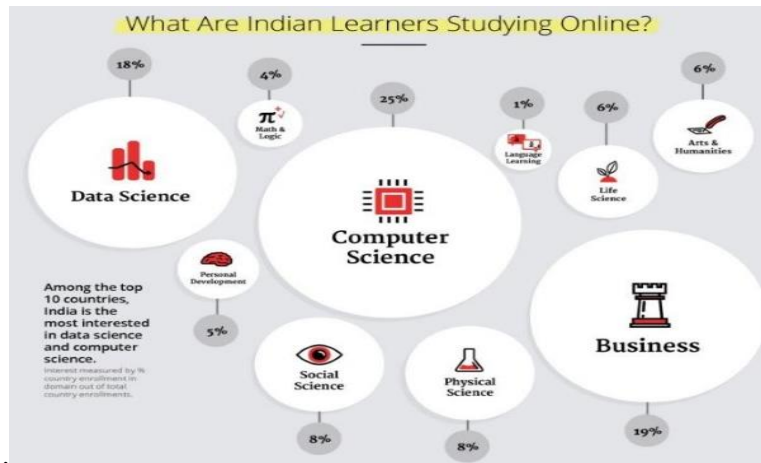
Source : www.indiaeducation.net

6 . Online courses in Various Subjects :

- Le Cordon Bleu offers online certificates and degrees in culinary management and operations.

- The International Forensic Sciences (IFS) Education Department of India offers online short term

  Certificate courses on Cyber Forensics, Cyber Law .

- Dawson Academy of India offers online postgraduate dental training for general dentists, specialists & lab

  technicians .

. 6.1 Online "supplementary" education will flourish

India's K12 education system has more than 26 crore students enrolled in it and is not exactly known for the

quality   of   education   it   imparts.

A major chunk of students have been relying on after-school coaching/ tuition or "supplementary

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[5] www.indiaeducation.net

education". Out of these, at least 2 crore students from classes 6 - 12 are expected to turn towards online forums for availing extra help.

(Source : www.byjus.com)

In fact, this number is going to increase further as technology permeates into the tier-2 and tier-3 cities. This is a major reason for the success of BYJU's - The Learning App that has seen more than 50 lakh installations. **Tuition centres & coaching classes will soon be replaced by e-tutorials**!

6.2 Focus will be on career skills, not just degrees:

While traditional degrees like a bachelors or masters are proof of your education, they don't really focus on specific skills that prove useful for a particular job profile. This gap is being bridged these days by a wide variety of online courses through which you can learn any skill you want!

So if you think you lack the know-how needed for a job you're applying to, just search for an online course which on completion, offers you microcredentials like "digital badge" or "nanodegree" or a "certified" tag. An example is the various professional accreditation (Adwords certification, Developer certification etc.) that Google provides to online learners who exhibit proficiency in various domains.

Employers in India have also slowly started accepting some of these online certifications as proof that the employee has the right skill-set for his job.

6.3   Quality & delivery will improve - with the rise of edtech companies in India

2016 saw education technology (edtech) companies receive massive investments (to the tune of $323 million) through more than 26 deals. A majority of ed-tech firms that received funding are focusing on online   education:

Byju's Classes - India's leading test preparation provider that will make you "fall in love with learning" through the online content it offers to students in the form of interesting & interactive videos. Last year, it

raised $75 million from Sequoia Capital & Sofina and $50 million in funding from Facebook's Chan Zuckerberg initiative!

Simplilearn: Online certificate course provider, Simplilearn has raised $28 million till date and is expected to raise another $30 million in 2017.

With more and more players in this domain & increasing competition, the quality of content & delivery of online courses will definitely improve.

<u>Factors Limiting The Growth Of Online Education In India:</u>

Ishan Gupta, Managing Director, Udacity India mentions, "*Lack of awareness of the student that online education can be more engaging and effective than distance education has been one of the limiting factors. Having said that, at EduKart we have seen growing enrolments and increased openness of students to pursue formal and non-formal education through online delivery.*"

Another education entrepreneur **Chaitanya Chitta**, mentions that **lack of awareness** is one major factor limiting the growth of online education in India. He mentions, "*Once that's addressed, proving the outcomes / RoI. Access & affordability are no-longer the culprits.*"

On the other hand **Aditya Malik**, CEO & MD – TALENTEDGE mentions Quality of content, ability to make it interactivity and certification & job linkage to be the reasons. (State and Scope of Online education, edtechreview, Priyanka Gupta, January2018)

Conclusion

There is a dire need that people adapt to the education technology as it can fulfill their learning needs but on the other hand lack of awareness and unavailability of supported infrastructure becomes one major reason for them to be not inclined towards the use of technology in education. And those who are well aware as well as have the proper supported infrastructure are finding it hard to gain the output after opting the online education as their preference. (State and Scope of Online education, edtechreview, Priyanka Gupta, January2018) With electronic content getting cheaper and easily accessible, online education is here to stay and will capture the interest of working professionals as well as students who wish to study at their own pace and ease.

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