

Higher Education in Digital India

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Abstract

This paper presents an insight into the design and developmental strategies that will provide an integrated perspective and study towards determining the Higher Education pedagogical approach and its working in a country like India. The aim here is to establish a bifurcation between traditional and digital learning and bring out the characteristics of both the approaches. Different ways are emerging pertaining to which the Higher Education is evolving at a faster pace constituting the factors that are shaping and transforming the online acceptance of its users / learners. We have inculcated the recent changes owing to numerous factors and in what manner has it affected or influenced the new generation. Moreover, learning preferences of the Z generation and utilisation of various techniques in accordance with their mindset and technological behavior will also be taken into consideration. Digitization is now becoming pervasive in nature, and all the sectors have embraced and endorsed the consequences by sustaining its pursuit. The tools must be aligned in correspondence with the objective and need of the student to derive the maximum benefit. Detailed analysis of the future prospects and the demeanor of the new generation with regard to such change will be scrutinized. The input and output of the online education will be explored and its technicalities will be examined.

Keywords

Online Education, Z Generation, Digitized Environment, Higher Education.

1. Introduction

Education system has been evolving ever since its introduction. Learners have witnessed a predictable evolution of subject material in respective area and circumstance of available information. Students attend classes;

imbibe the new courses initiated in the lecturing session and discuss the objectives and outcomes. Similarly, lecturers introduce new and diverse ways to enlighten the students by imparting intricacies in an advanced manner. However, amongst numerous factors that determine the characteristic and quality of education, there is one factor – technology, that single handedly influences the entire system and moulds it into an approach of distinctive ability. It enables the learner to access information from varied sources and utilize it on the basis of their requirements. This has affected the system internally and has also given a boost for a prospective approach, shifting the focus from teacher to learner. This change in the trend of learning orientation has attempted to integrate the content so that it attains the defined prerequisites.

There are certain sequential steps and layering depending upon the capacity, attribute and learner understanding of the particular subject matter. It is subjective and open to interpretations by different people. The formal education system begins with primary and secondary school and later proceeds to graduation, post-graduation, diploma and Ph.D. courses. In India there are 903 Universities, 39050 Colleges and 10011 Stand Alone Institutions registered on the web portal where 36.6 million has been estimated as total enrolment in Higher Education, constituting around 28.98 million in undergraduate programme, and around 1.6 lakh in PhD programme. (AISHE, 2018). As the student proceeds in his educational qualification, the final step transforms into a narrow review and demands a particular knowledge and expertise with regard to the concerned disciple. According to the Ministry of Human Resource and Development - Higher Education is defined as the education, which is obtained after completing 12 years of schooling or equivalent and is about the duration of at least nine months (full time) or after completing 10 years of schooling and is of the duration of at least 3 years. The education may be of the nature of General, Vocational, Professional or Technical education. (MHRD, 2018).

2. Objectives of the Paper

- To understand the point of view of a learner.
- To study why there is a need of Digital learning.
- To elaborate the input and output factors that influence online education preference.

3. Factors Determining the Learner's View point

Two important factors that highlight the effect of higher education can be bifurcated into two aspects from the view point of a learner - Input and Output. Input refers to the physical and monetary effort attempted while attaining a good quality higher education and output refers to the ultimate result or outcome obtained. Aforementioned term 'good quality education', is subject to various interpretations. It has been defined as a process of evaluation by Hoy et al. (2000) (Springer), accounting the determinants of faculties, premises, subject materials by Grisay and Mahlack (1991) and use 'five dimensions of quality: learners, environment, content, processes, and outcomes, founded on 'the rights of the whole child, and all children, to survival, protection, development and participation' by (UNICEF). Therefore, measuring a good quality education is not an easy task pertaining to the fact that most of the universities and colleges offer miscellaneous variety of subjects which perhaps entail a distinct result as compared to other subjects. They produce students who have different capacity and ability that can result in disparate evaluations. Moreover the efforts of teachers are also accountable to some extent in the case of quality consideration. (Council, 2012).

4. Traditional Teaching and Learning

Traditional pedagogies in earlier times were responsible in constructing a well-defined and educated learner. In accordance with the need of the hour, the methods adopted by the teacher were relevant and assisted in molding the child in an appropriate manner. Even today, more than half of the learners are obtaining education in a traditional format which is slowly being remodelled as blended learning. The Government itself has come up with numerous initiatives and reforms to support online and blended learning.

5. Why Digital Learning?

Distance teaching education saw a growth from 200 at the end of XI plan to 363 at the end of third year of XII plan as per the annual report by MHRD. It constitutes for about 11 per cent of the total enrolment in Higher Education as of 2018. However, we should not confuse the distance and digital learning as one or the same thing. Increase in distance learning only implies the fact that people are opting against the traditional

daily classroom learning, they prefer to multi task and hence that is leading in adoption of learning via distance.

In addition to the above fact the online education market is set to witness a tremendous growth in e learning, i.e., it is about to witness an increase from 1.6 million users from 2016 to 9.6 million users by 2021 (KPMG, 2017). There are several reasons that are contributing to the augment in online education marketers. They can be pointed out as precisely as follows:

6. Input Factors

a) Cost of online education: According to the India's demographic profile (INDEX Mundi, 2017), India's population is estimated at 1.28 billion in (est. July 2017) where the median age being 27.2 and 28.6 of male and female respectively. So it can be easily deciphered that half of the population is below the 27 years of age in this country. The higher education is right now at the moment is being pursued by the new generation, i.e. Z generation (born after 1995). The expenditure on education sector has always been one of the most crucial outlays for the salaried income group or middle class people. (PWC, 2017) Centre and State takes care of the Higher and School Education respectively. Apart from the courses and degrees offered by the government facilities which tend to amount as a low cost alternate, private institution's education costs soar relatively higher and limited seats make it difficult for the people to get enrolled in such institutes. Thus, online platform makes it easy to apply without severe time constraint and availability of required seats.

Due to the aforesaid reason, the learners are adopting the new courses offered by online educators on the basis of either cost or availability of seats as it provides a substantial similar prospect and place the students at par with the traditional as well. Online MBA is one of the most dominating course in this arena as it is set to witness a 41 per cent increase since the year 2016. (KPMG, 2017)

- b) Psyche of the Young Population:** The Z generation is our new generation that has entered in the higher education market. They are the future of the economy and the world of business. If they want to find a solution of the problem, they trust their mobile phones and internet more than the traditional teacher. They are impatient and easy going therefore they try to find things on their own without any delay. According to the survey of Economic Times – 98 per cent of the Z generation in Asia owns a mobile phone and use it for a minimum of 4 hours per day. (Times, 2017). Their reading habit has been overtaken by kindle, Google play book, ibook, PDF reader and various other online material (e reader), the concept of saving paper and availability of wide material online is facilitated in the increase online education.
- c) Government Initiatives:** The major boost to the online education has been received by the Government in the form of initiatives. Few of the important initiatives are as follows:
- **SWAYAM:** Study Webs of Active Learning for Young Aspiring Minds provides numerous courses online provided by the best of the faculties and institutions. It hosts MOOCs i.e. Massive Open Online Courses with enabling a revolution in the educational sector, which has seen an increase from 11 per cent to 27 per cent in just one year for MOOC provider edX. (Chauhan, 2017). Moreover, India is second to US as of December, 2016 with over more than 1.4 million users using courser (another MOOC provider). It brings a digital revolution in the area of Higher education in India. Hosted Courses include – Video, SAT, special study materials and online discussions. (MHRD, 2018). More than thousand courses are being offered which are attracting learners from widespread area (Bureau, 2018).
 - **GIAN:** Global Initiative of Academic Networks aims at unearthing a pool of talented individuals or a group of people (scientists, entrepreneurs etc.) so that they may link their resources and expertise with the HE institutes in order to accelerate high paced growth. (GIAN). It was launched on November 30th, 2015. The courses approved till date have been 1839 out of which 108 have been withdrawn.

- **NAD:** National Academic Depository was launched on 27th October, 2016. It is an online Depository which stores the awards - certificates, diplomas, degrees, mark sheets, other relevant documents. It is a cloud storage which facilitates in accessing of all the data, awards and documents as and when required.
 - **SWAYAM Prabha:** It is a group of 32 DTH Channels which telecasts high quality educational programmes on a regular basis. (PRABHA, 2018).
 - **IMPRINT:** Impacting Research Innovation and Technology – Addresses to the major science and engineering challenges.
- d) Internet Penetration:** The internet users in India in 2017 were 331.77 million users, which is expected to grow to 551.89 million users in 2022. India is already the second largest online market and the pace at which it is utilizing the facilities of the internet and mobile phones; it will surely make it to number one on the list. (Portal, 2017).

7. Output Factors

- a) Productivity Quotient:** Online platform offers a wide variety of mock test and self-evaluation tests which benefit the learner in the appraisal and control of their performance. Around 87 percent of the students adopt mobile phones for the preparation of these tests and mock papers, where the highest inclination is towards the preparation of Bank PO and Government examinations accounting to 30 and 35 per cent respectively. Most of the entities have adopted the online examination platforms which enable the students to appear for a mock test beforehand to get an idea of the particular assessment. Customization of the required detail is also available so that no time of the student is wasted on browsing and analyzing. Similarly, MOOCs are becoming the possible leaders in the future as they have a pool of efficient and talented people who help learners in the process and India is already at the second position after US. Top institutes in India like IIT, IIM are adopting it and offering newer programmes. Around 2300 students participated in a recently held programme in IIT Kanpur and in addition to that a MOOC on mobile is also said to be introduced shortly. (Times T. E., 2018). The reason

for the overall success of this is because the marginal cost of providing service to an extra student goes down to zero.

- b) Entrepreneurship:** Pertaining to the rise of social media contacts and linkage through LinkedIn and other online portals, the Z generation is shifting its focus towards entrepreneurship. Bloggers and influencers have undertaken the role to reach out to the people at large and therefore are making money through the platform. A study conducted by Tata Consultancy Services, showed that around 55 per cent of the new generation wants to use online services not for online shopping and social media, but for aspirations for new idea and entrepreneurship (Services, 2016).
- c) Dealing with major changes:** The new generation has been a witness to few of the major changes in the economy in the country: demonetization, capitalization of PSU banks, introduction and implementation of GST and RERA 2017 etc. Therefore, this new generation is dealing with the changing reforms along with being up to date owing to the availability of real time news and information.
- d) Real time outcomes:** The Z generation students generally have a lower tolerance as compared to millennial and that is the reason why they resort to online medium in search for a quick fix. The travel time is also curtailed to a certain extent and the focus towards studies can be accomplished. 87 percent of the students studying in the science section prefer online platform for the preparation of exams and performing experiment evaluation. (KPMG, 2017)
- e) Aid to Distance Learning:** Considerable growth in online education will be witnessed as it facilitates the working of open and distance learning. 50 percent learners admitted in a survey by KPMG that they are more satisfied by video based content and meeting talented and worthy tutors on online mode for a better guide and support.
- f) Convenience and Better Concentration:** Online education also helps in procuring the relevant information as per convenient basis. Students or learners can have a better concentration at home or some other place in accordance with their time and schedule. 88 percent of the students prefer laptops, whereas 72 percent resort to the usage of mobile phones for acquiring any data or information from online mediums. (KPMG, 2017)

8. Summary

The above factors generally separated the input made in terms of efforts in acquiring an online education and output in term outcome and consequences thereof. Since online education is a growing market at this point of time there are certain challenges that are faced by the learners and teachers in regards with certain implications. However, it will not be inaccurate to acknowledge that as there is a visible escalation up to 41 per cent in online platform with regard to Higher Education and almost double increment of internet users with the availability of internet at minimal cost along with government's support and initiatives, tradition education will clearly reduce tremendously.

As for the people's behavior - the Generation X (mid 60s to early 80s) majorly was responsible for tremendous innovations that shaped up human life and augmented the standard of living. Their ideas contributed in the development of a larger part of society. The birth of Google, Amazon and Apple helped the society to dream bigger and achieve the unthinkable. They were responsible for introducing the concept of Cloud Computing in the lives of people which transformed and introduced numerous ways of doing things. Generation Y (mid 80s to early 90s) too have performed well in their work area because they believed in team work and they have been educated in a proper traditional way with a certain kind of discipline. On the other hand, the new Generation or the Z generation is are being called as the born entrepreneurs because they opt to work independently and believe in hiring people.

9. Future Prospects

Although online education is at an early stage of development, there is no iota of doubt that it is going to re-establish itself in a new and transformed way. Private universities are already offering Undergraduate and Post graduate learning courses as they have noticed an inclination towards the emerging trend in this system. As per the studies, the most opted post graduate course via online platform for the moment is MBA. However, in no time other courses are also going to join the league and attain an important position in the online market. The Government has also acknowledged the importance of the digital platform and thus has

offered various initiatives for the benefit of the students and online education market. Blended learning is being recognized as the most appropriate approach for the future of Higher Education.

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