

A STUDY ON INDIAN EDUCATION INDUSTRY: DRIVERS OF GROWTH AND OPPORTUNITIES

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ABSTRACT

India is known to have one of the world most ancient education systems in the world. Its origin dates back to the Vedic period. From the education being imparted at the traditional Hindu gurukuls in ancient times to education now being imparted through the use of information and communication technology, India has come a long way in just 75 years of its independence. The Indian education system we see today is the result of various policy interventions made by the British during the pre-independence period and later by the Indian government. It has four major segments namely preschool, K12, Higher education, and, Digital education segment. The objective of this paper is to critically examine and dissect our understanding of all four segments and to highlight the Drivers of Growth that would bring opportunities in this industry in the future. This paper uses standard academic models/concepts to correlate and explain the fundamentals of the education system and industry in India for easy understanding of the readers. Both qualitative and quantitative data have been used from authoritative third-party sources and their citations have been mentioned in the appropriate sections. The intended readers of this paper may include Students and Jobseekers who may get information on prospective avenues of employability in the education sector. Aspiring entrepreneurs may find untapped opportunities they can capitalize upon, and businessmen and investors may find promising business opportunities in the sector. Education Institutions may find data that can help to them to diversify.

Keywords: Education Industry, Preschool, K12 Segment, Higher education, Digital education

Introduction

The Education industry, in general, is a combination of institutions/establishments such as schools, colleges, and training centres that provide instruction and training in a wide variety of subjects. These institutes are privately owned, private aided, or not-for-profit public establishments. The schools, community colleges, universities, ministries or departments of education, training centres, etc. form the education industry.

In all these establishments the primary objective is to render Educational services which are usually delivered by teachers or instructors that explain or supervise direct learning. There are diverse means through which educational Instructions are provided such as learning at schools, colleges, at institutions in person or learning through correspondence by the means of the Internet and television.

To understand the education Industry in India it is important to have an overview of policy changes, commissions formed, schemes, and programs initiated in this sector post-independence. The transformational changes that we see in education, especially in terms of ease of access to quality education to all at all levels are a result of the following events:

Year	Policies/commissions/Schemes
1949	University Education Commission
1952-53	Mudaliar Commission
	Secondary education Commission
1964-66	Kothari commission
1968	National Education Policy
1986	National Education Policy
1987	Operation Blackboard
	Teachers education scheme
1994	District Primary education Programme
1995	Mid-Day meal scheme

2001	Sarva Shiksha Abhiyan
2002	86 th Constitutional Amendment
2004-05	Kasturba Gandhi Balika Vidyalaya scheme
2009	Rashtriya Madhyamika Shiksha Abhiyan
	Sakshar Bharat
2013	Rashtriya Unhehtar Shikshan Abhiyan
2018	Smagra Shikshan Abhiyan
2020	New Education Policy

Table 1: Exhibit of Policies, Schemes and Programs in education sector post independence.
Source: Compiled on the basis of data retrieved from www.education.gov.in.

All the above policy measures and commission had the common intent of cutting down of irregularities in the education system and making it more formal. The Secondary objectives were to provide better infrastructure and equal educational opportunities, Early life Nutrition to school going kids with scheme like mid-day meals, promoting education also remained one of the key objectives of the schemes and programmes such as Sarva Shiksha Abhiyan, Sakshar Bharat and Samgra Shiksha Abhiyan. The Education Policies one after the other shaped the education system in India, from Preschool to Higher education, Governed by Boards like CBSE, State, NIOS, Boadies like AICTE, NCERT, UGC and law of central, state and local government. Education in India today is regulated by the Ministry of Human Resource, Government of India.

Education Industry in India is a combination of establishments rendering early Child education and care, Kindergarten and schooling, Higher education , vocational and technical training institutes .With Advancement in Internet and communication technology ,Digital education has become an added segment and has been fuelling the Industry growth.

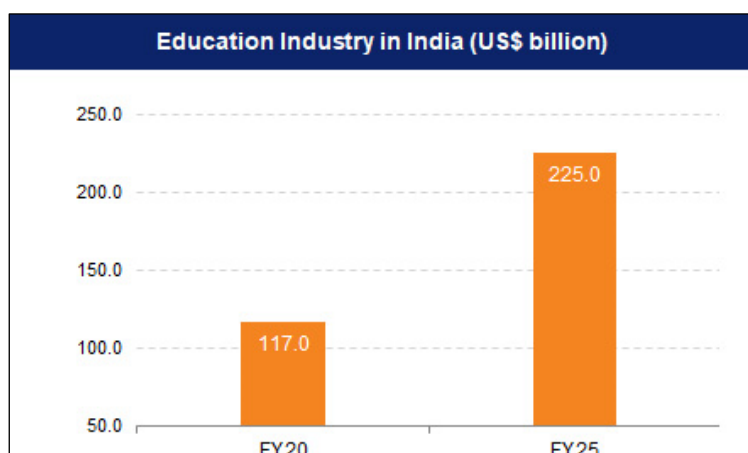


Figure 1; Exhibit of Growth of Education Industry
Source: <https://www.ibef.org/industry/education-sector-india>

It is estimated that by the year 2025, the Indian education industry is expected to attain a worth of US\$225 Billion as compared to US\$ 117 for the year 2020. The population of the country is increasing and the median age of the growing population is 5-25, this age group creates a consumer base for education in the country.

Research methodology

This paper is based on the qualitative and quantitative secondary data collected from different sources like the official website of the Ministry of commerce and industry, the Unified system of education plus, Reports published by the Department of Education, and other national and international survey reports submitted by various agencies. The study also has references from the paper published in journals. The data has been represented in the form of tables and graphs to aptly light the objectives of the study. The sources of the data, tables, and graphs have been cited in the respective section.

Objective of the Study:

1. To study the Key segments in the Indian education sector, namely, Preschool, K12 Schools, Higher education, and Digital Education.

2. To identify the drivers of growth and opportunities in the Indian education industry.

Literature Review:

Trenis (2018) studied that education system in India .It highlighted the evolution of the education system and showcased that Indian education system has gone through progressive evolution .It also stated that we have a long way to go when compared with countries like United States and Germany when it comes to higher education.

Anderson and Lightfoot (2019) studied and evaluated the progress of the Indian education industry for the period 2014-2019 .The research mentioned that the New education policy would bring in a positive change in the education system across all levels and the growing partnership among public and private players in education sector will contribute towards creating more opportunities in the sector, leading to economic development of the country.

Agarwal, (2021) and Sinku (2021) studied the scope and challenges of digital education in India and observed that, digital education is not just economical and convenient means of education but ,it is also a holistic method of teaching and learning. Their studies explained the digital transformation of education in India and concluded that digital transformation in education leverages the teaching and learning experience and makes education more accessible and impactful.

Suthar (2021) examined the issues and challenges in higher education in India .the research identified the need of improvement in the field of higher education on aspects such as infrastructure, curriculum, faculties etc. she mentioned that these challenges pose an opportunity for individuals and organization to come up with solutions and bridge the gap.

Kale (2009) discussed the inside out orientation of India and the policy changes that took place in 60 years of independence and their implications. The research concluded that the policy changes in the education sector have been slow but have gained momentum over the years and brought in positive transformation in the education ecosystem.

Cryrill (2022) studied the major segments in the education industry and concluded that the industry would play a significant role in the socio economic growth of the country. Dubé (2021) examined the technology trends in k12 education between 2011 -21 .It was observed that technology has a continuous influence on educational practices and creates avenues for policy makers, educators and researchers in rendering immersive and effective teaching and learning experience.

Tobenkin (2022) and Roy (2021) discussed the increasing importance of India in the landscape of higher education through and explained the scope of reforms and venturing in this sector.

IBEF (2022) and IMARC (2022), report on the Indian education and training industry highlighted specific advantages that India to drive the growth of education industry in years to come and projected significant percentage increase in the annual growth rate in the sector

UNICEF (2022), through the analysis of the report on early child education of various countries around the world concluded that early child education programmes lays a foundation for lifelong learning among children aged 0-8 and that it increases the chances of completion of higher education.

India's education industry:

India's education industry is not just formal but also vast and diverse, with institutions established to serve the educational needs of each age cohort starting from the age of 2 years and above, covering the preschool period, followed by the K-12 school years, and higher education and research. With the advancement in information and communication technology and the Internet, E-learning is now also a key emerging segment in the Industry.

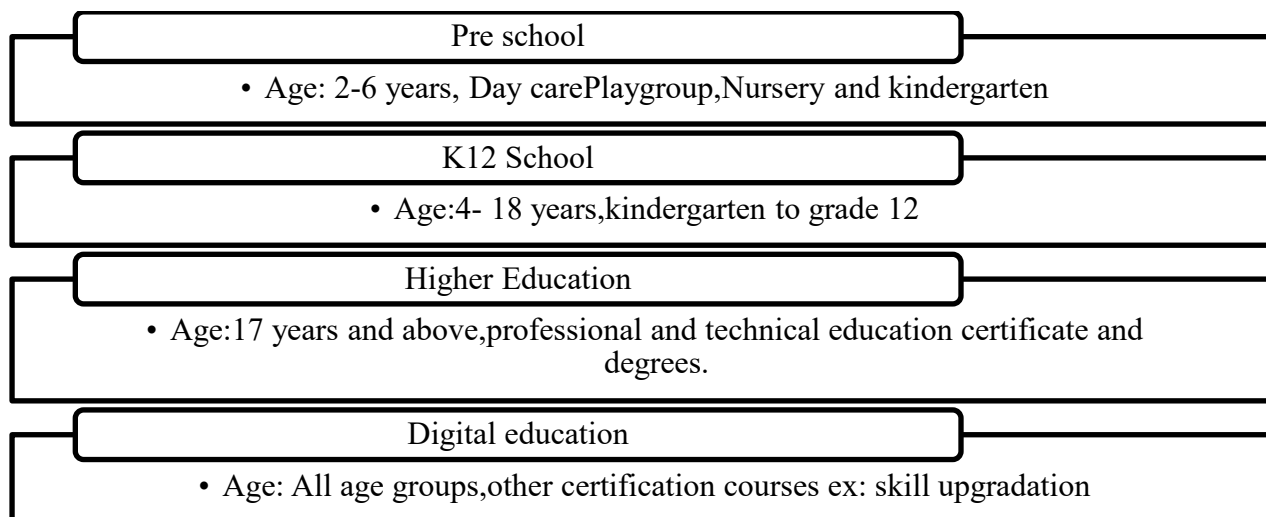


Figure 2: Segments of education Industry in India

Pre-schools Segment

Any education or child care service provided to children aged 2-6 years are generally referred to by the term Early Child care and education and Pre-schools in India are an essential part of this. It caters to the education and care of the child for the first four years. This is a preparatory stage that develops basic cognitive, physical, social, and emotional capabilities that make the child ready for later success and challenges in school and life. Preschools in India can be explained as a combination of Day-care, nursery also known as play school, and lower and upper kg education also known as kindergarten. Pre-schools in India can be owned and operated both publicly and privately.

Day care	Playschool	Kindergarten
<ul style="list-style-type: none"> • Provides Safe stay and daycare with activities to develop fine motor skills through art craft and play 	<ul style="list-style-type: none"> • Promotes learning based on pedagogies and works on improving social interaction 	<ul style="list-style-type: none"> • Lower kg and upper kg prepares students for grade 1 through basic reading and writing lessons

Figure 3: Components of Preschools segment

The Indian Preschool Market

India's preschool market has seen positive growth, over the past 2 decades more and more brands are entering this space with a promise of offering quality educational and safe infrastructure. Owing to the popularity of the preschool coupled with changes in lifestyle the Indian preschool/childcare market size reached US\$ 3.8 Billion in the year 2022. . By the year 2028, IMARC Group report on the preschool market in India, the segment expected to reach US\$ 7.3 Billion.

Drivers of Growth

From the analysis of the various reports on the growth of Indian preschool and child care the drivers of the preschool market can be summarised as under:

1. The rise in the nuclear family culture has led to more burden on the parent to take care and educate a child, in the case of nuclear families where women are working preschools with day care become a safe and convenient choice.
2. High participation of women in the workforce is leading to growth in demand for child care and early childhood education institutes.
3. An increase in the disposable income of parents makes it possible for the parents to spend on child care and education even at the preparatory stage of preschool or nursery.
4. The importance of early childcare and education for the overall development of the child is now a known fact and is moreover being endorsed by proven scientific research so the parents aim to ensure

the development of cognitive and motor skills which are very well delivered through the preschool teaching modules.

5. Penetration of the Branded preschools (Franchises) in the country.
6. Growing Brand consciousness and in tier 2 and 3 cities.
7. Innovative advanced and quality education is provided by the preschools.
8. The government intervention in promoting pre-schooling for children of low-income groups in form of the National early child education policy has also led to an increase in preschool enrolments in rural markets.

K12 Education Segment:

The term k12 can be explained as model of modern school education; here the letter K stands for Kindergarten, and 12 stands for 12th grade. The largely accepted k12 segment that promotes interactive learning includes kindergarten, primary, secondary, high-school, and pre-university education in India.

School education in India is governed by various education boards. Following are the major Boards that govern school education in India.

State Boards, Board of education of respective states.

The Central Board of Secondary Education (CBSE)

The Indian Certificate of Secondary Education (ICSE)

The National Institute of Open Schooling (NIOS)

By ownership, the schools in India can be broadly classified as government-owned, private aided and private unaided schools. There are several Top performing government schools in the country which are dominated by the Kendriya and Navodaya Vidyalaya, However, most of the Government and government-aided schools have peculiar issues related to a lack of trained teaching staff and infrastructure. In light of this situation, despite of being a comparatively expensive Private school education is the preferred choice.

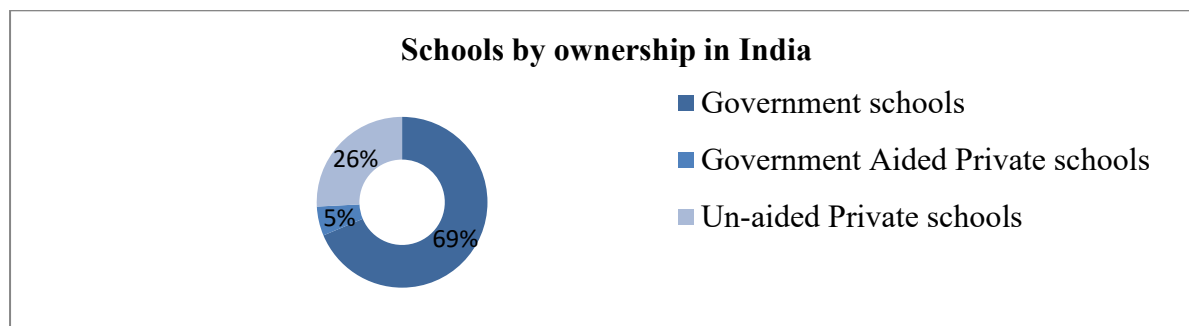


Figure 4: K12 Schools in India by ownership

Source: Compiled using data retrieved from Unified District information system of education Plus Report 2021-22

The Current system of school education system shall soon be replaced by the new one with changes in the levels as introduced by the new education policy. The primary focus of the policy is to make a changes in the content and pedagogy from school to university levels, introduce and integrate technology in teaching and learning, create a progressive change in assessment and make it more high-order skills-based than just grades, promote multidisciplinary learning, learning in mother tongue and Training the teachers to cope up with the shift in pedagogy and inclusion of technology in teaching. With the policy in practice the school stages shall also undergo a change as show in the table below.

Age	Current 2019	Grade	As Proposed by New National education policy
17-18	Higher Secondary	12	High stage
16-17		11	
15-16	Secondary	10	
14-15		9	
13-14	Upper primary	8	Middle Stage
12-13		7	
11-12		6	

10-11	Primary	5	Preparatory stage
9-10		4	
8-9		3	
7-8		2	
6-7	Pre primary	1	Foundational stage
5-6			
4-5			
3-4			

Table 2: Stages of school education in the K12 segment: current and as proposed by New Education Policy 2019.

Source: <https://www.ibef.org/industry/education-sector-india>

Indian K12 school economy

India has the world’s second largest school education systems, with about 1.5 million schools and nearly 250 million enrolments; about 50 percent of the overall size of the growing education industry in India belongs to the k12 school segment.

The market size of the Schools in India in the year 2022 was US\$ 43.5 Billion .It is expected that by 2028 this market would reach a total of about US\$ 87.3 Billion by 2028.(Imarc report on Indian school market 2022: <https://www.imarcgroup.com/school-market-india>).

Drivers of growth

The primary factors driving the Indian school market can be listed as under:

1. India is the second largest populated country in the world, with a growing population of 1.37 billion. There are not enough schools in the country to cater to the educational need of the rising population. Moreover, there is a shortage of schools that provide quality education; this represents a huge consumer base for schools in the future.
2. Due to the monetary support received from the government as well as private the education in both rural and urban regions have been significantly upgraded..
3. The market has been positively driven due to reforms such as the foundation of Eklavya schools, compulsory elementary education formation of the New Education Policy (NEP), etc .These reforms have been introduced by the government to provide equal and quality education opportunities for all.
4. Technological advancements in the methods of teaching such as use of Digital boards, smart classes, digital libraries, etc., have also made learning more interactive for students, exhibiting immense possibilities of growth for the Indian school market.
5. The K12 segment is the highest job provider in this sector. The highest number of jobs in this segment is taken up by teachers and administrative staff. Not only this Segment has opportunities for employment in the mainstream k12 segment but also in coaching, both online and offline modes.

Higher education Segment

In India Higher education refers to a stage of formal learning that one undergoes after the completion of secondary education. It consists of post-secondary education training and research guidance at an institution approved by central or state authorities. Higher education is provided by establishments that include universities, colleges, vocational institutions, and trade schools. These institutes provide education and training for developing the professional attitude and aptitude of individuals. There are several types of universities, affiliation, courses, and modes to opt for Higher education in India as showcased in the table below.

Type of universities	Affiliation	Courses	Mode
Deemed-To-Be-Universities	University/University Level Institutions	Graduate	Full time
Central Universities	Colleges/Institutions - Affiliated/Recognized with University	Post-Graduate	Part-time
State Universities	Standalone Institutions - not Affiliated/Recognized with University	Diploma	Online
State Private Universities	Others	Certifications	Hybrid
Autonomous Colleges		PhD	
Institutes of National Importance		Others	
Others			

Table 3: Exhibit of type of universities in India, affiliation courses offered, and mode
Source: Compiled as per data collected from All India survey of higher education report 2019-20

Higher education market

The higher education sector in India shoulders the responsibility of grooming students into trained professionals. Institutes in India providing technical and management education today are of National and International eminence and are becoming a centre of choice for many international students as well. However, there are only a few that have made their mark and many others who are striving to set benchmarks in terms of providing quality higher education. With an increase in the population and demand for professional education for jobs, the demand for higher education is also increasing. This is been projected by the increase in the enrolments in colleges and universities.

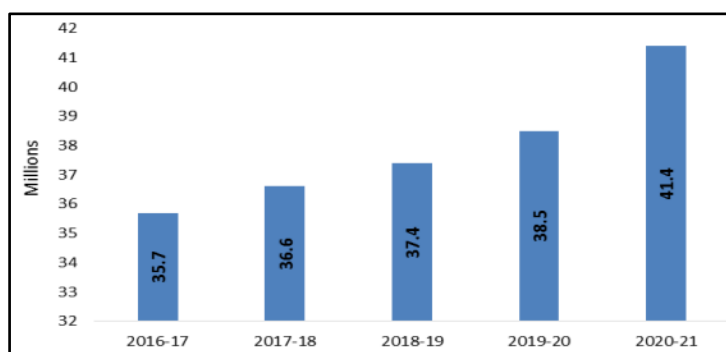


Figure 5: Exhibit of Increase in enrolment in Higher education.
Source: All India survey of higher education report 2019-20

Year	Student Enrolment								
	Ph.D.	M. Phil	Post Graduate	Under Graduate	PG Diploma	Diploma	Certificate	Integrated	Grand Total
2016-17	141037	43267	4007570	28348197	213051	2612209	166617	173957	35705905
2017-18	161412	34109	4114310	29016350	235263	2702934	177223	195777	36637378
2018-19	169170	30692	4042522	29829075	224711	2699395	162697	241126	37399388
2019-20	202550	23934	4312535	30647287	217249	2672562	159869	200373	38436359
2020-21	211852	16744	4716646	32657509	257187	2979320	155911	385541	41380710
CAGR	10.7	-21.1	4.2	3.6	4.8	3.3	-1.6	22	3.8

Table 4: Exhibit of increase in enrolments in higher education by the stream
Source: All India survey of higher education report 2019-20

According to the latest, All India Survey of Higher Education Report (AISHE 2019–20) India has 1,043 universities, 42,343 colleges, and 11,779 stand-alone institutions which makes it one of the largest higher education sectors in the world. The Trend of the last five years 2016-21 shows that there is a steady increase in the number of universities and colleges in India

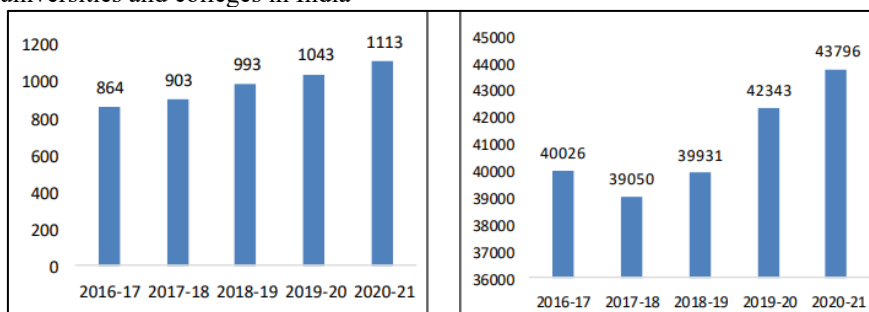


Figure 6: Growth in Number of Universities and Colleges in India 2016-2021

Source: All India survey of higher education report 2019-20

The brooking institution in its report published in 2019, Reviving Higher education in India stated that the number of Higher education institutions has increased by over 400 percent since 2001.

By 2023-2028 The global higher education market is expected to exhibit a growth rate (CAGR) of 9.9% and offer better opportunities for existing and prospective investors in this sector.

Drivers of growth

The growth in this sector is driven by the following factors:

1. Due to the growing number of student enrolments in the school sector the literacy rate of India is improving, propelling the demand for higher school education.
2. With Liberalization, Globalization and favourable government policies in place, demand of employees with higher education degrees that can adapt to the rapidly changing business environment in the country is increasing.
3. The implementation of policies, aimed at promoting higher education in India such as the National Accreditation Regulatory Authority Bill for Higher Education, Unnat Bharat Abhiyan, SWAYAM Prabha, etc., are acting as another significant growth-inducing factor.
4. The Integration of Technology, artificial intelligence, and the internet of things for generating automation in personalized adaptive learning with higher education is expected to fuel the Indian higher education market in the years to come.
5. An increase in the number of digitalized solutions in the education sector is leading creation of new opportunities for education and streams in the sector.
6. There is stimulation in regional markets due to the emerging prominence of e-learning solutions and the introduction of massive open online courses (MOOCs).
7. Demand for higher education is being positively affected by the increase in per capita expenditure.

Digital Education Segment

Digital education also known as technology-enhanced learning, digital learning or e-learning can be defined as the innovative use of modern technology and digital tools to help the progress of teaching and learning. In other words, Modern day education obtained through the means of technology and the digital device is called digital education.

Digital education has characteristics like Low cost flexible, convenient, and specialized course learning options, which make it a preferred choice of education and training for working individuals. Today it is very important for working professionals to keep themselves relevant and updated with skills and knowledge to be competitive. Therefore the Premier Institutes and Top companies are collaborating with Edutech players and e-learning platforms to provide online learning solutions and programs that are suitable for both students and working professionals.

Moreover, the New Education Policy also outlined provisions for expansion into online degrees, credit transfers, and blended learning as the key pillars for improving access to affordable and quality education. This has led start-ups and unicorns across the world in this segment to venture into this segment in India.

Digital Education Market in India

There is a rapid growth in Online learning platforms in India. Educational segments such as primary, secondary, higher education, test preparation, and casual learning are gaining impetus. This Market is scattered and there are few companies that operate in different segments mentioned above. There and start-ups with innovative offerings such as content and courses that are gradually making business in this segment. Digital education market in India is known to have unicorn companies that are valued in billions.

Drivers of growth

The growth in the digital education segment is propelled by:

1. The penetration of low-cost smartphones has led to an increase in the demand among the larger population for internet services. This has led to an increase in the demand for online content, including educational material, both, in rural and urban areas.
2. The major initiatives and policy interventions undertaken by the government such as SWAYAM, Digital India,– National Digital Educational Architecture (NDEAR), PM eVIDYA Program, Samagra Shiksha Scheme, Andhra Pradesh State Skill Development Corporation (APSSDC), and 'ShaGun'

Portal has made it possible to avail a varied variety of course on multiple subjects available and accessible for masses.

3. Online learning options are proving to be economical and convenient over time making them a preferred choice
4. The personalization that digital education offers caters to the unique learning needs of individuals, and many companies have realized this fact and are designing solutions accordingly.
5. Growing acceptance of Integrated learning in the education system over a decade, has shown the result that it makes learning interesting for students and helps them grasp the subjects better. This has opened a lot of opportunities for companies offering digital education solutions to help promote integrated learning.

Digital education economy:

As per a Report published in the year 2021 on the Online education market in India, the education market was valued at INR 108.79 Bn, it is expected that by the year 2027, the market would reach INR 299.18 Bn with a compound annual growth rate (CAGR) of ~22.26%, the market is expected to grow and expand.

Education Industry an Emerging market in India:

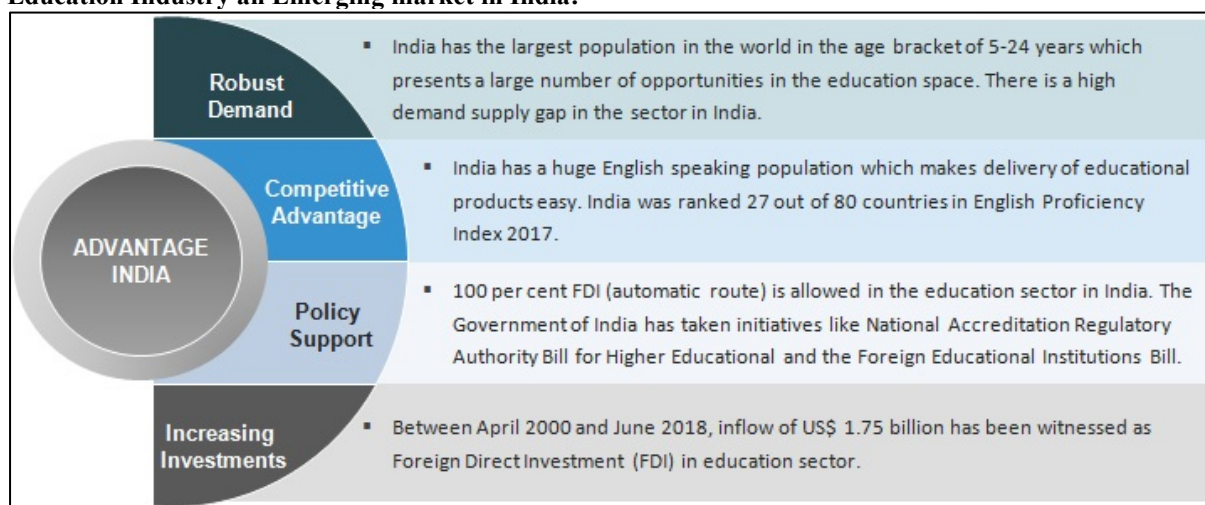


Figure 7: Exhibit of Advantage for education Industry in India

Source: <https://www.ibef.org/industry/education-sector-india>.

The IBEF report published by India Brand Equity Foundation (IBEF), a Trust established by the Department of Commerce, Ministry of Commerce and Industry, Government of India on Education and Training Industry in India, 2022 highlighted advantages that India has in education sector. The advantages demonstrated in the figure above puts India in a favourable position to expand in education sector.

Opportunities and Careers in the education sector Education Industry:

The Indian Education sector is not only an enabler of the economy that produces well educated and trained working population but also is an employment provider to millions. Delivering Instruction and training being the core service in the education sector the highest employment in this industry is taken up by the teachers. Currently, there are about 95 lakh teachers employed in k12 Schools in India. Apart from this, the higher education sector employs 15,51,070 people in the roles of Professor, Associate professor, Lecturer/Assistant Professor, demonstrator, tutors, and temporary teachers at colleges across the country. Conventionally it appears that the sector offers the largest pool of jobs in the teaching and lecturing areas in schools, colleges, and coaching but other jobs in the area of education, advice and development are promising career choices. A teaching degree/formal education is a requirement for most jobs in this sector. Professional and technical degree holders are hired today in administrative departments at educational establishments for taking care of roles such as public relations, Accounts, and Information technology. Due to the rise in the awareness of advantages of integrated education, technologically enabled education has gathered huge attention, This has led to the creation of jobs in space of content creation, systems, and software programming, At schools and Institutes that deal in higher education and have international collaborations, there, is a demand for Academic Managers and Manager of International student program. These managers assist and enable counselling, and enrolment and coordinate and communicate for a hassle-free completion of the program at respective establishments. Similarly, Foreign Language teachers, Academic writers, Higher education Analysts, and Education and skill training manager are some of the promising career choices the education sector in India is offering these days. With rise in the

number of unicorns in the digital education space and inflow of foreign investments in education there is a chance of securing opportunities in this sector. Moreover the government of India is promoting the start-up India and is encouraging people to venture in to new business there by promoting India's make in India movement. The policies around start up ecosystems are so favourable that in just a short span of 5 years many companies in education have turned in to unicorns. These projects that are venturing in to education are expected to give positive results to investors and businessmen.

Conclusions

The education industry in India is a combination of preschool, k12, higher education, and digital education market. There are several advantages that India has in form of demographic distribution, policy support, growing flow of investments, etc. that will leverage the growth of this industry in the country, which would in turn create opportunities for employment in this sector. The increase in foreign direct investment in education would lead to the entry of new players and the creation of new institutions, courses, and jobs. The area related to digital education on account of the implementation of the new education will bring new opportunities to venture into content creation delivery and training, The edutech world would have the opportunity to come up with adapting technologies, equipment, solutions, and services to match the learning needs of the new pedagogies in order to full fill the learning need of the massive school going population, academic institutions and government. At Universities level the government's recent flagship program ,Study in India is likely to project a positive image of the nation , allowing India to showcase the metal of its educational legacy. Such programs are not only promoting cultural exchange among countries through student exchange but are also paving the path to create network of prospective individuals that may acquire key positions in leading Multinational companies around the world .This shall intern lead to stronger economic and social ties with other countries. Moreover when education as an industry prospers there is an increase in pool of professional and technically equipped working population that effectively contributes towards the overall development of the country. Therefore we can conclude that education Industry in India is constantly emerging and creating new benchmarks in world of education.

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