

# **Education System in India**

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#### **Abstract:**

Education system in India lays more stress on studies. It is an exam system not an education system. Why is it so that we can remember the movies and not our chapters? Indian education system needs a lot of changes.

The system of education in India should be learning-centric rather than exam-centric. Children must be allowed to choose subjects according to their interests. Instead of gaining knowledge from voluminous books and lectures, children must be made to interact in groups and express their views on various topics. Rather than taking notes from the teacher and textbooks, children must be made to research information on their own from library books and the Internet and share them in the class. This will help them develop good reading habits, self-confidence and openness to criticism. It will also help them in developing critical reading and analytical skills. Children will be able to remember what they learn when they apply it practically. They must be taken on field trips to museums, labs, planetariums, excavation sites, botanical gardens, etc. where they can learn by interacting with knowledgeable and experienced people in varied fields. It will also help them improve their communication skills. In this article the author of this article wants to focus on the basic education system of education in our country.

**Keywords:** Education system, Homeschooling, 10+2+3 Pattern, Primary Education, Private Education, Higher Education, Secondary Education

## 1. Introduction

Education in India is provided by the public sector as well as the private sector, with control and funding coming from three levels: central, state, and local. Taxila was the earliest recorded centre of higher learning in India from at least 5th century BCE and it is debatable whether it could be regarded a university or not. The Nalanda University was the oldest university-system of education in the world in the modern sense of university. Western education became ingrained into Indian society with the establishment of the British Raj.

Education in India falls under the control of both the Union Government and the states, with some responsibilities lying with the Union and the states having autonomy for others. The various articles of the Indian Constitution provide for education as a fundamental right. Most universities in India are controlled by the Union or the State Government.

India has made progress in terms of increasing primary education attendance rate and expanding literacy to approximately two thirds of the population. India's improved education system is

often cited as one of the main contributors to the economic rise of India. Much of the progress, especially in higher education and scientific research, has been credited to various public institutions. The private education market in India is merely 5% although in terms of value is estimated to be worth \$40 billion in 2008 and will increase to \$68–70 billion by 2012.

However, India continues to face stern challenges. Despite growing investment in education, 25% of its population is still illiterate; only 15% of Indian students reach high school, and just 7% graduate. The quality of education whether at primary or higher education is significantly poor as compared with major developing nations. As of 2008, India's post-secondary institutions offer only enough seats for 7% of India's college-age population, 25% of teaching positions nationwide are vacant, and 57% of college professors lack either a master's or PhD degree.

As of 2011, there are 1522 degree-granting engineering colleges in India with an annual student intake of 582,000, plus 1,244 polytechnics with an annual intake of 265,000. However, these institutions face shortage of faculty and concerns have been raised over the quality of education. In India education system is not based on pure merit, but it's based on caste based reservations. In universities/Colleges/Institutions affiliated to federal government there is minimum 50% of reservations applicable to various castes. At state level it varies. State of Andhra Pradesh has 83.33% of reservations as on 2012, which is highest percentage of reservations in India. So the state is popularly known as the state that killed merit.

# 2. History of Education

Brahmin gurus imparted education by means of begging and not through charging fees or funds from the students or their guardians. Later, temples were also centrees of education. Religiouis education was compulsory but secular subjects were also taught. Students were required to be brahmacharis or celibates. The knowledge in these orders was often related to the tasks a section of the society had to perform. The priest class, the Brahmins, were imparted knowledge of religion, philosophy, and other ancillary branches while the warrior class, the Kshatriya, were trained in the various aspects of warfare. The business class, the Vaishya, were taught their trade and the working class of the Shudras was generally deprived of educational advantages. The book of laws, the Manusmriti, and the treatise on statecraft the Arthashastra were among the influential works of this era which reflect the outlook and understanding of the world at the time.

Secular institutions cropped up along with Hindu temples, mutts and Buddhist monasteries. These institutions imparted practical education, e.g. medicine. A number of urban learning centers became increasingly visible from the period between 500 BCE to 400 CE. The important urban centers of learning were Taxila (in modern day Pakistan) and Nalanda in Bihar, among others. These institutions systematically imparted knowledge and attracted a number of foreign students to study topics such as Vedic and Buddhist literature, logic, grammar, etc. Chanakya, a brahmin teacher, was among the most famous teachers of Taxila, associated with founding of Mauryan Empire.

By the time of the visit of the Islamic scholar Alberuni (973–1048 CE), India already had a sophisticated system of mathematics.

With the arrival of the British Raj in India the modern European education came to India. British Raj was reluctant to introduce mass education system as it was not their interest. The colonial educational policy was deliberately one of reducing indigenous culture and religion, an approach

which became known as Macaulayism. This dramatically changed the whole educational system. Educated people failed to get jobs because the language in which they received their education had become redundant. The system soon became solidified in India as a number of primary, secondary, and tertiary centers for education cropped up during the colonial era. Between 1867 and 1941 the British increased the percentage of the population in primary and secondary education from around 0.6% of the population in 1867 to over 3.5% of the population in 1941. However, this was much lower than the equivalent figures for Europe, where in 1911 between 8 and 18% of the population was in primary and secondary education. Additionally, they made efforts to improve literacy. In 1901, the literacy rate in India was about 5.4%; by India's independence it was nearly 16.5%.

The credit for fostering education to the masses following independence in 1947 chiefly goes to the first prime minister Jawaharlal Nehru. India's first education minister Maulana Azad envisaged strong central government control over education throughout the country, with a uniform educational system. [15] However, given the cultural and linguistic diversity of India, only higher education, which dealt with science and technology, came under the jurisdiction of the central government. The government also held powers to make national policies for educational development and could regulate selected aspects of education throughout India.

The central government of India formulated the National Policy on Education (NPE) in 1968 and in 1986 and also reinforced the Programme of Action (POA) in 1992. In 2008 the government initiated several measures the launching of DPEP (District Primary Education Programme) and SSA (Sarva Shiksha Abhiyan,ssa.nic.in India's initiative for Education for All) and setting up of Navodaya Vidyalaya and other selective schools in every district, advances in female education, inter-disciplinary research and establishment of open universities. India's NPE also contains the National System of Education, which ensures some uniformity while taking into account regional education needs. The NPE also stresses on higher spending on education, envisaging a budget of more than 6% of the Gross Domestic Product. While the need for wider reform in the primary and secondary sectors is recognized as an issue, the emphasis is also on the development of science and technology education infrastructure.

#### 2.1 Overview

India's education system is divided into different levels such as pre-primary level, primary level, elementary education, secondary education, undergraduate level and postgraduate level. The National Council of Educational Research and Training (NCERT) is the apex body for curriculum related matters for school education in India. The NCERT provides support and technical assistance to a number of schools in India and oversees many aspects of enforcement of education policies. In India, the various curriculum bodies governing school education system are:

- The state government boards, in which the majority of Indian children are enrolled.
- The Central Board of Secondary Education (CBSE). CBSE conducts two examinations, namely, the All India Secondary School Examination, AISSE (Class/Grade 10) and the All India Senior School Certificate Examination, AISSCE (Class/Grade 12).
- The Council for the Indian School Certificate Examinations (CISCE). CISCE conducts three examinations, namely, the Indian Certificate of Secondary Education (ICSE Class/ Grade 10); The Indian School Certificate (ISC Class/ Grade 12) and the Certificate in Vocational Education (CVE Class/Grade 12).
- The National Institute of Open Schooling (NIOS).

- International schools affiliated to the International Baccalaureate Programme and/or the Cambridge International Examinations.
- Islamic Madrasah schools, whose boards are controlled by local state governments, or autonomous, or affiliated with Darul Uloom Deoband.
- Autonomous schools like Woodstock School, The Sri Aurobindo International Center of Education Puducherry, Auroville, Patha Bhavan and Ananda Marga Gurukula.

In addition, NUEPA (National University of Educational Planning and Administration) and NCTE (National Council for Teacher Education) are responsible for the management of the education system and teacher accreditation.

#### 2.2 10+2+3 Pattern

The central and most state board uniformly follows the "10+2+3" pattern of education. In this pattern, 10 years of primary and secondary education is followed by 2 years of higher secondary (usually in schools having the higher secondary facility, or in colleges), and then 3 years of college education for bachelor's degree. The 10 years is further divided into 5 years of primary education and 3 years of upper primary, followed by 2 years of high school. This pattern originated from the recommendation the Education Commission of 1964–66.

# 3. Primary Education System in India

The Indian government lays emphasis to primary education up to the age of fourteen years (referred to as Elementary Education in India.) The Indian government has also banned child labour in order to ensure that the children do not enter unsafe working conditions. However, both free education and the ban on child labour are difficult to enforce due to economic disparity and social conditions. 80% of all recognized schools at the Elementary Stage are government run or supported, making it the largest provider of education in the Country.

However, due to shortage of resources and lack of political will, this system suffers from massive gaps including high pupil to teacher ratios, shortage of infrastructure and poor levels of teacher training. Figures released by the Indian government in 2011 show that there were 5,816,673 elementary school teachers in India. As of March 2012 there were 2,127,000 secondary school teachers in India. Education has also been made free for children for 6 to 14 years of age or up to class VIII under the Right of Children to Free and Compulsory Education Act 2009.

There have been several efforts to enhance quality made by the government. The District Education Revitalization Programme (DERP) was launched in 1994 with an aim to universalize primary education in India by reforming and vitalizing the existing primary education system. 85% of the DERP was funded by the central government and the remaining 15 percent was funded by the states. The DERP, which had opened 160000 new schools including 84000 alternative education schools delivering alternative education to approximately 3.5 million children, was also supported by UNICEF and other international programmes.

This primary education scheme has also shown a high Gross Enrollment Ratio of 93–95% for the last three years in some states. Significant improvement in staffing and enrollment of girls has also been made as a part of this scheme. The current scheme for universalization of Education for All is the Sarva Shiksha Abhiyan which is one of the largest education initiatives in the world. Enrollment has been enhanced, but the levels of quality remain low.

## 4. Private Education

According to current estimates, 80% of all schools are government schools making the government the major provider of education. However, because of poor quality of public education, 27% of Indian children are privately educated. With more than 50% children enrolling in private schools in urban areas, the balance has already tilted towards private schooling in cities; even in rural areas, nearly 20% of the children in 2004-5 were enrolled in private schools. According to some research, private schools often provide superior results at a multiple of the unit cost of government schools. However, others have suggested that private schools fail to provide education to the poorest families, a selective being only a fifth of the schools and have in the past ignored Court orders for their regulation.

In their favour, it has been pointed out that private schools cover the entire curriculum and offer extra-curricular activities such as science fairs, general knowledge, sports, music and drama. The pupil teacher ratios are much better in private schools (1:31 to 1:37 for government schools and more teachers in private schools are female

There is some disagreement over which system has better educated teachers. According to the latest DISE survey, the percentage of untrained teachers (parameters) is 54.91% in private, compared to 44.88% in government schools and only 2.32% teachers in unaided schools receive in-service training compared to 43.44% for government schools. The competition in the school market is intense, yet most schools make profit. However, the number of private schools in India is still low - the share of private institutions is 7% (with upper primary being 21% and secondary 32% - source: fortress team research).

Even the poorest often go to private schools despite the fact that government schools are free. A study found that 65% of schoolchildren in Hyderabad's slums attend private schools.

# 5. Homeschooling

Homeschooling is legal in India, though it is the less explored option. The Indian Government's stance on the issue is that parents are free to teach their children at home, if they wish to and have the means. HRD Minister Kapil Sibal has stated that despite the RTE Act of 2009, if someone decides not to send his/her children to school, the government would not interfere.

# 6. Secondary Education

The National Policy on Education (NPE), 1986, has provided for environment awareness, science and technology education, and introduction of traditional elements such as Yoga into the Indian secondary school system. Secondary education covers children 14–18 which covers 88.5 million children according to the Census, 2001. However, enrolment figures show that only 31 million of these children were attending schools in 2001–02, which means that two-third of the population remained out of school.

A significant feature of India's secondary school system is the emphasis on inclusion of the disadvantaged sections of the society. Professionals from established institutes are often called to support in vocational training. Another feature of India's secondary school system is its emphasis on profession based vocational training to help students attain skills for finding a vocation of his/her choosing. A significant new feature has been the extension of SSA to secondary education in the form of the Madhyamik Shiksha Abhiyan.

A special Integrated Education for Disabled Children (IEDC) programme was started in 1974 with a focus on primary education but which was converted into Inclusive Education at Secondary Stage Another notable special programme, the Kendriya Vidyalaya project, was started for the employees of the central government of India, who are distributed throughout the country. The government started the Kendriya Vidyalaya project in 1965 to provide uniform education in institutions following the same syllabus at the same pace regardless of the location to which the employee's family has been transferred.

A multilingual web portal on Primary Education is available with rich multimedia content for children and forums to discuss on the Educational issues. India Development Gateway is a nationwide initiative that seeks to facilitate rural empowerment through provision of responsive information, products and services in local languages.

# 7. Higher Education

After passing the Higher Secondary Examination (the grade 12 examination), students may enroll in general degree programs such as bachelor's degree in arts, commerce or science, or professional degree programs such as engineering, law or medicine. India's higher education system is the third largest in the world, after China and the United States. The main governing body at the tertiary level is the University Grants Commission (India), which enforces its standards, advises the government, and helps coordinate between the centre and the state. Accreditation for higher learning is overseen by 12 autonomous institutions established by the University Grants Commission. In India, education system is reformed. In future, India will be one of the largest education hubs.

As of 2009, India has 20 central universities, 215 state universities, 100 deemed universities, 5 institutions established and functioning under the State Act, and 33 institutes which are of national importance. Other institutions include 16000 colleges, including 1800 exclusive women's colleges, functioning under these universities and institutions. The emphasis in the tertiary level of education lies on science and technology. Indian educational institutions by 2004 consisted of a large number of technology institutes. Distance learning is also a feature of the Indian higher education system.

Some institutions of India, such as the Indian Institutes of Technology (IITs), have been globally acclaimed for their standard of undergraduate education in engineering. The IITs enroll about 10,000 students annually and the alumni have contributed to both the growth of the private sector and the public sectors of India. However the IIT's have not had significant impact on fundamental scientific research and innovation. Several other institutes of fundamental research such as the Indian Association for the Cultivation of Science(IACS), Indian Institute of Science IISC), Tata Institute of Fundamental Research (TIFR), Harishchandra Research Institute (HRI), are acclaimed for their standard of research in basic sciences and mathematics. However, India has failed to produce world class universities both in the private sector or the public sector.

Besides top rated universities which provide highly competitive world class education to their pupils, India is also home to many universities which have been founded with the sole objective of making easy money. Regulatory authorities like UGC and AICTE have been trying very hard to extirpate the menace of private universities which are running courses without any affiliation or recognition. Indian Government has failed to check on these education shops, which are run by big businessmen & politicians. Many private colleges and universities do not fulfill the required criterion by the Government and central bodies (UGC, AICTE, MCI, BCI etc.) and take

students for a ride. For example, many institutions in India continue to run unaccredited courses as there is no legislation strong enough to ensure legal action against them. Quality assurance mechanism has failed to stop misrepresentations and malpractices in higher education. At the same time regulatory bodies have been accused of corruption, specifically in the case of deemed-universities. In this context of lack of solid quality assurance mechanism, institutions need to step-up and set higher standards of self-regulation.

Government of India is aware of the plight of higher education sector and has been trying to bring reforms; however, 15 bills are still awaiting discussion and approval in the Parliament. One of the most talked about bill is Foreign Universities Bill, which is supposed to facilitate entry of foreign universities to establish campuses in India. The bill is still under discussion and even if it gets passed, its feasibility and effectiveness is questionable as it misses the context, diversity and segment of international foreign institutions interested in India. One of the approaches to make internationalization of Indian higher education effective is to develop a coherent and comprehensive policy which aims at infusing excellence, bringing institutional diversity and aids in capacity building.

Three Indian universities were listed in the Times Higher Education list of the world's top 200 universities — Indian Institutes of Technology, Indian Institutes of Management, and Jawaharlal Nehru University in 2005 and 2006. Six Indian Institutes of Technology and the Birla Institute of Technology and Science – Pilani were listed among the top 20 science and technology schools in Asia by Asiaweek. [60] The Indian School of Business situated in Hyderabad was ranked number 12 in global MBA rankings by the Financial Times of London in 2010while the All India Institute of Medical Sciences has been recognized as a global leader in medical research and treatment.

#### 8. Technical Education

The number of graduates coming out of technical colleges increased to over 700,000 in 2011 from 550,000 in FY 2010. However, 75% of technical graduates and more than 85% of general graduates are unemployable by India's high-growth global industries, including information technology.

From the first Five Year Plan onwards India's emphasis was to develop a pool of scientifically inclined manpower. India's National Policy on Education (NPE) provisioned for an apex body for regulation and development of higher technical education, which came into being as the All India Council for Technical Education (AICTE) in 1987 through an act of the Indian parliament. At the Central(federal) level, the Technology, the Indian Institute of Space Science and Technology, the National Institutes of Technology and the Indian Institutes of Information Technology, Rajiv Gandhi Institute of Petroleum Technology are deemed of national importance.

The Indian Institutes of Technology are among the nation's premier education facilities. Since 2002, Several Regional Engineering Colleges (RECs) have been converted into National Institutes of Technology giving them Institutes of National Importance status.

The Rajiv Gandhi Institute of Petroleum Technology: The Ministry of Petroleum and Natural Gas (MOP&NG), Government of India set up the institute at Jais, Rae Bareli district, Uttar Pradesh through an Act of Parliament. RGIPT has been accorded "Institute of National Importance" along the lines of the Indian Institute of Technology (IIT), Indian Institute of

Management (IIM) and National Institute of Technology (NIT). With the status of a Deemed University, the institute awards degrees in its own right.

The UGC has inter-university centres at a number of locations throughout India to promote common research, e.g. the Nuclear Science Centre at the Jawaharlal Nehru University, New Delhi. Besides there are some British established colleges such as Harcourt Butler Technological Institute situated in Kanpur and King George Medical University situated in Lucknow which are important center of higher education.

Central Universities such as Banaras Hindu University, Jamia Millia Islamia University, Delhi University, Mumbai University, University of Calcutta, etc. are too pioneers of technical education in the country.

In addition to above institutes, efforts towards the enhancement of technical education are supplemented by a number of recognized Professional Engineering Societies such as

- 1. Institution of Mechanical Engineers (India)
- 2. Institution of Engineers (India)
- 3. Institution of Chemical Engineering (India)
- 4. Institution of Electronics and Tele-Communication Engineers (India)
- 5. Indian Institute of Metals
- 6. Institution of Industrial Engineers (India)
- 7. Institute of Town Planners (India)
- 8. Indian Institute of Architects

that conduct Engineering/Technical Examinations at different levels(Degree and diploma) for working professionals desirous of improving their technical qualifications.

## 9. Open and Distance Learning

At school level, National Institute of Open Schooling (NIOS) provides opportunities for continuing education to those who missed completing school education. 14 lakh students are enrolled at the secondary and higher secondary level through open and distance learning.

At higher education level, Indira Gandhi National Open University (IGNOU) co-ordinates distance learning. It has a cumulative enrolment of about 15 lakhs, serviced through 53 regional centres and 1,400 study centres with 25,000 counsellors. The Distance Education Council (DEC), an authority of IGNOU is co-coordinating 13 State Open Universities and 119 institutions of correspondence courses in conventional universities. While distance education institutions have expanded at a very rapid rate, but most of these institutions need an up gradation in their standards and performance. There is a large proliferation of courses covered by distance mode without adequate infrastructure, both human and physical. There is a strong need to correct these imbalances.

Arjun Singh Center for Distance and Open Learning, Jamia Millia Islamia University was established with the assistance of Distance Education Council in September 2002. Major objectives of the Centre are to provide opportunities for higher education to those who are not able to draw benefits from formal system of education. The Open Learning System allows a learner to determine his pace of learning and provides education at the doorstep of the learner. The mode of transaction is through self-learning print material, supplemented by audio and video

programmes. It has further scope of students accessing material through internet and various other media.

## 10. Conclusion

Improvement in the Indian system of schooling is an elephantine task and has become very important. What our students are learning now is mostly redundant. Syllabus needs to be skill based rather than mugging up of large chunks of theory. I am shocked to see that students even mug up mathematical sums before the exams. Learning by doing should be our primary focus and they need to be taught what is relevant. Invalid information in textbooks take away a lot of productive learning time. We also do not have any system in traditional schools to tap the talents of students apart from academic achievement as we lay so much importance on marks and grades.

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