

AN ANALYTICAL REPORT

ON

The Indian Education System

SUBMITTED TO: PROF. MEENAKSHI K

SUBMITTED BY:

MEHUL JAIN (18BCE0192) ;

GAURAV KUMAR (18BCE0211)

NITIN RANJAN (18BCE0272);

YASH ANAND (18BCE0276);

TANISHQ PADWAL (18BCE2237)

PLACE: VELLORE

DATE: 12TH MARCH, 2019

AN ANALYTICAL REPORT

ON

The Indian Education System

SUBMITTED TO: PROF. MEENAKSHI K

SUBMITTED BY:

MEHUL JAIN (18BCE0192) ;

GAURAV KUMAR (18BCE0211)

NITIN RANJAN (18BCE0272);

YASH ANAND (18BCE0276);

TANISHQ PADWAL (18BCE2237)

PLACE: VELLORE

DATE: 12TH MARCH, 2019

PREFACE

Education is not just the books, the schools or the teachers – it is about the lifelong attitude that is given over to students as professionals and citizens of an ever-increasing global community. And this makes education a field of prime importance as it decides both the skillset an individual carries as well as a large part of values one lives with in the society.

The Republic of India has a unique and multi-faceted Education System. Although the Education system in general traces its roots to the establishment of skill-oriented *gurukulas* which as per historians were set up at least 3000 years ago, the modern form of Education began some 250 years ago with the implementation of the Indian Education Act in 1854. Since then, several developments took place in India including its independence from the British rule. However, Education has always been a priority in every household and with time, the number of students graduating high school and university are increasing.

The system produces about a million engineers, doctors and CAs alone annually. However, the skillset that these university graduates possess is far from satisfactory. This has been adding up to the skilled unemployed in the country. This is worsened by increasing competition in all spheres of life – education, employment and remuneration – all of which are primarily determined by the educational skills possessed by an individual.

These have resulted in an increasing trend of suicides and depression in most prime institutions across the country. The report tries to trace the lacunae

that the system possesses by interacting with students and professionals and thereby try to produce and suggest solutions to the same.

In this way, we aim at redirecting the vision of education itself and bring about atleast a subtle change in the way Education is seen and perceived in India.

Thankyou

The authors

ACKNOWLEDGEMENTS

The preparation of this report was a really wonderful journey. We all acknowledge the fact that without team spirit and enthusiasm, the work would not have met its glory of completion. We would like to thank all contributors, who through their testimonies have helped us gain a better insight into the way a system effects an individual.

The team expresses its sincerest and heartfelt gratitude to Dr. Meenakshi K, Professor Faculty ENG1011 course for giving us this opportunity to understand this world in a better way. We apologise if someone is not explicitly mentioned, but we assure them that our gratitude reaches all of them.

The team

TABLE OF CONTENTS

Preface ...	1
Acknowledgements ...	3
Abstract ...	5
1. Introduction ...	7
2. Methodology...	8
3. Discussion ...	9
a. Case Study 1: High School System	
b. Case Study 2: College/ University	
c. Case Study 3: Political Interference	
d. Case Study 4: Innovation and Skill export	
4. Conclusion ...	15
5. Recommendations ...	16
6. Appendix A(Survey Forms attached)...	18
7. Appendix B(Personal Testimonies of students)...	18
8. Bibliography/References...	21

Abstract

The Indian Education system is probably one of the most complex organizations on the planet. The complexity arises out the need for it to cater to a huge population with a diverse cultural, ethical and religious backgrounds. It largely borrows the British model that was set before the Indian independence. And with time, it has proven to be successful in various spheres – like the provision of a quality general education, ready to take scrutiny and to work on self-improvisation. The NIF of 2005 was a milestone in improvising the way high school education worked. It eased curricula but introduced hands-on-learning.

However, as the issue remains – students feel no or very low motivation to study by the time they are in the universities. There is an apparent shift from the zeal to study in middle school and high school to the apathy in university. In addition, there has been an increase in the number of cases of suicides, depressions and crimes. While many universities claim to provide a special course on ‘Humanities’, there has been apparently no effect of it on the way students conduct themselves in institutions. While this has got several reasons, the most important seems to be the fact that they experience a new-found freedom, something which is more or less a taboo in most households. Another reason is that parents often decide the way in which a student must conduct himself/herself. They often choose their careers with the notion of a child being too naïve to work it out. Most students and professionals have little or no interest in their fields. And finally, Indian Education system has failed to support individual learning, though has greatly improved its imparting of generic education to all to let everyone have a common basic

skillset and knowledge. And this is another reason why as per estimates only about 10% of skilled professionals are employable in the country.

There are not many ways out of this problem – but the most effective one is to bring about awareness and progressive psychological shift in the society. While adaptation of new learning methodologies and systems to enhance individual skillset will take some organizational work, the psychological shift can actually be achieved at a very fast rate keeping in mind the fact that India’s median age is 27 years – and hence we are young enough to understand the problems that youngsters face in this era.

“Education is the most powerful weapon which you can use to change the world.”

- Nelson Mandela

Introduction

The Indian Education system traces its origin to a 2000 years old Vedic model of '*gurukula*'. However, as time and age changed, the system fell to chaos and the healthy scientific age that saw some of the greatest discoveries and inventions of the age fell to more than a millennium of political turmoil that nevertheless yielded some really wonderful poets and storytellers. By the early 1800s, it was evident that the Britishers would emerge the sole political superpower of the subcontinent. There was general apathy among the Britishers about the issue and it was only in 1854 that Sir T. Macaulay pressed for a universal Western model for education that the Indian Education Act was passed and in 1902 when Lord Curzon, the then Viceroy of the crown to India began a massive work to improve quality of Indian Education.

After independence, the government of India long cherished the dream of Universal Education which it was able to implement for an age group of 6-14 years. One of the greatest impacts of British rule over India was the importance assigned to English language. It in itself became some sort of vocational course to learn and know English. Commerce and infrastructure have always maintained their values. However, with time, however, as IT entered the Indian market, it became a favourite of students and parents alike. And as per the year 2018, the highest ranked students in most Engineering colleges chose Computer Sciences or IT as a field of their interest. No doubt, India has produced some of the best brains on the planet including CEOs of MNCs, scientists, Cas, economists and entertainers.

In addition to all this history of development that is associated with Education in India, there have also been cases of suicides, depressions,

protests and political chaos. In 2015 alone , the number of student suicides stood at 8,934. Parents often decide careers in India, which often leads to students to find it hard to indulge deeply into the subject. Another issue is the great preference engineering holds over other careers in India. Arts and sports are often looked down upon as permanent career options. While these seem to be great problems in their own respect, these are secondary. There are many primary issues that we shall be dealing with in our report. Through this report, which includes first hand interaction with students – the largest stake holders and some professionals, we try to find the root of the issue. While the Education system itself cannot be blamed for all ills and gains, it is a great cause in the same.

Methodology

Reaching a large audience was a really difficult task. So, we decided to work out with survey forms – which can be easily made using servers like google or survey monkey. While the first form was intended to for a general audience, the second was specific to students. The forms were intended to cover a holistic range of topics that the term Education encompasses. The students study in different parts of the country and hence, we expect that the results present a general picture of the way in which Indian Education system conducts itself.

Some students were glad to provide us with written testimonies and share their experiences, dreams and aspirations as a college student. (All these are attached separately as appendices).

We also included notes and referrals from reports by think-tanks, government surveys and independent groups that provide a more comprehensive narration of the Indian Education.

Discussion

Case study 1: High School

High School is probably one of the most important phases of learning. As per our survey, out of 49 students questioned, 25 people accepted that high school was indeed significant in their life and only 13 people treated it as insignificant, the remaining chose to remain neutral. CBSE implemented the NEF(National Education Framework) over high school students. High school forms a basis for college examinations in most countries.

However, the actual problem with high school education is the fact that the students are ‘programmed’ to rote learn. The examination pattern through which most students undergo expects the students to produce text as it is in the textbook, not pushing towards any greater level of understanding. This forms new patterns of learning in a student’s brain which loses its ability to question and decipher things. Thus, the lack of any open-ended questions in high school often lead to degradation in student quality and a thorough dependency on rote learning. Infact if an open-ended question is indeed put in a question paper, the students feel it to be unfair. This is later on visible in most of their learning skills, including even cognitive ones like coding and programming (Springer pub.).

This does not do well with skills that need observation and cognition – basic skills needed everywhere. This also creates problems for students who want to pursue some skill based career as they enter into a completely uphill domain all of a sudden. This is the primary reason why in CBSE schools, CCE induced pattern of division of course syllabus into halves for each

semester(introduced in 2014-15) was removed in 2018 with the reintroduction of complete syllabus annual examinations to put a limit on rote learning. But that actually does not stop rote learning or the competition that exists in the classroom. The competition is ever strong, and examiners seldom try to come up with new questions. Question banks flood the market and so, most high schoolers, with exception to those who are really interested in learning or those preparing for competitive examinations seldom learn to grow with self-study. This puts immense pressure on them once they reach junior college or universities, where self-study is the primary mode of learning.

A big drawback and positive point at this stage is the existence of competitive examinations. One issue is the fact that students are expected to appear for them as soon as they graduate high school. Now, keeping in mind the fact that high school was itself a race, this only adds up to it and to the revenue that coaching industry generates(thanks to the fact that high school education is not sufficient to clear most entrance examinations with a very good merit). Good students improve while most are not even given a chance to ponder over options and simply become a part of the herd mentality.

DRAWBACKS OF HIGH-SCHOOL EDUCATION SYSTEM:

1. Rote learning is encouraged through examinations that expect a copy-paste mechanism from notes on answer sheet.
2. The aptitude to question and realise stuff is not given importance.
3. Open-ended thinking is seldom encouraged.
4. Self study is not inculcated as a habit in most students.
5. Rat race and competition for entrance examinations.

CASE STUDY 2: COLLEGE/UNIVERSITY

Most students have aspirations to do something as a career. It is often a hobby, often just an infatuation and many-a-times a determined goal. Of 52 students who took part in the survey, 76.9% students accepted the fact that they had a dream as a child, while 13.5% were not very sure of it. The remaining denied having any dream career. However, the problem is that only 34.6% of the respondents said that they were in college/university and were actually pursuing their dream, while 28.8% denied doing so. 36.5% were still not very sure about where they were heading to.

In India, most parents decide the career of their children. And the most preferred career is that of a software engineer/IT firm worker. Engineering thus becomes a great longing for most in India. About 2 million students appear for engineering entrance examinations annually. However, as per the Annual Standard of Education report, 2018(ASER 2018), only 17% of engineers in India are employable. And IT companies like Infosys, Cognizant etc. have been in a lot of news for their lay-offs. The intake in automobile industry is always very selective. This leaves about a million and a half engineers in jeopardy annually. What essentially is the reason for this?

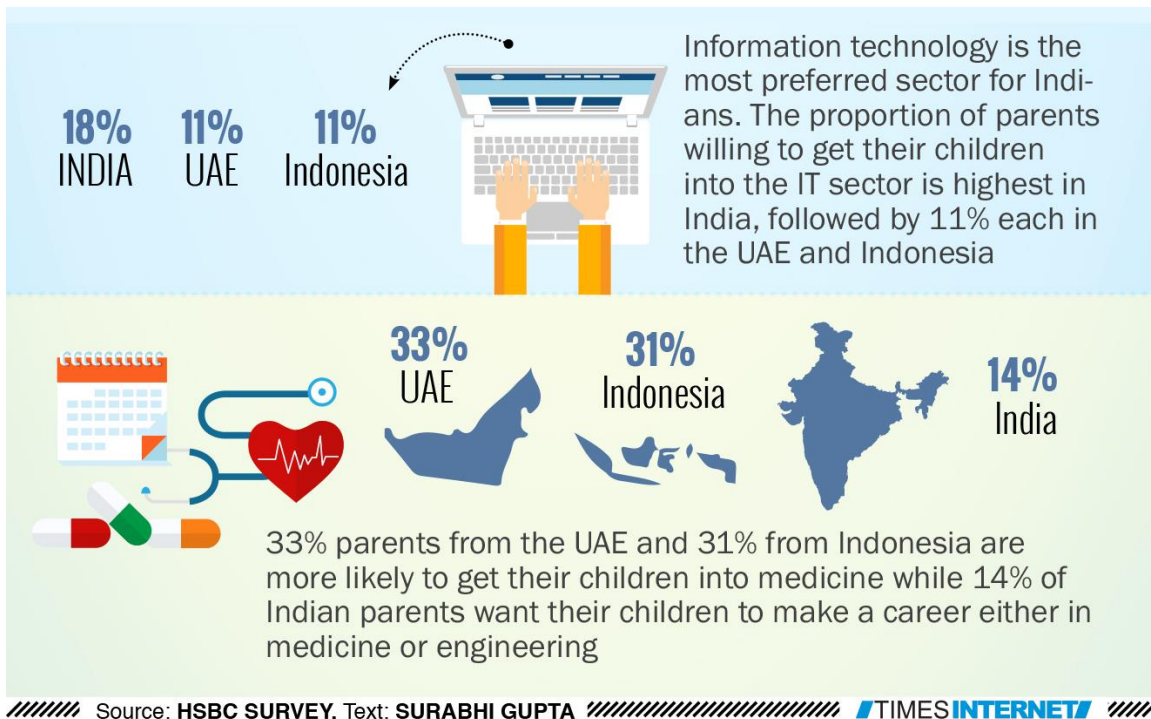
As already mentioned, most students don't feel ease with their subjects. This leads to an eventual loss of motivation in the student to learn and grow. Most of our survey respondents agreed with the fact that Indian colleges generally lack students with a zeal to learn. Most engineering colleges fail to provide model based learning or hands-on -approach. While medical colleges cannot function without them, engineering colleges and commerce colleges often run on generic learning yet again. They fail to cater to individual skills. This is a

highly plausible case in a country with population as large as India, however, the fact remains that this often leads to the breaking of a ‘grand college’ dream for students who actually opted an institution to learn stuff. This lack of motivation pushes most students to the brink of depression or even suicides.

A problem that exists here is the fact that student-teacher interaction is not very strong at this phase. Many teachers are apathic towards students’ mental problems – which in itself is not a very open topic in India. Another point is the fact that college continues with trend of generic education imparting and most students prefer to learn things by self-study.

On the part of students, for them college/university presents a new found freedom. Most households have helicopter parents and a sudden freedom is too much for students to resist. They often do not study, showing apathy on their part too – towards their studies. They often study hours before the examination commences – thanks to their ancient art of rote learning and most college based examinations can be cleared using the same. This has a terrible effect yet again.

The issue remains hence, the apathy of institution and lack of motivation among students.



DRAWBACKS OF COLLEGE/UNIVERSITY EDUCATION SYSTEM:

1. Lack of students who are self-motivated to learn
2. Breaking of the college dream
3. Self-study means no classroom studying
4. Practical learning missing

CASE STUDY 3: POLITICAL INTERFERENCE:

Education no doubt holds a deep social as well as political meaning for the people. It can be used to build up ideologies that support a particular political outfit or its ideas. As many of the participants of the survey also pointed, political interference in the way education runs can ruin it. Leave alone reservation that holds some meaning to the underrepresented sections, the books published by NCERT had in 2016 come under scrutiny for propagating leftist politics for decades including the glorification of the naxalbari movement in classrooms. NCERT has also been used to spread ideologies of the then ruling governments.(see the Hindu article in Reference). This means a lot as students were actually influenced while learning and the governments have for years maintained a zero political interference in schools policy.

CASE STUDY 4: SKILL EXPORT

A major problem faced by India is the massive skill export or brain drain one can say. Most students go abroad in search of jobs or for higher education. As per UN reports, about 180,000 left India in the first decade of 2000s itself. This illustrates the fact that even if skilled workforce is created in the country, a large part of it is lost due to inability of industries and higher educational institutions to retain it. It is primarily due to lack of well-developed research facilities and teachers in India. As per one of the participants of our survey, students who are trying to seek PhD in India often end up under professors who treat them as servants running for errands. Finally, the professor himself/herself creates the thesis and awards a PhD.

Thanks to new regulations set up in 2013 and 2017, PhD students need to go through a lot many tests before being awarded the degree.

The issue here is the fact that in India, most universities expect teachers to be PhD holders, irrespective of the actual input the teacher can put into the class.

Brain drain is a big issue for any state that wants to develop. The government of India has proposed to bring in about 200,000 Indian students back to India by 2020.

Conclusions

India has done excellent job in its capacity to contain diversity and eliminate political fragments from its education. (The research team found the article about NCERT politically influenced from the Hindustan Times and the Hitvada as it is. And government has decided to get rid of those portions).

The group, however came to a conclusion that the four primary problems faced by the education system in India are:

1. Rote learning promoted in High Schools;
2. Lack of Self-motivation for learning in high school and universities;
3. Inability of institutions to cater to individual skill development instead of providing generic knowledge;
4. Inability of industries and higher education offering institutes to provide research facilities and job opportunities at par with international institutions;

Recommendations

1. Though the committee realizes that the huge population and the diverse skillsets offered in India cannot always be identified and catered, it is always possible to find means to let individuals realize their interests. This can be done by letting students form hobby clubs in middle and high schools. And this will give students about 6 years to ponder over their interests and skills. This can be extended to the idea of letting a mentor work with a student for an hour each week. This mentor must be closely associated with the field the student wants to work with. A psychiatrist must at all times look over all students. This mentor can then recommend finer skills within the hobby.
2. A student must not be evaluated on academic grounds alone. Co-academic and extra-academic learning should hold grounds if the student is good at it.
3. Every student must go through a compulsory career counselling and psychological counselling to understand his/her aptitude and zeal.
4. If one gets stuck along a path, change paths. One very important thing is the idea that learning is more important than marks or momentary success. Learning gives enjoyment and joy in each of the small achievements that will be made by the student. This idea must be spread amongst parents as well. This can be done through acts, pamphlets or theatre.
5. One can learn greatly from the lives of people actually involved in an industry. TEDx or TED or talks organized in schools and colleges can be a great help.

6. Colleges must themselves improve their standards. On the part of students, they can form study circles to augment understanding. They can also share their learning via blogs or videos on servers like YouTube and WordPad.
7. College learning should be fun. This is to reduce apathy towards learning that most students possess. Remove the system of marks and let students work on models to implement a course or even better – models to teach a course that is better understood by fellow classmates.
8. Let students pursue hobbies of arts, drama and music while also exploring technical curriculum. The opposite is true for students of art.

The committee realizes that while most of these recommendations are based on the will of administration, it also believes that they are not too hard to be rejected.

With this, the committee closes its report.

APPENDIX A:

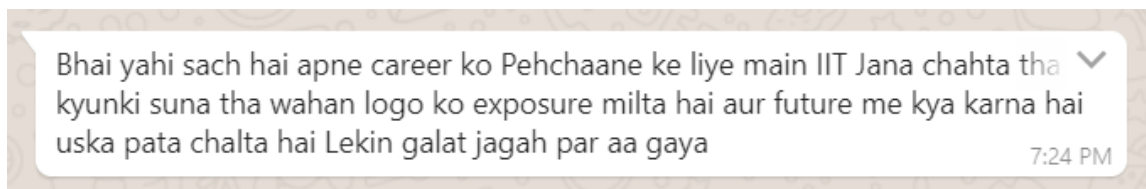
SURVEY FORM links. Reports attached.

<https://goo.gl/forms/C3A6vnTLd4kLaBvC2> ...survey form 1

<https://goo.gl/forms/YZ6wRGRiRqIsfZkG3> ...survey form 2

APPENDIX B: TESTIMONIES

A Chemical Sciences Student from a reputed university stated:



Which translates to : “It is true that I wanted to join an IIT in order to understand myself, so that I could choose my career as I was told that one gets a lot of exposure there. However, I believe I have come to a wrong place...”

A student of IT Branch student shared some of his experiences in VIT.

- Language barrier :- it is the most common problem for the north Indians while they interact with the locals.
- FFCS :- the system of FFCS is no doubt a good system , but it has some limitations like , some students cannot opt for their subjects of interest. Also , a lot of students are sometimes unable to access through the server during the FFCS registration , due to which the required credits are not registered.
- Incompetent teachers :- some the teachers are really egoists , like whenever we try to correct them or we ask question , they get angry and sometimes deduct marks from digital Assignments.
- Mess’ food :- it is the most common and the huge problem for the hostelers that they encounter every day. Due to this , a lot of people try to avoid the mess’ food and prefer restaurants , which can cause problems to the health , if preferred on regular basis.

- Percentile system :- Due to a strange percentile based system, the competition increases tremendously even in individual classrooms. For example – a student got a D grade with 78 marks. This really demotivates students.
- Drug consumptions :- a lot of students are indulged in consuming drugs , cigarette smoking and consuming alcohol , due to which their friends starts consuming drugs because of peer pressure.
- Attendance issue :- it is the most common issue nowadays claimed by the students , as 75% above attendance is mandatory. This is really tough for the students to maintain it , and many of the students get debarred in the subjects.

A Computer Science Student from a reputed University stated:

“When I joined college, I was so much into dreams. I wanted to visit labs, play like hell, learn music, learn programming and do a lot of stuff. However, a week into the system and things were evident to me. I joined CSE because I felt that I could relate it to cosmology, my first love...but now it seems even clearing CSE is a question. I don't feel like studying here. My rank was pretty good when taking admission. So, I thought I could make up. But, it seems, I cannot...”

Another CSE student recounted,

“When I was in school, I always thought college is a space is extreme freedom , where you have the complete opportunity to explore yourself beyond just getting educated to get a job.

Coming to college , I was a bit disappointed as the amount of work given is overwhelming and leaves very less time to explore one's capabilities and ones interest .

In school, you are always told that college is a very interesting place and you have a lot of time to decide as to what you like and want to pursue after graduation. The amount of hard work that you do to enter a college on merit , is not done justice to by the workload on the students .Furthermore, students are given limited opportunities to study subjects beyond the courses they registered for.”

References

Weblinks:

<http://www.ncee.org/wp-content/uploads/2013/10/India-Education-Report.pdf> (The National Centre for Education and Economy Report titled the 'Indian Education Profile', 2013)

https://www.britishcouncil.in/sites/default/files/indian_school_education_system_-_an_overview_1.pdf (the British Council Report on Indian Education System, Dec 2014)

<https://www.speakingtree.in/blog/indian-education-system-good-or-bad> (The Speaking Tree Blog dated 27th December 2017)

<https://www.gnu.org/education/edu-system-india.en.html> (A report by the GNU OS centre)

http://web.worldbank.org/archive/website01291/WEB/0__CO-14.HTM (World Bank Report)

<http://www.economicdiscussion.net/articles/problems-faced-in-the-progress-of-education-in-india/2291> (This is written in first person)

<https://timesofindia.indiatimes.com/blogs/toi-edit-page/indias-failing-education-system-it-is-our-childrens-future-not-our-ancestors-pride-that-deserves-our-outrage-first/> (3rd April 2019 report on ASER 2018)

<https://timesofindia.indiatimes.com/blogs/minorityview/indian-parents-have-very-high-expectations-about-their-childrens-education-and-careers/>

(TOI report using Homi Bhabha Center for Science Report)

<https://www.hindustantimes.com/health-and-fitness/every-hour-one-student-commits-suicide-in-india/story-7UFFhSs6h1HNgrNO60FZ2O.html>

(A report on suicides in India)

https://link.springer.com/chapter/10.1007/978-3-662-46742-8_12 (on rote learning of codes)

<https://timesofindia.indiatimes.com/city/guwahati/fake-phd-degrees-under-government-scanner/articleshow/63726060.cms> (fake PhD)

<https://timesofindia.indiatimes.com/city/chennai/another-prof-held-for-fake-phd-as-bihar-turns-hotspot-for-forged-certificates/articleshow/65479674.cms> (fake PhD)

<https://www.thehindu.com/op/2004/11/09/stories/2004110900161700.htm> (NCERT passages)

<http://monitor.icef.com/2012/11/number-of-indian-students-heading-abroad-up-300-over-past-decade/> (Indian students abroad)

Books:

A Students' History Of Education In India: 1800-1973 by JP Naik