Report summary

on

Performance of Haryana State's students in IIT selection during last 5 years

Year: 2017-2021



State Council of Educational Research and Training Haryana, Gurugram

राज्य शैक्षिक अनुसंधान एवं प्रशिक्षण परिषद् हरियाणा, गुरुग्राम

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1. Introduction

The National Education Policy introduced on July 29, 2020 has brought with it some drastic changes for the Indian Education system. Though the schools are given these directions as suggestions, they have welcomed these new changes and are trying their best to implement them into their curriculum. The National Education Policy strives to change the entire system of examinations and school systems from a 10+2 to a 5+3+3+4 system for the benefit of students. The educational experts have developed the NEP 2020 on the basis of four pillars including Access, Equity, Quality and Accountability¹. Dealing with this requirements, it becomes necessary to have a deeper understanding of all these pillars especially the term 'Quality'. In the school education system, it can be viewed in terms of a child's performance, knowledge based on various input factors.

As per education experts and policy makers, the term quality is hard to define as it stands different for different stakeholders and also, because of different structures of educational boards in the country. Though in India, there is the provision of central authority, but primary education is a state system and power officially resides with the states, concerns about efficiency and local involvement are addressed through the delegation of authority from the legislative branch to the local school board². With this new education system with quality in focus, it becomes necessary to understand the basic structure of the different boards functional in India; as there are many structural and pedagogical differences in the various educational boards functional in the country resulting in the performance of students at national and international level.

Gradually various national, international and state boards and organizations of school education came into existence to serve some or the other purposes of school education; but what matter most are the issues/factors due to which one system lags behinds the other. In this light an attempt is being made to conduct a comparative study of 3 different boards functional

¹https://www.eastcoastdaily.in/2022/02/26/know-all-about-the-new-national-education-policy-

^{2022.}html#:~:text=It%20has%20replaced%20the%20old%20national%20education%20policy%20launched%2 0in%201986.&text=Educational%20experts%20has%20developed%20the,Equity%2C%20Quality%2C%20and %20Accountability retrieved dated 10.06.2022.

²'Quality in school education' retrieved from https://www.qcin.org/PDF/Comman/Quality-in-School-Education.pdf dated 10.06.2022.

in the state i.e., CBSE, ICSE and BSEH to understand certain broad aspects related to the difference in performance of students studying under the given boards. As a part of this process, Phase I was conducted which was focused on studying the student's achievements from the State of Haryana in terms of their performance in IIT selections. The summary of the data collected for last 5 years has been presented in 'Analysis' section of this report. The next phase of the study with focus on qualitative indicators will begin soon.

2. Research Methodology

The study was conducted to find out the achievements of students from Haryana after passing +2 examination from various boards. For this purpose, the data regarding the number of students selected in all the 23 IITs on the basis of JEE-Advance test scores in all 4-5 years academic courses (including B.Tech, B.S., B.Arch, Dual Degree B.Tech-M.Tech, Dual Degree B.S.-M.S., Integrated M.Tech and Integrated M.S.) during last 5 years was collected.

However, to collect the data from all 23 IITs was quite time consuming from collection and compilation point of view. In the process of data collection, it was observed that the IIT-JEE Advanced tests are being conducted by the zonal IITs on rotation basis since 2006. In view of the above mentioned period, the JEE-Advanced tests were conducted by the following institutes from 2017 to 2021.

Table 1: List of IITs who conducted JEE-Advanced during 2017-21

Sr. No.	Year	Name of IITs conducted JEE-Advance Exam for the
		below mentioned years
1.	2017	IIT Madras
2.	2018	IIT Kanpur
3.	2019	IIT Roorkee
4.	2020	IIT Delhi
5.	2021	IIT Kharagpur

So, all the above mentioned IITs were contacted to get the data collected on the prescribed format as sent to each IIT. With the support of all the concerned IITs, we were able to retrieve the data as required.

3. Analysis

This chapter presents a brief summary of the performance of students from Haryana state with respect to the last 5 years i.e., 2017-21.

3.1 Performance of Haryana state

a) **Student's selection in IITs during last 5 years:** Data shows that percentage of students selected among the total seats available lies between 3-4% throughout these years and the ranking is 8-9 among all the states & UTs.

However, the number of students selected through last 5 years has increased from 441 (in 2017) to 567 (in year 2021).

Table 2: Status of student's selection from Haryana during 2017-2021

Sr. No.	Year	No. of students selected in given year	% of student's selected (out of total seats)	Haryana's ranking (States + UTs as a whole)	Haryana's ranking (States only)
1	2017	441	4.1	8	8
2	2018	475	4	8	8
3	2019	470	3.5	9	8
4	2020	552	3.4	9	8
5	2021	567	3.5	9	8

b) Student's selection in IITs during last 5 years with respect to 'Gender': If we look at the data from gender perspective, it's clearly visible that the percentage of boys selected in IITs is far greater than the percentage girl students selected.

Figure 1: Student's selection from Haryana during 2017-2021 w.r.t. Gender



However, one important thing to note here is that the performance of girl students being selected in IITs from Haryana has improved as the percentage of girl students selected i.e., 8.8% in 2017 has increased to 18.3% in 2021.

c) **Student's selection in IITs during last 5 years with respect to 'Boards':** Every state has schools functioning under different type of Boards. Being a state academic authority it was important to find out the bifurcation of students who got selected after passing out +2 level examination under different Boards functional in the state.

96.6 100.0 95.2 95.2 93.7 91.5 90.0 80.0 70.0 60.0 50.0 40.0 30.0 Year- 2021, 5.8 Year- 2020, 5.8 2 Year-2017, 3.2 Year- 2018, 2.9 Year- 2019, 2.6 0 1.6 10.0).4 1.5 0.4 0.4 1.1 1.6 0.5 0.0 0.0 YEAR-2017 YEAR- 2018 YEAR- 2019 YEAR- 2020 YEAR- 2021 ■BSEH ■CBSE ■ICSE ■Other Boards

Figure 2: Students selected from Haryana in IITs during 2017-2021 w.r.t. Educational Boards

Data for the same shows that the majority of students got selected in IITs during last 5 years are from CBSE. No doubt that the percentage of students selected from BSEH has increased over the years i.e., 3.2% in 2017 to 5.8% in 2021, yet the overall percentage is still very low

d) Ranking of Haryana state among all states and UTs during last 5 years: Data shows that Haryana has been on Ranks 8-9 since last 5 years. Also the ranking of all top and low performing states is almost same through these years.

Rank	State & UT's Names w.r.t. each year					
	2017	2018	2019	2020	2021	Remarks
1	Rajasthan	Rajasthan	Rajasthan	Rajasthan	Rajasthan	Top 5 performing
2	Uttar Pradesh	Uttar Pradesh	Uttar Pradesh	Uttar Pradesh	Uttar Pradesh	states: Rajasthan, Uttar Pradesh,
3	Maharashtra	Maharashtra	Telangana	Maharashtra	Maharashtra	Maharashtra,
4	Andhra Pradesh	Telangana	Maharashtra	Telangana	Telangana	Andhra Pradesh, Telangana
5	Telangana	Andhra Pradesh	Andhra Pradesh	Andhra Pradesh	Andhra Pradesh	

Table 3: Ranking_State's & UTs (Year-wise)

6	Bihar	Madhya Pradesh	Madhya Pradesh	Madhya	Bihar	
7	Madhya	Bihar	Bihar	Pradesh Bihar	Madhya	
	Pradesh	11	Delhi	Delhi	Pradesh	
8	Haryana	Haryana			Delhi	
9	Jharkhand	Delhi	Haryana	Haryana	Haryana	
10	Delhi	West Bengal	Jharkhand	Karnataka	West Bengal	
11	West Bengal	Gujrat	Gujrat	Gujrat	Gujrat	
12	Gujrat	Jharkhand	West Bengal	Jharkhand	Karnataka	
13	Tamilnadu	Tamilnadu	Tamilnadu	Tamilnadu	Jharkhand	
14	Karnataka	Karnataka	Karnataka	West Bengal	Tamilnadu	
15	Punjab	Kerala	Kerala	Kerala	Kerala	
16	Kerala	Punjab	Punjab	Punjab	Punjab	
17	Chhattisgarh	Chhattisgarh	Odisha	Chhattisgarh	Odisha	
18	Odisha	Odisha	Uttarakhand	Odisha	Chhattisgarh	
19	Uttarakhand	Uttarakhand	Chandigarh	Uttarakhand	Uttarakhand	
20	Assam	Assam	Chhattisgarh	Chandigarh	Chandigarh	
21	Chandigarh	Jammu &	Assam	Assam	Assam	
		Kashmir	-			
22	Himachal Pradesh	Chandigarh	Jammu & Kashmir	Jammu & Kashmir	Jammu & Kashmir	
23	Jammu &	Himachal	Himachal	Himachal	Himachal	
24	Kashmir Dadra and	Pradesh Tripura	Pradesh Goa	Pradesh Puducherry	Pradesh Goa	
24	Nagar Haveli and Daman &	Пірша	Goa	ruducherry	Goa	
25	Diu Arunachal Pradesh	Goa	Puducherry	Goa	Puducherry	
26	Goa	Arunachal Pradesh	Manipur	Tripura	Arunachal Pradesh	
27	Tripura	Puducherry	Arunachal Pradesh	Ladakh	Tripura	
28	Nagaland	Manipur	Tripura	Arunachal Pradesh	Manipur	
29	Puducherry	Meghalaya	Dadra and Nagar Haveli and Daman & Diu	Dadra and Nagar Haveli and Daman & Diu	Dadra and Nagar Haveli and Daman & Diu	
30	Manipur	Dadra and Nagar Haveli and Daman & Diu	Meghalaya	Manipur	Meghalaya	
31	Meghalaya	Nagaland	Nagaland	Mizoram	Mizoram	
32	Lakshadweep	Sikkim	Sikkim	Nagaland	Ladakh	Low 5 performing
33	Mizoram	Mizoram	Mizoram	Meghalaya	Nagaland	states: Lakshadweep,
34	Sikkim	Andaman and Nicobar Islands	Andaman and Nicobar Islands	Sikkim	Sikkim	Sikkim, Andaman and Nicobar Islands, Ladakh
35	Andaman and Nicobar Islands	Ladakh	Ladakh	Andaman and Nicobar Islands	Andaman and Nicobar Islands	
36	Ladakh	Lakshadweep	Lakshadweep	Lakshadweep	Lakshadweep	