

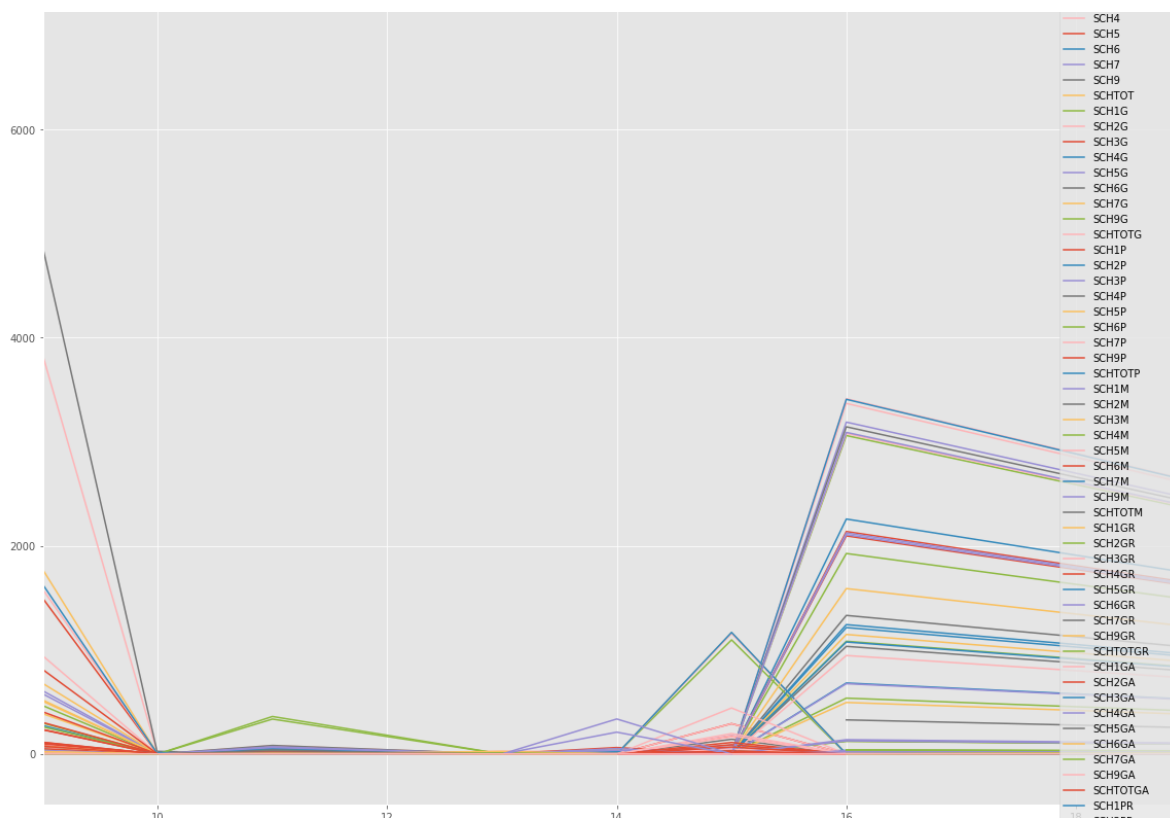
## **Indian Education- Prospering India makes world proud:**

The Indian Education system, the largest in the globe in generating the most talented and skill set for the country and is recognized across the world by means of Indians now holding leading and decision making positions in fortune 500 companies in the world. Recent years have seen a dramatic positive change among Indians across societies towards education. The mass campaign from the Govt. and the various initiatives taken in the education sector supplemented with monetary schemes for all under privileged segment is the prime cause that has boosted the diversified mass of India to take education serious for overall growth of every individual, family, society and the country as a whole. This new demand and change in mindset among the masses have initiated a new dialogue on the standard Indian education system with demands to review and change. But do we really need to change the well proven education system of our and need to fine-tune time it with time. I think the Indian think-tank is well placed with the data available in hand to initiate necessary changes and fine-tune the existing education standard in India to counter to the new demand and changes that has evolved currently.

The information shared by UDISE is self-sufficient and provides precise information on the current and past education parameters and that explains key criterias of success and failure across every state in India. This healthy data clearly highlights the achievements, successes and improvement areas incl. failures in any and is an excellent starting point for the future roadmap of Indian Education map.

I was thrilled to work on this noble project that enlightened me on the complexity of the Indian education system addressing 125 crore people of our nation. This helped me understand the various key factors of success and failures across states.

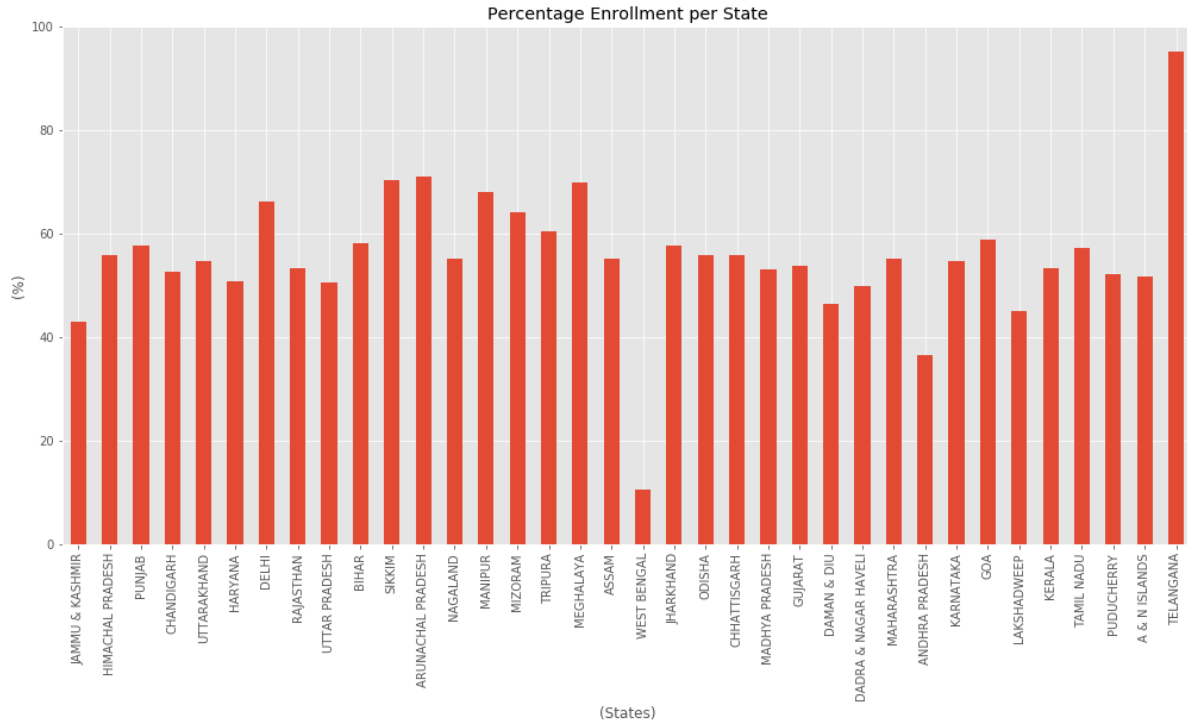
I have used the data to find out top states in the respective categories of top enrollment percentages and top dropout percentages. Then, with the list of states in hand, I used certain data filters to find out common similarities between these states. This helped me to pin point certain criterias that could potentially play a key role in increasing enrollment rates for the better.



The changes in Geo-political, ecumenical, social, financial status changes from state to state and every state has taken corrective steps to address the gap on time.

Governments focus towards such diversities time to time and changes accommodated accordingly are praiseworthy. However, given the current circumstances and with forward thinking education based on time and basis my observation, there are few areas Govt. and other authorized agencies should look into the situations of:

- Some segment of the society in some remote segments in certain states some children find it difficult to attain basic elementary education. Sadly, the enrollment percentages according to the data, for most states is in 50s. That means out of the total youth population, only half actually enroll or schools.



- School dropout cases are significant in few of the states (ex: Assam, 7.2%). This is concerning basic amenities which must be provided to ensure everyone gets to study. Policies like “right to education” is a very positive step which needs to be supported by “amenities must for education” approach.
- Social and behavioral change is noticed in some of the states that calls immediate attention to train and guide to the respective guardians, parents and as a whole to the entire society and encourage them to push and mandate education to their child and belongings irrespective of their sexes and financial status. Wherever possible, Govt should extend the “helping hand” to succeed in this mission. Compulsory education till schooling should be made a “MUST”.
  - Difference in quality of education in Private schools vs Govt. institutes is visible. While the rich enjoys the benefit of private school education the poor is deprived of that. However some states have taken the initiatives to ensure the poor and underprivileged society also gets Pvt school education which is praise worthy. In addition few states have taken concrete steps in ensure quality education from Govt. institutes.
  - Student pass out ratio vs seat availability at every step is visible. Few states have taken significant steps to reduce the gap which has helped the masses significantly.

- Current syllabus vs. actual job requirement is also a visible phenomenon. While certain steps are taken across the education sector, it is necessary to have some more steps to address the challenge in order to maintain global competition in the job sector and discourage brain-drain.
- Appropriate infrastructure and study material required to gain practical knowledge should be provided in all schools. Distance to School is a key factor in some of the states. Such remote areas needs to be identified asap and schools should be made available like the way our voters gets opportunity to vote in all corners of the country.

Here are certain results I have found after performing data analysis:

## Percentage Enrollment

The factors most common between states with high enrollment percentages are listed below. Most likely, these are the factors that are actually key contributors towards the higher enrollment percentages in these states, and thus, should be implemented in other states too:

**1)Female Literacy Rate :** The top states in terms of high enrollment have the highest female literacy rates, which indicates if the female member of the family is literate, then there are higher chances of youth enrollment from that family.

**2)Overall / Male Literacy Rate :** Again, an overall higher literacy rate is common among the states with highest enrollment percentages.

**3)Urban Population :** These states have an overall higher urban population, which indicates youth from urban families contribute more to enrollment rates

**4)Growth Rate :** The population growth rate in these states are relatively lower than the other ones. The government should implement steps to control growth rates in other states too, because this is a very significant commonality between these states.

**5)Total Population :** As the total population graph suggests along with the table above, the population in these states is **very** low as compared to the other states. The government needs to spread more awareness about population control as it clearly is a major contributing factor with higher enrollment.

**6)Schools with attached pre-primary sections :** These states have high number of pre-primary sections, indicating the government should create more pre-primary sections in schools over other states.

**7)Female Teachers in Schools :** The schools in these states have higher number of female teachers. Moreover, the female teachers are qualified. The female teachers in government and private schools of these states are relatively high. This trend is very common among the states and thus, the government should take steps to ensure more qualified female teachers in schools.

**8)Higher Number of Primary Teacher :** Schools in these states have higher number of primary teachers.

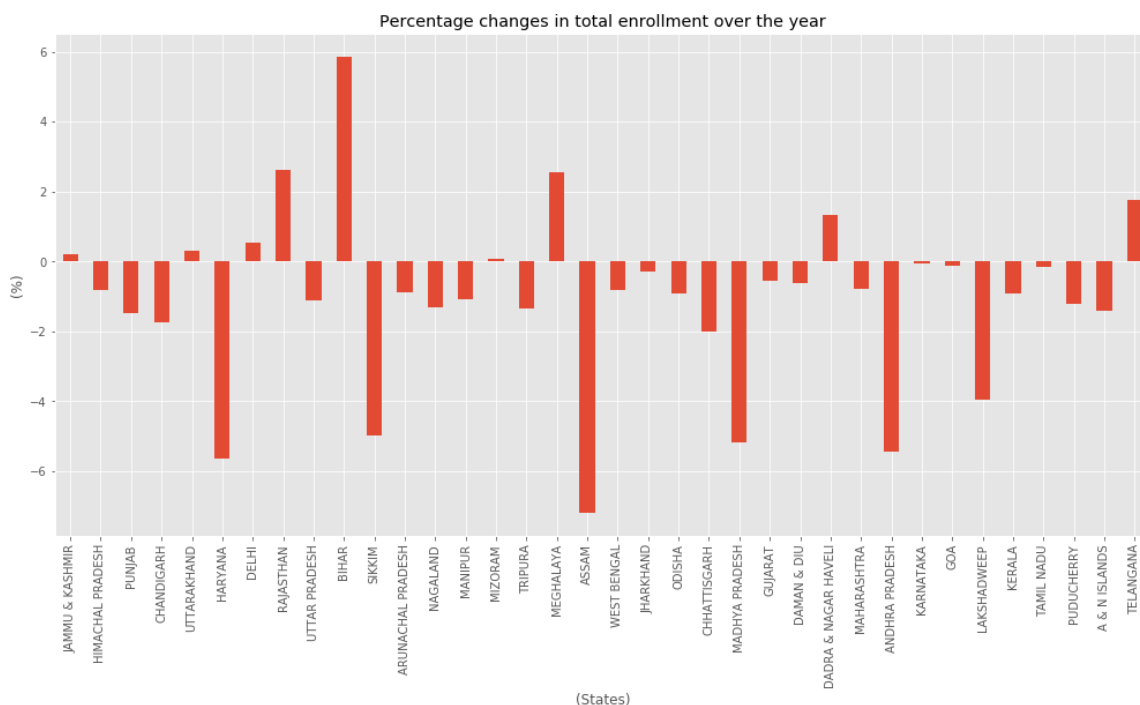
**9)Teachers with in-service Training :** Schools in these states have teachers with in-service teaching. Hence, the government should take steps to provide in-service training to teachers in schools.

**10)School with Ramps :** These schools have ramps wherever necessary. It certainly contributes to higher enrollments and hence, the government should build more ramps for ease of use for differently abled students.

**11)Schools with Boundaries :** The schools in these states have boundaries around the perimeter. This trend is common among the top enrollment states. Hence, the government should implement plans to make boundaries around more schools in other states too. Perhaps, a school with boundaries gives an impression of *completion*, and encourages students to join the school.

These steps when implemented in other states should yield a higher enrollment rate. These are not all that is there, but these are some very precise and to the point details regarding the enrollment factors.

## Dropout Percentages



Luckily, the statewise dropout percentages are not very high. Most of them end at two percent or less. But there are some states with higher than two percent dropout rates. We take those states as our benchmarks and follow the analysis.

## Possible reasons for higher dropouts:

*Using the common properties above, we pinpoint what is most likely causing the higher dropout rates :*

- 1) Low Number of Primary and Upper Primary Schools :** The government needs to build more primary and upper primary schools in these states, because they are relatively lower than others in most cases.
- 2) Higher SC population percentage :** These states have higher percentage of SC population. The government needs to promote education amongst the SC population to increase enrollments
- 3) Lower schools with management committee :** The schools with management committee are low in these states. The government needs to take steps for proper management committees in schools for better functioning overall.
- 4) Low Female Literacy Rate :** The female literacy rate in these states are lower than other states. "If you educate a woman, you educate a family" So, the lower female literacy rates act as a barrier in positive enrollment rates.
- 5) Low Overall/Male Literacy Rate :** The male, and in fact the overall literacy rate in these states are lower as compared to other states. The average family should be literate to know the importance of education, otherwise, they would never send their children for enrollment, or make their children dropout of schools.
- 6) Low Number of Primary and Upper Primary Teachers (Government):** The number of primary and upper primary teachers (government) are low. The government needs to hire or take other steps to increase the number of primary and upper primary teachers in government schools.
- 7) Low Urban Population :** The urban population contributes very low percentage to the overall population. As seen in the case of **high enrollment states**, urban population contributes significantly to positive enrollment. The government needs to urbanize the states further, because joining school and earning a degree is a very significant part of the urban culture.

According to the data analysis, these are some of the key factors that play a role in the higher dropouts than others. Once the necessary steps are taken to improvise these areas, then the dropout rates should reduce in these states, and perhaps the rest too.

The algorithm used in these analysis is very expandable. It can certainly be used on other sets of data to gather helpful data. It is very flexible in those terms, as well as manipulating the base conditions. Right now, it shows data for only enrollment and dropouts, from data belonging to only 2014 and 2015. But due to the expand-ability of the code, it can easily be applied to data from other years and from other fields.