Report of Workshop on
Educational Development Index (EDI)
July 30, 2014

NUEPA is collating and disseminating data on school education under U-DISE. Data are collated and disseminated on annual basis. As part of this NUEPA is calculating Educational Development Index (EDI) and ranking the states on the basis of EDI at elementary education since 2005-06. The availability of data on a large number of variables under U-DISE made it easier to monitor the progress and development of school education in states on a number of attributes. However getting a coherent picture from large number of variables is not easy. In view of this the need to calculate a composite indicator from large data collected under DISE was widely felt. Some obvious questions that came up in this context include what variables ought to be included, how to choose these variables, how to assign weights to different indictors and what methodology to be followed in calculating composite indicator or to be specific, Educational Development Index. In order to identify indicators and methodology to calculate EDI, the MHRD has constituted a small group consisting of experts from MHRD, IAMR, the World Bank, and NUEPA among others in 2006. The small group suggested the methodology to calculate EDI from 22 indicators. A brief description of the suggested methodology is given in annexure-I. The 22 indictors were grouped into four categories viz.., access (2 at primary level and 3 at upper primary level), infrastructure (5), teachers (6) and outcomes (9). With some addition, deletion and changes in definition now and then the same set of variables are used to calculate EDI until now. The variables used in calculation of EDI each year under four categories are given at annexure-II. NUEPA prepared a training module on the basis of suggested methodology and the same can be found at www.dise.in[1]

A number of issues have emerged since the calculation of EDI. Some of them are inherent for any attempt to calculate composite indicators by combining a large number of variables. Whether indicators chosen to include represent what they

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[1] http://dise.in/Downloads/suggestive-framework-for_EDI-compution%202009.pdf

purport to represent or some other alternative indicator would have been better? Whether the methodology to assign weights to variables is appropriate or an alternative strategy would have been better? How to deal with inconsistencies in data? How different categories of variables are related with each other? Is the progress of backward states is acknowledged? How to explain large variation in EDI and rank between different components? The EDI and ranks vary widely over the years. How robust is EDI to the quality of data and variables included? There are other issues that emerged from the EDI and ranks a few states got. For example, a few states like Kerala, Tamil Nadu, etc got very low EDI and rank with respect to access ostensibly due to habitation patterns. In a few other instances some of the known advanced states got very low EDI and rank and other backward states got better EDI and rank. Further how the EDI can and has been used to inform public policies on elementary education is not clear.

These issues clearly point to the need to revisit the variables included in EDI and methodology of calculating EDI and suggest necessary modifications to make it more robust and helpful in assessing the current status and inter-state comparison and also policy making. In this connection, the Department of EMIS, NUEPA organized a Workshop on Educational Development Index (EDI)[2] on July 30, 2014. Specific objectives of the workshop include

- To revisit the variables included in and methodology of calculation of EDI currently
- To suggest variables to be included in and further refinements in methodology to calculate EDI

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[2] List of participants is given in Annexure-IV

Proceedings of the Workshop

The Workshop on Educational Development Index (EDI) was opened with welcome remarks by Prof. R. Govinda. In his opening remarks Prof. R. Govinida NUEPA is calculating EDI largely based on DISE data for the last couple of years. He recalled that the variables included and methodology adopted to calculate EDI was developed by team of experts and policy makers which includes people from MHRD, World Bank, IAMR, etc. Since then same variables and methodology is being followed to calculate EDI with no or rather minor changes. He observed EDI of several states is not consonance popular perception of educational development across different states adequately. Many variables used in calculating either becomes redundant or appropriate and reliable data are not available. He felt that it is necessary to revisit the variables included in calculating EDI and methodology. Prof. Arun Mehta while joining Prof. R. Govinda in welcoming the participants explained briefly the evolution DISE and increase in coverage from DPEP districts to the whole of nation and from primary education to cover the entire spectrum of school education. He also further explained the process of selection of variables and adoption of methodology to calculate EDI. Subsequently Mr. Anugula Reddy made an elaborate presentation on each variable used and methodology of calculating EDI as delineated in Annexure-I. Following this the variables used and methodology adopted in calculating EDI was extensively discussed. The discussion was structured in two parts. The part was devoted to variables included in calculating EDI and additions and deletions thereof. The second part focused on methodology of calculating EDI. Many suggestions for removal and inclusion of variables, and to further improve the methodology of calculating EDI were made in the Workshop. A brief overview of some of the pertinent issues discussed and suggestions emerged from the Workshop is given below. Comments and suggestions made by variables is given at the end the proceedings.

- Each variable used in calculation of EDI in year 2013-14 was discussed for its suitability to retain in calculating EDI. It was generally felt that density of schools and number of schools per 1000 child population do not give much analytical information and therefore can be taken out from calculation of EDI. It was suggested that percentage of change in enrolment of government school over the previous year may be removed as it is not clear what it conveys.

- It was also felt that a few variables like percentage of schools with SCR more than 30 and 35 at primary and upper primary level respectively, percentage of schools with 1:1 ratio and percentage of schools with PTR more than 30 and

35 at primary and upper primary stage respectively are likely to highly correlate with each other and therefore one need to carefully look for possible removal of some of these variables. It was suggested that the correlation matrix need to be calculated that would help in identifying variables that are highly correlated with each other and therefore some of them can be removed and that are unique and that can be used in calculating EDI. Further it was suggested that the selection of variables ought not to be driven by RTE provisions and norms. A composite indictor with focus on RTE provision and norms can calculated separately if it is felt necessary for policy and intervention purposes.

- It was advised that some variables relating to infrastructure like library, playground, electricity, ramp, etc may be explored for possible inclusion. Further it was suggested that the variables relating to governance of school system like functioning of SMCs, attendance, etc may be included in calculating EDI. It was suggested that dropout and transition rate disaggregated by gender may be included in outcome indicators.

- It was pointed out that some of the variables listed under outcomes like GER and participation of marginal groups cannot be treated strictly as outcome variable. The variables relating outcomes need to be fine tuned.

- The issues relating to whether to use GER or NER, whether to use difference between percentage of marginal children in total enrolment compared to percentage of marginal groups in total population as per Census or ratio between them, measuring GPI with just enrolment or in relation with population was extensively discussed. It was felt that whichever way the issues relating to projection of child population, persistence of overage children in particular belonging to marginal groups in schools, gender imbalance in child population and enrolment would continue to plague indicators relating to enrolment ratio (GER) and participation rates.

- On methodology it was suggested that multi-stage aggregating of variables i.e. by components and by primary and upper primary stage and then aggregating them to arrive EDI can be done away with. Instead all the variables used to calculate EDI at primary, upper primary and elementary stage may be aggregated directly using PCA analysis. This however does not preclude calculating EDI by different components and/or levels, if found necessary for policy and research requirements.

It was noted that the weights for each variable to aggregate them are derived each year afresh. Part of year to year variation in EDI and ranks of different states may be on account of this. Further, this makes EDI incomparable over time. It was felt that the weights to aggregate variables need not be calculated each year afresh. It was suggested that weights can be calculated by using data of relevant variables for the last five years and then freeze them for the next five years. This implies that the weight assigned to each variable is already known and EDI can be calculated by using them. This also implies the variables used to calculate EDI also need to be frozen for the next five years. This makes the EDI temporally comparable and also improves consistency over time.

It was suggested the normalization of variables before undertaking PCA is not necessary. Carrying PCA in any software including SPSS usually takes care of issues emerging from different scales and direction of variables. Consequently no additional value is added by normalizing variables and therefore can be dispensed with.

Comments made by Variables

Component	Variable	Comments
ACCESS	Density of schools per 10 Sq. Km. Availability of Schools per 1000 Child Population Ratio of Primary to Upper Primary Schools/Sections	*Density of schools*: It was observed this indicator is misleading in case difficult terrains with sparse population, small pockets with dense population, etc. It was recommended to be removed. *Availability of Schools per 1000 Child* : Similarly is the case with this indicator. It is misleading incase of sparse and dense populations and school size may also be compounding factor. Recommended to be removed. *Ratio of Primary to Upper Primary Schools/Sections:* The composite schools that have both primary and upper primary sections would enter into numerator and denominator compounding the indicator. However as access to and participation in upper primary education is still further expansion it was suggested to retain this indicator.
INFRASTRUCTURE	Percentage of Schools with Student Classroom Ratio : (Primary >30 & Upper Primary >35) Percentage Schools with 1:1 classroom-teacher ratio Percentage of Schools with Drinking Water facility Percentage of Schools with Boys' toilet Percentage of Schools with Girl's toilet Percentage of Schools Required and have Ramp Percentage of Schools with Kitchen-shed (Government and Aided Schools)	Many variables a priori appears to be correlated with each other. Correlation matrix would help in identifying the variables to be included in calculating EDI. Other infrastructure variables like library, playground, playing material, electricity, etc may be explored for inclusion

Component	Variable	Comments
TEACHERS	Percentage of Schools with Female Teachers (In schools with 2 and more teachers)	
	Percentage of Schools with Pupil-Teacher Ratio : (Primary >30 & Upper Primary >35)	
	Percentage of Single-Teacher Schools	
	Teachers without Professional Qualification	
OUTCOMES	Average number of instructional days	
	Average working hours for teachers	
	Percentage change in enrolment in Government schools over the previous year	May be removed as direction of change is not clear
	Gross Enrolment Ratio	Possibility of using NER in place of GER may be explored. Direction of changes in GER when GER is above 100 is not clear i.e. whether to consider an increase from 110 to 120 as positive or negative and vice versa.

It was suggested to cap GER at 105 if it is continue to be used. This implies that changes above 105 are inconsequential. |
	Participation of Scheduled Castes Children = Percentage SC Population (2011 Census) - Percentage SC Enrolment	
	Participation of Scheduled Tribes Children = Percentage ST Population (2011 Census) - Percentage ST Enrolment	
	Participation of Muslim Children = Percentage Muslim Population (2001 Census) - Percentage Muslim Enrolment	
	Ratio of Girls' Enrolment to Boys Enrolment	Normalizing with population by gender is needed as this indicator does not take into account gender imbalance in the child population.
	Drop-out Rate	Dropout rate for boys and girls to be used separately
	Transition Rate from Primary to Upper Primary level	Transition rate for boys and girls to be used separately

A brief description of methodology of calculation of EDI

Based on DISE data, the Educational Development Index (EDI) is being calculated each year from 2005-06 onwards. It is calculated separately at primary and upper primary stage and a composite indicator at elementary stage. About 22-24 variables derived from DISE data are used to calculate EDI. These variables are grouped into four categories, viz., access, infrastructure, teacher and outcomes. The list of variables used under each category from 2005-06 to 2013-14 is given in Annexure-II. The variables included in calculation of EDI for the year 2011-12 to 2013-14 are given below.

Component	Variable	Assumptions and data cleaning
ACCESS	Density of schools per 10 Sq. Km.	
	Availability of Schools per 1000 Child Population	
	Ratio of Primary to Upper Primary Schools/Sections	
INFRASTRUCTURE	Percentage of Schools with Student Classroom Ratio : (Primary >30 & Upper Primary >35)	Best value is set to zero.
	Percentage Schools with 1:1 classroom-teacher ratio	
	Percentage of Schools with Drinking Water facility	
	Percentage of Schools with Boys' toilet	
	Percentage of Schools with Girl's toilet	
	Percentage of Schools Required and have Ramp	
	Percentage of Schools with Kitchen-shed (Government and Aided Schools)	
TEACHERS	Percentage of Schools with Female Teachers (In schools with 2 and more teachers)	
	Percentage of Schools with Pupil-Teacher Ratio : (Primary >30 & Upper Primary >35)	Best value is set to zero.
	Percentage of Single-Teacher Schools	
	Teachers without Professional Qualification	Best value is set to zero.
OUTCOMES	Average number of instructional days	
	Average working hours for teachers	If average working hours for teachers exceeds 7, it is replaced with 7

Component	Variable	Assumptions and data cleaning
	Percentage change in enrolment in Government schools over the previous year	
	Gross Enrolment Ratio	If GER exceeds 120 it is replaced with 120
	Participation of Scheduled Castes Children = Percentage SC Population (2011 Census) - Percentage SC Enrolment	If negative, it is replaced with zero
	Participation of Scheduled Tribes Children = Percentage ST Population (2011 Census) - Percentage ST Enrolment	
	Participation of Muslim Children = Percentage Muslim Population (2001 Census) - Percentage Muslim Enrolment	
	Ratio of Girls' Enrolment to Boys Enrolment	
	Drop-out Rate	If dropout is negative it is left blank. This is addressed by clicking the option of exclude cases pairwise in missing values in while carrying out PCA in SPSS
	Transition Rate from Primary to Upper Primary level	If transition rate exceeds 100 it is replaced with 100

Methodology

The following steps are followed to calculate EDI.

1. All variables are normalized using the following formula

$$\text{Normalized Value of a Variable } X = 1 - \left[\frac{Best\ Observed\ X - Observed\ X}{Best\ Observed\ X - Worst\ Observed\ X} \right]$$

The normalized values vary between 0 and 1 and have same direction i.e. lower normalized value indicates low development across all variables.

2. Composite indicator by each of four categories i.e. access, infrastructure, teacher and outcomes is calculated separately. The weights for variables are obtained by carrying out Principal Components Analysis (PCA) using SPSS.

The following steps are followed in carrying out PCA

Step 2.1: The normalized values of all variables are entered into SPSS.

Step2.2: By following Analysis ⟹ Dimension Reduction ⟹ Factor Analysis through click and mouse method, dialogue box for different options within Factor Analysis are opened.

Step2.3 All variable of a particular category, say for example all 7 variables under infrastructure, are selected and moved to Factor Analysis dialogue box.

Step 2.4 Next different options under Descriptives, Extraction, Rotation and Options are selected

   a. **Descriptives:** Within Descriptives dialogue box, 'initial solution' is selected by default and in addition 'Univariate Descriptives' would be selected under statistics
   b. **Extraction:** All default selections-'Principal Components', 'Correlation Matrix', 'Unrotated Factor Solution' and 'Eigen values greater than 1' are retained
   c. **Rotation:** Within Rotation dialogue box, under method 'Varimax' is selected. Selection of 'Varimax' would by default select 'Rotated Solution' and 'maximum iterations for convergence' set to 25. These are retained.
   d. **Options:** In case of missing values in the data, 'exclude cases paiwise' is selected under missing values of options.

      After the above selections the factor analysis was run.

Step 2.5 Running Factor Analysis with the above selections shall give factor loadings and Eigen values that are greater than one. Next step would be to calculate weights for each variable. Weights for each variable are obtained my multiplying factor loading (ignoring sign) with corresponding Eigen values and then summing them up for each variable.

   Weight for a variable $X = \sum |L| \times E$

      L is factor loading
      E is corresponding Eigen value

Step 3.0   The composite indicator of say, infrastructure is calculated by multiplying normalized values of all 7 variables with their weights and summing it up and then dividing it by sum of all weights.

$$\text{Composite indicator} = \frac{\sum X \times W}{\sum w}$$

The composite indicator varies between 0 and 1 and higher the value higher the development of education with respect to that particular category.

Step 4.0   The PCA would be carried once again on the composite indictors of four categories i.e. access, infrastructure, teacher and outcomes to obtain corresponding weights.

Step 5.0   EDI is calculated by multiplying composite indicator of 4 categories with their weights and summing it up and then dividing it by sum of all weights.

EDI varies between 0 and 1 and higher the value higher the development of education.

The above exercise is carried out separately at primary and upper primary stage to calculate EDI respectively.

Step 6.0   The EDI at elementary stage shall be calculated by following above mentioned steps using EDI of primary and upper primary stage.

The states were accordingly ranked by composite index of each category (i.e. access, infrastructure, teachers and outcomes) within primary and upper primary education separately and by EDI of primary, upper primary stage separately and by EDI of elementary stage as a whole.

The composite indictor by category and EDI and ranks of different states at primary and upper primary stage is given in annexure III (a) and (b) respectively. The EDI and ranks at elementary stage for the last five years is given in annexure-III (c).

Variables Used in Calculating EDI, 2005-06 to 2013-14

Name of Variables	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
Access									
Percentage of Habitations not Served[3]	√	√	√	√	√	√			
Availability of Schools per 1000 Population	√	√	√	√	√	√	√	√	√
Density of schools per 10 Sq. Km.							√	√	√
Ratio of Primary to Upper Primary Schools/Sections (only in case of Upper Primary stage)			√	√	√	√	√	√	√
Infrastructure									
Ratio of Primary to Upper Primary Schools/Sections (only at Upper Primary stage)		√							
Average Student-Classroom Ratio[4]	√	√	√						
Percentage of Schools with Student-Classroom Ratio> 40 [5]				√	√	√			

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[3] Habitations that are not served by a primary and upper primary level within 1 and 3km respectively as reported in 6th AISES. This was adjusted with new schools opened (i.e. all habitation not served by school – number of new schools opened since 2002-03). This has become negative over the years.

[4, 5] Average Student Classroom Ratio (SCR) was replaced with percentage of schools with SCR>40 from 2008-09 and this again replaced with SCR > 30 in case of primary and SCR> 35 in case of upper primary schools from 2011-12 to reflect the RTE norms of separate classroom for each teacher and PTR $\leq$ 30 and 35 at primary and upper primary respectively.

Name of Variables	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
Percentage of Schools with Student-Classroom Ratio : Primary > 30 & Upper Primary > 35							√	√	√
Percentage of Schools with Student-Classroom Ratio ≥60	√	√	√						
Percentage of Schools with Drinking Water facility	√	√	√	√	√	√	√	√	√
Percentage Schools that confirm to ratio of 1:1 with respect to Classroom-Teacher Ratio							√	√	√
Percentage of Schools with Common Toilet out of Total Schools		√	√	√	√	√			
Percentage of Schools with Boy's Toilet in Boys and Co-edu schools	√						√	√	√
Percentage of Schools with Girl's Toilet in Girls and Co-edu Schools	√	√	√	√	√	√	√	√	√
Percentage of Schools Required and have Ramp*							√	√	√
Percentage of Schools with Kitchen-shed (Government and Aided Schools)							√	√	√
Teachers									
Percentage of Female Teachers[6]	√	√	√						

[6,] The variable % of female teachers is replaced with percentage of schools with two or more teachers having female teacher

* Percentage schools having ramp is calculated out of all schools in year 2011-12

Name of Variables	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
Percentage of Schools with Female Teachers (in schools with 2 and more teachers only)				√	√	√	√	√	√
Pupil-Teacher Ratio[7][8]	√	√	√						
Percentage of Schools with Pupil-Teacher Ratio > 40[9]				√	√	√			
Percentage of Schools with Pupil-Teacher Ratio : Primary > 30 & Upper Primary > 35							√	√	√
Percentage of Schools with Pupil-Teacher Ratio ≥ 60	√	√	√						
Percentage of Single-Teacher Schools (in schools with more than 15 students)[10]	√	√	√						
Percentage of schools with less than 2 teachers (in schools with more than 15 students) (Primary schools only) [11]				√	√	√			
Percentage of Single-Teacher Schools							√	√	√

[7, 8, 9] PTR was replaced with Percentage of schools with PTR greater than 40 from 2008-09 and with PTR greater than 30 and 35 at primary and upper primary level respectively from 2011-12

[10, 11] These variables to represent percentage of single teacher schools. For the later three years, percentage of single teacher schools across schools including both primary and upper primary schools.

Name of Variables	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
Percentage of Schools with 3 or less Teachers	√	√	√						
Percentage of Schools with < 3 teachers (Upper Primary schools/sections)				√	√	√			
Percentage of Teachers without Professional Qualification	√	√	√	√	√	√	√	√	√
Outcomes									
Gross Enrolment Ratio – Overall	√	√	√	√	√	√	√	√	√
Scheduled Castes : Gross Enrolment Ratio [12]	√	√							
Participation of Scheduled Castes Children= Percentage SC Population (2001 Census) - % SC Enrolment			√	√	√	√	√	√	√
Scheduled Tribes: Gross Enrolment Ratio [12]	√	√							
Participation of Scheduled Tribes Children = Percentage ST Population (2001 Census) - % ST Enrolment			√	√	√	√	√	√	√
Participation of Muslim Children = Percentage Muslim Population (2001 Census) - % Muslim Enrolment							√	√	√

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[12] The GER by SCs and STs is replaced with % of SC population (2001 Census) - % of enrolment of SC in total enrolment from 2007-08. From 2012-13 onwards data from 2011 Census is used.

Name of Variables	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
Gender Parity Index in Enrolment [13]	√	√	√	√	√	√			
Ratio of Enrolment of Girl enrolled to Boys enrolled[14]							√	√	√
Average Number of Instructional Days							√	√	√
Average Working Hours for Teachers							√	√	√
Percentage Change in Enrolment in Government schools over the previous year							√	√	√
Repetition Rate	√	√	√	√	√	√			
Drop-out Rate[15]	√	√	√	√	√	√	√	√	√
Ratio of Exit Class over Class I Enrolment (only at Primary stage)	√	√	√	√	√	√			
Transition Rate from Primary to Upper Primary level (only for Upper Primary level)				√	√	√	√	√	√
Percentage of Passed Children to Total Enrolment	√	√	√						
Percentage of Appeared Children passing with 60 per cent and more marks	√	√	√	√	√				

[13], [14] There is no difference in calculation except in name. This is calculated as ratio of girls enrolled to boys enrolled.
[15] From 2011-12, dropout rate is calculated as annual average dropout rate between two consecutive years using DISE data. Prior to that, dropout rate as reported in Selected Educational Statistics (SES) which is cohort dropout rate was used.

Educational Development Index at Primary Level, 2013-14

State/UT	Access		Infrastructure		Teacher		Outcome		EDI Primary Stage	
	Index	Rank	Index	Rank	Index	Rank	Index	Rank	Index	Rank
A & N Islands	0.246	22	0.738	18	0.852	7	0.738	13	0.659	12
Andhra Pradesh	0.257	20	0.567	31	0.668	18	0.784	6	0.564	23
Arunachal Pradesh	0.432	5	0.5	34	0.33	35	0.648	23	0.46	34
Assam	0.377	7	0.523	32	0.35	34	0.818	1	0.49	32
Bihar	0.193	30	0.516	33	0.421	32	0.688	20	0.444	35
Chandigarh	0.201	29	0.69	25	0.981	2	0.437	35	0.621	14
Chhattisgarh	0.308	14	0.763	17	0.455	28	0.809	3	0.575	21
D & N Haveli	0.225	25	0.729	19	0.688	15	0.522	30	0.565	22
Daman & Diu	0.141	34	0.832	12	0.84	8	0.442	34	0.608	16
Delhi	0.524	2	0.722	21	0.837	9	0.504	31	0.673	10
Goa	0.245	23	0.723	20	0.763	12	0.495	33	0.586	19
Gujarat	0.148	33	0.878	5	0.856	6	0.724	16	0.678	8
Haryana	0.152	32	0.813	14	0.719	13	0.706	18	0.616	15
Himachal Pradesh	0.481	3	0.903	2	0.684	16	0.773	7	0.719	3
Jammu & Kashmir	0.399	6	0.581	30	0.536	25	0.612	28	0.531	28
Jharkhand	0.286	17	0.653	28	0.352	33	0.784	5	0.502	31
Karnataka	0.255	21	0.91	1	0.778	11	0.817	2	0.705	5
Kerala	0.135	35	0.869	7	0.965	3	0.58	29	0.68	7
Lakshadweep	0.262	19	0.86	9	0.999	1	0.636	25	0.726	2
Madhya Pradesh	0.299	15	0.779	16	0.433	30	0.735	15	0.559	24
Maharashtra	0.178	31	0.88	4	0.676	17	0.736	14	0.634	13
Manipur	0.358	8	0.712	23	0.602	21	0.675	21	0.592	17
Meghalaya	0.561	1	0.317	35	0.452	29	0.635	26	0.468	33
Mizoram	0.322	11	0.665	27	0.564	23	0.496	32	0.527	29
Nagaland	0.215	26	0.686	26	0.627	20	0.671	22	0.558	25
Odisha	0.319	12	0.701	24	0.571	22	0.747	12	0.583	20
Puducherry	0.278	18	0.889	3	0.95	4	0.748	11	0.743	1
Punjab	0.232	24	0.863	8	0.806	10	0.703	19	0.674	9
Rajasthan	0.294	16	0.801	15	0.561	24	0.648	24	0.587	18
Sikkim	0.455	4	0.849	11	0.708	14	0.759	10	0.701	6
Tamil Nadu	0.206	27	0.87	6	0.895	5	0.791	4	0.712	4
Tripura	0.332	10	0.623	29	0.43	31	0.763	9	0.524	30
Uttar Pradesh	0.204	28	0.82	13	0.517	26	0.619	27	0.554	26
Uttarakhand	0.353	9	0.858	10	0.644	19	0.771	8	0.664	11
West Bengal	0.313	13	0.717	22	0.466	27	0.719	17	0.55	27

Educational Development Index at Upper Primary Level, 2013-14

State/UT	Access		Infrastructure		Teacher		Outcome		EDI at Upper Primary Stage	
	Index	Rank	Index	Rank	Index	Rank	Index	Rank	Index	Rank
A & N Islands	0.234	31	0.682	22	0.964	3	0.69	22	0.678	12
Andhra Pradesh	0.275	26	0.595	32	0.81	15	0.748	8	0.643	19
Arunachal Pradesh	0.374	12	0.66	26	0.647	27	0.797	2	0.637	20
Assam	0.224	33	0.41	34	0.638	29	0.775	5	0.557	30
Bihar	0.258	29	0.646	30	0.606	30	0.609	29	0.538	31
Chandigarh	0.503	3	0.656	29	0.993	1	0.68	24	0.739	4
Chhattisgarh	0.317	23	0.759	15	0.465	32	0.755	7	0.567	29
D & N Haveli	0.253	30	0.736	18	0.786	20	0.734	13	0.647	18
Daman & Diu	0.349	17	0.849	4	0.892	8	0.598	31	0.675	14
Delhi	0.581	2	0.667	25	0.95	4	0.66	28	0.737	5
Goa	0.213	34	0.546	33	0.862	12	0.676	26	0.616	22
Gujarat	0.343	19	0.929	2	0.898	7	0.682	23	0.714	6
Haryana	0.344	18	0.802	13	0.787	19	0.734	14	0.676	13
Himachal Pradesh	0.438	7	0.851	3	0.793	18	0.743	9	0.709	10
Jammu & Kashmir	0.4	9	0.677	23	0.756	21	0.567	32	0.608	27
Jharkhand	0.283	25	0.672	24	0.489	31	0.604	30	0.507	32
Karnataka	0.353	16	0.932	1	0.879	10	0.692	21	0.714	7
Kerala	0.269	27	0.823	8	0.947	5	0.724	16	0.712	9
Lakshadweep	0.455	5	0.784	14	0.93	6	0.774	6	0.756	2
Madhya Pradesh	0.321	22	0.75	16	0.237	34	0.707	19	0.479	34
Maharashtra	0.268	28	0.829	7	0.795	17	0.733	15	0.666	16
Manipur	0.342	20	0.686	20	0.818	14	0.721	18	0.665	17
Meghalaya	0.457	4	0.358	35	0.715	22	0.742	10	0.615	25
Mizoram	0.596	1	0.685	21	0.805	16	0.565	33	0.667	15
Nagaland	0.365	15	0.657	28	0.712	23	0.667	27	0.615	24
Odisha	0.389	10	0.715	19	0.658	26	0.677	25	0.614	26
Puducherry	0.448	6	0.834	6	0.971	2	0.795	3	0.782	1
Punjab	0.37	13	0.841	5	0.874	11	0.723	17	0.712	8
Rajasthan	0.418	8	0.81	12	0.664	25	0.552	34	0.597	28
Sikkim	0.388	11	0.745	17	0.88	9	0.844	1	0.742	3
Tamil Nadu	0.232	32	0.82	9	0.84	13	0.793	4	0.69	11
Tripura	0.366	14	0.616	31	0.71	24	0.737	12	0.63	21
Uttar Pradesh	0.299	24	0.818	10	0.122	35	0.463	35	0.37	35
Uttarakhand	0.323	21	0.815	11	0.639	28	0.699	20	0.615	23
West Bengal	0.054	35	0.66	27	0.435	33	0.737	11	0.48	33

Composite Educational Development Index at Elementary Stage

State/UT	2009-10		2010-11		2011-12		2012-13		2013-14	
	EDI	Rank	EDI	Rank	EDI	Rank	EDI	Rank	EDI	Rank
A & N Islands	0.746	4	0.715	18	0.593	16	0.598	16	0.668	12
Andhra Pradesh	0.662	14	0.767	9	0.597	15	0.579	23	0.603	19
Arunachal Pradesh	0.474	31	0.598	31	0.492	31	0.587	19	0.548	28
Assam	0.445	32	0.555	33	0.451	35	0.527	32	0.524	30
Bihar	0.421	35	0.512	35	0.465	33	0.532	30	0.491	34
Chandigarh	0.735	6	0.782	8	0.622	10	0.597	17	0.68	11
Chhattisgarh	0.498	27	0.611	26	0.513	28	0.582	22	0.571	26
D & N Haveli	0.602	20	0.66	22	0.598	14	0.612	13	0.606	18
Daman & Diu	0.697	9	0.798	6	0.675	5	0.645	7	0.642	15
Delhi	0.72	8	0.766	10	0.661	6	0.627	11	0.705	6
Goa	0.692	10	0.748	12	0.562	21	0.52	33	0.601	20
Gujarat	0.657	15	0.739	14	0.625	9	0.591	18	0.696	8
Haryana	0.68	11	0.761	11	0.591	17	0.585	20	0.646	14
Himachal Pradesh	0.654	17	0.739	13	0.619	11	0.626	12	0.714	4
Jammu & Kashmir	0.512	25	0.679	19	0.578	18	0.602	15	0.57	27
Jharkhand	0.431	34	0.529	34	0.452	34	0.452	35	0.505	33
Karnataka	0.656	16	0.732	15	0.693	2	0.661	5	0.71	5
Kerala	0.772	3	0.804	5	0.637	7	0.603	14	0.696	9
Lakshadweep	0.795	2	0.849	2	0.716	1	0.712	1	0.741	2
Madhya Pradesh	0.486	30	0.59	32	0.521	26	0.552	28	0.519	31
Maharashtra	0.663	13	0.722	17	0.627	8	0.635	8	0.65	13
Manipur	0.519	24	0.62	25	0.533	24	0.632	9	0.628	17
Meghalaya	0.433	33	0.6	30	0.515	27	0.576	24	0.541	29
Mizoram	0.641	18	0.727	16	0.575	19	0.627	10	0.597	22
Nagaland	0.624	19	0.674	20	0.494	30	0.569	26	0.586	24
Orissa	0.496	28	0.606	28	0.543	22	0.565	27	0.599	21
Puducherry	0.813	1	0.87	1	0.675	4	0.696	2	0.762	1
Punjab	0.73	7	0.815	3	0.606	13	0.647	6	0.693	10
Rajasthan	0.544	22	0.623	24	0.536	23	0.572	25	0.592	23
Sikkim	0.678	12	0.795	7	0.619	12	0.672	4	0.722	3
Tamil Nadu	0.744	5	0.815	4	0.689	3	0.683	3	0.701	7
Tripura	0.491	29	0.634	23	0.522	25	0.545	29	0.577	25
Uttar Pradesh	0.523	23	0.606	29	0.47	32	0.508	34	0.462	35
Uttarakhand	0.587	21	0.67	21	0.569	20	0.585	21	0.639	16
West Bengal	0.503	26	0.61	27	0.495	29	0.527	31	0.515	32

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