# Demand for Grants 2022-23 Analysis
## Education

The Ministry of Education consists of two departments: (i) school education and literacy, and (ii) higher education. The **Department of School Education and Literacy** is broadly responsible for education imparted between the ages of six to 18 years, i.e., school education. Under the Right to Education (RTE) Act, 2009 the government is mandated to provide elementary education to all children between 6-14 years of age. Secondary education is imparted between Class 9-12 for children between 14-18 years of age.

The **Department of Higher Education** is responsible for higher education, and training for students above 18 years of age. Higher education includes undergraduate and postgraduate courses, doctoral degrees, and certificates following the completion of 12 years of schooling or equivalent.

This note looks at the proposed expenditure of the Ministry for 2022-23, trends in this expenditure and discusses some of the issues related to the education sector.

### Budget speech 2022-23 highlights[1]

- To enable all states to provide supplementary education in regional languages for classes 1-12, 'one class-one TV channel' programme of PM eVIDYA will be expanded from 12 to 200 TV channels.

- To promote critical thinking skills and creativity in vocational courses, 750 virtual labs (in science and mathematics), and 75 skilling e-labs (for simulated learning environment) will be established in 2022-23.

- High-quality e-content in all spoken languages will be developed for delivery via internet, mobile phones, TV and radio through Digital Teachers.

- A Digital University will be established to provide access to students across the country for world-class quality universal education with personalised learning experience at their doorsteps. This will be made available in different Indian languages and ICT formats. The best public universities and institutions in the country will collaborate as a network of hub-spokes.

## Allocation in Union Budget 2022-23

In 2022-23, the Ministry has been allocated Rs 1,04,277 crore. This is an 18.5% increase over the revised expenditure in 2021-22. The allocation constitutes 3% of the central government's estimated expenditure for 2022-23.

In 2022-23, the **Department of School Education and Literacy** has been allocated Rs 63,449 crore, accounting for 61% of the Ministry's total allocation. The **Department of Higher Education** has been allocated Rs 40,828 crore, accounting for 39% of the Ministry's total allocation.

## Overview of finances

As per the Economic Survey (2021-22), India's total public investment (centre and states combined) in education has nearly doubled from Rs 3.5 lakh crore in 2014-15 to Rs 6.9 lakh crore in 2021-22.[2] However, the share of public investment on education has largely remained constant, at 10% of total government expenditure (centre and states combined) or 3% of GDP.[2] This is much lesser than countries like Germany, USA, UK, and South Africa, which have a public investment of about 5-6% of their GDP in education. The National Policy on Education 1968 recommended the spending on education to be 6% of GDP. The National Education Policy, 2020 (NEP) reaffirms the recommendation of increasing public investment on education to 6% of GDP.[3]

**Table 1: Budget allocations for the Education (2022-23) (in Rs crore)**

| Department | 2020-21 Actuals | 2021-22 RE | 2022-23 BE | % change (RE to BE) |
|---|---|---|---|---|
| School Education & Literacy | 51,842 | 51,970 | 63,449 | 22.1% |
| Higher Education | 32,378 | 36,032 | 40,828 | 13.3% |
| **Total** | **84,219** | **88,002** | **1,04,277** | 18.5% |

Note: BE – Budget Estimate; RE – Revised Estimates.
Sources: Expenditure Budget - Ministry of Education, 2022-23; PRS.

Table 2 shows the key heads under which the Ministry spends its funds.

**Table 2: Major heads of expenditure under the Ministry of Education (2022-23 Budget Estimates)**

| Expenditure head | Amount (in Rs crore) | % of total |
|---|---|---|
| Samagra Shiksha | 37,383 | 36% |
| Autonomous Bodies | 12,359 | 12% |
| PM POSHAN | 10,234 | 10% |
| Universities | 9,914 | 10% |
| IITs | 8,495 | 8% |
| UGC and AICTE | 5,321 | 5% |
| NITs and IIEST | 4,364 | 4% |
| Student Financial Aid | 2,078 | 2% |
| RUSA | 2,043 | 2% |
| Others | 12,086 | 11% |
| **Total** | **1,04,277** | **100%** |

Note: Autonomous Bodies include NCERT and Navodaya Vidyalaya Samiti (NVS); Universities include grants to central universities, and Deemed Universities promoted by central government.
Sources: Expenditure Budget - Ministry of Education, 2022-23; PRS.

**Rajat Asthana**
rajat@prsindia.org

**February 16, 2022**

In 2022-23, the highest expenditure (36%) is allocated towards Samagra Shiksha (Rs 37,383 crore), followed by: (i) autonomous bodies (12%) such as NCERT, (ii) PM POSHAN (10%), (iii) universities (10%), (iv) Indian Institutes of Technology (8%), and (v) statutory and regulatory bodies in higher education (University Grants Commission (UGC) and All India Council for Technical Education (AICTE)) (5%), among others.

Refer to Table 10 in the Annexure for a detailed breakup of the expenditures under the Ministry of Education.

The Standing Committee on Human Resource Development/Education (2018, 2020, 2021) has repeatedly noted that the Department of School Education and Literacy is allocated funds much below its proposals.[4,5,6] In 2018-19, 2020-21, 2021-22, the shortfall was Rs 15,500 crore, Rs 22,700 crore, and Rs 43,000 crore respectively. In other words, the Department only received 76%, 72% and 56% of the sought funding in these years, respectively.

The Committee recommended additional funds for centrally sponsored schemes and central sector schemes under the department at the revised estimates stage. Note that in the years stated above (2018-19, 2020-21, and 2021-22), the Department could utilise 97%, 87%, and 95% of the allocated funds respectively.

Similarly, for 2020-21, the Department of Higher Education received an allocation of Rs 39,466 crore, against a demand of Rs 58,251 crore.[7] The Standing Committee on Human Resource Development (2020) noted that the allocation for Central Universities is inadequate as compared to their infrastructure, faculty and number of students enrolled.[5] This affects the implementation of schemes. The Committee recommends increasing the budgetary allocations of the department of higher education.

## Department of School Education and Literacy

School education generally refers to the education imparted to an individual in the 6-18 year old age group. The school education system in India comprises of more than 25 crore students, 96 lakh teachers, and 15 lakh schools (Table 3).

**Table 3: School system dimensions**

|  | Public | % share | Private | % share |
|---|---|---|---|---|
| **Students** | 15.5 crore | 62% | 9.5 crore | 38% |
| **Teachers** | 57.5 lakh | 60% | 38.5 lakh | 40% |
| **Schools** | 11 lakh | 73% | 4 lakh | 27% |

Sources: UDISE Flash Statistics 2019-20; PRS.

For 2022-23, most of the allocation to the Department of School Education and Literacy is for Samagra Shiksha (59%), autonomous bodies (19%), and the PM POSHAN scheme (16%). Autonomous bodies refers to the Kendriya Vidyalaya Sangathan, Navodaya Vidyalaya Samiti, National Council of Educational Research and Training (NCERT), Central Tibetan School Administration, and National Bal Bhawan. Table 4 shows the key expenditure heads of the department.

**Table 4: Major heads of expenditure under the Department of School Education and Literacy in 2022-23 (in Rs crore)**

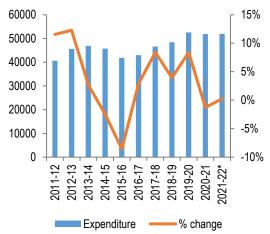| Major Head | 2020-21 Actuals | 2021-22 RE | 2022-23 BE | % change (RE to BE) |
|---|---|---|---|---|
| National Education Mission | 27,923 | 30,003 | 37,510 | 25% |
| -Samagra Shiksha | 27,835 | 30,000 | 37,383 | 25% |
| -Teachers Training and Adult Education | 89 | 3 | 127 | 4,518% |
| Autonomous bodies | 10,388 | 11,073 | 12,359 | 12% |
| PM POSHAN # | 12,878 | 10,234 | 10,234 | 0% |
| Exemplar | - | - | 1,800 | - |
| ASPIRE* | - | - | 600 | - |
| Scholarship Scheme** | 321 | 284 | 350 | 23% |
| Others | 331 | 376 | 596 | 58% |
| **Total** | **51,842** | **51,970** | **63,449** | **22%** |

Note: # Earlier known as National Programme of Mid-Day Meal in Schools; * Refers to Accelerating State Education Program to Improve Results, ** Refers to National Means-cum-Merit Scholarship Scheme.
Sources: Expenditure Budget, 2021-22; PRS.

Between 2011-12 and 2021-22, the Department's expenditure has seen a compounded annual growth of 2%. This is lesser than the CAGR of the Ministry's actual expenditure (3.8%), during the same time period (2011-12 to 2021-22).

**Figure 1: Trend of actual expenditure incurred by Department of School Education and Literacy (2010-22) (in Rs crore, year-on-year change in %)**



Note: *Figures for 2021-22 are revised estimates.
Sources: Expenditure Budget, 2011-22; PRS.

Table 5 shows a trend of utilisation of funds allocated to the department between 2010-11 and 2020-21.

**Table 5: Comparison of budget estimates and the actual expenditure (2010-21) (in Rs crore)**

| Year | Budget Estimate | Actuals | Utilisation % (Actuals/BE) |
|---|---|---|---|
| 2011-12 | 41,451 | 40,641 | 98% |
| 2012-13 | 48,781 | 45,631 | 94% |
| 2013-14 | 52,701 | 46,856 | 89% |
| 2014-15 | 55,115 | 45,722 | 83% |
| 2015-16 | 42,220 | 41,800 | 99% |
| 2016-17 | 43,554 | 42,989 | 99% |
| 2017-18 | 46,356 | 46,600 | 101% |
| 2018-19 | 50,000 | 48,441 | 97% |
| 2019-20 | 56,537 | 52,520 | 93% |
| 2020-21 | 59,845 | 51,842 | 87% |
| 2021-22* | 54,874 | 51,970 | 95% |

Note: BE – Budget Estimate. *Revised Estimate
Sources: Union Budgets, 2012-22; PRS.

**National Education Mission (NEM):** The NEM consists of two expenditure heads: (i) Samagra Shiksha, and (ii) Teachers Training and Adult Education.  Allocation to the NEM accounts for 36% of the total budget of the Ministry of Education.  In 2022-23, the NEM has been allocated Rs 37,510 crore, which is a 25% increase as compared to 2021-22.

*Samagra Shiksha* was launched in July 2018.  It aims to ensure inclusive and equitable quality education at all levels of school education.  It subsumed three erstwhile centrally sponsored schemes: (i) Sarva Shiksha Abhiyan (SSA), (ii) Rashtriya Madhyamik Shiksha Abhiyan (RMSA), and (iii) Teacher Education (TE).

In 2022-23, Samagra Shiksha has been allocated Rs 37,383 crore (25% increase over 2021-22).  The allocation for Samagra Shiksha accounts for 59% of the total departmental allocation and 99% of the allocation for the National Education Mission.  In 2021-22, Samagra Shiksha was allocated Rs 31,050

crore which was reduced to Rs 30,000 crore at the revised stage.

In 2021-22, the Samagra Shiksha scheme received an allocation of Rs 31,050 crore, against a demand of Rs 57,914 crore.  In March 2021, the Department stated that it needs Rs 19,164 crore for implementation of NEP interventions under the Samagra Shiksha scheme.[6]

*Teacher Training and Adult Education* has been allocated Rs 127 crore in 2022-23, which is 0.2% of the total departmental allocation.  In 2020-21, teacher training and adult education had an allocation of Rs 250 crore at the budget stage, which was decreased to Rs 2.7 crore at the revised stage. (a decrease of 98%).

**PM POSHAN:** In September 2021, the central government renamed the National Scheme for Mid-Day Meal in Schools to PM POSHAN.[8]  The Mid-Day Meal programme targeted enhancement of enrolment, retention, attendance, and nutritional levels among children studying in Class 1 to 8 across India.  The erstwhile Mid-Day meal programme has been modified by: (i) extending the scheme to pre-primary students studying in government and government aided primary schools , (ii) providing supplementary nutrition items to children in aspirational districts and districts with high prevalence of anaemia, (iii) involvement of women self-help groups and farmer producer organisations to use locally grown food items, and (iv) mandatory social audits in all districts.

In 2022-23, PM POSHAN has been allocated Rs 10,234 crore, which is the same as the revised estimates of 2021-22.

**Autonomous bodies:**  These include: (i) Kendriya Vidyalaya Sangathan (KVS), (ii) Navodaya Vidyalaya Samiti (NVS), (iii) National Council of Educational Research and Training (NCERT), (iv) Central Tibetan School Administration (CTSA), and (v) National Bal Bhawan.  In 2022-23, the allocation for autonomous bodies is Rs 12,359 crore (12% increase from 2021-22).

**Exemplar:** This is a new scheme launched by the Department of School Education and Literacy.  In 2022-23, this scheme has been allocated Rs 1,800 crore.  The scheme aims to qualitatively strengthen more than 15,000 schools, by incorporating all aspects of the National Education Policy 2020.[9]  The selected schools will include: (i) one primary and one elementary school in each block, (ii) one secondary and one senior secondary school in each district, and (iii) a few Kendriya Vidyalayas and Navodaya Vidyalayas.  Over a period of time, these schools will become schools of excellence, and provide handholding and mentoring to other schools in their regions.

**ASPIRE (Accelerating State Education Program to Improve Results):** This is a new scheme launched by the Department of School Education and

Literacy. ASPIRE will assist the central government in implementing Samagra Shiksha, to improve education outcomes in Assam, Gujarat, Jharkhand, Tamil Nadu, and Uttarakhand.[10] The key outcomes include: (i) foundational learning at the primary level, and (ii) reduced dropout rates at the secondary level. The scheme is supported by the Asian Development Bank, with a total support of about Rs 3,700 crore over a period of six years.

**National Means-cum-Merit Scholarship Scheme:** The scheme provides one lakh scholarships of Rs 6,000 per annum each to eligible meritorious students in Class 9. The scholarship is provided up to Class 12 to prevent students from dropping out due to financial constraints.

In 2022-23, Rs 350 crore has been allocated for the scheme. This is the same as the allocation for 2021-22 at the budget estimates stage. In 2021-22, the revised expenditure for the scheme is Rs 284 crore. This is 19% less than the 2021-22 budget estimates (Rs 350 crore).
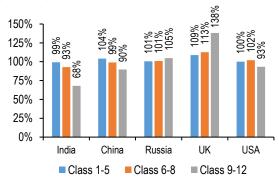
## Key issues in school education

### Issues related to access, dropout, and quality of learning

**Enrolment:** Gross Enrolment Ratio (GER) is the student enrolment as a proportion of the corresponding eligible age group in a given year.[11] For the year 2020-21, the GER of students at elementary, secondary, and senior secondary levels was 96%, 76%, and 50% respectively.[6] The Standing Committee (2021) took note of the sharp decline in GER at senior secondary level (50%). This implies that curtailing dropouts at the senior secondary level remains a challenge. As per the NEP, more than three crore out of school children need to be enrolled in school to achieve 100% GER at all levels of school education, by 2030.[3]

Figure 2, compares GER in India with other countries as in 2015-16.[3]

**Figure 2: International comparison of GER (2015-16)**



Sources: Educational statistics at a Glance 2018; PRS.

India's enrolment rate in Class 1-5 and Class 6-8 is comparable to that of developed countries. However, it is significantly less (68%) than these countries for Class 9-12 (see Figure 2).

The NEP notes that the GER is lower for certain socio-economically disadvantaged groups, based on: (i) gender identities (female, transgender persons), (ii) socio-cultural identities (scheduled castes, scheduled tribes), (iii) geographical identities (students from small villages and small towns), (iv) socio-economic identities (migrant communities and low-income households), and (v) disabilities.[3]

### Impact of Covid on enrolment

As official data is only available up to 2019-20, the Economic Survey (2021-22) uses data from the Annual Status of Education Report (ASER) 2021, to assess the impact of the Covid pandemic on education in rural areas. As per ASER Rural (2021), the share of children (in the 6-14 years age group) not enrolled in schools increased from 2.5% in 2018 to 4.6% in 2021 (Table 6). Among all groups, the decline in enrolment was the most among the 7-10 year age group. In the 7-10 year age group, the decline of enrolment for boys was higher than that of girls.

**Table 6: Enrolment in schools by age group and school type in rural areas (in percent)**

| Category | 6 to 14 age group | | 15 to 16 age group | |
|---|---|---|---|---|
| | 2018 | 2021 | 2018 | 2021 |
| Government | 64.3% | 70.3% | 57.4% | 67.4% |
| Private | 32.5% | 24.4% | 29.9% | 25.2% |
| Others | 0.7% | 0.7% | 0.6% | 0.9% |
| Not Enrolled | 2.5% | 4.6% | 12.1% | 6.6% |
| **Total** | **100%** | **100%** | **100%** | **100%** |

Sources: Economic Survey (2021-22); PRS.

Further, despite the pandemic, the share of children (in the 15-16 years age group) not enrolled in schools decreased from 12.6% in 2018 to 7.1% in 2021.
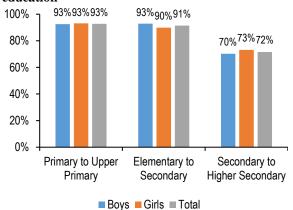
The ASER report also found an increase in the share of enrolment in government schools, and a simultaneous decrease in enrolment in private schools, in both age groups (Table 6). This may have been caused by: (i) shut down of low-cost private schools, (ii) financial distress of parents, (iii) disproportionately high fee in private schools, and (iv) return of families to villages. To deal with the increased enrolment in public schools, the Economic Survey (2021-22) recommends equipping them with additional teachers, classrooms, and teaching/learning materials.

**Transition and dropouts:** Transition rates reflect the dropout levels in the school education system. It is the percentage of pupils enrolled in the final grade of the current stage who proceed to the first grade of the next stage. Higher the transition rate, lower the dropout level. As of 2019-20, the transition rate from primary to upper primary and from elementary to secondary was more than 90%. However, the transition rate from secondary to higher secondary was only 72%. The transition rate for both genders is low for the transition from secondary to senior

secondary (Class 10 to Class 11).[12]

**Figure 3: Transition rate across different levels of education**



Sources: UDISE Flash Statistics 2019-20, PRS.

According to the Ministry, the most prominent reason for dropping out in 2015-16 was due to engagement in domestic activities (for girls), and engagement in economic activities (for boys).[13] Other reasons for dropping out include loss of interest in studies, and financial constraints.

**Table 7: Major reasons for dropping out (Class 1-12) for 2015-16**

| Reason for dropping out | Male | Female |
|---|---|---|
| Child not interested in studies | 23.8% | 15.6% |
| Financial Constraints | 23.7% | 15.2% |
| Engage in Domestic Activities | 4.8% | 29.7% |
| Engage in Economic Activities | 31.0% | 4.9% |
| School is far off | 0.5% | 3.4% |
| Unable to cope up with studies | 5.4% | 4.6% |
| Completed desired level/ Grade | 5.7% | 6.5% |
| Marriage | | 13.9% |
| Other reasons | 5.1% | 6.2% |

Note: Other reasons include: (i) timings of educational Institution not suitable, (ii) language/medium of Instruction used unfamiliar, (iii) inadequate number of teachers, (iv) quality of teachers not satisfactory, (v) unfriendly atmosphere at school. For girl students, other reasons also include: (i) non-availability of female teachers, (ii) non-availability of girl's toilet.
Sources: Educational Statistics at Glance 2018, MHRD; PRS.

The Standing Committee (2021) also noted that high drop out among girls at the secondary stage has a correlation with high incidence of child marriage.[6] The Committee recommended conducting a survey to identify districts where dropout rates of Scheduled Caste (SC), Scheduled Tribe (ST) and girls were higher than the national average.[14]

For 2021-22, the allocation (budget estimates) for the North East Region was Rs 4,382 crore. The Standing Committee (2021) noted that this was lesser than the allocation in 2020-21. The Committee noted that the dropout rates in states like Arunachal Pradesh, Assam, Meghalaya are higher than the national average, and hence, need special interventions.[6]

In July 2020, the central government has issued guidelines for main streaming of children of migrant labourers. The guidelines allow for the smooth admission of these children into schools, without asking for any documents other than identity.[15,16]

To improve the retention of children in schools, the NEP recommends strengthening existing schemes and policies which are targeted at socio-economically disadvantaged groups. For instance, schemes for free bicycles for girls from socio-economically disadvantaged groups or scholarships to tackle dropouts. Further, it recommends setting up special education zones in areas with a significant proportion of such disadvantaged groups. A gender inclusion fund should also be set up to assist female and transgender students in getting access to education.

The Standing Committee on Human Resource Development (2020) suggested that vocational training be provided to students dropping out at the secondary level. This will help them get job opportunities at the earliest and continue their studies.[5]

***Response to Covid***

In January 2021, to prevent dropouts and ensure continuity in learning, the central government released guidelines to identify out of school children, and ensure continuity of learning.[17,18] The guidelines provide that states must carry out identification of out of school children in the six to 18 years age group through a door-to-door survey, and prepare an action plan for their enrolment. When schools reopen, they must: (i) prepare and run school readiness modules/bridge course to allow students adjust to the school environment, (ii) relax detention norms to prevent drop out this year, and (iii) identify students across different grades based on their learning levels.

***Infrastructure in schools***

As per the Economic Survey (2021-22), access to basic facilities (such as electricity and sanitation) in schools has improved. As of 2019-20, more than 90% schools had access to a hand wash facility. More than 95% schools had functional toilets, for both boys and girls. However, only 38% of all schools had access to computers, while only 22% of schools had access to a functional internet connection.

The Department provides for the establishment of Kasturba Gandhi Balika Vidyalayas (KGBVs) in Educationally Backward Blocks (EBBs) of a State/UT, where the female rural literacy rate is below the national average.[6] As of March 2021, 5,726 KGBVs have been sanctioned.[6] Of these, 1,339 have been sanctioned in Aspirational
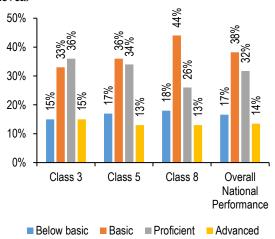
Districts. Out of the 1,339 schools, only 1,016 are operational.[6]

The Standing Committee (2020) highlighted that delay in completion of infrastructure leads to cost overruns and students' dropouts in government schools.[5]

## Quality of learning

The National Achievement Survey (2017) observed that nearly 53% of class 3 students have achieved grade proficiency levels.[19] This means that they can solve problems using simple logic, apply simple rules, follow simple instructions, and are able to use simple language to express themselves. This proportion of students who are grade proficient drops to 47% in class 5 and to a further 39% in class 8. Note that NAS is conducted for class 3, 5, and 8 and it measures learning level outcomes in language, mathematics, and environmental studies (for class 3 and 5), and language, mathematics, sciences, and social sciences (for class 8).[19]

**Figure 4: Proficiency of learning at different levels**



Note: Below basic means learners at this level have not achieved the required learning for this grade.
Sources: National Achievement Survey 2017, MHRD; PRS.

The Central Advisory Board on Education (CABE, 2014), National Achievement Survey (2012 and 2017), and the Economic Survey (2016-17) also observed declining learning levels in elementary education even after the implementation of the Right to Education Act (RTE), 2009.[20,21,22,23]

Under the RTE Act, children are enrolled in the class that corresponds to their age, irrespective of their learning levels. This results in a situation where children may have different learning levels within the same class, depending on when they are enrolled in the schooling system. To close the gap in learning levels, the NEP has made several recommendations such as reforms in: (i) curriculum and nature of assessments, and (ii) improving foundational literacy and numeracy through incorporating early childhood care and education in the education system.[3]

## Impact of Covid on quality of learning

Due to the pandemic, schools were shut down during the resulting lockdowns. As a result, online learning became the dominant mode of learning.[2]

As of December 2020, while the number of internet subscribers per 100 inhabitants in urban areas was 103, the corresponding number for rural areas was 35, almost two-thirds less.[24] According to the 75th round of National Sample Survey (2017-18), only 15% of the rural households had internet. In comparison, 42% of the urban households had internet facility. As per the survey, only 4.4% of the rural households had a computer (does not include a smartphone), the corresponding number for urban households was 23%. These figures are indicative of comparatively lesser access to internet and computers in rural areas.

The Economic Survey (2021-22) observed that in spite of an increase in availability of smartphones, issues related to availability of devices, and internet access remained.[2] This has negatively impacted the access to education in rural areas.[2] Further, students in lower grade found it difficult to do online activities compared to higher-grade students.[2]

In the 2022-23 Union Budget speech, the Finance Minister noted that the closure of schools has negatively impacted children in rural areas, especially from the Scheduled Castes and Scheduled Tribes.[1] To enable imparting supplementary teaching in regional languages, the 'One Class-One TV channel' programme of PM eVIDYA will be expanded from 12 to 200 TV channels.[1] In an NCERT survey about the use of different digital tools, only 3% of the surveyed students reported using TV.[25] The most preferred modes for students were smartphones (80%), and laptops (20%).[25] A similar preference pattern was noted in teachers.[25]

The PM eVidya initiative was launched in May 2020 under the Aatma Nirbhar Bharat Abhiyaan. Under this initiative all states were provided access to various e-content through the web portal - DIKSHA. The e-content included courses for teachers, and quizzes. In addition, the initiative provided for Swayam Prabha channels, which helped in telecasting educational programmes for students who did not have internet access. The initiative also included a channel for differently abled children.[26]

## Foundational literacy and numeracy

The NEP also notes lack of foundational literacy and numeracy as a reason behind poor learning levels at subsequent stages of education. It observed that more than five crore students currently enrolled in elementary school (26% of students) have not attained foundational literacy and numeracy (the ability to read and understand basic text and carry out basic addition and subtraction).

The NEP aims to achieve universal foundational literacy and numeracy in primary school by 2025.[3] This implies that every child, by grade 3, must be

able to read with comprehension, write, perform basic mathematical operations, and learn basic life skills. To achieve this by 2026-27, a national mission named National Initiative for Proficiency in Reading with Understanding and Numeracy (NIPUN Bharat) has been launched.[27]

The Mission specifies yearly targets for achieving learning outcome at various grade levels. To track the progress of students, school based assessment and large-scale standardised assessment will be conducted.[28] Training for teachers will focus on bridging the language barrier, and encouraging peer learning.[83] A five tier structure will be in place for implementing the scheme (at the national, state, district, block, and school levels).

To achieve universal foundational literacy and numeracy, the NEP also recommends Early Childhood Care and Education (ECCE) for making children school ready before starting instruction-based learning.

**Early Childhood Care and Education**

The NEP observes that over 85% of a child's cumulative brain development happens before the age of six. To ensure healthy brain development and growth, it recommends universalising access to quality Early Childhood Care and Education (ECCE). This will ensure that students entering Grade 1 are school ready.

ECCE consists of play-based and activity-based learning comprising of alphabets, language, puzzles, painting, and music for children in early years of their life. The NEP recommended that ECCE for children in the age group of 3-6 should be incorporated in the school structure by restructuring the school curriculum

As of June 2018, the enrolment rate across the country for age-group 3-5 stands at 33%.[29] This implies that nearly only one in every three students in the 3-5 age-group is receiving early education. There are wide variations amongst states in this regard. In states like Punjab, Kerala, Himachal Pradesh, Telangana and Tamil Nadu, the age-specific attendance ratio (for 3-5 years) is more than 50% while in Karnataka and Bihar, it is around 20% only.

In contrast, the enrolment rate in early childhood education for OECD countries (generally developed countries) is 87%.[30] In the United Kingdom, since September 2010, all families who have a three to four year old child are eligible for 570 hours a year (over 38 weeks) of government funded early education.[31] As of 2018, 94% of the three and four year old children benefitted from universal funded early education.[32] While early child care is not mandatory in New Zealand, the New Zealand Government subsidises all children who attend early learning services for up to six hours a day (a total of 30 hours per week), up until children go to school or turn six.[33]

Other measures to be taken in this regard include: (i) filling teacher vacancies at the earliest, (ii) ensuring a pupil to teacher ratio of 30:1 for effective teaching, and (iii) training teachers to impart foundational literacy and numeracy.

*Curriculum*

The NEP noted that the current curriculum system is based on rote learning. The Policy specifies reduction in the content of subjects to core essentials to enhance critical thinking, and inquiry-based, discussion-based, discovery-based, and analysis-based learning.[3]

The Policy recommends various reforms in the curriculum system to shift the system towards a character and skill-building system. The reforms include: (i) introduction of experiential learning (such as hands-on learning, arts/sports-integrated learning), (ii) eliminating significant separation among curricular, extracurricular, or co-curricular in certain streams, and (iv) promoting mother tongue as medium of instruction, preferably till Class 8 and beyond.[3]

Further, it recommended that the existing system of exams be reformed. Board examinations should test only core concepts and cover a range of subjects. Students should be able to choose their subjects and have the option to take the exams on up to two occasions during a given year. To track students' progress throughout their school experience, examinations will be conducted in Class 3, 5, and 8. The examination in Class 3 will test basic foundational literacy and numeracy, and its results will only be used for the improvement of the school education system. Further, a National Assessment Centre will be set up under the MHRD as a standard-setting body for student assessment and evaluation.[3]

Note that under the RTE Act, the Continuous and Comprehensive Evaluation (CCE) is the evaluation mechanism for elementary education. CCE (e.g., paper-pencil test, drawing and reading pictures, and expressing orally) does not mean an absence of an evaluation, but it means an evaluation of a different kind from the traditional system of examinations. It has been recommended that proper design of assessment and using this information can help improve the quality and innovation in terms of teaching and learning.[34] However, the CABE (2014) noted that CCE has not been adequately implemented or monitored. It recommended that there is a need to proactively communicate the intent of CCE among teachers for its effective implementation.[35]

*Issues related to teachers, and training*

Experts have identified various issues concerning the role of teachers to address the challenges confronting elementary education.[36] These include: (i) low teacher accountability and appraisal, (ii) poor quality of the content of teacher-education and changes required in the curriculum of B. Ed and D. Ed

courses, (iii) need for continuous in-service teacher training and upgradation of skill set, (iv) inadequate pupil-teacher ratio and deployment of teachers for non-educational purposes, (v) teacher vacancies, and (vi) excessive recruitment of contract/para teachers.
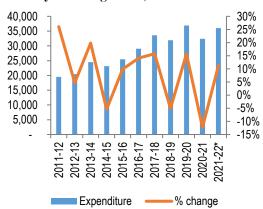
Over the last few years, the number of teachers in the schooling system has increased (from nearly 82 lakh in 2013-14 to nearly 89 lakh in 2016-17).[11] This has led to a decline in the Pupil-Teacher Ratio (PTR) across school education (from 31.3 in 2013-14 to 28.4 in 2016-17). PTR is defined as the number of students per teacher. According to the RTE Act, 2009, the PTR should ideally be lower than 30:1 at the primary level, and 35:1 at the upper primary level. Amongst the states, only Uttar Pradesh and Bihar do not meet the RTE prescribed PTR at the primary level, with a PTR of 39 and 36, respectively.

The NEP also observes that the quality of teacher education, recruitment, deployment, and service conditions are not up to desired standards. Further, it noted the significant teacher vacancies across India. It also adds that poor service conditions and culture, and lack of career progression amongst teachers affects their motivation and teaching quality.

## Department of Higher Education

Higher education includes under graduate and post graduate courses, doctoral degrees, and certificates following the completion of 12 years of schooling or equivalent. The higher education system in India comprises of more than 1,000 universities, 42,000 colleges, and 3.8 crore students.[37] Most of the colleges in India are private unaided colleges (65%), followed by government colleges (21%), and private aided colleges (14%).[38]

**Figure 5: Trend of actual expenditure of the Department of Higher Education (in Rs crore, year-on-year change in %)**



Note: Figures for 2021-22 are revised estimates.
Sources: Expenditure Budget, 2011-22; PRS.

In 2022-23, the Department of Higher Education has been allocated Rs 40,828 crore (13% increase over revised estimates of 2021-22). This is 39% of the total budget allocation to the Ministry of Education. In 2021-22, the allocation for the department was Rs 38,351 crore, which was reduced to Rs 36,032 crore at the revised stage (6% decrease).

Between 2011-12 and 2021-22, the Department's expenditure has seen a compounded annual growth of 6%. Figure 5 depicts the allocation to the Department of Higher Education from 2010-11 to 2021-22.

Table 8 indicates utilisation of funds to the department between 2010-11 and 2020-21.

**Table 8: Comparison of budget estimates and the actual expenditure (2010-21) (in Rs crore)**

| Year | Budget Estimate | Actuals | Utilisation % (Actuals/BE%) |
|---|---|---|---|
| 2011-12 | 21,912 | 19,505 | 89% |
| 2012-13 | 25,275 | 20,423 | 81% |
| 2013-14 | 26,750 | 24,465 | 91% |
| 2014-15 | 27,656 | 23,152 | 84% |
| 2015-16 | 26,855 | 25,439 | 95% |
| 2016-17 | 28,840 | 29,026 | 101% |
| 2017-18 | 33,330 | 33,614 | 101% |
| 2018-19 | 35,010 | 31,904 | 91% |
| 2019-20 | 38,317 | 36,916 | 96% |
| 2020-21 | 39,467 | 32,900 | 83% |
| 2021-22 | 54,874 | 51,970 | 95% |

Note: Figures for 2021-22 are revised estimates.
Sources: Union Budgets 2011-22; PRS.

The utilisation has generally been below the budgeted amount. In 2016-17 and 2017-18, the Department's expenditure exceeded the budget estimates. Table 9 provides the major heads of financial allocation under the Department for 2021-22.

**Table 9: Major expenditure heads for Department of Higher Education, 2022-23 (in Rs crore)**

| Major Head | 2020-21 Actuals | 2021-22 RE | 2022-23 BE | % change (RE to BE) |
|---|---|---|---|---|
| Universities | 8,807 | 9,288 | 9,914 | 7% |
| IITs | 6,681 | 8,345 | 8,495 | 2% |
| Statutory and regulatory bodies | 4,194 | 5,139 | 5,321 | 4% |
| NITs and IIEST | 3,252 | 3,699 | 4,364 | 18% |
| Student Financial Aid | 1,834 | 2,089 | 2,078 | -1% |
| RUSA | 165 | 793 | 2,043 | 158% |
| World Class Institutions | 1,016 | 1,200 | 1,700 | 42% |
| IISERs | 993 | 1,121 | 1,380 | 23% |
| IISc | 604 | 622 | 727 | 17% |
| IIMs | 465 | 651 | 654 | 0% |
| Digital India e-learning | 280 | 368 | 421 | 15% |
| IIITs | 339 | 407 | 543 | 33% |
| Research | 214 | 144 | 219 | 51% |
| Others | 3,533 | 2,164 | 2,971 | 37% |
| **Total** | **32,378** | **36,032** | **40,828** | **13%** |

Note: Universities include grants to central universities, and Deemed Universities promoted by central government.
Sources: Expenditure Budget 2021-22; PRS.

In 2022-23, the highest share of the departmental allocation is for universities (24%), IITs (21%), statutory and regulatory bodies (13%), and NITs and the Indian Institute of Engineering Science and Technology (11%).

In December 2021, the Comptroller and Auditor General (CAG) had released its performance audit of the eight new IITs (in Bhubaneswar, Gandhinagar, Hyderabad, Indore, Jodhpur, Mandi, Patna, and Ropar), which were established during 2008-09.[39] The report covers the activities of these IITs during 2014-19. The Ministry envisaged an overall intake of 18,880 students across the eight IITs between 2008-14. The audit found that only 6,224 students (out of the planned intake of 18,800 students) were admitted during this period. Further, although the Ministry of Education had permitted an increase in sanction of faculty positions, the seven IITs had vacancies in faculty positions ranging from 5% to 36%. As of February 2022, there were 4,370 vacant faculty positions across the 23 IITs.[40] The CAG also noted that the pace of infrastructure creation did not correspond with the pace of envisaged increase of student/faculty. The CAG recommended: (i) increasing the pace of establishing infrastructure, and (ii) attracting research from non-funding resources.

In 2021-22, the allocation for Rashtriya Uchchtar Shiksha Abhiyan (RUSA) reduce from Rs 3,000 crore at the budget estimates stage, to Rs 793 crore at the revised estimates stage (Table 9). RUSA aims to improve the overall quality of existing state higher educational institutions.[41] As of December 2021, more than 2,900 projects worth Rs 14,600 crore have been approved in all states (and UTs) under RUSA.[42] Under RUSA, states were required to establish State Higher Education Councils for: (i) synergising resources from the centre and state, (ii) channelling resources to institutions from the state budgets, and (iii) planning, monitoring, quality control and co-ordination of higher education at state level.[41]

The allocation to World Class Institutions in 2022-23 is Rs 1,700 crore. This is 42% more than the allocation in 2021-22 at the revised estimates stage. The government has granted the status of Institution of Eminence (IoE) to ten private institutions and eight public institutions.[43] These institutions have greater autonomy in admitting foreign students, fixing fees, and recruiting foreign faculty. Further, each public institution declared as an Institute of Eminence gets financial assistance of up to Rs 1,000 crore over five years.[44]

## Issues in the higher education sector

### *Enrolment*

The overall Gross Enrolment Ratio in higher education in India has increased from 19.4% in 2010-11 to 27.1% in 2019-20.[45] Gross Enrolment Ratio (GER) is the percentage of students enrolled in a higher education course from the age group of 18-

23 years. In 2019-20, the GER for female students (27.3%) was higher than the GER for male students (26.9%).[47] India's GER in higher education (27.1%) is much lesser than countries like USA (86%), Germany (68%), UK (57%) and China (43%).[46] States where GER is below the national level include Bihar (14.5%), Assam (17.3%), and Chhattisgarh (18.5%).[47]

The Standing Committee (2016) had noted that the Gross Enrolment Ratio (GER) in higher education in the country has increased due to the government of India's efforts of setting up new Central Universities in the country, including Indian Institutes of Information Technology (IIITs).[48]

As of 2019-20, the highest enrolment is at the under graduate level (80%), followed by post graduate level (11%).[47] Enrolment at the Ph.D level is just 1% of the total enrolment in higher education. Most students at the under graduate level are enrolled in the arts stream (30%), followed by science (16%), commerce (14%), and engineering (12%).[47] The preferred subject at the post graduate level is social science, followed by science and management.[47] At the Ph.D. level, majority of the students chose science.[47]

The NEP aims to increase the GER in higher education to 50% by 2035. This will be achieved by improvement in the capacity of existing higher education institutes by restructuring and expanding existing institutes.[3] Note that in countries like USA, where the GER in higher education is 86%, the average amount of student debt for federal loans is USD 27,000 (Rs 20 lakh).[49]

Further, NEP recommends that all institutes should aim to be large multidisciplinary institutes (with enrolments in thousands), and there should be one such institution in or near every district by 2030. Further, institutions should have the option to run open distance learning and online programmes to enhance the reach of higher education.[3]

### *Regulation of higher education*

The NEP observes that higher education in India has been overly regulated with too little effect. It noted problems of concentration of power, conflict of interest, and a resulting lack of accountability in higher education regulation.

In India, higher education is regulated by multiple authorities. The University Grants Commission (UGC) regulates universities and colleges teaching general subjects. It is empowered with disbursing grants to universities for their maintenance and development, and with regulating fees charged by them. It also has powers regarding the recognition, functioning, and de-recognition of deemed universities. Failure to comply with UGC standards may result in withdrawal of grants or termination of affiliation of a college to a university if the college

does not comply with fee structure and other regulations.[50]

Universities in India (public or private) are established by an Act of Parliament or state legislatures. The central government can also declare an institution to be a deemed university based on recommendations of the UGC. Such universities are allowed to set their own syllabus, admission criteria, and fees. Some prominent higher educational institutions are also classified as institutions of national importance (INI). Universities awarding their own degrees can be classified into five categories based on their management: (i) Central Universities; (ii) State Universities; (iii) Private Universities; (iv) Institutions-deemed-to-be-a-University; and (v) Institutions of National Importance.

Out of the 3.5 crore students enrolled in higher education, most attend state universities (85%), followed by central universities (7.7%), private universities (3.4%), deemed universities (2.5%), and institutes of national importance (0.8%).[47] IITs, IIITs, NITs, IIEST, IISERs, and IIMs, among others, are recognised as institutes of national importance.[51] In terms of type of universities, the highest budget allocation for 2022-23 went to institutes of national importance (38%), followed by central universities (24%) and state universities (5%).

The All-India Council for Technical Education (AICTE) regulates universities or colleges offering technical courses such as engineering and management. These institutions are required to comply with the academic standards and regulations set by AICTE.[52] Additionally, institutions offering courses related to medical, legal, nursing, or architectural education are regulated by 15 professional councils such as the Medical Council and the Bar Council. These councils also conduct qualifying examinations for entering the profession.

For setting quality standards and accreditation, there are, currently, two accrediting institutions: (i) the National Board of Accreditation (NBA) established by AICTE, and (ii) the National Assessment and Accreditation Council (NAAC) established by UGC.

The NBA only accredits programs in engineering, computer application, pharmacy, architecture, management, hotel management and catering technology.[53]

The NAAC undertakes quality assessment of higher educational institutes, and provides a final institutional grade on a four-point scale.[54] The grades range from D (not accredited) to A++. The assessment is based on seven criteria, which include: (i) curricular aspects, (ii) teaching, learning and evaluation, and (iii) infrastructure and learning resources.[55] As of December 2020, only 318 universities (30%) and 5,542 colleges (13%) were accredited by NAAC.[38] Out of these, only 182 universities and 1,410 colleges had a rating of A and above.

The Standing Committee on Human Resource Development (2016) noted that accreditation of higher educational institutions needs to be at the core of the regulatory arrangement in higher education.[48] Further, the Committee recommends that credit rating agencies, reputed industry associations, and professional bodies should be encouraged to rate Indian universities and institutions.

The Standing Committee on Human Resource Development (2020) noted higher education to be of global importance.[7] The Committee recommended alignment of the higher education system in India with global standards by developing graduates with new skills, a broad knowledge base, and competencies. The Committee noted that this could be achieved by: (i) upgrading existing institutions, (ii) allocating more funds towards university-based research, and (iii) promoting collaborations among institutions.

Earlier, the draft Higher Education Commission of India Bill (HECI) was placed in public domain for comments. The HECI will act as an umbrella body with four separate arms for: (i) standard-setting, (ii) accreditation, (iii) regulation, and (iv) funding. As of February 2022, stakeholder consultations for the bill are in progress.[56]

### Issues related to teachers and training

As of September 2020, 6,210 teaching posts are vacant across 42 central universities which come within the purview of the Ministry of Education.[57] As of December 2021, more than 14,400 teaching posts are vacant across all centrally funded higher education institutes.[58,59]

The Standing Committee on Human Resource Development (2016) noted that this could be due to two reasons: (i) young students don't find the teaching profession attractive, or (ii) the recruitment process is long and involves too many procedural formalities.[48]

The Standing Committee on Education, Women, Children, Youth, and Sports (2021) noted that the current evaluation system of faculty recruitment is ineffective.[60] The Committee recommends transforming the National Eligibility Test to align with the latest modes of teaching and research. Further, the Committee observed a need for a mechanism to monitor faculty induction and development. The Committee recommended creating an independent cadre of faculty for all centrally funded institutes, through a common exam conducted by the National Testing Agency or Union Public Service Commission

The NEP states that National Professional Standards for Teachers will be developed by 2022. The standards will specify expectations from a teacher at different levels of expertise. These standards will be revised in 2030 and thereafter every ten years to ensure the efficacy of the system.

*Infrastructure in higher education institutes*

As of 2019-20, more than 80% universities had playgrounds, auditoriums, libraries, laboratories, conference halls, common roofs, cafeteria, computer centres, and first aid rooms.[47] About half of all universities had theatres, indoor stadiums, and connectivity to the National Knowledge Network (NKN).[47] The NKN is a high-speed internet backbone, connecting higher education institutes, research labs, and data centres for seamless sharing of research and knowledge.[61]

The Higher Education Financing Agency (HEFA) is tasked with the creation of high-quality infrastructure in premier educational institutions. It is jointly promoted by Canara Bank and the Ministry of Education with an authorised capital of Rs 10,000 crore. All the centrally funded higher educational institutions are eligible for joining as members of the HEFA.[62] HEFA has been tasked to mobilise one lakh crore rupees to meet the infrastructure needs of higher educational institutions by 2022.[63] In 2019-20, HEFA has sanctioned nearly Rs 8,600 crore for 48 projects, and disbursed nearly Rs 1,200 crore.[64]

*Issues related to research funding and output*

India's investment in research and development (as a percentage of GDP) has reduced from 0.8% in 2008 to 0.7% in 2018.[65] This is much lower than the United States (2.8%), China (2.1%), Israel (4.3%), and South Korea (4.2%).[65] As a result, India's research output is lesser compared to some other countries.

For example, in 2017, India's number of patent applications (46,000) were 7% of those filed by the United States (6 lakh), and just 3% of those filed by China (13.8 lakh).[66] Further, the share of Indian residents in total applications has increased from 20% in 2010-11 to 40% in 2020-21.[66]

The Economic Survey (2021-22) notes that the number of patents granted in India has increased from 7,509 in 2010-11 to 28,391 in 2020-21.[66] As of 2020, this was much lesser compared to China (5.3 lakh), USA (3.5 lakh), Japan (1.8 lakh), and Korea (1.3 lakh).[66]

In terms of publications, India's share of scientific publications increased from 3.1% in 2009 to 4.8% in 2016. As of 2016, both USA (18%) and China (19%) published approximately four times as many articles.

In the 2021-22 Union Budget Speech, the Finance Minister announced the establishment of the National Research Foundation (NRF).[67] The NRF was given an outlay of Rs 50,000 crore over five years. As per the detailed project report, the NRF's key objectives will include: (i) funding competitive peer-reviewed grant proposals of all types, submitted in any of our official languages to individuals or groups of individuals, across all disciplines, and (ii) funding research infrastructure at individual institutions and other research equipment that can be shared across multiple institutions.[65]

The Standing Committee on Education (2021) recommended that funding from National Research Foundation (NRF) should focus on themes having national importance as identified after due consultations with different Ministries/organisations.[58]

**Table 10: Allocations to the Ministry of Education for 2022-23 (in Rs crore)**

| Major Heads | 2020-21 Actuals | 2021-22 RE | 2022-23 BE | % change (RE to BE) |
|---|---|---|---|---|
| **Department of School Education and Literacy** | **51,842** | **51,970** | **63,449** | **22.1%** |
| National Education Mission | 27,923 | 30,003 | 37,510 | 25% |
| -Samagra Shiksha | 27,835 | 30,000 | 37,383 | 25% |
| -Teachers Training and Adult Education | 89 | 3 | 127 | 4,518% |
| Autonomous bodies | 10,388 | 11,073 | 12,359 | 12% |
| PM POSHAN | 12,878 | 10,234 | 10,234 | - |
| Exemplar | - | - | 1,800 | - |
| ASPIRE* | - | - | 600 | - |
| National Means Cum Merit Scholarship Scheme | 321 | 284 | 350 | 23% |
| Others | 331 | 376 | 596 | 58% |
| **Department of Higher Education** | **32,378** | **36,032** | **40,828** | **13%** |
| Statutory and regulatory bodies (UGC and AICTE) | 4,194 | 5,139 | 5,321 | 4% |
| NITs and IIEST | 3,252 | 3,699 | 4,364 | 18% |
| Student Financial Aid | 1,834 | 2,089 | 2,078 | -1% |
| Rashtriya Uchhatar Shiksha Abhiyan (RUSA) | 165 | 793 | 2,043 | 158% |
| World Class Institutions | 1,016 | 1,200 | 1,700 | 42% |
| IISERs | 993 | 1,121 | 1,380 | 23% |
| IISc Bangalore | 604 | 622 | 727 | 17% |
| IIMs | 465 | 651 | 654 | 0% |
| Digital India e-learning | 280 | 368 | 421 | 15% |
| IIITs | 339 | 407 | 543 | 33% |
| Research and Innovation | 214 | 144 | 219 | 51% |
| Others | 12,340 | 11,453 | 12,885 | 13% |
| **Total** | **32,378** | **36,032** | **40,828** | **13%** |

Sources: Expenditure Budget 2022-23; PRS.

[1] Budget Speech 2022-23, https://www.indiabudget.gov.in/doc/Budget_Speech.pdf.

[2] 'Chapter 10: Social Infrastructure, Employment, and Human Development', Economic Survey, 2021-22, Ministry of Finance, https://www.indiabudget.gov.in/economicsurvey/doc/eschapter/echap10.pdf.

[3] National Education Policy 2020, Ministry of Human Resource Development, https://www.education.gov.in/sites/upload_files/mhrd/files/NEP_Final_English_0.pdf.

[4] Report No. 305, Demand for Grants 2018-19 of the Department of School Education and Literacy, Standing Committee on Human Resource Development, March 9, 2018, https://rajyasabha.nic.in/rsnew/Committee_site/Committee_File/ReportFile/16/98/305_2018_9_15.pdf.

[5] Report No. 312, Demand for Grants 2020-21 of the Department of School Education and Literacy, Standing Committee on Human Resource Development, March 5, 2020, https://rajyasabha.nic.in/rsnew/Committee_site/Committee_File/ReportFile/16/123/312_2020_3_12.pdf.

[6] Report No. 323, Demand for Grants 2021-22 of the Department of School Education and Literacy, Standing Committee on Human Resource Development, March 9, 2021, https://rajyasabha.nic.in/rsnew/Committee_site/Committee_File/ReportFile/16/144/323_2021_7_15.pdf.

[7] Report No. 313 – Demand for Grants 2020-21 of the Department of Higher Education, Standing Committee on Human Resource Development, March 5, 2020, https://rajyasabha.nic.in/rsnew/Committee_site/Committee_File/ReportFile/16/144/313_2021_1_16.pdf.

[8] "Cabinet approves Continuation/Revisions/Modifications of Centrally Sponsored National Scheme for PM POSHAN in Schools for five more years", Press Information Bureau, Cabinet Committee on Economic Affairs, September 29, 2021.

[9] "Union Budget 2021-2022: Highlights for the Department of School Education and Literacy", Press Information Bureau, Ministry of Education, February 10, 2021, https://pib.gov.in/PressReleseDetailm.aspx?PRID=1696879.

[10] Program Description, Program Implementation Document, India: Accelerating State Education Program to Improve Results, Asian Development Bank, November 2021, https://www.adb.org/sites/default/files/project-documents/53386/53386-001-pam-en.pdf.

[11] Unified District Information System for Education+ Annual Report 2019-20, Ministry of Education, https://dashboard.udiseplus.gov.in/assets/images/pdf/UDISE+2019_20_Booklet.pdf.

[12] UDISE Flash Statistics 2016-17, National Institute of Education Planning and Administration, http://udise.in/Downloads/Publications/Documents/Flash_Statistics_on_School_Education-2016-17.pdf.

[13] Educational Statistics at a Glance 2018, Ministry of Human Resource Development, https://www.education.gov.in/sites/upload_files/mhrd/files/statistics-new/ESAG-2018.pdf.

[14] "330th Report: Action Taken by the Government on the Recommendations/Observations of the Committee contained in its Three Hundred and Twenty Third Report on Demands for Grants (2021-22) of Ministry of Education", Standing Committee on Education, Women, Children, Youth and Sports, February 3, 2021, https://rajyasabha.nic.in/rsnew/Committee_site/Committee_File/ReportFile/16/144/330_2021_8_16.pdf.

[15] "Steps taken by the Government to ensure no loss of education during Covid", Press Information Bureau, Ministry of Education, August 9, 2021, https://pib.gov.in/PressReleasePage.aspx?PRID=1744059.

[16] "Guidelines for States and UTs for continuous education of children of migrant labour", July 13, 2020, Ministry of Education, https://www.education.gov.in/sites/upload_files/mhrd/files/Migrant%20labour%20guideline.pdf.

[17] "Ministry of Education issues guidelines for identification, admission and continued education of migrant children", Press Information Bureau, Ministry of Education, January 10, 2021, https://www.pib.gov.in/PressReleaseIframePage.aspx?PRID=1687442.

[18] D.O. No. 18-94/2020, "Guidelines for Out of School Children and mitigation of loss of learning", January 7, 2021, Ministry of Education, https://www.education.gov.in/sites/upload_files/mhrd/files/guidelines_oosc.pdf.

[19] National Achievement Survey-2017, Ministry of Human Resource Development, https://ncert.nic.in/pdf/NAS/WithReleaseDate_NPPTL.pdf.

[20] "Report of CABE Sub Committee on Assessment on implementation of CCE and no detention provision", 2015, Ministry of Human Resource Development, http://mhrd.gov.in/sites/upload_files/mhrd/files/document-reports/AssmntCCE.pdf.

[21] A summary of India's National Achievement Survey, Class VIII, 2012, National Council of Educational Research and Training, http://mhrd.gov.in/sites/upload_files/mhrd/files/upload_document/11-March-National-Summary-Report-NAS-Class-VIII.pdf.

[22] National Achievement Survey 2017, Dashboard, http://nas.schooleduinfo.in/dashboard/nas_ncert#/.

[23] Economic Survey, 2016-17, http://indiabudget.nic.in/es2016-17/echapter_vol2.pdf.

[24] The Indian Telecom Services Performance Indicators October - December 2020, https://www.trai.gov.in/sites/default/files/QPIR_27042021_0.pdf.

[25] Students' Learning Enhancement Guidelines, NCERT, Ministry of Education, https://www.education.gov.in/sites/upload_files/mhrd/files/Learning_Enhancement_0.pdf.

[26] "Union Budget 2021-2022: Highlights for the Department of School Education and Literacy", Press Information Bureau, Ministry of Education, February 10, 2021, https://pib.gov.in/PressReleseDetailm.aspx?PRID=1696879.

[27] "NIPUN Bharat", Ministry of Education, July 5, 2021 https://static.pib.gov.in/WriteReadData/specificdocs/documents/2021/jul/doc20217531.pdf.

[28] NIPUN Bharat Implementation Guidelines, Ministry of Education, July 5, 2021 https://www.education.gov.in/sites/upload_files/mhrd/files/NIPUN_BHARAT_GUIDELINES_EN.pdf.

[29] Household Social Consumption on Education in India, NSS 75th Round, MOSPI, July 2020.

[30] Enrolment in childcare and pre-school, OECD-Education at a Glance-2019, Organisation for Economic Cooperation and Development.

[31] UIN 158280, tabled on June 27, 2018, Question for Department of Education, https://questions-statements.parliament.uk/written-questions/detail/2018-06-27/158280.

[32] Provision for children under 5 years of age in England, January 2018, Department for Education, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/719273/Provision_for_children_under_5_2018_-_text.pdf.

[33] Preschool care and education, New Zealand Now, https://www.newzealandnow.govt.nz/live-in-new-zealand/education-and-schooling/preschool-care-and-education.

[34] World Development Report, 2018, World Bank, http://www.worldbank.org/en/publication/wdr2018.

[35] "Report of CABE Sub Committee on Assessment on implementation of CCE and no detention provision", Ministry of Human Resource Development, 2014, http://mhrd.gov.in/sites/upload_files/mhrd/files/document-reports/AssmntCCE.pdf.

[36] "Vision of Teacher Education in India: Quality and Regulatory Perspective", Report of the High-Powered Commission on Teacher Education constituted by the Supreme Court of India, August 2012, Ministry of Human Resource Development.

[37] Unstarred Question 1164, Ministry of Education, Rajya Sabha, July 29, 2021, https://pqars.nic.in/annex/254/AU1164.pdf.

[38] Higher Education Profile 2019-20, Ministry of Education, https://www.education.gov.in/sites/upload_files/mhrd/files/statistics-new/he_profile_1920.pdf.

[39] Report of the CAG on Performance Audit of Setting up of new Indian Institutes of Technology (IITs), December 2021, https://cag.gov.in/uploads/download_audit_report/2021/Report%20No.%2020%20of%202021_IITs_English_PDF%20A-061c2ed6ce12811.66323547.pdf.

[40] Lok Sabha Unstarred Question No. 788, Ministry of Education, February 7, 2022, http://164.100.24.220/loksabhaquestions/annex/178/AU788.pdf.

[41] RUSA 2.0 Guidelines, Ministry of Education, http://rusa.nic.in/wp-content/uploads/2018/12/Final-Guidelines-Copy.pdf.

[42] Unstarred Question 1937, Ministry of Education, Rajya Sabha, December 15, 2021, https://pqars.nic.in/annex/255/AU1937.pdf.

[43] 20 Institution recommended for status of 'Institutions of Eminence', Press Information Bureau, Ministry of Human Resource Development, August 2, 2019.

[44] Lok Sabha, Unstarred Q No. 44, Ministry of Human Resource Development, Answered on November 18, 2019, http://loksabhaph.nic.in/Questions/QResult15.aspx?qref=6362&lsno=17.

[45] Starred Question 44, Ministry of Education, Rajya Sabha, February 4, 2021, https://pqars.nic.in/annex/253/A44.pdf.

[46] Education Statistics at a Glance 2018, Ministry of Human Resource Development, March 2018.

[47] All India Survey on Higher Education 2019-20, Ministry of Education, https://www.education.gov.in/sites/upload_files/mhrd/files/statistics-new/aishe_eng.pdf.

[48] Report No. 284 – Issues and Challenges before Higher Education Sector in India, Standing Committee on Human Resource Development, December 14, 2016, https://rajyasabha.nic.in/rsnew/Committee_site/Committee_File/ReportFile/16/16/284_2017_4_11.pdf

[49] Student Debt, National Center for Education Statistics, https://nces.ed.gov/fastfacts/display.asp?id=900.

[50] University Grants Commission Act, 1956, https://www.ugc.ac.in/oldpdf/ugc_act.pdf.

[51] Institutions of National Importance, Ministry of Education, https://www.education.gov.in/en/institutions-national-importance.

[52] All India Council for Technical Education Act, 1987, http://legislative.gov.in/sites/default/files/A1987-52.pdf.

[53] Accreditation, National Board of Accreditation, https://www.nbaind.org/accreditation.

[54] Grading System of NAAC, http://naac.gov.in/docs/Promotional%20Materials/Microsoft%20Word%20-%20Grading%20_System_%20NAAC.docx.pdf.

[55] Distribution of weightages across Key Indicators (KIs), http://naac.gov.in/images/docs/Key-Indicators-and-Weightages.pdf.

[56] Implementation of Budget Announcements 2021-22, , https://www.indiabudget.gov.in/doc/impbud2020-21.pdf.

[57] Lok Sabha, Unstarred Question No. 202, Vacant teachers and other staff posts, Ministry of Education, September 14, 2020.

[58] Report No. 324, Standing Committee on Education, Women, Children, Youth and Sports, Rajya Sabha, February 2, 2021, https://rajyasabha.nic.in/rsnew/Committee_site/Committee_File/ReportFile/16/144/324_2021_7_13.pdf.

[59] Lok Sabha, Unstarred Question No. 202, Vacant teachers and other staff posts, Ministry of Education, September 14, 2020.

[60] Report No. 322, Standing Committee on Education, Women, Children, Youth and Sports, February 2, 2021, https://rajyasabha.nic.in/rsnew/Committee_site/Committee_File/ReportFile/16/144/322_2021_2_17.pdf.

[61] Features, National Knowledge Network, https://nkn.gov.in/en/about-us-lt-en/features-lt-en.

[62] "Cabinet approves establishment of Higher Education Financing Agency for creating capital assets in higher educational institutions", Press Information Bureau, Cabinet, September 12, 2016.

[63] About Us, Higher Education Financing Agency, https://hefa.co.in/about-us/.

[64] Unstarred Question 1975, Ministry of Education, Rajya Sabha, December 15, 2021, https://pqars.nic.in/annex/254/AU1975.pdf.

[65] Detailed Project Report on National Research Foundation, Prime Minister's Science, Technology and Innovation Advisory Council (PM-STIAC), December 2019, https://www.psa.gov.in/psa-prod/2020-11/English%20NRF.pdf.

[66] 'Chapter 9: Services', Economic Survey, 2021-22, Ministry of Finance, https://www.indiabudget.gov.in/economicsurvey/doc/eschapter/echap09.pdf.

[67] Budget Speech 2021-22, https://www.indiabudget.gov.in/budget2021-22/doc/Budget_Speech.pdf.