

Vocational Education in Schools: A Tool to Overcome the Drop-Out Rate in Public Funded Institutions

Abstract

Access to quality education is the fundamental right in India and it is the foundation for sustainable development. Indian education system after independence has made great progress, and is now accessible to a large segment of the society. The government has set up various educational committees, right from Dr. Radhakrishnan committee 1948-49 to the proposed National Education Policy 2020 with an objective to address the challenges of education. These have recommended comprehensive steps to improve education system in India. The broad objective of all educational policies has been to address the questions of access, equity and quality apart from other issues as per the then existing needs. A special focus has almost always been also on the universalisation of School education and achievement of 100% Gross Enrollment Ratio (GER) at national and state level. The UDISE report says that "India has made remarkable strides in recent years in attaining near universal enrollment in Primary schools, according to U-DISE data GER in 2016-17 for grades 1-5 was 95.1%. The data indicates some serious issues in retaining children in the schooling system for later grades. For classes 6-8 GER is 90.7%, while for Grades 9-10 and 11-12 it was only 79.3% and 51.3% respectively" (U-DISE). Furthermore, the report indicates that a large proportion of students - drop out after 8th class. Policy makers have been concerned about how to retain these students in the educational fold. The present study has attempted to find what the dropped out students are doing after discontinuation of the studies and to suggest few strategies to prevent further students from dropping-out. The study was done in Hyderabad District, which is the capital of Telangana state. The data is collected from the parents or guardians of dropped out students who had been studying in government schools. Purposive sampling technique is adopted and the addresses of the students were taken from the schools located in the study area. It is concluded that the most of the families whose children are studying in Government schools, Hyderabad migrated from rural to urban areas in search of livelihood. Moreover, according to the U-DISE data for the year 2016-17 Telangana State witnessed almost a double dropout rate up-to class VIII during 2016-17 compared to previous year.

Keywords: Gross enrollment Ratio (GER), Dropout rate, School Education, U-DISE, Government schools.

Introduction

India is a young nation with around 1.3 billion population, out of which 26.98 % of the population is under 14 years – (Indian Demographic Profile 2019). To ensure that this young population proves to be our future demographic dividend, it is of utmost importance that they are provided quality

education. The various policy initiatives of the government strive towards providing accessible, affordable and quality education to the citizens.

The Education system in India is broadly classified as School Education and Higher Education. Since independence several educational policies were made and implemented in 1968, 1986/1992 and

at present a draft National Educational policy (NEP) 2020 is for the approval of the government. The main objectives of all educational policies and government initiatives were to create infrastructure and develop mechanisms for providing quality education that is accessible and affordable, apart from having a special focus on Universalisation of School Education.

National Education Policy-2020 (Proposed)

This policy aims at equitable and inclusive education for every child in the country with special focus on under-represented groups. The policy also aims to universalize pre-primary education by 2025 and provide fundamental literacy for all by 2025. It also proposes to achieve universal access and retention with 100% GER for school education by 2030. It suggests a new curricular and pedagogical structure with 5+3+3+4 design covering the children with age group 3-18 years instead of 6-14 years under RTE act.

Budget allocation on School education at India level and State level:

In 2020-21, the Department of School Education has been allocated Rs. 59,845 crore, a 5.9% increase over the revised estimates of 2019-20” (MHRD, 2018; PRS). This amounts to 60% of the total allocation to the ministry. The expenditure as a percentage of GDP was high at 3.1 percent in 2014-15 thereafter moved downwards to between 2.8 and 3.0 percent in 2016-17 and 2018-19. Figure 1 shows the allocation of the Department of School Education and Literacy over the past 10 years (2010-20) (MHRD, 2018; PRS). During 2015-16, the allocation was reduced by 9%.

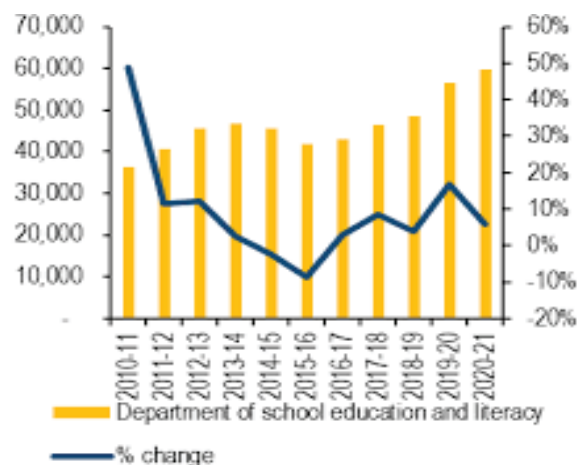


Figure 1: “Budget Allocation to Department of School Education and Literacy (2010-20) (in Rs crore)”

“**Note:** Revised estimates have been used for 2019-20 and Budget estimates for 2020-21.

Sources: Union Budgets, 2010-20; PRS”.

GER and Drop out rate scenario in India

One of the primary goals of Indian education system must be to ensure that children are actually enrolled in and attending school. According to U-DISE data a large proportion of students drops out after class 8th.

The drop out rate, as the 2019 Economic survey points out, becomes very high at Secondary and Higher Secondary level. This is contributing to a never ending stream of under-educated, low-skilled young people in millions entering an increasingly technological driven economy.

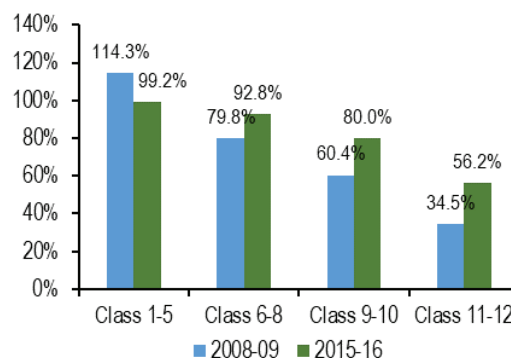


Figure 2: Changes in GER in school education during 2008-09 and 2015-16

“Sources: Education statistics at a glance, Ministry of Human Resource Development, 2018; PRS”

Transition and Dropouts

The above figure shows that dropout rate peaks at the secondary level (class 9-10). It is at 17% as compared to 4% in elementary school (class 1-8) and is 2% in the senior secondary school (class 11-12) (see Figure 3). This is also reflected in the transition rates in school education where the lowest transition rate is at the secondary level (class 9 to 10) at 66%. Note that a transition rate below 100% indicates that the students are held back or have dropped out of school” (MHRD, 2018; PRS).

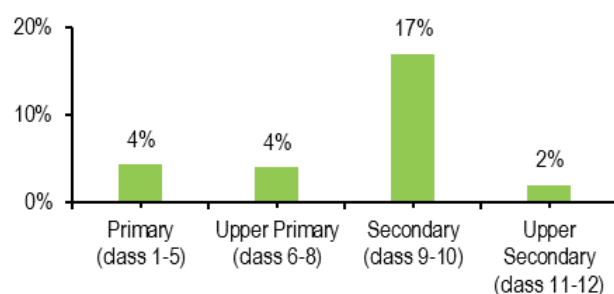


Figure 3: “Dropout rate in school education (2014-15) (%)”

Sources: Education statistics at a glance, Ministry of Human Resource Development, 2016; PRS.

Vocational Education In India

With 17 different ministries in India currently engaged in some sort of skill development schemes, the revamping of Vocational education in Secondary schools has led to a newly revised policy of Vocationalisation of Secondary and Higher Secondary education with the launch of the new National Skills qualification framework (NSQF) in the year 2013. Under the Vocational education component of *Samagra Shiksha*, different vocational courses are taught to the students from Class 9th to 12th. Since then efforts have been made to connect classrooms with industry to create a skilled workforce along with formal education at school level. Every year, a provision for a separate budget

is made for vocational education and skill development. The government allocated Rs.3016 Crores in 2017-18, Rs.3400 crores in 2018-19, Rs.2989 Crores in 2019-20, and in 2020-21 and about Rs 3,000 crore have been allocated for skill development. Integration of vocational education with School education may help decrease dropout rate and be a tool for an increase in GER.

Review of Literature

Earlier studies reveal that socio-economic status plays an important role in the education outcomes of students (Bahrudin & et al, 1998). They also show that management is a key factor in the success of academic achievements of the students (Stoner, & et al., 2000). We know interestingly that a person’s educational status is closely linked to the chances they can have in their lives and affects their income, and well-being (Battle & et al, 2002). In the earlier research study it was revealed that the “School environment factors, such as school size, neighborhood, and relationship between teachers and students influence test scores (Crosnoe, & et.al, 2004). Private schools lead to better academic performance because of surplus funds and more access to resources such as computers, which have been shown to enhance academic achievements (Crosnoe, & et al, 2004). Moreover, physical activity is a very important tool for academic achievement and earlier research studies have shown that physical activity could increase neurotic activity in the brain (Tompsonowski, & et al, 2008). the fast growth of tertiary education is partly due to the development of post-secondary vocational education and training (PSVET). PSVET programs are typically organized between upper secondary and longer more academic post-secondary programs. PSVET institutions are absent from the global rankings of Universities. The universities that find places there are research intensive, attract the topmost achieving students and staff, and provide access to the most prestigious jobs” (Jaana. P, 2012).

Zeiger pointed out that an excellent teacher understands that teaching involves a number of teaching skills to ensure that the school day runs smoothly and all the students receive a quality of education (Zeiger, 2014). There is great variety in the funding, info and organizational measures that has facilitated the success of the earlier study in Europe. A countless variety in the policy instruments countries have been used to increase study success. There have been over 170 national and institutional policy instruments identified in 35 countries across Europe. These instruments can be grouped into 22 typical police types falling under three main policy headings: 1. Funding and financial incentives, 2. Information and support for students, and 3. Organization of higher education (Hans Vossensteyn & et al, 2015). Leaving the education and training program early (The phenomena is known as Early leaving of education and training ELET) is at EU level recognised as a failure to complete upper secondary education or a failure to gain qualifications equivalent to a school leaving certificate. It (ELET) can lead to a vicious cycle of unemployment, social exclusion and poverty, with costs for the individual and society that include reduced levels of economic activity, higher unemployment, poorer health outcomes and demands on state welfare systems (Joachim. J. C, 2016). In some earlier investigation, it was found that the issues that explain university failures included in them, the investment decision models too. Researchers had clustered those determinants into four main categories, such as, students characteristics, abilities and behavior; parental background and family networks; characteristics of tertiary education system & institutions; labor market performance, (Carmen. A, et al., 2018). It has been argued for quite a while that school should start some technical courses to overcome the problem of unemployment (Samiullah, & et al., 2018). Earlier research study had recommended that to increase school enrollment, schools should organize parent teacher meetings and should provide a learning environment

and schools should offer some scholarships and some technical courses to overcome unemployment and poverty issues for the students (Samiullah, & et al., 2018).

Research Gap

After going through various studies concerning the Dropout rate, Gross enrollment ratio and Vocational education in India, it is found that most of the studies are addressed at trying to find the reasons for drop out of the students and the reasons for decrease in GER and the Vocational courses being offered by the Government. There was no study found on what dropout students do after discontinuation of their studies and to find out if they are interested in some type of Skill courses being offered in Schools along with the regular academic program.

Need and Justification of the Study

Education is a national agenda and is the catalyst that can transform the future of the children and youth. The Government of India has implemented the Right to Free and Compulsory Education Act, for children of age group 6 to 14 years. To examine the extent of achievement of this objective, there is a need to ensure access to education, to gender parity in school enrolment, ensure retention and to an overall increase in enrollment and the quality of education being imparted. During the past decade out of the budget allocation for Education Sector made by the government of India around sixty percent is for School education.

In spite of all efforts made by the Government a significant drop out of students at Secondary and Higher Secondary levels is seen. A review of the literature gives supported evidence about the drop out from schools. This study was aimed at finding out what dropouts are doing subsequently and what they would like as course possibilities. This may help to find the needed vocational courses to be offered in schools along with regular academic programs.

Objectives of the Study

The main objective of the study is

1. To find out the engagement of drop-out students after discontinuation of their studies.
2. To know the impact of vocationalisation on dropout rate.

The other Objectives are

- To find the Profile of Drop out Children and their Parents / Guardian.
- To find out the Reasons for discontinuation of Studies.
- To find out the effect of Demographic profile on the dropout rate of students.
- To know the Involvement of dropouts in type of Job / Training.
- To find out the Perception of Parents / Guardians regarding Vocational training.

Hypotheses

1. Reason for drop out is independent of Demographic profile of parents / guardians.
2. Vocationalization of School education will have an impact on drop-out rate.

Methodology

Detailed data was collected with the help of some structured questionnaires. The questionnaires were tested for reliability and internal consistency and the Cronbach's alpha value was found to be 0.812 indicating reliability. The researcher herself approached the respondents to collect the information. The respondents were the parents or guardians of the drop-out students of Urdu and Telugu

Medium government secondary schools located in the city of Hyderabad. One of the reasons for selecting Hyderabad for study is that most of the families whose children are studying in Government schools have migrated from rural to urban areas in search of livelihood.

For selection of schools the purposive sampling technique was adopted. In the chosen schools the addresses of drop-out students were taken from school records. The government schools were selected as the dropout rate was expected to be lower in the private schools for various reasons not to do with the school. 15 secondary schools were visited to collect the addresses of drop-out students and data is collected accordingly from 218 parents/ guardians whose children left the school in the preceding 3 years. Among the respondents 94 were Telugu medium and 124 Urdu medium drop outs. For data analysis descriptive statistics like mean, percentages were used and for inferential statistics like Chi-Square and t-test is used. SPSS software has been used for data analysis.

Data Analysis and Findings

Demographic Profile of Respondents

The respondents are the parents/guardians of the drop-out students. In the table -1&2 given below, we show the information obtained from the respondents about themselves and their wards- the drop out student. The variables included gender, medium of study, and respondents Education qualification, Occupation, Size of the family and their Native place (Domicile).

Table 1: Profile of Drop out Children

S.No.	Gender	Medium			Class last studied			Total
		Telugu	Urdu	Total	8th	9th	10th	
1	Male	77	85	162 (74%)	46	64	52	162
2	Female	17	39	56 (26%)	19	27	10	56
Total		94 (43%)	124 (57%)	218 (100%)	65 (30%)	91 (42%)	62 (28%)	218 (100%)

From Table-1 we can see that 30% students dropped out after studying only till 8th class and 50% students dropped out from school after studying till 9th class and 28% students discontinue their studies after studying 10th class.

Table 2: Demographic Profile of Parents/Guardian

Education	Uneducated	Upto 5 th	Upto 10 th	Upto 12 th	12 th & above	Total		
	73 (33.5)	89 (40.8)	41 (18.8)	14 (6.4)	1 (0.5)	218 (100%)		
Occupation	Unskilled / Daily wager	Skilled labor	Petty Business	Own Shop	Pvt. Employee Salaried	Govt. employee	Nothing / unemployed	Total
	46 (21.1)	49 (22.5)	59 (27.1)	16 (7.3)	30 (13.8)	4 (108)	14 (6.4)	218
Native Place (Domicile)	Urban		Rural		Total			
		51 (23.4)		167 (76.6)			(100)	
Family Size	Upto 4 members	4-6 members	6-8 members	More than 8 members	Total			
		32 (14.3)	82 (37.6)	82 (37.6)	22 (10.1)	218 (100)		

Above table 1 & 2 reveals that among the majority of dropout students (74%) are Males and among the total dropouts, 41% discontinued their studies after 8th Class. Among respondents only 7% of parents had completed 10th class. The remaining were either illiterate or had not gone beyond 10th class. With regard to occupation, more than 70% were involved in petty jobs or were daily skilled /unskilled work. Data shows that around 77% respondents had migrated from rural to urban in search of livelihood and 75% of the families consist of 4-8 members as dependents.

Reasons for Discontinuation of Studies

Majority (55%) of the children, especially Boys, discontinued studies due to the reasons related to School. The reasons related to school were location, infrastructure, ineffective teaching, School timings, no transport facility. Many students said they are interested in technical studies as there are no jobs after studies. Data is shown in table-3

Table 3: Reasons for discontinuation of Studies

S.No.	Gender	Reasons related to school	Reasons related to Parents	Reasons related to Children	Total
1	Male	98	30	34	162
2	Female	22	21	13	56
	Total	120 (55.1)	51 (23.4)	47 (21.5)	218 (100)

From Table-3 we can say that on the average 55% students drop out for reasons related to school and 23% for reasons related to parents and 22% for reasons related to themselves.

Hypothesis testing: The Chi-square test was conducted to know whether the demographic profile of the parents is the reason for dropout or discontinuation of studies.

Accordingly Null Hypothesis is Ho1: Reasons for drop out is independent of the demographic profile of the Parents/Guardian included in the study.

Results of the hypothesis tested at 5% level of significance shows that Ho is accepted i.e the reasons for School dropout is independent of demographic profile of the

Parents / Guardians . it means the reason for dropout is not the demographic profile of the parents/guardian. The demographic profile is however not reflective of the total population in that area and is restricted to students coming to these govt schools. The analysis is shown in table-4.

Table 4: Chi-square test result of Demographic profile and Reasons for drop out of students.

S.No	Demographic Variable	Value	df	Significance (2-tailed)	Result
1	Education of the parents	8.349	8	0.400	Accept Ho
2	Occupation of the parent	14.596	12	0.267	Accept Ho
3	Size of the family	6.99	6	0.321	Accept Ho
4	Native place	1.533	2	0.465	Accept Ho

*tested at 5% level of significance

Engagement of Children after discontinuation of studies

the discontinuation of the studies. Whether they are engaged in doing a job or training.

Table 5 shows what children are doing after

Table 5: Engagement of children after discontinuation of studies

S.No	Gender	Job	Training	Nothing	Total
1	Male	78	68	16	162
2	Female	17	14	25	56
Total		95 (43.6 %)	82 (37.6 %)	41 (18.8 %)	218 (100 %)

From Table-5 we can say that the from the children who dropped out from schools

43.6% are doing job 37.6% are doing are doing training and 18.8% are doing nothing.

Table 6: Involvement in type of Job / Training.

Sl. No.	Category of work	Male	Female	Total
1	Plumber	6	--	6 (2.7 %)
2	Carpentry	1	--	1 (0.4 %)
3	Electrician	28	--	28 (12.8 %)
4	Automobile	34	--	34 (15.5 %)
5	A.C. Mechanic	18	--	18 (8.2 %)
6	Beauty Parlor Mehndi	--	10	10 (4.5 %)
7	I.T/ ITES	6	4	10 (4.5 %)
8	Sales / Marketing	33	8	41 (18.8 %)
9	Tailoring	4	7	11 (5 %)
10	Mobile Repairing	7	--	7 (3.2%)
11	Self Business / Other	9	2	11 (5 %)
12	Nothing	16	25	41 (18.8 %)
Total		162	56	218

Table 6 shows the type of job or training they are engaged in doing. Responses show that around 80% of the children are doing some kind of job or Training. Majority of the girls (44.6%) are not doing anything and were found to be engaged in household work.

It was found that while most of the Male children are engaged in skilled work like

Electrician, Automobile (Mechanic), and girls are into tailoring and Beautician work. A significant thing noted was that no one is engaged in formal training offered by the government or private agencies. They do not also have knowledge about skill development courses. The details are shown in the following tables.

Perception of Parents / Guardians regarding Vocational training

Table 7: Perception of Parents / Guardians regarding Vocational training.

Response	Awareness of vocational training	Willingness to join vocational training	Vocational training along regular studies
Yes	60 (27.5)	150 (68.8)	188 (86.2)
No	158 (72.5)	68 (31.2)	30 (13.8)
Total	218	218	218

Respondents were asked about the awareness of vocational training being offered by the government, more than 70% of the respondents were not aware and had not heard about Vocational / Skill development courses being offered under various schemes. Majority (68%) showed their willingness to join Vocational training courses if offered

and more than 85% parents said it would be better if vocational courses are offered in School itself along with the formal education. They were of the opinion that Vocational courses in schools may help in increasing the retention rate of the students. Details are shown in table-7.

Table 8: Result of t-test on Impact of Vocationalisation on Dropout rate of children from School.

S.No.	Statement	t- value	df	Sig (2 tailed)	Result
1	Willingness to join vocational training	41.715	217	.000	Reject Ho
2	Vocational training in school along with regular studies	48.645	217	.000	Reject Ho

* tested at 5 % level of significance.

Hypothesis Testing: To know whether the Vocationalization of Secondary education will help in decrease of dropout rate of the children, t-test is conducted with the framing of Null Hypothesis as H_0 : Vocationalisation of School education will not have impact on dropout of children from School, as the null hypothesis is rejected at 5% level of significance it is concluded that parents seem to feel that Vocationalization of School Education can have impact on dropout rate. i.e vocationalization will help in decrease in dropout rate. Analysis is shown in table-8

Conclusion

It is seen that Majority of the dropouts are after eighth standard and studies are discontinued mostly due to school related reasons like Location, Lack of good infrastructure, good teaching etc. Many students said they are interested in technical studies as there are no jobs after studies. It is evident from the study that the majority of the students who have dropped out are engaged in some kind of job or training that is related to Vocational training / Skill development course. Hence, awareness regarding Vocational courses

being offered by the government and integration of vocational courses with formal education at Secondary School level may help decrease dropout rate at Secondary School level and may also help in achieving the targeted Gross Enrollment ratio.

References

- 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.
- All India Survey on Higher Education, 2017-18, Ministry of Human Resource and Development, Department of Higher Education, <http://aishe.nic.in/aishe/viewDocument.action?documentId=245>.
- Baharudin, Rozumah, Tom Luster (1998). Factors related to the quality of the home environment & children's achievement. *Journal of family Issues*. 19(4). 375-404.
- Battle, Juan, Michael Lewis, (2002). The increasing significance of class: The relative effects of race and socioeconomic status on academic achievement. *Journal of poverty*, 6(2), 21-35.
- Crosnoe, Robert, Monica Kirkpatrick Johnson, Glen.H.Elder Jr. (2004). International bonding in school: The behavioral and contextual correlates of students & teacher relationship. *Sociology of Education*, 77(1), pg60-80.
- Crosnoe, Robert, Monica Kirkpatrick Johnson, Glen. H. Elder Jr. (2004). School size and the interpersonal side of education: An exam of race, ethnicity and organizational context. *Social science Quarterly*, 85(5), 1258-1275.
- Carmen Aina, Eliana Baici, Giorgia Casalone, Francesco Pastore (2018). The Economics of University Dropouts and Delayed Graduation: A Survey. Discussion Paper Series. IZA Institute of Labor Economics. Pg.15.
- Demand for Grants, Ministry of Human Resource Development, Union Budget, 2020-21; PRS. "Draft National Education Policy", Ministry of Human Resource Development, May 31, 2019, https://mhrd.gov.in/sites/upload_files/mhrd/files/Draft_NEP_2019_EN_Revised.pdf.
- Expenditure Budget, Vol. 2, Union Budget 2020-21, <https://www.indiabudget.gov.in/doc/eb/sbe58.pdf>; <https://www.indiabudget.gov.in/doc/eb/sbe59.pdf>.
- Educational Statistics at a Glance 2018, Ministry of Human Resource Development, https://mhrd.gov.in/sites/upload_files/mhrd/files/statisticsnew/ESAG-2018.pdf.
- Flash Statistics, U-DISE 2016-17; AISHE 2018-19, Educational Statistics at a Glance 2018; Ministry of Human Resource.
- Hans Vossensteyn, Bjørn Stensaker, Andrea Kottmann, Elisabeth Hovdhaugen, Ben Jongbloed, Sabine Wollscheid, Frans Kaiser, Leon Cremonini (2015). Dropout and Completion in Higher Education in Europe. Centre for higher education policy studies. Luxembourg: Publications Office of the European Union, Doi: 10.2766/826962.
- "Implementation of Right of Children to Free and Compulsory Education (RTE) Act, 2009", Comptroller and Auditor General of India, July 21, 2017, <http://www.cag.gov.in/content/report-no23-2017-complianceaudit-union-government-implementation-right-children-freeandcompulsory-education>.
- Joachim James Calleja. (2016). Leaving education early: putting vocational education and training Centre stage Volume II: evaluating policy impact. Luxembourg: Publications Office of the European Union.
- Jaana Puukka. (2012). Higher Education in Regional and City Development Post-Secondary Vocational Education and Training: Pathways and Partnerships. Series: Higher Education in Regional and City Development ISSN 2218-3140 (online).
- K-12 Education: Highlights of the No Child Left Behind Act of 2001, Library of Congress. Congressional Research Service, February 28, 2005, <https://digital.library.unt.edu/ark:/67531/metadc824710/m1/1/>.
- National Achievement Survey 2017, Dashboard, http://nas.schooleduinfo.in/dashboard/nas_ncert#/.

- National Achievement Survey (2015), Class X, National Council of Educational Research and Training, [http://www.ncert.nic.in/departments/nie/esd/pdf/NASSummary .pdf](http://www.ncert.nic.in/departments/nie/esd/pdf/NASSummary.pdf).
- “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.
- “Report to the People on Education”, 2011-12, Ministry of Human Resource Development, http://mhrd.gov.in/sites/upload_files/mhrd/files/documentreports/RPE_2011-12.pdf.
- Report no. 284: Issues and Challenges before the Higher Educational Sector in India”, Standing Committee on Human Resource Development, December 14, 2016, <http://164.100.47.5/newcommittee/reports/EnglishCommittees/Committee%20on%20HRD/284.pdf>.
- “Report to the Nation: 2006-2009”, National Knowledge Commission, March 2009, <http://www.aicte-india.org/downloads/nkc.pdf>.
- Report of the Committee on the Evolution of the New Education Policy, Ministry of Human Resource Development, March 30, 2016, <http://www.prsindia.org/uploads/media/Report%20Summaries/Committee%20Report%20for%20Evolution%20of%20the%20New%20Education%20Policy.pdf>.
- Stoner, J.A.Freeman, Gilbert, A. E. (2000). Management. New Delhi, India: Prentice Hall of India.
- Sami Ullah, Tahira Bibi (2018). Factors Affecting Dropout Rate at Secondary School Level in Private Schools of Punjab, Pakistan. International Journal of Management Sciences and Business Research, Vol-7, Issue 4. Pg. 22 & 26.
- ‘Social Infrastructure, Employment, and Human Development’, Chapter 10, Economic Survey, 2019-20, Ministry of Finance, https://www.indiabudget.gov.in/economicsurvey/doc/vol2chapter/echap10_vol2.pdf.
- The Draft Higher Education Commission (Repeal of the University Grants Commission Act, 1956) Bill, 2018,
- The RTE (Amendment) Rules, 2017, Ministry of Human Resource Development, https://mhrd.gov.in/sites/upload_files/mhrd/files/upload_document/RTE_Amendment_2017.pdf. http://mhrd.gov.in/sites/upload_files/mhrd/files/HE_CoI_India_2018_act.pdf
- Tomprowski, Phillip; Catherin Davis, Patricia Miller, Jack Naglieri, (2008). “Exercise & Children’s Intelligence, Cognition and Academic Achievement”. Educational Psychology 20 (2): 111–131. Zeiger, S. (2014). What is the Role of a Teacher in Education. Retrieved March 17, 2015, from <http://work.chron.com/role-teachers-education-8807.html>.