

**AN ANALYTICAL STUDY OF SCHOOL ENROLMENT &
EXPENDITURE ON PRIMARY & SECONDARY
EDUCATION IN INDIA**

Dr.G.Jayanthi*

M.Bhuvaneswari**

M.Kalaivani***

Abstract

Education is the process of facilitating learning knowledge, skills values, beliefs & habits of a group of people which are transferred to other people, through storytelling, discussion, teaching, training or research. Education is the fourth necessity of man after food, clothing & shelter in today's competitive world. The study reveals the enrolment in primary & secondary education in India, to study the expenditure of primary & secondary education in India. Trend analysis showed that the enrolment in both primary & secondary education has increased drastically.

*** Assistant Professor of Economics, PSG College of Arts and Science, Coimbatore.**

**** M.Phil Research Scholar, PSG College of Arts and Science, Coimbatore.**

***** M.Phil Research Scholar, PSG College of Arts and Science, Coimbatore.**

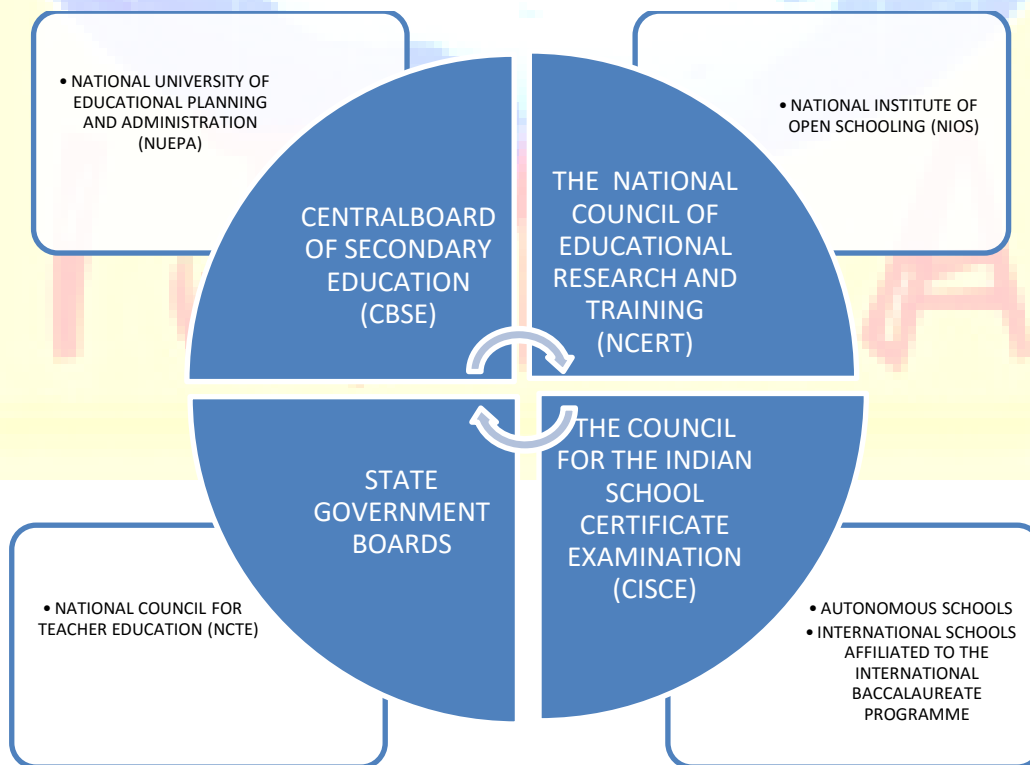
Introduction

Education is the process of facilitating learning, knowledge, skills, values, beliefs and habits of a group of people which are transferred to other people, through story-telling, discussion, teaching, training or research. It is an effective tool for bringing social change through community development. It is one of the most powerful instruments for reducing poverty and inequality. Education equally key to enhance India’s competitiveness in the global economy. It is the key to the task of building nation. It is also well-accepted fact that providing the right knowledge and skills to the youth can ensure the overall national progress and economic growth.

Education is the fourth necessity of man after food, clothing and shelter in today’s competitive world. No country has ever climbed the human development ladder without steady investment in education. Every individual has potential and prosperity to move towards realisation of full potential if he or she is provided a right environment. Education can provide that right environment (among other things) to realise individual’s potential.

Figure-1

Various curriculum bodies governing school education system



Noble prize winner Amrathya K Sen identifies Education as one among the basic capabilities, i.e. among a relatively small number of centrally important beings and doings that are crucial to well-being. Education is important not merely as means to other ends, but it is an attribute that is valued in itself, by most individuals. Education serves several instrumental aims, since it is a means to other valuable goods, such as better life prospects, career opportunities and form of social and economic participation. According to Huisman, Rani and Smits tested hypothesis on the role of socio-economic and cultural factors and characteristics of the educational infrastructure on primary enrolment using data for 70,000 children living in 439 districts of 26 states of India. Interaction analyses showed that effects of factors at the household level depended on characteristics of the context in which the household lives.

Statement of the Problem

The Government of India has taken several measures to improve the literacy rate in villages and towns of India. State Governments has been directed to ensure and improve literacy rate in districts and villages where people are poor. Enrolment and Expenditures are attitude the most important factor at school level because it reveals the children attitude and government towards education.

Objectives

1. To study the growth of Enrolment in Primary and Secondary Education in India.
2. To study the Expenditure of Primary and Secondary Education in India.
3. To analyze the future trend projection of primary and secondary education.

Data Source and Methodology

Secondary Data were collected from the standardised sources like Ministry of Human Resource, and District Information System for Education. The study covers the period from 2000-2001 to 2013-2014. The data so collected was analysed by using appropriate statistical tools such as Percentage, Annual Growth Rate, Compound Growth Rate & Trend Analysis.

Review of Literature

Grover and Singh (2002) made pilot quality assessment study based upon school observations, interviews and research conducted in two districts of Tamil Nadu, India. The most salient

findings were that key structures are in place for imparting quality education. However, several weaknesses in the system of educational administration and management currently limit the quality of education provided. A strengthening of crucial elements of the education system is needed in order to achieve the two important goals of building: Strong accountability in the system and evaluating the quality of the system by regular Monitoring of student learning, and thus, improving the overall efficiency of the system.

Cooray (2009) examined the effect of the quantity and quality of education on economic growth. Using a number of proxy variables for the quantity and quality of education in a cross section of low and medium income countries, this study found that education quantity when measured by enrolment ratios, unambiguously influences economic growth. The effect of government expenditure on economic growth was largely indirect through its impact on improved education quality

Huisman, Rani and Smits (2010) tested hypothesis on the role of socio-economic and cultural factors and characteristics of the educational infrastructure on primary enrolment using data for 70,000 children living in 439 districts of 26 states of India. Interaction analyses showed that effects of factors at the household level depended on characteristics of the context in which the household lives. A major finding in this respect is that in rural areas inequalities between socio – economic status groups were lower if more schools and teachers were available quickly and in one of the poorest states of India, the positive impact of the summer camps was judged to be noteworthy.

Frankline's (2012) purpose of the study was to determine the influence of leadership styles on Kenya Certificate of Primary Education performance in primary schools in Chuka Division of Tharaka Nithi County. This study adopted descriptive survey research design. The population for the study comprised of 71 head teachers, 71 deputy head teachers and 540 teachers from 71 public/boarding primary schools. Simple random sampling technique was used to select 25 head teachers, 25 deputies and 198 teachers. Piloting was conducted in three primary schools in the neighbouring Magumoni division which has similar characteristics. This study established that headteachers did not attend seminars due to lack of career and professional development

programmes in place to enhance and promote acquisition of new and relevant knowledge for head teachers. There was no reward programme for teachers who perform well, a clear indication of lack of motivation for teachers. In addition, study findings reveal that there is understaffing coupled with inadequate facilities to support learning in primary schools in the District, which affects the academic performance.

Shaari (2014) examined the relationship between education levels and economic growth in Malaysia by using data from 1982 to 2011. Johansen co-integration was employed to analyze the data.. The results indicated that primary and tertiary did not Granger cause economic growth and vice versa. Causality didn't run from any formal and secondary education to economic growth. Therefore, the government should increase investment on education to increase the economic growth.

Awasthi (2014) analyzed that State Government of Uttar Pradesh with the help of Government of India had done its outmost effort in improving Quality of Education but most of the efforts were based on providing infrastructure in schools, opening new schools, recruitment of teachers etc. Although teachers plays an important role in the education system yet none of the efforts were directed toward the welfare of teachers, they remain neglected assuming that satisfaction of teachers do not affects the quality of education.

Sastry, Agarwal and Jaggi (2014) seemed to highlight the key issues and unaddressed need gaps currently impeding the realization of the goal of universal primary education in India. On the hone hand, it highlighted the considerable success achieved in certain areas like enrolment and infrastructure and on the other hand, it seeked to find a solution to the biggest threat: ensuring quality learning. From the analysis conducted, followed a collaborative model wherein the private sector, non-governmental organizations (NGOs), the government and the community should work together, towards "Education for All".

Berry et. Al (2014) stated that Learning levels of primary school children have not kept pace with increased enrollment. 400 primary schools and 100 upper primary schools in Mahendragarh and Kurukshetra districts were taken as sample for a timeline of 2012 – 13. Researchers

evaluated the impact on student learning outcomes of two programs introduced by the Government of Haryana. While the Continuous and Comprehensive Evaluation (CCE) program did not have any effect on test scores, the Learning Enhancement Program (LEP), which focused on basic literacy and numeracy, significantly improved Hindi test scores, especially for students with initially low learning levels.

Rajan (2015) stated that the government typically reacts to the need for more extensive education system that can serve many more Indians by levying an educational cess over and above the income tax that citizens pay. But when it comes to expenditure on education, a fairly large fund goes to the creation of new IITs, IIER and NITs etc., often without adequate preparation. The money could be better utilized in equipping schools and polytechnics with skill-imparting institutions. He recommended good physical and electronic connectivity to the primary schools.

Analysis and Interpretation of data

Education in India is provided by the public sector as well as the private sector, with control and funding coming from three levels : central, state, and local. Under various articles of the Indian Constitution, free and compulsory education is provided as a fundamental right to children between the ages of 6 and 14. The central and most state boards uniformly follow the "10+2+3" pattern of education. In this pattern, study of 12 years is done in schools or in colleges and then three years of graduation for a bachelor's degree. The first 10 years is further subdivided into five years of primary education, three years of upper primary, followed by two years of high school. This pattern originated from the recommendation of the Education Commission of 1964–66.

Table – 1
Number of primary & upper primary schools in India

Year	Number of primary schools	AGR	Number of upper primary schools	AGR (lakhs)
------	---------------------------	-----	---------------------------------	-------------

2000-01	638,738	-	206,269	-
2001-02	664,041	3.96	219,626	6.48
2002-03	651,382	-1.91	245,274	11.68
2003-04	712,239	9.34	262,286	6.94
2004-05	767,520	7.76	274,731	4.74
2005-06	772,568	0.66	288,493	5.01
2006-07	784,852	1.59	305,584	5.92
2007-08	805,667	2.65	445,108	45.66
2008-09	809,108	0.43	476,468	7.05
2009-10	809,974	0.11	493,838	3.65
2010-11	827,244	2.13	535,080	8.35
2011-12	842,481	1.84	569,697	6.47
2012-13	853,870	1.35	577,832	1.43
2013-14	858,916	0.59	589,769	2.07
CGR	140.7		150.4	

Source: Statistics of School Education, 2012-13, MHRD, Government of India; and Unified District Information System for Education (U-DISE), National University of Educational Planning and Administration (NUEPA)

The above table 1, reveals that during the period 2000-01 to 2013-14, the total number of primary schools (schools with only primary section) has increased by 34.5 per cent (from 638,738 to 858,916 schools). The total number of schools imparting upper primary education has increased by 185.9 per cent (from 206,269 to 589,796). The annual growth rate of primary and upper primary schools shows a fluctuating trend during the study period. The compound growth rate of primary and upper primary schools was 140.7 and 150.4 during the study period. The total number of schools in the country during the year 2013-14 was 1,518,160. The total number of schools with primary section in 2013-14 was 1,200,772.

Table - 2

Total enrolment in primary education (In Millions)

	Primary Education (Classes I-V)			AGR (Primary Education)	Upper Primary education (Classes VI_VIII)			AGR (Upper primary Education)
	Boys	Girls	Total		Boys	Girls	Total	
2000-01	64	49.8	113.80	-	25.3	17.5	42.80	-
2001-02	63.6	50.3	113.90	0.09	26.1	18.7	44.80	4.67
2002-03	65.1	57.3	122.40	7.46	26.3	20.6	46.90	4.69
2003-04	68.4	59.9	128.30	4.82	27.3	21.5	48.80	4.05
2004-05	69.7	61.1	130.80	1.95	28.5	22.7	51.20	4.92
2005-06	70.5	61.6	132.10	0.99	28.9	23.3	52.20	1.95
2006-07	71	62.7	133.70	1.21	29.8	24.6	54.40	4.21
2007-08	71.1	64.4	135.50	1.35	31	26.2	57.20	5.15
2008-09	70	64.5	134.50	-0.74	29.4	26	55.40	-3.15
2009-10	70.8	64.8	135.60	0.82	31.8	27.6	59.40	7.22
2010-11	70.5	64.8	135.30	-0.22	32.8	29.3	62.10	4.55
2011-12	70.8	66.3	137.10	1.33	31.8	30.1	61.90	-0.32
2012-13	69.6	65.2	134.80	-1.68	33.2	31.7	64.90	4.85
2013-14	68.6	63.8	132.40	-1.78	34.2	32.3	66.50	2.47
CGR			0.227				0.248	

Source: Statistics of School Education, 2012-13, MHRD, Government of India, Educational Statistics at a Glance, 2014, MHRD; GoI; Statistics of School Education, 2012-13, MHRD, GoI; and U-DISE

From the above table it is clear that the enrolment in primary education increased steadily up to 2010-11 and then showed a declining trend. The enrolment in primary education reached the highest level in 2011-12 (137.1 million) and then 132.4 million in 2013-14. The overall increase in enrolment in primary education during the period 2000-01 to 2013-14 was 18.6 million while the overall increase in enrolment of boys and girls respectively was 4.6 million and 14.0 million during this period.

The enrolment in upper primary education increased by 23.7 million (from 42.8 million to 66.5 million). Enrolment of girls increased by 14.8 million (from 17.5 million to 32.3 million) while that of boys increased by 8.9 million (from 25.3 million to 34.2 million) during the same period. The total enrolment in upper primary education has increased by 55.4 per cent during the period 2000-01 to 2013-14. The increase in enrolment has been much higher for girls (84.6 per cent) than that for boys (35.2 per cent).

Table - 3

Trend analysis of total enrolment and gross enrolment in primary education

Year	Total Enrolment in Primary Education (in millions)	Trend Value	Gross Enrolment Ratio	Trend Value
2000-01	113.80	120.26	95.4	99.43
2001-02	113.90	121.76	96.1	100.49
2002-03	122.40	123.26	95.3	101.55
2003-04	128.30	124.76	98.1	102.61
2004-05	130.80	126.26	107.7	103.67
2005-06	132.10	127.76	109.3	104.73
2006-07	133.70	129.26	111.3	105.19
2007-08	135.50	130.76	113.95	106.85
2008-09	134.50	132.26	114.35	107.91
2009-10	135.60	133.76	115.45	108.97

2010-11	135.30	135.26	116.05	110.03
2011-12	137.10	136.76	108.05	111.09
2012-13	134.80	138.26	106	112.15
2013-14	132.40	139.76	101.45	113.21
Total	1820.2		1488.5	

Projection of Total and Gross enrolment

Year	Total Enrolment	Gross Enrolment
2014-15	141.26	114.27
2015-16	142.76	115.33
2016-17	144.26	116.39
2017-18	145.76	117.45
2018-19	147.26	118.51

From the above table it shows that the total and Gross enrolment in primary education from 2001-2014 reveals that there has been overall rising trend. From the present study it was expected that due to the growth of the education system, the country would attain a better position in overall development. By the year 2018-2019 the total and gross enrolment was expected to increase. It would be increase by 147.26 million and 118.51 tonnes respectively. Future trends on education expected on appreciable growth in India. The trend projection estimation reveals that the total and Gross enrolment in primary education shown in the study are increasing throughout the study period from 2014-2019.

Table 4

Gross Enrolment Ratio in Primary and Upper Primary Education

Year	Primary Education (Classes I-V)			Upper Primary education (Classes VI_VIII)			Elementary education (Classes I_VIII)		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total

2000-01	104.9	85.9	95.4	66.7	49.9	58.3	89.03	69.50	79.26
2001-02	105.3	86.9	96.1	67.8	52.1	59.95	87.80	74.65	81.23
2002-03	97.5	93.1	95.3	65.3	56.2	60.75	90.28	76.60	83.44
2003-04	100.6	95.6	98.1	66.8	57.6	62.2	99.35	84.90	92.13
2004-05	110.7	104.7	107.7	74.3	65.1	69.7	100.78	86.10	93.44
2005-06	112.8	105.8	109.3	75.2	66.4	70.8	102.88	88.80	95.84
2006-07	114.6	108	111.3	77.6	69.6	73.6	105.84	93.50	99.67
2007-08	115.3	112.6	113.95	81.5	74.4	77.95	105.24	94.40	99.82
2008-09	114.3	114.4	114.35	77.9	74.4	76.15	107.71	96.85	102.28
2009-10	115.5	115.4	115.45	84.5	78.3	81.4	108.96	99.90	104.43
2010-11	115.4	116.7	116.05	87.7	83.1	85.4	99.26	92.80	96.03
2011-12	106.8	109.3	108.05	72.9	76.3	74.6	99.65	95.90	97.78
2012-13	104.8	107.2	106	80.6	84.6	82.6	97.66	97.75	97.71
2013-14	100.2	102.7	101.45	86.3	92.8	89.55	89.03	69.50	79.26

Source: Statistics of School Education, 2012-13, MHRD, Government of India; Educational Statistics at a Glance, 2014, MHRD; GoI; Statistics of School Education, 2012-13, MHRD, GoI; and U-DISE, NUEPA

From the data given in the table 3, The Gross Enrolment Ratio (GER) in elementary education has increased by 15.4 percentage during the period 2001-02 to 2013-14. The GER increased by 4.8 percentage for boys, while the GER for girls increased by 26.7 percentage. The GER in Primary school was very high 116.05 percentage during 2010-11. The GER in upper Primary school was high 89.55 percentage during 2013-14.

Table - 5

Number of schools and enrolment of secondary/ higher secondary education

Year	Number of secondary/ higher secondary schools	AGR	Enrolment in Secondary/Higher secondary education (in Millions)			AGR
			Boys	Girls	Total	
2000-01	126,047	-	16.9	10.7	27.6	-
2001-02	133,492	5.91	18.4	12.1	30.5	10.51
2002-03	137,207	2.78	19.5	13.7	33.2	8.85
2003-04	145,962	6.38	20.6	14.4	35	5.42
2004-05	152,049	4.17	21.7	15.4	37.1	6.00
2005-06	159,667	5	22.3	16.1	38.4	3.50
2006-07	169,568	6.20	23	16.9	39.9	3.91
2007-08	172,990	2.02	25.2	19.3	44.5	11.53
2008-09	193,200	11.68	25.6	19.9	45.5	2.25
2009-10	190,643	-1.32	26.7	21.5	48.2	5.93
2010-11	200,184	5	28.3	22.9	51.2	6.22
2011-12	212,433	6.12	28.7	24.8	53.5	4.49
2012-13	228,914	7.76	29	25.6	54.6	2.06
2013-14	237,111	3.58	31.5	28.1	59.6	9.16
CGR	129.22				28.07	

Source: Educational Statistics at a Glance, 2014, MHRD, GoI; U-DISE, NUEPA.

From the data given in the table 5, the number of secondary schools (Classes IX & X) and higher secondary schools (Classes XI-XII) has increased from 126,047 in 2000-01 to 237,111 in 2013-14. The expansion of secondary and higher secondary schools has resulted in considerable increase in enrolment in secondary and higher secondary education. Between 2000-01 and 2013-14, the enrolment in secondary/higher Secondary education has increased by 32 million (from 27.6 million to 59.6 million). The enrolment of boys has increased by 14.6 million (from 16.9

million to 31.5 million) while the enrolment of girls increased by 17.4 million (from 10.7 million to 28.1 million) during this period.

Table - 6

Trend analysis on number of Secondary School and Enrolment in Secondary Education

Year	Number of secondary school	Trend Value	Enrolment in Secondary Education (in millions)	Trend Value
2000-01	126,047	120718.32	27.6	27.69
2001-02	133,492	129173.38	30.5	30.01
2002-03	137,207	137628.44	33.2	32.33
2003-04	145,962	146083.5	35	34.65
2004-05	152,049	154538.56	37.1	36.97
2005-06	159,667	162993.62	38.4	39.29
2006-07	169,568	171448.68	39.9	41.61
2007-08	172,990	179903.74	44.5	43.93
2008-09	193,200	188358.8	45.5	46.25
2009-10	190,643	196813.83	48.2	48.57
2010-11	200,184	205268.92	51.2	50.89
2011-12	212,433	213723.98	53.5	53.21
2012-13	228,914	222179.04	54.6	55.53
2013-14	237,111	230634.1	59.6	57.85
Total	2459467		598.8	

Projection of number of school and enrolment in secondary education

Year	Number of secondary school	of Enrolment of Secondary Education
2014-15	239089.16	60.17
2015-16	247544.22	62.49
2016-17	255999.28	64.81
2017-18	264454.34	67.13
2018-19	272909.4	69.45

As per the data from the table shows that the number of secondary / higher secondary school and Enrolment of secondary education from 2001-2014 reveals that there has been overall rising trend. From the above table it shows that the number of secondary school and enrolment in secondary education from 2002-2014 reveals that there has been overall rising trend. By the year 2018-2019 the number of schools and enrolment in secondary education was expected to increase. It would be increase by 272909.4 numbers and 69.45 millions respectively. Future trend on education expected on appreciable growth in India.

Table -7

Gross enrolment ratio in secondary and higher secondary education (%)

Year	GER in secondary education			GER in higher secondary education		
	Boys	Girls	Total	Boys	Girls	Total
2004-05	57.4	45.3	51.35	30.8	24.5	27.65
2005-06	57.6	46.2	51.9	31.4	25.2	28.3
2006-07	58.6	47.4	53	31.5	26.1	28.8
2007-08	62.6	53.2	57.9	36.3	30.4	33.35
2008-09	64.2	55	59.6	37	31.2	34.1
2009-10	66.7	58.5	62.6	38.3	33.3	35.8
2010-11	69	60.8	64.9	42.2	36.1	39.15
2011-12	65.5	64.2	64.85	40.5	35.3	37.9

2012-13	67.4	65.4	66.4	39.6	38.2	38.9
2013-14	76.8	76.5	76.65	52.8	51.6	52.2

Source: Educational Statistics at a Glance, 2014, MHRD, GoI; U-DISE, NUEPA; Statistics in school Education, 2012-13, MHRD, GoI

The Gross Enrolment Ratio (GER) in secondary/higher secondary education is shown in the above table. There has been a gradual increase in enrolment ratio during 2004-05 to 2011-12 but in 2012-13 there was a decline in the GER. The percentage of increase in GER was higher in girls when compared to boys.

Table-8
Expenditure on education in the five year plans (Rs. Lakh)

Five Year Plans	Elementary	Percentage (%)	Secondary	Percentage (%)	Higher	Percentage (%)	Total Expenditure
I	85	56	20	13	14	9	15,300
II	95	35	51	19	48	18	27,300
III	201	34	103	18	87	15	58,900
IV	239	30	140	18	195	25	78,600
V	317	35	156	17	205	22	91,200
VI	803	30	736	25	530	18	2,04,300
VII	2849	34	1829	22	1201	14	8,50,000
VIII	4006.6	47	1538	18	1055.8	12.4	8,52,190
IX	16364.88	65.7	2603.5	10.5	2500	10	24,90,850
X	45650.47	78	3808.50	7	8227.24	14	58,81,733
XI	65150.19	45	54337.80	37	25599.16	18	1,45,087.15

Source: Five-year Plans, Annual plans and MHRD Reports.

Note: The figures in parenthesis indicate percent to total allocation

The expenditure on education system during the five year plan was given in the above table. The expenditure on Education system keeps increasing in every five year plan. The above table shows that the percentage of Expenditure spent on elementary education is very high in each plan when compared with secondary and higher education in India.

Conclusion

India has made progress in terms of increasing education and expanding literacy to approximately two thirds of the population. India's improved education system is often cited as one of the main contributors to the economic rise of India. The fact is that India's spending on education is very less when compared with other nations. Education is a public good and associated with social benefits, and to provide education for all as a fundamental right and as means of development, Government indeed require spending much more on education. India's growing position in the world economy and there is an urgent need to pace up with the global developments in all sphere. With the help of Education and increasing literacy rate, India may witness a strong rise in fulfilling the economic and social needs of the country. The results from this study were found that the enrolment in both Primary and Secondary education have increased drastically. The expenditure spent on education keeps increasing in every five year plan but the total expenditure spent on education was very low during the study period.

References

1. Arusha V. Cooray, 'The Role of Education in Economic Growth', Proceedings of the 2009 Australian Conference of Economists, Adelaide, Australia, South Australian Branch of the Economic Society of Australia, 2009, PP 1-27.
2. Deepa Awasti, 'Job of Primary Teacher in Uttar Pradesh: A Profession by Chance Not by Choice', research paper, Department of Education, University of Lucknow, Vol. 3, Issue. 9, September 2014, www.globaljournals.com.
3. James Berry et. Al, 'Improving Learning Outcomes through the Government School System in India', research paper, Pratham foundation, 2014, www.povertyactionlab.org.
4. Janine Huisman, Uma Rani and Jeroen Smits, 'School characteristics, Socio- economic status and culture as determinants of primary school enrolment in India', NiCE Working Paper 10-109,

Nijmen center for Economics, Institute for Management Research, Radbound University Nimegan, September 2010.

5. Mohd Shahidan Shaari, 'Education-led Economic Growth in Malaysia', University Malaysia Perlis, SOP Transactions on Economic Research, Vol.1, No.1, January 2014, www.dera.ieo.ac.uk

6. Mugeru G. N. Frankline, 'Influence of Management Strategies on Kenya Certificate of Primary Education Performance in Chuka Division of Thakara Nithi County, Kenya', Abstracts of Postgraduate Research Projects, Mount Kenya University, Kenya, 2012, p 14.

7. RajanY.S, 'Education: The Key', Kisan World, February 2015, pp: 11-17.

8. Shuchi Grover and Nishu Harpreet Singh, 'The Quality of Primary Education: A Case Study of Madurai and Villupuram Districts in TamilNadu, India', Harvard Graduate School of Education, April 2002, www.cid.harvard.edu.

9. Trilochan Sastry, Ankita Agarwal and Ayesha Jaggi, 'Achieving Universal Primary Education: A Collaborative Model', IIMB management review initiative, 2014, www.tejas.iimb.ac.in

Note: Third Author Contribution (M.Kalaivani) She has helped for the Data Collection and Typing Work.