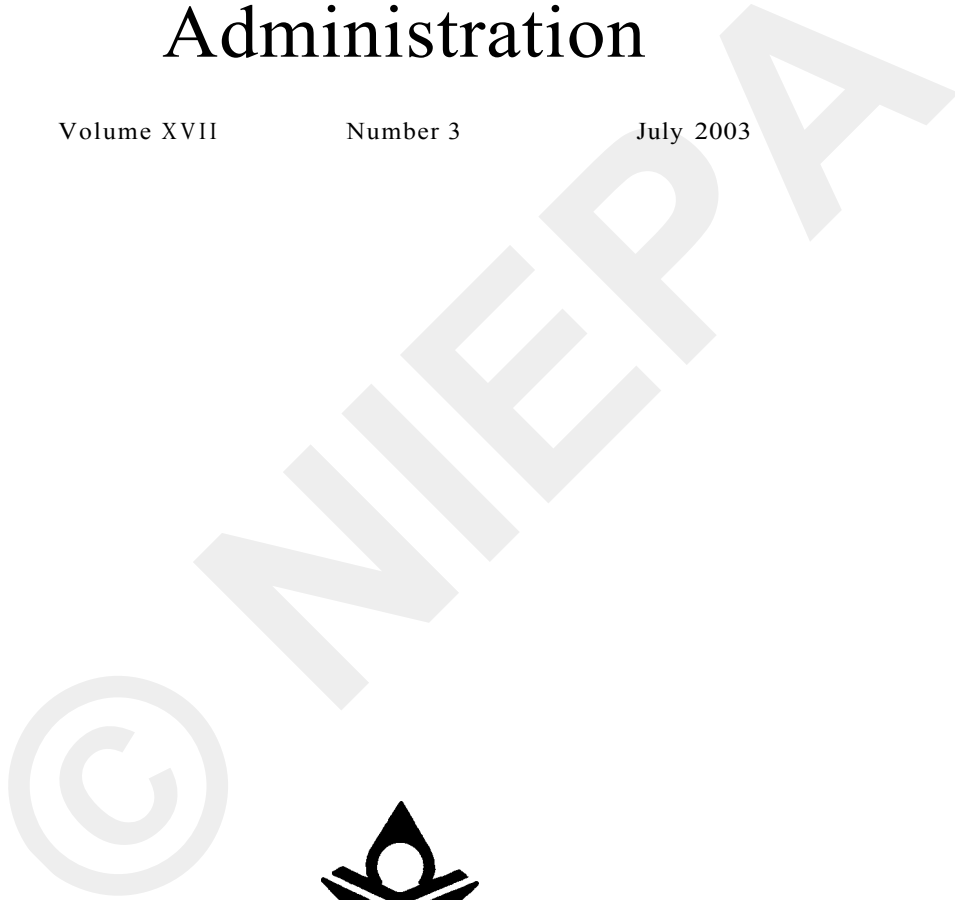


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Jandhyala B.G. Tilak

Financing of Secondary Education in Gujarat*

K.RShah*
Sarita Agrawal

Abstract

Gujarat's level of economic development somehow cannot be taken as its level of educational attainment as per 1991 census. In terms of literacy rate by age groups 10-14 and 15-19, Gujarat ranked 7th and 12th respectively. Similarly, it ranked 8th and 1st on the basis of the children of the age-groups 6-10 and 15-19 attending schools respectively. Even it occupied 7th position in terms of the proportion of non-working children of the age group 10-14 attending schools. It occupied 9th and 6th rank in terms of population in the matric but below graduate and graduate and above categories respectively.

Gujarat accounts for a higher proportion of literates whose educational attainment is below primary [20.8%] and primary but below middle [41.2%]. Relatively, very few literates go to middle level after completing primary level of education and acquiring 7-8 years of elementary education. Gujarat in 1991 was way away from the objective of '[Basic] Education For All'. In the remaining two categories, matric but below graduate and graduate and above, the respective proportions were 19.5% and 4.8%. The distribution of literates seems to be favouring higher levels of education in Gujarat. The state has yet to strengthen its base, which is its constitutional commitment, to lay a solid foundation of the superstructure of education. This shows how the fruits of high economic growth are used.

General

Gujarat state, situated in the western part of India, was constituted from the erstwhile Bombay state on May 1, 1960. Among the traditionally 15 major Indian

* Based on a study on Financing of Secondary- Education in Gujarat with a Focus on Grants-in-Aid, conducted with the financial assistance of NIEPA.

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states, Gujarat has been able to succeed in maintaining its status as a rich state since inception. With the change in the perspective on growth from mere physical growth to development incorporating social or human development for growth to be sustainable, the high economic growth tells a partial story of performance of a state or a region. Gujarat indisputably belongs to that category of world economies, following Amartya Sen's categorization in his book 'Development As Freedom' [1999], where there is high economic growth but without a comparable success in the development of social opportunities as reflected in the 6th rank it occupies in HDI [Human Development Index] as of 2001 with a value of 0.479, IMR [Infant Mortality Rate]-6, and literacy rate-3. Literacy rate of 70% in 2001 in Gujarat was far below 91% achieved by Kerala. Even within the state, variation in literacy rates between rural-urban areas, between male-female and between scheduled castes [SC] scheduled tribes [ST] is quite wide. The incidence of illiteracy among women of the age-group 15-44 of around 52% in 1991 in Gujarat was 6.5 times that of 8% in Kerala. This is a matter of concern for Gujarat in view of its socio-demographic features of 22% combined share of SC/ST population [1991], the adverse sex-ratio [female per 1000 males] of 921 as against all-India 933[2001], a fifth of the state population living in slums, mostly in urban areas, which has a higher proportion of population living below poverty line relative to that in the rural areas, and a growing proportion of houseless population. Sen's 'Poverty Index', measuring intensity of poverty, of 0.19 for Gujarat is above that of 0.18 for all-India. [Shariff-1999].

Question of Priority

The connection between economic growth and social development tends to work through public expenditure on social services in general and on education in particular. That Gujarat has accorded low priority relative to Kerala during economic reforms regime is evident. [1] Proportions of Net State Domestic Product [NSDP] devoted to social services in Gujarat of 6.92% in 1990-91, 5% in 1995-96 and 6.63% in 1998-99 respectively turn out to be lower than the corresponding proportions of 10.79%, 6.79% and 6.1% respectively for Kerala. Similarly, proportions spent on education by Gujarat in 1990-91, 1995-96 and 1998-99, that is, of 3.79%, 2.93%, and 3.54% respectively were lower than those of 6.53%, 4.15% and 3.51% respectively for Kerala. Also, the total government [public] expenditure as a proportion of NSDP in Gujarat during the first half of the 1990s was lower in the range of 5% [1990-91] to 3% [1995-96] than in Kerala. In 1998-99, it was higher by around 3% in Gujarat than in Kerala [20.9% and 18.2%] respectively]. But the proportion of aggregate state expenditure on social services tended to be below the proportion for Kerala. The respective proportions were 31.58%, 30.82% and 31.60% in 1990-91, 1995-96 and 1998-99

for Gujarat as against 40.79%, 35.22% and 33.36% for Kerala'. These figures drive home the point of a much higher level of social development and a lower level of economic development, Kerala has accorded higher priority to social development or relative to Gujarat. In the changed context of globalisation and information technology revolution, mere fulfilment of the avowed objective of Universalisation of elementary education, though important on its own, is not enough. What is required is the creation of the 'knowledge society' to face the challenges of the 21st century. Educational attainment of 10 years may turn out to be a minimum requirement for the persons to participate in the process of development as agents of social and economic change.

State of Gujarat Government Finances

When education is a state subject, its financing is very much influenced by the financial position of a state. It is common knowledge that social sector, including education, becomes the first victim when the plan size is pruned because of financial stringency. Moreover, it fails to regain its original position even after improvement in finances. This is deplorable as it reflects the priority given to this sector in the development programmes. In this regard, the financial pattern reveals a clear conflict between the short-term and the long-term goals of a society. Obviously, the social sector belongs to the latter. Both development and plan expenditures as proportions of GSDP have exhibited declining tendency during the nineties. However, it should not be forgotten that the financial constraint cannot [and should not] absolve the State for its low commitment to the development of social services. What is more worrisome is the state's inability to spend what is provided for in a budget or in a plan as well the diversion of funds to other heads of expenditure.

Issues Facing Secondary Level of Education

"The secondary education occupies a key position between the primary education and higher education [college and university], yet the fact is that it has remained the 'weakest link' in the education system" [Govt, of Gujarat, 1972]. This observation was made three decades before the introduction of 10+2+3 pattern of education in mid-seventies. It coincided with the publication of the Education Commission Report [Kothari Commission, 1964-66]; the implementation of its recommendations was under consideration then. With respect to the secondary level of education, the following observations of the Commission are relevant. [1] The existence of financially unavailable secondary schools. [2] The basic

During the last five decades, there has been a phenomenal rise in the proportion of literate population in Gujarat. The literacy rate of the state had increased from 21.7% in 1951 to 35.7% during 1971 and further to around 50% in 1981. In 1991, this had risen 61% and as of 2001, the literacy rate in Gujarat has risen to 70%.

objective of 10+2+3 pattern of education is to expand secondary education, including higher secondary, in a manner that serves this level of education as the 'terminal' stage of education and puts a break to the mad rush for higher education. [3] Making secondary education more vocational and technical oriented. [4] The issue of efficiency and equity and cost-effectiveness. Also, [5] the issue of educated unemployment dominated by the unemployed matriculates. If the financing of secondary education is still the major responsibility of the State, whether the magnitude and nature of its funding have taken care of these observations to redress its label of "weakest link".

In view of the none-too-happy financial position has secondary education been squeezed financially between primary and higher education? Has the State made concerted efforts any time to reduce its funding role and to privatize secondary education? If yes, what is its outcome? What is the reaction of school management to this move on the part of the state? Have the norms of grants-in-aid policy been addressed to the special socio-demographic features of the state, noted in the beginning? Does there exist an accepted framework for the evaluation of this policy? Has such a need been felt any time? These are some of the questions that we endeavour to answer here. We propose to analyse some of these issues mainly on the basis of secondary data covering the last two decades of the century just concluded. Section 2 examines the expansion of secondary level of education in terms of the growth of schools, students and teachers along with expenditure growth making all possible permutations and combinations of these parameters of expansion. Section 3 is on financing secondary education where the role of different sources of funds is examined with a focus on grants as well on the evaluation of grants policy. Section 4 presents main findings of the study and an assessment of the progress of the secondary level of education.

2. Growth of Secondary Education

The old pattern of education [7+4+4] was replaced by the new pattern [10+2+3] almost a decade later [1976] after it was recommended by the Education Commission in the mid-sixties. The secondary level of education was split up into secondary [high] schools covering classes VIII, IX and X and higher secondary schools covering classes XI and XII. Two public examinations, twice each in a year [March and October], are conducted by the Gujarat S.S.C.E. Board and the H.S.C.E. Board for students of classes X and XII respectively. At the S.S.C. level there is only one general stream whereas at the H.S.C. Level, there are three streams, namely [1] General, [2] Science, and [3] Vocational, later comprising of Commerce, Home Science, Technical and Agriculture groups.

Growth of Secondary and Higher Secondary Schools

During the eighties, the number of schools increased at the rate of 2.8 per cent per annum. The growth rate slowed down to 1.2 per cent per annum during the subsequent decade of 1990s. [The index number of the growth of schools at this level taking 1980-81 = 100 was 135 in 1990-91 and 151 in 1997-98 in Gujarat. The corresponding all-India index was 155 in 1990-91 and 208 in 1997-98.]

The proportion of higher secondary schools of around 19 per cent in 1980-81 rose to 22 per cent in 1989-90, and further to 23 per cent in 1997-98. Majority of schools are secondary schools at this level, though during both the decades the higher secondary schools have exhibited higher relative growth.

The tribal districts - Dangs, Panchmahals and Banaskantha - accounted for just 1.6 per cent of the total number of schools in 1980 which rose to a little above 3 per cent in 1998. Further, the districts where the literacy rates in 1991 were not only below the state literacy rate but also below 50 per cent, in the above three districts and in Kutch, the annual growth rate of schools during both the reference periods was far above the overall growth rate. The significance of this observation lies in the fact that the share of SC [Scheduled Caste] students in the total enrolment is higher than their share of 7 per cent in the population, whereas that of ST [Scheduled Tribes] students of 10.2 per cent is more than 70 per cent of their share of 14 per cent in total population of the State. Their combined share in total enrolment of 19.33 per cent works out to 86 per cent of their combined share in total population.

During the economic reforms regime, the state government has initiated the privatization move by granting permission to those willing to start private unaided schools on permanent basis. But they hardly account for 6 per cent of the total educational institutions during this period. Thus, without an iota of doubt, it can be stated that the provision of secondary education is still the state domain.

Growth of Enrolment

The pattern of enrolment growth depicts a trend similar to that observed for schools. The annual rate of growth of total enrolment during the 1990s of 2.4 per cent has been lower than that of 4.9 per cent during the 1980s. The observed slow down in the rate of growth during the 1990s in the context of the eleventh rank of the state on the basis of the proportion of the population of the age-group 15-19 attending secondary schools appears disturbing [1991 census].

The movement of the index number of enrolment like that of schools compared to all-India has also been slow in Gujarat. It moved up to 161 in 1990-91 and further to 192 in 1997-98 taking 1980-81 as the base. The all-India index of enrolment rose to 174 in 1990-91 and from that to 247 in 1997-98 from the base 1980-81. The male-female composition of enrolment shows an increase in the proportion of girl students. It was slightly above one-fifth in 1960-61; rose to

above one-third [35 per cent] in 1980-81 and to 41 per cent in 1997-98 - higher than the all-India proportion of 37 per cent during the same year - a clear trend towards gender equality. This is also borne out by the fact that the number of girl students per 100 boys at this level has been higher than All-India throughout the reference period. It was 53 in Gujarat as against 44 in all-India in 1980-81. After a decade, the respective numbers were 61 and 50. In 1996-97, the numbers were 70 in Gujarat and 59 in India, showing possibly an impact of free secondary education for girls in the state.

The composition of enrolment has similarly tilted in favour of SC/ST students vis-a-vis non-SC/ST students. Their share of 19.33 per cent by the end of the previous decade has not lagged far behind their share of 22 per cent in the state population. Thus, the equity aspect seems to have been taken care of.

Vocationalisation of Secondary Education

Various policies and programmes, being adopted by the government, have been emphasising that the secondary education should be broadly governed by the needs of the trained manpower for the labour market for which, vocationalisation of secondary education has been emphasised time and again. Kothari Commission had recommended the enrolment of pupils in vocational courses to the extent of 50% at the higher secondary stage and 20% at the lower secondary stage. The various development programmes adopted by Gujarat Government have also been emphasising the need for vocationalisation.

The enrolment of pupils in various streams of courses at higher secondary level over a period of time is not available but the results of HSC examination published by Gujarat Secondary Education Board, Gandhinagar, give the number of pupils that appeared in the examination by streams for the past few years. If this number is taken as a proxy measure of the students' enrolment in various courses, the trends show that an extremely low proportion of students have entered into vocational education. Majority of the students enter into the general (arts and commerce) rather than vocational course. There has not been any major increase in the number of students in vocational education. In fact, during some of the years, it even declined [Table 1]. Even as proportion of total students, the proportion of students in vocational education is declining. Hence, it can be said that not only is the vocationalisation of education not taking place but also the vocational education is becoming less and less popular among the students and there seems to be a mad rush for arts and commerce. In fact, since the mid nineties, the proportion of students in vocational stream has continuously been declining

Gujarat is far away from the vocationalisation target of 10 per cent of enrolment at the higher secondary level supposed to be achieved by 1995 and 25 per cent by 2000 laid down by the National Policy on Education, 1986. Of the total number of candidates that appeared at the HSC examination in 1981, the

number that appeared in the vocational courses accounted for just 1.87 per cent. Since then it has been continuously falling and was 0.96 per cent in 1989.

TABLE 1
Proportion of Students in Vocational Courses

<i>Years</i>	<i>% of students appeared for vocational stream to total appeared*</i>
1981	1.87
1982	0.37
1984	1.27
1985	1.43
1986	1.42
1987	1.39
1988	1.04
1989	0.96
1990	2.28
1991	3.55
1992	4.82
1993	5.73
1994	5.33
1995	4.55
1996	3.16
1997	2.49
1998	2.02
1999	1.93
2000	1.92

Note: * computed on the basis of the data from GSEB, Gandhinagar.

Between 1990 and 1993, it shot up from 2.28 per cent to 5.73 per cent. But after that till 2000, it exhibited declining tendency and was 1.92 per cent of the number that appeared at the HSC examination. Not only vocational courses are not popular among students or their parents, but also even among private persons venturing into secondary education. Of the 92 completely private unaided secondary schools recognized by the state government in 1998-99, over 70 per cent were general stream schools, 24 per cent were science stream schools and only 1 per cent was pure vocational schools [excluding commerce and home science].

Growth of Teachers

Along with students, teachers are an important input in the entire education process. Unlike physical and inert inputs, students and teachers are the living and lively inputs as they are human beings with intelligence and emotions. Students differ from teachers in that the former are both inputs as well as outputs.

The growth of teachers has an important bearing on the financing of education as their salary cost is borne by the State and it has remained one major object [head] of public expenditure on education. This is precisely the reason why the state government in its grants-in-aid policy, together with other norms, has laid down the norm for the class size [i.e., the number of students to be admitted in a class] and also for the number of teachers to be appointed per division, their educational qualifications, their pay scales, service rules, etc. They are state government employees and enjoy job security like other state government employees. A new phenomenon of 'temporary' teachers appointed on the monthly consolidated pay has emerged during the post-reforms period.

This raises the issue of comparison and commitment of these two breeds - permanent and temporary personnel - in this profession. This employment duality may be a reflection of tight job market for the educated labour and of one concerted effort on the part of the funding agency, the state government to reduce its financial responsibility.

These norms implicitly fix the teacher-pupil ratio. Whether the actual teacher-pupil ratio is in tune with the one given by the norms is an interesting point for analysis as it throws light on the financial viability of a school [class]. The growth of teachers, like that of schools and students, has decelerated during the 1990s. As against more than 4 per cent growth per annum during the eighties, it was as low as 1 per cent during the nineties. Even then, the growth of teachers in Gujarat was relatively faster than the one observed for all-India. Taking 1980-81 as the base, the respective indices in 1990-91 were 151 and 144; and in 1997-98 were 169 and 164. Female teachers as proportion of the total accounted for roughly one-fifth in 1980-81. Their share was higher at one-fourth during the following decade. Growing proportion of women teachers is a welcome sign, particularly in tribal areas where parents prefer female teachers to teach their daughters and acts as incentive to parents to continue the schooling of their daughters beyond compulsory elementary education.

In brief, though the nineties has seen the deceleration in the annual growth rates of all the above three parameters relative to the eighties, the pattern of growth has favoured most the enrolment, next the teachers and last the physical infrastructure [schools] during both the decades.

Teacher-Pupil Ratio

The above observed trends have made their impact felt on the behaviour of the teacher-pupil ratio. On the basis of the norms for the admission of students and the appointment of teachers laid down for the purpose of the fixation of grant to a school, the teacher-pupil ratio ranges from 1:33 to 1:40 at the secondary level and from 1:25 to 1:30 at the higher secondary level. The simple average of these two ranges gives the overall ratio [for both the levels combined] in the range of 1:29 to 1:35 - the lower and the upper ratios for simplicity. The lower range has already been achieved in 1990-91 itself when the actual ratio was in tune with the implicit ratio 1:29, worked out on the basis of the norms. In 1998-99, it was 1:31 but below the upper range of 1:35 - a distance of around 11 per cent - which is not sizeable and achievable if the base, elementary education, is strengthened further. At the higher secondary level, the ratio of 1:42 in 1997-98 has crossed the upper range. In this sense, the class size has grown in tandem with the norms and can be taken as an indication of the financial viability of schools [classes]. Whether the class size reveals the optimum size of a school [student strength] is altogether a different question, as the optimum size refers to that size where the associated average cost [per pupil] is the minimum. Below this size, the schools are non-viable, as the average cost is much above the minimum.

Growth of Expenditure on Secondary Education

In a sector, where three levels [stages] are mutually interdependent, the intra-sectoral allocation of financial resources matters. What has been the share of secondary education in the total expenditure on education? Has its share fluctuated or remained constant [steady] during the 1980s and the 1990s? What proportion of GDP is devoted to education sector in general and secondary education in particular? How fast the expenditure on secondary education has increased relative to total expenditure on education?

Apart from priority questions, matters concerning sources of funding and objects [heads] of expenditure are equally relevant in any study on financing. How have the relative roles of two funding agencies - state [public] and private [students or their families] - changed? Over a period of time, salary [teaching cum non-teaching] expenditure has dominated the scene. Has the scene changed in favour of such non-salary components of expenditure such as library, equipments, laboratories, computers and maintenance, etc.? There is a provision for such expenses in government grants on which educational standards depend as much on salary expenditure. The neglect of maintenance of assets in our economy is self-evident.

When expenditure on education is investment and has to compete for resources with other sectors particularly in a period of prolonged resources

crunch, the issue of cost-effectiveness cannot be lost sight of. Internal efficiency of educational institutions is expected to throw light on the question of cost-effectiveness. We endeavour to examine this in terms of the cost ratios estimated, taking per capita real expenditure on secondary education as numerator and per capita real GDP as denominator. Making more drift on resources per se is not bad. It creates worry when correspondingly we fail to observe any worthwhile improvement in internal efficiency. The persistence of drop-out and failure rates and low grade schools [grades on the basis of their students' performance in the Board examinations] beyond certain proportions is reminiscent of low internal efficiency. These have their effect on cost spread i.e., the spread between the cost per enrolled pupil and the cost per pupil taking public examinations on the one hand and that between the latter and the cost per pass pupil at these examinations. The disproportionate cost spread is a cause for concern. This amounts to saying that there is no smooth transition from elementary level to secondary level. Even if they discontinue their studies, that is to be taken as the "distress" terminalisation and not in the sense intended by the Education Commission or by the policy makers. The problem gets compounded when those who complete secondary education somehow experience joblessness; either they lack 'employability' or economic planning has a very limited employment orientation.

In this regard, the all-India usual status unemployment rate of 12.5 per cent during 1999-2001 for rural youth with secondary education and above is a fact to reckon with. 23 per cent unemployment among persons with technical education and the three times more incidence of unemployment among educated females than their male counterparts are also the noteworthy facts. [R. Radhakrishnan 2002]. This is termed as 'external efficiency' in literature.

Trends in Expenditure on Secondary Education - Absolute and Per Pupil at Current and Constant Prices

Let us start with intra-sectoral allocation of total expenditure on education as a whole. In 1985-86, the order of allocation was as given below.

Elementary education accounted for 60.7 per cent; secondary education for another 27.6 per cent; the share of higher education was 8.6 per cent; technical education accounted for 2.6 per cent and adult education shared the remaining 0.5 per cent of the total. During the nineties, the average share of elementary education came down to nearly 55 per cent; and that of adult education to 0.33 per cent. The base of the education system in the process has suffered. The highest gainer is the secondary education with its average share jumping to 33.14 per cent. The other two - higher and technical education - are comparatively marginal gainers, their respective shares being 9.31 per cent and 4.02 per cent. Thus, on the face of it, the secondary education has not been sandwiched. And its average share has turned out to be as high as the all-India average share of 32.46 per cent for secondary education during the corresponding period. [S. Mahendra

Dev and Jos Maouli- 2002], So far so good. How does the picture look like when the growth of expenditure on secondary education is related to the growth of NSDP [State Net Domestic Product]? During the eighties, expenditure on secondary education at constant 1981-82 prices -[WPI] had grown at 6 per cent per annum as against 6.5 per cent annual increase in real NSDP [1980-81 prices]². The picture has altered during the 1990s. As against 7.8 per cent annual growth in NSDP, expenditure growth works out to 5.2 per cent per annum. Thus, the pace of the growth of expenditure in the light of the growth of NSDP has reduced. Has it anything to do with the behaviour of the proportion of NSDP expended on total education in Gujarat? The answer is in the affirmative. In this regard, various calculations by different scholars show that this proportion was lower at 3.48 per cent on an average during the 1990s than that of 3.72 per cent on an average during 1986-90. Also the gap between the highest [4.17 per cent of NSDP] and the lowest [3.36 per cent of NSDP] proportion of 0.81 per cent during the later half of the eighties was higher at 1.03 per cent [highest 4.09 per cent and lowest 3.06 per cent] of NSDP devoted to education during the 1990s. This is the nationwide trend.

True, that though the share of secondary education has improved between the two decades, the pace of growth of expenditure on secondary education slowed down consequent upon the decline in the proportion of NSDP spent on education. By implication, it suggests that the pace of expenditure on other levels might have reduced relatively at a greater speed. This tendency of the rate of growth of real expenditure is similar to the one observed earlier for the growth of schools, teachers and enrolment. However, during both the decades, the rate of growth of real expenditure outstripped the other growth rates by a sizeable margin. In the end, the per pupil real expenditure on secondary education between two decades should have improved.

An additional point of interest in this context is the distribution of expenditure between secondary and higher secondary schools at this level (Table 2). The ratio estimated for this purpose has behaved in the following manner. In 1981-82, it was 1.50:1 [secondary to higher secondary schools]; came down to 1.23:1 in 1989-90; improved a bit to 1.12:1 in 1997-98 from 1.10:1 in 1990-91, though below the level achieved in 1989-90. Obviously, the share of secondary schools vis-a-vis higher secondary schools has a tendency to fall. The respective proportionate shares of 60:40 in 1980-81 came down to 53:47 in 1997-98.

² When both per capita expenditure on secondary education and per capita NSDP are expressed at 1981-1982 constant prices (WPI series from 1981-1982 to 1993-1994), the ratio of per capita expenditure to per capita NSDP for the decade 1980s works out to 0.015 on an average. It was higher at 0.017 on an average for the period 1990-91 to 1993-94. Since then, at 1993-94 prices, the said ratio was lower at 0.011 on an average.

TABLE 2
Total Expenditure on Secondary Education in Gujarat

Years	(Rs. in lakh)										
	In Current Prices					In Constant Prices					Expenditure on Sec. Edu. as % of GDP
	Sec.	Edu	Hr.	Sec.	Edu	Sec.	Edu	Hr.	Sec.	Edu	
1980-81				5609							1.99
1981-82	9788			6520							2.20
1982-83	11092			8026							1.98
1983-84	12988			9332							2.16
1984-85	13793			11607							2.51
1985-86	16985			13384	15726			12392			2.58
1986-87	20036			16072	18816			15093			3.04
1987-88	24224			18074	22109			16496			2.58
1988-89	28640			21733	26534			20134			2.57
1989-90	30434			24711	28544			23177			2.49
1990-91	31531			28561	28397			25722			2.63
1991-92	35448			33118	31186			29136			2.47
1992-93	47276			39310	42829			35612			1.94
1993-94	50325				47063						1.94
1994-95	52842				49197						2.04
1995-96	65364			59372	58549			53182			1.99
1996-97	79235			66604	72515			60955			2.20
1997-98	85558			76372	80175			71567			1.98

Note: * computed using CPI deflator. 1984-85 prices

Income and Expenditure by Heads

Over the years, income from the central and the state governments has been continuously increasing. In case of central government, it increased from 0.51% to almost 1% while in case of the state government from 86.4% to almost 95% during 1979-80 to 1992-93 [Table 3]. However, the contribution of fees declined significantly from nearly 12% to 2.5% during the same period. It is, therefore, evident that the financial burden on the central as well as the state government increased while the contribution by private individuals through fees declined significantly. The contribution of endowment has increased but only marginally. Though in case of non-recurring sources, the contribution of the state and the central government has declined, the non-recurring income itself is a very small amount of the total income.

An analysis of the sources of income during the period 1979-80 to 1992-93 shows that the total recurring income has increased at a rate of 16.42% per annum and total income (recurring as well as non-recurring) has also grown at a rate of 16.52% per annum. The head-wise distribution of income shows that the government contribution (state and centre together) has increased at a very fast

rate of 18% compared to fees which increased only at the rate of 3% p.a. during the entire period.

TABLE 3
Sources of Recurring Income for Secondary Education, by Heads

Heads	1979-80	1982-83	1985-86	1987-88	1989-90	1992-93
Recurring Income						
Central government	0.51	0.40	0.65	3.02	1.39	0.97
State government	86.44	91.73	93.57	84.76	93.94	94.17
Local bodies	0.26	0.46	0.74	1.26	0.71	1.00
Fees	11.83	6.34	3.80	8.41	0.79	2.46
Endowment & other sources	0.95	1.06	1.23	2.56	3.17	1.40
Total (recurring)	100	100.00	100.00	100.00	100.00	100.00
Non-recurring income						
Central government	0.80	0.19	0.21	0.35	1.12	2.58
State government	65.29	44.69	30.33	53.03	52.62	50.00
Local bodies	8.96	16.34	4.72	4.67	4.63	2.49
Endowment & other sources	24.94	38.79	64.73	41.95	41.62	44.92
Total (Non recurring)	100.00	100.00	100.00	100.00	100.00	100.00
Total (Recurring+ Non recurring)	519771	855920	1349542	926741	2385864	3921717
% of recur. Income to total income	96.61	93.44	91.26	90.44	96.26	93.93

Source: Compiled and computed on the basis of data from various issues of *Education in India*

The total recurring expenditure increased at a much faster rate compared to income, by almost 31.39% per annum during the same period [Table 4]. Hence, the expenditure has increased at almost double the rate compared to rise in income. Looking at the various heads, the expenditure on salary has grown at a rate of 10% p.a. while the non-salary expenditure grew at a rate of 11% p.a. As for salary of the teaching staff vis-a-vis the salary of the non-teaching, expenditure on teachers' salary has grown at a lower rate (9% p.a.) compared to the salary of the non-teaching staff (being more than 20% p.a.). On the other hand, the expenditure on scholarship, stipend and other financial concessions has grown at a rate of 11% p.a.

TABLE 4
Recurring and Non-recurring Expenditures, by Heads

	1979-80	1982-83	1983-84	1985-86	1987-88	1992-93
Non-recurring expenditure						
Library	6.80	7.41	6.63	3.12	8.06	4.71
Building	17.71	6.50	8.25	13.59	26.97	45.08
Equipment, furniture & other items	75.49	86.09	85.11	83.29	64.96	50.20
Total (non-recurring)	100.00	100.00	100.00	100.00	100.00	100.00
% of recurring expenditure to total expenditure	97.76	95.04	94.86	90.15	96.65	94.34
Total (Recurring)	100.00	100.00	100.00	100.00	100.00	100.00
Recurring Expenditure						
Salary of the teaching staff	86.48	72.90	72.86	74.97	75.30	74.97
Salary of the non-teaching staff	4.90	11.78	13.20	12.45	14.61	15.25
Maintenance of building	1.60	2.66	2.23			
Equipment & furniture	0.27	1.15	1.15			
Apparatus, chemical & consumables	0.57	1.23	1.21	1.51	1.23	1.29
Library	0.18	0.40	0.35	0.53	0.41	0.42
Stipend, scholarship & other fin. conces.	1.76	3.06	2.42	2.06	1.99	1.90
Games & sports	0.15	0.39	0.36			
Hostels	0.41	0.09	0.09	0.11	0.23	0.28
Other items	3.67	6.35	6.13	8.38	6.21	5.89

Source: Compiled and computed on the basis of data from various issues of *Education in India*

The sources of expenditure by heads (Table 4) show that major part of the expenditure is incurred on the salary of the teaching and the non-teaching staff. Almost 90% of the expenditure is incurred on the salary. Though the fact remains that over the years the total expenditure on salary of teachers has declined while that of the non-teaching staff has increased considerably, almost three-fold. The financial burden for the maintenance of buildings has continuously risen.

Table 5 analyses the plan and non-plan expenditure of the government on secondary education by heads. Major part of expenditure of the government is incurred on financial assistance to the private aided schools. Till the mid-nineties, there were marginal fluctuations in financial assistance to non-government schools. However, seemingly because of the adoption of policy of private

unaided schools, reduction in the salary of the newly recruited staff, there has been a decline in the assistance to private aided schools. What is important to know is that during the nineties, in fact, at constant prices [1984-85] the assistance to non-government schools declined at a rate of more than 25% per annum (Table 6). The expenditure on scholarship and teachers' training has also declined.

TABLE 5
Plan and Non-plan Expenditure on Secondary Education by Heads
(as % of total expenditure)

Heads	Dir/Ins/J Training	Ass. to Government Schools	Ass. to Non Government Schools	Ass. to Local Bodies	Scholarship	Teachers' Training	Text Books	Other Expenses	Total
1982-83	0.50	4.80	86.50	7.90		0.30			100
1983-84	0.50	5.10	86.20	7.90		0.20		0.10	100
1985-86	0.40	3.50	87.50	7.60	0.20	0.10		0.70	100
1990-91	0.35	3.61	85.58	5.97		0.12	0.02	4.35	100
1992-93	0.37	3.70	87.07	5.56		0.11	0.07	3.12	100
1993-94	0.39	4.04	85.83	6.24		0.12	0.02	3.36	100
1994-95	0.34	3.75	85.65	5.75	0.01	0.08	0.13	4.29	100
1995-96	0.31	3.88	86.78	5.57	0.01	0.07	0.05	3.33	100
1996-97	0.33	3.87	86.81	5.56	0.01	0.07	0.07	3.28	100
1997-98	0.38	4.08	86.60	5.55	0.01	0.07	0.10	3.21	100
1998-99	0.43	3.85	83.14	4.29		0.05	0.05	8.19	100
1999-00	0.26	3.65	83.41	4.77		0.05	0.12	7.74	100
2000-01	0.32	3.52	81.97	4.45		0.06	0.14	9.54	100

Source: *Analysis of Budgeted Expenditure on Education*: Ministry of Education and Culture, Department of Education. Planning, Monitoring and Statistics Division, Government of India, New Delhi, various issues.

As per Table 6, the growth of expenditure on secondary education declined during the 1990s. During the period 1982-83 to 1990-91, the total expenditure grew at a rate of 21.3% per annum; it declined to 13.5% during the 1990s at current prices. But at constant prices, it witnessed a negative growth rate. This means that at constant prices the expenditure on secondary education during 1990s was on an average 75% of the expenditure incurred during the 1980s. Looking at various heads of expenditure, the expenditure on other items grew at a very fast rate during the 1980s, though more than doubled every year; it has also

witnessed a slow down. Still, the rate of growth of expenditure on other items is high, compared to expenditure on all other items. Assistance to non-government schools, it grew at a very high rate during the 1980s. But has gradually declined. Hence, the decade 1990s witnessed a slow down of assistance to non-government schools which is a reflection of government's effort to reduce the financial burden.

TABLE 6
Growth of Expenditure by Heads on Secondary Education (%)

S. No.	Heads of Expenditure	'Growth rate during		"Growth rate during	
		1982-83 - 1990-91	1990-91 - 2000-2001	1982-83 - 1990-91	1990-91 - 2000-01
1	Direction/ inspection & trg.	15.63	12.54	8.96	3.91
2	Assistance to Govt, schools	17.05	13.20	10.30	4.72
3	Ass. To non-govt. schools	21.13	13.00	14.13	-25.80
4	Ass. to local body schools	17.27	10.19	10.50	1.73
5	Expenditure on Scholarship®		6.68	120.06	-1.47
6	Teachers' training	7.92	6.35	14.29	-17.07
7	Text books		39.34	8.96	3.91
8	Other expenditures	127.63	22.76	10.30	4.72
9	Total	21.3	13.50	14.13	-25.80

Notes: @ Growth during 1992-93 to 2000-2001

* Current prices

Constant prices, 1984-85=100

Per Pupil Expenditure

During 1990-91 to 1997-98, the increase in per pupil expenditure in nominal terms works out to 12.8 per cent per year. It has grown from Rs. 1260 in 1990-91 to Rs. 4964 in 1998-99. In real terms, the growth in per pupil expenditure is of the order of 3.8 per cent per annum.* This inflation rate is higher than that of 7.9 per cent for the period 1991-92 to 2000-01 but close to that of 8.7 per cent based on consumer price index [CPI- Industrial workers]. Our inflation-adjusted growth rate of expenditure on education in a sense may be viewed as CPI-adjusted if inflation rate based on WPI fails to capture expenditure on education adequately. Separately, on the basis of these two price indices, the real growth of per pupil expenditure (Table 7) during 1990-91 to 1993-94 was barely 0.4 per cent as against 7.4 per cent during 1994-95 to 1997-98. In any case, per pupil real expenditure has not shown negative growth rate.

TABLE 7
Expenditure Per Pupil in Secondary Education

Year	Actual		Growth Rates	
	In Current Prices	In Constant Prices*	In Current Prices	In Constant Prices*
1989-90	1523	1093		
1990-91	1760	1090	13.46	5.93
1991-92	1996	951	11.82	-0.27
1992-93	1923	1038	-3.79	-14.61
1993-94	2243	1100	14.26	8.47
1994-95	2553	1189	12.48	5.63
1995-96	3080	1219	16.78	7.48
1996-97	3452	1235	10.77	2.46
1997-98	3730	1235	7.45	1.29
1998-99	4964	1481	24.85	16.6

* 1984-85 prices

Moreover, the per capita real expenditure on secondary education has also risen at a rate higher than that of the per capita expenditure on education as a whole, which in turn has grown faster than the growth of per capita real GDP during the 1990s. Thus, education, in general, and secondary education, in particular, has been making an increasing draft on the state resources on per capita basis. Per capita [or pupil] expenditure on education when taken as investment, the observed increase tantamounts to increasing cost.

Reported public expenditure on education during the 1990s should have increased at a rate lower than the one observed for the reported private expenditure. The reasons are not far to seek: [1] State now bears 80 per cent of salary cost instead of earlier 100 per cent; [2] No maintenance grant is given now as it is collected from students; and [3] State has given option to schools to charge higher tuition fees. If we take account of that part of private expenditure which is not reported, i. e., mainly non-tuition costs, then according to previous studies, the burden of financing education is shared by the state [public] and private individuals in the ratio of almost 50: 50 [Shah, 1997].

Now, a look at qualitative aspects of secondary education. As stated earlier, internal efficiency, judged in terms of drop-out rates, failure rates, and graduation of schools on the basis of school results at the two public examinations, throws sufficient light on the quality of education at this level. Moreover, low or poor quality of education gets reflected in what is termed as 'cost-spread' between [a] cost per enrolled pupil and cost per pupil appeared at the public examinations, on the one hand; [b] cost per pupil appeared and cost per pupil clearing these examinations; and [c] cost per enrolled pupil and cost per pupil passing these

examinations, on the other hand. Cost-spread tells about the extent or the level of cost-effectiveness.

Drop-out Rates

Information about drop-out rates is presented in Table 8. How many students enrolled in class VIII in any one year [say 1990-91] go to class X after two years [i.e., in 1992-93]? Our calculations show that during the decade of 1990s, on an average around 73 per cent of class VIII students reached class X after two years. The average drop-out rate works out to 27 per cent. Over the period it has increased from 23 per cent during 1992-93 to 28 per cent during 1998-99. The highest drop-out rate was 29 per cent during 1996-97. These rates are crude in the sense that no adjustment is made for repeaters and failures. Similar exercise carried out for drop-out at the higher secondary level reveals that only 20 per cent of students enrolled in class X on an average reached class XII during the decade, giving exorbitant drop-out rate of 80 per cent. It has risen from 76 per cent during 1992-93 to 81 per cent during 1998-99. At the first sight, this figure appears to be unbelievable.

But we get some clue in support from the average failure rate of around 50 per cent in class X and the average drop-out rate of 27 per cent at the high school level. The simple addition of these two figures of 77 per cent [50%+27%] turns out to be very close to 80 per cent drop-out rate at the higher secondary level. This is nothing short of "distress" terminalisation of education. In any case, difference of 2.5 times between the enrolment in class XII and the number taking class XII public examination in favour of the latter shows that the majority of high school failures and drop-outs intend to appear at the class XII examination on becoming eligible.

TABLE 8
Drop-out Rate in Secondary and Higher Secondary Classes

<i>Years</i>	<i>Drop-out rate in X</i>	<i>Drop-out rate in XII</i>
1992-93	22.97	76.0
1993-94	27.46	76.5
1994-95	27.11	78.8
1995-96	27.91	82
1996-97	29.14	81.6
1997-98	27.47	82.4
1998-99	28.22	81.1

Moreover, better performance of class XII students [general stream] at the public examination relative to class X students also of general stream indicates

that only the more competent of them successfully complete twelve years of schooling.

Failure Rates

The failure rate at the SSC examination was 52.7 per cent on an average during the eighties, which was marginally lower at 49.6 per cent on an average during the nineties - an improvement in performance just by nearly four percentage points (Table 9). Contrarily, at the HSC examination [general stream], the average failure rate of 42.1 per cent during the 1980s was much lower at 24.7 per cent, a 17 percentage points improvement in performance between these two decades. Furthermore, not only the difference between the highest and the lowest failure rates was larger at the SSC level than at the HSC level, the said difference widened at the SSC level whereas at the HSC level, it got narrowed between these two decades. The performance of science stream students of HSC has been far below their general stream counterparts. The average failure rate of 55 per cent did fall to 50 per cent between eighties and nineties at the HSC Science stream, but still twice that of the general stream. The vocational stream students have performed far better than their counterparts of the other two streams have. During 1981-90, the average result was 56.8 per cent [43.2 % failure rate]. In 1991 examination, the result was 66.8 per cent [33.2% failure rate]. During 1992-97, the average result shot up to 75 per cent [25% failure rate]; whereas during 1998-2001, the average result was 93.3 per cent [6.7% failure rate]. Thus, performance-wise, vocational stream students occupy first position, the next is general stream students and the last is the science stream students. It is ironical that the least popular stream has surpassed the popular streams in performance. The low standing of the science stream should concern all of us as the State has been experiencing dearth of science subject teachers, particularly at a time when we need competent scientific and technical personnel. This lends credence to our competency argument. However, one or two caveats are in order at this juncture. The performance of students also depends, to an extent, on private coaching classes apart from education imparted in schools. Also, the psychological fear of examinees exposed for the first time at the tender age of 16 years or so to the public examination under this new pattern unlike the old pattern may be a factor explaining the observed variation in performance.

TABLE 9
Failure Rates in Public Examination

		(pass %)		
<i>Years*</i>		<i>HSC (General)</i>	<i>HSC (Science)</i>	<i>SSC</i>
1981		70.21		49.57
1982		61.50		48.04
1983		52.50		47.10
1984		53.43		38.41
1985		47.15		41.32
1986		56.33		42.92
1987		52.41		47.69
1988		64.67	35.00	57.55
1989		59.80	34.51	54.80
1990		61.00	33.22	51.90
1991		57.37	33.00	60.59
1992		74.00	52.00	68.18
1993		73.00	40.00	56.33
1994		70.00	40.00	42.18
1995		75.98	58.00	50.34
1996		69.85	51.27	40.97
1997		75.33	52.97	40.17
1998		81.76	57.52	45.16
1999		87.08	51.05	55.80
2000		88.85	60.96	58.70
Average results			Failure rates	Change over previous
for decade				decade
HSC general	1981-90	57.99%	42.1	17.4
	1991-2000	77.20%	24.7	
HSC Science	1981-90	40.00%	60.0	10.4
	1991-2000	50.40%	49.6	
SSC	1981-90	47.93%	52.07	3.47
	1991-2000	53.40%	49.6	

Note: * results of the examination held during March

Something more about performance. The average annual growth of number appeared at both the public examinations between two decades has gone down - at the SSC examination from 7.14 per cent during eighties to 4.40 per cent during 1990s [1991-2001], and at the HSC examination, it dropped from 11.5 per cent to 5.7 per cent. The average annual growth of number passed, contrarily, has risen. This apparent increase can solely be ascribed to the phenomenal increase in the growth rate during the later part of 1990s, between 1999-2001. The respective growth rates work out to 22.23 per cent and 33.7 per cent for SSC and HSC examination. As against this, during the major part of the decade [1991-98], the respective growth rates were just 6 and 5 per cent. If we go by the trend revealed

by the major period, the average annual growth rate of number passed like the number appeared decreased between the two decades. It declined from 7.5 per cent to 6 per cent at the SSC examination and at the HSC examination, it dropped down to 5 per cent from 10 per cent (Table 10).

TABLE 10
Average Annual Growth of Number Appeared and Passed at the SSC and HSC Examinations

Period	SSC		HSC (General)		HSC (Science)		HSC (Vocational)		HSC (All Streams)	
	APP	PASS	APP	PASS	APP	PASS	APP	PASS	APP	PASS.
1980s	7.14	7.45	12.3	10.9	9.5	3.30	1.30	31.9	11.5	10.2
1990s	4.40	9.89	6.5	8.9	2.95	13.7	3.4	6.6	5.7	13.0
1991- 1998	3.79	6.01	0.3	5.4	1.2	124	4.0	5.5	-	5.2
1999- 2001	6.03	22.2	23.0	20.0	7.7	17.4	1.9	17.7	20.8	33.7

This observation stands for each stream separately at the HSC examination. Similarly, the performance level further scales down on bifurcation of the decade nineties into 1991-98 and 1999-2001. The extent of disparity in average results between these two periods is astonishing (Table 11).

TABLE 11
SSC and HSC Average Results

Period	SSC	HSC [General]	HSC [Science]	HSC [Vocational]	All Streams
1980s [1981-90]	47.9[52.1]	58 [42]	40 [60]	56.8 [43.2]	53.9 [46.1]
1990s [1991-2001]	53.4 [46.6]	77.2 [22.8]	50.4 [49.6]	80.9 [19.1]	72.1 [27.9]
1991-98	50.5 [49.5]	73 [27]	46.3 [53.7]	75.9 [24.1]	68.0 [32.0]
1999-2001	61.1 [38.9]	88.4 [11.6]	61.3 [38.7]	94.3 [5.7]	83.0 [17.0]

Note: Figures in brackets are failure rates.

At the SSC examination, as against average 73 per cent result during 1991-98, it was 88.4 per cent during 1999-2001. At the HSC examination, for the period 1991-98, the average result was 50.5 per cent. It was 61.1 per cent for a short period of 1999-2001. Confining to the period 1991-98, the performance level at the SSC scales down to 50.5 per cent from 53.4 per cent [1991-2001] average results. At the HSC, from 72 per cent to 68 per cent. Correspondingly, the average failure rate has scaled up. The stream-wise average results show a similar pattern. Does this amount to a 'managed' as against a 'genuine'

improvement in performance? Has the State, of late, started following the policy of appeasement to tone up the performance levels? However, the fact remains that the higher secondary students [all streams together] have performed much better than their counterpart secondary school students.

Poor performance of students at the SSC level can be corroborated by the existence of a large number of low grade schools on the basis of school results (Table 12). A little above one-fifth [22.4%] schools are given x and z grades with results below 20 per cent. Another one-third [34%] are given e+ and e- grades with results between 21 per cent and 40 per cent. D grade schools account for 15.4 per cent of the total. [Results in the range of 41% to 50%]. Hardly 28 per cent schools [results in the range of 51%- 90+%] are accorded A+, A, B, and C grades. Thus, the low grade schools account for more than one-half of the total. In this way, the gradation of schools tallies with the students' performance. Some of these schools must have been penalized by the 10 per cent cut in their grants as per grants-in-aid code.

TABLE-12
**Grading of the Schools on the basis of S.S.C. Examination results
by Gujarat Secondary Education Board, Gandhinagar**

<i>Grade</i>	<i>1994-96</i>	<i>1997</i>	<i>1998</i>
A+ (more than 90%)	107	127	170
A (71 to 90%)	387	361	485
B (61 to 70%)	404	367	498
C (51 to 60%)	655	521	711
D(41 to 50%)	981	741	885
E (31 to 40%)	1052	921	925
E-(21 to 30%)	983	956	909
X(less than 20%)	992	1479	1032
Z (0%)	50	144	89
Total	5611	5617	5704

Source: Souvenir published by GSEB, Gandhinagar.

Cost Spread

Cost-spread gives an idea of the extent of variation between the cost of input and the cost of output. Factor cost of education is a relevant concept when the cost of input and output is to be estimated. Factor cost of education comprises: [a] recorded [published] public and private expenditure on education [outlay]; [b] unrecorded private expenditure on education, for example, books, stationery, equipment, private tuition, transport, etc., [c] imputed cost, interest paid on borrowed funds for education or interest foregone if own money is invested in

education; and [d] indirect or opportunity cost of education i.e. earnings foregone. According to NSSO [52nd Round, 1998], annual average private cost at the secondary level [secondary and higher secondary schools] of education for the year June 95- June 96 was Rs.1577. This covers a part of recorded expenditure in the form of fees - tuition, examination, and others, accounting for 23 per cent of the total private cost of Rs. 1577. The unrecorded private cost [excluding fees] as per [b] above comes to Rs. 1208 on an average per year. This accounts for 28 per cent of the recorded expenditure per pupil of Rs.4345 during 1997-98 at the secondary level of education in Gujarat. The cost-spread estimated by us is based only on recorded average cost (Table 13). In this sense, this amounts to underestimating the cost-spread. Thus, around three-fourth of the recorded expenditure takes the nature of public expenditure.

TABLE 13
Cost -Spread at the Secondary Level of Education

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1980-81	10.24	3.25	1.76	9788	955.86	3011.69	5561.36	4044.63
		[31.7]	[17.2]					
1990-91	16.52	6.38	3.31	31531	1908.66	4942.16	9525.98	7653.16
		[38.6]	[20.0]					
1997-98	19.69	7.35	3.93	85558	4345.25	11640.54	21770.48	16677.97
		[37.3]	[20.0]					
1998-99	20.43	7.43	4.60					
		[36.4]	[22.5]					

Notes: [1] Figures in brackets respectively are the proportions of the number appeared and the number passed to total Enrolment.

[2] Average cost per pupil of classes X and XII is estimated on the assumption that the number appeared in the SSC and HSC public examinations is equal to the enrolment in these two classes as the number appeared turns out to be far in excess of the number enrolled.

[3] Appeared and Pass figures are for the years-1981,1991. 1998, and 1999.

The state government is the major funding agency. The whole idea of this exercise is to apprise the funding agency of how efficiently or effectively the funds are being deployed. Cost per enrolled pupil is estimated for the level as a whole as costs are indivisible, i.e., difficult to apportion class-wise. Moreover,

final output, in the form of input in the education process, has to complete the prescribed years of schooling. Similarly, the other two costs - cost per pupil appearing at and passing out the two public examinations - are estimated, taking total expenditure incurred on this level. Since the number appeared has exceeded the number enrolled both in classes X and XII, the cost per pupil appeared is on the low side. To overcome this tangle, on the assumption that the number appeared is equal to the number enrolled in the above two classes, the average cost per pupil appeared is estimated, pushing up the cost. Two estimates of the cost per pupil appeared are made - one high and the other low.

The cost-spread is quite significant. Let us first focus on the cost-spread between the number enrolled and appeared. During 1980-81, the difference was of the order of 3.15 times. It was 2.56 times in the year 1990-91, but rose to 2.68 times in the year 1997-98. Confining to the estimate on the high side made on the assumption of equality between the enrolment and the number appeared, the cost-spread widened to 4.23 times in the year 1980-81. A decade later, in 1990-91, the difference was a little lower at 4 times. And in the year 1997-98, it was further lower at 3.83 times. It is safe to surmise that the cost variation between enrolment and the number appeared at the two public examinations has ranged from around 3 to 4 times. The extent of variation is found to be higher when cost comparison is made between enrolment and those clearing public examinations. It was 5.8 times in the terminal year 1980-81. In the other two terminal years, 1990-91 and 1997-98, the said difference in the two cost estimates was lower at 5 times. The cost difference between those appeared and passed is relatively small, in the vicinity of roughly two times. The above described cost-spread hints at the known fact that in relation to enrolment, the number successfully completing the prescribed years of schooling at this level is quite low. In the light of high drop-out and failure rates, the estimated cost-spread is suggestive of low internal efficiency. The improvement in performance has taken place at a snail's pace. In view of the above, the secondary level of education appears to be the 'weakest' link in terms of efficiency and not in terms of its funding. Thus, we have not yet come out of the age-old issue of equity-efficiency quandary or that of quantity-quality trade-off.

Let us raise a few searching questions, having policy implications. Is the State Government justified in its efforts to reduce its funding responsibility by injecting employment duality in the system, by passing the burden of maintenance cost on to students and allowing schools to charge higher fees? Of course, the response to these efforts has not been to the government expectations. Why the restructuring of public expenditure, say from salary to non-salary or the effective monitoring of grants, has failed to surface prominently on the Government agenda? Curbing private tuitions by teachers or coaching classes in the past has hardly paid off. Is there an urgent need to strengthen the base of the education system namely elementary education from which students are drawn

by the secondary level as input? The capability of inputs to pursue the non-compulsory education is to be raised at any cost. The disillusionment in the form of very poor employment opportunities among students also matters when education beyond compulsory education is pursued for economic motive. They continue their studies, as they have nothing else worthwhile to do. Also, the low grade schools need to be identified on a priority basis.

3. Financing of Education in Gujarat

The State is a major funding agency as education is a state subject. Its financial participation takes the form of grants to educational institutions. However, this is not the only source of finance. Other non-governmental [private] sources are fees - tuition, admission, term, examination, and others - donations, schools' own income and miscellaneous.

As shown in Table 14, the outlay on education increased during the past two decades. It may, however, be pointed out that the actual expenditure on education was more than the outlay during the 1980s. But, during 1990s, the actual expenditure was much below the outlay. During the year 1997-98, the actual expenditure was low by 63% of the outlay. During 1998-99, though the gap between the outlay and actual expenditure declined to nearly 23% but remained low. What is interesting to note is that the actual planned expenditure was low compared to the outlay. However, actual non-planned expenditure has always been more than the outlay.

TABLE 14
Planned Expenditure on Education in Gujarat

(Rs. In Lakh)

Years	Secondary Education		Education (Total)		
	Provisional	Actual Expenditure	Provisional	Actual	Expenditure
1980-85	1049.66	1059.53	1482.50		1522.30
1985-90	1817.29	2251.54	2620.00		2958.37
1992-97	2892.20	2435.53	4897.70		4221.80
1997-98	1706.58	693.43	3036.00		1860.57
1998-99	2203.80	2093.71	3685.75		3000.39
1997-2002	28937.00		39660.00		

Source: Educational Statistics, *op.cit.*

Based on the data for the period 1970-71 to 1997-98, the correlation values between the rate of growth of NSDP and budgetary expenditure on education, estimated to be more than -0.3 shows negative relationship, indicating that the budgetary expenditure has not increased with the growth of NSDP.

TABLE 15
Expenditure on Secondary Education

<i>Years</i>	<i>Plan</i>	<i>Non-plan</i>	<i>Total</i>	<i>% to total on sec. education</i>
1980-81	13732	509092	522824	30.3
1981-82(RE)	13780	569912	583692	29.5
1982-83(BE)	14206	594759	608965	29.6
1984-85	23777	1220056	1243835	28.1
1985-86(RE)	10735	1,28,26,81	1,29,34,16	26.9
1984-85	23777	1220056	1243835	28.1
1986-87(BE)	1,00,30	1,38,85,75	1,39,86,05	27.3
1993-94	41318	4335057	4376375	32.27
1994-95(RE)	46205	4812970	4859175	31.52
1994-95	43130	4891476	4934606	32.04
1995-96(BE)	39377	5134487	5173864	30.50

Source: Educational Statistics, *op.cit*

Table 15 shows that the expenditure on secondary education declined from more than 30% to nearly 27% by the mid-eighties. However, during the nineties, it shows an increasing tendency.

Grants-in-aid Policy

Though the government is not directly responsible for the extent of secondary education, a liberal grant policy has been adopted in Gujarat. Until 1968, the secondary schools received grants up to 45-55% of the expenditure, which after 1969 had been liberalised up to 100%. The major features of the 1968 and 1977 grants-in-aid policy were:

- i 100% salary of the teaching and non-teaching staff and payment of the salary through bank.
- ii 20% of the salary grant to meet other expenses for schools having more than 150 students.
- iii Reimbursement of the rent for the schools run in the hired premises and 5% of capital cost to schools functioning in the own building.

The Gujarat government had adopted liberal grant-in-aid policies till the mid-eighties and early nineties. A new policy of no grant was adopted for the period of 1993-98. Hence, there was a U-turn from the previous policies.

Norms for the Provision of Grants to Schools

Norms laid down by the Gujarat government are as follows:

- i Only government recognized schools are eligible for financial aid in the form of grants.
- ii In such schools, the appointment of teachers, strength of teaching staff, their pay scales should be as per government rules and regulations. In case, the number of teachers is in excess of what is approved by the govt., the school is not paid grant for this additional number.
- iii Schools are required to incur expenditure out of grant income as per rules and regulations specified in the booklet supplied to each school. If norms are not adhered to by any school, then such expenditures become non-admissible and the portion of the grant utilized to finance such expenditures is to be refunded
- iv Fixation of grants depends on the income from the tuition fees prescribed by the Govt.
- v Provision is made for 5-10% cut in grant in case the S.S.C. result of a school is below 35%.
- vi Auditing of school accounts by the govt, auditors is mandatory.

Changes in Grants-in aid Policy

When secondary education was not tuition free, grant was meant to cover 45% of annual expenditure. When it was made free, the state started giving 100% salary [teaching+non-teaching] grant plus 100% grant to cover admissible expenditures. Recently the state govt, has given option to private aided schools to increase tuition fee rates but majority of schools have opted for government laid down tuition fee rates and thus refrained from charging higher fees out of fear of decline in student strength. 75% of tuition fee collected can be spent on items as per standards laid down by the State. Separate maintenance grant is now not given. 100% salary grant is given to recognized private aided schools not accepting other grants.

Approved expenditures to be met out of grant are: [a] library books; [b] science and laboratory equipments; [c] examinations related expenses; [d] electricity and telephone bills; [e] ceiling fans only & necessary furniture & [f] Stationery.

Grants and Quality of Education

Teachers are an important input in the education sector. Number of teachers in a school, criteria for their- appointment, their pay scales and service rules are determined by the state education policy. They are, all said and done,

government employees and cannot be easily removed. Their job, thus, is highly secured. Naturally, there is an incentive to get trained as pay scales of trained and un-trained teachers vary. Surplus college/university teachers on account of the introduction of the 10+2 stream were by and large absorbed in higher secondary schools. Commitment to teaching - their main job - should be higher than otherwise. If over the years the proportions of trained teachers and that of teachers with P.G. degree have increased, the quality of this input should have improved and consequently the quality of education. What are the trends in the following determinants of the quality of education: average annual teacher salary at constant prices; salary [teacher] expenditure per pupil in real terms; S.S.C & H.S.C examinations results; and pupil-teacher ratio - actual and prescribed. In all three grades of secondary schools, 50 students per class can be admitted and a few more with the state permission. If there are two divisions of the same grade, three teachers can be officially appointed.

Thus, for 100-120 students at that level when three teachers are working, pupil-teacher ratio varies in the range of 33:1 to 40:1. The question of viable size of a school arises only when the actual pupil-teacher ratio is much lower than the above. But in such a situation, the division may be merged or wound up. At the higher secondary level also, there is a provision of 50 students in a class. But two teachers per class are allowed with the provision of few more by the government approval. Pupil-teacher ratio varies in the range of 25:1 to 30:1. These ratios, then, can give an idea of the viability of a school

Other quality-related variables are per pupil expenditure on library, science and laboratory equipments and examinations. How have they behaved in relation to salary expenditure?

When all these parameters exhibit positive change, performance at this level should have improved and the proportion of uneconomic size schools should have fallen, with decline in the drop-out rate.

The rapid growth of the parallel education system [private coaching classes], however, casts doubts on these determinants. Also, complaints that the majority of successful higher secondary school students are not well-equipped for college/university education and fare poorly further generate apprehension about the quality determining factors. To be on the firmer ground in this regard, an in-depth analysis of sampled schools based on primary data is a better alternative. For example, the study sponsored by the U.G.C. on 'Effectiveness of Science Laboratories of Bhavnagar [Gujarat] district for Secondary Education' conducted by Dr. Manharbhai Thakar shows that the effectiveness is low in the sense that their existence in schools is not conducive to the teaching of science subjects, as well to the development of students' talent and personality. Even at the higher secondary level, the idea of creating self-learning students group, by and large, has remained on paper.

The relative importance of government role in financing secondary education must have changed over a period of time because of [a] students'/ parents' preference for fee charging in private un-aided schools, [b] state's finances in poor shape, and [c] changes in the state's grants-in-aid policy.

A new policy was adopted during 1999 that discouraged the commercialisation of secondary schools and reducing the financial burden on the government through subsidies and involvement of parents and management in education. The policy envisages the setting up of private aided schools only in those areas where there is no school within ten kilometres in case of non-tribal areas and five kilometres in case of tribal areas.

The approval of the grant will be as follows:

Full salary grant will be sanctioned during the first three years, 75% salary grant during fourth year and 60% during the fifth year in case of schools in the non-tribal areas. In case of tribal regions, the sanction of grant will be 10% point higher in all categories.

No school shall receive any maintenance grant. Schools will, however, be allowed to charge fees for their maintenance. This would be Rs. 35 in case of standard VIII, Rs. 40 for standard IX and Rs. 45 for standard X. In standards XI and XII, the same has been fixed at Rs. 50 and 60 respectively. Of the total amount raised, 65% would be spent on non-educational expenditure. The new policy, therefore, ensures participation of the parents and students in the education system.

A special grant will be released for schools in those areas where there is no school imparting science teaching in the block (taluka).

The present policy aims at gradually reducing the financial burden on the government by the fifth year from 100% to 50% that is contrary to the previous policy where the grant-in-aid increased from 50% to 100%. The policy also aims at ensuring the participation of students, teachers and management in the fee decision making.

According to the previous policy, the full salary of the staff was reimbursed. Additionally, schools would get 20% of the salary bill towards maintenance that gradually was reduced to 10%. 5% of the capital cost was paid as grant to aided schools having their own premises and those schools run in the rented buildings, rental charges as approved by the authorised engineers were reimbursed.

As per the new policy, the maintenance grant is no more the responsibility of the government. Private aided schools can raise their own funds by way of fees. In case of new private aided schools, no grant will be paid to schools during the first year; the school will receive 40% grant during the second year, 60% during the third year and from fifth year onwards, the school will receive only the salary grant. These schools are expected to express their option either for availing the maintenance grant from the government without a fee hike or through rise in fee structure as determined by the government. Once the school opts for no

maintenance grant, such schools enjoy flexibility in using the funds raised by them. There will be no government auditing. Those schools that opt for maintenance grant will continue to get it not on the basis of their gross salary bills as in the case of previous policy but on the basis of student strength. Schools having number of classes up to 5 would be paid Rs. 1800 per month per division, between 6 and 30, Rs. 1500 per month per division and schools with more than 31 divisions would be paid Rs. 1000 per month per division as the maintenance grant. Of this, 65% of the grant can be utilised by the school for miscellaneous expenses and 35% for maintenance of school building or rental purposes. Schools in the rural areas and those schools where the number of students is less would prefer to opt for the maintenance grant.

Opinion Survey

In order to know the view of the school authorities, we carried out a small sample survey of few schools in Vadodara and Surat cities in the state. The principals and authorities of some of the schools were formally interviewed to express the views on the grant-in-aid policies adopted by the government. The findings in this section are based on the general opinions of the school authorities.

All those private aided schools that have a large number of students and also those that have students coming from a reasonably good economic background opt for the fee structure determined by the government. A large number of students means higher maintenance grant. This is beneficial to the schools as they get more maintenance grant and do not have to face government audit. But those schools that have students coming from economically backward communities do not adopt it for fear of losing students. A few schools have opted for maintenance grant. These schools charge a term fee of Rs. 12/- per student, i.e., Rs. 24/- per annum at secondary level and Rs. 50/- per term per student at the higher secondary level. The number of students receiving scholarship in such schools is also high, something ranging between 20-35% of the total students. Those schools that have adopted fee structure have lower proportion of students belonging to backward communities.

Even in raising maintenance grant, schools do not enjoy autonomy. Government is the decision-making authority. Only those schools that have been started on the condition of no grant on permanent basis, i.e., private unaided schools are allowed to determine their fee structure.

Once a private aided school adopts the fee structure, all students irrespective of caste, community and gender have to pay. That means, after the implementation of the maintenance fee, secondary education does not remain free for any one. There is a clear division between the private aided schools and the non-aided schools. Students belonging to economically backward families normally come to these private-aided schools or government (state or local body school) where they pay relatively less fee.

When the new pay scales for the teachers were adopted, the pay scale of a newly appointed teacher in a private aided school in secondary section on regular basis was Rs. 5000/- plus other allowances. Gross salary at the minimum of the scale would be something around Rs. 7500/-. While a teacher in higher secondary class would get a scale of Rs. 5500/- plus other allowances which would mean a gross salary of around Rs. 8000/-. In the new grants-in-aid policy, government has allowed recruitment of the teacher on a consolidated salary of Rs. 4000/- in a secondary class and Rs. 4500/- in a higher secondary class; a clerk on a salary of Rs. 2500 and a peon Rs. 1500 p.m. This salary is fixed for five years. In the previous scale, a teacher was entitled for annual increment but not the newly recruited teacher. Hence, the new salary structure would reduce the financial burden on the government but it is believed that this might have adverse impact on teaching in the schools by the teachers as the school teachers might try to find the sources of additional income in the form of private coaching to the same students³. It is, therefore, suggested that the determination of the salary should be left to the schools with a minimum grade.

In short, the new policy is expected to reduce the financial burden on the government, first, by cut in the salaries of the teaching and the non-teaching staff in private aided schools and secondly, by reducing the burden of maintenance grant to these schools. Moreover, the newly coming up private aided schools will also bring less financial burden on the government at least after a couple of years. Of late, the private unaided schools are being encouraged by the government; this too will ease the financial burden on the government.

However, the secondary education still remains the state domain for several reasons. First, majority of schools are private aided schools, though unaided schools are coming up. Secondly, it has been mentioned time and again even by the government that the recurring expenditure on salary of the staff has been the major source of finance for the schools from the government; the schools are allowed to raise only the maintenance grant and no other funds or expenditure. However, proportion of such schools is extremely low. According to a rough estimate, only 10% of the total schools in Gujarat have adopted the maintenance fee structure and 90% of the schools in the state still depend on the government for their maintenance. The burden remains.

4. Concluding Observations

There is a felt need to evolve a framework for the evaluation of school performance, funded largely by the State. To facilitate research on financing of secondary education based on secondary data, as the present study is, it is

³ The cost of living in the urban areas has been increasing continuously. Also, the standard of living of an average person is rising. The new salary structure leads to decline in the salary of teacher by almost half.

suggested that the District Education Office (DEO) in a state should prepare for the district and publish (a) annual report covering various aspects of equity and performance spelt out above and, (b) Statement of Accounts giving information about sources of income and structure of expenditure along with highlights of the audited reports as is the prevailing practice at the higher education level. Then, the studies purely based on secondary data will be less time-consuming and less costly and more policy-oriented. DEO office in a district is the right agency for the compilation and availability of scattered information.

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An Empirical Analysis of Grants-in Aid Rules, Financing Pattern and Cost Structure in Secondary Schools in Delhi[#]

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Abstract

Based on a detailed study undertaken on the financing, cost and grants-in-aid system of secondary education in Delhi (Qamar and Zahid, 2002). this paper aims at highlighting various issues associated with the development and financing of secondary education in Delhi. Delhi has the unique status of being the seat of the national capital and also as the national capital territory (NCT) it is expected to provide the best face of the nation. Development initiatives, achievements, goals and strategies of the NCT are often taken by other states and union territories as ideals to emulate. Significantly this study attempts a detailed investigation into the principles and practices of grants-in-aid system of financing secondary education, of rules and regulations concerning financing and financial administration of the secondary schools, followed by a comprehensive analysis of sources of finance for different types of secondary and senior secondary schools operating in Delhi. Investigation into the effect of financing policies and practices on the cost structure and cost composition and its implications on the working and performance of the secondary and senior secondary schools also considered inevitable, therefore, includes analysis of the cost of education in different types of schools operating in the National Capital Territory of Delhi.

As enrolment, retention and progression rates in primary education have been consistently moving upward, the demand for secondary education is bound to increase, thereby exerting pressure on the existing facilities and unless commensurate additional investments are made in the sector, access to quality secondary education would be very adversely affected. Besides, there is also a realization that the progress of higher education would be under severe

[#] Based on a research study on Financing Secondary Education: Grants-in-Aid Policies and Practices, commissioned by NIEPA

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constraints if the secondary education sector were not adequately developed. Concerns like these call for a thorough probe into the secondary education system so as to develop insight into their working, performance and financing. Yet another factor that necessitates detailed enquiry of this sector arises on account of the fact that this sector of education has experimented with private participation for quite sometime now [NCERT, 1970; Aiyar, 1993; Muzammil, 1989]. As of now, the secondary and senior secondary education is imparted by a blend of private unaided, private aided and government schools and this has been in gross violation of the agreed public policy and its reiteration time and again to strive for a common school system. Existence of such multiple delivery system in secondary and senior secondary education has drawn considerable research attention [Qamar & Zahid, 2002; Duraisamy & Subramanian 1999, 2000; Tilak, 1995]. However, research evidences on the cost and financing and their implications on quality of different types of secondary and senior secondary schools are only scanty.

TABLE 1
Number of Schools Covered in the Sample for Financial and Non-Financial Data

Year	<i>Financial Data</i>				<i>Non-Financial Data</i>			
	<i>Aided Schools</i>	<i>Govt. Schools</i>	<i>Unaided Schools</i>	<i>All Schools</i>	<i>Aided Schools</i>	<i>Govt. Schools</i>	<i>Unaided Schools</i>	<i>All Schools</i>
1995	93	90	132	315	45	25	60	130
1996	82	98	64	244	56	88	63	207
1997	35	131	44	210	52	135	60	247
1998	42	97	83	222	43	132	90	265
1999	27	44	77	148	44	167	90	301
2000	33	188	79	300	39	290	83	412
2001	6	17	7	30	21	24	32	77
All Years	318	665	486	1469	300	861	478	1639

The blend of secondary data collected from a variety of sources include Education in India, Analysis of Budgeted Expenditure, Statistical Handbook of Delhi, Economic Survey of Delhi and website of the Delhi Government. In order to detail discussion on the financing and cost of education, data have also been collected from the records of the Directorate of Education of the Delhi Government for the period 1995-2001. Although all schools are expected to file annual returns giving data on their educational and financial aspects, information only with respect to limited number of schools could be obtained from the

Directorate. The number of schools for which such data could be collected for different years is detailed in Table 1.

It needs to be emphasized here that although the sample size appears to be small given the total size of the secondary and senior secondary schools in Delhi, the data are quite representative of the educational situation in the state and, therefore, the conclusion drawn on the basis of the data are not likely to be quite off the mark.

Legal Framework for Secondary Education in Delhi

The secondary and senior secondary schools operating in the National Capital Territory of Delhi are subjected to a number of legislations. All schools are required to operate within the bounds of the Indian Constitution and as such they are required to ensure that their activities are in consonance with the letter and spirit of the constitution. *Government schools* are often run as an extension of the government department or as a departmental undertaking directly under the charge of a minister and are, therefore, subject to the government rules and regulations including the general financial rules of the central and the state governments. The *aided schools*, though permitted to operate as autonomous bodies with the responsibility of efficient management lying with their managing committees, are also required to adhere to the general financial rules as they receive substantial support from the public exchequer. The *private unaided schools* too are subjected to certain legislations so as to ensure that they continue to work in the best public interest. The establishment, management, administration and financing of schools are primarily governed by the Delhi School Education Act and Rules 1973. The legislation is applicable to the whole of the Union Territory of Delhi. A government school is one, which is run either by the Central, State or Local Government or by any other authority specified or sponsored for this purpose by any of the above governments. While this legislation primarily targets the private aided and unaided schools, it may not be wrong to presume that the government schools too are expected to adhere to the minimum standards of performance prescribed in the legislation.

As per provision of the Act, a school seeking recognition must have: (a) Adequate funds to ensure its financial viability including its ability to regularly pay salaries & allowances to its employees; (b) Duly approved scheme of management; (c) Provisions for offering approved courses of study and efficient instruction; (d) Teachers with prescribed qualifications; (e) Prescribed facilities for physical education, library services, laboratory work, workshop practices or co-curricular activities; and (f) Suitable or adequate accommodation and sanitary facilities having regard, *inter alia*, to such factors as the number, age and sex of pupils attending the school. A school seeking recognition must, therefore, provide for: (a) *Facilities for Physical Education*: suitable playground or open space around the school or facilities for gymnastics or any other exercise; (b)

Library Service: separate and exclusive room for library, a reading room, stock of books for the need of the students and teachers; (c) **Laboratory Work:** adequate and suitable accommodation, equipment and apparatus; (d) **Workshop Practice:** a room or a workshop adequately and suitably equipped for conducting workshop practice or other vocational activities; (e) **Co-curricular activities:** facilities and environment for as many co-curricular activities as may be possible so as to give every student an opportunity to participate in debates, recitation, elocution, dramatics, music, dance, hobbies, mock model parliament, house system, perfectorial system, class competition, N C C, scouting and guiding, social service etc;

In addition, the Act also requires a school to meet the following conditions before it can be granted recognition: (a) It must be run by a registered society or a public trust; (b) It must serve a real need of the locality and is not likely to adversely affect the enrolment in a nearby recognized school; (c) It is not run for profit to any individual, group or association of individuals or any other person; (d) Admission to the school is open to all without discrimination based on religion, caste, race, place of birth or any of them; (e) It must not compel students and teachers to take part in any religious activities; (f) It is open to periodic or regular inspection and commits to all records of schools to inspection; and (g) It commits to furnish such reports and information as may be required from time to time.

Rules Relating to Grants-in-Aid

The legislation provides that aids can be provided only to recognized schools as no unrecognized school shall be eligible to receive any aid or any benefit made available to private schools. A recognized school seeking grant-in-aid shall have: (a) A permanent income from endowments or other sources (excluding fees and the public fund) which when supplemented by grant-in-aid shall be adequate to discharge its obligations and to enable it to do its work efficiently; and (b) A reserve fund of an amount which shall not be less than the amount indicated or specified by the Affiliating Board; the reserve fund shall be the property of the school and shall be maintained in its name and shall be kept deposited in a scheduled or nationalized bank or a post office.

A private school, in order to be eligible to receive grant-in-aid, must undertake to: (a) employ adequate number of qualified teaching and other staff; (b) fill up approved posts without discrimination or delay; (c) adhere to the reservation policy in filling posts in the school; (d) give preference in filling up their positions to such employees of other aided schools as have become surplus; and (e) deposit 5 per cent share towards pay and allowances, medical facilities, pension, gratuity, provident fund and other prescribed benefits and shall cause to disburse the same within first week of every month to employees. The Act further provides that the grant-in-aid to a school may be stopped, reduced or

suspended at any time. Some of the conditions that may warrant such an action arise if: (a) one or more of the conditions of recognition, discipline, organization or instruction in the school are unsatisfactory; (b) the school fails to comply with any provisions of the Act or Rules; (c) as a result of lack of discipline, the academic standards are likely to be adversely affected; and (d) one or more conditions for recognition or the grant of any aid to the school have been violated. Besides, it is also provided in the Act that an aided school will have to ensure that the number of students on its roll shall not fall below the number on the basis of which the grant-in-aid was granted to it. Similarly, the school will also have to ensure that the number of its working days must not fall below 210 days in a year. Should the number of working days of an aided school fall below 75 per cent of the prescribed days, the rules provide for proportionate reduction in the grant-in-aid payable to such school.

As per provision of the rules, grant-in-aid to an aided school shall be of two categories: namely, the (a) maintenance grant - which shall include recurring maintenance grant and non-recurring maintenance grant; and (b) building grant. *The recurring maintenance grant* covers staff grant, provident fund grant, pension and retirement benefit grant, medical benefit grant, additional benefits to employees grant, grant for books & journals and grant for apparatus & equipment. The recurring maintenance grant to an aided school is equivalent to 95 of the difference between the approved expenditure on the items in relation to which recurring maintenance grant is given and the income from fees and such other items as may be specified by the Director. *The non-recurring maintenance grant* covers such categories as contingent grant, rent grant, depreciation grant, hostel depreciation grant, grant for equipment, furniture, games & sports materials, biennial or triennial grant for library books and book bank. *The contingent grant* is admissible to a school to the extent of 95 per cent of the actual expenditure incurred on approved item. *The rent grant* equivalent to a maximum of Rs. 300 per month is provided to such schools as are being run from a rented accommodation provided that the rented accommodation is not owned by a member of the managing committee of the school. *Depreciation grant for the school building* at the rate of Rs. 12 per month for each room or a total of Rs. 300 per month for the whole building may also be provided to such schools, which are using their own buildings that have been constructed without any grant from public funds. *Hostel depreciation grant* is given to such schools, which have their own hostel buildings constructed without public funds. The grant is admissible at the rate of Rs. 12 per month for room, Rs. 8 per month for kitchen and Rs. 15 per month for the superintendent of the hostel's quarter. *Hostel grant* to the extent of 95 per cent of the difference between the approved expenditure and income from hostel fees may be provided to such aided schools that have hostels attached to them. *Grant for equipment, furniture etc* to the extent of a minimum of two-third of the actual expenditure incurred on the purchase of the

approved articles of furniture, equipment, appliances, sports & games materials or the like, may also be granted to an aided school. *Building grant* ordinarily not exceeding two-third of the actual total expenditure or a maximum of Rupees one lakh may be paid to only those schools which are eligible to receive maintenance grant for purchase, construction or extension of school building or for the repayment of debt for purchase, construction or extension of school building.

A perusal of the provisions of the Delhi School Education Act and Rules 1973 indicates that the State seeks to encourage private participation in school education for it provides near complete freedom to individuals, their associations, societies and trusts to establish schools at their will. However, these schools must meet standards prescribed in the legislation in order to get recognition. The grants-in-aid can be provided to a recognized school only and the aided schools must meet much more stringent conditions. What is, however, noticeable is the fact that most of these conditions are procedure-oriented rather than goal-oriented. Obviously, aided schools face the same extent of bureaucratic hurdles as government schools do. In brief, receiving grants-in-aid would mean that a school would have to give up all of its operating flexibility.

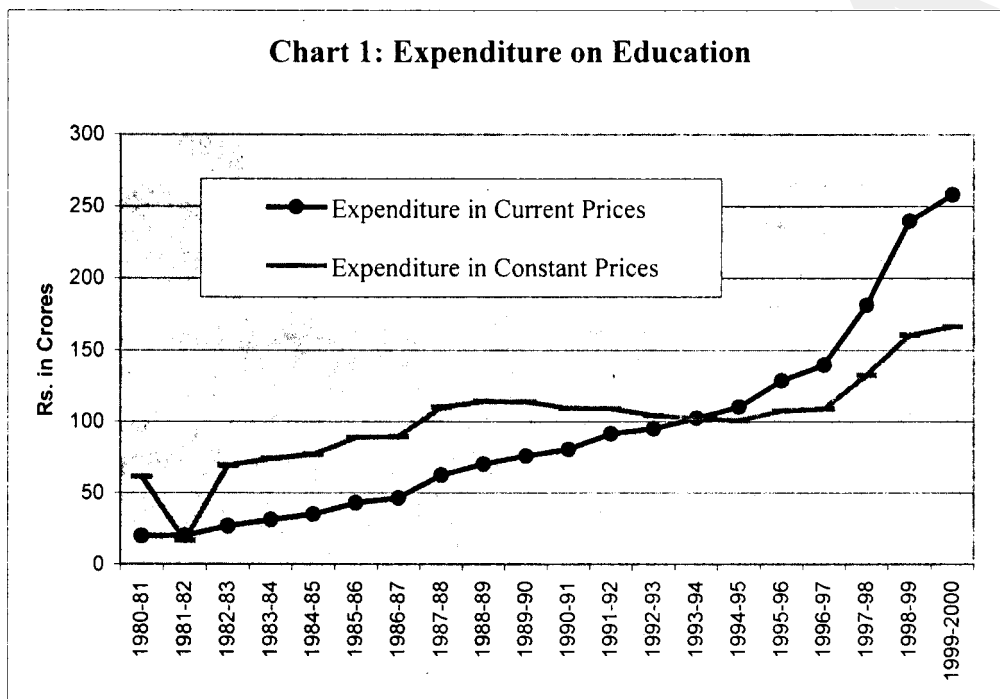
Financing of Secondary Education in Delhi

Investment on education in the National Capital Territory of Delhi, like most other states, is incurred out of the plan and non-plan budget head. Expenditure on education in the NCT of Delhi are incurred by such agencies as Directorate of Education, Directorate of Higher Education, Directorate of Technical Education, Municipal Corporation of Delhi (MCD), New Delhi Municipal Committee (NDMC), Cantonment Board and Kendriya Vidyalaya Sangathan (KVS). As expenditure on the Central Schools, which are run by the KVS are incurred by the Central Government, they are not reflected in the plan and non-plan budget of the Delhi government. The expenditures incurred by all other agencies mentioned above are included in the budget documents of the Delhi government. The present analysis is based on the same data.

State Support to Education in Delhi

Analysis of the data, during the past two decades, reveals that the expenditure on education in Delhi recorded a tremendous increase at least in absolute terms. From a meagre Rs. 1996 Lakhs in 1980-81, the expenditure on education shot up to Rs. 8557 Lakhs by the end of the decade. The expenditure on education continued to rise even during the nineties, despite resource crunch and by the year 1999-2000, the same touched nearly Rs. 26 thousand Lakhs. A closer look at the data on expenditure on education would, however, reveal that the rate of growth in the expenditure has not been consistent. Instead, the rate of increase in the expenditure has widely fluctuated from year to year basis as is evident from

the following, which shows that the rate of growth in expenditure on education has widely varied from 1 per cent to 36 per cent per year. In other word, this simply means that the government does not have a definitive policy with respect to educational expenditure and the sector suffers from lack of consistency [Chart



Plan Expenditure on Education

Plan expenditure on education symbolizes development expenditure as a major portion of such expenditure is used for establishing new schools and for developing further infrastructure and physical facilities in the existing schools. Besides, an analysis of the plan expenditure also indicates the relative importance that a government attaches to a particular sector of its economy. Given below are the total plan expenditures on all sectors of the economy of the Delhi and the plan expenditure on education during 6th through 9th Five-year Plans. The analysis spans over two decades and presents a good evidence of the priority and importance that the Delhi government has attached to education. Share of education in the total plan expenditure of Delhi has declined considerably over the past two decades or so. It is obvious from Table 2 that the share of education in the state has declined from about 13 per cent in the 6th Five Year Plan to less

expenditure on education does not show any consistent trend and keeps fluctuating from year to year. In absolute terms, however, the plan expenditure on education in Delhi has seen magnificent increase plan after plan, which is apparent from Table 2.

TABLE 2
Plan Expenditure on Education in Delhi

<i>Five Year Plan</i>	<i>Period</i>	<i>Total Plan Expenditure</i> (Rs. in Crores)	<i>Expenditure on Education</i>	<i>Education as Percentage of Total Plan</i>
Sixth Five-Year Plan	1980-85	1042.07	135.44	12.99
Seventh Five-Year Plan	1985-90	2631.47	222.89	08.47
Eighth Five-Year Plan	1992-97	6208.32	609.18	09.81
Ninth Five-Year Plan	1997-2002	15541.28	1080.75	06.95
Annual Plan	1997-98	1978.31	188.06	09.51
Annual Plan	1998-99	2054.56	228.97	11.15
Annual Plan	1999-2000	2298.20	235.62	10.25
Annual Plan	2000-2001	3129.11	211.20	6.75
Annual Plan (Outlay)	2001-2002	4200.00	301.62	7.18

Source: Economic Survey of Delhi for 1999-2000 & 2000-2001 as reported on <http://delhiplanning.nic.in>

It is evident from the data that the plan expenditure on education, which was only slightly more than Rs. 135 Crores during the 6th five-year plan, reached a level of Rs. 1080 Crores during the 9th five year plan period. Although the Table includes expenditure on all sectors of education - general, technical, elementary, primary, middle, secondary, senior secondary and higher - the case with investment in secondary and senior secondary education is not likely to be any different and the same is sought to be explained with the help of data on plan expenditure on general education as well as on education through Directorate of Education.

Utilization of Plan Grants

The plan expenditure on education, in general, and on secondary education has recorded considerable decline in Delhi but what is more worrisome is the fact that the state government has not been able to utilize a substantial portion of the available funds. Table 3 is a testimony of neglect that the NCTD has shown to the general education during the 9th Five-Year Plan period. A comparison of the approved outlay with the revised outlay and actual expenditure during the annual plan shows that both the revised outlay as well as actual expenditure have been

invariably lower than the approved outlay and the actual expenditure. So grave is the situation that the average actual expenditure during the 9th plan period has been no more than 61 per cent of the plan outlay. The data describes the status of the utilization of plan grants by all agencies engaged in general education but the case with the expenditure on general education by the Directorate of Education, which mainly accounts for the secondary and senior secondary education, is no different. In fact, the average actual plan expenditure by the Directorate of Education during the 9th Plan has been around 57% of the approved outlay for the plan period.

TABLE 3
Plan Expenditure on General Education during the 9th Five Year Plan

(Rupees in Crores)					
<i>Year</i>	<i>Approved Outlay</i>	<i>Revised Outlay</i>	<i>Actual Expenditure</i>	<i>Revised Outlay as Percentage of Approved Outlay</i>	<i>Actual Expenditure as Percentage of Approved Outlay</i>
By All Agencies					
1997-98	147.27	139.01	141.29	94%	96%
1998-99	238.51	234.39	183.13	98%	77%
1999-2000	264.00	212.82	190.68	81%	72%
2000-2001	309.55	238.00	175.61	77%	57%
2001-2002	323.30	254.24	97.96	79%	30%
Total	1282.63	1078.46	788.67	84%	61%
By Directorate of Education					
1997-98	80.97	78.00	81.84	96%	101%
1998-99	94.50	91.95	73.58	97%	78%
1999-2000	148.00	110.07	78.04	74%	53%
2000-2001	172.25	118.00	80.99	69%	47%
2001-2002	155.00	115.51	56.39	75%	36%
Total	650.72	513.53	370.84	79%	57%

Source: Annual Plan Appraisal Documents, <http://delhiplanning.nic.in>

Total Expenditure on Education

The state support to education comes from the Department of Education as well as many other Departments of the governments, which are engaged in educational activities. The analysis of budgeted expenditure on education provides details in this regard. The total expenditure on education by the Department of Education during 1989-90 to 1999-2000 has gone up from a mere Rs. 249 Crores to around Rs. 1100 Crores. As against this, the contribution of other Departments, which, in 1989-90, was about Rs. 22 Crores, has increased to

Rs. 72 Crores in 1999-2000. It may also be noted that the non-plan expenditure constitutes a predominant proportion of the total educational expenditure (Table 4).

TABLE 4
Expenditure on Education by the Education and Other Departments in Delhi at Current Prices

(Rupees in Crores)

Year	Education Department			Other Departments			All Departments		
	Plan	Non-Plan	Total	Plan	Non-Plan	Total	Plan	Non-Plan	Total
1989-90(A)	48.11	200.5	248.61	7.85	14.26	22.11	55.96	214.76	270.72
1990-91(A)	35.88	249.47	285.35	6.72	19.83	26.55	42.60	269.3	311.9
1991-92(RE)	54.72	263.8	318.52	6.71	22.43	29.14	61.43	286.23	347.66
1992-93(A)	65.99	280.56	346.55	5.48	25.07	30.55	71.47	305.63	377.10
1993-94(A)	39.71	91.86	131.57	3.6	9.03	12.63	43.31	100.89	144.20
1994-95(A)	81.55	329.22	410.77	14.97	30.1	45.07	96.52	359.32	455.84
1995-96(A)	110.02	369.2	479.22	10.45	38.82	49.27	120.47	408.02	528.49
1996-97(A)	114.43	435.55	549.98	14.18	40.56	54.74	128.61	476.11	604.72
1997-98(A)	99.26	660.5	759.76	13.49	34.36	47.86	112.75	694.86	807.62
1998-99(RE)	137.82	829.6	967.42	14.97	47.07	62.03	152.79	876.67	1029.45
1999-2000(BE)	197.17	898.51	1095.68	20.03	51.83	71.85	217.20	950.34	1167.53

Source: Analysis of Budgeted Expenditure for Different Years, Planning Monitoring & Statistics Division, MHRD, GOI

A further analysis reveals that the financial support to educational activities by the Education Department has increased much more rapidly than the financial support to education by other Departments of the Government. This is true both for the plan as well as non-plan assistance. Take, for example, the expenditure on education by the Education Department; the total expenditure on education has gone up by more than 3.5 times. Notably, the rate of increase has been steadier in case of the non-plan expenditure than the plan expenditure. It may also be noted from the above Table that the Department of Education is a major contributory to the financing of education in Delhi. The share of Education Department in total governmental support to education has gone up from 92 per cent in 1989-90 to 94 per cent in 1999-2000. In case of the Plan expenditure on education, the growth in the share of Education Department has been more pronounced. Share of education in the total budgeted expenditure of the Delhi Government has remained nearly stagnant over the past one decade or so as far as

the aggregate expenditure on education by the Education and other Departments is concerned.

In terms of constant prices (base year 1993-94) there has been increase in the plan and non-plan expenditure by Education Department as well as by the other departments. However, the increase has been pronounced in case of the non-plan expenditure than the plan expenditure (Table 4A).

TABLE 4A
Expenditure on Education by the Education and
Other Departments in Delhi
At Constant Prices; 1993-94=100

(Rupees in Crores)

Year	Education Department			Other Departments			All Departments		
	Plan	Non-Plan	Total	Plan	Non-Plan	Total	Plan	Non-Plan	Total
1989-90(A)	72.1	300.6	372.7	11.8	21.4	33.1	83.9	322.0	405.9
1990-91(A)	48.7	338.8	387.5	9.1	26.9	36.1	57.9	365.7	423.6
1991-92(RE)	65.3	314.9	380.2	8.0	26.8	34.8	73.3	341.7	415.0
1992-93(A)	72.5	308.0	380.5	6.0	27.5	33.5	78.5	335.6	414.0
1993-94(A)	39.7	91.9	131.6	3.6	9.0	12.6	43.3	100.9	144.2
1994-95(A)	74.4	300.4	374.8	13.7	27.5	41.1	88.1	327.9	415.9
1995-96(A)	92.1	309.0	401.1	8.7	32.5	41.2	100.8	341.5	442.3
1996-97(A)	89.2	339.6	428.8	11.1	31.6	42.7	100.3	371.2	471.5
1997-98(A)	72.5	482.4	554.9	9.9	25.1	35.0	82.4	507.5	589.9
1998-99(RE)	92.2	555.0	647.2	10.0	31.5	41.5	102.2	586.5	688.7
1999-2000(BE)	127.0	578.6	705.5	12.9	33.4	46.3	139.9	611.9	751.8

Source: Computed from Analysis of Budgeted Expenditure for Different Years, Planning Monitoring & Statistics Division, MHRD, GOI

Share of Education in Total Expenditure of Delhi

A closer examination reveals that the plan expenditure on education as percentage of total expenditure by the Education Department has declined from about 21 in 1989-90 to around 15 in 1998-99. However, the non-plan expenditure by the Education Department increased from 30 per cent in 1989-90 to nearly 36 per cent in 1998-99. Should we take expenditure on education by the Department of Education as well as by all other departments, the plan expenditure on education in Delhi sharply declined from about 24 per cent in 1989-90 to about 17 per cent in 1998-99. During the same period, however, the non-plan expenditure on education by all departments has gone up from 32 per cent to 38 per cent. It may be noted that the plan expenditure on education either by the

Education Department or by all departments put together shows a jumpv trend. As against this, there has been consistent increase as far as the non-plan expenditure on education is concerned (Table 5).

TABLE 5
Expenditure on Education as Percentage of Total Budgeted Expenditure of Delhi (Revenue Account)

<i>Year</i>	<i>By Education Department</i>			<i>By All Departments</i>		
	<i>Plan</i>	<i>Non-Plan</i>	<i>Total</i>	<i>Plan</i>	<i>Non-Plan</i>	<i>Total</i>
1989-90(A)	20.67	30.10	27.66	24.04	32.24	30.12
1990-91(A)	13.98	33.28	28.36	16.60	35.92	31.00
1991-92(RE)	17.97	32.67	28.64	20.17	35.45	31.27
1992-93(A)	29.36	29.36	29.36	31.80	31.98	31.95
1993-94(A)	15.53	36.44	25.91	16.93	40.03	28.39
1994-95(A)	19.70	32.38	28.71	25.31	35.33	31.85
1995-96(A)	20.26	27.68	25.53	22.18	30.59	28.15
1996-97(A)	17.71	31.43	27.07	19.91	34.36	29.76
1997-98(A)	15.67	39.12	32.72	17.80	41.15	34.78
1998-99(RE)	15.10	35.83	29.97	16.74	37.86	31.89
1999-2000(BE)	18.15	34.90	29.93	19.99	36.91	31.89

Source: Analysis of Budgeted Expenditure for Different Years, Planning Monitoring & Statistics Division, MHRD, GOI

State Support to Secondary Education

While the published sources of the Directorate of Education or the Directorate of Economics & Statistics of Delhi Government do not provide data on state support to secondary education, limited data on this level of education for Delhi is available through national level publications. Analysis of available information is presented in the following paragraphs. State support to secondary and senior secondary education in Delhi, like any other state, is provided through recurring and non-recurring grants. The total income of the secondary and senior secondary schools, at current prices, has seen quantum increase, as is evident from Table 6. During the period 1981-82 to 1992-93, the recurring income in case of Delhi constitutes 88 per cent of the total grant while non-recurring income constitutes 12 to 11 per cent of the total budgeted expenditure on secondary education. Over the year, the proportion of the recurring income has consistently increased to touch a level of about 89-90 per cent by 1992-93. An examination into the growth in recurring and non-recurring income of secondary and senior secondary school during the same period shows that although both the recurring as well as non-recurring income has increased, rate of growth in recurring income has been slightly higher than the growth in the non-recurring income. This only demonstrates that the rate of increase in investment in infrastructure has been

lower than the rate of increase in consumption and establishment expenditure as the recurring incomes are generally used to meet recurring expenditure of the schools.

TABLE 6
Income of Secondary and Senior Secondary Schools in Delhi

Years	Income (Rs in Crores)			Index Number			
	Recurring	Non-Recurring	Total	Recurring Income as Percentage of Total Income	Recurring Income	Non-Recurring Income	Total Income
1981-82	59.73	8.07	67.80	88%	100.0	100.0	100.0
1982-83	70.33	12.08	82.42	85%	117.8	149.7	121.6
1983-84	80.87	8.86	89.74	90%	135.4	109.8	132.3
1985-86	109.43	11.57	121.00	90%	183.2	143.3	178.5
1987-88	122.95	15.80	138.75	89%	205.8	195.7	204.6
1988-89	149.51	16.74	166.25	90%	250.3	207.3	245.2
1989-90	131.72	16.53	148.25	89%	220.5	204.7	218.6
1990-91	135.52	16.82	152.33	89%	226.9	208.3	224.7
1992-93	143.49	17.38	160.87	89%	240.2	208.3	237.3

Source: Education in India- Vol. II for Respective Years, Planning Monitoring & Statistics Division, MHRD, GOI

Recurring income to secondary and senior secondary schools arises from the government grants as well as fees received from the students. Besides, there are also such other contributing sources as endowments & donations. An analysis of the composition of sources of finance of secondary and senior secondary schools in Delhi shows that the contribution of the government sources has declined from about 72 per cent in 1981-82 to 68 per cent in 1992-93. In contrast, the contribution of fees from students has gone up from about 27 per cent in 1981-82 to 30 per cent in 1992-93. Contribution of other sources, on the other hand, has remained nearly stagnant at 2 to 3 per cent of the total income of the secondary and senior secondary schools. This analysis is severely constrained by certain data limitations. First, the data were available only up to the year 1992-93. Secondly, the data did not permit analysis by types of schools as the break-ups for the same were not available. These limitations have been overcome through alternative sources of data. It may, however, be noted that the data collected from the alternative sources may restrict comparability to some extent, as the different sources follow different classifications. The analysis of budgeted expenditure on education during the period 1989-90 through 1998-99 shows that the secondary education in Delhi has been getting between 69 to 70 per cent of the total educational budget of the state. It may, however, be noted that the share of the

secondary education in the total educational budget of the state indicates a somewhat oscillating trend (Table 7).

TABLE 7
Plan & Non Plan Expenditure on Secondary Education by
Education Department in Delhi (Revenue Account)

Year	Total Expenditure (Rupees in Crores)			Index Number			Share of Education in Total Expenditure (%)
	Plan	Non-Plan	Total	Plan	Non-Plan	Total	
1989-90(A)	21.53	149.74	171.27	100.00	100.00	100.00	68.89
1990-91(A)	5.70	182.69	188.39	26.47	122.01	110.00	66.32
1991-92(RE)	12.43	197.28	209.71	57.72	131.75	122.44	65.84
1992-93(A)	18.32	214.19	232.51	85.09	143.04	135.76	67.09
1993-94(RE)	25.54	237.31	262.86	118.66	158.48	153.48	71.94
1993-94(A)	9.81	67.58	77.39	45.58	45.13	45.19	58.82
1994-95(A)	26.81	255.52	282.33	124.52	170.64	164.84	68.73
1995-96(A)	42.40	287.29	329.68	196.96	191.85	192.49	68.80
1996-97(A)	25.39	346.39	371.79	117.96	231.33	217.08	67.60
1997-98(A)	11.02	532.71	543.73	51.19	355.75	317.47	71.57
1998-99(RE)	23.91	677.48	701.39	111.07	452.43	409.53	72.50
1999-2000(BE)	44.14	728.35	772.49	205.04	486.40	451.04	70.50

Source: Analysis of Budgeted Expenditure for different Years, Planning Monitoring & Statistics Division, Ministry of Human Resource Development, GOI

Further, as was the case with respect to the non-recurring expenditure on secondary education during the eighties, the plan expenditures on secondary education during the late eighties and throughout the nineties show substantial variations year after year. As against this, the non-plan expenditure on the sector has been somewhat more consistent. A consistent increase in the non-plan expenditure on secondary education is reflective of the incremental budgeting practices followed by different departments of the government. An incremental budgeting practice ensures that the next year's allocation is a little more than the previous year's expenditure. Besides, a substantial proportion of the non-plan expenditure of secondary and senior secondary schools is incurred on salaries of the teaching and non-teaching staff. This, being a committed expenditure, cannot be curtailed; hence, such expenditures continue to rise. The non-plan expenditure, on the other hand, though essential for quality improvement and long-term sustenance of institutions can be easily cut down in view of resource crunch. Quite naturally, not only the rate of increase in the plan expenditure on education by the Education Department of Delhi, during 1989-90 to 1999-2000,

has been far lower than the rate of increase in the non-plan expenditure during the corresponding period, but also there have been no consistent trend visible in the plan expenditure. Such expenditure, in fact, appears to widely fluctuate on year-to-year basis. 'At 1993-94, there has been a sharp increase in the total revenue expenditure on secondary education by the education department. But as noted with respect to the total expenditure on education, the rate of increase in the non-plan expenditure has been much more rapid than the rate of increase in the plan expenditure (Table 7A)

TABLE 7A
**Plan & Non-Plan Expenditure on Secondary Education by
 Education Department in Delhi (Revenue Account)
 Constant Prices (1993-94 =100)**

Year	<i>Total Expenditure (Rupees in Crores)</i>			<i>Index Number</i>		
	<i>Plan</i>	<i>Non-Plan</i>	<i>Total</i>	<i>Plan</i>	<i>Non-Plan</i>	<i>Total</i>
1989-90(A)	32.28	224.50	256.77	100.0	100.0	100.0
1990-91(A)	7.74	248.11	255.85	24.0	110.5	99.6
1991-92(RE)	14.84	235.48	250.32	46.0	104.9	97.5
1992-93(A)	20.11	235.17	255.29	62.3	104.8	99.4
1993-94(RE)	25.54	237.31	262.86	79.1	105.7	102.4
1993-94(A)	9.81	67.58	77.39	30.4	30.1	30.1
1994-95(A)	24.46	233.14	257.61	75.8	103.9	100.3
1995-96(A)	35.49	240.44	275.92	109.9	107.1	107.5
1996-97(A)	19.80	270.07	289.87	61.3	120.3	112.9
1997-98(A)	8.05	389.08	397.13	24.9	173.3	154.7
1998-99(RE)	16.00	453.22	469.21	49.6	201.9	182.7
1999-2000(BE)	28.42	468.99	497.42	88.0	208.9	193.7

Source: Computed from Analysis of Budgeted Expenditure for different Years, Planning Monitoring & Statistics Division, Ministry of Human Resource Development, GOI

The analysis of budgeted expenditure on education' does provide some clue as to the types of activities on which the plan and non-plan expenditure on secondary education is incurred. The analysis shows that the assistance to government schools has declined from 35 per cent in 1989-90 to 25 per cent in 1999-2000. Assistance to non-government schools during the same period also declined from 19 per cent to 15 per cent. So has been the case with respect to the assistance to the secondary and senior secondary schools run by the Local Bodies (Table 8).

TABLE 8
Distribution of Plan and Non-Plan Expenditure on Secondary Education by Education Department to Different Activities in Delhi (Revenue Account)

	5	<i>Assistance to</i>								
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1989-90(A)	0.58	35.13	18.68	0.64	0.00	0.3	0.00'	0.01	44.65	100.0
1990-91(A)	0.55	33.54	18.40	0.64	0.00	0.42	0.00	0.02	46.45	100.0
1991-92(RE)	0.58	31.93	17.51	0.73	0.00	0.51	0.00	0.05	48.69	100.0
1992-93(A)	0.52	31.18	16.67	0.84	0.00	0.45	0.00	0.00	50.34	100.0
1993-94(RE)	0.61	30.28	15.85	0.63	0.00	0.54	0.00	0.00	52.08	100.0
1993-94(A)	0.52	29.49	15.32	2.61	0.00	0.39	0.00	0.00	51.67	100.0
1994-95(A)	0.50	29.83	16.46	0.67	0.00	0.37	0.02	0.00	52.15	100.0
1995-96(A)	0.54	28.50	0.61	0.25	0.00	0.45	0.02	0.00	69.62	100.0
1996-97(A)	0.53	27.70	16.54	0.44	0.00	0.55	0.02	0.00	54.22	100.0
1997-98(A)	0.48	27.36	15.86	0.57	0.00	0.36	0.02	0.00	55.35	100.0
1998-99(RE)	0.48	26.32	15.38	0.53	0.00	0.49	0.02	0.01	56.77	100.0
1999-2000(BE)	0.51	25.20	15.29	0.48	0.00	0.52	0.13	0.02	57.85	100.0

Source: Computed from Analysis of Budgeted Expenditure for different Years, Planning Monitoring & Statistics Division, Ministry of Human Resource Development, GOI

The analysis is, however, incomplete and cannot fully comment on the extent to which state spends on the government and non-government sectors of education as significantly and increasingly a larger proportion of total expenditure on secondary education is classified under the head 'other expenditure'. The above analysis does provide an overview of the financing of secondary education in Delhi but it does not help in understanding the financing pattern in different types of schools. The description that follows is, therefore, intended to present a detailed analysis of the sources of finance of different types of secondary and senior secondary schools in Delhi.

Total Income of Different Types of Schools

Average of the Total Income of different types of schools in Delhi during the period 1995 through 2001 is given in Table 9. The Table indicates that the amount of total income of all types of schools increased considerably over time. However, at the 1995 prices the rate of increase has been only marginal and that

is true both for per school income as well as per student income of different types of schools.

TABLE 9
Total Income Received by Schools in Delhi

Year	At Current Prices			At Constant Prices		
	Aided	Govt.	Unaided	Aided	Govt.	Unaided
Per School Income (Rs in Lakhs)						
1995	28.08	50.63	75.93	28.08	50.63	75.93
1996	32.09	31.17	93.02	29.96	29.10	86.83
1997	34.10	40.05	82.78	30.22	35.50	73.37
1998	54.16	54.46	111.55	45.31	45.56	93.33
1999	59.58	80.66	128.11	46.81	63.37	100.64
2000	61.83	79.27	159.26	45.59	58.45	117.42
2001	56.11	82.89	180.62	39.34	58.12	126.64
% Increase	99.8%	63.7%	137.9%	40.1%	14.8%	66.8%
Per Student Income						
1995	3,020	4,666	4,602	3,020	4,666	4,602
1996	3,440	2,449	5,535	3,211	2,286	5,167
1997	3,887	3,741	5,176	3,445	3,316	4,588
1998	5,656	4,542	7,136	4,732	3,800	5,970
1999	6,783	6,182	8,096	5,329	4,857	6,360
2000	7,176	7,448	9,609	5,291	5,491	7,085
2001	6,09	7,783	10,688	4,564	5,457	7,494
% Increase	116%	67%	132%	51%	17%	63%

Importantly, however, the average of the total income of the unaided schools has invariably been higher than the government and aided schools and the difference between the total income of the unaided schools and the aided and government schools has increased rather sharply in recent years. A further analysis also reveals that during the seven years under study, the total income of private unaided schools has gone up rather sharply as it has increased by nearly 138 per cent. As against this, the total income of aided schools has risen only by 100 per cent during the same period. The worst sufferers have been the government schools where the increase in their total income was not more than 64 per cent. Given the variations in the average enrolment size of different types of schools, it seems pertinent to compute per student total income of different types of school* in Delhi. Analysis of per student total income across different types of schools indicates that the unaided schools have the highest income followed by the government schools. Per student total income is the lowest in case of the aided schools. It may also be noted that the difference between per student total income of different types of schools has further widened over time. The growth in per student total income of the three different types of schools is

only marginally different than growth in the total income of the different types of schools in absolute terms.

Non-Recurring Income of Different Types of Schools

The total income of schools comprises of recurring and non-recurring income. By definition, the non-recurring income does not accrue to a school definitely on year-to-year basis. These are, in a way, sporadic sources of income that may arise off and on; and, therefore, such incomes generally do not follow any definite pattern. Non-recurring income reported by different types of schools during the period 1995 through 2001 is presented in Table 10.

TABLE 10
Non-Recurring Income of Schools in Delhi

Year	At Current Prices			At Constant Prices		
	Aided	Govt.	Unaided	Aided	Govt.	Unaided
Per School Non-Recurring Income (In Rs.)						
1995	7,577	25,060	-	7577	25060	-
1996	5,192	27,373	269,106	4847	25552	251206
1997	4,416	40,188	16,466	3914	35620	14594
1998	24,340	32,406	499,265	20364	27113	417711
1999	12,808	88,534	503,716	10062	69553	395726
2000	10,031	53,187	293,612	7396	(9214	216479
2001	2,000	2,059	62,714	1402	1444	43973
Per Student Non-Recurring Income						
1995	8	23	-	8.0	23.0	-
1996	6	22	160	5.6	22.0	149.4
1997	5	38	10	4.4	33.7	8.9
1998	25	27	319	20.9	22.6	266.9
1999	15	68	318	11.8	53.4	249.8
2000	12	50	177	8.8	36.9	130.5
2001	2	2	37	14	14	25.9

1

Table 10 indicates that on an average the unaided school have been able to generate more of such income than the aided and the government schools. The efficacy of private unaided schools becomes more apparent when we analyze per student non-recurring income reported by different types of schools. It becomes obvious from the Table that while an aided school is able to generate non-recurring income only in tens, a government school is normally able to have them in twenties. But in sharp distinction, an unaided school generally reports per student non-recurring income in hundreds, at least five out of seven times.

Recurring Income of Different Types of Schools

Recurring incomes are the most reliable source of finance for a school as they have a high degree of certainty of occurrence year after year. Besides, the recurring income constitutes a major chunk of the total income of educational institutions and secondary and senior secondary schools in Delhi are no exception. It may be observed that such income constitutes nearly 98 to 99 per cent of the total revenue of schools. Analysis of data shows that the recurring income of different types of schools differs significantly. The private unaided schools have the highest recurring income followed by the government schools. The aided schools, somehow, generate the lowest level of recurring income (Table 11).

TABLE 11
Average Recurring Income Received by Schools in Delhi

Year	<u>At Current Prices</u>			<u>At Constant Prices</u>		
	<i>Aided</i>	<i>Govt.</i>	<i>Unaided</i>	<i>Aided</i>	<i>Govt.</i>	<i>Unaided</i>
	Per School Recurring Income (Rs. in Lakhs)					
1995	28.00	50.38	75.93	28.00	50.38	75.93
1996	36.21	30.89	90.33	33.80	28.84	84.32
1997	34.05	39.65	82.61	30.18	35.14	73.22
1998	53.92	54.14	106.55	45.11	45.30	89.15
1999	59.4*	79.78	123.07	46.70	62.68	96.69
2000	61.73	78.74	156.32	45.51	58.05	115.25
2001	56.11	82.87	179.99	39.34	58.11	126.20
% Increase	100*9%	64.49%	137.05%	40.51%	15.33%	66.21%
	Per Student Recurring Income					
1995	3,012	4,643	4,602	3,012	4,643	4,602
1996	3,881	2,427	5,375	3,623	2,266	5,017
1997	3,882	3,703	5,166	3,441	3,282	4,579
1998	5,630	4,515	6,817	4,710	3,777	5,703
1999	6,768	6,114	7,778	5,317	4,803	6,110
2000	7,^64	7,398	9,432	5,282	5,455	6,954
2001	6,509	7,781	10,651	4,564	5,456	7,468
% Increase	116.10%	67.59%	131.44%	51.52%	17.50%	62.28%

As was the case with the total income, the size disparity of different types of schools necessitate the computation of per student recurring income in order to have better understanding of a school's ability to generate recurring income. Such an analysis shows that the per student recurring income of government schools has gone up from Rs. 4,643 in 1995 to Rs. 7,781 in 2001. During the

same period, recurring income of the aided schools increased from Rs. 3,012 to Rs. 6,509. As against this, the recurring income of the unaided schools increased from Rs. 4,602 in 1995 to Rs. 10,651 in 2001. Obviously, the gap between per student recurring income of the private unaided schools vis'-a-vis government and aided schools has risen substantially. While in 1995 the unaided schools were generating recurring income, which was lower than what government schools were generating, today they generate around more than Rs. 4,000 per student per year in excess of what government schools get. It may also be noted that the rate of growth in the recurring income of different types of schools, both in absolute terms as well as in terms of per student, has not been uniform. The recurring income of the unaided schools in 2001 recorded an increase of about 137 per cent over 1995 whereas the recurring income of the government schools could grow only by about 64 per cent during the same period.

Grants-in-Aid in Different Types of Schools

Grants-in-aid are the financial support provided to a school out of public exchequer. At an aggregate level, it constitutes the single most important source of finance. Grants include the annual maintenance as well as the development grants. In case of aided school, maintenance and development grants are provided subject to certain limitations and ceilings, as discussed earlier. In case of government schools, the total expenditure is met out of the public exchequer. The private unaided schools are not entitled to receive any maintenance and development grants from the government. Data on the extent to which government sources contribute in the total recurring income of different types of schools is given in Table 12. An analysis of the sources of finance of different types of schools in Delhi shows that while unaided schools, do not receive any grant-in-aid, this source of finance constitutes an average 3.1 per cent of the total recurring income of the aided schools. Government schools, as would be expected, receive an average of 99 per cent of their recurring income through governmental sources.

TABLE 12
Grants as Percentage of Recurring Income of Schools in Delhi

<i>Year</i>	<i>1995</i>	<i>1996</i>	<i>1997</i>	<i>1998</i>	<i>1999</i>	<i>2000</i>	<i>2001</i>	<i>Average</i>
Aided	93.64	93.68	93.98	94.58	93.42	93.11	93.68	93.74
Government	99.06	98.14	99.44	99.54	99.65	98.84	97.96	99.02

The government of Delhi sanctions grants on the basis of deficit, which means the approved expenditure of a school adjusted by the estimated income generated by the school is sanctioned as grants. This is applicable both in case of government as well as aided schools. Thus the amount of grants has to vary from

school to school. Average amount of grants sanctioned to different types of schools in presented in Table 13.

TABLE 13
Grants in Aid to Different Types of Schools in Delhi

Year	<i>Per School Grants (Rs. In Lakh)</i>				<i>Per Student Grants</i>			
	<i>At Current Prices</i>		<i>At Constant Prices</i>		<i>At Current Prices</i>		<i>At Constant Prices</i>	
	<i>Aided</i>	<i>Govt.</i>	<i>Aided</i>	<i>Govt.</i>	<i>Aided</i>	<i>Govt.</i>	<i>Aided</i>	<i>Govt.</i>
1995	26.17	49.88	26.17	49.88	2,814	4,598	2814	4598
1996	34.16	30.29	31.89	28.28	3,662	2,380	3418	2222
1997	32.01	39.42	28.37	34.94	3,649	3,682	3234	3263
1998	50.90	53.89	42.59	45.09	5,315	4,494	4447	3760
1999	55.52	79.52	43.62	62.47	6,321	6,094	4966	4788
2000	57.40	77.88	42.32	57.42	6,662	7,318	4912	5396
2001	52.53	81.34	36.83	57.03	6,094	7,638	4273	5355
% Increase	101%	63%	41%	14%	117%	66%	52%	16%

It is obvious from the above Table that the amount of government support to government schools has been far more than the amount sanctioned to aided schools. However, over the years, the increase in the support to the aided schools has been on the rise as indicated in the Table. It may be noted that the amount of grants to the aided schools in 2001 is nearly double the amount that was sanctioned to these schools in 1995 whereby the amount of expenditure incurred in case of government schools during the same period has risen only by 63 per cent. The rate of increase in the grants notwithstanding, the per student government support in case of the government schools continues to be higher than in case of the aided schools. However, as was the case with grants-in-aid in absolute numbers, the per student grants to aided schools increased by more than 117 per cent during the period 1995 through 2001 as against an increase of only about 66 per cent in case of the government schools.

Fees from Students in Different Types of Schools

A portion of the cost of education, which is recovered from the students or parents thereof, is referred to as fees. As discussed on legal framework for education in Delhi, the government as well as the aided schools charge only a nominal amount of fees from students. The unaided schools are, however, permitted to charge any amount of fees from the student albeit with the condition that they must file their schedule of fees chargeable from students at the beginning of each academic year and that they are not permitted to enhance the amount of fees during the currency of the academic session. Besides, there are

also certain conditionalities with regard to the amount of certain types of fees and charges that these schools are expected to adhere to.

The amount of fees as percentage of total recurring income in case of the aided schools is about 2, while in case of the government schools fees do not constitute more than 77 per cent of their total recurring income. As against this, the fees constitute about 98 per cent of the total recurring receipts of the aided schools. The total amount of fees recovered from students under different heads is given in Table 14 and it may be observed that the same is very meagre in case of the government and aided schools but is a major chunk in case of the unaided schools. It may, however, be noted that during the past three years, the aided schools have, somehow, started raising significantly higher amount of fees from their students. An analysis of the per student total fees received by different types of schools in Delhi evinces the trend more clearly. It is obvious from the Table that the per student amount of fees received in the aided schools has gone up from Rs. 74 in 1995 to Rs. 246 in 2001. As against this the per student fees in the government schools has been in range of Rs. 20 to Rs. 47. In sharp contrast and as would be expected the per student fees in case of the unaided school has gone up from Rs. 4, 422 in 1995 to Rs. 10, 633 in 2001 (Table 14)

TABLE 14
Average Amount of Fees Received by Schools in Delhi

Year	At Current Prices			At Constant Prices		
	Aided	Govt.	Unaided	Aided	Govt.	Unaided
Per School Fees Collection (In Rs.)						
1995	68,437	49,333	7,296,862	68,437	49,333	7,296,863
1996	17,185	60,385	9,032,799	16,042	56,368	8,431,956
1997	59,106	22,208	8,126,205	52,388	19,684	7,202,539
1998	90,030	25,251	10,585,876	75,324	21,126	8,856,703
1999	178,266	26,025	11,895,101	140,048	20,446	9,344,939
2000	259,716	33,421	15,443,085	191,487	24,641	11,386,104
2001	212,167	152,471	17,970,000	148,763	106,906	12,599,834
% Increase	210%	209%	146%	117%	117%	73%
Per Student Fees Collection						
1995	74	45	4,422	74	45	4,422
1996	18	47	5,375	17	44	5,017
1997	67	21	5,082	59	19	4,504
1998	94	21	6,772	79	18	5,666
1999	203	20	7,517	159	16	5,905
2000	301	31	9,317	222	23	6,869
2001	246	143	10,633	172	100	7,455
% Increase	232%	218%	140%	133%	123%	69%

Donations & Endowments

Direct contribution from the society i.e. members of the public at large toward the development and maintenance of educational facilities is termed as donations and endowments. This source of finance has been dwindling quite fast and the secondary education in Delhi has been no exception. This source constitutes only a negligible portion of the total income of schools. In government schools, donations and endowments have been non-existent. The aided schools are able to raise between Rs. 1 Lakh to 1.5 Lakh each year through donations and endowments. The collection of donations and endowments in case of the unaided schools has been inconsistent and the amount was found to vary between a few thousands to a few Lakhs of Rupees in different years (Table 15).

TABLE 15
Average Amount of Endowment & Donations Received by Schools in Delhi

<i>School Type</i>	<i>1995</i>	<i>1996</i>	<i>1997</i>	<i>1998</i>	<i>1999</i>	<i>2000</i>	<i>2001</i>
Aided	115,378	190,202	144,900	211,933	214,896	173,100	145,667
Govt.			859			52,124	
Unaided	296,415		134,834	69413	412,403	189,410	29714

Cost of Secondary Education in Delhi

Studies are aplenty to establish that the cost of education and expenditure pattern have serious implications for financing of education. An investigation into the cost component and changes that have occurred in the structure of the cost is of utmost significance in arriving at policy decisions with respect to investment in education. This section, therefore, seeks to analyze the cost structure of the secondary and senior secondary schools in Delhi so as to ascertain the major items of expenditure and the type of variations that exist in the cost composition of different types of schools.

Total Expenditure on Secondary Education

The secondary and senior secondary schools incur expenditure on recurring and non-recurring items. Put together, the total expenditure by secondary and senior secondary schools increased from Rs. 67. 88 Crores in 1981-82 to Rs. 158.88 Crores in 1992-93. The share of recurring expenditure in the total expenditure of these schools has steadily gone up from about 85 per cent in 1981-82 to as much as 89 per cent by the year 1992-93. It may also be noted that the rate of increase in the recurring and non-recurring expenditure has not been uniform during the period.

TABLE 16
Recurring & Non-recurring Expenditure of Secondary Education in Delhi

Year	Expenditure (Rupees in Crores)			Share of Recurring Expenditure	Index Numbers	
	Recurring	Non-Recurring	Total		Recurring	Non-Recurring
1981-82	57.73	10.16	67.89	85%	100.00	100.00
1982-83	67.42	12.76	80.18	84%	116.80	125.58
1983-84	79.50	12.14	91.63	87%	137.71	119.48
1985-86	105.95	15.33	121.28	87%	183.54	150.91
1987-88	122.33	16.35	138.67	88%	211.90	160.99
1988-89	147.20	16.35	163.54	90%	254.98	160.93
1989-90	129.43	16.11	145.54	89%	224.20	158.61
1990-91	132.41	17.18	149.59	89%	229.37	169.12
1992-93	141.42	17.42	158.84	89%	244.97	171.54

Source: *Education in India - Vol. II* for respective Years, Planning, Monitoring & Statistics Division, MHRD, GOI

It is obvious from the following Table that during the period 1981-82 to 1992-93, the recurring expenditure of secondary and senior secondary schools grew by almost 150 per cent whereas the increase in the non-recurring expenditure has been only to the tune of 50 per cent during the corresponding period. Details of total recurring expenditure incurred by the secondary and senior secondary schools of Delhi are given in Table 17.

TABLE 17
Composition of Recurring Expenditure of Secondary and Senior Secondary Schools in Delhi

Year	Teaching Salaries	Non-teaching Salaries	Hostels	3	Scholarship	Apparatus/ Chemicals	Other Items	Total Recurring Expenditure
1981-82	74%	9%	1%	2%	3%	1%	11%	100%
1982-83	75%	9%	1%	2%	2%	1%	10%	100%
1983-84	76%	10%	1%	2%	2%	1%	9%	100%
1985-86	77%	10%	0%	2%	2%	1%	9%	100%
1987-88	82%	9%	0%	1%	1%	1%	5%	100%
1988-89	82%	9%	0%	1%	1%	1%	5%	100%
1989-90	82%	9%	0%	1%	1%	1%	5%	100%
1990-91	82%	9%	0%	1%	1%	1%	5%	100%
1992-93	81%	10%	0%	1%	1%	1%	5%	100%

Source: *Education in India - Vol. II* for respective Years, Planning, Monitoring & Statistics Division, MHRD, GOI

Further analysis indicates that salaries of the teaching staff constitute a major chunk of the total recurring expenditure of the secondary and senior secondary schools. Salaries of teaching staff, which accounted for nearly 74 per cent of the recurring expenditure in 1981-82 consume as much as 81 per cent of the recurring expenditure in 1992-93. The salaries of the non-teaching staff during the corresponding period have, however, remained static at 9-10 per cent of the recurring expenditure. Expenditure on scholarship and libraries, as proportions of total recurring expenses has declined. As regards non-recurring expenditure, the building constitutes a major chunk as it consumes more than 80 per cent of the total non-recurring income [Table 18].

TABLE 18
Non-Recurring Expenditure on Secondary Education in Delhi

Year	Expenditure (Rs. in Thousands)				Distribution			
	Library	Building	Other Items	Total	Library	Building	Other Items	Total
1981-82	1495	87205	12874	101574	1.5%	85.9%	12.7%	100.0%
1982-83	1484	110379	15697	127560	1.2%	86.5%	12.3%	100.0%
1983-84	1109	104905	15342	121356	0.9%	86.4%	12.6%	100.0%
1985-86	1780	127548	23957	153285	1.2%	83.2%	15.6%	100.0%
1987-88	2212	135308	25999	163519	1.4%	82.7%	15.9%	100.0%
1988-89	2722	134841	25899	163462	1.7%	82.5%	15.8%	100.0%
1989-90	2216	130289	28605	161110	1.4%	80.9%	17.8%	100.0%
1990-91	2236	139299	30247	171782	1.3%	81.1%	17.6%	100.0%
1992-93	2616	141327	30300	174243	1.5%	81.1%	17.4%	100.0%

Source-. *Education in India - Vol. 11 for respective Years, Planning Monitoring, & Statistics Division, MHRD, GOI*

It is obvious from the analysis that there is minimal investment in library facilities as no more than one and a half per cent of the non-recurring expenditure is incurred on this item. In recent years, however, the proportionate expenditure on other items has assumed some prominence over building and construction. It is, therefore, not surprising to find bare classrooms with minimal furniture even in some of the best government schools. It may also be indicated here that the rate of increase in the non-recurring expenditure in the secondary and senior secondary schools of Delhi has been lower than the rate of increase in the recurring expenditure. Amongst the different items of non-recurring expenditure, the rate of increase in items other than the building and library has been the highest.

Total Annual Expenditure of Different Types of Schools

Total expenditure of a school consists of recurring as well as non-recurring expenditure on different educational activities. Average of the total (Recurring and Non-recurring) expenditure as worked out for different types of schools is presented in Table 19.

It is apparent from the Table that the total expenditure in all the three types of schools has been on the rise during the period 1995-2001, albeit with the rate of increase being different for different types of schools. It may be noted that while the total expenditure of the private unaided schools has increased by about 2.5 times, the rate of increase in case of the aided schools has been 2 times. In sharp contrast, the rate of increase in the government schools has been to the extent of only about 79 per cent.

TABLE 19
Total Expenditure (Recurring & Non-recurring) of Schools in Delhi

Year	<i>At Current Prices</i>			<i>At Constant Prices</i>		
	<i>Aided</i>	<i>Govt.</i>	<i>Unaided</i>	<i>Aided</i>	<i>Govt.</i>	<i>Unaided</i>
Per School Expenditure (Rs. in Lakhs)						
1995	28.08	46.18	71.37	28.08	46.18	71.37
1996	32.10	31.19	89.98	29.96	29.11	84.00
1997	33.29	40.05	81.24	29.51	35.49	72.01
1998	54.16	63.10	125.62	45.32	52.79	105.10
1999	59.72	80.66	129.16	46.91	63.37	101.47
2000	61.74	79.34	154.65	45.52	58.50	114.02
2001	56.12	82.61	177.38	39.35	57.92	124.37
% Increase	75%	165%	97%	31%	99%	48%
Per Student Expenditure						
1995	3,020	4,256	4,325	3020	4256	4325
1996	3,440	2,450	5,355	3211	2287	4999
1997	3,795	3,741	5,080	3364	3316	4503
1998	5,656	5,263	8,036	4732	4403	6723
1999	6,799	6,182	8,163	5341	4857	6413
2000	7,166	7,455	9,331	5283	5497	6880
2001	6,510	7,757	10,496	4565	5439	7359
% Increase	89%	217%	96%	42%	138%	47%

It may also be noted that even in absolute terms, the total expenditure of the unaided schools has been far greater than the total expenditure of the aided and government schools. An unaided school invariably spent three times the amount spent by an aided school and nearly about two times the amount spent by a

government school. Much of this difference in the total expenditure incurred by different types of schools could be due to the variations in the enrolment size. Analysis of per student total expenditure clearly proves the point. It may, however, be noted that even in terms of unit cost, the amount of, as well as the rate of increase in total expenditure on education has been the highest in case of the unaided schools and the lowest for the aided schools. It may, therefore, not be wrong to conclude that the government and aided schools suffer from under-investment and the trend may aggravate as the time passes by unless some immediate corrective actions are initiated.

Recurring Expenditure of Different Types of Schools

Recurring expenditure constitutes a major chunk of the total expenditure of an average school. In case of government and aided schools such expenditure constitutes nearly 100 per cent of the total expenditure while in the unaided schools the proportion of such expenditure works out to be around 92 per cent. In absolute terms, the total recurring expenditure has been found to be the highest in private unaided schools and the lowest in case of aided schools. As was the case with the total expenditure, an average unaided school spends a far greater amount on recurring expenditure as compared to an aided or a government school. Besides, the recurring expenditure in the private unaided schools has recorded higher growth rate (169%) as compared to the aided (100%) and government (80%) schools (Table 20).

In terms of unit recurring cost, the expenditure in government schools increased from Rs. 4,236 in 1995 to Rs. 7,753 in 2001. In contrast, the per student expenditure in the unaided schools has gone up from Rs. 3,677 to Rs. 9,652 during the corresponding period. It may be observed that while in 1995, the unaided schools were spending lower than the government schools, they have gradually raised their level of per student spending to become significantly higher than the amount incurred by the aided and the government schools. Notably per student recurring expenditure of the unaided schools has also been increasing at a rate, which is much higher than the rate of increase in the government and the aided schools. This is evident from the fact that during the period 1995-2001, the per student recurring expenditure of the unaided schools increased by 116 per cent as compared to only 116 per cent in the aided and just 83 per cent in the government schools.

TABLE 20
Total Recurring Expenditure of Schools in Delhi

<i>i eur</i>	<i>At Current Prices</i>			<i>At Constant Prices</i>		
	<i>Aided</i>	<i>Govt.</i>	<i>Unaided</i>	<i>Aided</i>	<i>Govt.</i>	<i>Unaided</i>
Per School Recurring Expenditure (Rs in Lakhs)						
1995	28.01	45.96	60.67	28.01	45.96	60.67
1996	32.04	30.91	77.16	29.91	28.86	72.03
1997	33.26	39.64	73.35	29.48	35.14	65.01
1998	53.92	62.82	97.29	45.11	52.56	81.40
1999	59.59	79.78	118.96	46.81	62.67	93.46
2000	61.64	78.81	140.97	45.45	58.10	103.93
2001	56.10	82.57	163.11	39.34	57.89	114.37
% Increase	100%	80%	169%	40%	26%	89%
Per Student Recurring Expenditure						
1995	3,012	4,236	3,677	3012.00	4236.00	3677.00
1996	3,435	2,429	4,592	3206.51	2267.43	4286.55
1997	3,791	3,703	4,587	3360.10	3282.10	4065.62
1998	5,630	5,240	6,224	4710.36	4384.06	5207.33
1999	6,784	6,114	7,518	5329.59	4803.23	5906.23
2000	7,154	7,405	8,505	5274.61	5459.67	6270.69
2001	6,508	7,753	9,652	4563.15	5436.09	6767.59
% Increase	116%	83%	162%	51%	28%	84%

Expenditure on Total Salaries in Different Types of Schools

Educational institutions, despite all technological innovations and development in the field of educational technology, continue to be labour-intensive enterprises. Human resources, therefore, are considered the most important assets and quite naturally, such institutions incur a large sum of money towards the payment of compensation to the human resources employed by them. Expenditure on salaries of teaching and non-teaching staff constitutes a predominant proportion of the total recurring expenditure in a typical educational institution. The case of secondary and senior secondary schools in Delhi does also follow similar trends. However, the differences across the three different types of schools are noticeable. It may be seen that while government and aided schools spend nearly 97 to 98 per cent of their recurring budget on salaries of human resources; this component of expenditure constitute, only about 70 per cent of the recurring budget of an unaided school (Table 21).

TABLE 21
Average Expenditure on Total Salaries in Schools of Delhi (Rs. in Lakhs)

Year	At Current Prices			At Constant Prices		
	Aided	Govt.	Unaided	Aided	Govt.	Unaided
1995	26.93	44.51	38.65	26.93	44.51	38.65
1996	30.86	29.79	49.94	28.81	27.81	46.61
1997	32.41	38.48	43.79	28.73	34.11	38.81
1998	52.26	61.84	59.96	43.72	51.74	50.17
1999	58.05	78.06	79.20	45.60	61.32	62.22
2000	59.76	75.86	95.51	44.06	55.93	70.42
2001	54.90	79.97	114.67	38.49	56.07	80.40
% Increase	10.72%	13.58%	29.13%	4.43%	4.43%	16.00%

Expenditure on total salaries precisely follows the same trend as has been discussed in case of the total and recurring expenditure. An aided school invariably was found to be spending the lowest sum of money on salaries of teaching and other staff. While a government school used to spend the highest sum of money on salaries in 1995, it spends far less than what is being spent by an unaided school. It may also be noted that while the expenditure on salaries in the unaided schools has been consistently on the rise, the government and aided schools show a fluctuating trend. Thus the rate of growth in the expenditure on salaries has not been even and uniform for all the three different types of schools. One of the probable reasons could be that in certain years, a number of positions falling vacant in government and aided schools may remain unfilled for procedural delays, thereby pulling the expenditure on salaries down.

Expenditure on Salaries of Teaching Staff in Different Types of Schools

Salaries of teaching staff constitute bulk of the total expenditure on salaries in all the three types of schools. In the aided schools, teaching staff salaries account for nearly 86 per cent of their salary budgets. The case of the unaided schools is also somewhat similar as the average expenditure on salaries of teaching staff works out to be about 86 per cent. As against this, the teaching salaries in the government schools work out to be around 90 per cent. Interestingly, the trend has remained steady over the years. In absolute terms, the total expenditure on salaries of teaching staff in the unaided schools has grown much more rapidly than in the government and the aided schools. Notably, the rate of increase in the expenditure on salaries of teaching staff in the unaided schools has been higher than the rate of increase in the total recurring expenditure of these schools (Table 22).

TABLE 22
Expenditure on Salaries of Teachers in Schools of Delhi

Year	Total Salary (Rs in Lakhs)			Per Student Salary (in Rs)			Per Teacher Salary (Rs. in Thousands)		
	Aided	Govt.	Unaided	Aided	Govt.	Unaided	Aided	Govt.	Unaided
At Current Prices									
1995	23.37	40.69	31.92	2,513	3,750	1,935	68.73	101.72	51.49
1996	26.99	26.69	42.07	2,893	2,097	2,504	79.05	61.09	67.60
1997	28.17	34.74	39.82	3,211	3,245	2,490	85.72	89.90	63.04
1998	46.44	56.09	52.99	4,849	4,678	3,390	141.43	118.54	90.71
1999	50.19	71.67	67.99	5,715	5,493	4,297	160.74	164.90	113.05
2000	51.75	69.1	79.25	6,006	6,493	4,781	166.51	178.25	126.11
2001	46.33	73.94	95.64	5,374	6,942	5,659	144.77	184.84	151.82
% Increase	98%	82%	200%	114%	85%	192%	111%	82%	195%
At Constant Prices									
1995	23.37	40.69	31.92	2513	3750	1935	68.73	101.72	51.49
1996	25.19	24.91	39.27	2701	1958	2337	73.79	57.02	63.10
1997	24.97	30.79	35.29	2846	2876	2207	75.97	79.68	55.88
1998	38.85	46.93	44.33	4057	3914	2836	118.33	99.18	75.89
1999	39.43	56.30	53.41	4490	4315	3376	126.28	129.55	88.81
2000	38.15	50.95	58.43	4428	4787	3525	122.77	131.42	92.98
2001	32.48	51.84	67.06	3768	4867	3968	101.50	129.60	106.45
% Increase	39%	27%	110%	50%	30%	105%	48%	27%	107%

It is emphasized time and again that different types of schools are of different sizes, hence a more appropriate measure to assess spending on the teaching staff salaries would be the per student cost of teaching staff. Such an analysis demonstrates two points very clearly. First, the per student expenditure on salaries of teaching staff has been growing rather rapidly in the unaided schools as compared to the government and aided schools. This is in conformity with the general trend that has been observed while analyzing the total and recurring expenditure of the different types of schools. Secondly and most importantly, per student expenditure on salaries of teaching staff continues to be the highest in case of the government schools. The finding is also corroborated by the analysis of student-teacher ratio which clearly showed that the student-teacher ratio and section sizes are lower in the government schools than in the unaided school. Quite naturally, and as proved by the data, this would entail higher unit cost of education.

Higher student-teacher ratio and better capacity utilization in the private unaided schools, however, may not be the sole reason for lower unit cost on account of teaching salaries. There are also indications that the average per teacher salary in the unaided schools still continues to be lower than the salaries of the government school. However, in recent years, particularly after the

directives of the Directorate that the private unaided schools would have to pay appoint qualified and trained teachers and at the same terms and conditions on which such teachers are appointed in the government and aided schools, the per teacher expenditure on salaries of the teaching staff in the unaided schools has considerably increased. It may also be mentioned here that the above should not be construed as if the private unaided schools pay lower salaries to their teachers. The per-teacher salary expenditure may vary on account of such other reasons as the scale of pay in which teachers are appointed, the ratio of TGTs and PGTs and their seniority in the position.

Expenditure on Salaries of Non-teaching Staff in Different Types of Schools

The non-teaching, administrative, supporting and technical staff is also crucial for the smooth functioning of a school, thereby necessitating expenditure on salaries of such staff. An analysis of such expenditure in different types of schools indicates that the unaided schools have been spending substantial amount as compared to the government and aided schools and in recent years, the trend has further accentuated. Part of variations in expenditure on salaries of the non-teaching staff is explained by variations in the enrolment size of these schools. Still, however, the unaided schools spend greater amount on this head of expenditure (Table 23).

TABLE 23

Expenditure on Salaries of Non-Teaching Staff in Schools of Delhi

Year	At Current Prices			At Constant Prices		
	Aided	Govt.	Unaided	Aided	Govt.	Unaided
	Per School Expenditure (Rs. in Lakhs)					
1995	3.57	3.82	6.72	3.57	3.82	6.72
1996	3.87	3.1	7.86	3.61	2.89	7.34
1997	4.24	3.74	3.97	3.76	3.31	3.52
1998	5.81	5.75	6.97	4.86	4.81	5.83
1999	7.86	6.38	11.21	6.17	5.01	8.81
2000	8.01	6.76	16.26	5.91	4.98	11.99
2001	8.58	6.03	19.03	6.02	4.23	13.34
% Increase	122%	95%	142%	67%	46%	82%
	Per Student Expenditure					
1995	383	353	408	383	353	408
1996	415	244	468	387	228	437
1997	484	350	248	429	310	220
1998	607	480	446	508	402	373
1999	894	489	709	702	384	557
2000	930	635	981	686	468	723
2001	995	566	1,126	698	397	790
% Increase	140%	132%	141%	80%	74%	81%

Recurring Expenditure on Apparatus in Different Types of Schools

Apparatus and equipment are other educational inputs considered essential for quality performance of schools. Expenditure on this head may, in fact, be considered essential as such expenditure promotes effectiveness of teachers and the teaching-learning process. Resource crunch in the government and aided schools has been sharply visible in this head of expenditure more than any other budget head [Table 24]. It may be seen that while government and aided schools spend money only in thousands as far as the equipment and apparatus are concerned, the private unaided schools have been spending money on such items in Lakhs. Not only that, the private unaided schools have also been more consistent in their approach toward expenditure on these types of items and activities. It may also be noted that even the aided schools report some consistency in so far as such expenditures are concerned. The government schools, however, do not have any consistent trend and it seems that the expenditure on this head is dependent on the availability of funds. In terms of per student expenditure on apparatus and equipment, an average unaided school spends in hundreds while government and aided schools are able to allocate only in tens.

TABLE 24
Average Recurring Expenditure on Apparatus in Schools of Delhi

<i>Years</i>	<i>Aided</i>	<i>Govt.</i>	<i>Unaided</i>	<i>Aided</i>	<i>Govt.</i>	<i>Unaided</i>
Per School Expenditure (Rs. in Thousands)						
1995	8.75	22.24	92.94	8.75	22.24	92.94
1996	9.62	19.54	142.04	8.98	18.24	132.59
1997	10.45	11.68	244.99	9.27	10.35	217.14
1998	11.22	8.26	96.30	9.39	6.91	80.57
1999	4.97	16.71	147.47	3.90	13.12	115.85
2000	20.31	30.88	142.65	14.98	22.77	105.18
2001	27.33	3.59	219.57	19.16	2.52	153.95
% Increase	212%	-84%	136%	119%	-89%	66%
Per Student Expenditure						
1995	9	20	56	9	20	56
1996	10	15	85	9	14	79
1997	12	11	153	11	10	136
1998	12	7	62	10	6	52
1999	6	13	93	5	10	73
2000	24	29	86	18	21	63
2001	32	3	130	22	2	91
% Increase	256%	-85%	132%	149%	-89%	63%

Expenditure on Scholarship in Different Types of Schools

Scholarships serve twin purposes. On the one hand, they are used as a reward to provide incentives to the intelligent and hardworking students, on the other hand, they are also used to provide financial support to the meritorious but needy students. Often, scholarships are also used to promote equity and social justice. Analysis of data on expenditure on scholarship in different types of schools shows that the private unaided schools have been spending significantly higher amount on scholarship (Table 25).

TABLE 25
Average Expenditure on Scholarship in Schools of Delhi

Years	Aided	Govt.	Unaided	Aided	Govt.	Unaided
Per School Expenditure (Rs. in Thousands)						
1995	6.28	23.45	92.58	6.28	23.45	92.58
1996	5.81	15.46	99.38	5.43	14.43	92.77
1997	10.81	14.16	127.72	9.58	12.55	113.21
1998	12.55	13.37	107.86	10.50	11.19	90.24
1999	13.24	38.21	110.95	10.40	30.02	87.16
2000	8.13	67.78	140.16	5.99	49.97	103.34
2001	9.83	51.94	233.86	6.90	36.42	163.97
% Increase	57%	122%	153%	10%	55%	77%
Per Student Expenditure						
1995	7	22	56	7	22	56
1996	6	12	59	6	11	55
1997	12	13	80	\\	12	71
1998	13	11	69	11	9	58
1999	15	29	70	12	23	55
2000	9	64	85	7	47	63
2001	11	49	138	8	34	97
% Increase	57%	123%	146%	10%	56%	73%

Besides, the expenditure on scholarship in such schools has been going up steadily and in a consistent manner. As against this, the government and aided schools have been spending only meagre sums on scholarship and do not have any consistent approach, as the amount of scholarship has been found to vary from year to year basis. Per student expenditure on scholarship in unaided schools, it may be observed, has consistently increased from Rs. 56 in 1995 to Rs. 85 in 2000. During the same period, the government and aided schools have mostly been spending Rs. 11 to 50 on scholarship.

Expenditure on Library in Different Types of Schools

Library is considered to be the backbone of an educational institution. A good and well-maintained library enables students to get access to quality books. Schools must, therefore, be spending appropriate sums of money on development and maintenance of libraries. Analysis of recurring and non-recurring expenditure on library facilities in the different types of schools shows that the aided schools have gradually raised their spending on library recording a growth of over 109 per cent during the period 1995-2001. The library expenditure in the government school has also increased, albeit in a jumpy manner. It may, however, be observed that like most other types of expenditure, the private unaided schools have generally been spending higher amount on library development than the government and aided schools. In fact, the government schools spend lower sums of money on library development and maintenance as compared to the unaided and aided schools (Table 26).

TABLE 26
**Total Expenditure on Maintenance and Development of Library in
Schools of Delhi**

<i>Years</i>	<i>Aided</i>	<i>Govt.</i>	<i>Unaided</i>	<i>Aided</i>	<i>Govt.</i>	<i>Unaided</i>
Per School Expenditure (Rs. in Thousands)						
1995	29.864	26.793	54.093	29.86	26.79	54.09
1996	37.346	19.919	104.992	34.86	18.59	98.01
1997	35.295	21.689	122.091	31.28	19.22	108.21
1998	39.842	27.629	85.018	33.33	23.12	71.13
1999	50.879	56.056	82.231	39.97	44.04	64.60
2000	59.529	33.138	68.00	43.89	24.43	50.14
2001	62.333	37.529	83.429	43.71	26.31	58.50
% Increase	109%	40%	54%	46%	-2%	8%
Per Student Expenditure						
1995	32	25	33	32	25	33
1996	40	16	62	37	15	58
1997	40	20	76	35	18	67
1998	42	23	54	35	19	45
1999	58	43	52	46	34	41
2000	69	31	41	51	23	30
2001	72	35	49	50	25	34
% Increase	125%	40%	48%	58%	-2%	4%

Even in terms of per student spending on library, it is the aided and unaided private schools that spend the highest amount. However, the expenditure does not show any consistent pattern. What is, however, apparent is that the private unaided schools invariably spend larger sums on library than the government and aided schools.

Miscellaneous Recurring Expenditure in Different Types of Schools

Miscellaneous expenditures are an integral part of the operation of any enterprise and educational institutions cannot be an exception. They too are required to meet expenses on contingencies, postage, stationery, chalks, duster, educational tools and aids. An analysis of expenditure on such items in different types of schools shows that the government and aided schools have been spending far less amount as compared to the private unaided schools. A clearer picture emerges, when one analyzes per student expenditure on miscellaneous expenditure. The government and aided schools spend at the most in hundreds whereas the unaided schools, which were spending about Rs. 1,166 in 1995 on miscellaneous activities, have raised their expenditure to the level of Rs. 2,560 by the year 2001 (Table 27).

TABLE 27
Miscellaneous Recurring Expenditure in Schools of Delhi

Year	<i>At Current Prices</i>			<i>At Constant prices</i>		
	<i>Aided</i>	<i>Govt.</i>	<i>Unaided</i>	<i>Aided</i>	<i>Govt.</i>	<i>Unaided</i>
Per School Miscellaneous Expenses (Rs. in Thousands)						
1995	63.28	75.43	1923.99	63	75	1924
1996	65.68	60.38	2323.98	61	56	2169
1997	42.73	71.20	2464.55	38	63	2184
1998	103.96	51.52	3472.28	87	43	2905
1999	85.07	88.50	3680.28	67	70	2891
2000	104.18	167.78	4050.72	77	124	2987
2001	20.50	168.53	4326.71	14	118	3034
% Increase	-68%	123%	125%	-77%	57%	58%
Per Student Miscellaneous Expenses						
1995	68	70	1166	68	70	1166
1996	70	47	1383	65	44	1291
1997	49	67	1541	43	59	1366
1998	109	43	2221	91	36	1858
1999	97	68	2326	76	53	1827
2000	121	158	2444	89	116	1802
2001	24	158	2560	17	111	1795
% Increase	-65%	126%	120%	-75%	58%	54%

Non-Recurring Expenditure in Different Types of Schools

Non-recurring expenditures indicate investment in creation of additional facilities in schools and are indicative of growth. Such expenditures are incurred on addition, and alterations in school building, major renovation, major maintenance of existing building and the like. As was the case with the recurring expenditure, the non-recurring expenditure, too is only meagre in the government and aided schools. In fact, the government schools still spend higher expenditure on non-recurring activities. In sharp contrast, the private unaided schools spend far greater sums on non-recurring heads of expenditure. Obviously, per student expenditure on non-recurring items in unaided schools runs in the range of hundreds whereas the aided schools spent at the most Rs. 25 per student per year in only one out of the seven years under investigation. The government schools, nonetheless, spend a bit higher amount (Table 28).

TABLE 28
Non-Recurring Expenditure in Schools of Delhi

Years	At Current Prices			At Constant Prices		
	Aided	Govt.	Unaided	Aided	Govt.	Unaided
Per School Non Recurring Expenditure (Rs. in Thousands)						
1995	7.58	21.71	1,069.74	7.58	21.71	1069.74
1996	5.18	27.37	1,282.09	4.84	25.55	1196.80
1997	3.72	40.19	789.59	3.30	35.62	699.84
1998	24.39	27.86	2,832.86	20.40	23.31	2370.12
1999	12.81	88.53	1,020.26	10.06	69.55	801.53
2000	10.03	53.19	1,368.58	7.40	39.21	1009.05
2001	1.50	4.12	1,426.43	1.05	2.89	1000.15
% Increase	-80%	-81%	33%	-86%	-87%	-7%
Per Student Non Recurring Expenditure						
1995	8	20	648	8	20	648
1996	6	22	763	6	21	712
1997	4	38	494	4	34	438
1998	25	23	1,812	21	19	1516
1999	15	68	645	12	53	507
2000	12	50	826	9	37	609
2001	2	4	844	1	3	592
% Increase	-75%	-80%	30%	-82%	-86%	-9%

The above analysis is a clear indication that the government and the aided schools, that largely rely on state support, have over the years been subject to

gross neglect and have been investing considerably lower sums on different education inputs. As against this, the private unaided schools in recent years have stepped up their spending on educational inputs and processes. The analysis leads to the obvious conclusion that unless major emphasis is given to the investment in public funded schools, they would lose out in favour of the private unaided schools.

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Private Education in West Africa: The Technological Imperative

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Abstract

The paper considers the growth of private education in four West African countries: Mauritania, The Gambia, Cote d'Ivoire and Senegal, that are undertaking measures to improve educational outcomes by including the private sector (for- and non-profit, as well as community, mission and NGO schools). The education market in each country is analyzed and the development of the private sector is assessed. Government policy is reviewed and the prospects for future growth are discussed. Information from the World Bank Group initiative to facilitate education investment information, (EdInvest) is used to discuss demand for and efforts by educational institutions to maintain access to new technologies and encourage wider ownership and partnerships in information and communication technology. A discussion of the EdInvest program sheds light on the role of external finance in strengthening science and technology capacity and shared ownership of technologies. The technological imperative for Africa is discussed in light of the potential of using information and communication technologies to improve access, quality, relevance and equity of education.

Introduction

Private financing and contributions have traditionally played a significant role in education provision. Increasing awareness of the importance of education for economic and social growth led many governments to prioritize public provision of education during the 20th century (Watkins, 1999). The main product has been the expansion of schooling. However, this expansion has not equally reached all members of society, including rural communities, girls, indigenous groups and

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children with learning disabilities. In most cases, the public provision of schooling has also not capitalized on the potentials of using information and communication technologies (ICTs) to enhance access to quality and relevance of and efficiency in the delivery of education.

Public intervention in education has been justified on several counts: it can reduce inequality, open opportunities for the poor and the disadvantaged, compensate for market failures in lending for education, and make information about the benefits of education more generally available. However, public spending on education is often inefficient and inequitable. It is inefficient when it is mis-allocated among uses; it is inequitable when qualified potential students are unable to enroll in institutions because educational opportunities are lacking or because of inability to pay. Present systems for financing and managing education are often inappropriate for meeting the above challenges. Public financing, moreover, is growing more difficult as enrolments expand (World Bank, 1995).

Most countries provide public education without charging a fee for provision or at minimal charges (however, costs are often borne by citizens, as is the case in terms of general taxes, fees or parents contributions for services provided at school, textbooks, transportation, uniforms, etc.). Fiscal constraints prevent many — especially low-income — countries from relying solely on government revenues to finance desired educational expansion. To solve this problem, many countries have adopted policies to: (a) charge tuition fees to recoup part of the cost of providing public education services; and/or (b) encourage development of private schools to handle at least part of the expansion (Patrinos, 2000).

Unmet demand for education, coupled with shrinking government budgets, is obliging the public sector to develop partnerships with the private sector — private for profit, private not-for-profit, non-governmental organizations, religious groups, communities, etc. These partnerships have involved the use of demand-side financing mechanisms (i.e., financing on the basis of student needs, such as scholarships). The aim is to enhance educational access to disadvantaged groups, encourage private sector provision and finance, international investment in education as well as the use of technologies to bridge information gaps in a cost-efficient manner.

The use of demand-side financing mechanisms such as vouchers, stipends and capitation grants does not necessarily imply less public finance. The use of these mechanisms in the education sector is common in member countries of the Organization for Economic Cooperation and Development (OECD) and in developing nations (Patrinos, 2000). In developing countries, demand-side financing mechanisms are increasingly being used to help poor families invest in schooling. Examples include compensating poor families for school attendance charges (e.g., in Bangladesh, Pakistan and Guatemala), providing student loans at the higher education level (e.g., in Jamaica); non-monetary community support in

the form of land, labour, materials, social marketing of the benefits of education (e.g., in Tanzania), as well as national and targeted voucher schemes (e.g., in Chile, Colombia and Kenya). Many developing countries provide subsidies to private schools that take in poor students such as the Dominican Republic and Cote d'Ivoire (Vawda, 2000).

Part of the conceptual framework of demand-side financing in education is the issue of choice. The focus is on the individual (or parents, in the case of basic education). In fact, the calls for parental choice are usually directly related to efforts to improve educational outcomes as part of an overall reform effort. School choice is promoted as a means of increasing competition in the school system (Friedman, 1955, 1962, 1997). It is believed that competition will lead to efficiency gains as schools — public and private — compete for students and try to improve their quality while reducing expenses. By encouraging more private schools, vouchers allow school managers to become innovative and thereby improve to the learning process. Public schools, in order to attract the resources that come with students, will feel the pressure to improve (Patrinos and Ariasingam, 1997).

When private demand for schooling is lower than optimal, along with other market failure arguments, a role for public intervention may be justified. However, it does not necessarily follow that the public sector role is 'provision'. It may not even be finance. Changes in regulations or incentives could be all that is needed. Sometimes simply providing more information so that optimal decisions can be made will be sufficient. In low-income countries, excess demand for schooling results in private supply when the state cannot afford schooling for all and people recognize the benefits of schooling (James, 1987, 1991, 1994). In high income countries, however, "differentiated" demand leads to a demand for private schooling, as a sophisticated clientele demands different kinds of schools (e.g., Montessori schools) (Patrinos, 2000).

Private investment in education is instrumental in preparing countries to succeed in the New Economy, where access to and use of information and communication technologies (ICTs) is increasingly a determinant of progress and sustainable development. Many question the investment in computers and ICT for African education systems when schools lack textbooks, many teachers are untrained, the AIDS epidemic is diminishing the teaching force in the worst-hit areas, and where millions of students are not even enrolled in schools. But these are precisely the concerns that necessitate consideration of the potential of technological advancements in resolving some of the challenges of education. A lack of investment in ICTs will perpetuate the economic divides between and within rich and poor nations. The use of ICTs in education has the potential of bridging these divides in ways that were inconceivable in the past. The private sector is usually at the forefront of these initiatives, but relies on the support of government to ensure that countries are not left behind in the digital age.

Already, developing countries are making the Internet work for them. Examples include virtual markets for trade in community-produced goods and services, access to agricultural product pricing information through village knowledge centres, networking with physicians in urban areas to determine treatments for patients in rural health clinics, teacher training and networking to connect teachers in remote areas.

The use of technology in education is increasingly being recognized as a cost-efficient mechanism to enhance educational access and improve quality. In India, the unit cost of distance education through the Indira Gandhi National Open University ranges from 8 to 40 per cent of the traditional curriculum cost and examination results are comparable to those in the traditional system (Perraton and Potashnik, 1997). Many developing country governments are entering into partnerships with the private sector to promote instruction based on technology. The government of Mexico, together with rural communities, has used television to provide comprehensive instruction at the junior secondary level to rural communities at costs comparable to those provided in urban areas (Calderoni, 1998). In Chile and Costa Rica, the governments have relied on private sector support to introduce computers in the education system. In countries, parents, private benefactors, universities and local companies have provided telephone lines, air conditioning, other equipment and technical services free of charge to schools. In Costa Rica, IBM assisted in developing an integral approach to both the technical and educational aspects of the program (Alvarez et al., 1998). The Bangladesh Rural Advancement Committee (BRAC) assisted the government by introducing interactive radio instruction into non-formal schools in 1995 (Bosch, 1997).

Building on the context of these international innovations, this paper reviews the current private education market, its growth potential and requisite regulatory and operational reforms in four West African countries — The Gambia, Senegal, Mauritania and Cote d'Ivoire. The comparative strength of the regulatory framework in each of the four countries is assessed. Information from the World Bank Group initiative to facilitate education investment information, EdInvest (<http://www.worldbank.org/edinvest>), is used to discuss demand for and efforts by educational institutions to maintain access to new technologies and encourage wider ownership and partnerships in ICTs.

The report draws on findings from a World Bank/International Finance Corporation (IFC) joint mission to these four countries in January-February, 1999. The mission team relied primarily on interviews with Government, World Bank Group task teams, public and private (for-profit and not-for-profit) education providers, financial sector representatives and other industry groups.

Basic Facts

The four West African economies vary substantially (Table 1). With a Gross Domestic Product (GDP) of US\$10.3 billions, Cote d'Ivoire represents the largest of the four economies, followed by Senegal, Mauritania and The Gambia (with combined GDP in 1997 just over half that of the Ivorian GDP). Cote d'Ivoire, with a population of 16 million, also represents the largest market size, followed by Senegal (9 m), Mauritania (2.4 m) and The Gambia (1.2 m). Real GDP growth rates in all the four countries (in 1998 for Senegal, 1997 all else) are higher than 1997 population growth rates for each country. Real growth rates of these economies are also greater than the average real GDP growth rate for sub-Saharan African countries—3.7 per cent. However, per capita Gross National Products (GNPs) in The Gambia and Mauritania are below the sub-Saharan African average of US\$500. The Gambia is also less urbanized than Senegal, Mauritania and Cote d'Ivoire.

TABLE 1
Selected Economic Indicators, 1997

	<i>The Gambia</i>	<i>Senegal</i>	<i>Mauritania</i>	<i>Cote d'Ivoire</i>
Gross Domestic Product (US\$ billions)	0.4	4.8	1.1	10.3
Per capita Gross National Product (US\$)	350	520	450	690
Gross Domestic Product Growth—Real (%)	5.0	5.7 [*]	4.6	5.7
Population (millions)	1.2	9.0	2.4	16.0
Population Growth (%)	3.3	2.7	2.5	3.8
Inflation (%)	2.8	2.0 [*]	5.0	5.2
Population in Urban Areas (%)	32	42	55	50

Source: LaRocque, 1999 a-d.

^{*} Data from 1998.

The Education Challenge

All these four countries face a common set of education challenges (Table 2). Public spending on education has increased during the last decade and currently accounts for more than one-fifth of government spending in these countries. Education expenditures are incurred in various ways. These include direct outlays to public schools, subsidization of school establishment and/or operating costs (as in the provision of free land for school construction and payment of teacher salaries in public and selected private schools in The Gambia), as well as voucher-type schemes to students (as in Cote d'Ivoire). These expenditures have led to varying degrees of enrolment increases. However, enrolment ratios are far

from universal primary targets. Gross primary enrolment (GPE) was around 70 per cent in The Gambia, Senegal and Cote d'Ivoire in 1997/98. This is below the average for countries in sub-Saharan Africa (UNESCO, 1998). High GPE in Mauritania is to be credited to significant efforts of the government over the past decade. While high in all countries, current levels of government spending may not be sufficient to keep pace with planned increases in enrolments. High population growth rates (between 2.5 and 4 per cent in 1997) in these countries necessitate continuing increases in education spending to maintain current achievements in enrolments and reduce drop-outs.

TABLE 2
Selected Education Indicators, 1997/98

	<i>The Gambia</i> ^a	<i>Senegal</i>	<i>Mauritania</i>	<i>Cote d'Ivoire</i>
Enrolments ('000s)	172	1,256	400 ^a	2,200 ^c
Gross Primary Enrollments (%)	70	69	82	70 ^c
Gross Primary Enrollments—Boys (%)	79	79	88	76
Gross Primary Enrollments—Girls (%)	61	62	76	58
Gross Secondary Enrollments (%)	20	11 ^b	15	25 ^b
Illiteracy Rate (%)	63	67	62	57
Education/Government Spending (%)	21	27	26	35
Repetition Rate (primary school) ^b	14	16	16	25

Source: LaRocque, 1999 a-d.

a. Data from 1996/97

b. Data from 1993

c. Data from 1995/96

Government resources may also be inadequate to combat inequities in access. In all the four countries, there are wide disparities between enrollment ratios for girls and for boys — in The Gambia, the GPE for boys is well above that for girls — 79 per cent versus 61 per cent. There are also wide disparities in enrollments across regions, with the region around the capital city Banjul having more than double the GPE of the most distant region in The Gambia. In Cote d'Ivoire, subsidies channeled through public schooling ranged from just US\$108 per student at the primary level to US\$4,647 at the tertiary technical level. However, distribution of subsidies through both public and private schooling to different income groups shows that poorer groups gained less than the non-poor in Cote d'Ivoire. The poorest quintile received a per capita subsidy amounting to about

14 per cent of the total education subsidy; the poorest 40 per cent of the population received just 31 per cent of this subsidy; the richest quintile received 35 per cent of the total education subsidy. Females gained only over a third of total education subsidies, with the inequality more marked among lower income quintiles (Demery et al., 1996).

Investments in education have positive returns in these countries and in most cases are higher than the average returns for sub-Saharan Africa (Psacharopoulos, 1994). However, the internal and external efficiency of the education systems is generally poor. Primary school repetition rates in 1993 were close to 15 per cent in The Gambia, Senegal and Mauritania. One out of every four entrants into the primary school cycle repeated at least one grade in Cote d'Ivoire. High drop-out and repetition rates mean that scarce resources are wasted. Unit cost data is not easily available, so it is difficult to judge whether public school education is more costly than private education. However, greater quality of education at private schools, and its attendant low repetition and drop-out rates are considered to render education delivery by the non-public sector more efficient.

Public education also faces the challenge of poor quality in these four West African countries. Public schools are well known for large class sizes, limited materials per student and high teacher absence, especially in Senegal, which has a relatively high number of industrial disputes. Public school fees are generally lower than private school fees. The average West African is unable to afford private schooling. Despite this, growth in private education has been significant in the 1990s, primarily because of the presumed higher quality of education offered at private institutions. In The Gambia, for example, the number of private students in primary schools grew by 40 per cent between 1993 and 1996, despite the fact that there are no tuition charges at state primary schools (LaRocque, 1999a).

Private Education Overview

Private education plays a significant role in education in West Africa (Table 3). In some cases, private education plays a dominant role. For example, the private sector accounts for almost 100 per cent of the early childhood market in The Gambia and the technical tertiary market in Cote d'Ivoire. In most of the countries under study, private education has evidenced strong growth in the 1990s—ranging from 3 per cent at the basic education level in Mauritania to more than 200 per cent at the senior secondary level in The Gambia. In The Gambia, Senegal and Cote d'Ivoire, more than 15 per cent of all enrolled students attended private institutions in 1997. Private education is offered at all education levels and by a variety of institutions, ranging from non-formal to formal for-profit and not-for-profit education companies as well as non-governmental organizations (NGOs) and communities. Most private institutions

are located in the urban areas and several are looking for international and regional partnerships.

TABLE 3
Private Education — Summary Statistics

	<i>The Gambia</i> (1996/97)	<i>Senegal</i> (1997/98)	<i>Mauritania</i> (1997/98)	<i>Cote d'Ivoire</i> (1995/96)
Number of Students	35,000	192,000	15,000	408,000
Overall Market Share (%)	21	15	4	19
Market Share — Range(%)	14-77	13-28	3-8	13-100
Number of Institutions	230	837	80	702
Types of Institutions	Grant-aided, Fully private	Secular, Catholic	General, Professional	Secular, Religious
Growth	Significant in 1990s	Significant	Up since 1980s	Significant in 1990s

Sources: LaRocque, 1999 a-d.

Despite low per capita incomes (less than US\$700) and the relatively high direct costs (i.e., fees) of private education, growth in private education has been significant (Table 4) in the 1990s. This growth has occurred due to several factors. These include increasing demand for quality and relevant education (e.g., curricula involving the use of computers or the Internet), dissatisfaction with the quality of public education, economic constraints limiting access to education abroad and growing demand for skilled labour. At the same time, governments have encouraged the growth of the private sector because of budget constraints in the public sector. In some cases, explicit government legislation has led to greater private investment. For example, in 1994, the Senegalese government changed its legislation to enable non-Senegalese and non-educator to establish schools. This led to an explosion of private involvement in education. In 1999, there were more than 1,000 registered private education institutions, more than 970 at the primary and secondary levels, 50 professional institutions and 30 higher education institutions in Senegal.

Private education institutions are perceived to provide better quality education, including more access to technology, smaller class sizes and more flexibility in curriculum. Originally, in The Gambia, private institutions were catering to students who were not successful in gaining admission to public schools. However, over time, test scores of students attending private schools are stated to be at comparable levels, if not higher than the scores of their peers in public schools. In Senegal, parents prefer to send their children to private schools

because of the frequency of teacher strikes in public institutions. In Mauritania, families choose private schools to ensure that their children learn both French and Arabic in junior grades. In Cote d'Ivoire, private missionary schools, which dominate the primary private school market, have earned a reputation for providing good quality education at affordable fees (LaRocque and Vawda, 1999).

TABLE 4
Growth in Student Enrollments at Private Education Institutions (Per cent)

	The Gambia (1993 - 1996)	Senegal (1987/88 - 1997/98)	Cote d'Ivoire (1991/92 - 1995/96)
Primary	40	123	6
Junior Secondary	123	32	n.a.
Senior Secondary	20	72	n.a.
Tertiary	n.a.	n.a.	66

Sources: Government of The Gambia, 1998, Government of Senegal, 1999, and Government of Cote d'Ivoire, 1997.

n.a. Data not available

Regulatory Framework

While there is recognition that the government needs a strong private sector to help meet its educational, social and economic objectives, the regulatory environment for private education varies in the four countries. The comparative strength of the regulatory framework in each of the four countries is assessed through four dimensions: entry and exit regulations, price controls, operational freedom and resource availability and mobilization (Table 5).

In The Gambia, the government is keen on promoting the private sector in education to achieve its educational objectives. However, there is a distinction between "purely private" and "grant-aided" schools, even though non-public bodies manage both. This results in complexities in regulations concerning the nature of private sector institutions and the role of government vis-a-vis those institutions. On a relative scale of the strength of the regulatory frameworks in these four countries, the Gambian government could be rated as having weak/poor entry and exit regulations. No agency at the department of state for education (Department of State for Education) is specifically tasked with overseeing the private education sector. The Education Minister must approve the establishment of private schools. Failure to register a school can result in a fine or imprisonment. The Minister can refuse to allow a school to be established. There are a number of grounds for refusal, including concerns over the fitness of the owner of a school, safety and the qualifications of the teaching staff. The regulatory framework in The Gambia is stronger in terms of price controls —

while there are no controls on the fees set by fully private institutions, grant-aided institutions are restricted from increasing fees. Student assistance schemes are limited. Private educational institutions have the freedom to set their own curriculum, school hours and school year — signs of a strong regulatory framework. Direct subsidies are provided in the form of teacher salaries to grant-aided schools only but free land is available to all public and private schools (LaRocque, 1999a).

TABLE 5
Comparative Summary of Regulatory Framework for Private Education

	<i>The Gambia</i>	<i>Senegal</i>	<i>Mauritania</i>	<i>Cote d'Ivoire</i>
1. Entry/Exit regulations	Limited	Relatively liberal; No waiting period; "Authorized" or "recognized" schools	Complex process; Limited by convention	Take account of existing schools; Time required for "chartering"
2. Price Controls/Fees	No limits for fully private; Grant-aided limited	No limits	No limits	Ministry of Finance ratifies fees
3. Operational Freedom				
a. Curriculum	Free	Centrally prescribed but variations allowed	Centralized	Centralized
b. School Hours	Free	Free	Free	Free
c. School Year	Free	Free	Set centrally	Set centrally after discussion
4. Resource Availability and Mobilization				
a. Direct Subsidies	Grant-aided schools only	"Recognized" private schools subsidized	None	Subsidies to primary schools; Public sponsorship of students in private schools
b. Subsidized land/buildings	Yes	No	Uncertain	No

Source: LaRocque, 1999 a-d.

The regulatory framework in Senegal is relatively strong in its support of enhanced private sector development. Private sector education issues are the responsibility of the Division de l'Enseignement Prive, a part of the education ministry. A 1994 law eliminated the requirement that school operators had to be Senegalese nationals and educators. This law also allowed schools to operate once they had submitted a request to establish a school. The only potential constraint is that the request to establish a school is subject to the approval of a number of interested parties. These parties can oppose the opening of a school in the interests of "public order, good morals or hygiene." Schools can be either "authorized" or "recognized." Only the latter are eligible for subsidies. Schools become recognized once they have been open for two years. Private for-profit schools pay income and social security taxes. There are no tax write-offs for student fees. Investors who use a substantial amount of local resources are exonerated from the Minimum Personal Income Tax and the Business License Tax. Firms that locate outside the capital city Dakar are exempt from the lump-sum payroll tax of 3 per cent (LaRocque, 1999b).

The regulatory framework for private education is probably the weakest in Mauritania. Establishment of a private institution requires authorization from several ministers — the Minister of the Interior, the Minister of National Education — and a number of local officials. The process of registering an establishment can take between three months and a year. If the application for registration has not been answered within three months, the school is automatically registered. Private institutions have limited operational flexibility — the school needs to follow the national curriculum and the school year authorized by the Minister. Public resources available to private schools are limited — private schools do not receive funding for operating costs or teacher salaries. Private schools are exempt from social security and value added taxes, but are subject to income tax. There are no limits on fees set by private schools (LaRocque, 1999c).

The regulatory framework for private education in Cote d'Ivoire is complex, strong on resource availability, but weaker on the entry and exit controls, price controls and operational freedom. Several aspects of the regulatory framework encourage expansion of the private sector. A key is the policy of sponsoring public students to attend private schools. Private schools must apply to the Ministry of Education and the Ministry of Construction to operate. The Minister of Education must approve any request to open, expand or close a primary or secondary school. Criteria can differ across sectors (i.e., secular, religious). Private schools are either "authorized" or "chartered/associated". Only the latter can attract subsidies for state sponsored students. To become chartered/associated, schools must be open for 2-3 years and must achieve good examination scores. The level of public funding depends on whether the school is secondary or primary and whether it is secular or religious. Primary schools

are funded via subsidies. Secondary schools (both secular and religious) are funded through state sponsorship of students. This is in effect a voucher scheme. Funding levels are set in the convention that is signed with the sector group. Primary school subsidies are targeted toward schools with a "social orientation". Hence, subsidies vary according to fee level and region—the higher the fee charged by the school, the lower the subsidy. Private schools set their own fees, but the Commerce Department must ratify these. Currently there is little enforcement of fee limits. Private for-profit schools pay income tax (35 per cent) as would any company. The Value Added Tax (VAT) is at 25 per cent. There are no education specific exemptions from sales taxes or duties (LaRocque, 1999d).

Areas of Private Education Expansion, Affordability and Financing

Given the enrollment trends and demand, the private sector has the potential for expansion in the areas of school building construction, secondary and tertiary education provision (especially technical training), as well as in the provision of ancillary services. Despite general observation that private education teachers are of higher quality than public school teachers, the teacher training market is unexplored by the private sector. This could be an avenue for investment. The lack of financing opportunities for students also creates an opportunity for the private education sector to be involved in student financing schemes, either through loans or mutual fund groups (already operational in Mauritania).

Private schools serve a range of clients — from the very wealthy to low-income households. Private school fees in The Gambia vary considerably depending on whether the school is a mission school or a "fully private" one, the level of education and the school's target client group. The range of annual fees charged could be as high as US \$ 381 for early childhood and primary school and US \$ 818 for secondary school to less than US \$ 100 at primary and secondary schools.

In Senegal, private schools are free to set their fees at whatever level the market will bear. Monthly tuition fees at Catholic secondary schools in Dakar range from US \$ 25 to US \$ 42. Catholic elementary schools have tuition fees in the range of US \$ 13 to US \$ 25 per month. Fees could be as low as US \$ 2.50 annually in public primary institutions or as high as US \$ 4,000 at private tertiary education institutions. Fees, particularly at private secular schools, would take out all or a large proportion of the annual income of most Senegalese. It is estimated that close to 40 per cent of Senegalese fall below the poverty line of US\$ 167.

In Mauritania, private school fees differ by level of education and by perceived stature of the school. For example, one band of private schools charges monthly tuition fees of US \$ 15, US \$ 20 and US \$ 25 for primary, College and Lycee. Another band of schools charge, monthly tuition fees of US \$ 12.50, US

\$ 17.50 and US \$ 22.50 for each level, while another charges monthly tuition fees of US \$ 10, US \$ 15 and US \$ 20 for each level. Elite schools charge significantly higher fees. These fees could be unaffordable for many, given the minimum wage of US \$ 35 per month.

Private school fees in Cote d'Ivoire vary according to a number of factors, including whether the school is religious or secular, its location and the quality of education delivered. Elite schools with overseas affiliations generally have the highest fees. Religious school fees are much lower than those for private for-profit schools, ranging from US \$ 6-8 per year in rural areas to US \$ 166 in Abidjan. Fees, particularly at private secular schools, would take out a large proportion of the income of the average Ivorian (the average income is somewhere around US \$ 583-667). Research suggests that the per-student subsidy paid to private schools for state-sponsored students (US \$ 200-233) is greater than the fees that many private schools charge their full fee-paying students in Cote d'Ivoire (LaRocque, 1999 a-d).

While all private schools charge fees, student assistance programs are available. Given the disparities in educational participation among different population groups, in different regions and between different income groups, the use of demand-side financing schemes is being encouraged.

In The Gambia, a scholarship scheme was established under the Third Education Sector Program (TESP) to increase the enrollment, retention and performance of girls attending grades 1-12. Research has shown that the overriding reason for low enrollment and completion rates is poverty. Lowering the cost of schooling relative to parents' incomes is thus a key to better education outcomes for girls in The Gambia. The scheme will provide full scholarships for tuition, books and examination fees to 33 per cent of girls in upper basic and secondary schools with low enrollment in the most deprived regions of The Gambia. The scheme will also provide full scholarships for tuition and examination fees to 10 per cent of girls in upper basic and secondary schools in less deprived regions who are excelling in science, mathematics and technology (World Bank, 1998).

In Senegal, five municipalities formed the Communaute Urbaine de Dakar to offer scholarships to students studying both in public and private schools. Annual funding for the scholarships is around US\$667,000-750,000. Half of the money is spent on those studying outside Senegal, with the other half spent on those studying in Senegal (LaRocque, 1999b).

In Mauritania, a mutual fund company, IDM, has financed education projects. IDM receives its funds from three key sources — European Union Funds, Cooperation Francaise and Commercial Banks. To date, IDM has financed three private education projects, one early childhood provider, one College and one Lycee. All assistance is provided in the form of loans. The value of these loans was US \$ 50,000, US \$ 10,000 and US \$ 8,000,000. The

most recent loan IDM granted to a private school was in 1998. IDM sees itself getting more involved in education with demand for financing from private schools on the upswing. The management of IDM recognizes that a key problem for the education sector is that private banks do not want to invest in education because banks do not appreciate the nature of the opportunities and risks in the sector. Banks see education as risky because it is a social service that generates returns only over a long period (LaRocque, 1999c).

The number of places available in public institutions in Cote d'Ivoire is insufficient to meet student demand. To help bridge some of the gap in the supply of places, the Government has introduced a program of sponsoring public students to attend private institutions. Under the program, private schools receive a payment for each public student placed at their institution. The Government sponsors students in lower and upper secondary and also in technical and professional training. Students can be sponsored to attend both religious and secular schools. The payment amount varies with the student's education level: US\$200 per year for lower secondary students; and US\$233 per year for upper secondary students. Payments are greater for students enrolled in tertiary level programs. The placement of students depends in part on the educational performance of the school. Only those schools, which are "chartered", are eligible to enroll sponsored students. In 1997, the Government spent about US \$ 10.3 million to sponsor over 162,000 students in private primary and secondary schools. In 1995/96, 40 per cent of the students in private institutions were state sponsored (LaRocque, 1999d).

Partnerships in Education

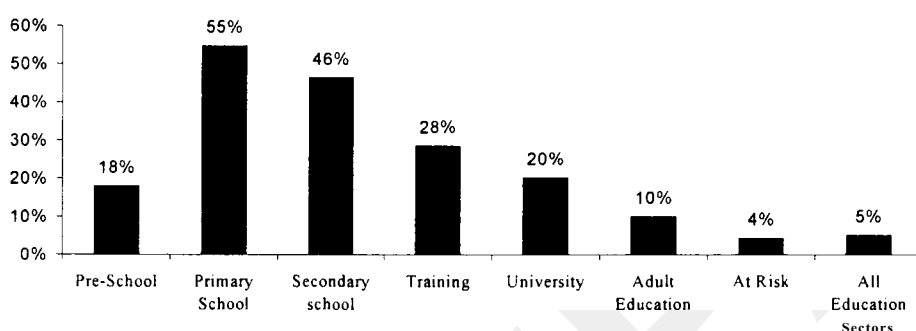
A survey of the private education sectors in these West African countries indicates that there are many examples of innovative ways of delivering good quality and relevant education. Many are local initiatives involving partnerships between the public and private sectors. A large number are taking advantage of new ICTs to enhance educational development and economic growth. However, a key constraint of education providers and government is lack of access to channels of information, for example the Internet, to deliver education, promote their initiatives, seek partnerships and learn from the experience of others. Investors also lack information on these initiatives and, therefore, on investment potential in the education sector.

The World Bank Group — The World Bank, International Finance Corporation (IFC), Multi-lateral Investment Guarantee Agency (MIGA) — initiated program EdInvest (<http://www.worldbank.org/edinvest>) is an education investment information facility. EdInvest attempts to promote greater awareness of education initiatives in developing countries, regulatory frameworks, as well as encourage communication between education sector entrepreneurs and community groups. EdInvest maintains an Internet-based database of private

education initiatives and partnership interests. The web site provides investors opportunities to select possible client organizations to invest in. The database also allows clients to disseminate information on their institutions and potential projects. However, the World Bank and the IFC do not broker any deals. EdInvest started as a pilot in Africa and has expanded to cover initiatives around the world. Starting in May 1999, about 264 registrations were received until September 1999. A survey of the EdInvest database indicates that most private education providers are seeking international partnerships, especially in the use of ICTs in education. Of the 264 groups registered by September 1999:

- 55 per cent are primary schools, 46 per cent secondary schools, close to 30 per cent training providers and less than 20 per cent each are operators of pre-school programs, university, adult education and at-risk groups (Figure 1),
- Close to 80 per cent are from West Africa, the target region for 1999 (Figure 2),
- Almost 80 per cent are education providers, 20 per cent vocational education providers, 8 per cent provide educational technology, 5 per cent educational media publishing and 4 per cent provide student financing services,
- Almost 60 per cent are seeking investment partnerships, with more than half seeking partnerships in technology. Of these:
 - * More than 50 per cent are looking for computer technology, more than 30 per cent are seeking improvements in laboratory equipment, almost 16 per cent are seeking partnerships in information technology, and more than 12 per cent are seeking to improve the quality of technical training through international partnerships and networks,
 - * Close to 90 per cent are from Africa,
 - * Almost 60 per cent are active in the primary education sector, 50 per cent in the secondary education sector, 25 per cent in training institutes and a little over 15 per cent in university education,
 - * About 90 per cent are education providers, 20 per cent vocational training providers and 8 per cent educational technology providers, and
 - * Almost all are willing to share information and over 80 per cent are willing to lead regional and/or international networks in their area of expertise (World Bank, 1999).

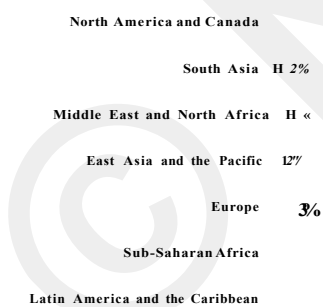
Figure 1: Profile of EdInvest Registrations, 1999



Source: World Bank, 1999.

Note: Categories are not mutually exclusive

Figure 2: Regional Distribution of EdInvest Registrants, 1999



Source: World Bank, 1999.

The Technological Imperative

EdInvest registrations indicate that both public and private education providers and financiers seek partnerships to advance the use of ICTs to improve the reach, quality and relevance of educational delivery. While the EdInvest web site is for the promotion of local initiatives and for fostering partnerships, many people are

unable to use this resource due to lack of access to the Internet. The lack of access to ICTs and knowledge is a cause for concern and raises issues for the future of technological and economic growth and educational improvement in Africa.

By eliminating major time and geographical constraints in the access, processing and exchange of information and services, ICTs (especially the Internet) present tremendous potential for economic growth and sustainable development. Incorporating ICTs in education, either as a subject or a mode of instruction, also holds promise in improving access, quality and relevance of education. It can change how teachers teach (e.g., through interactive curriculum) and what they teach (e.g., computer skills). Use of ICTs in education can also expand the audience (e.g., by including adult learners) and the reach of education (e.g., through digital distance education). ICTs can also change what learners learn (e.g., cutting-edge information), when and where they learn (e.g., at home) and, how they learn (by developing materials with classrooms/students in other parts of the world).

As an example, the use of ICTs has revolutionized distance learning. The potential benefits associated with an expanded use of distance education are numerous, especially at the higher education levels, in which sub-Saharan Africa faces pressures to expand supply, despite declining quality and limited funding possibilities. Post-graduate students in Africa are increasingly able to take courses on-line, delivered by universities in developed countries (supported by on-line libraries). Experiments to expand educational access through digital distance education are underway in many countries. Namibia and Ghana equally recognize undergraduate degrees received through either distance or traditional modes of learning. Botswana, Cameroon and Zambia are using a university-based Internet system to support interactive regional study centers for distance learners. Tanzania, Botswana, and Zimbabwe have established new tertiary institutions wholly dedicated to distance education. Cote d'Ivoire, Congo, Togo, and Benin are at various stages to set up university-based distance education programs. Senegal uses distance education to train teachers and award master's level courses in health and law. The use of distance education based on satellite transmission and interactive e-mail is being tested by the African Virtual University project (<http://www.avu.org/>). The development of tele-centers — public sites that offer access to telephones, fax, e-mail and Internet services for a fee — is growing in South Africa, Ghana, Nigeria, Senegal and elsewhere. The Confederation of Open Learning Institutions in South Africa (COLISA, <http://www.colisa.ac.za/>), a partnership of the country's three main tertiary distance education institutions, is developing Internet-based courses, a web-based student-teacher interaction system, and a series of local Internet access points for students (Saint, 2000).

While the impact of using ICTs in education is not fully evaluated, many countries realize the importance of incorporating ICTs in education to stay competitive in the new knowledge economy. Most African countries are unable to immediately reap the full benefits of ICTs in the knowledge-based economy because of issues including lack of basic computer skills, literacy, investment, connectivity and affordability. These issues are more acute in rural areas where the majority of people live. The Internet is, as yet, a largely insignificant medium in Africa, with access limited to about 0.1 per cent, the great majority of these in cities. Having said that, the Internet is expanding rapidly. Outside of South Africa, the number of host sites in Africa has increased from 290 in 5 countries in 1995 to 6,510 in 32 countries in 1998 (Kenny, 2000).

Some countries are also making efforts to improve their telecommunication infrastructure, which is one of the strongest determinants of Internet development. In sub-Saharan Africa, many local and international ISPs have been set up in the last three years. By the beginning of 1998, there were 130,000 Internet host computers in the region, suggesting a user base exceeding half a million (Telecommunication Development Bureau, 1998). Growth in main telephone lines in the continent is around 10 per cent per year. If the current growth trends continue, it is estimated that by 2003, more than 27 million phone lines would be created, doubling the number of 1996. One of the most important developments is the partial privatization of the national fixed-line operators in Cote d'Ivoire, Guinea, Ghana, Senegal and South Africa, opening the way for strategic foreign investments. Regulatory reforms in African nations are likely to continue as part of the ratification of World Trade Organization (WTO) telecommunication liberalization policies by seven nations (Cote d'Ivoire, Ghana, Mauritius, Morocco, Senegal, South Africa and Tunisia). There is also an increasing interest among other nations to participate in the WTO liberalization process (Telecommunication Development Bureau, 1998). Moreover, current proposals to introduce wireless technologies and fiber-optic cables can potentially provide Internet services to both urban and rural areas. One such project is the Africa One project which will create a 32,000 kilometers under-sea fiber optic telecommunications cable that will connect the entire continent with an initial capacity of 80 gigabytes per second (<http://www.africaone.com/>). High prices of personal computers and Internet connections also inhibit Internet development in these countries. The International Telecommunication Union proposes that it is more feasible to disperse computers with Internet access in public areas such as schools, libraries, payphone centers. Many such programs have been initiated (Table 6).

TABLE 6
Internet Connectivity in African Education: Selected Programs

<i>Program</i>	<i>Description</i>
Alliance for Global Learning (AGL) http://www.global-learning.org	Aims to create sustainable models for school networking in developing countries by providing the necessary technology, teacher training and support for collaborative educational projects.
Sub-Saharan Africa Project http://www.aaas.org/international/ssa/ssa.htm	Started in 1987 by the American Association for the Advancement of Science to address institutional crisis that African educators and scientists face.
World Links for Development http://www.worldbank.org/worldlinks	World Bank Group initiative to link schools to the Internet worldwide. Now connecting most disadvantaged rural schools in Uganda, to serve additionally as community learning centers.
The Imfundo Project http://www.imfundo.org/imfundo/	The Imfundo Team works with donors, recipient countries, experts and other stakeholders to identify options for teacher training and education management projects that support the country's education reform strategy.
The Internet Learning Trust http://www.netschools.org	An NGO with a commitment to expand the use of information and communication technologies in education both in developing countries and the United Kingdom.
Schools Online http://www.schoolsonline.org/	A not-for-profit organization focusing on helping to ensure that all schools have effective access to the communication and information resources of the Internet.
The Acacia Initiative—Communities and the Information Society in Africa http://www.idrc.ca/institution/e1_acacia.html	The Acacia initiative aims to empower sub-Saharan African communities with the ability to apply information and communication technologies to their own social and economic development.
USAID Leland Initiative http://www.usaid.gov/leland/	A five-year effort to extend full Internet connectivity to 20 or more African countries. The Leland Initiative builds on existing capacity with the ultimate aim of facilitating Internet access throughout each country.
Africa Internet Connectivity http://afr.worldbank.org/aft2/connect/newpage/connecthp.htm	Collaborative project to promote connectivity activities in sub-Saharan Africa. Participating programs include: The Africa Information Society Initiative; The Africa Internet Forum; Connectivity for the Poor initiative.
International Telecommunication Union http://www.itu.int/home	International organization within which governments and the private sector coordinate global telecom networks and services.

Source: Compiled by authors

Bridging the technological gap and fully capitalizing on the potentials of ICTs will depend on how quickly, innovatively and adequately, the public and private sector and international donors can collaborate. Governments can alter policies (such as eliminating telephone monopolies to expand access and lower costs, or provide tax breaks to investors, etc.). The private for-profit sector has expertise in spearheading ICT initiatives. Therefore, it is critical for them to be involved and to invest in education. NGOs and community groups also have an important role to play to make ICTs work for development.

Conclusion

In the four West African countries under study, private sector role in education is growing. It appears that these trends are consistent globally, as government budgets are shrinking and the demand for education is increasing. Labour requirements of the New Economy are placing additional pressures on countries to transform their education systems. In this context, governments and international organizations need to work together with the private sector not only to enhance educational access but also to improve its quality and make it appropriate.

The growth of the Internet over the last four years has introduced unlimited possibilities for education. It could be used to deliver education to disadvantaged groups. It is considered to be cost-efficient. It could be employed to share knowledge and expertise. The potential for bridging the information gap around the world is also unlimited. Demand for the Internet and attendant information technologies seems to exist among developing country governments and education providers (public and private). For example, a significant proportion of entrepreneurs registered in the EdInvest database indicate that they seek partnerships for technology. This demand is increasing worldwide as students, parents, schools, private individuals, and companies become aware of the necessity and potential of ICTs in education. Governments recognize that the private sector is a key player in the technology market and many are introducing regulatory reforms to encourage international investments to provide the infrastructure for Internet connectivity. And many public and private sector initiatives are being undertaken to promote technology in education.

However, governments, the donor community and the private sector have to make more rigorous efforts to realize the full potential of using ICTs in education. This will involve undertaking research to determine priorities, legislating regulatory and financing reforms to encourage investments and partnerships between local entrepreneurs and investors as well as building the capacity of entrepreneurs to meet the education challenge. Since universal Internet connectivity will necessitate significant investment, it is important that the countries determine the level of education in which it is absolutely necessary to provide Internet access to ensure that students in developing countries are at

par with their colleagues in developed nations. It is equally important to explore the relationship between private Internet providers, related market investors (e.g., infrastructure, computers), school suppliers and private school demand.

In conclusion, local and international efforts are already underway to enhance access, quality, relevance and equity of education in many countries. Governments need to take stock of these initiatives and examine their regulatory and financing schemes in order to facilitate such efforts. Organizations such as the World Bank Group could, in addition to financing and policy advice, bridge information gaps. This would involve disseminating information on the needs of local education investment seekers, the country economic setting, regulatory frameworks for private sector involvement in education, and direct partnership and investment interests of local entrepreneurs, as done through EdInvest.

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RESEARCH NOTES/COMMUNICATIONS

Administration of Education - Need for a New Paradigm

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Education is considered as "the most important single factor in achieving rapid economic development and technological progress and in creating a social order founded on the values of freedom, social justice and equal opportunities."¹ Swami Vivekananda, the young holy saint, deemed education as the panacea for all ills in the society.

It implies the necessity of a sound policy of education and an effective administration at all levels. It was realized in India as early as 1931 that "you cannot have a well devised and directed policy without a proper administration."² It is all the more relevant today in view of unprecedented expansion of education at all levels.

It is necessary, therefore, to evaluate and overhaul the administrative machinery in education from time to time. It keeps education in tune with the changing values and varying contingencies. It hardly needs emphasis that administration means, "all those techniques and procedures employed in operating the educational organization, in accordance with established policies."³ This, however, does not mean that administration is an insipid and lifeless accumulation of rules and directions. Administration is a social process in which behaviour of social system gets the upper edge in operating educational organization. Techniques and procedures are just the tools. Therefore, educational administration means solving mutual problems; involving groups of persons and elements such as planning, organizing, staffing, directing, coordinating, reporting, budgeting etc. and leadership.

With this framework of education and administration in mind, let the scenario, about education and administration prevailing in India, be succinctly examined, especially after the independence of the country. The Constitution of

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¹ Planning Commission, (1961) *Third Five-year Plan*, Government of India, Delhi: Manager of Publications, p.573.

² National Archives of India, *Pro. Edu. July,1931-4-Deposit-* (A lecture delivered by Sir P. Hartog), New Delhi.

³ Carter V. Good (ed.) *Dictionary of Education*. (New York: McGraw Hill, 1959), p.13.

India has given due importance to education through various Articles, Amendments and Directive Principles of the State Policy. It has, in fact, been accepted as a cardinal principle to provide the benefit of right type of education without any discrimination. Now with the latest amendment in the Constitution, elementary education becomes a fundamental right of the child.

Many efforts have been made at various levels and at different times to make tangible improvements in education. But the efforts so made serve not more than patch work without looking at the educational organization in a holistic manner. There has hardly been a significant achievement in education right from school stage to universities. More the expansion in education, more enigmatic the educational administration becomes perceptible. The Chairman of the University Grants Commission terms the present scenario of higher education as the "Pentagon Puzzle". Education has not been able to obtain an indigenous character. Resultantly, a move is sweeping, throughout the country, to Indianise education.

Mahatma Gandhi once said that the development of the country should be routed through lanes of the villages. But westernisation is eating into the vitals of the rural society day in and day out.

No doubt, there has been a tremendous increase in the number of schools, scholars and teachers. Expenditure on education has also increased manifold. The Ministry of Human Resource Development takes pride, and rightly so, in showing a decrease in the absolute number of illiterates which has gone down from 32 crores in 1991 to 29 crores in 2000. But this achievement pales into insignificance when it is found that there was provided one teacher for every 24 students at primary level in 1951 which has been enhanced to one teacher for every 43 students in 2000. This ratio is increasing day by day. This increased ratio is justified on account of curtailing expenditure, as if it is the fundamental right of the managers of education to crucify quality of education in the name of economy. There are many schools in India, especially those managed by the Government, which function under the roof of the sky or are covered by the dilapidated buildings. It has also to be taken note of that 90% of the expenditure is spent on salaries of staff and other administrative heads. In one of the economically well off states of India, this expenditure goes upto 99% of the total expenditure on education. Secondary education, a very important link in the whole spectrum of education, gets only 1% of the GNDP.

Coming to dissemination of value-based education, little said the better. The relation between the teacher and the taught is getting more and more materialistic rather than an intimate personal one. Saint Kabir's dictum that a teacher is the mine of nectar is becoming a thing of the past. The student has a growing feeling that he gets education because he pays for it. All this affects character formation of the coming generation. Technological advances are further likely to loosen the grip of the pious relationship between the teacher and the taught. Many people

consider classrooms as lifeless graveyards. The so-called piecemeal reformation in education is a dangerous signal for bringing about coherence in education.

It is not far to seek, therefore, that making education as a responsive agent of social change is becoming a grave challenge to the managers and administrators of education. Perhaps, innovative management skills can be of some utility. It is very necessary to prepare a base of educational administrators who may be totally committed to education.

It is usually seen that the posts of Education Secretaries and Directors of Education are held by officers belonging to Indian Administrative Service. In some of the States the posts of Directors and district level functionaries are held by the education cadre officers on the basis of seniority. Obviously, they adorn these posts towards the fag end of their career. No doubt, it is on the basis of their adroity, skills and intelligence that they have come to the I.A.S.; it is also true that persons from education field come up with rich experience. But both these arrangements do not appear to be satisfactory. As regards I.A.S. officers, it is estimated that they do not stay for a long duration to head such a large and important organization. Their stay in this department does not normally extend beyond a year which is not sufficient even to comprehend the organization completely. It is a common feeling that I.A.S. officers are not interested in education department. Educational administration has got a special significance and propriety rendering it not every body's cake. Then, if one is interested in the job, he or she is not allowed to stay for long. So far as educational officers are concerned, they do not have much initiative or vision. They also have predetermined likes and dislikes which is sometimes injurious to the health of the organization.

There is one way to get out of this predicament. The Indian Education Service should be created once again to recuperate the feeling of belongingness to education. This will enable them to make the department responsive to the educational needs and cultural aspirations of the people. It may be appropriate to hurriedly go into the factors responsible for the creation of I.E.S. during the late nineteenth century and its extinction in the twentieth century.

After a good deal of deliberations in India and England at the level of the Public Service Commission (1886-87) and other agencies, the Government of India, through a resolution of 23rd July, 1896⁴, gave effect to the recommendation that Education Department be broadly divided into (A) the Superior Service, and (B) the Subordinate Service. The Superior Service was to consist of (i) Indian Educational Service (persons to be appointed in England); and (ii) the Provincial Educational Service (persons to be appointed in India).

The main purpose of creating I.E.S. at that point of time was to provide manpower at the higher levels of Department of Education at the Centre as well

⁴ As quoted in J.S.Cotton, *Progress of Education in India (Third Quinquennial Review)*, 1892-97. (London: Her Majesty's Stationery Office, 1898), p.56.

as the Provinces. The candidates for I.E.S. were to be appointed by the Secretary of State for India in England. The natives of India could also be appointed for I.E.S. The I.E.S. officers could be placed in teaching posts as well as the inspecting staff with the provision that they could be interchanged with each other. Dr. Sarvpalli Radhakrishnan was, perhaps, the first Indian to be appointed to the I.E.S. It is clear, therefore, that despite a spate of devolution of powers in those days, a need was felt for the creation of the I.E.S.

Under the Montague-Chelmsford Reforms, the position of I.E.S. was reviewed. Education was a transferred subject (under Indians) whereas finance was under the charge of the executive (the English). This arrangement was seriously viewed and was vehemently criticized. The position of I.E.S. was considered to be anomalous. The I.E.S. officers were responsible and accountable to the Secretary of State for India, sitting in England, who had complete control and jurisdiction over their duties and privileges which were guaranteed in the Government of India Act India Act, 1919. These officers were charged with lack of sympathy for public aspirations and short of adaptability to the changed circumstances specially during the beginning of the Diarchy period.⁵ Education, in those days, was considered to be between devil and the deep sea, protected services, on the one hand, and unprotected Governor with sweeping powers, on the other. There was also an opinion at that time that there were normal relations between the Ministers and the members of the I.E.S.⁶ It was also echoed by the Reform Enquiry Committee Report, 1924.⁷ Subsequently, however, the Lee Commission suggested for abolition of the I.E.S.

Now the circumstances are different in Independent India. The I.E.S. like the I.A.S., owing allegiance to the Centre, can still work well with the States. There are a good number of guards with the State Governments to make the services work for the benefit of the local population. Besides, the Government of India plays a role of Big Brother in education. There are many central schemes initiated by the Centre and run by the States. The States welcome such initiatives. There are compelling reasons for setting in uniformity in the educational contents and methodology. Diversity, for obvious reasons, is generally taking off the scenario. The I.E.S. will only enhance the mutual relationship between the Centre and the States. The I.E.S. can be cadred posts allocated to different States and U.Ts. The managerial skills, consisting of reflective mindset (managing people end interpersonal relationship), the analytical mindset (managing the societal

⁵ National Archives of India. When a Resolution passed by the C.P. Legislative Assembly pertaining to the provincialisation of educational services came to the Government of India for approval, it met a strong rebuff by no less an educational authority of the time than H. Sharp as "absurd resolution". *Pro. Edu., Nov. 1921. 49-51-B*, New Delhi.

⁶ B.P. Stenden speaking on Resolution of Mr. K.P. Pande, *U.P. Legislative Council Debates March 8, 1924*, p.256.

⁷ Government of India, *Reforms Enquiry Committee Report, 1924*. (Calcutta: His Majesty's Stationery Office, 1925) p.27.

context), and the action mindset (managing change) can be well taken care of in the selection process of these services and also during their pre-service and post-service training periods. The new inroads in managerial skills call for a new pedagogical structure in educational administration at all levels. The Union Public Service Commission can be involved in creating the I.E.S.

The expansion in education, especially school education, is becoming so large that there is a need to replace the existing district level officers with the members of I.E.S. This will provide a new blood and a new push to education at all levels.

As seen earlier, the expansion in education is taking place without making the administration of education responsive to the needs and contingencies of education. In fact, administration of education is in a state of flux. This calls for a change in the existing concept and paradigm of administration. The concept of administration goes with the concept of the form of Government. The democratic form of Government, as we have in India, enjoins decentralized administration. It is opined by Lane and others that the administrators are compelled to rely on participation of their subordinates as the latter are in a better position to be creative because they are less constrained and their energy is less consumed by conflicting pressures. This prompts Bryson to observe that there is more inventiveness for sale on the market than there is first rate administrative capacity. So decentralized administration is a positive response to the problems, especially in larger organizations like education, which demand a new approach. In short, the size of the organization, complexity of educational enterprise, competence of personnel and satisfaction of those who are actively involved in the organization are compelling factors for developing a decentralized administration in education.

The flat type of administration, rather than a pyramidal one, is useful for implementing the concept of decentralization. Pyramidal administration is analogous to centralized administration. It may be mentioned that pyramidal organization reflects a structure which rises to the highest peak with numerous subordinate levels of authority. Flat organization, on the other hand, does not rise to a peak and is characterized by "fewer managerial levels, larger spans of control with more people responsible to a single authority and has vertical communication." Presently, we hardly have flat type of organization at any level. It will be too long if an exercise is made in getting to the practical implications of flat organization, if implemented.⁸ The "centralized authority" with "centralized administration" should give way to "decentralized authority" and "decentralized administration". There should be full freedom followed by full accountability in the performance of duties of the educational administrators at different levels.

⁸ For details, Sarwan Kumar, "Decentralisation of Educational Administration", *Haryana Journal of Education*. January 1968, Vol. 1, No. 1 pp54-58.

It is evident from what has been discussed above that there is a need to change the concept of educational administration at all levels, right from the school to the secretariat. The I.E.S. should be introduced with all checks and balances. The I.E.S. should function at the Centre, State Secretariat, Directorate and District levels. There should be a move to centralized authority and decentralized administration. Full freedom to the administrators followed by full accountability should be the new slogan. New managerial skills should permeate the new pedagogical structure before and after the appointment of the educational administrators at all levels. It will usher in a new paradigm of educational administration with flexibility and vitality, so necessary to meet the demands of a fast changing society. Hopefully, the political will shall rise to the occasion.

Vocational Education in the Context of the Present Labour Market Demands - Issues and Challenges: A Perspective

B.S. Prakash*

The efforts of employment and educational planning have always demanded a close coordination in the interest of keeping the extent of mismatch in the skills imparted and those actually needed the least. However, the quantitative dimensions of employment planning which had to cater to a wider spectrum of growing labour force, coupled with independent factors operating on the educational front, have kept the degree of skill match inadequately addressed than desired. Vocationalisation of education at post-secondary and above levels and efforts at establishment of a system of industry-institution interaction and policies for promotion of self-employment ventures were aimed at according a distinct policy thrust in this regard. It is, however, not seen to have yielded the desired results with preference for organised wage employment opportunities remaining high. In the light of this background, the present paper seeks to bring out the direction in which renewed efforts need to be made in the context of current labour market demands.

The paper is mainly in two parts. The first part presents some important employment profiles serving to bring out the trends as prevailed in later part of the nineties. The second indicates the key elements of the renewed policy thrust envisaged to be accorded by the Government during the Tenth Plan Period. Drawing from the experiences and contents of the two, the paper sums up with a perspective for vocationalisation of education in tune with the present employment scenario.

Employment Profile

Sector of Employment

The profile presented here is based on the results of a study¹ (which focussed on assessing the employability of skilled/semi-skilled workers with training at

¹ Institute of Applied Manpower Research, I.P Estate, New Delhi.- 110002

I "Study of ITI Training/Trades: Establishment Survey Report". IAMR Report No. 5/2001, New Delhi. The study was sponsored by DTE&T, Government of Delhi. As such, the report has been published only for limited circulation with copies of its report available for reference with the Institute.

ITI/apprenticeship level including the vocationally trained) relating to a total of 29 establishments² surveyed in 1999. They were distributed in terms of employment size as follows: (a) Below 50: 9; (b) 51-100: 8; (c) 101-500: 7; and (d) Above 500: 5. In terms of their total employment (7623), their distributions by the above grouping were 241; 606; 1779; and 4997 respectively. By type of management (i.e., govt, and private sector of ownership), the distribution of total employment was 2850 (37%) and 4773 (63%) respectively (Table 1).

TABLE 1
Distribution of Employment (%) by Form of Ownership and Level

<i>Form of Ownership (Sector)</i>	<i>Level of Employment</i>						<i>Total</i>
	<i>Mgr-U Exec.</i>	<i>Supervisory</i>	<i>Skilled Worker</i>	<i>Semi-Skilled Worker</i>	<i>Unskilled/ Casual Labour</i>	<i>Others</i>	
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>
Government (4)	0.4	1.9	90.0	6.1	0.4	1.2	100.0 (2850)
Private (25)	12.1	17.8	34.4	18.0	7.7	10.0	100.0 (4773)
Total (29)	7.7	11.9	55.2	13.5	5.0	6.7	100.0 (7623)

Source: Primary Survey

Note: i) Figures within brackets in first column denote the number of establishments in the sample. Those in the last column indicates total employment,
ii) 'Others' include clerical and auxiliary level staff.

² The selection of establishments for the survey was so made as to fulfil the envisaged objective of covering those establishments whose employment needs of craftsmen level (i.e., ITI/apprenticeship trained) were high. The methodology adopted for the survey was one of selecting a 10 per cent sample of industrial establishments or units from a list of about 500 units available from the office of the Apprenticeship Adviser in Delhi. The scope of the survey was thus confined to the NCT of Delhi. As the list of units is periodically updated on the basis of regular industrial surveys (conducted twice annually) the frame of establishments used for sampling was expected to provide a cross-section of current employment/skill level trends in the industry. The response received for the first stage effort of surveying a targeted sample of 50 units was, however, limited to 17. In view of this, a second stage effort was made to improve the response rate in which the officials/investigators of the office of the Apprenticeship Adviser also took part. The ultimate responses received were from a total of 29 establishments with a total employment strength of 7623 (in which the share of skilled/semi-skilled workers was 68.8 per cent) and ITI/apprenticeship trained constituting 66.1 per cent of the total skilled workers strength. The method of selecting the units for the survey was thus purposive with the target group being focussed on trained skilled workers. To the extent that the ultimate sample represented different sizes of establishments (in terms of their employment strength) and types of management (i.e., government/private sector), the sample reflects a representative segment of establishments employing skilled manpower in the production/service oriented industrial segment of the NCT of Delhi.

Skilled/Semi-Skilled Workers

The proportion of workers in the skilled/semi-skilled category was 68.7 per cent with the unskilled/casual workers category accounting for another 5.0 per cent. The distribution of skilled workers between the government and private sector establishments revealed a wide differential - 96.1 per cent and 52.4 per cent respectively (Table 1). Further, the proportion of workers with ITI/apprenticeship level of training was high at 93.0 per cent for government establishments and low at 17.0 per cent for private establishments (Table 2). The low proportion in the latter is further matched by a significant 48.3 per cent of workers who were mainly 'on-the-job' trained with their formal education at below matric level. It is thus evident that the private sector establishments are not for one reason or the other recruiting formally trained persons for their skilled manpower need. Among the reasons expressed for this were the factors of non-availability of trained persons in their times of need, expectations of higher pay, lower levels of skill than required and inability to adopt to the latest technology, etc. This issue assumes greater relevance in the context of the increasing role of private sector participation under current policies of the government. The need, therefore, is one of making the private establishments more active partners in the actual management of training institutions so as to achieve a greater degree of skill match.

TABLE 2
**Distribution of Employment (%) by Level of Education/Training
and Form of Ownership of Establishment**

<i>Form of Ownership (Sector)</i>	<i>Level of Education/Training</i>					<i>Total</i>
	<i>ITU Appren- ticeship</i>	<i>Dip. and Above in Engg.</i>	<i>Grad. & Above</i>	<i>General Below Gradn.</i>	<i>Others</i>	
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>
Government (4)	93.0	2.2	1.6	0.8	2.4	100.0 (2850)
Private (25)	17.0	16.8	13.3	4.6	48.3	100.0 (4773)
Total (29)	45.5	11.3	8.9	3.2	31.1	100.0 (7623)

Notes: i) As in Table 1

ii) 'Others' includes mainly 'on-the-job' trained workers with formal education of below matric level.

institutional Support

Strengthening of the required institutional systems is one of the important aspects linked to facilitating the achieving of desired changes to suit the demands of the current times. As a case in point, the level of support extended by the employment exchanges is cited. Of the total number of respondents (191) to a separate questionnaire in which response to 'source of recruitment' was sought, 77.5 per cent responded to recruitment by 'direct efforts' and the rest (22.5%) to through 'employment exchange' (Table 3). Analysis of employment market information (EMI) data on proportion of number of vacancies notified to total number of registered candidates among ITI graduates reveals a corroborative and dismal picture in this regard. The number of candidates sponsored by the employment exchange for three years of the nineties (1996 to 98) was consistently less than 10 per cent of total registrants (8.4; 9.3; and 7.6 per cent respectively). The number of vacancies notified was also roughly of the same order. By type of organisation, less than 5 per cent of respondents in the private sector establishments reported for source of recruitment as through 'employment exchange' while for government/public sector establishments it was higher at around 40 per cent. In this context, it is relevant to note that for vacancies notified by the private sector establishments, the employment exchanges are not sponsoring the registrants (as they do for positions in government establishments) but merely display the vacancy positions on the notice board. This fact explains to an extent the reason for low proportion of sponsorships to private sector establishments which not only defies any rationale for the practice followed but is also totally ill-serving the present day needs of employment trends in the country. With the rising trend in the overall share of employment in the private sector, the need to strengthen and reorient the institutional set-ups like employment exchanges, placement service cells etc. to facilitate the job seekers in getting suitable placements is clearly underscored.

TABLE 3
**Proportion of Job Placement (%) by Source of Recruitment
 and Type of Organisation**

<i>Source of Recruitment</i>	<i>Type of Organisation</i>				<i>Total</i>
	<i>Govt.</i>	<i>Private</i>	<i>PSU</i>	<i>Others</i>	
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>
Direct	64.7	97.2	54.5	75.9	77.5
Through Employment Exchange	35.3	2.8	45.5	24.1	22.5
Total	100.0	100.0	100.0	100.0	100.0
	(68)	(72)	(22)	(29)	(191)

Source: Response to Individual Employee Questionnaire

Note: Figures within brackets in the last row denote total number of respondents.

Self-Employment Ventures

With the employment market undergoing the kind of changes as is to be expected under open market policies with the inevitable demands on the skill requirements of a varied nature, the orientation of the training offered at the Vocational Training Institutions (VTIs) to meet the requirements of self-employment pursuits is needed. Data in this respect by the respondents to the survey points out that initial efforts made by some (proportion very low and negligible) had to be discontinued in preference to wage employment³. Among the reasons pointed out for this, the absence of an effective and coordinated institutional framework combined with the perceived inability to cope with the varied requirements of such a venture is cited. This, therefore, suggests the need for covering the essentials of the preparation of a viable project proposal (along with its other associated details) in the curriculum of the vocational training programmes supplemented by the extension of required facilitating support by the institutions (VTIs). The latter in particular requires attention in areas of accessibility to institutional credit and appropriate market links for the output of self-employed in order that such ventures do not get discontinued due to impediments faced on these fronts. A number of programmes/institutions are already in existence to assist the setting up of micro-enterprises through industry, service and business routes. They also provide each entrepreneur with facilities for training and skill development to run the units set up effectively. In effect, what is, therefore, mainly required to be achieved is the coordination of institutional efforts (i.e. VTIs with other agencies already existing e.g. SIDBI, NSIC, NIESBUD, etc.) so as to facilitate the promotion of self-employment ventures among the educated youth.

Industry-Institution Linkage

Notwithstanding the employment prospects and reasons for their under-utilisation, an overwhelming proportion of respondents (95.2%) felt that there is a good match between their job requirement and skills imparted/acquired by the training undergone. The responses furnished, relating to questions of job contents, relevance of training received, aspirations/expectations realised, are observed to be consistent (at 1 per cent level by a 2x2 contingency test) in establishing authenticity to the views expressed across different questions. This

³ In a follow-up survey of self-employment pursuits under PMRY scheme (for three years of 1995-96, 1996-97 and 1997-98), out of a total of 16,397 beneficiaries surveyed in 6 states, the proportion of beneficiaries with ITI and other vocational oriented training was estimated to be less than 5 per cent. Further, the overall success rate was estimated at around 47 per cent. While the income level of this group by their self-employment venture was above Rs. 25,000/- per annum, another 37 per cent of beneficiaries were estimated as earning below Rs. 25,000/- per annum. The remaining 16 per cent of the beneficiaries had either not started or discontinued their venture. (IAMR, "PMRY: An Evaluation", 2001, mimeo).

also adds credence to the views expressed by a responding group of senior managers in the establishments who opined that the contents of courses (particularly in the training offered at the ITIs) are relevant and with the on-the-job pre-or post-employment training given, the trainees are able to meet the needs of the industry. More particularly, the respondents at supervisory/managerial levels were of the view that though practical exposures to modern/latest methods are lacking in the courses offered at ITIs, the theoretical foundation given is both required as well as sound in its contents. This, therefore, reinforces the view that qualitative standards need addressal which can be achieved only by the establishment of stronger industry-institution linkage. The apprenticeship-training scheme which is aimed at utilising the facilities for training existing in the industrial establishments needs to be implemented rigorously so as to realise the maximum possible potential from this front. The views expressed in this respect by the respondents, in fact, suggest for the extension of its application compulsorily towards the end of the training courses so as to afford the trainees on-the-job practical exposure. Additional measures suggested in this direction include: (i) enhancing the course curriculum by including latest technological methods/practices; (ii) imparting more practical/applied knowledge; (iii) exchange of faculty from institutions and professionals from industry to study their problems and provide inputs for their addressal, etc. Towards this end, it is important to ensure that the curriculum modification committees are duly represented by teachers/trainers from VTIs. The industry-institution exchange would then help in identification of the emerging areas by the faculty on which modifications in the curriculum can be effected even at shorter intervals so as to provide awareness on latest methods/practices to the trainees at VTIs. A calendar for the organisation of such programmes for exchange of ideas must be worked out in advance so that periodical holding of such exchanges are pre-planned and made known well before. This is an area in which professional bodies and organisations could be involved so as to benefit by their expertise in such activities/fields.

To sum up, the following recommendations, on employment policies in a global context, adopted by the 83rd session of the International Labour Conference (ILO, 1996-97) on enhancing the adaptability of the labour market and the efficient use of human resources are quoted:

- Adapt the training system to meet the needs of the self-employed, especially where few jobs in the formal or modern sector are being created; the efforts in this direction should be such as to improve the supply response to skill needs and also to provide an appropriate system of incentives and support for employers to offer and workers to seek training, so that economic expansion is not restricted by a mismatch in skills;

- Encourage cooperation between private and public, large and small and medium sized enterprises to exchange information and take other actions so as to nurture new entrepreneurial and management skills with the goal of increasing employment;
- Assist the development of small and medium sized enterprises in order to encourage the creation of jobs by facilitating access to capital markets and credit on reasonable collateral, interest and repayment terms, taking into account the need to encourage women entrepreneurs;
- Design policies and programmes aimed at providing equal employment opportunities for women and men.....(with due consideration) on the need to improve possibilities for workers to combine family responsibilities with their working life.

Renewed Policy Thrust

The policy thrust accorded for development of vocational education in India is not new. In fact, "some form of systematic vocational education was provided (even) in ancient India for a long time"⁴. In particular, development of vocational education in India after independence is marked for its emphasis by the various commissions especially set up for its promotion [e.g. Radha Krishnan Commission, 1948; Mudaliar Commission, 1952; Secondary Education Commission, 1953; Education Commission, 1964-66; Adiseshiah Committee (Learning to Do, 1978); National Policy on Education, 1986 etc.]. Thus the concept of vocational education received due attention but has always needed a renewed thrust keeping in tune with the changing labour market trends.

The 72nd session of the International Labour Conference (1986) stressed on the "vital impact of the opportunities and the quality of education on the chances for workers to find gainful employment and to participate positively in all aspects of the social and economic life of the society" and, more importantly, on the need for "more integrated education systems comprising (of) both a formal education component and a broad network of non-formal education and training activities involving workers and adults in general and offering access to workers of low-income groups" in particular (ILO, 1995, p-1). In essence, the resolution reflects the "ideal embodied in the Human Resources Development Convention (1975, No. 142) which while stressing the mutual relationship between HRD and other social, economic and cultural objectives" calls on member States to "establish and develop open, flexible and complementary systems of general, technical and vocational education, educational and vocational guidance and vocational training, whether these activities take place within the system of formal education

⁴ Background Paper on Vocational Education at Post-Secondary Level in India", IAMR (mimeo).

or outside it" (ibid, p-2)⁵. In the light of this, therefore, it is useful to note the dimensions of changes undergone in the perspectives of Vocational Education (VE) over time.

Traditionally, while 'Vocational Education' (VE) was understood as "education designed to prepare skilled personnel at lower levels of qualification for one or more groups of occupations, trades or jobs" (IAMR, ibid) with the changing times, its connotation has undergone significant change to acquire the sense of "demonstrated acknowledged development of knowledge, skills and attitudes necessary for a place in the workforce at levels ranging from pre-trade to para-professional". VE thus entails three distinct attributes of practical training or experience (demonstrated); a process of going through a testing for certification of skills acquired (acknowledged); and, more importantly, skills possessed with the attitudes necessary to mould for the requirement of jobs in demand (i.e., adaptability to skills with the change in technological developments). And in a related perspective VE is "distinguished from general education by its higher cost of delivery, especially at the secondary level, and by the options it opens or closes at the secondary and post-secondary levels" [World Bank and International Labour Organisation (WB/ILO), 2000, p-13]. The policy of vocationalisation should, therefore, address not merely the re-orienting of fresh entrants to labour force but also those of experienced practical hands already in jobs but without certification of their acquired skill levels. It is in this sense that the Ninth Plan had observed: "For skill upgradation of the workers in the unorganised sector, flexibility in the duration, timing and location of training courses needs to be introduced" (PC, p-212). In line with this goal, the National Policy on Vocational Training (NPVT) identified the need to "introduce short-term and medium-term need-based vocational programmes to

⁵ For a distinction between the formal, non-formal and informal systems of education and learning, the following may be noted. By 'formal' education is meant that a network of institutions provides a systematic and chronologically sequential progression of education starting right from early childhood upto a stage of learning in a university or an officially recognized centre for advanced professional training. 'Non-formal' education operates outside that network, and offers a heterogeneous range of activities adapted to the specific needs of certain groups. Its objective is nevertheless to transmit well-defined knowledge and skills to persons who participate consciously and purposefully. 'Informal' education is the important process of developing intellectual, moral and practical capacities in which the family, the community and the media are influential agents. This is profoundly influenced by socio-economic and cultural factors which play a great part in determining the capacity of the individual to benefit from the planned activities of formal and non-formal education. In particular, it is necessary for the former two viz. the formal and the non-formal systems to co-exist and complement the efforts of one another as the effort of updating and modernizing formal systems must be accompanied by the creation of non-formal networks providing for: (i) compensatory education in basic skills; (ii) vocational programmes complementary to the formal system; (iii) short, intensive training programmes to meet specific needs; and (iv) supplementary general education for adults, including trade union education. (ILO, 1995, ibid, pp. 15-16 & 25).

augment rural development (which) need to be non-formal and flexible and made available to neo-literates, school drop-outs, unemployed or partially employed persons" (NPVT, 1999). Furthermore, the training system was supposed to be reoriented for "delivering competencies in line with nationally recognized standards" (ibid). The focus of curriculum was meant to be revitalised for "developing technical, methodological and social competencies aimed at providing broad qualifications" (ibid).

The renewed policy thrust envisaged (as seen from the inputs provided to the Tenth Five Year Plan/ is also, therefore, aimed at:

- Addressing the weak spots in the existing system of VE;
- Establishment of a system of c[^]ffickion for workers in informal (unorganised) sector;
- Involvement of industry in a greater degree to strengthen the vocational training system thereby reducing the mis-match in skills; and
- Evolve a practical approach to skill development funding drawing on the experiences of other countries.

Weak Spots vis-a-vis Future Efforts

The areas, which have not received the level of attention deserved and, therefore, identified as needing emphasis, are:

- Focus on higher order generic skills the absence of which hinders acquisition of higher order specific skills;
- Developing programmes of skill development related to service sector;
- Training of trainers and establishment of facilities for improvement of qualification of trainers;
- To forge linkages with the community in skill training;
- Assessment of demand and supply of skilled workers including qualitative dimensions of skill and wage structure;
- Drop-out rates of those admitted to formal and non-formal streams of Vocational Training (studying the reasons therefor and measures to be initiated for its dealing); and
- Improvement in infrastructural facilities for improving quality of training imparted.

⁴ Background Papers for the Second Meeting of the Working Group on Skill Development and Training, Input to Preparation of Tenth Five Year Plan, New Delhi (mimeo).

⁵ "Labour Market Signals and Training of Labour Force", Input to the Working Group on Skill Development and Training set up by the Planning Commission for preparation of Tenth Five Year Plan, IAMR, (mimeo).

System of Certification for Competency Levels

Several institutions and bodies including ITIs/Vocational Schools (e.g. export promotion councils, commodity boards, community polytechnics, extension centres of Agriculture/Horticulture, NGOs, professional bodies and associations, chambers of commerce and industries, etc.) are conducting a large variety of formal and non-formal vocational training programmes. There are also a large number of people who have acquired skills by working on-the-job in occupations inherited or otherwise and are without formal certification for the level of skills acquired. Experiences of other countries reveal that many developed and developing countries all over the world have evolved standard certification procedures at different levels p | % 1 to those that are applicable to formal education/training programmes. **they** have also built-in flexibility whereby a unit of training can lead to competency-based certification of specified units in a modular manner. Such units accumulated over a period of time are allowed to be used for certification based on modules completed.

During the Tenth Plan period, it is envisaged to establish a certification system whereby modules of training and retraining undertaken at different levels can be systematically accumulated leading to certification at appropriate levels. The activity is proposed to be coordinated by Ministry of Labour/HRD in an integrated manner. Involvement of user organisations like employers, industries etc. (including trade unions) are proposed to be encouraged to contribute effectively in the endeavour.

Strengthening of Vocational Education/Training System Through Industry-Institution Interaction

The different aspects involved in ensuring the qualitative standards of VE (curriculum updating, training of trainers, identification of emerging areas, upgradation/maintenance of training infrastructure, etc) are an exercise in continuity and are not merely a one-time effort. The most important or the central requirement in this respect is the forging of an effective industry-institution interaction. One of the points made by ASSOCHAM to the Working Group on Skill Development and Training on the issue of establishing better Industry-Institution Interaction is: "the onus is on the government to make the industry feel that the training under the Apprenticeship Act is not a burden on the industry but help since the industry needs good, confident and trained manpower". The first part of this submission indicates the need for a reassurance while the second part reflects the self-interest and, therefore, the implicit motivation for contributing to improving the quality of training. Experiences of other countries reveal that such a partnership is forged with much flexibility, incentives and support extended by the government and constitutes the key for strengthening the vocational training system (WB/ILO, *ibid*, pp. 22-35). The suggestions and

sought-out concessions/incentives for encouraging the industry to play an active and meaningful role are: (i) introduction of flexibility in allocating apprentices to industry depending on local/regional requirements; (ii) stipend to trainees/apprentices to be enhanced and 50 per cent of the same to be borne by the government; (iii) group of industries to be asked to support one institution in an area; and (iv) private sector to be given incentives to set up training institutions such as providing free or highly concessional land, 50 per cent of capital cost as grant, 200 per cent tax benefit on the amount spent on setting up and running of the institution, autonomy in respect of fee structure to be followed etc. Although the issue of closer partnership with the industry in making the training system more attuned to the industry's needs has received concerted attention, its roots are still not sufficiently established and the envisaged approach in the course of Tenth Plan is expected to give a new thrust in this direction.

Skill Development Fund (SDF)

In the present context of globalisation and economic reforms, funding of VE is also expected to be gradually shifted outside the purview of public funding. There is a proposal to levy a training cess to be borne by establishments proportionate to the total employment in the establishment. A review of policies pursued by other countries reveals (WB/ILO, *ibid*, p-20) that the financing is done through sources like: (i) Allocation from workers' union funds; (ii) Funding from public revenue by State; (iii) Per capita payment from employers to union education fund; and (iv) International donor agencies. Proposal for Tenth Plan in this respect includes the setting up of a Skill Development Fund (SDF) on the lines adopted by many countries. Mandatory contributions from the employers depending upon the number of employees, annual turn-over, profit and the technology level of the operations are expected to constitute a significant part of the proposed SDF.

Issues and Challenges: A Perspective

The addition to the country's labour force between the two latest NSSO employment and unemployment surveys is 26.9 million with an increase from 379.7 million in 1993-94 to 406.6 million in 1999-2000. The average annual addition to the labour force is thus of the order of 4.48 million. While this figure constitutes an important basis for the purposes of employment planning in general, what percentage of this total addition is 'educated manpower' and how much of it is 'vocationally trained' are important indicators from the point of view of required thrust in the policies of manpower utilisation in the economy. A look at the annual out-turn data from the different educational courses under offer in the country reveals that the highest annual out-turn of all is from the ITIs (6,77,784) with another 3,60,527 from the various other vocational courses

combined^s. The total of these two segments is thus a significant 10,88,311 a year constituting about 24.2 per cent of vocationally trained manpower in the total annual labour force addition in the country. This proportion compares unfavourably to the levels attained by other developing countries and falls far short of those of the developed ones (Table 4). Thus, while the efforts to increase the share of vocationally educated and trained must be addressed with a renewed vigour, the aspect of addressing the nature of available employment opportunities should also deserve the attention of policy thrust.

The issues to be given weightage in this respect centres around promotion of traits geared to facing the challenges of current trends in employment market. As noted earlier, the success rate in self-employment pursuits (in terms of income) from one of the popular self-employment promotion schemes for educated youths was a significant 47 per cent. However, as also noted from the profile of other side of such ventures, an equally significant 37 per cent come under pursuing low productivity ventures. Thus, although at a macro level the proportion of self-employment venturists is not small (53 per cent in 2000: Table 5), the productivity aspect of such ventures is an altogether different issue requiring to be examined by micro level studies. Thus, in addition to changing the existing balance in the system of education in the country (which is excessively tilted towards general academic education) in favour of Vocational Education & Training (VET), there is also a need to improve the quality of employment opportunities available through a viable employment/HRD strategy. It is also important to note in this connection that decisions on investment in education and training must be so made as to be consistent with the policies of economic and employment planning especially with regard to the desirability of maintaining a balance between areas of capital intensity and labour intensity in a judicious harmony. A coordinated sectoral approach with efforts directed to meet medium and long-term manpower needs is especially to be the key in this regard. Since the perception to think beyond a 'wage employment pursuit' itself needs to be developed, the ability to mould one's thinking in this direction by the establishment of integrated/coordinated institutional support systems is also much called for.

Besides the out-turn from ITIs, the courses by level and their estimated annual outturn considered to arrive at this estimate are: Engineering Degree (74,323) and Diploma (92,323); Medical (Allopathy - 14,500 and Dental 2,584); Agriculture/Veterinary/ Natural Sciences (Graduates and Post-graduates - 3,53,761); Para-medical - 22,456 (Nurses - 13,331; Mid-wives - 3,725; ANMs - 4988; and Health Visitors - 412); and Apprentices - 34,310 (Manpower Profile, India Yearbook 2001, IAMR). The estimate is by no means comprehensive as it excludes a significant chunk of general graduates in Arts, Science & Commerce besides many other courses. The estimate is presented merely to highlight the fact that a substantially high percentage of annual addition to labour force are of the category of educated manpower' whose employment needs require to be addressed for which vocationalisation of education is expected to provide some answer.

TABLE 4
Proportion of Vocationally Trained Among the Youth in Labour Force
International Comparison

<i>Country</i>	<i>Age Group</i>	<i>Vocationally trained (per cent of those in labour force)</i>
India	20-24	15.9[@]
Developing countries		
Botswana	20-24	22.42
Colombia (1998)	20-29	28.06
Mauritius (1995)	20-24	36.08
Mexico (1998)	20-24	27.58
Developed Countries		
Australia (1998)	20-24	64.11
Canada (1998)	20-24	78.11
France (1997)	20-24	68.57
Germany (1998)	20-24	75.33
Israel (1998)	18-24	81.23
Italy (1997)	15-24	43.88
Japan (1997)	20-24	80.39
Korea Republic (1998)	20-24	95.86
New Zealand (1997)	20-24	63.03
Russian Federation (1998)	20-24	86.89
Singapore (1998)	20-24	66.24
United Kingdom (1998)	20-24	68.46

Source: IAMR, Centre for Public Policy and Governance (CPPG), 2002 (mimeo) p-12.

[@] The proportion for India (15.9%) is worked out by taking the two streams of ITI and apprenticeship levels of training. This proportion rises to 24.2 if other courses of higher level are included (vide end note 5).

TABLE 5
Proportion of Self-Employed Among the Workers by Industry: 1999-2000

<i>Industry</i>	<i>(Per cent)</i>		
	<i>Rural</i>	<i>Urban</i>	<i>Combined</i>
Agriculture	57.9	57.2	57.7
Manufacturing, mining, electricity, gas and water supply, construction	45.4	33.8	40.3
Trade, transport, financial, ownership of dwellings, community, social and personal services	52.9	44.6	48.2
All industries	55.9	42.1	52.9

Source: IAMR (CPPG), *ibid*, p-7.

While the aforesaid fact relates to bringing about change in the educational system, on the one hand, and the perception of employment among the new entrants to the labour force along with a need to strengthening the institutional support for the promotion of self-employment pursuits, on the other, the issue of addressing education-employment linkages in the required perspective is also close on its heel. It is a fact that vocationalisation of education by itself does not lead to generation of employment and it is the increased level of economic activity and the resultant economic growth which results in an atmosphere conducive for employment growth. To bring out the perspective of this dimension of the problem, it is relevant to note that "the persistence of structural unemployment, which means that we cannot guarantee that education and training will lead to a job, but only affirm that they are likely to move individuals ahead of others in the queue for such jobs as exist, seriously reduces the motivation to participate in education.

It also means that there will always be losers as well as winners in the competition for work, and raises the question of what kind of education (assistance) should be offered to the losers ... The heightened competition for work also increases the severity of initial disadvantage or handicap ... The trend towards the internationalization of economies ... (is also) profoundly affecting the processes of production and distribution, employment prospects, and the economic status and social security of workers (and in this process) the political and educational responses have been less than adequate (so far)" (ILO, 1995, *ibid*, p-5). Thus, the economic policies pursued and the sectors in which they would lead to generation of employment must be carefully dovetailed with the contents of HRD programmes pursued in order that there is a proper match in the skill needs of the economy (Awasthi, 1992)*. The efforts at strengthening the industry-institution linkage must, therefore, be seriously pursued in order to facilitate the process of establishing the desired education-employment-skill linkage.

An integral aspect in the realisation of the desired objectives is the input on labour market profiles. Characteristics of labour market trends on trained manpower absorption and changes in the attitude and the atmosphere for venturing self-employment pursuits need to be studied continuously. This requires the conduct of tracer studies and development of a Labour Market Information System (LMIS) for providing the necessary input to take up supportive measures. The Tenth Plan emphasised the crucial need for this purpose with an integrated approach by all players including NGOs. This is required to be pursued seriously along with measures for evolving simplified and integrated systems for availing institutional support for the setting up of self-

* The paper brings out the occupational classes and levels from a sectoral standpoint within the envisaged plan perspective much of which is relevant even in the present economic scenario.

employment ventures. Policies of women's empowerment and addressing the needs of the disabled and weaker sections of community also need to be pursued in order that the principles of social justice are accorded due weightage. Indeed, in the present context, the rate of growth of GDP and of employment depends importantly on an economy's ability to compete successfully within the new system of globalized production. The policy challenges revolve, therefore, around providing the economic framework and incentives to facilitate adjustments to higher productivity and higher skilled production system (ILO, 1994).

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BOOK REVIEWS

Jyotsna JHA and Dhir JHINGRAN (2002) *Elementary Education for the Poorest and Other Deprived Groups: The Real Challenge of Universalisation*, New Delhi: Centre for Policy Research, Pages: 255, Price: not mentioned. (Paperback)

Since the past several years, field research studies and grass-root level action have acknowledged and highlighted parental desire to send their children to schools that are functional. To some extent, this 'parental desire' is incorporated in government programmes such as the 'Education Guarantee Scheme' which places the onus on parents and communities to 'demand' education from the State. How does this 'parental desire' translate itself into a 'parental demand' and how does this 'demand' lead to 'commitment' to education? The field based investigations conducted by Jha and Jhingran attempt to raise these questions in the context of analysing micro-level decision making processes which determine whether children go to schools or remain outside the education system. The authors try to explain these decision making processes and the way they are influenced by three critical factors, namely, the socio-economic and cultural context, the situational realities at the level of the household and the school situations.

It is important to note that the authors have brought fresh data to their readers having produced the report within one year of collecting the empirical data. The study is based on detailed field work carried out in rural and urban areas of India. The authors began by preparing an index on the basis of percentage of population Below Poverty Line, Infant Mortality Rate and Female Illiteracy Rate. Among the top 100 highest ranking rural districts (High in population Below Poverty Line, Infant Mortality Ratio and Female Illiteracy Rate), nine districts were chosen and two districts were chosen among the bottom lowest ranking districts where the incidence of poverty and deprivation was relatively lower. Thus, districts from across the country, covering states of Assam (Dhubri), Bihar (Araria), Jharkhand (Palamu), Orissa (Nuapada), Madhya Pradesh (Sidhi), Uttar Pradesh (Shravasti), Gujarat (Dangs), Karnataka (Chamarajnar), Andhra Pradesh (West Godavari) and Maharashtra (Pune) were identified. Two blocks per district were identified except in West Godavari and Pune where only one block each was identified in each district. Two villages were identified within each selected block on the basis of the following criteria: a] existence of at least one particular feature such as poverty/backwardness, social composition and certain natural features such as forest dependence, flood or drought-proneness, and b] presence of a primary school within the village or within the radius of 1.5 kilometres. The urban centres were selected so as to include one mega city (Delhi), one industrial city (Kanpur) and three smaller cities (Warangal, Parbhani

and Malda) from different states. Altogether, the study covers 37 villages and 15 neighbourhood slums. The households were selected randomly based on the Below Poverty Line lists acquired through the Panchayat or Municipality offices. In all, the field investigations covered 1077 families, 2190 children and 87 schools. A mix of qualitative and quantitative methods was adopted and tools such as village appraisals, poverty perception exercises, focus group discussion, household surveys, case studies, school surveys, interviews with the teachers and administrators and village analytical reports were used to gather data. The entire field work was carried out between February and September 2001.

The report is divided into ten chapters. The Introductory chapter provides a conceptual framework, the approach and methodology used in the study. Chapter Two analyses the contextual realities and life conditions of children and an assessment of the school functioning. Chapter Three reports the findings from the field survey and highlights the school participation patterns among children and the decision making processes at the level of the families. Educational deprivation amongst different social groups such as the Dalits, the Scheduled Tribes, Muslims, Other Backward Classes and girls is discussed respectively in Chapters Four and Eight. The specific concerns of schooling among the urban low-income groups are studied in Chapter Nine. In the concluding chapter, the authors tie up their arguments and review the existing policies, programmes and non-governmental interventions in the field of education. Throughout the report, the authors have highlighted specific issues such as Integrated Education for the Disabled, child labour, religious education in *madrassas*, with boxes and numerous case studies based on school experiences of the marginalised children.

Apart from concluding that we are far from reaching our goal of achieving 'Education for All', the report also brings out the utter dysfunctionality of our government school system on the one hand, and a rejection of this sub-standard quality of education by the marginalised communities, on the other. In situations where schools are not able to deliver and perform even the most basic functions at the elementary level, we find households deciding against sending their children to school. The swelling numbers of the never enrolled children within the larger category of out-of-school children drives home this point succinctly. While addressing the challenges faced by children from marginalised communities, the study also draws linkages with larger questions such as socio-cultural alienation of tribal children, the parental outlook on *madrassa* as a schooling option, the influences of socio-political mobilisation on dalit education, socialisation processes and importance of education for the girl child. In the final chapter the authors note that the adverse socio-political positioning of the poor, deep-rooted patriarchal values and socio-cultural practices, basic livelihood insecurity and children's engagement in work and unaccountability of the schooling system to the people are factors that determine parents' commitment to schooling. However, the flow-chart describing these schooling

related decision making processes at the household level could have been more refined by bringing in more variables and by depicting relationships between the same.

This report is quite informative and can be useful for researchers, planners, activists and all those interested in understanding the status of education among the disadvantaged sections of our society. Since the study covers a range of issues, the data presented may appear unwieldy to the readers. Some important findings appear to be lost in the labyrinth of data since not all tables and charts are analysed and discussed in the text. Since the data analysis is primarily restricted to descriptive statistics, the readers are deprived of an understanding of statistical relationship between variables affecting school-related decision making which could have been accomplished through a multivariate analysis. Given the nature and range of the data collected, the authors could have considered bringing out a series of monographs, each extensively highlighting school participation and deprivation among the respective marginalised groups, instead of publishing a single report. As one of the authors points out in the preface, further analysis of data is intended to be undertaken at a later stage.

Having recognised children's fundamental right to elementary education is one thing but addressing the challenges thrown up by complex situations of deprivation and marginalisation is another. A report of the kind written by Jha and Jhingran not only brings out more questions pertinent to these empirical realities, they also remind that attempts to universalise education are futile without addressing the needs of the poor and the deprived.

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Janet Ward SCHOFIELD and Ann Locke DAVIDSON: (2002) *Bringing the Internet to School: Lessons from an Urban District*, San Francisco, USA, Jersey Bass A Willey Company, pp. xviii + 393, Price: US\$ 27

The book under review, the outcome of Janet Ward Schofield, a social psychologist and Ann Locke Davidson, an educational anthropologist, is a five year (1993-1981) study about the introduction of Internet to Waterford Public Schools (WPS) - a large urban school district. It has been termed as Networking for Education Testbed (NET). The purpose of the study was to encourage educators to find ways to incorporate Internet use into students' everyday activities in order to explore and demonstrate the potential of such use to improve education. The book examines the human and organisational issues and the processes that shape Internet use and its consequences in the Classroom.

The study takes the theoretical perspective of 'Web Model' that views computer based system as a social object whose architecture and use are shaped by social relations between influential participants, the infrastructure that supports them, and the history of commitments in institutions utilising these systems. This conceptual orientation holds that political interests, structural constraints and participants' definitions of the situations have their major implications of how people use technology and what consequences of such issues are. It is hypothesized that Internet use will be shaped not only by the nature of technology itself but also by longstanding patterns of behaviour and social organisation within schools, the nature of support provided to teachers and students who attempt to use technology, and the history of computing in a school district. It is suggested that anyone attempting to understand the use and impact of technology should pay close attention to the way that access to technology influences individual's interest and the ways they interpret its introduction. This approach conceptualises computer as part of the social web.

Two major methods of data gathering in this study were intensive qualitative observation and interviews. Interviews were conducted with students and teachers, classrooms were observed and team meetings were held. The core of research was a detailed study of five participating schools in NET; a significant amount of data was collected in another eight schools, and more limited information was gathered from the remaining NET schools. Moreover, to understand the context in which NET' functioned, data was gathered on the pertinent activities and perspectives of both NET staff and those in the district charged with responsibilities related to NET. Besides, a large amount of archival data, including all proposals submitted to NET's annual competition and a variety of planning documents, newsletters and other written material were collected. The data analysis ranged from the qualitative coding of field notes to the production of descriptive and inferential statistics from the survey and questionnaire data.

The need for technology in education was stressed by two reports - *A Nation at Risk* and *SCANS Report* (U.S. Department of Labour, 1991). It is argued that technology could play a major role in solving education's problems and preparing the nation's workforce to be competitive in the increasingly global economy - so technology is essential to effective schooling and an engine that could power the needed reform. Over the years, schools in the United States and around the world have spent millions of dollars to commit students and teachers to the Internet. However, there is little solid evidence about the impact of Internet use on teachers and students. Educators are not aware about the challenges that schools will have to meet in order to maximise the potential of Internet use to improve education. It is stressed that the ultimate value of Internet access in schools will clearly depend on the extent to which students and teachers use the Internet and on the purposes for which they use it.

In the realm of technological change, the emergence of world wide web and its readily search tools, the potential increases in the speed of connection that schools are likely to be able to purchase, and the increasing power and decreasing price of laptop computers have potentially major implications for the Internet's use and likely impact on education. On the other hand, teachers and students within schools change less rapidly than technology. This is attributed to the characteristics of education system and is not likely to change drastically in the near future. Factors such as teachers' conceptualisation of the classroom as a private domain for independent professional action, the tendency towards batch processing of students and teachers' time is a scarce resource, will continue to have an impact on how school use the Internet.

There is not sufficient evidence that Internet access will fundamentally transform education and its outcome. Moreover, outcome of Internet access are likely to be extremely variable. Some teachers used Internet primarily as an archive, some used it mostly for communication while some Internet users were more central to curriculum than others. Students in the same school, and even in the same classroom, ended up with different levels of Internet access. However, its use increased teachers' and students' use of up-to-date and extensive educational resources including expertise of others with whom they communicated. It also gave students new opportunities to learn in the context of meaningful experiences embedded in real world education. It also increased students' motivation, their acquisition of technical skills, and their ability both to share their work with those outside the school and to work cooperatively with others. Its use fostered more positive student-teacher relations, the emergence of new and constructive students' role and the increased student independence.

The study identified eight social and organisational factors associated with extensive Internet use. These included: team cohesion, project ownership, collaboration, active librarian involvement, strong teacher leadership, ease of integration, discretionary professional time and technical reliability. It is emphasised that having a predominance of these factors is clearly associated with more Internet activity.

Issues that arose in NET schools included the need for additional time for educators to develop skills and plan Internet activities; the need to build into the already crowded curriculum enough room to teach all students Internet skills including key boarding. Educators also need support in learning how to integrate technology use into their pedagogical practice and their curricular material. There is need for a bit between educators' vision of education and their opportunities that new technology provides. It is pointed out that computer aided instruction (CAI) can have positive effect on student achievement. Applications such as intelligent tutors, multi-media video-discs also promote student achievement.

There is need to train students in the use of computer Internet skills - access to material, communicating with others and e-mail. E-learning is also gaining

popularity, internet use brings with it the possibility of active empowerment roles for students. The schools should make a place in the curriculum to deal seriously about misuse of Internet. There is need to carefully and creatively foster responsible Internet behaviour. There is need to develop post-relevant educational material on Internet for the benefit of students.

There is a suggestion that technical training may be imparted to teachers. More and more teachers will bring computer and Internet skills to their job, as Internet use becomes part of daily life. Technical training and support are ongoing needs that increase with the constant changes in the technical world. Internet can also help in the professional development of teachers and education supervisors. To the question about the discontinuity of Internet access from the school after the study is over, teachers and students felt sad and upset if their schools would no longer have Internet access.

In the Indian context, a news item entitled 'when Internet becomes a hindrance to education', it is stated that if crossing the caste or religious barrier was not enough, school admissions now have a digital divide. For children, planning to apply to Delhi Public School (DPS), it is mandatory to have computer literate parents and a credit card. The Dwarka branch of DPS has also issued an advertisement for on-line forms only. Even though a High Court order passed on September 27, 2002 directed DPS to accept forms that are not on-line. (*The Hindu*, October 7, 2002).

In fine, this is a pains-taking study. Based on interviews and observations, the authors have given an idea about the feelings of the participants. The book will be of interest to educators who are interested in introducing computers and Internet in their schools. The study gives an idea about the threats and opportunities offered by computers and Internet in the field of education. The authors and the NET staff deserve the gratitude of readers for their endeavour.

A useful contribution.

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Hank RUBIN (2002) *Collaborative Leadership: Developing Effective Partnerships in Communities and Schools*. California: Corwin Press, Inc., A Sage Publications Company Thousand Oaks, pp. 107+index; Price: \$24.95: (Paperback)

The book has arrived at time when major transition in India is taking place towards decentralization in educational governance and management leading towards empowerment of the community and school leaders for bringing systemic school reforms. One would agree that very useful experiences have emerged in the arena of education, which presents a wealth of insight for the

education sector. The book, as one can gather from the first exposure, catches the analytical eye of educational personnel, to whom one can say for certain that it gives a 'feel' of sensitive issues arising from the efforts for systematic school reforms holding schools accountable to the public.

There has been a growing realization that no positive change can occur until the skills of interpersonal relations are strengthened among educators, community and civil society and government leaders. The book advocates the message that where, on the one hand, the skills of effective partnerships are the essential tools for leaders to leave an ever lasting impact on schools and communities, on the other, social empowerment and teamwork lead to the realization of goals. The present volume attempts to address two vital issues facing collaborative systems: (i) posing a variety of arguments for *doing* collaboration, (Chapter 1 through 4); and (ii) exploring how best to *do* collaborations (Chapter 5 through 9).

The first half of the book spells out the importance of relationships which marks inter-personal skills and principled institutional leadership as vehicles to sustain effective relationships. At the same time a collaborative leader has been understood as one who nurtures relationships through which the missions are accomplished. In this entire arena, it is the person that matters and the term of 'institutional collaboration' is a misnomer since institutions have neither beating hearts nor collaborative relationships. The inference drawn is *Collaborative Leaders Succeed with and through People*. Getting things done in public always entails collaboration, which stands on the strong foundations of sustaining relationships with the people. It is, therefore, imperative for an effective collaborative leader to sharpen the skills of relationship management with clear and common vision. The cultures may differ in separate management organizations like profit-non-profit or public-private organizations but definitely all are charged with interpersonal and collaborative skills.

The second half of the book is devoted to several models, frameworks and symbols. One of the models on System Alignment considers the role, contribution and action to be taken to ensure systematic approach within quality perspective, and explains two basic domains on a continuum, with "Why" (our shared goals) appear at one extreme and "What" (Quality principles of system alignment) on the other. In order to clarify about "Why", three components have been highlighted: (i) Raising Expectations; (ii) Bridging the Gaps; and (iii) Partners for Student Success. Concomitants to each of these components, the strategies that need to be taken care of have been listed, which include leadership, strategic planning, stakeholder focus, fact-based decision making, sensitivity to Human Resources, management systems and continuous improvement. Having looked at "Why" and "What", the "How" part emphasizes on alignment of systems through quality practices for accomplishment of goals that can be taken care of "with" and "through relationships with people." This

certainly requires an understanding that systems are nothing more than mental constructs that improve effectiveness of collaborative leaders to align the will and work of people, causing the systems to follow.

The life cycle sketched out within the 12 phases of collaboration addresses to the rudimentary quality framework (reliability untested) for aligning systems through collaboration. These 12 phases analyze critical issues followed in a sequence: (i) reason for collaborative approach in order to improve likelihood of accomplishing goals; (ii) considering alternatives when those decision-makers are selected who are unlikely to participate; (iii) identifying stakeholders who could be accountable to the organization; (iv) developing a tailored strategy which will satisfy the prospects/interest through effective collaboration; (v) addressing the key functions of collaborative leadership; (vi) developing strategic plans with benchmarks to understand and ensure collaborations which can be measured as well; (vii) making early successes a tool for organizing, focusing, encouraging and leading; (viii) building essential bonds between -collaborative partners; (ix) celebrating successes; (x) assessing, adjusting and enforcing bonds; (xi) creating systems by goal centered accountability; and (xii) revisiting and renewing mission and goals of collaboration.

The book also introduces the 24 skill-oriented dimensions that should be present in the partners, may be in varying degrees, but surely make collaboration a success. They are not only the starring points for self-assessment by collaborators but also the targets for self-improvement. At the same time, they also constitute competencies around which curricula for teaching the skills of collaborative leadership is built up. Although the entire attempt on the part of the author is to present an integrated theoretical framework of collaboration, it still leaves space for other researchers to extend the work further to establish its coherence and authenticity. The book continues with a dialogue of seven principles reflecting on the manner in which the scope of vision, skills and institutional resources be expanded to contribute to collaborations that work.

One can only say, after thorough examination of the book, that it has addressed the issue of "Collaborative Leadership" with greater indepth analysis. Although the models presented are in their nascent stage, they do, however, flash positive messages of system alignment within quality frameworks. The book has, in fact, emerged as a facilitator to those who belong to various organizations, definitely encompassing a wide coverage of readership right from educators and decision making authorities at the apex level to practitioners at the grassroot level. On the whole, this book is expected to promote people who are honestly striving to usher advancements in the system to which they are integrally linked.

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K.C. ZACHARIAH et.al. (2002) *Kerala's Gulf Connection*, Centre for Development Studies, Thiruvananthapuram, St. Joseph's Press, Pages: 230, ISBN 0674-00 343-8, Price: Rs. 250/US \$25, (Hard Cover).

Migration is a phenomenon in which there is transfer of people from one place to another, which may stem from desire for self-sufficiency and need to earn one's living. Opportunities for betterment and growth are possible when people shift to new areas. This shift takes place across different states, regions and countries.

In the knowledge-based industrial economy, jobs require certain degree of competencies, which may not be available within the existing local resource group. To meet this shortage of skilled labour, the supply may be met by persons from other regions or countries where there is less demand for skills. Human labour shifts to regions with higher demand for labour. This may accrue benefits in terms of higher salaries and opportunities for self-development. Because of its manifold repercussions - direct, indirect, tangible and intangible - migration becomes significant for contemporary society.

High level of education and skills tend to shift a person from agricultural jobs to other sectors for employment. Regions with good education facilities have greater supply of labour. If employment opportunities are limited, there is tendency for migration. Migration may be more prevalent in one place as compared to another. Kerala is one such place where educated skilled labour has to migrate in search of employment opportunities due to lack of industrial development in the state itself.

The state of Kerala has witnessed mass shift of people both across the country as well as international borders. A significant number of people have been migrating over the years to the Gulf to seek employment opportunities. This has brought about a radical change in Kerala society. Migration has not only created immense employment opportunities but has also reduced poverty and raised the standard of living. The state of Kerala has witnessed mass shift of people both across the country as well as international borders. Impact of migration is visible in terms of increased housing facilities and consumer durables.

This book explores the extent and magnitude of migration in Kerala, the effect of migration on society and economy of Kerala and its contribution to social change. It also seeks to examine the direct as well as indirect benefits of migration as well as further benefits to be extracted from the current situation. It provides valuable and exhaustive information about Kerala migrants. The authors have analysed the impact of migration in detail.

This book has five working papers dealing with different aspects of gulf migration. The first chapter gives a brief introduction of the book. Chapter 2 deals with migrants and their socio-economic status in terms of sex, age, marital status, education and occupation and most importantly, an estimation of actual

number of migrants. The study estimates the number of people who have returned. It throws light on the situation of return emigrants and suggests policies for optimum utilization of remittances. It highlights the role played by migrants. The reasons contributing to migration are identified namely a vibrant social sector alongside with a stagnant productive sector. The authors trace the visible economic effects of migration in terms of remittances, increase in housing, household amenities and possession of consumer durables. These are important contributions which indicate the overall rise in standard of living due to migration. Chapter 3 examines the indirect effects of migration in terms of structural and behavioural changes. It studies the impact of consequences of men and women for whom the consequences arise not only of their own but because of their husbands' migration. This analysis of social impact of migration on elderly people and women is of special significance.

A noteworthy contribution of the book is to highlight the situation of Gulf wives, women who have been left behind in India when their husbands were in the Gulf, women who have used the adverse situation to transform themselves. The human capital aspect has been highlighted which assumes a significant place in the economy. This chapter identifies areas for development policies so as to support families of emigrants and ensure continuing migration and utilize remittances. Development policies are required to upgrade the current education and training system so as to assure a flow of skilled army of labour whose skills will be continuously upgraded so as to keep pace with the international market demand. The education system has to be redesigned so as to make the workers of Kerala highly skilled professionals, not just semi-skilled labourers. These policies, if implemented, will go a long way in promoting the economic scenario of Kerala.

The fourth chapter describes the situation of the return migrants and discusses their occupational mobility, utilization of the human and material resources in Kerala's development and their rehabilitation. It highlights the problems faced by migrants after returning home. It also discusses how the potential of immigrants can be utilized for gainful employment and suggests schemes for their rehabilitation. This chapter highlights certain characteristics of these migrants. It states that these trips have changed the attitude of workers as to instil in them a sense of discipline and commitment, which, if tapped properly, would go a long way in contributing towards development of the state. Suggestions are made to establish a welfare scheme and organization of cooperatives for specific tasks in which the work discipline which the return emigrants have acquired abroad could be of use. This is a noteworthy contribution and is of special importances planners.

Chapter 5 is based on data collected mainly from UAE. It deals with the labour market conditions. It discusses changes in demand for different categories of workers according to changing skill requirements. In future, there will be

greater demand for skilled workers and professionals. It examines employment, wages, working conditions and problems of Kerala emigrants and also discusses education and training requirements for future emigrants. The findings of the study show that demand for unskilled and semi-skilled labourers in UAE have decreased due to economic recession, completion of major infrastructure projects and changes in emigration policy of UAE government. The information provided is critical to education planners and policy makers as it provides valuable inputs on manpower requirements. This information will be useful while formulating educational policies and help the state to reform and upgrade the education system. The authors give a number of recommendations to help the emigrants with the problems associated with migration. These, if implemented, will go a long way in solving their problems.

Chapter 6 deals with remittances and their impact on the economy. This chapter tries mainly to quantify the exact amount of huge sums remitted. It examines the macro-economic impact of remittances, the extent to which remittances have influenced income, consumption and savings in the economy. An attempt has been made to estimate the actual economic impact of remittances, since remittances actually constitute a sizable portion of savings and has a marked impact on the economy. After getting an actual estimate of enormous amounts of money remitted, one realizes its actual significance. Positive steps can be taken to regenerate the savings into proper channels of economic development.

The book explores the consequences of migration - social and economic. It makes valuable contribution towards issues on migration and is of special importance to policy makers and researchers, educational planners and economists. If implemented, the policies suggested by authors will go a long way in contributing towards development of the state.

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Marmar MUKHOPADHYAY (2002) *Secondary Education - The Challenges Ahead*, New Delhi: National Institute of Educational Planning and Administration, ISBN: Pages: 450, Price: Rs. 450, (Paperback)

The book, a compilation of papers presented in a national conference on secondary education, addresses many challenges of a much-neglected aspect of education in India. The book is divided into six parts. Part I deals with secondary education from a much required developmental perspective. Part II focuses on the issues involved in capacity building of the needed inputs, the educational administrators. Part III focuses on how quality can be monitored and managed in

secondary education. Part IV pertains to the most crucial issue in any sector, its financing. Part V deals with the much-debated issue of centralization versus decentralization in secondary education. Finally, papers in the last part of the book highlight the required administrative reforms in management of schools.

As a few contributors rightly point out, secondary education does not receive the same attention in policy circles as primary education because focus on primary education (like literacy) has a populist appeal. Similarly, focus on higher education also has a populist appeal, either because of its implications for central and state budgets (e.g., issues pertaining to hiking fees), or checking brain-drain, especially in management or technical education. However, as we all recognize, secondary education is the bridge from primary to higher education. If we fail to reform our secondary education, we shall fail to create opportunities for those aspiring to cross the bridge to reach higher education, affecting the supply of human/intellectual capital in the country, so crucial for its growth at this stage.

In a country like India, the unemployment rate is high, judging by the magnitude of employment in the organized sector. Nearly 95 per cent of employment in India is in the unorganized sector. Only 5 per cent is in the organized sector. While the large amount of employment in the unorganized sector speaks for many constraints present in organized sector employment (minimum wage laws, laws that make labour retrenchment difficult), it also implies that the secondary or higher education in the country has failed to meet the needs of the formal sector. Or, at least, that there is a lack of correspondence between the outputs of education and the demands of the labour market. Then the challenge is to have an adequate combination of academic as well as vocational training in the curriculum so that students can choose either of these later. So the answer to moving labour force from the unorganized to the organized sector may well lie within the ambit of reforms in secondary education.

Interestingly, as data in the articles show, nearly half (about 48 per cent) of enrolment at plus-two stage is concentrated in Arts curriculum, with only more than one-fourth (roughly 28 per cent) enrolled in Science streams of study. A meagre 5 per cent of enrolment is in vocational/technical streams of education. The data also clearly show urban bias in the science stream. As Agarwal points out in his paper, these choices are governed not by the aptitude of children, but by the social and economic standing of families to which the children belong. This shows the existence of artificial barriers to access in science education. The urban bias in education, coupled with the fact that nearly 75 per cent of our population lives in the rural areas, implies that rural children choose the arts stream. This is because parents in rural areas are less likely to be technically educated or equipped enough to help their children in science streams. Another related factor relates to the possible ignorance of rural parents of benefits that could accrue from science or vocational education.

It is clear why vocational training has not found acceptance among a large number of rural and urban parents. While lower income classes are unaware of the benefits of vocational training, lower middle income classes always strive for a 'degree' rather than training even though that helps them find a job. Everything said and done, most parents wish to see their children in white-collar jobs and eventually in positions of power.

Further, even if vocational education were to be accepted as a relevant area of study, Mukhopadhyay rightly points out the constraints in separating out vocational from academic streams of education, which relate to the sensitive issues involved in labeling vocational education as that which is meant for the academically weaker children.

Besides these issues, the actual training provided in vocational schools also leaves much to be desired in terms of the skills the graduates attain, in relation to what is demanded in the labour market. From this viewpoint, as Sacheti and Mehrotra point out in their paper, the entry of foreign universities to start franchisee centres is a step in the positive direction, to stimulate competition in this very important sector. Like all other sectors, taking advantage of globalization and reduction of tariff and non-quantitative restrictions, is the way to give a fillip to this important service sector.

The features of the alternative training and education system, that Sacheti and Mehrotra propose in their paper, fill most of the gaps in the existing system, the most important one being to closely link the educational institutions with the demand requirements of the industry, services and other sectors. In this way, we will be able to bring a large number of the graduates into the organized sector.

In Part I, Chapter 2 (Table 2.12), Agarwal presents enrolment projections for secondary schools based on time-series regression analysis. It is surprising that, **foT** a time-series regression analysis that has been used for forecasting, no estimates are presented of evidence of auto-correlation or non-stationarity in the data. If yes, the enrolment projections could be misleading. As basic econometrics shows, if the enrolment data during the period 1981-98 were to be interdependent, then prediction using Ordinary Least Squares (OLS) would be misleading. In fact, it is not even clear from the results presented whether the cubic and exponential regressions presented are estimated by OLS. Further details regarding these regression results would have made the analysis and projections more credible.

In Part II, Khajapeer's paper rightly points to the importance of teacher education as schools and teachers have become today only one of many sources of information for the students. In the age of the Internet, the role of teacher becomes more of a guide and facilitator as to how students can utilize the information they have. Unfortunately, many of the suggestions he makes for the in-service training of school teachers/principals are too general to be of use to any training programme. Narula's paper fills this gap and discusses training

efforts by giving a comprehensive list of the task-oriented and methodological skills required by a school principal covering academic, personnel, financial, infrastructure, and student activity services.

As Nayyar (1998) points out, India got universal adult franchise much before universal literacy, which has historically led leaders to pursue populist programmes that were not always good for the country. Now, given that our competitiveness in the globalized economy depends on the quality of our manpower, we have to question what determines or constitutes quality in secondary schools. Moreover, quality in secondary education is also likely to determine the quality of leaders we elect, and, governance. Rightly, papers in part III of the book focus on this important aspect.

Cyril's paper maintains that quality can be either of material or intangible type. He points out that although a number of schools claim to be superior in terms of material quality (e.g., playground and computer infrastructure), it is the intangible type that is more important for us to maintain in our secondary schools as that determines the quality of manpower that eventually constitutes the mainstream labour force.

However, many aspects, of what Cyril discusses as building moral quality, are debatable. For instance, he focuses on group work based on community values, not competition, as building quality in schools, among others. This is questionable. Take the case of the Information Technology (IT) sector in which India is known to have good quality manpower and has an edge over other countries, if trade in services were to be liberalized. This is presumably the result of good secondary schooling that has provided students many relevant technical inputs required for success in this sector. It would rather be difficult to establish *a priori* that group work is the basis of the superiority we enjoy in the IT sector. A better indicator of quality would be, for instance, to measure flexibility at the beginning of the secondary schooling system for students to choose what they like (at standard 8) and specialize, instead of dumping all courses on students (as is the current practice) till standard 10 and let the student decide at class 11 what s/he wants to do. Such aspects are not explicitly dealt with in the papers on quality.

In Part IV, the paper by Azad provides an exhaustive description of how expenditure on education for various categories has changed over the years. While it shows that in real terms, expenditure on education has increased only marginally and also when per capita expenditure is taken into account, the paper provides very little *analysis* of why such trends are observed. Further, we need to answer what can be done to arrest the declining trend in expenditure on such an important sector. A valid observation that can be made here is that with globalization, all countries have started downsizing their governments. Smaller government means lower government expenditure financed by lower taxes. In the Indian context, the low expenditure and small government has to cover the much-

required education and health sectors. Lower governmental expenditure in the Indian context has to refer to reduction of expenditure or, disinvestment, in the unnecessary areas (e.g., consumer goods in which the private sector has a better advantage in producing). This is how expenditure on various categories of education can be stepped up on a war footing.

In Part V, papers relate to decentralization of school management and the advantages of school-based management. So far, management of school education has been a centralized phenomenon where decisions are taken by the government, which the school functionaries are expected to implement, whether or not they are conducive for the interests of the school. Thus, papers in this part rightly point that school administrators that work with students directly are the most informed regarding what educational arrangements benefit them the most and hence should be empowered with decision making. In fact, this is something that has been advocated with respect to higher (university) education. Universities should be provided with more autonomy regarding courses, curricula, types of teacher and staff appointments based on local needs and competition from schools in the area.

The benefits of decentralization and school-based management are undeniable. There is, however, one caveat we need to remember in decentralized decision making with respect to curricula. While this gives enough flexibility for each school to choose its own model, the flexibility of administering a common examination may be lost. For instance, there are certain advantages in a 'public' examination, the most important being to delink students from their actual instructors and examine how they perform in relation to their peers who are taught by other instructors. A further disadvantage with excessive decentralization in decision making to schools is that school administrators that may be biased in favour of, or against certain issues, may become the decision makers in which case the objectivity of the policy making process could suffer.

In the last part of the book that deals with administration related issues in secondary education, Dhar points out that we lack a long-run vision of the specific role that secondary education has to perform. This has largely led to its neglect. The first step toward doing this, as he rightly suggests, is integrate educational planning with manpower planning requirements of industry. For realistic planning, a good information base aided by adequate infrastructure consisting of PCs, faxes, e-mail, and telephones is required. Currently, many schools, especially those in the rural areas, are unreachable except through snail mail.

Overall, the book provides a comprehensive view of the problems of secondary education covering developmental aspects, training, quality, financing, current administrative structure and reforms required. I hope policy-makers would soon begin to experiment with some of the suggestions made regarding

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these various aspects, to see what they hold for the future of India's most important asset, the human capital.

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John MACBEATH and Archie MCGLYN (ed): (2002) *Self-evaluation —What is in for Schools*, Rutledge Falmer, London, pp. x+150, Price: Rs.1032.70

The quality of schooling has been a matter of concern to all the stakeholders in society — the parents, teachers and the government at large. What makes a school good or bad depends upon the judgment made. What is the difference between a good school and an effective one, which leads a parent recommending their own child's school to a neighbour? What are those internal and external evaluation strategies, which indicate that a school is more effective or less effective?

The book under reference has been brought out under the series of what's in it for schools? The series editors are Kate Myers and John MacBeath. The book is divided into eight chapters. The first chapter, Why evaluate schools?, discusses about effectiveness of the schools, which is a measurement of progress. A school is effective when it surpasses the predictions about the future success of its pupils. However, it is very difficult to see how any school could be effective without the measures of improved attitudes, motivation, raised esteem and difficult-to-measure skills such as learning to learn. A good or effective school ultimately is a matter of perspective. There is need for better, more systematic evaluation of schools, which can find a common meeting ground of schools and authorities, policy makers and politicians, researchers and academics.

It is significant as to what should be evaluated in schools? The practice differs from country to country. However, the present focus seems to be turned towards internal characteristics of schools, to departments and classrooms as the more focal point for what differentiates success from failure. Child learning followed by the culture of schools is central to evaluation. Next comes the leadership which must be outward-looking and responsive to the needs and expectations of the community. The chapter also makes a difference between assessment and evaluation and discusses how and when the evaluation of schools can be made.

Chapter Two, 'Internal and External Supervision — Two Sides of a Coin', discusses that internal supervision, usually seen as synonymous with the self-evaluation, is about collective gathering of data. It involves teachers and school leaders coming to judgments based on their first-hand knowledge of what is

happening in classrooms, workshops and laboratories in the school. External evaluation is used to mean the review and reporting on a school's work by people who are not part of the school's organization. Different agencies are involved in the external evaluation including local authority personnel, inspectors and advisors who have long played a role in reviewing school performance, with varying combinations of audit and support.

The authors argued that though there are critics of both the system — as the internal evaluation is pointed out self-deluding and external as the culture of dependency both the systems are needed as the schools need strategies for improvement on rigorous and planned monitoring of what actually happens in the classrooms, in the laboratory and in the workshop. While analyzing the system of accountability as the public reporting system, it served the overriding purpose of school inspections. The types of accountability, as has been discussed in this chapter are: legal/statutory accountability, professional and moral accountability and political and market accountability.

The discussion which revolves round the issues in the Third chapter is on 'Evaluating Teaching.' The authors elaborate that teacher effectiveness is a fruitful field of inquiry. They emphasize that evaluation of the quality and impact of teaching is central to inspection. It is the skill of rigorous and perspective inspection to find, illustrate and evaluate the links between the two. While indicating their remarks towards inspectors — observed and observing that over the years inspection has been subject to many swings of the pendulum in an attempt to find the balance, they point to that form of evaluation that would be acceptable to the teachers and would also meet social scientist demand for validity and reliability.

The important stakeholder whom the authors mentioned in evaluation in teaching is the pupil. Pupils are rarely mentioned as evaluators even though they have the most intimate knowledge of their teacher's strengths and weaknesses. Who should evaluate teaching, they mention that these may be: inspectors, the head teacher, the head of the department, a colleague chosen by teacher herself, a colleague chosen at random, pupils and a researcher.

While analyzing the different learning situations, the authors pose serious questions to the evaluators since classroom situations are not similar and widely vary from one place to another. It is argued that it is very necessary to evaluate learning since it looks to cognitive and social psychology. It attempts to probe individual thinking and feeling and how the learner constructs his learning. Explaining the number of ways of pupil evaluation, the authors suggest that it is necessary to see 'What are the pupils doing? What are they learning? What am I doing?'

For establishing link between benchmarking and school improvement, the authors have identified five broad steps. The first step is 'how well we are doing?' All the stakeholders in school have to acknowledge the sensitivities and

constraints of school. The second step is the readiness for critical self-appraisal, which will be made easier if a range of voices and opinions have opportunities to be heard. Appraisal should emphasize learning, effectiveness and efficiency of the organization, which supports that learning. The third step is to take a broad view, which will include the feel of the school from different points of view, how well the school is doing on this or that aspect. This step will help in benchmarking our school against the school having similar background.

The next step is to have a closer look at our key priorities and on those aspects on which we are falling short of our chosen benchmarks and where we feel there is scope for improvement. Step five includes the comparison of regional or national benchmark and we may now be in a position to decide how we can translate any lessons learnt into our own practices. This may be the planning for improvement stage - what we are going to do now?

Commenting upon the 'Preparing for Inspection', in chapter 7, the authors try to analyze the different sets of activities, which a school conducts before inspection. The cleanliness, general maintenance and repair, painting and writing on classroom walls, decoration of the entrance of school, preparation of students for classroom observation, introduction of new teaching techniques, experiments and innovations, rehearsal and brainstorming etc. They prepare school plan but may not have action points to be initiated. All these things are done in haste and as a result the school failed the inspection.

In the concluding chapter 8, 'Evaluating Leadership', the authors emphasize that the leadership qualities of the head teachers and the manner in which they fulfil the management responsibilities are key factors in determining the effectiveness of schools. While discussing the leadership qualities of school they analyzed that the driving questions in this respect are: What makes good leaders? How are good leaders made? Can leadership be learned or is it a gift? While searching the answers they mentioned four types of dimensions in different studies of leadership: quantitative and qualitative; inductive and deductive; subjective and objective; and behaviourist and constructivist.

In the studies based on the quantitative and qualitative techniques, they observed that leadership effectiveness would be demonstrated by finding a direct relationship between measured pupil outcomes and measures of leaders' performance. In the United States, performance based accountability has recently been reinforced in schools. Studies have shown that there is direct strong correlation between the quality of leadership and pupil outcomes; and the happier and more committed teachers. While deductive studies state what we know about leadership, the findings of the inductive studies suggest that educational leaders outshone their business counterparts on most major traits except that of delegation.

In subjective studies, evidence on leadership may be leaders themselves; in objective studies, on the other hand, evidence may be objective. For example, the

measurement of amount of time a head spent on teaching. A pure behaviourist approach rests on the belief that all that really matters is what we can observe, while a constructivist approach rests on the belief that behaviour is only understandable when we have access to the thought and feeling that construct behaviour.

In their concluding remarks, the authors, while highlighting the leadership and headship, how good am I as a leader, what impact do I/we have on the school, summarized that management and leadership have less to do with the qualities of the individual or team than the effect on the school as a whole — its efficiency, strategic approach and general well being. It is necessary for the head to assess how well they are doing and provide the back-up for their views. It has been suggested that evaluation of school leadership and management should be an integral part of the school self-evaluation culture. Self-evaluating leaders and learning schools need less time for rehearsal and role-play because they are prepared for external security at any time and welcome the challenging visitor or inspector.

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Martyn HAMMERSLEY (2002) *Educational Research - Policymaking and Practice*, London, Paul Chapman, Sage, Pages: 180, ISBN 077766197420 2, Price: £15.99 (Paperback)

Educational Research, Policy-making and Practice, a book by Martyn Hammersley attracted the attention as the questions raised by the author are a professional compulsion and demand answer from the researcher who has to deal with issues in Education having bearing simultaneously on research findings, their policy implications and the feasibility of the suggestions or solutions based on the research undertaken.

It refers to the need of asking factual theoretical and value questions related to role of educational research as regards the policy and/or its implementation. Introduction provides the setting for understanding the relation of the complex trio of Educational Research, Policy-making and Practice. The aim of writing this book is "...To contribute to a deeper analysis of the relationship between research and policy making or practice, particularly as regards what it is possible for educational research to contribute, and what the implications of answers to this question are for its justification and organisation."

The author has given a clear description of what stimulated him to undertake this kind of relational analysis of educational research and policy making or practice. The reader, if he is not a student of Comparative Education,

has to first understand the background of this relational analysis given in Chapter One. This chapter refers to a criticism of David Hargreaves of educational research. The criticism of David is: (i) that educational research has failed to produce a cumulative body of knowledge; and (ii) whatever it has generated is often of very little use to teachers. It has pointed out the fallacies in the argument and has also argued what would happen if instrumental relationship is expected in research and policy or practice. Chapter Two discusses the implications of looking at research from the angle of Enlightenment. The discussion points out various stands either stated explicitly or understood implicitly about the impact of research contributions and the faith that well executed research always has desirable consequences. The author argues that a moderate Enlightenment model will facilitate the recognition of the modest practical contribution that research offers rather than assigning it a master role and then making complaints about its failure to live up to its role. Chapter Three discusses the relation of research and practice. It is written with Roger Gomm. It points out the way the research and practice or policy making view each other. It points out that the relation is held as incompatible in reality is complementary. However, the perception that researchers and policymakers or parishioners belong to two different worlds is analysed. In this chapter, various metaphors such as application, implementation or dissemination or translation that reflect the relationship between research and policy or practice are viewed in detail. The metaphor of translation is indicated as more useful. The difference between policy and practice also is reflected in the course of discussion. Chapter Four refers to qualitative research as used in education and its criticism in the context of the two models namely Enlightenment and Engineering. Chapter Five deals with the various considerations involved in freedom and/or control that rests with the research community. The implications of control and what it means in the context of 'the republic of science' too are stated. Chapter Six presents an argument related to the serious problems the author has realized in the conventional distinction between basic and applied research. In the end, he has made a reference to the point that there are always losses as well as gains in choosing one type of research over the other; and that each type has value. The classification facilitates the researchers and funding agencies in giving clarity regarding what is to be expected at the end of the research. Chapter Seven, written with Peter Foster, focuses on the utility of reviews of research as the most important means of communicating the findings of the scientific educational research to people outside the researcher community. It identifies the issues related to the process of writing the review of educational research. They are related to decisions related to the various aspects involved in the process of writing the research reviews such as the initiation of the reviews, the audience in view, the definition of the field to be reviewed, the coverage and treatment of relevant studies and the drawing of conclusions. It has used the reviews available in Britain for clarifying

the issues. The author has given the Conclusion which really helps the reader to judge one's own understanding of the arguments, as a Learner and then as a Critical Reader, made in the seven chapters.

The reason why the teacher who teaches research methodology to M.Ed, or M.Phil, courses or who guides the research activity or research students would find this book of a great help as it will provide help in initiating discussions among students or the research team in taking a stand related to the relation analysed in this book on educational research, policy making and/or practice. This is said so because the professional training of Teacher Educators, as a researcher (This is based on field observation and firsthand experience of the present reviewer), not always caters to coverage of all such issues in detail. The reading of this book would make the reader ask the relevant questions related to the role of research in the processes of policy making and assessing the existing practices or the practices to be changed. In addition, for the same reason as given above, the book is equally useful to the educational administrators and officials who are very close to decision-making either at policy level or at the practice level but may not be exposed to the nuances in the processes of educational research.

A research guide working in India either in a College of Education or a Department of Education in different Universities would benefit from reading the book under review in more than one ways. This book would add to the various conceptual aspects related to the research process. It would make one think about the relationship of research policy making and practice. It would also help one reflect on the kind of preparation of the would-be researchers as researchers, policy-makers and educational administrators at various levels. When the care for the learners' future role becomes the concern of the Educator, the accountability and Quality, both are in safe hands. This kind of conscious role-play would be facilitated by reading and reflecting on the book under review. The assumption, of course, is one reads for thought and action is implied in the thinking.

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G.L ARORA (2002), *Teachers and Their Teaching - Need for New Perspectives*, Ravi Books, Delhi, ISBN: 81-88276-01-4, pp. 161, Price: Rs. 325.

The author has attempted to provide a plethora of the profile of teachers and their teaching in the book. The status of teachers in the past and the present and the importance placed on them in the entire learning process was suitably highlighted.

The teachers form the largest manpower in running the education system in any country. In most of the economically advanced countries, the women take up the teaching jobs but in India so far the male teachers have dominated the teaching profession. However, this trend is changing with considerable increase of female teachers in the profession. Similarly, the entry-level qualifications and training have also undergone a stringent change countrywide, by bringing more qualified and trained teachers into the system. The constitutional safeguards have also taken care of the socially disadvantaged sections of the society by giving them equal opportunity to enter into the teaching profession. In spite of the fact that the country has a variety of managements looking after the schooling sectors, the service conditions remained mostly similar except for few of the privileges enjoyed by the government appointed teachers in the country. These situations are unavoidable as the problem of unemployment exists in the country and the scarcity of resources is also another major factor contributing to such inequalities. The new schemes of para teachers and temporary teaching forces with different nomenclatures are deployed in various states in order to overcome the shortage of teachers as well as the meagre resources available.

The roles, being performed by the teachers, have become more demanding with more responsibilities entrusted upon them. Their role, as instructors have increased with the assigning of multifarious duties of an agent of change, curriculum developer, evaluator, knowledge generator, counsellor, promoter of community linkages and above all as a manager of the entire schooling system. The expectations from the administrators as well as the community have increased manifold. The question of meeting all the demands and reaching to the expectations of such quantum of demands is an issue to be pondered. While assigning all the tasks to the teachers, the planners and administrators failed to think about the basic job of teaching and learning, and this important task of teaching seems to have taken the backseat.

However, it was also realized that in order to have a good teaching force, the provision of up-gradation of knowledge was felt essential by way of training and retraining so that they will not lapse into oblivion. Institutions were created and programmes were developed to provide some kind of a professional support to the teachers, so that the quality of education, which they impart, will improve. As in the past, the teachers did not have any opportunity to attend any in-service training in order to equip themselves with the latest developments taking place in their curriculum and other aspects of teaching learning process. Special emphasis was also made in various committees and commissions since Kothari Commission in 1966, but no breakthrough could be achieved. It was again after the adoption of National Policy on Education in 1986 that the teacher training gained impetus and specialized institutions known as District Institutes of Education and Training were established and up-gradation of the Colleges of

Teacher Education were carried out in the country and a special programme of mass orientation of school teachers (PMOST) was organised.

While dealing with the teacher empowerment and their ethics in the day to day conduct of the schooling activities, the author has made references to some of the ideas enunciated by some great writers and also referred to the education commission reports, such as, teachers to have right to determine school objectives, right to decision making in the instructional process, right to improve classroom capacities according to their own choice, and right to have better working conditions and professional development etc. However, all these rights seem to work well in ideal conditions but the country is vast and the education system is widespread with a very huge teaching force, all these conditions are not conducive for enforcement of such rights on the part of the administrators. The Education Acts in some of the States are strictly adhered to which benefited the teachers to some extent, but the beneficiaries were from the government, aided and reputed private schools only; the unaided and unrecognized schools which have come up in large numbers in the recent past could not get benefit out of it. The lack of adequate teaching learning material and academic support and certain amount of funds in order to meet the urgent school expenses have also become demotivating factors. The traditional system of managing the schools needs to undergo a change so that the teachers can work together as a team and participate holistically in the schooling activities. The administrators should make them more responsible and try to facilitate their working so that they can work together, experiment, innovate and take risk in tackling the day to day teaching learning activities, suitable rewards can encourage good work. In addition, to these acts etc, is the code of professional ethics for teachers spelling out various rules and regulations failing to observe may attract punitive action also. One such code was developed soon after the implementation of National Policy on Education 1986, which dealt with the teacher's obligation in relation to students/parents/guardians, organization, society, nation, profession, colleagues, management and administration.

The methods of teacher recruitment, deployment, transfer and appraisal are also most important factors in the education system. The right kind of selection enables the system to produce right kind of output. However, due to variations in the criteria adopted, the system of selection of the teachers and their promotion has remained more mechanical and ritualistic. The planners and policy makers are in a great dilemma and not able to reach any consensus over this important issue, as they may face stiff opposition from the teacher unions and politicians. The National Council for Teacher Education (NCTE) has also now come up with strict recruitment criteria for teachers, but further promotions, transfers and appraisal etc are mechanical and ritualistic without any professionalised criteria.

Finally, the author tried to explore in greater details the various methods of teaching, which form the most important functions of the teachers. Adopting

good teaching methods in transacting the curriculum with active modes of communication and proper interactions with learners etc can enhance the level of learning. The transactions included the chalk and talk methods, interactive styles, co-operative methods of teaching etc. In nutshell, the author tried to deal with teachers and their teaching, being the most important activities to be performed by a teacher. In order to better their teaching, the necessary inputs in the form of professionalised selection criteria, training and professional development, empowerment and codes of ethics for guiding the system in a right direction were all dealt with precision and finally, the facilitating role of the criterion in order to improve the teaching-learning process as well as a variety of innovative teaching methods can make the teaching-learning process more effective.

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Breton GILLES and Michel LAMBERT (eds.): *Universities and Globalization: Private Linkages, Public Trust*. Paris: UNESCO Publishing, 2003, pp 244, Price: not mentioned; ISBN: 92-3-103890-7, (paperback)

In the worldwide wave of globalisation, there is hardly any country in the world that could keep itself away from it; and there is hardly any sector in an economy that is not affected by it. Globalisation has been truly global, affecting every country, and every sector, and every aspect of life. Higher education sector has been both an actor and an object of globalisation. Globalisation influences how higher education is planned and provided in many developing and developed countries on the one hand, and, on the other, it itself is influenced by the contributions of higher education, that is, higher education influenced the phenomenon of globalisation, its nature and spread - horizontally and vertically. Of late, quite a few studies have examined the relationships between globalisation and higher education - some examined higher education as a passive object, some focused on the role being played by higher education in globalisation; and very few examined the two-way relationship. The several papers in the volume under review fall under the above three categories.

Based on a selection of contributions to a conference on 'Globalization: What Issues are at Stake for Universities,' that took place at the Universite Laval, Quebec, Canada in September 2002, the book is yet another important addition to the burgeoning literature on the subject. To present an overview of the book, there are seventeen chapters (though only fourteen have been numbered), including an introductory chapter by Breton, a conclusion by Francois Tavenas, and a post-script by the editors. There is also an appendix that gives the 'Joint Declaration of Higher Education for General Agreement on Trade in Services' signed by Association of Universities and Colleges of Canada, American Council

on Education, European University Association, and the Council for Higher Education Accreditation of USA. The fourteen chapters are arranged in five major sections. Some of the themes covered include knowledge society - knowledge production, distribution and management, research in universities, GATS, apartheid in South Africa, the enterprise universities of Australia, the for-profit universities in USA, social relevance and collective action, etc.

Many papers in the volume explicitly or implicitly stress on the importance of higher education in development. John Daniel argues that higher education is and must remain a public good, though according to him, it can be partly privately financed; and that its benefits are not confined to economic growth. David Bloom also highlights the point that the social returns to higher education could indeed be much higher than what the traditional estimates of rates of return have shown and that higher education serves as a major 'public interest.' Jamil Salmi presents the D-turn of the World Bank policies on the role of higher education, and the critical role of the state in the development of higher education in the construction of knowledge societies in developing countries. Bernard Pau argues that in the world society that is increasingly based on knowledge, it is essential that knowledge is made freely accessible to every one. Riccardo Petrella underlines the primacy of knowledge in the service of the right to live with dignity for all human beings, and argues for recognition of knowledge as a common good of humanity. Francois Tavenas recognises the primary role of higher education institutions to develop and transmit knowledge and universal values. All this is reassuring, when higher education is in peril in several developing countries, partly attributed to the new economic policies, including the globalisation adopted.

Many contributors argue for reforms in higher education in the context of globalisation - to benefit and benefit from globalisation. New modes of delivery of tertiary education have been suggested. For example, Craig Swenson favours adult-centred education institutions offering mainly professional training like the University of Phoenix. Noting the emergence of new universities such as virtual institutions, private for-profit universities and corporate universities, Peter Scott feels that traditional universities have the capacity to become new hybrid universities, and to become 'activist' knowledge organisations. Francois Tavenas proposes introduction of new programmes, new courses and new structures in higher education.

While several contributors to the volume believe that globalisation offers more opportunities than threats to developing countries, some attempt to offer a balanced view, if not a critique. Many took a positive view of globalisation in that it can and must benefit all people in all countries. As Chris Brooks noted, globalisation is about increased interdependence, it changes to the better the rules of the game, it is about development and solidarity, and that universities have a role as mediators. Hans van Ginkel rightly reminds us that globalisation is not a

new process. But there is a lot of difference in the nature and objectives of globalisation of the yester-years (first and second generation globalisation of the previous centuries) and the current one. On the other side, Riccardo Petrella, for example, argues whether globalization aims at concealing the failures of development policies adopted and implemented by the North in the developing countries during the last several decades; and whether in the name of knowledge, new 'human divides' and 'knowledge wall' would be created. Jan Currie feels that the traditional role of the universities is still important; and, moreover, Currie feels that it is possible for traditional universities to resist globalisation.

Thus the selection presents diverse views from diverse perspectives on globalisation. Francois Tavenas makes a valiant attempt in the concluding chapter at drawing 'main conclusions and courses of action' as follows: (a) higher education institutions have to strike a right balance in the dual mission to develop and transmit knowledge and universal values and, at the same time, to contribute to cultural, economic and social development of the local societies; (b) knowledge production has to be accelerated by introducing an increasing interdisciplinary dimension into research practices; and (c) higher education institutions have to develop social actors and leaders. Tavenas also argues for reforming higher education systems in such a way that all embrace modern technology like internet. Continuing education programmes have to be developed. In all, higher education institutions should aim at bridging knowledge gap. He also warns that competitive approaches to higher education may be more harmful than being beneficial; and that higher education is not merchandise and hence internationalisation of higher education should be governed by its own very specific set of rules.

The book on the whole provides a rich flavour of diverse issues, but not necessarily an in-depth and a comprehensive flavour. Perhaps that was not the objective of the authors or of the editors. As Hans Ginkel suggested, 'one way to understand the term more coherently is to look at the multi-dimensional character of globalisation, or, in other words, to break it down into its constituent elements' (p. 74). Very few contributions have attempted at it. On the whole, many contributors to the volume have taken globalisation as given, and outlined measures for reforms in higher education. The socio-cultural and economic impact of globalisation on developing countries and the rapid marketisation of higher education systems, with all its effects in developing as well as developed countries in the name of reforming higher education in the era of globalisation have not received adequate serious attention in the book. Yet it provides a useful general reading on the growing subject.

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**ASIA-PACIFIC JOURNAL OF
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The **Asia-Pacific Journal of Teacher Education and Development (APJTED)** is an international refereed journal dedicated to theory development, empirical research, policy formulation, and practical improvement in teacher education, staff development, and teaching. It is published biannually with articles in English or Chinese. Potential contributors are teacher educators, educational researchers, scholars, school practitioners, policy analysts, educational planners, program developers, education inspectors, and professional development consultants in the local, regional, and international communities.

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