Secondary Education in West Bengal Prospects and Challenges

Pratichi Institute

In association with UNICEF, Kolkata

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Abbreviation

AISES All India School Education Survey

CABE Central Advisory Board for Education

CAGR Compounded Annual Growth Rate

CCE Continuous Comprehensive Evaluation

GER Gross Enrolment Ratio

ICT Lab Information and Communication Technology Laboratory

L.D.C Lower Division Clerk

MPCE monthly per capita expenditure

NCERT National Council of Educational Research and Training

NCF National Curriculum Framework

NSSO National Sample Survey Organisation

OECD Organisation for Economic Co-operation and Development

OHP Over Head Projectors

RMSA Rastriya Madhyamik Siksha Abhiyan

SSK Sishu Siksha Kendra

U.D.C Upper Division Clerk

U-DISE Unified District Information System for Education

UT Union Territories

VET Vocational Education and Training

WBBME West Bengal Board of Madrasah Education

WBBSE West Bengal Board of Secondary Education

WBCHSE West Bengal Council of Higher Secondary Education

WBCROS West Bengal Council of Rabindra Open Schooling

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Foreword

Both at the policy level as well in the broader public discourse the value of school education is increasingly being recognized as an important social goal. This growing consciousness also gestures towards the need for facilitating a much awaited educational transition from the elementary to the secondary level. It is indeed becoming a part of the received wisdom that the success of elementary schooling hinges crucial upon the opportunity for wider participation at the secondary level. Yet, secondary school participation remains a relatively understudied area, especially in those states of India that remain relatively dormant in their efforts at expanding secondary schooling. In short, there is a clear gap between the need for heightened policy efforts to expand secondary education and informational wherewithal that is required to respond to their need. This report is an attempt to address, albeit in a modest way, this informational deficit in our understanding of the promises and challenges of secondary schooling that seem to exist in the state of West Bengal. What motivates this study is to place at the centre of both policy and public discussions conceptual issues and practical problems that are germane to secondary schooling in West Bengal in order to proffer some concrete suggestions for promotional and remedial action.

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Highlights

- The Central Advisory Board for Education (CABE) observed that those who work with their hands and produce significant wealth are denied access to formal education, while those who have access to formal education not only denigrate productive manual work but also lack the necessary skills for the same.
- Contrary to the expectations, participation of youths in vocational courses in the country
 is found to be poor; sadly, girls lag far behind in this respect both quantitatively as well as
 qualitatively.
- Secondary education has not received much attention from the policy makers. It is only
 recently, following the wide expansion of elementary education resulting in a higher
 demand for secondary education, that expenditure on the secondary education has started
 increasing at a higher rate.
- Though 80 percent of secondary students pursue free education against 48 percent in the
 country, expenditure in private tuition in general in West Bengal is very high, that make
 the average per capita expenditure in secondary education in the state 44 percent higher
 than the national average.
- Overall participation in secondary education has increased in recent years though a huge amount of enrolment is wasted during the transition from standard 5 to 6 and from standard 9 to 10, with better proportion of girls participating in such examination. The overall results have also improved during the same period.
- Participation in elementary education has increased manifold in recent years, resulting to higher enrolment in secondary level; the situation therefore demands extra infrastructural inputs and resources.
- A comparison with 2nd AISES (1967) with current data shows significant expansion of opportunities of secondary education as reflected in higher enrolment: while gross enrolment in class 1 has increased by 36% overtime, enrolment in class 10 has increased by 103% during the same period.
- Lower ratio of upper primary schools to that of primary schools is another concern, as a large portion of students of upper primary level dropout due to non-availability of schools

- and of facilities therein. The rural areas of the state lack upper primary as well as secondary schools in a far greater extent compared to the urban areas.
- Overall enrolment in schools with secondary section is 9552206. Out of which 5663012 is in elementary section, 2413941 are in secondary level and rest 1475253 is in higher secondary level. Total number of classrooms in these schools counts to 141277; with average Student Classroom Ratio (SCR) of schools with secondary section is 69.7 (154 schools reported no enrolment). While SCR in Kolkata district is lowest (36.8), highest SCR is reported in Kochbehar (105.9)
- Both district-wise PTR and SCR are directly related to average district-wise enrolment –
 the higher the enrolment is the higher the SCR and PTR are. The correlation coefficient
 of district-wise average enrolment with average PTR is 0.824428 and that with SCR is
 0.801422
- The average PTR in secondary section is 35.2, marginally above the RMSA recommendation, though the inter-district variation is very high. Darjiling with 19.7 has lowest PTR, and neighbouring district of Jalpaiguri has highest PTR of 65.9. Average PTR in rural secondary sections is 38.5 while the same in urban secondary sections is 26.9
- While share of female teacher in secondary level is 35.4 percent in the state, their deployment remain highly skewed. Rural secondary schools have on average 29.2 percent female teachers against 51.4 percent in urban secondary schools. Overall educational attainment and status of training of teacher of the urban secondary schools in the state is better than those in the rural secondary school.
- There is evidence of serious lack of specialized teachers for science subjects. In absence of qualified teachers, general teachers are conducting science classes
- Only 821 (8.5%) secondary schools have ICT laboratory in them as against 3943 (40.7%) schools approved for the same by the year 2010-11, implying that only around 21 percent of plan has materialized
- There are locational (Rural/Urban) disadvantage associated with the availability of Science Laboratories, Information and Communication Technology (ICT) Laboratory, Computer Aided Learning (CAL) Laboratory, Libraries and other amenities. Availability of such facilities varied according to various managements of schools.

- Most of schools which have such facilities are schools with higher secondary section
- Only 15.9 percent of secondary schools have at least one functional computer
- Much is yet to be done to make the schools compliant with even the most pragmatic recommendations related to basic amenities like water, electricity, toilets, playground, Head Teachers room, availability of hostel etc.
- Status of facilities like laboratories, libraries, classrooms etc. is insufficient; facilities
 related to co-curricular activities and availability of hostels is much poor than expected.
 While maintenance of various laboratory equipments, building etc is associated with
 recurring expenditure, in absence of grants for such recurring expenditure, available
 facilities are depleting.
- Two percent of total secondary schools have electricity but not functional, 23.3 percent of the schools with pucca boundary wall reported the same to be broken. Similar situation is persisting in case of toilets as around 20 percent of toilets are non-functional
- Though it is evident that special care has been taken to distribute larger portion of grants under the RMSA in educationally backward regions of the state, there remained much disparity in this regard
- Though state budget expenditure on education in general and on secondary education in particular has increased in years, non-plan expenditure in the state is much higher compared to other states.
- Non-plan expenditure on important heads like Direction, Inspection, Administration and even Teachers Training has declined in consecutive budgets.

Secondary Education in West Bengal: Prospects and Challenges

1. Introduction

While attributing the size of Indian population to be one of the major problems of the country's developmental prospects, observers generally tend to overlook the structure of our population which, with a huge membership of young people, has all the potential of reversing the challenge of so called population growth. That about a third of our population belongs to the age group of 0-14 is certainly an asset for the country, for, it is this population that is going to take up the task of the country's enhancement to the future. However as, to how much this task could be accomplished, depends much on the country's readiness to empower this population with educational achievements. The country has of late shown some major commitments towards universal elementary education, particularly through the enactment of the Children's Right to Free and Compulsory Education, and it would certainly have impact on this population readying for acquiring secondary education. They are not mere common citizens of the country; they bear the load of expectations on their shoulders to drive the nation towards a better place to live in. Hence and here, arises a crucially important question: "Is this population provided with required opportunities to doing so?" In other words, "What is the status of delivery of secondary education in the country?"

Answer to this question is central not only to the development of secondary education alone, but also to the delivery of elementary education, as the actual opportunity of future progress has overarching impact on the status of elementary education. Studies suggest that actual prospect of further achievement of education-from primary to upper primary and upper primary to secondary-has a clear motivational impact on the parents and children towards acquiring school education.² This context adds urgency to making a serious inquiry into the delivery of secondary

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¹ According to the Census of India 2001, 35 percent of total population in the country was within the age of 14 years. And, in all likelihood, this figure is not going to change much, in the yet to be published 2011 age specific Census data,

² The Sarva Siksha Mission in North Bengal: Progress and Challanges, Pratichi Institute with Paschim Banga Sarva Siksha Mission, 2012 & Research and Action for the Implementation of the Right to Education Act 2009 in West Bengal, Pratichi Institute with UNICEF Kolkata, 2012

education in the country, and this report is an attempt to come to term with this demand. While practical constraints confine the geographical boundaries of the report to one of the states of India, that is West Bengal, the findings are expected to contribute substantially to the body of knowledge on educational delivery in the country. Also the comparisons made with other states would offer some commonalities across the states and, thus, the suggestions emerged here should have some general applicability for the country as a whole. In doing so, this report while looking at the various recommendations made by different commissions and the Rashtriya Madhyamik Siksha Abhiyan (RMSA) and other secondary literature pertaining to the delivery of secondary education, it also makes a thorough examination of the details related to access, enrolment, teaching-learning and results of the secondary students in various board examinations and the structures of administration. As a preliminary investigation, this report draws from the secondary sources only, a list of which is added as appendix A. Before proceeding to the details of the outcomes of the exercise involved in the inquiry, we would briefly present here a review of existing notions pertaining to the role of secondary education. Diverse as they are it is important to keep the views in account in order to develop a clearer understanding of the issue as they form the theoretical basis of and guiding principles for public policies concerning the delivery of secondary education.

2. Contextualizing the Role of Secondary Education

2a. Diverse Views

Dexterity, as mentioned by Adam Smith, in his classic *the Wealth of the Nations*, has travelled a long way, and is no more achievable by repetition of manual work itself; in modern industries, where machineries are not directly controlled by human hands, rather are controlled by more sophisticated machines, the role of labour has changed radically, and workers are expected to handle these sophisticated automatic machines. For that, being literate is no more a sufficient qualification, rather the workers are required to take decision themselves and often have to do something different from what they have done earlier. To successfully handle the responsibilities they are given, they need education of higher standard and quality, and not mere literacy. The

³ Smith, A. Of the Division of Labour, Chapter 1, Book 1, The Wealth of Nations, Bantam Dell, 2003.

present industries therefore require educated and skilled labour, which directly demand larger participation of the young generation in the secondary and higher secondary education.

In accordance, while the policy-makers stress repeatedly on vocationalization of school education; in India, such trainings seldom achieve the desired quality, and are often provided by the family itself under the semi-feudal social structure, where the occupation of young people is often predetermined beyond any scope of change on the basis of their caste, creed and gender. Vocational education and training in India is still confined within the use of age-old tools, and is often provided by the people who are themselves not properly educated and have very little faith in the requirement of formal education for the purpose – and as a result, the policies do not prove to be fruitful. As the Central Advisory Board for Education (CABE) report on universalisation of secondary education, 2005 reads:

... the policy on vocational education of "diverting" at least 25% of the children enrolled at the \pm 2 stage to the vocational stream by the year 2000 has not found favor with students. According to the Ministry's Annual Reports, less than 5% of the enrolment at the \pm 2 stage in the year 2003 was in vocational stream. One can infer that the children refused to be "diverted" and preferred the academic stream.

The problem in participation in vocational and technical education in India has remained one of the biggest unresolved issues, as only a meager 1.9 percent of the 5-29 year old population is found seeking technical education in India, while the percentage participation in vocational education is even lower at 0.3 percent. Participation of rural youth in technical and vocational education is much lower at 0.9 and 0.2 percent respectively compared to the urban youth 4.7 and 0.3 percent respectively⁴.

This is where the first definition of secondary education, that it is the link between elementary education and higher education, is challenged by many educationists and commentators. According to them secondary education should be terminal in nature, so that college education is not perceived as the natural destination. Citing examples of China and East Asian countries, where admission to colleges and universities is strictly controlled, they insist on establishing more high quality secondary schools rather than establishing under-equipped and ill-staffed

⁴ Education in India: 2007-08 Participation and Expenditure, NSSO

colleges, from which, they allege, the tertiary education sector in the country is suffering from. According to them the tertiary education sector in the country actually acts as a tool to defer the unemployed status of the youth of the country and has hardly any relevance to the economic growth of the country.⁵

2b. Policy Responses

Ambiguities of understanding on secondary education has resulted in inconsistent policies: in India, while general education has been operational under the Ministry of Human Resource Development, vocational education, notwithstanding very intrinsic relationship with secondary education, is largely taken care of by the Ministry of Labour and Employment⁶. On the other hand, the CABE report has expressed serious concerns in respect of the exclusionary character of education in general and secondary education in particular. The report – has highlighted the fact that those who work with their hands and produce significant wealth are denied access to formal education, while those who have access to formal education not only denigrate productive manual work but also lack the necessary skills for the same. This is what the report describes as an 'artificially instituted dichotomy between work and knowledge'.

In accordance with above observations, the committee recommended a twofold strategy for curriculum reform in secondary and higher secondary education:

- I. A work-centred pedagogy until class X, so that the students are ready for vocationalized education at secondary and higher secondary level.
- II. Keeping Vocational Education and Training (VET) outside the school system which may be conceived as a major national programme in mission mode.

Such recommendations are also substantiated by international reports on the subject:

⁵ Singh, A. The Place of Secondary Education, Economic and Political Weekly, April 26, 1997.

⁶ Human Resource and Skill Requirements in the Education and Skill Development Services Sector , National Skill Development Corporation.

Lower secondary level extends and consolidates the basic skills learned in primary school; upper secondary school deepens general education and adds technical and vocational skills⁷.

To take a quick look into the past, there had been a division of class observable among the beneficiaries of elementary education and higher education in the country. While the affluent class had hardly any problem in getting elementary and secondary education, the lower rung of the society was still striving for basic education itself. While the former never encountered any problem in getting secondary education, the latter actually was concentrating on the demand of elementary education itself and secondary education for them was a distant desire. Accordingly the priority for elementary education and higher education continuously fluctuated in the post independent India, while the secondary education system found no benefactor. The planned expenditure on elementary education during the first to the eighth five year plans fluctuated from 24 (during 1966-69, i.e. plan holidays) percent to 56 percent of total planned expenditure on education, the same figures for the higher education swung from 8 to 25 percent. In case of secondary education the range was limited within 13 to 24 percent only.

There of course was a conscious effort by the consecutive governments to spend more in elementary level than secondary level during the last two decades of 20th century, as the planned expenditure in elementary education increased consistently during the period.

During 1980s, the policy shifted towards spending more in the education sector, sooner, there were international commitments, like, the Education for All (1990) and the Millennium Development Goals (2000), which made the issues of elementary education into the centre of the development agenda. Since then the country has been following a sort of truncated education development agenda, leaving relatively little space for policy planning and resources for the post-compulsory levels of education, i.e. the middle segment of the education chain, namely the secondary and higher secondary level.

Though the expenditure in the secondary level has increased at a higher rate than that in elementary level in last few years¹⁰, the same was perhaps not enough to bridge the gap. But the demand of universal secondary education in the country has its reflections in public declarations

⁸ Singh, Amrik. The Place of Secondary Education, EPW, April 26. 1997

⁷ UNESCO

⁹ Biswal, K. Secondary Education in India: Development Policies, Programmes and Challenges, NUEPA, 2011 ¹⁰ In case of elementary education the budgetary allocation by the central government has doubled, where as it has increased by more than three times in case of secondary and higher education. Two third of the increment has been funded by the education cess since 2004. *Basu, S. India Infrastructure Report 2012, Routledge.*Also see Table 2.1 of the same document

and official documents like the CABE report and draft vision document of the Rastriya Madhyamik Siksha Abhiyan (RMSA). The latter states: 'Given the high transition rate of about 85% from class VIII to IX and the anticipated progress in UEE, which is now widely acknowledged, that the time has arrived for taking proactive measures to plan and provide for universal access to secondary education and senior secondary education in a phased manner.'

The targets under the RMSA are also fixed; the RMSA seeks to achieve an enrolment rate of 75 percent within five years (by 2014), universal access by 2017 and universal retention by 2020. In order to achieve universalisation of access, the working group on secondary education has estimated that 19946 additional secondary schools will be required to ensure 100 percent GER by 2017.¹¹ What is evident from the discussion is that public policies developed on the delivery of secondary education need to be much clearer than what they are and it is imperative not only to take into account the ongoing debates and reflections but also encourage more informed churning on the subject.

3. Extent of Secondary Education

3a. Access

The draft vision document of RMSA points out towards three A's – Availability, Accessibility and Affordability of secondary education to be the central objective of providing quality.

Historically state of school education in India was much poorer compared to other countries. Access to secondary school was no exception. India under British occupation, experienced departure from its indigenous education system, the new schools were mostly in urban areas, with English as the medium of instruction, accessed exclusively by the upper castes and privileged classes. In the second decade of the twentieth century (1916-17), India had only 7004 secondary schools for boys and 689 for girls (total 7693) in 1457 towns (all places containing 5000 inhabitants or more and all municipalities whatever their population were treated as towns) and 535917 villages. It is worth noting here that the figures are for British India, which stretched from North-West Frontier Province to the then Burma (present day Myanmar)¹².

¹² Sharp. H, Progress of Education in India 1912-17, Seventh Quinquennial Review, Vol II page 11, General Table I

¹¹ Unstarred question no. 5582, Lok Sabha, answered on 7 September 2011. cited *in Basu, S. India Infrastructure Report 2012, Routledge.*

The state of affairs of secondary education has constantly changed since then, both during British India as well as in post independence era. The All India School Education Surveys (AISES) observed these changes periodically and remained as an authentic source of information in this regard. The first All India School Education Survey (AISES) published in 1960, which was the first study of its kind in independent India, enumerated the details of school education in the country in 1957, and provide a detailed view of the status of school education in various states and Union Territories (UT) as well as the nation as a whole. The report also presented a detailed plan on the requirement of schools in the country at that point of time. Unfortunately, West Bengal did not participate in the first AISES, the report reads as below:

...The Government of West Bengal had first designated the Director of Statistics and Economics for this purpose but neither did he attend the session nor the state ultimately participated in the survey scheme.¹³

The said report, while denouncing the British Educational Policy in the country – that it was not meant for the masses of the country – stated that it was necessary to diffuse the facilities of secondary education as widely as possible in rural areas and there should be a secondary school at a distance no longer than five miles (approximately 8 kilometre) from the residence of every rural child, implying that there should be one secondary school in every 80 square miles (around 203 square kilometre) of habitation. The report also observed that a habitation with a population of 5000, was expected to have enough children of high school stage in it, and therefore, should have a high school within the same. At the time of the survey, only 43.4 percent of habitations with population 5000 or more were found to have a high school ¹⁴.

The report mentioned that out of a total 840033 habitations in the country only 4500 (0.54%) had high school facilities; these were to provide 297053 (34.52%) habitations the opportunities of higher schooling. The report also proposed, in line with the criteria laid down above, a plan to establish secondary schools in 13487 habitations to bridge the gap; even then it was not sufficient to cover all habitations, and the report stated that around 17 percent of habitations would still remain out of access to secondary schooling facility.

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¹³ Ministry of Education, Government of India, Report of the first All India Education Survey, 1960.

¹⁴ 1st AISES, Chapter 3, page 23

3b. Distributional disparities

As for West Bengal availability of secondary schools in terms of geographical coverage seemed to be adequate, but, it was only in terms of average. Access to secondary school education in West Bengal has been suffering from distributional problems, which could be analysed with the help of 2001 Census data pertaining to village amenities. The data reveal that there were 985 villages¹⁵ with population 5000 or more without any secondary school in them; on the other hand there were 2862 villages with population below 5000 had been provided with secondary schools. The figures acquire importance from the fact that a huge majority of secondary schools (3369 or 93% of total secondary schools) were found to be the only secondary level institutions in those areas. While average population of villages without secondary school was 1170 (Table 1), corresponding figure for the villages with such institutions was 1171. This implied that the decisional choice of establishment of these schools had more connection with arbitrariness than reason. In some cases, where there were more than one schools, however, number of secondary schools increased along with the increase in average population of the villages. Yet, this did not actually help rationalising the distribution, for the decision of expansion was greatly influenced by the socio-economic formation of the population: the advanced the population group was the fortunate it was to have a secondary school located in their villages.

Table 1: Village-wise population and number of secondary schools

Number of secondary schools	Total village	Average population per village	Total population	Total SC population	Total ST population
1	2	3	4	5	6
0	37155	1170	43504410	11633050 (26.7)	3530705 (8.1)
1	3369	1171	12170350	3344853 (27.5)	527526 (4.3)
2	245	3612	1689709	422087 (25)	58454 (3.5)
3	21	6897	334997	107568 (32.1)	18750 (5.6)
4	4	15952	49481	17367 (35.1)	931 (1.9)
Total	40794	28802	57748947	15524925 (26.9)	4136366 (7.2)

Source: Census 2001, figures in parenthesis are percentage to total population (Column 4)

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¹⁵ Villages mentioned in Census are much larger than the habitations mentioned in AISES, yet villages are generally a group of contiguous habitations

3c. Social Division and Access Constraint

Discrimination in providing secondary schools to areas with higher Adivasi population is palpably clear from Table 1. While, it is the geographical inaccessibility that restricts their prospect of acquiring secondary education, for the Muslims of the state it is the school-population imbalance that puts a limiting boundary to their accessing the opportunities: thick population density vis a vis smaller number of schools resulted in overcrowding of the schools with students.

Let us look at the results of a simple exercise, where the districts of West Bengal have been divided in three categories according to the share of Muslims in their populations: high, medium and low (Table 2).

Table 2: District-wise percentage Muslim population and population served per secondary school

District	Percentage Muslim Population	Total Rural Population	Number of rural Secondary Schools	Rural Population served per Secondary school
Murshidabad	63.67	5133835	277	18534
Malda	49.72	3049528	196	15559
Uttar Dinajpur	47.36	2147351	85	25263
Birbhum	35.08	2757002	240	11488
South 24 Pargana	33.24	5820469	361	16123
Nadia	25.41	3625308	192	18882
Howrah	24.44	2121109	144	14730
Kochbihar	24.23	2253537	123	18321
North 24 Pargana	24.22	4083339	261	15645
Dakshin Dinajpur	23.93	1306324	112	11664
Kolkata	20.05	0	0	N/A
Bardhaman	19.78	4348466	385	11295
Hugli	14.14	3354227	251	13363
Medinipur	11.35	8626883	696	12395
Jalpaiguri	10.85	2794291	124	22535
Bankura	7.5	2957447	260	11375
Purulia	7.12	2281090	148	15413
Darjiling	5.3	1088740	83	13117

Source: Census of India, 2001

The tertiles formed according to Census 2001 shows that the districts with high Muslim population, namely, Murshidabad, Maldah, Uttar Dinajpur, Birbhum, South 24 Parganas and Nadia served largest average population (16679) per secondary school. In the district with medium Muslim population share, namely Howrah, Kochbihar, North 24 Parganas, Dakshin Dinajpur and Bardhaman, each secondary school on average served 13769 persons, while corresponding figures for the low-Muslim density districtswas 13510. Average rural population served by each secondary school was very high in districts like Uttar Dinajpur (25262) and Murshidabad (18533). Moreover, despite having equal proximity to the state capital, North and South 24 Pargana districts had this ratio much higher than their low Muslim density counterparts, like Hugli and Howrah. However, some exception to this trend was found in Dakshin Dinajpur and Birbhum. Nevertheless, overall figures showed some statistical correlation too, the correlation coefficient being 0.390588, of greater population per secondary school served in districts with higher percentage share of Muslims. Though, as mentioned earlier, West Bengal did not participate in first AISES, which proposed an elaborate plan concerning the requirement of secondary schools in various states, the findings of Census 2001 clearly showed the state's unpreparedness in terms of meeting the challenge of providing adequate secondary schools in all the locations with 5000 inhabitants.

3d. Geographical Reach

The AISES recommendations suggested another way of looking into the situation by mapping the secondary schools with that of their distance to the habitations. The second AISES report published in 1967, reported that 85.7 percent of total rural habitations covering 88.5 percent of total rural population in West Bengal were served by secondary sections. At that point of time access to secondary schools was much better than the national average, as the corresponding national figures for the above mentioned variables were 61.2 and 71.4 respectively. In West Bengal, About 7.3 percent of this population living in 1641 (2.42 percent of total rural habitation) habitations had this facility within the habitations.

In the third AISES report, published in 1967, the limit of accessibility was fixed at 5 kilometres instead of 5 miles, and therefore could not be compared with the earlier reports. Yet, there were

27.6 percent of habitations covering 20.9 percent of total population had no access to secondary schools within five kilometres; the corresponding national average were much higher – 45.9 percent and 33.7 percent respectively¹⁶.

In the fourth and subsequent reports, the distance for a secondary school to be treated as accessible or within walking distance, was once again raised to 8 kilometres, comparable with the first report, which, as mentioned earlier considered the distance to be 5 miles.

While the access in terms of distance kept on improving in the consecutive surveys, the shortage of secondary schools and inequality in distribution thereon was apparent when evaluated in terms of average population served by these schools (Table 3).

Table 3: District-wise population served per secondary and higher secondary school

Division and the second	Total Population	Secondary	Higher Secondary	Population served/Sec	Population served/H.
District	2011	School	School	School	Sec school
1	2	3	4	5	6
Kolkata	4496694	706	440	6369	10220
Darjiling	1846823	278	169	6643	10928
Paschim Medinipur	5913457	778	486	7601	12168
Bankura	3596674	445	255	8082	14105
Purba Medinipur	5095875	627	365	8127	13961
Puruliya	2930115	344	347	8518	8444
Hugli	5519145	631	330	8747	16725
Barddhaman	7717563	876	466	8810	16561
Haora	4850029	535	444	9065	10923
Birbhum	3502404	382	186	9169	18830
Dakshin Dinajpur	1676276	176	111	9524	15102
Koch Bihar	2819086	279	169	10104	16681
North Twenty Four Parganas South Twenty Four	10009781	985	726	10162	13788
Parganas	8161961	796	452	10254	18057
Jalpaiguri	3872846	345	248	11226	15616
Nadia	5167600	454	313	11382	16510
Maldah	3988845	341	229	11697	17419
Murshidabad	7103807	511	328	13902	21658
Uttar Dinajpur	3007134	187	168	16081	17900
West Bengal	91276115	9,676	6,232	9433	14646

Sources: Column 2- Primary Census Abstract (PCA) 2011, Columns 3 & 4-DISE 2012-13

¹⁶ Table 31, 3rd AISES, NCERT,

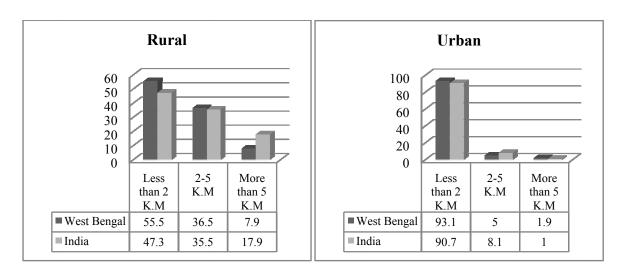
Table 3 provides figures for district-wise average population served per secondary school in ascending order, though the figures have improved tremendously, it is appalling to find the same set of districts at the bottom as mentioned in Table 2 earlier.

These issues have been recognised in the fifth AISES report which mentioned that though overall 95.6 percent of rural population had access to secondary education within a distance of 8 kilometres, corresponding figures for the scheduled castes and scheduled tribes were lower than the average, indicating the groups' being discriminated against. According to the report, 91.5 percent of the rural population predominantly inhabited by the Scheduled Castes had access to secondary education; the figure was even lower in case of Scheduled Tribes at 87.2 percent. No assessment was done for the habitations predominantly inhabited by Muslims; such indifference towards the state of affairs of Muslims in the country in general and particularly in West Bengal is evident in many official statistics; though the community in the state in general had a much lower level of human development achievements.

3e. Class Division and Limitation of Access

We now turn to the issue of economic divisiveness: the differences of access to secondary education originated from economic status have been captured well by the National Sample Survey Organisation (NSSO). The 64th round NSSO – *Education in India: 2007-08 Participation and Expenditure* provides a detailed picture of the issues related to access to secondary school in the states and UTs of the country. In terms of access to secondary schools, West Bengal showed better figures than that of the national average in both rural and urban areas. As figure 2 suggests, only around eight percent of the rural households in the state had reported the nearest secondary school to be at a distance beyond five kilometres as against 18 percent in case of the country as a whole. The figures were almost similar in case of urban areas, as distance can hardly be a problem in urban areas due denser population. The problem, however, lies in the economic capability of the population.

Figure 1: Percentage distribution of rural households by distance from secondary school, West Bengal and India



Source: Education in India: 2007-08 Participation and Expenditure, NSSO

While caste and religion acted as the social determinants for access to secondary school in the state, there were certainly economic factors associated to it. Access to secondary school depended on monthly per capita expenditure (MPCE)¹⁷, which is certainly linked directly with the income of the household. Access to primary school was reported to be better for lower MPCE group, but it was just opposite in case of secondary school. While 98.2 percent rural household of the lowest MPCE decile (one tenth of families with minimum MPCE) in India had primary school facility within a distance of 2 kilometers, the figures were actually lower at 97.8 and 97.5 percent for the highest two deciles. But the access to middle school for various MPCE groups was much different as the percentage of households having access to middle school increased from 72.4 percent for the lowest decile to 82.7 percent for highest MPCE decile in rural areas. The increase is continuous and gradual. The gap between the percentage population with access to secondary schools within 2 kilometres for the lowest and highest MPCE decile was further greater as only 38.8 percent of the lowest MPCE decile had such facility as against 58.5 percent for the highest MPCE decile¹⁸.

¹⁷Education in India: 2007-08 Participation and Expenditure, NSSO

¹⁸ Page 19, Statement 3.6a, Education in India: 2007-08 Participation and Expenditure, NSSO

3f. Is Secondary Education Really Free?

Not just elementary education in West Bengal, rather secondary and higher secondary education too remained free for majority of the students. At elementary level, around 90 percent of students in the state were pursuing free education, while 80 percent students at secondary level were doing so. The national averages were much lesser compared to these figures. At secondary level only 47.9 percent of the students in India were pursuing free education¹⁹. In West Bengal while 65.4 percent of the urban students in secondary and higher secondary levels were pursuing free education, 86.1 percent of the rural students were doing so²⁰.

But does free education ensure quality education? Perhaps not. At least trends in preference shown by various MPCE groups in this regard do not support it, especially for the urban cases. While overall 64.7 percent of the students in lowest MPCE decile in the country reported to have pursued free education at secondary level, the proportion of their higher MPCE counterparts was reported to be only 23 percent, figures for urban areas were 59.6 percent and 11.3 percent respectively ²¹. Why do the higher MPCE groups avoid free education at secondary level? Free education is provided mostly in government schools (including the schools under local bodies) and private aided schools²². While majority (80%) of the students in the state are pursuing free secondary education as mentioned earlier in this report by quoting the NSSO report no. 532, which was much higher than the national average (47.9%), even the figures for other level of education also reported same trend, the same NSSO report suggests that barring primary education, the expenditure per student was much higher in the state compared to the respective national average (figure 2). More importantly percentage gap in expenditure per student at secondary level in the state over the national figure was highest at secondary level at 44.4 percent (Figure 3). This leads to an immediate question: where this expenditure has incurred at?

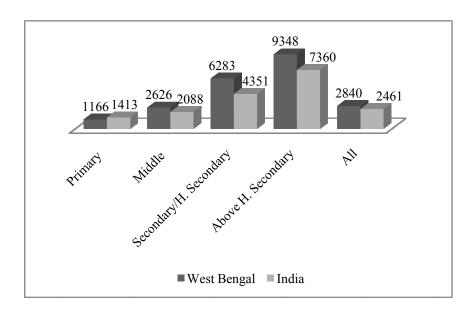
The average annual expenditure per student of age 5-29 years pursuing general education on various items showed that much of the expenditure incurred by the students was in private tuition.

¹⁹ Ibid, page 18, Statement 4.11.1²⁰ Ibid, Table 21

²¹ Ibid, Table 22, page A 217

²² Ibid, table 23, page A 220

Figure 2: Expenditure per student in West Bengal and India at various levels of education (in Rupees)



Source: Table 28, Appendix A, Education in India: 2007-08 Participation and Expenditure, NSSO

As table 4 shows that expenditures on all items excepting private coaching in West Bengal was either lower than the national average or only marginally higher than it. While in terms of expenditure on uniform, the state ranked only 3rd among 35 states and union territories (U.Ts), its ranking in terms of tuition fees was 7th, examination and other fees-11th, transport-12th, books and stationeries-19th, but when it came to private tuition the state ranked 33rd among the 35 states and U.Ts.

Table 4: Expenditure per student pursuing general education on various heads, India and West Bengal (in Ruppes)

	Tuition Fee	Exam and other fees	Books and stationeries	Uniform	Transport	Private coaching	Other expenses
India	675	340	530	264	204	346	100
West							
Bengal	251	237	646	143	157	1278	128

Source: Table 33, page A-279, Education in India: 2007-08 Participation and Expenditure, NSSO

If the comparison was to be made on the basis of percentage expenditure on private coaching to the total expenditure, this would slip down further to 34; for Chandigarh, which had reported a

higher expenditure per student on private coaching, had also had a higher overall expenditure per student; indeed it is the highest in the country (Rs. 12937), even more than double than that of Delhi ((Rs. 6149), second highest in this regard. The only state which reported higher expenditure on private coaching in both the terms, absolute and percentage, was Tripura (Rs. 1589 or 55% total expenditure). Expenditure on private coaching by the students in West Bengal was Rs. 1278 against national average of Rs.346, or 45 percent of total expenditure in the state as against 14 percent of the same in the country. Average per student expenditure of West Bengal (Rs.2840) was marginally greater than national average (Rs. 2459). Strangely, the state was among the "exclusive" nine states and U.Ts to have reported expenditures incurred on private coaching for students pursuing vocational education. And per student expenditure was even surprising –Rs. 1318, ten times higher than the national average (Rs. 130)²³.

In other words, though large section of children are offered free education in the state, the expenditure incurred on private coaching appered to be a huge burden on the students and resulted in large number of students' dropping out of school owing to their restricted affordability. Irrespective of their place of residence, around a third of the students of the age group 5 to 29 in the state reportedly to dropout due to financial constraints²⁴.

While lower school fees lead to greater enrolment, the same may not ensure the quality of education desired to be delivered by a school²⁵. The recent Indian experience also suggests that though enrolment of socio-economically backward groups in the country has increased substantially, they are yet to achieve the level laid down in the newly found right. Students coming from disadvantaged background do face a distinctly different socio-cultural atmosphere in the school, and their voice is seldom heard. On the other hand, deteriorating quality of the public schools make the affluent classes to switch over to private schools, further reducing the accountability of the schools catering to the "ordinary" children.

 ²³ Ibid, Table 39, page 291
 ²⁴ Ibid, Table 55

²⁵ Bold, Tessa et al. Does Abolishing Fees Reduce School Quality? CSAE Working Paper, University of Oxford, 2010

4. The Equity Question

4a.TheSocialContext

The Seventh Quinquennial Review of Education in India (1912-17) reported 1084356 male and 101979 female students at the secondary level. As was evident from the figures, only 8.6% of total students were girls²⁶. In the early twentieth century, the extent of exclusion of Indian girls was enormous. The Seventh Quinquennial Review (1912-17) mentioned that the participation of European girls in secondary education was almost equal to that of the boys; it was equitable among the Anglo-Indians, followed by the Indian Christians. Discriminations based on gender, race, religion and caste apart from geographical location was something that blurred the prospect of secondary education.

Exclusion of various castes in school education in general and in secondary education in particular, was evident in the above report. Against around 5 percent share of the total population during the period mentioned, Brahmins' participation in secondary education was much higher; according to the report, Brahmin pupils constituted 22 percent of total enrolment in secondary English schools (Majority of schools were English medium) and their share was above 45 percent of total Hindu enrolment in the same category. The report did not mention enrolment of various castes, rather it bifurcated the total Hindu enrolment into Brahmin and non-Brahmin enrolment. It is not difficult to presume that much of the rest 55 percent Hindu enrolment was from the other upper castes and the participation of backward castes and present scheduled castes had hardly any opportunity to attend secondary schools.

Despite receding gap between male and female literacy rates in India as well as in the state of West Bengal, and increasing participation of girls in elementary education, their numbers in the secondary level is far from satisfactory. This is another juncture when the intrinsic relation of secondary education with vocational education/training becomes further evident. There is clear apathy evident in the society towards girls' vocational education, and this could be a reason for lesser participation of girls in secondary education and their lower level of achievement. Participation of girls in vocational education in the state remained dismal. While overall admission of girls in the ITIs in 2000 was one tenth of that of the boys, more than half of the

²⁶ Sharp. H, Progress of Education in India 1912-17, Seventh Quinquennial Review, Vol II page 11, General Table I

girls (53%) were pursuing course of cutting and tailoring alone, another 44 percent were pursuing courses like Secretarial Practice, Hair and Skin Care and Dress Making, which were completely uncommon in the case of male students²⁷. The type of courses opted by the girls suggest that the vocation they opted for was that of a home maker.

This disturbing pattern persisted across the geographical boundaries of the Indian states and also beyond:

...girls who are enrolled in technical and vocational education tend by and large to be in areas that lead to traditionally female occupations, often characterized by low pay, such as hairdressing, sewing and tailoring, sales and service occupations and care profession.²⁸

4b. Approach to Secondary Education

Notwithstanding the fact that the secondary and higher secondary education age coincides with that of the period of life when students undergo not only biological changes but also changes concerning their worldview, these issues receive little or no attention in the educational discourses. Given the conventionality involved in the thought processes of general Indian families, where the male child is expected to join the world of work, and the girls are supposed to be readied for marriage and thus investment on girls' education is taken to be a wastage, changes in the discourse on educational contents and processes become imperative to make it meaningfully acquirable by all sections of the society – boys and girls, low caste and high caste, rich and poor and so on. Keeping aside the indifference of families and individuals to secondary education, the state itself is not found equally enthusiastic to provide secondary education with the same fervor as it did for elementary education in recent years. Secondary education is neither compulsory in India, nor any real effort has been made by the state to achieve universal secondary education. It is only recently that, following the recommendations of the CABE report, the launching of the Rashtriya Madhyamik Siksha Abhiyan (RMSA) has shown some commitments towards this cause. Contrary to the Indian scenario, many of the developed countries have made secondary education universal – although not always making it compulsory

²⁷ Bagchi, J & J. Guha, Chapter 3, The Changing Status of Women in West Bengal 1970-2000: The challenge ahead, SAGE 2005

²⁸ Youth and Skill: Putting Education to Work, UNESCO, 2012

- and have harvested its fruits to strengthening their economy as well as enhancing the scope of higher education. The status of secondary education in the developed countries is much different compared to what is in vogue in India. In the developed nations, literacy is almost universal, children stay at school till the ages of 16 to 18 to complete their secondary education. Secondary education in these countries is terminal in nature – and only a small proportion of students opt for higher education, reducing the load on higher education sector. In India, it is only lately that elementary education has received importance; the goal of universal secondary education still looks distant as policy declaration takes this not to be essential but only "desirable". ²⁹ There are quite a good number of counties who have already made efforts to make secondary education compulsory for their children. In 1959, France extended the age of compulsory education from 14 to 16. As a result, in ten years the enrolment rate of 15 years olds increased from around 50 percent in 1958 to 80 percent in 1969³⁰. A UNESCO report states that practically all OECD countries divide basic education into three stages - primary, lower secondary and upper secondary. A vast majority of countries impose compulsory education upto the age of fourteen to sixteen years. Practically all countries impose education of at least nine or ten year's duration. Some provide additional full or part time compulsory schooling for another one to three years. Some countries, such as the Nordic ones, have a single curriculum from grade 1 to grade 9 and try to keep the students in the same schools. Others have developed a single continuous curriculum from pre-school through to the end of upper secondary (e.g. different states in the U.S.A). The following section will now turn to the issues of curriculum and syllabus.

5. The Content of Secondary Education:

5a. Curriculum and Syllabus

West Bengal, unlike the educationally advanced states in India, like Kerala, Himachal Pradesh, Goa and Tripura, has separate boards for secondary and higher secondary education. Both these boards are statutory organisations. These boards are also one of the oldest institutions of their

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²⁹ Singh, A. The Place of Secondary Education, EPW April 26, 1997

³⁰ Briseid, O and Françoise Caillods. Trends in Secondary Education in Industrialised Countries: Are they relevant to African Countries, International Institute for Educational Planning, UNESCO, 2004

kinds. The West Bengal Board of Secondary Education (WBBSE) was established in 1951 and reconstituted in 1964, and the West Bengal Council of Higher Secondary Education (WBCHSE) was established in 1929 (reconstituted in 1962)³¹. Apart from the WBBSE there is another board, called, the West Bengal Board of Madrasah Education (WBBME), which follows the same syllabus as the WBBSE, except two subjects, namely, Arabic and Islam Parichay³², the latter being a compilation of Islamic texts like Quran, Hadith and so on. The West Bengal Council of Rabindra Open Schooling (WBCROS) formerly known as the Rabindra Mukta Vidyalay offer secondary courses which is based on the syllabus of the WBBSE and are almost similar to that. Both these institutions are given the status of statutory bodies in 1994 and 2001 respectively. These apart, there are some schools under the central boards – CBSE, ICSE, etc.

While defining Curriculum and Syllabus, the National Focus Group on Curriculum, Syllabus and Textbooks under the NCERT described these two as follows:

Curriculum is, perhaps, best thought of as that set of planned activities which are designed to implement a particular educational aim- set of such aims - in terms of the content of what is to be taught and the knowledge, skills and attitudes which are to be deliberately fostered, together with statements of criteria for selection of content, and choices in methods, materials and evaluation

Syllabus refers to the content of what is to be taught and the knowledge, skills and attitudes which are to be deliberately fostered; together with stage specific objectives.

While the issue of a common core curriculum throughout the country without compromising the pluralistic character of the country – a subject that gathered importance in the National Policy on Education, 1986 –has been resolved to a good extent, classroom activities, examination and evaluation procedures remain widely different across the boards.

In 2004 the Executive Committee of National Council of Educational Research and Training (NCERT) had taken the decision to revise the National Curriculum Framework (NCF). Subsequently, the Secretary, Ministry of Human Resource Development communicated to the Director of NCERT the need for reviewing the National Curriculum Framework for School Education (NCFSE – 2000) in the light of the report, *Learning Without Burden* (1993). In the context of these decisions, a National Steering Committee, chaired by Prof. Yash Pal, and 21

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³¹ MHRD,

³² Official Site of the WBBME, http://www.wbbme.org/about_wbbme.aspx

National Focus Groups were set up. Representatives of institutions of advanced learning, NCERT's own faculty, school teachers and non-governmental organizations were to be the members of the committees.

5b. Content and Private Support

The emphasis that the National Curriculum Framework (NCF) 2005 attached to *Learning without Burden*, came at a time when most of the school students in the country in general were visibly crawling with the load of syllabus. School became secondary and privately arranged paid tuitions became the primary means of acquiring "education". Coaching or private tuition emerged as a flourishing economy. To most of the students, parents and even the teachers, studying at school alone was not sufficient to complete the syllabus offered to them. While NCF quoted Rabindranath Tagore who emphasised on 'Creative spirit' and 'generous joy' to be associated with studying, the same phrases became alien as the number of secondary schools lacked basic laboratory infrastructure for the creativity of the students to be explored and joy of studying was restricted within the limits of marks and grades.

In its report, *Learning Without Burden*, the committee pointed out that learning at school cannot become a joyful experience unless we change our perception of the child as a receiver of knowledge and move beyond the convention of using textbooks as the basis for examination. In sharp contrast to such findings, children in West Bengal under the tremendous burden of ensuring better marks at the board examinations of secondary and higher secondary level to guarantee a place at one or the other college for higher education are compelled to indulge in rote learning.

International experience shows that unless the secondary stage of education is made terminal in character, the level of competence at the middle level in various jobs, particularly at the vocational level, remains unsatisfactory ... If standards of performance at that level have to be improved, there is no choice but to improve the standards of performance at the higher secondary level. ... if the pressure on colleges has to be relieved to some extent, the knowledge and skill quotient of those completing the secondary and/or the higher secondary level must improve. ... the objective at the secondary level

should be to get rid of the customary view of treating it as something preparatory for college entrance to and make it terminal in character. ³³

6. Achievements in Secondary Education:

6a. Widening Extent

Despite all odds, youths in the state have shown their interest in secondary education as the number of regular students, irrespective of their socio-economic status and the board under which they have been appearing in the examinations has been in the rise. Number of examinees under the West Bengal Board of Secondary Education, the main board in the state has consistently been increasing literally in lakhs. The other two boards have also seen similar growth in number of examinees (Table 5). Most importantly participation of girls has also increased in 2010 to such an extent as to outnumber the boys, though it was possible only because of a larger participation of girls under the Board of Madrasa Education and Rabindra Mukta Vidyalay.

Table 5: Number of regular students appeared in secondary schools under various boards of West Bengal

Name of Board	2008			2009			2010		
Name of Board	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
West Bengal Board of Secondary Education	322831	290000	612831	366534	344503	711037	411696	404063	815759
Board of Madarsa Education	10414	15296	25710	12342	19622	31964	11060	20065	31125
Rabindra Mukta Vidyalaya *	10717	16098	26815	9964	16716	26680	29758	44589	74347
All	343962	321394	665356	388840	380841	769681	452514	468717	921231
Gender-wise Percentage	51.7	48.3	100.0	50.5	49.5	100.0	49.1	50.9	100.0

Source: Ministry of Human Resource Development, Government of India

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 $^{^{33}}$ Singh, A. The Place of Secondary Education, Economic and Political Weekly, April 26, 1997

*In Open Schooling System, candidates are not classified as 'Regular' or 'Private''.

Overall, the number of regular secondary examinees in the state, increased by 38.5 percent in just three years.

Similar growth was also observed during the same period among the socially backward groups, namely, the Scheduled Castes and the Scheduled Tribes (Table 6). However, despite some enhancements, participation of SC and ST girls has not followed the general line of increase.

Table 6: SC, ST regular students appeared for secondary education under various boards of West Bengal

	SC								
Name of Board		2008		2009			2010		
Name of Board	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
West Bengal Board of Secondary Education	76130	58355	134485	89278	74762	164040	106648	93617	200265
Board of Madarsa Education	235	262	497	254	351	605	379	460	839
Rabindra Mukta Vidyalaya	1840	2528	4368	1866	2748	4614	4809	6388	11197
All	78205	61145	139350	91398	77861	169259	111836	100465	212301
					ST				
West Bengal Board of Secondary Education	13471	8808	22279	16279	11726	28005	19885	15783	35668
Board of Madarsa Education	68	61	129	112	94	206	117	113	230
Rabindra Mukta Vidyalaya	376	567	943	1719	1950	3669	2192	2565	4757
All	13915	9436	23351	18110	13770	31880	22194	18461	40655

Source: Ministry of Human Resource Development, Government of India

6b. Enhanced Rate of Promotion

Not just participation, youths of the state have participated with success. Though the success rate of the students of the various boards of secondary education in the state was above the national

^{*}In Open Schooling System, candidates are not classified as 'Regular' or 'Private".

average for all three years in consideration (2008, 2009 and 2010), percentage of successful studentshas increased with a rate higher than the national average. The overall success rate of students of WBBSE, WBBME and Rabindra Mukta Vidyalay are provided in table 7. Their relative standings in the list of all secondary boards in the country in terms of success rate appear quite encouraging. The WBBSE ranked 15th, 10th and 12th in the consecutive examinations analysed here. The WBBME faired even better, and their advancement was more consistent as their ranking in the all India list in the respective years were 21st, 12th and 7th respectively (Table 7).

Table 7: Percentage successful candidates in secondary examination under various boards of West Bengal

Name of Board		2008			2009			2010		
		Girls	Total	Boys	Girls	Total	Boys	Girls	Total	
West Bengal Board of Secondary Education	77.5	66.9	72.5	86.8	76.3	81.7	80.4	84.2	82.1	
Board of Madarsa Education	71.5	60.3	64.8	87.3	76.7	80.8	93.1	87.0	89.2	
Rabindra Mukta Vidyalaya	36.9	41.6	38.6	37.9	43.7	41.5	31.7	34.9	33.6	

Source: Ministry of Human Resource Development, Government of India

Rabindra Mukta Vidaylay on the other hand, is the only board which has not shown such successes, rather in absence of regular academic assistance, only a small proportion of students could manage to pass the examination. The National Institute of Open Schooling, being the largest open school in the country in terms of number of examinees appearing in the secondary education recorded an excellent result in which 70 percent of the students passed. Even the average pass percentage of all boards taken together was 52 percent which was much better than that that of Rabindra Mukta Vidyalay. It is well known that the students appearing in secondary examination under the open schools are mostly from underprivileged background, who do not get an opportunity to join the mainstream, and hence they need more attention than their regular counterparts. Unfortunately, this is not seen to have happened. Secondary education has the risk of reproducing or reinforcing inequalities for it has a dual function of providing skills for early employment for some, and selecting and preparing the rest for further education, based on their interests and academic ability. These students, who could not receive the opportunity at proper

juncture of their lives, should be treated more sympathetically, and their efforts should be supported by more aid from the open school system in the state

7. Governance Structure:

7a. Departmental Linkages

The objective of the School Education Department is to frame policies and programmes covering school and vocational education and implement them with consistency, efficiency, integrity and transparency and to ensure provision of quality education at all levels. The norms of quality are consistent with the commonly accepted, monitorable parameters relating to capacities, output, competence and performance levels.

The main functions of the School Education Department is to coordinate, frame policies and set priorities and allocation of resources. In West Bengal there are a few statutory institutions dealing with specific subject matter as follows:

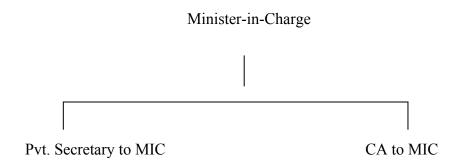
- a) West Bengal Board of Primary Education dealing with all matters relating to primary education. At the district level, it networks with elected District Primary School Councils.
- b) West Bengal Board of Secondary Education dealing with Secondary education.
- c) West Bengal Council for Higher Secondary Education dealing with matters relating to Higher Secondary education.
- d) School Service Commission. Dealing with selection and appointment of School Teachers.
- e) West Bengal Council of Rabindra Open Schooling dealing with Open schools at Upper Primary and Secondary level.

The management structure of school education department of west Bengal is given below:

Management Information System-A

The office of the Honorable MIC of School Education

West Bengal



Management Information System-B

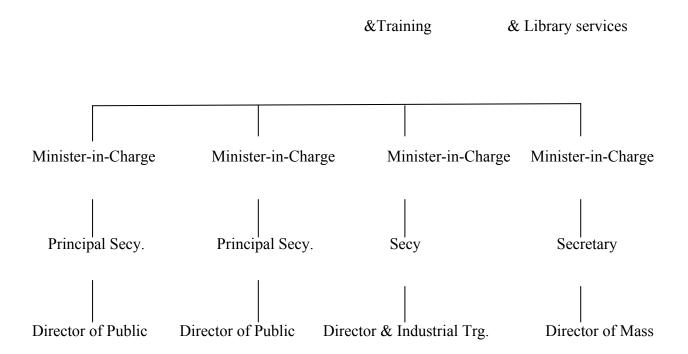
Different Departments of Education

Technical Education

Mass Education Extn.

School Education

Higher Education



Instruction Education Education

Director of Technical Education & Trg

The Board of Secondary Education was established in 1951 under an Act of the State Legislature called the West Bengal Secondary Education Act of 1950. The basic task of the board was:

- To regulate, control and develop secondary education of the stage
- To conduct the school final examination

Previously these activities were managed by the University of Calcutta. The Board was subsequently renamed in 1964, under the West Bengal Board of Secondary Education Act, 1963, as the West Bengal Board of Secondary Education,. As an autonomous body, the board has taken its present shape in January 1964.

7b. Composition of the Board

The Board is constituted with 67 members, with the President at its helm. Of the total members 37 are elected from and by the teaching and non-teaching staff of the recognized institutions; rest of the members are appointed ex-officio. The different constituencies from which the elected and nominated members are to be appointed are clearly spelt out in the Act. Ex-officio members include the Director of School Education, President of the West Bengal Council of Higher Secondary Education, the West Bengal Board of Madrasah Education, the West Bengal Board of Primary Education, etc. The exact numbers of members belonging to different categories are given below:

Table 8: Number of officials according to category

SL.No.	Category of members	Number
1	Ex. Officio Members	12
2	Nominated members from Universities	4

3	Elected members of teaching staff of recognized training	2
	colleges	
4	Heads of recognized secondary schools nominated by the	2
	State Govt.	
5	Elected permanent teaching and non-teaching staff of	34+3
	recognized secondary schools including hill areas	
6	MLAs	2
7	Persons interested in education nominated by the State Govt	5
8	Persons elected by the employees of the Board	1
9	Permanent teaching staff of recognized primary schools	1
	nominated by the State Govt.	
10	Permanent teaching staff of affiliated colleges nominated	1
	by the Govt	

7c. Power and Responsibilities of the Board

The Board is basically vested with the following powers:

- 1. Advising and laying down before the government the general policies regarding secondary education;.
- 2. Controlling and guiding the schools in different administrative matters;
- 3. Mapping the entire educational activities at secondary level ranging from preparation of the syllabi, publication of the text books, conducting the teacher empowerment programmes to conducting the secondary examination;

On the basis of these powers the activity map of the board runs as follows:

- 1. To frame courses of study and to advise the government to introduce them in the schools.
- 2. To draw up the general policy of secondary education and implement them with the concurrence of the government.

- 3. Interacting with various academic and action-centric bodies like NCERT, NUEPA, COBSE, UNICEF etc, at the state and national level for achieving high-end and quality educational activities.
- 4. Granting, withholding or withdrawing recognition.
- 5. Conducting enquiries against erring teachers and non-teaching staff.
- 6. Granting approval or withholding something related to the adoption of certain penal measures taken by the M.C. against teachers and no-teaching staff.
- 7. Handling the appeals made by the teachers and non-teaching staff regarding their grievances.
- 8. Conducting the Madhyamik Pariksha (SE) of the regular and external examinees through a battery of paper-setters, examiners and other related persons.
- 9. Preparation and review of the syllabi by experts.
- 10. Publication of text books from classes VI to X and reviewing them from time to time. Streamlining the sale of these books through a bank of book sellers selected by the Board. Maintaining sales counters at H.Q and Regional offices.
- 11. Approval of text books published by the private publishers as per the prescribed syllabi
- 12. Arrange for in-service training and orientation of the approved school teachers to keep them updated of the changes in curricula, syllabi and teaching method in various compulsory and optional elective subjects
- 13. Designing policy and implementation strategy for spreading computer literacy. The Board gives approval to the teaching of .Computer Application as an Optional Elective Subject in classes IX and X and also as project activity in work education from classes VI-VIII.
- 14. Publication of the *Parshad Varta* organ of the Board that carries the informational flow down to the affiliated schools.
- 15. Constitution and reconstitution of the Managing Committee through democratic processes stipulated in the Management rules.
- 16. Conducting enquiries against errant M.C.s.
- 17. Occasional appointment of administrator and/or ad-hoc Committees for ensuring reconstitutions of M.C.s in case of the latter's functional failure;
- 18. Approving the special constitution of the M.C. to ensure sectional rights and privileges.

The board functions with the help of different committees and sub committees. They are:

- 1. Executive Committee
- 2. Examination Committee
- 3. Finance Committee
- 4. Recognition Committee
- 5. Syllabus Committee
- 6. Appeal Committee
- 7. Committee constituted under Section 24 of the Act.

Secondary school education gets completed with the final school examination, conducted by the board. This examination, .Madhyamik Pariksha, is in effect, the first eliminating test in a student's life for the Right to Education Act 2009 has put a bar on detaining any student at elementary level. Secondary education is followed by 2 years of Higher Secondary Education. There are different types of schools in the state. They are, Junior High Schools (up to standard 8), Junior Madrasahs, High Schools (up to standard 10), High Madrasahs, Senior Madrasahs and Higher Secondary Schools (up to standard 12). The Directorate of School Education directly controls and maintains 41 (forty-one) institutions within the State. Out of which 39 (thirty-nine) are Schools for secondary and higher secondary education and the remaining 2 (two) are Teacher's Training Institutions. Recently one more school, Begum Rokeya Smriti Balika Vidyalaya, has been established at Bidhannagar, Salt Lake. This school has started operation from the academic session, 2000-01 and now able to meet the long standing demand of the local population for a separate Government Girl's School. The Government School Section, under the Directorate of School Education (WB) is responsible for appointment, posting, transfer, salary, pension etc. of the teaching staff of these institutions. Full financial assistance for maintenance and modifications of these schools are borne by the State Government.

7d. Management of Secondary Education

The management system of secondary education is as followed:

Secondary Unit

District Inspector of Schools

Addl. District Inspector of schools

Assistant Inspector of schools

Sub-Inspector of Schools

Head Clerk-cum-Cashier

U.D.C.s

L.D.Cs

Group-D Staff

U.D.C – Upper Division Clerk

L.D.C – Lower Division Clerk

8. Growth of Secondary Education

8a. Enrolment

The preceding decade has seen substantial advancement in access to elementary education in West Bengal, through establishment of new schools, improvement in infrastructural provisions — be it classrooms or other amenities under the Sarva Siksha Abhiyan — though the long pending issues of equity in terms of quality as well as quantity of such provisions persists till today; both enrolment and attendance has also increased as various incentives are provided to the socially backward section of society and particularly to the girls, the transition and retention rates also improved due to no detention policy in the primary section in the state. There are of course doubts prevailing regarding the whole process to ensure access itself as the process is plagued by its input focussed and not outcome oriented approach. Nevertheless, as a result of huge effort to universalise elementary education and its success, large section of the young children are

becoming eligible for secondary education, the secondary school system appears to be unprepared for. The ever growing pressure on the secondary education system in the country has been recognised in various recent reports by private institutions as well as the government commissions.

The Gross Enrolment Ratio (GER) at elementary level is 119 percent, at secondary level 63 percent, higher secondary level 36 percent, and in higher education 15 percent...

...The focus on elementary education policy and investment in the last five years, leading to higher enrolment rates and the automatic promotion under the Continuous Comprehensive Evaluation (CCE) scheme, have added pressure to an already stressed secondary education system. The demand for secondary education is also growing in view of the high returns from secondary education, which are even more than returns from higher education³⁴.

The growing number of children in the elementary school system is bringing pressure to bear on the need for further education³⁵

The enrolment in Education in India has witnessed a compounded Annual Growth Rate (CAGR) of about 3.3 percent, with High and Higher Secondary Education (Standards IX-X and Standards XI-XII respectively) Recording a higher growth rate of 5.4 percent³⁶.

Apart from the fact, that more and more children are becoming eligible for secondary education due to wide participation of children in the elementary education, there are greater opportunities for such children for higher education, once they pass through the secondary level³⁷.

The figures for the enrolment during the 2nd All India School Educational Survey (AISES) and the recent data provided in the U-DISE (Unified District Information System for Education) 2012-13, stands as an evidence for the above statements. While in 1967 (during 2nd AISES), percentage enrolment of children in class 10 to that of total enrolment in the class 1 was only 7.2 percent, the latest figures provided in the U-DISE 2012-13 shows that the same has increased to 29.4 percent, more importantly there is hardly any gender discrimination noticeable in 2012-13 figure (Table 9 and Table 10); while enrolment in class 1 has increased by 570576 (35.7%), enrolment in class 10 has increased by 580789 (102.8%). Though the main driving force behind this increment was the spread of elementary education in the state, Secondary Education received

³⁷ Biswal, K. Secondary Education in India: Development Policies, Programmes and Challenges. NUEPA, 2011

Basu, S. India Infrastructure Report 2012, Routledge.
 Report of the Central Advisory Board for Education on Universalisation of Secondary Education 2005.

³⁶ Human Resource and Skill Requirements in the ...

lesser attention from the policy makers, and the secondary education system was hardly able to provided adequate facilities for the ever increasing number of students at secondary level.

Table 9: Apparent Cohort³⁸ on the basis of 2nd AISES

		Apparent Cohort		Apparent	Total	Apparent Cohort
Classes	Boys	for Boys	Girls	Cohort for Girls	enrolment	total enrolment
Class 1	973754	100.0	623438	100.0	1597192	100.0
Class 2	464974	47.8	274771	44.1	739745	46.3
Class 3	415316	42.7	232249	37.3	647565	40.5
Class 4	395647	40.6	153632	24.6	549279	34.4
Class 5	240598	24.7	113926	18.3	354524	22.2
Class 6	210340	21.6	98004	15.7	308344	19.3
Class 7	179937	18.5	80473	12.9	260410	16.3
Class 8	157111	16.1	64314	10.3	221425	13.9
Class 9	123922	12.7	414525	6.5	538447	33.7
Class 10	86904	8.9	27999	4.5	114903	7.2
Class 11	45121	4.6	11365	1.8	56486	3.5

Source: Second All India School Education Survey (AISES), NCERT 1967

Table 10: Apparent cohort on the U-DISE 2012-13

		Apparent Cohort for		Apparent		Apparent Cohort
Classes	Boys	Boys	Girls	Cohort for Girls	Total	total enrolment
Class 1	1215167	100.0	1152601	100.0	2367768	100.0
Class 2	970541	79.9	939314	81.5	1909855	80.7
Class 3	909540	74.8	887692	77.0	1797232	75.9
Class 4	930437	76.6	913838	79.3	1844275	77.9
Class 5	896444	73.8	916338	79.5	1812782	76.6
Class 6	821654	67.6	866091	75.1	1687745	71.3
Class 7	754740	62.1	819693	71.1	1574433	66.5
Class 8	702270	57.8	784421	68.1	1486691	62.8
Class 9	633053	52.1	709624	61.6	1342677	56.7
Class 10	511050	42.1	561011	48.7	1072061	45.3
Class 11	411215	33.8	372372	32.3	783587	33.1
Class 12	369624	30.4	326068	28.3	695692	29.4

Source: Unified District Information System for Education (U-DISE) 2012-13

³⁸ Mehta, A.C, Indicators of Educational Development with Focus on Elementary Education: Concepts and Definitions

8b. Provision Constraints

For long, the ratio of upper primary school to that of primary schools in the state was unacceptably low. The issue is far from been resolved, present ratio of 4.5 primary school for every upper primary school in the state remains as a proof of the same. One must keep in mind that the only 3.53 percent of total schools in West Bengal have class 5 as the highest class whereas 78 percent schools have class 4 as the highest class. Therefore for all practical purposes the primary schools provide education till class 4 and the upper primary schools provide education from class 5 to class 8, and if the pre-primary sections introduced in the primary schools this year ignored, the primary and upper primary schools actually have equal number of classes.

On the other hand, the same ratio with secondary schools is 8.2 and that with higher secondary schools is 12.7. The tapered structure of the school system in terms of capacity to accommodate students, actually push out students, and the victims are often from the backward socio-economic background as the category-wise cohort suggests.

Moreover, as mentioned earlier in this report, while the developed countries have either a single curriculum from grade 1 to grade 9 and try to keep the students in the same schools. Others develop one continuous curriculum from pre-school through to the end of upper secondary (e.g. different states in the U.S.A). The situation in West Bengal is much different. The entire school education system is fragmented in four different categories with four different boards at the helm of affairs. Availability of various sections (primary, upper primary etc.) in schools have wide variation according to district, according to the management as well as location (rural/urban) of schools.

As Table 11 shows that only 8.7 and 5.3 percent of rural schools have secondary and higher secondary sections respectively, the figures are much higher in case of urban schools at 20.8 percent and 14.7. The figures may change slightly (11.1 percent for secondary and 6.85 percent for higher secondary) if we exclude the Sishu Siksha Kendras (SSK), numbering 18025 in the state, which were introduced in the state under the Department of Panchayat and Rural

Development of the State Government with a sole objective to improve access to primary schools in the rural areas of the state.

Table 11: Distribution of secondary and higher secondary schools according to location

	With Secondary Section	Percentage schools with Sec. Section	Without	Total
Rural	7,104	8.7	75,003	82,107
Urban	2,590	20.8	9,887	12,477
Total	9,694	10.2	84,890	94,584
	With H. Secondary Section	Percentage schools with H. Sec. Section		
Rural	4,392	5.3	77,715	82,107
Urban	1,840	14.7	10,637	12,477
Total	6,232	6.6	88,352	94,584

Source: DISE 2012-13

Comparison of number of schools under various managements in the state reveals that a huge majority of schools (65.5 percent) are under the Department of Education (table 12), and is certainly the most important group of schools. The percentage of schools with secondary section under the Department (8.7%) is higher than the state average (6.6%). Another 19 percent schools are under the Department of Panchayat and Rural Development with no secondary schools under it. The third largest group of schools is formed by the private unaided schools (9.12%) has only 5.5% schools with secondary section. Highest percentage of secondary schools (85.5%) is reported by the schools under Madrassa Education, but 67 percent of these schools start from the upper primary level and somewhat has specialized in upper primary and secondary education only. Schools under the Madrassa Education are the only exception in this regard.

Table 12: Distribution of secondary and higher secondary schools in West Bengal according to school management

		ols with ary Section		s with H. ry Section	
School Management	Number	Percentage	Number	Percentage	Total
Central Govt.	62	78.5	53	67.1	79
Department of Education	8,457	13.7	5,401	8.7	61,956
Madrasha Siksha Kendra	9	2.1	4	0.9	425
Madrassa Education	455	85.5	262	49.2	532
Municipal body	16	1.6	4	0.4	1,015
NCLP	0	0.0	0	0.0	649
Others	2	50.0	2	50.0	4
P and RD	0	0.0	0	0.0	18,025
Private (Unrecognised)	27	2.3	16	1.4	1,180
Private Aided	75	17.2	55	12.6	435
Private Unaided	483	5.6	355	4.1	8,626
Tribal/Social Welfare	23	21.7	10	9.4	106
Un-recognised	85	5.5	70	4.5	1,552
Total	9,694	10.2	6232	6.6	94,584

Source: DISE 2012-13, Figures in parenthesis

Table 13: District-wise distribution of schools according to category

District	Primary	U. Primary	Secondary	H. Secondary	Total	Primary Percentage	U. Pry Percentage	Secondary Percentage	H. Secondary Percentage
Bankura	4,276	888	445	255	5,141	83.2	17.3	8.7	5.0
Barddhaman	5,753	1,241	876	466	6,813	84.4	18.2	12.9	6.9
Birbhum	3,576	779	382	186	4,301	83.1	18.1	8.9	4.3
Dakshin Dinajpur	2,083	341	176	111	2,388	87.2	14.3	7.4	4.7

Darjiling	1,462	267	145	71	1,686	86.7	15.8	8.6	4.2
Haora	3,033	828	538	444	3,751	80.9	22.1	14.3	11.9
Hugli	3,717	892	631	330	4,519	82.3	19.7	14.0	7.3
Jalpaiguri	4,047	885	345	248	4,763	85.0	18.6	7.2	5.2
Koch Bihar	3,039	663	279	169	3,652	83.2	18.2	7.6	4.6
Kolkata	2,142	939	713	440	2,744	78.1	34.2	26.0	16.1
Maldah	3,516	714	341	229	4,147	84.8	17.2	8.2	5.5
Murshidabad	5,717	1,388	511	328	6,952	82.2	20.0	7.4	4.7
Nadia	3,807	819	454	313	4,572	83.3	17.9	9.9	6.9
North Twenty Four Pargana	6,052	1,417	985	726	7,319	82.7	19.4	13.5	9.9
Paschim Medinipur	8,048	1,406	781	486	9,368	85.9	15.0	8.3	5.2
Purba Medinipur	5,214	1,105	627	365	6,273	83.1	17.6	10.0	5.8
Puruliya	3,793	833	349	347	4,559	83.2	18.3	7.7	7.6
Siliguri	1,136	211	133	98	1,283	88.5	16.4	10.4	7.7
South Twenty Four Pargan	5,907	1,299	796	452	7,053	83.8	18.4	11.3	6.4
Uttar Dinajpur	2,810	505	187	168	3,300	85.2	15.3	5.7	5.1
Total	79,128	17,420	9,694	6,232	94,584	83.7	18.4	10.2	6.6

Source: DISE 2012-13

It is evident from the (table 13) that sharpest decline in number of schools in a particular level was from primary to upper primary in the state. This decline in the number of schools with upper primary level results into a sharp rise in average enrolment per school in the upper primary section. The average enrolment in the upper primary section in such schools is 382 compared to 102 in primary section. The averages for secondary and higher secondary section are 253 and 243 respectively. Interestingly the transition rate from class 4 to 5 remained much higher than the transition rate from class 5 to 6. In fact the transition rate was more than 100 percent during 2002-2010, the pattern has reversed only during 2010-11, and continued till 2013. Therefore there is hardly any evidence that the students are reluctant to continue study in the upper primary level; rather most of them leave schools only after completing one year in the upper primary

level. Secondary education in the state is suffering due to very few upper primary schools with very high enrolment are repelling students out before they reach secondary level.

As table 13 shows, the scarcity is not even throughout the state, rather the figure in Kolkata district is much better compared to the rest of the state. While 78 percent schools in Kolkata have primary section, 34 percent have upper primary section; the figure is much higher than the state average of 18 percent. The other districts with better primary-upper primary ratio are the adjoining districts of Kolkata like, Howra, Hugli, North 24 Parganas; the only exception is Murshidabad.

A comparison of district-wise ratio of primary school to that of secondary and higher secondary are provided in table 14. The table clearly reads that the position of the disadvantaged districts as regards the ratio of primary with that of upper primary, secondary and higher secondary respectively remain unchanged in the decade (between 2001 and 2011) On the other hand, districts with higher primary-upper primary ratio are also found to have higher primary – secondary/higher secondary ratio (see table 14). Table 14: Ratio of upper primary, secondary and higher secondary schools to primary schools

Table 14: Ratio of Upper Primary, Secondary and Higher Secondary School to Primary School

District	Primary	U. Primary	Secondary	H. Secondary	Primary/U.Primary	Primary/Secondary	Primary/H.Secondary
Bankura	4,276	888	445	255	4.8	9.6	16.8
Barddhaman	5,753	1,241	876	466	4.6	6.6	12.3
Birbhum	3,576	779	382	186	4.6	9.4	19.2
Dakshin Dinajpur	2,083	341	176	111	6.1	11.8	18.8
Darjiling	1,462	267	145	71	5.5	10.1	20.6
Haora	3,033	828	538	444	3.7	5.6	6.8
Hugli	3,717	892	631	330	4.2	5.9	11.3
Jalpaiguri	4,047	885	345	248	4.6	11.7	16.3
Koch Bihar	3,039	663	279	169	4.6	10.9	18.0
Kolkata	2,142	939	713	440	2.3	3.0	4.9
Maldah	3,516	714	341	229	4.9	10.3	15.4

Murshidabad	5,717	1,388	511	328	4.1	11.2	17.4
Nadia	3,807	819	454	313	4.6	8.4	12.2
North Twenty Four Pargana	6,052	1,417	985	726	4.3	6.1	8.3
Paschim Medinipur	8,048	1,406	781	486	5.7	10.3	16.6
Purba Medinipur	5,214	1,105	627	365	4.7	8.3	14.3
Puruliya	3,793	833	349	347	4.6	10.9	10.9
Siliguri	1,136	211	133	98	5.4	8.5	11.6
South Twenty Four Pargana	5,907	1,299	796	452	4.5	7.4	13.1
Uttar Dinajpur	2,810	505	187	168	5.6	15.0	16.7
Total	79,128	17,420	9,694	6,232	4.5	8.2	12.7

Source: U-DISE 2012-13

The correlation coefficients calculated on the basis of the relationship between primary-upper primary ratio with that of primary-secondary (column 6 and 7) and primary-higher secondary (column 6 and 8) appear to be 0.714836 and 0.703697, respectively. The glaring inequity found in the above exercise, in fact, reinforces the already existing dividing line based on provision advantage.

8c. Decline in Transition

As discussed in the previous section of this report, large number of students in the state opted to leave schools during the first year of upper primary schooling. As the reconstructed cohort below

Table 15: Reconstructed Cohort

Class	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
Class 1	2661384	-31.6								
Class 2		1820823	-6.5							
Class 3			1703141	2.2						
Class 4				1740592	3.1					
Class 5					1794862	-17.9				
Class 6						1472688	3.7			
Class 7							1526586	-5.2		
Class 8								1447143	-9.8	
Class 9									1306038	-17.9
Class 10										1072061

Source: State Report Cards of respective years & DISE 2011-12, 2012-13

suggests, while the largest decline in enrolment is observed during the transition from class 1 to class 2, the phenomenon is characteristic of West Bengal and primarily due to non-availability of pre primary section in government primary schools till 2012-13; the wastage so apparent is not due to dropout, rather due to repetition. The second largest decline occurred during the transition from class 5 to class 6 and interestingly with the same magnitude (17.9%) from class 9 to class 10. In both the cases the students left only after staying for a year in the new level, i.e. upper primary and secondary respectively. The average enrolment per school in various level of school education is provided in table A3 of the appendix B, showing the over crowded nature of schools, especially at the upper primary level, which remain one of the main reasons for students dropping out of school.

While most of the students repeat in class 9 (10%) and fewer in class 10 (4.5%) the overall percentage of repeaters remain almost same compared to the national figures, yet the trend is quite opposed to it, as the national rate of repetition in class 9 is 6.5% and in class 10 is 6.8%, evenly distributed in the two classes. On the other hand the rate of repetition in the higher secondary education is lower in West Bengal (class 11 - 2.24% and Class 12 - 2.29%) compared to the national average (class 11 - 3.6% and Class 12 - 4.6%) and is evenly distributed in the two classes³⁹.

Prevalence of repetition in secondary education had hardly any bearing with the place of residence (rural/urban) and gender, as the percentage of students repeating in the same class while studying in class 9 and 10 remained same for male, female for the location. For rural areas the figures for female, male and total were 4.9, 6.2 and 5.7 respectively, and that for urban areas was 4.3, 5.9 and 5.2.⁴⁰

Viewing the decline in enrolment in the secondary level alone will certainly give a distorted image of the situation, as the children from underprivileged social categories start to leave schools right from the elementary level itself. While the reconstructed cohort in table 16 above provides a glimpse of enrolment related detail in the elementary level in the state, the table below provide the percentage participation of various social categories in the state in year 2012-13.

³⁹ Secondary Education in India: Where do We Stand 2010-11 (Provisional), NUEPA

⁴⁰ Education in India: 2007-08 Participation and Expenditure, NSSO

Table 16: Reconstructed cohort – Elementary Education West Bengal

	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
Class 1	2661384	2407985	2217381	2388461	2416059	2219350	2698487	2552380	2498292	2367768
Class 2	1805172	1820823	1694937	1789216	1818255	1746339	2070903	1981477	1913800	1909855
Class 3	1741040	1720228	1703141	1755391	1706812	1659352	1975312	1918238	1877997	1797232
Class 4	1660902	1673947	1605939	1740592	1727742	1636964	1943962	1921232	1929920	1844275
Class 5	1706748	1771853	1784577	1842894	1794862	1751008	1856655	1858243	1866038	1812782
Class 6	1278303	1347535	1384287	1464516	1434294	1472688	1633838	1664425	1661971	1687745
Class 7	1078606	1151387	1186911	1272326	1270611	1322725	1526586	1588627	1590419	1574433
Class 8	902770	976734	1015160	1089096	1102356	1149102	1335051	1447143	1489520	1486691

Source: State Report Card of various years, NUEPA

The last column in the table provides the average enrolment of particular social group in the whole school education system while the other columns provide enrolment of these social groups in various levels of school education. The highlighted cells depict that the enrolment in such level was lower than the average enrolment of the particular social group. The figures clearly show that the enrolment of general category remained almost unchanged in all four levels of school education, SC enrolment shows significant decline only in the higher secondary level. Whereas the enrolment of STs and Muslims decline with significant consistency through various levels

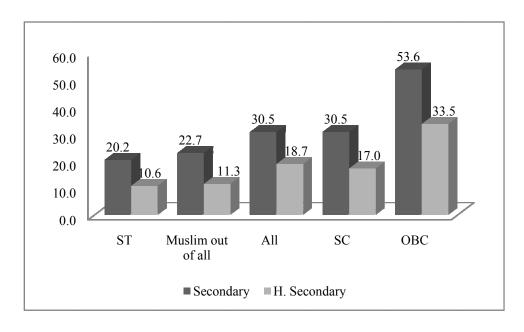
While table 17 provided status of percentage participation of various social groups in a particular level of school education, the figure below provide percentage enrolment of various social categories at secondary and higher secondary level to that at primary level. Overall the enrolment in secondary and higher secondary level are 30.5 and 17 percent to that in the primary level, the figures for general and SC categories are almost equal to the overall average, the figures are much lower for STs and Muslims.

Table 17: Percentage Participation of various social categories at primary, upper primary, secondary and higher secondary level

Category	Enrolment in Primary section	Percentage	Enrolment in Upper Primary section	Percentage	Enrolment in Secondary section	Percentage	Enrolment in H.S section	Percentage	All	Percentage
1	2	3	4	5	6	7	8	9	10	11
General	4623696	58.4	3571661	54.4	1351748	55.98	871269	58.9	10418374	56.7
SC	2137356	27.0	1837204	28.0	652235	27.01	364321	24.6	4991116	27.2
ST	628645	7.9	405713	6.2	126946	5.26	66583	4.5	1227887	6.7
OBC	529433	6.7	747073	11.4	283809	11.75	177106	12.0	1737421	9.5
All	7919130		6561651		2414738		1479279		18374798	
Muslim out of all	2597207	32.8	1877408	28.6	590505	24.45	294101	19.9	5359221	29.2

Source: U-DISE 2012-13

Figure 3: Category-wise enrolment at Secondary and Higher Secondary level as percentage of enrolment in Primary level



Source: U-DISE 2012-13

9. Paucity of facilities

While there can hardly be any reason to deny that the overall environment of school and classroom has immense effect on teaching and learning; learning environment, inside the classroom and outside are equally important. This understanding has rightly guided various committees and commissions on education to highlight the relevance and urgency of proper learning requirements in secondary schools. But, in the Indian context, where the very school infrastructure is wanting, the applicability of such 'advanced' recommendations cannot but be doubtful. Unfortunate as it is, some of the expert reports do not even raise the question of the basic lacks. For example, the CABE report while setting the norms for secondary schools insists on the provision of OHP (over head projectors) and LCDs for each secondary school, but it did not give much importance to coming to terms with the general paucities: in practice most of the classrooms have no adequate light, they are often found without a window, making the walled classrooms darker than the black board. The CABE report also recommends each school to have music instruments and gymnasium while the schools do not have common rooms to play musical instruments, and simple sports equipments like a football or a cricket set.

The list of recommendations by CABE goes on to other aspects like facilities for disabled children too, as it recommends Braille and sign-language related equipments and software, while the schools are yet to be provided with ramps, disabled friendly toilets, etc. and appear to be far less welcoming to the disabled children. Also, the U-DISE Data Capture Format (DCF), which otherwise remains a source of detailed information on schools, does not seem to have paid much attention to these recommendations as information pertaining to them are hardly accommodated in the format.

While the high end facilities are provided to the privileged, the lower rung of the society is provided with not even minimum requirements. Though CABE recommends these facilities for all schools, in practice, it takes a narrow route to cover only a few privileged schools. That the recommendations are integral to quality of education is undoubted. But, it is equally important to ensure that their implementation does not suffer from partiality and inflict further inequality in the school system, which is already quite tilted towards the privileged neglecting the mass of disadvantaged.

The CABE report had also doubted the applicability of its own recommendations as it apprehended them to be taken as "utopian".

The norms may appear immediately to be utopian. But Committee considers it to be the necessary utopia. The norms listed already exist in large number of Kendriya Vidyalayas. Many of the reputed private schools have facilities much more than what is laid out in the norm. ⁴¹

Norms set by CABE

Land: 2 to 4 acres

Constructed area: not more than 50% of the land area

Teachers One for every 30 students to be steadily moved to 1:20; at least one

for every subject area; qualified teachers for sports, games and

physical education, music and art.

Other Facilities

• One classroom for every 30 students

- One integrated junior science lab. (for Classes 6th to 8th)
- One Science lab each for physics, chemistry, biology, English Language, Geography, Mathematics for 9th to 12th grades
- Disabled friendly facilities like ramp, special toilets, classroom furniture, etc.
- Braille and sign language-related equipment/computer software"
- SIT to receive EDUSAT programmes
- OHPs, LCD projector
- Musical instruments, Gym equipment, sports and games material
- Junior computer lab with 30 computers for 6th to 8th graders with internet connectivity
- Senior Computer lab. with 30 computers for 9th to 12th graders with internet connectivity

⁴¹ Report of the CABE Committee on Universalisation of Secondary Education

- Separate health/restrooms for boys and girls
- Separate cubicles for teachers with computing facilities one computer for every 4 teachers with internet connectivity
- Safe drinking water facilities
- School canteen and stores
- Separate toilets for girls and boys, and staff
- Library with computer facilities and professionally qualified staff
- Separate offices of Principal and vice-principal with computer facilities
- Electricity
- Telephone
- School office for non-teaching staff with computer facilities
- Hobby room (s) for developing creativity and life skills including music, art and paintings
- Playgrounds soccer, hockey, volleyball, basketball, badminton, tennis, preferably separate for girls
- Indoor games facilities separately for girls and boys
- Gymnasium separately for girls and boys
- Gardens and Social Forestry

The RMSA on the other hand appears to be more pragmatic in this regard. It made in its vision document the recommendations pertaining to the facilities required in secondary schools:

- Adequate number of classrooms, art and craft room, integrated science laboratory, mathematics laboratory, library cum ICT room, availability of clean toilets, clean water and electricity as per norms set by for Kendriya Vidyalayas.
- Sport field and sport materials for adolescents either in the school premises or in the community.

- Seven trained graduate teachers belonging to subject areas such English, Hindi/Regional Language, Science, Mathematics, Social Sciences, Art Education and Health and Physical Education and also a head teacher or principal.
- One lab attendant, computer professional, one clerk and one peon.
- Teacher Pupil ratio of 1: 35.
- Library and laboratories equipped with required books and equipments.
- Provision of immediate aid in case of injury, etc.

On the basis of these recommendations and using the U-DISE 2012-13 data, we try to assess the status of various facilities available in the secondary schools of West Bengal. All figures are derived from U-DISE 2012-13, which gives the latest figures, if not mentioned otherwise.

9a. Numeric and academic strength of teachers

Recognising the centrality of adequate number of teachers, the CABE report clearly recommends that each classroom at secondary level should not have more than 30 students, and there should be one teacher for every thirty students; CABE also recommends to gradually reduce the Pupil Teacher Ratio (PTR) to 20.

On the other hand RMSA recommends the PTR in secondary schools to be 35. However, it also recommends, as mentioned earlier in this report, that each secondary school should have seven trained graduate teachers belonging to major subject areas, namely, English, Hindi/Regional Language, Science, Mathematics, Social Sciences, Art Education and Health and Physical Education. While implementation of this recommendation requires 67858 teachers for the subjects mentioned above, the state, as can be seen from DISE data presented in 18, already has 68491 teachers existing in the schools. Existing PTR in the state complies with the RMSA recommendations. But, despite this adequacy what do not go in line with the RMSA formulations are the academic and professional qualifications of the teachers, which appear not at par with the desired levels. We will elaborate this presently.

As regards the RMSA recommended PTR, while 10 of the 20 educational districts have higher PTR than the recommended one, the other ten appear on the other side of the line, with a lower average PTR than the desired one. A closer look into the figures reveals that the districts with higher PTR have greater number of classrooms per schools, but the number of teachers per school does not increase accordingly. This implies an overall scarcity of secondary school facilities in the districts with higher PTR. Greater number of availability of classrooms in these districts indicates that schools in these districts somehow manage to accommodate huge number of aspiring secondary students, which is evident from very high average enrolment in these districts, the inadequacy of teachers it seem to have a negative consequence on the quality of education delivered.

Table 18: Classrooms, Other rooms and Teachers in secondary schools

District	Total Schools	Total Classrooms*	Class Room Per School	Total Other Room	Other Room Per School	Secondary Teacher	Secondary teacher Per School	Total Secondary Enrolment	PTR Secondary	Average Enrolment Per School
Bankura	445	4687	10.5	1090	2.4	3201	7.2	97969	30.6	220.2
Barddhaman	876	9873	11.3	1652	1.9	5748	6.6	189632	33.0	216.5
Birbhum	382	4051	10.6	901	2.4	2461	6.4	89289	36.3	233.7
Dakshin Dinajpur	176	2632	15.0	438	2.5	1437	8.2	53349	37.1	303.1
Darjiling	145	1452	10.0	294	2.0	1014	7.0	19990	19.7	137.9
Haora	538	7122	13.2	1340	2.5	4489	8.3	109521	24.4	203.6
Hugli	631	7517	11.9	1129	1.8	4569	7.2	137702	30.1	218.2
Jalpaiguri	345	4948	14.3	670	1.9	1861	5.4	122588	65.9	355.3
Koch Bihar	279	2950	10.6	353	1.3	1872	6.7	93343	49.9	334.6
Kolkata	713	8157	11.4	1726	2.4	4379	6.1	94581	21.6	132.7
Maldah	341	4685	13.7	1136	3.3	3022	8.9	115269	38.1	338.0
Murshidabad	511	7545	14.8	1945	3.8	3682	7.2	192708	52.3	377.1
Nadia	454	6958	15.3	1341	3.0	3319	7.3	156414	47.1	344.5
North Twenty Four Par	985	11771	12.0	1816	1.8	6558	6.7	239987	36.6	243.6
Paschim Medinipur	781	9119	11.7	3206	4.1	5749	7.4	165223	28.7	211.6
Purba Medinipur	627	7384	11.8	1770	2.8	4362	7.0	146069	33.5	233.0
Puruliya	349	3819	10.9	641	1.8	3026	8.7	81554	27.0	233.7
Siliguri	133	2057	15.5	122	0.9	1075	8.1	35181	32.7	264.5
South Twenty Four Pa	796	11334	14.2	2639	3.3	4792	6.0	197573	41.2	248.2
Uttar Dinajpur	187	3118	16.7	523	2.8	1875	10.0	75999	40.5	406.4
Total	9,694	121179	12.5	24732	2.6	68,491	7.1	2413941	35.2	249.0

Source: DISE 2012-13 *All classrooms in schools, irrespective of usage by various classes in the school

That the number of available secondary schools in various districts has little correlation with that of the population of respective districts is already stated in this report. Districts with inadequate school facilities, i.e. those which report higher average enrolment per school suffer, in general, from inadequate number of teachers too. The problem is graphically presented in Figure 4, which shows that the districts with higher average enrolment per school in secondary section have a higher PTR, which takes the problem beyond the lack of classroom or teachers to a fundamental deficiency — the very absence of adequate number of schools. Districts like Jalpaiguri, Murshidabad, Kochbehar, Nadia, Malda and Uttar Dinajpur appear to be the worst sufferers in this regard.

70.0 JLP 60.0 50.0 PTR, Secondary 40.0 30.0 20.0 10.0 0.0 0.0 100.0 200.0 300.0 400.0 500.0 Average enrolment per school, Secondary

Figure 4: District-wise Secondary PTR and Average Secondary Enrolment per School

Source: U-DISE 2012-13.

We have presented in Table 18 average PTR of various districts of West Bengal. Distribution of schools according to PTR is given in Table 19, which shows thatonly 52.5 percent of secondary schools in the state reported to have PTR within 35. Districts like Murshidabad, Maldah, Nadia, Uttar Dinajpur and

Table 19: District-wise distribution of secondary schools according to PTR

	PTR	<=35	PTR	36 To 70	PTR 71	and Above	Total
District	Number	Percentage	Number	Percentage	Number	Percentage	Schools
Bankura	281	63.1	144	32.4	20	4.5	445
Barddhaman	491	56.1	258	29.5	127	14.5	876
Birbhum	197	51.6	144	37.7	41	10.7	382
Dakshin Dinajpur	92	52.3	55	31.3	29	16.5	176
Darjiling	88	60.7	18	12.4	39	26.9	145
Haora	382	70.9	109	20.2	48	8.9	539
Hugli	391	62.0	156	24.7	84	13.3	631
Jalpaiguri	73	21.2	118	34.2	154	44.6	345
Koch Bihar	93	33.3	123	44.1	63	22.6	279
Kolkata	444	62.3	102	14.3	167	23.4	713
Maldah	149	43.7	149	43.7	43	12.6	341
Murshidabad	124	24.3	277	54.2	110	21.5	511
Nadia	156	34.4	196	43.2	102	22.5	454
North Twenty Four Pargana	517	52.5	347	35.2	121	12.3	985
Paschim Medinipur	529	67.6	227	29.0	26	3.3	782
Purba Medinipur	351	56.0	242	38.6	34	5.4	627
Puruliya	237	68.3	93	26.8	17	4.9	347
Siliguri	80	60.2	38	28.6	15	11.3	133
South Twenty Four Pargana	337	42.3	340	42.7	119	14.9	796
Uttar Dinajpur	73	39.0	80	42.8	34	18.2	187
Total	5,085	52.5	3,216	33.2	1,393	14.4	9,694

Source: U-DISE 2012-13

South 24 Pargana, which, as mentioned earlier, suffer from various inequalities related to educational provisions, are found to be at the receiving end of severe neglect in terms of provision of teacher in the secondary schools.

As it appears, one of the central problem of secondary education is clearly linked with the unevenness of distribution of resources, particularly teachers. Table 20 shows how some of the schools with higher enrolment suffer from severe scarcity of teachers, while some schools with lower enrolment enjoy the luxury of having greater number of teachers

Table 20: Distribution of Schools as per Enrolment in Secondary Section and Number of Teachers in them.

			N	Number (of Schoo	ls accord	ling to en	rolment	range.		
Number of	Upto 100	101- 150	151- 200	201- 250	251- 300	301- 350	351- 400	401- 450	451- 500	More than 500	Row Total
Teachers	100	150	200	250	300	350	400	450	500	600	Total
1	107	37	23	17	9	10	7	1	2	11	224
2	196	89	53	51	32	26	12	7	8	23	497
3	179	93	79	60	42	41	17	19	11	24	565
4	257	159	137	104	62	41	36	17	19	37	869
5	325	251	234	151	135	97	45	31	27	48	1,344
6	360	360	423	343	262	192	116	73	57	109	2,295
7	71	76	173	156	153	140	96	68	46	127	1,106
8	28	51	100	143	153	157	105	90	59	142	1,028
9	9	18	29	52	58	48	71	35	34	72	426
10	10	10	45	36	59	62	54	42	36	96	450
11	6	2	11	15	21	26	18	14	7	37	157
12	5	7	6	7	19	24	25	21	22	51	187
13	3	1	4	9	13	9	4	2	5	18	68
14	3	0	2	6	8	10	7	4	3	14	57
Fifteen & above	5	3	8	7	17	15	11	17	10	45	138
Total	1,564	1,157	1,327	1,157	1,043	898	624	441	346	854	9,411

Source: DISE 2012-13

*283 schools either reported to have no teacher or not reported at all are excluded from this exercise

Discriminations owing to the disparity in allocation of teachers are linked with two different dimensions, first, the locational divisions, namely rural and urban, and second the inter-district variations. We have already discussed above the inter-district differences (see Table 18 and related analysis), and present in Table 21 the rural-urban gaps pertaining to PTR.

Table 21: Average PTR in rural and urban secondary schools

	Secondary Enrolment	Secondary Teachers	PTR
Rural	1900572	49410	38.5
Urban	513369	19081	26.9
Total	2413941	68491	35.12

Source: U-DISE 2012-13

As evident from the data, rural secondary schools in the state not only suffer from numerical deficiency of teachers but also face other discriminations, namely the lack of female teachers in them (see table 22). Female teachers not only attract more number of girls in the schools but also they play a key role in facilitating them in handling their in-school problems, which are numerous and acute, in a prejudiced society like ours.

Now we turn to one of the major determinants of quality of education – academic strength of the teachers. This relates to their educational background as well as training – both pre-service and in-service. ⁴² As presented in Table 22, overall educational attainment and status of training of teachers of the urban secondary schools in the state is found to be better than what is found in their rural counterparts.

Table 22: Location-wise distribution of teachers according to gender, educational qualification and training

Rural-Urban	Female Teachers	Male Teachers	Graduate & Below	Post Graduate & Above	Untrained Teachers	Total Teachers
1	2	3	4	5	6	7
	14361	34850	21531	27680	13999	
Rural	(29.2)	(70.8)	(43.8)	(56.2)	(28.4)	49211
	9757	9208	7390	11575	4292	
Urban	(51.4)	(48.6)	(39)	(61)	(22.6)	18965
	24118	44058	28921	39255	18291	
Total	(35.4)	(64.6)	(42.2)	(57.6)	(26.8)	68,176

Source: U-DISE 2012-13, Figures in parenthesis are percentage to total teachers (column 7)

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⁴² Though the number of secondary teachers reported by the U-DISE 2012-13 was 68491, complete information on them was available for 68176 teachers. In order to maintain accuracy of analysis, we have considered here the number with complete information, and thus kept 315 (0.46%) teachers out of this analysis.

The pattern of disparity, obviously, goes down to the district level. As is evident from table 23 there are wide inter- district variations related to the availability of female teachers and trained teachers. That educational attainment alone does not make a teacher qualified to be good, and it requires adequate and specific professional training for teaching is a definitive fact. Contrasting sharply to this demand, more than one fourth (27 percent to be exact) of the secondary teachers in the state have not had any professional training. Proportion of untrained teachers in Siliguri, Malda, South 24 Parganaand some other districts is much higher than the state average.

Table 23: District-wise distribution of teachers according to gender, academic qualification and training

	Percentage Female Teachers	Percentage Male Teachers	Percentage Teachers Graduate & Below	Percentage Teachers- Post Graduate	Percentage Untrained Teachers	Total Teachers
Bankura	23.8	76.2	35.3	64.7	20.2	3,188
Barddhaman	36.2	63.8	39.6	60.4	28.0	5,783
Birbhum	24.8	75.2	37.4	62.6	19.2	2,484
Dakshin Dinajpur	23.5	76.5	59.4	40.6	16.8	1,437
Darjiling	44.4	55.6	56.5	43.5	24.3	1,028
Haora	46.9	53.1	43.0	57.0	25.3	4,472
Hugli	38.8	61.2	54.9	45.1	30.8	4,488
Jalpaiguri	36.5	63.5	51.7	48.3	15.2	1,901
Koch Bihar	27.7	72.3	46.9	53.1	29.0	1,851
Kolkata	63.2	36.8	35.5	64.5	22.0	4,320
Maldah	25.0	75.0	42.9	57.1	36.9	3,010
Murshidabad	21.9	78.1	41.6	58.4	33.3	3,636
Nadia	38.0	62.0	33.1	66.9	24.7	3,263
North Twenty Four Pargana	44.4	55.6	39.7	60.3	26.6	6,521
Paschim Medinipur	26.8	73.2	36.3	63.7	23.2	5,730
Purba Medinipur	28.5	71.5	45.5	54.5	24.6	4,348
Puruliya	26.3	73.7	48.8	51.2	29.1	3,025
Siliguri	43.8	56.2	40.2	59.8	39.5	1,032
South Twenty Four Pargana	40.1	59.9	45.7	54.3	35.6	4,784
Uttar Dinajpur	24.0	76.0	40.3	59.7	27.3	1,875
Total	35.4	64.6	42.4	57.6	26.8	68,176

Source: U-DISE 2012-13

The latest amendments in the West Bengal School Service Commission (Selection of Persons for Appointment to the Post of Teachers) Rules⁴³, 2007, allows the candidates to apply for teacher's post in secondary schools without any pre-service professional training till March 2014, yet they are supposed to accomplish necessary training within two years from the date of appointment. The same amendments have provision to give priority to trained teachers in terms of awarding credit during selection procedure.⁴⁴

The amendment recognises following training courses for the purpose of appointing secondary teachers

- 1. Diploma in Elementary Education
- 2. One year Bachelor in Education (B. Ed)
- 3. Bachelor of Elementary Education (B. El. Ed)
- 4. Four years B.A/B. Sc Ed or B.A Ed or B. Sc Ed
- 5. One year B. Ed (Special Education)

Detailed district-wise table providing information regarding level of educational qualification and type of professional qualification (according to the courses mentioned above) of the secondary teachers of the state is provided in Table A16 and Table A17 in the Appendix B.

As discussed earlier the RMSA recommends specialised teachers for seven subjects. The U-DISE captures the information regarding (a) subjects for which individual teacher had been appointed and (b) subject currently taught by the teacher. While the number of subjects, for which teachers had been appointed, was only 28, the reported number of subjects taught by teachers was 40, (See Table A14 & A15 of Appendix B). A huge number of teachers (53853 or 79 %) are reported to be appointed for 'all subjects'. And practically they teach all subjects irrespective of their specialisation. RMSA's recommendations in this regard appear to be incomplete. For example, in the context of secondary education, mentioning 'science' as a subject does not sufficiently describe the content: a teacher specialised in bio-sciences would find it difficult to teach physical sciences. Again, 'social science' contains a a group of subjects, but the segregation is not reflected in the recommendation.

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⁴³ Government of West Bengal Notification Number 1585-SE(S)/ES/S/1S-26/2010, December, 2011.

⁴⁴ Ibid, Note 6, Serial 4

Even if we take the given break up for convenience, and put them under the categories of, Language, Science, Social Science and others (according to Table A14 and A15 of Appendix-B), we find a huge disparity between the number of teachers according to the subjects they had applied for and the subjects actually taught by them (see Table 24). ...

Table 24: Distribution of teachers according to subject applied for and subject taught

	Number of teachers	Percentage	Number of teachers	
Subject	applied for subject		teaching subject	Percent
Language	3450	5.1	21,922	32.16
Other	57565	84.4	15,982	23.44
Science	4579	7	20,535	30.12
Social Science	2582	3.8	9,737	14.28
Total	68176		68,176	100

Source: U-DISE 2013-13

The shortages of specialised teachers for Science (including mathematics) and English deserves a mention here, for most of the students often find the contents of these subjects difficult to comprehend, and consequently a large number fails to obtain even the pass-marks in these subjects. A detailed district-wise distribution of the teachers according to major subjects they teach is provided in table A19 of appendix. The table shows that the neglect towards subjects like Art Education and Physical Education is pervasive.

9b. Information and Communication Technology Laboratory (ICT)

The Information and Communication Technology (ICT) Laboratory scheme was launched in December 2004, to provide the secondary students an opportunity to build their capacity with the help of ICT, which in recent years has flourished to a great extent. ICT on one hand expands the horizon of information available to the students and provides opportunities to the students on the other to experience materials and concepts which are otherwise impossible to explain with available tools in schools. For example, three dimensional scientific models of structure of chemical compounds, DNA structures, and electrical diagrams are not only helpful while teaching science subjects but also often become indispensible. ICT can help teachers as well as the students to teach and understand lessons of social studies too. Even the liveliest lectures may not be able to express how a rain forest or a desert looks like, while a simple video helps a

student feel like travelling through this places. A movie based on historical event can help the students remember the time place and characters involved. Though these cannot be taken as substitutes to the texts, they are undoubtedly helpful to the students.

It also makes the students familiar with Information and Communication Technology itself, and expands their scopes to join the industry which is not only one of the most vibrant industries providing greater job opportunities. Also, application of ICT in everyday life has increased manifold in recent years and students conversant with this can certainly harvest a lot for their future life. Moreover, ICT will certainly strengthen Management Information Systems (MIS) related to school education.

Connectivity is the most important change the nation has experienced in recent past and the school system cannot remain ignorant to this fact; there can hardly be any aspect of school which will not be benefited by introduction of ICT in schools, be it teacher's professional development, or students academic development. Assessment and evaluation of status of programs currently running in the school system will get extra assistance from this scheme.

Implementation of ICT scheme has two main constraints, infrastructural, including that of finance and geographical, which involves the requirement of coverage of wide areas. Data on availability of Information and Communication Technology Laboratory (ICT Lab) in the state suggests that there are only 8.5 percent secondary schools in the state which have such facility, implying that students of the 93 percent schools are deprived of the facility. Again, as the U-DISE 2012-13 suggests, while 10.75 percent of urban schools enjoy such facilities only 7.67 percent of rural schools are provided with the same. On the basis of their access to modern equipments, like computers, rural children are far more disadvantaged for unlike the urban children who can access modern equipments; rural ones are completely dependent on the schools for such facilities. The context adds urgency to expanding such facilities to rural schools on a priority basis. Over and above, the whole process is far too slower than was expected or planned; this is evident from the fact that according to U-DISE 2012-13 only 821 secondary schools have

ICT laboratory in them as against 3943 schools approved for the same by the year 2010-11. It means that only around 21 percent of plan has been materialised.⁴⁵

Despite having discrepancy in distribution of ICT lab on the basis of location of schools, the fairer side of the situation is that the districts otherwise remained at the bottom in almost all respects had ICT labs in larger percentage of secondary schools (table 25). Importantly, students from various social backgrounds could access such facilities (table 26), although only 10.3 percent of secondary students in the state have access to ICT Lab.

Table 25: District-wise distribution of schools with ICT facility

District	Total secondary schools	Secondary schools with ICT Lab	Percentage of secondary schools with ICT lab
Bankura	445	51	11.5
Barddhaman	876	57	6.5
Birbhum	382	42	11.0
Dakshin Dinajpur	176	10	5.7
Darjiling	145	8	5.5
Haora	538	41	7.6
Hugli	631	36	5.7
Jalpaiguri	345	46	13.3
Koch Bihar	279	25	9.0
Kolkata	713	61	8.6
Maldah	341	45	13.2
Murshidabad	511	69	13.5
Nadia	454	41	9.0
North Twenty Four Pargana	985	94	9.5
Paschim Medinipur	781	47	6.0
Purba Medinipur	627	50	8.0
Puruliya	349	33	9.5
Siliguri	133	10	7.5
South Twenty Four Pargana	796	32	4.0
Uttar Dinajpur	187	23	12.3
West Bengal	9,694	821	8.5

Source: DISE 2012-13

 $^{^{45}}MHRD:http://mhrd.gov.in/sites/upload_files/mhrd/files/Statewise\%20schools\%20approved\%20under\%20ICT\%20Scheme\%201.pdf$

Table 26: Category-wise distribution of students with access to ICT

Cotogory and Class		Enrolment	Enrolmen	t in schools with ICT
Category and Class	Absolute	Percentage to total	Absolute	Percentage to total
General Class 9	742915	30.8	77970	31.0
General Class 10	608833	25.2	65371	26.0
SC Class 9	370874	15.4	36664	14.6
SC Class 10	281361	11.7	28466	11.3
ST Class 9	73464	3.0	6583	2.6
ST Class 10	53482	2.2	5000	2.0
OBC Class 9	155424	6.4	17431	6.9
obc Class 10	128385	5.3	14064	5.6
Total	2414738	100	251549	100
Muslim Class 9 out of total	335105	13.9	33334	13.3
Muslim Class 10 out of total	255400	10.6	25980	10.3

Source: DISE 2012-13

ICT laboratories in the state are available mostly in the schools with higher secondary section, as 10.8 percent of schools with higher secondary as the highest section available have ICT laboratory. Figure for the schools with secondary section as the highest section available is only 4.2 percent (See Table A20 of Appendix B).

The CABE report, while defending its 'utopian' recommendations in respect to facilities to be provided in secondary schools, comments that the high end facilities (like ICT) are available in most of the Kendriya Vidyalayas. Such observation is substantiated by U-DISE. A huge 28.4 percent gap is found in the availability of ICT laboratory in schools under the management of central government (37.1%) and the Department of Education of the state government (8.7%). Such variations can also be seen in the figures of availability of Computer aided learning lab (CAL) and libraries too (See table A21 of Appendix B).

9c. Computer Aided Learning (CAL)

Another facility which has immense implication for vocational development of secondary students is the Computer Aided Learning (CAL) as computer literacy has become a pre-requisite for finding a job. In addition, use of computers gives the teacher extra advantage and makes the

lessons enjoyable to the students. Availability of computer aided learning in secondary school in the state remains another cause of concern (Table 27).

Table 27: District-wise Distribution of Schools with Computer Aided Learning Facility

	Information					Percentage Schools
	Not	CAL Not	CAL	Available but	Available and	With Functional
District	Available	Available	Available	not Functional	Functional	CAL#
						VII=VI * 100/Total
I	II	III	IV	V	VI=IV-V	School
Bankura	0	313	109	23	86	19.3
Barddhaman	0	748	128	0	128	14.6
Birbhum	0	220	97	65	32	8.4
Dakshin Dinajpur	0	109	66	1	65	36.9
Darjiling	2	70	70	3	67	46.2
Haora	0	353	158	27	131	24.3
Hugli	1	541	77	12	65	10.3
Jalpaiguri	0	232	97	16	81	23.5
Koch Bihar	0	183	74	22	52	18.6
Kolkata	0	403	292	18	274	38.4
Maldah	5	175	158	3	155	45.5
Murshidabad	0	373	117	21	96	18.8
Nadia	0	337	104	13	91	20.0
North Twenty Four Par	0	723	244	18	226	22.9
Paschim Medinipur	0	555	215	11	204	26.1
Purba Medinipur	0	459	153	15	138	22.0
Puruliya	1	265	63	20	43	12.3
Siliguri	0	48	72	13	59	44.4
South Twenty Four Pa	0	604	163	29	134	16.8
Uttar Dinajpur	0	44	136	7	129	69.0
Total	9	6,755	2,593	337	2256	23.3

Source: DISE 2012-13. # (Total schools=II+III+IV+V)

Table 28 shows how availability of such facilities varied widely for various districts of the state. While Hugli has the least proportion of schools (12.2%) having CAL laboratory, Uttar Dinajpur reported to have the highest proportion (72.7%) against the state average of 26.7 percent. While on an average 13 percent of the schools have non-functioning CAL, the figure is found to vary between two extremes of zero and sixty seven percentages for two neighbouring districts of

Barddhaman and Birbhum respectively. What makes these two districts so different in this matter remains and unresolved puzzle and demands a closer examination. As shown in

Table 28: District-wise Availability of Computers and Functionality in secondary schools

	Total	Total	Percentage	Number of Sec.	
	Available	Functional	Functional	Schools With At Least	
District	Computer	Computer	Computer	1 Functional Computer	Percentage
Bankura	2671	274	10.3	24	5.4
Barddhaman	5384	400	7.4	46	5.3
Birbhum	1965	293	14.9	22	5.8
Dakshin Dinajpur	1472	1049	71.3	123	69.9
Darjiling	1523	762	50.0	65	44.8
Haora	3888	610	15.7	73	13.6
Hugli	4086	1237	30.3	87	13.8
Jalpaiguri	2786	1120	40.2	120	34.8
Koch Bihar	1781	654	36.7	21	7.5
Kolkata	10638	3797	35.7	132	18.5
Maldah	3299	453	13.7	43	12.6
Murshidabad	3184	1228	38.6	95	18.6
Nadia	2447	586	23.9	49	10.8
North Twenty Four Pargana	5410	1991	36.8	190	19.3
Paschim Medinipur	3757	1575	41.9	97	12.4
Purba Medinipur	1399	1326	94.8	103	16.4
Puruliya	2172	590	27.2	49	14.0
Siliguri	2632	275	10.4	18	13.5
South Twenty Four Pargan	5153	1265	24.5	100	12.6
Uttar Dinajpur	1520	726	47.8	82	43.9
West Bengal	69167	20211	29.2	1,539	15.9

Source: DISE 2012-13

Table 28, maintenance of computers remains one of the major concerns in the present situation, as only a meagre 29.2 percent of the computers in secondary schools of the state are reported to be functional. Moreover, according to table only 15.9 percent of the secondary schools have at least one functional computer. This figure is not only disturbing for all concerned about the delivery of education but also raises serious questions about the accuracy of information provided. To illustrate, while only 15.9 percent schools reportedly to have at least one functional computer (table 28), the same set of information reports 23.3 percent secondary schools to have

functional CAL laboratory (table 27). Does that precisely mean that there could be functional laboratories without having functional equipments?

Much of the overall recurring expenditures in school system occur in the form of salary of teachers and non-teaching staff and the government schemes and initiatives provide funds mostly for non-recurring, one time expenditures. As a result maintenance of equipments gets little or no priority. Table 29 shows how a huge number of schools reported to have computer rooms without functional computers and in some worst cases no computer at all. Again, faulty distribution of such facilities results into some schools having functional computer but not having any computer room.

Table 29: District-wise Distribution of Computer Rooms and Computers

	Secondary Schools With			
	Computer	Computer Room but No	Computer Room but	Functional Computer but
District	Room	Functional Computer	no Computer at all	no Computer Room
Bankura	223	204	49	12
Barddhaman	299	274	62	46
Birbhum	191	174	29	29
Dakshin Dinajpur	113	9	9	29
Darjiling	76	36	4	95
Haora	312	246	42	38
Hugli	275	209	68	45
Jalpaiguri	198	102	24	78
Koch Bihar	146	130	23	19
Kolkata	437	320	35	135
Maldah	192	161	46	49
Murshidabad	287	212	70	65
Nadia	209	170	49	42
North Twenty Four Pargana Paschim	456	314	105	123
Medinipur	271	200	31	69
Purba Medinipur	247	170	28	85
Puruliya	152	114	24	42
Siliguri	70	54	0	5
South Twenty Four Pargana	358	281	51	118
Uttar Dinajpur	104	49	5	58
West Bengal	4,616	3,429	754	1,182

Source: DISE 2012-13

Availability of laboratories of various science subjects in the secondary schools of the state raises serious concern for science education in the state. The RMSA in its vision document not only mentioned these concerns, rather it specifically identified the lacunae in this regard:

...Schools in rural areas are poorly equipped with science labs or equipment for mathematical activities. Absence of adequate labs and equipments denies children equal opportunity for learning... secondary and higher secondary schools require well-equipped laboratory.⁴⁶

Table 30: Distribution of Laboratories of various Science subjects according to their location in secondary schools

	Rı	ıral		Urban		All	
Status	Number	Percent	Number	Percent	Number	Percentage	
	•	Physics					
N/A	16	0.2	124	4.8	140	1.4	
Fully equipped	223	3.1	269	10.4	492	5.1	
Not Applicable	4,736	66.7	1,459	56.3	6,195	63.9	
Not Available	398	5.6	60	2.3	458	4.7	
Not equipped	224	3.2	41	1.6	265	2.7	
Partially equipped	1,507	21.2	637	24.6	2,144	22.1	
Total	7,104	100.0	2,590	100.0	9,694	100.0	
Chemistry							
N/A	16	0.2	124	4.8	140	1.4	
Fully equipped	228	3.2	266	10.3	494	5.1	
Not Applicable	4,759	67.0	1,463	56.5	6,222	64.2	
Not Available	399	5.6	60	2.3	459	4.7	
Not equipped	221	3.1	42	1.6	263	2.7	
Partially equipped	1,481	20.8	635	24.5	2,116	21.8	
Total	7,104	100.0	2,590	100.0	9,694	100.0	
	•	Biology	,				
N/A	16	0.2	124	4.8	140	1.4	
Fully equipped	249	3.5	269	10.4	518	5.3	
Not Applicable	4,625	65.1	1,442	55.7	6,067	62.6	
Not Available	388	5.5	64	2.5	452	4.7	
Not equipped	230	3.2	43	1.7	273	2.8	
Partially equipped	1,596	22.5	648	25.0	2,244	23.1	
Total	7,104	100.0	2,590	100.0	9,694	100.0	

Source: DISE 2012-13, *N/A= Information not available

⁴⁶ Chapter 4, Vision Multi-layer Strategic Guidelines for Quality Improvement at Secondary Stage, NCERT, 2009

Overall, there are only around 25 percent schools which reported to have laboratories of various science subjects. A scrutiny of table 31, which provides district-wise distribution of the the number of secondary schools with laboratories of various science subjects, we find a find a divide between the schools either having no laboratory facility at all or having laboratories of all science subjects; this implies that while some schools are equipped reasonably well for science teachings, majority of them are not counted to be worth having such crucial facilities. A further probe into the matter reveals, that the schools which reported to have laboratories, actually are schools with higher secondary section (Table 32), Table 31: District-wise distribution of fully or partially equipped laboratories of various science subjects in secondary schools

	Availa	bility of Fully Laborat		equipped	Percentage Schools with
District	Physics	Chemistry	Biology	All Three	All Tree
Bankura	123	123	145	112	25.2
Barddhaman	194	193	207	180	20.5
Birbhum	67	66	74	62	16.2
Dakshin Dinajpur	54	54	54	54	30.7
Darjiling	35	38	31	30	20.7
Haora	169	167	172	159	29.6
Hugli	180	183	188	169	26.8
Jalpaiguri	81	83	91	75	21.7
Koch Bihar	48	47	45	44	15.8
Kolkata	232	232	232	226	31.7
Maldah	70	67	74	64	18.8
Murshidabad	121	119	126	112	21.9
Nadia	129	124	142	117	25.8
North Twenty Four Pargana	231	228	251	218	22.1
Paschim Medinipur	277	265	281	251	32.1
Purba Medinipur	260	255	266	242	38.6
Puruliya	91	93	95	87	24.9
Siliguri	23	23	23	23	17.3
South Twenty Four Pargan	200	199	211	183	23.0
Uttar Dinajpur	51	51	54	49	26.2
West Bengal	2,636	2,610	2,762	2,457	25.3

Source: DISE 2012-13

which offer science subjects. Mention may here be made that schools with upper primary with secondary sections count 34 percent of all secondary schools and only a meagre 5.2 percent of these schools have all three types of laboratories.

Table 32: Distribution of schools with science laboratories according to category

School Category	Total School	Schools with laboratory for all three science subjects	Percent schools with laboratory for all three science subjects
Pry With U Pry And Sec	190	22	11.6
Pry With U Pry And Sec And Hs	555	125	22.5
Secondary Only	2	0	0.0
Secondary With Hr. Secondary	1	0	0.0
U Pry With Sec And Hs	5,664	2140	37.8
Upper Primary with Secondary	3,282	170	5.2
Total	9,694	2457	25.3

Source: DISE 2012-13

9d. Other amenities

Both CABE and RMSA recommended the secondary schools to have resources for co-curricular activities for the students. Table 33 offer a glimpse of the availability of various infrastructural facilities related to the same. As mentioned in the CABE report, figures for such facilities are expectedly very poor and a long way has to go to make the schools properly equipped.

Various tables related to other facilities are also provided in Appendix B, which show that much is yet to be done to make the schools comply with even some of the most pragmatic recommendations. Basic amenities like water, electricity, toilets, playground, Head Teachers' room, availability of hostel etc. demand much more attention from the authorities (See Table 34).

Table 33: District-wise distribution of facilities related to Co-curricular activities, and facilities for staffs in secondary schools

					Number (Of Schools	With Fac	ilities			
District	Total Schools	Auditorium	Common Room For Girls	Room For Indoor Games	Integrated Science Laboratory	Room For Co- Curricular Activity	Room For NCC & NSS	Medical Room	Library Room	Staff Room For Teachers	Staff Quarter
Bankura	445	21	65	15	102	17	25	14	194	390	19
Barddhaman	876	30	76	13	122	19	30	16	271	612	12
Birbhum	382	13	87	22	50	32	25	18	138	339	8
Dakshin Dinajpur	176	15	76	4	33	12	15	8	79	149	2
Darjiling	145	35	15	22	30	16	17	18	55	105	15
Haora	539	44	76	27	116	43	34	26	268	448	13
Hugli	631	51	86	28	106	35	34	27	305	524	18
Jalpaiguri	345	33	129	20	66	31	29	52	148	282	27
Koch Bihar	279	22	117	9	41	21	19	19	140	244	11
Kolkata	713	138	55	98	190	114	73	126	376	549	42
Maldah	341	2	145	9	54	10	14	12	130	295	2
Murshidabad	511	18	125	14	102	26	21	36	263	451	17
Nadia	454	29	64	7	74	18	28	25	193	371	7
North Twenty Four Par	985	84	134	66	173	81	59	79	492	786	20
Paschim Medinipur	782	38	161	27	164	33	43	45	322	676	28
Purba Medinipur	627	55	163	22	156	30	46	60	278	518	30
Puruliya	347	19	37	18	60	16	17	20	117	266	22
Siliguri	133	10	19	11	16	6	7	15	38	69	0
South Twenty Four Pa	796	37	159	30	153	51	31	49	347	682	22
Uttar Dinajpur	187	6	78	4	31	9	7	8	85	152	3
Total	9,694	700	1,867	466	1,839	620	574	673	4,239	7,908	318

Source: DISE 2012-13

There are 60 secondary schools in the state which are yet to be provided with water facility; majority of them (38 or 63%) are from Darjiling. It is understandable how difficult it is for the 5999 students of these schools to spend 6 to 7 hours every day at a place which does not have drinking water to offer. Most depressing of the facts is that 45 out of these schools are under the Department of Education.

Table 34: District-wise availability of essential facilities in Secondary Schools

District	Electricity	Boundary Wall	Playground	H. Teachers Room
Bankura	404	326	348	55
Barddhaman	826	746	533	88
Birbhum	358	310	237	40
Dakshin Dinajpur	162	136	123	54
Darjiling	117	65	109	45
Haora	517	407	248	90
Hugli	623	502	341	102
Jalpaiguri	318	264	263	94
Koch Bihar	242	194	251	66
Kolkata	711	637	268	196
Maldah	306	220	166	51
Murshidabad	469	342	293	61
Nadia	424	351	299	53
North Twenty Four Pargana	928	730	555	202
Paschim Medinipur	694	522	603	102
Purba Medinipur	544	423	443	70
Puruliya	285	307	235	36
Siliguri	130	120	108	25
South Twenty Four Pargana	603	505	509	100
Uttar Dinajpur	168	144	129	44
Total	8,829	7,251	6,061	1,574

Source: U-DISE 2012-13

While availability is one part of the problem, the other part relates to even more important an aspect of maintenance of the available facilities; while 7 percent of secondary schools do not have electricity at all, 2 percent of the schools reported to have this facility, but only customary – without operational. Similarly though 7251 schools reported to have boundary walls, 1223 (16.9%) of these were reported to be dilapidated. Number of schools with pucca but dilapidated boundary walls form nearly one fourth (23.3 % to be exact) of the total schools with pucca boundary walls.

A common problem found in all categories of schools is the poor construction and maintenance of the toilets. Lack of planning while constructing the toilets in schools is evident. Hand pumps being the only source of water in almost half of the schools (see table A10 of Appendix B) and toilets are situated away from the source of water, maintenance of the toilets becomes all the more difficult. Greater percentage of rural schools having hand pumps as the source of water

results in more number of non-functioning toilets in rural schools than in their urban counterparts. Variations are also found between schools under different management categories (Table 36).

Table 35: Availability and functionality of toilets

Rural/Urb	Boys	Boys functional	Percentage		Girls	Girls functional	Percentage	
an	toilet	toilet	functional		toilet	toilet	functional	
Rural	74366	58734	7	79.0	77718	61634	79	9.3
Urban	15298	12941	8	34.6	19326	16342	84	4.6
Total	89664	71675	7	79.9	97044	77976	80	0.4

Source: U-DISE 2012-13

Table 36: Availability and functionality of toilets according to management of schools

School Management	Number of schools	Boys toilet	Boys functional toilet	Percentage functional	Girls toilet	Girls functional toilet	Percentage functional
Central Govt.	62	414	356	86.0	412	366	88.8
Department of Education	8,457	62548	51888	83.0	70868	58542	82.6
Madrasha Siksha Kendra	9	406	307	75.6	465	360	77.4
Madrassa Education	455	898	802	89.3	1099	992	90.3
Municipal body	16	625	473	75.7	681	400	58.7
Others	2	10	3	30.0	4	1	25.0
Private (Unrecognised) Madrasa	27	752	531	70.6	707	460	65.1
Private Aided	75	638	566	88.7	866	799	92.3
Private Unaided	483	8595	7016	81.6	10073	8064	80.1
Tribal/Social Welfare Department	23	156	138	88.5	206	164	79.6
Un-recognised	85	1705	853	50.0	1784	1029	57.7
Total	9,694	76747	62933	82.0	87165	71177	81.7

Source: U-DISE 2012-13

The issue related to availability of separate toilets for boys and girls in co-educational secondary schools deserves immediate attention, as 9.3 percent of such schools do not have separate toilet for boys, 2.6 percent of such schools do not have separate toilet for girls. There are 73 secondary schools in the state, reported to have no toilet at all. A special mention of two districts must be made here: 5.4 percent and 7.6 percent of secondary schools in Purulia and Darjiling

respectively reported not to have any toilet at all. Detailed tables are provided in Appendix B according to type (Girls/Boys/Co-ed) of schools.

9e. Distribution of Grants under RMSA

The RMSA provided grants to schools under the management of Department of Education, Central Government and Madrassa Education. They are disbursed under three heads of which major portion of grants is provided under the head of civil works.

Table 37: District-wise allotment of various grants (in Rs) under RMSA

	Total eligible secondary schools	Civil grants received	Annual recurring school grant received	Grant for repair and replacement	Grant for books and periodicals	Grants for water, telephone, electricity etc.	Other grants	Total grants received	Percentage to total grants
Bankura	434	202620	2448	3321	4522	21604	28149	113996304	11.25
Barddhaman	793	139050	2801	1607	4801	106976	9395	209851400	20.71
Birbhum	374	19990	1834	778	1929	1795	7104	12502930	1.23
Dakshin Dinajpur	163	328010	9852	4180	2852	61	8386	57594393	5.68
Darjiling	123	33714	1985	1422	4740	26293	2452	8684321	0.86
Haora	503	18784	1096	167	862	2028	3608	13352104	1.32
Hugli	602	104568	6691	1393	8786	772	9175	79094317	7.81
Jalpaiguri	305	69783	13036	2537	6866	8258	17378	35946480	3.55
Koch Bihar	272	75118	522	378	1766	88	11595	24334980	2.40
Kolkata	516	8998	2527	439	1237	766	3685	9108184	0.90
Maldah	327	43005	31429	381	1793	176	7909	27694886	2.73
Murshidabad	488	29102	309	198	266	395	1323	15417285	1.52
Nadia	439	31753	4656	1553	2742	2076	5237	21079036	2.08
North Twenty Four Pargana	936	28242	4556	553	1383	171	59127	88013584	8.69
Paschim Medinipur	743	15655	503	189	1104	85	2394	14807460	1.46
Purba Medinipur	612	24673	3359	228	1750	1170	4400	21774465	2.15
Puruliya	324	23580	2964	1256	4223	686	4700	12120104	1.20
Siliguri	80	168973	1098	675	8440	213	18183	15806472	1.56
South Twenty Four Pargan	754	162086	3663	4320	14204	3082	18602	155290858	15.32
Uttar Dinajpur	185	244027	106686	4519	15619	8405	36357	76888439	7.59
Total	8,973	74215	6523	1353	4148	12121	14573	1013358002	100.00

Source: U-DISE 2012-13

According to U-DISE 2012-13, sixty six percent of the total grant was disbursed under the same. Recurring annual school grants include, minor repairing and replacement of building and laboratory equipments, purchase of laboratory equipments and books/periodicals, and expenditure against water, telephone and electricity charges. Grants disbursed under this head amount to 21.4 percent of the total grants. The third head of grants is unspecified.

Distribution of these grants does not appear to be in line with the existing situation explained in table 18. Moreover, a wide variation is found in the distribution pattern: while grants per school for water, electricity etc. was a meagre Rs 61 in Dakshin Dinajpur; it was an astronomical Rs. 106976 in Bardhaman.

9f. State Budgets

In recent time, budget allocation on education under both revenue and capital account has increased in the state. The expenditure under the capital account as a share of total capital expenditure of the state has increased in a faster pace than the national average (see table 38).

Table 38: Percentage share of capital expenditure on education to total capital expenditure

	2007-08	2008-09	2009-10 (Revised	2010-11 (Budget
	(Actual)	(Actual)	Estimate)	Estimate)
West Bengal	0.21	1.41	2.51	3.12
All states				
average	1.38	1.57	2.19	2.26

Source: Statement 31, Analysis of Budget Expenditure on Education, MHRD

Similar increase has also been seen in the expenditure under revenue account, presented in table 39.

Table 39: Percentage share of revenue expenditure on education to total revenue expenditure

	2007-08 (Actual)	2008-09 (Actual)	2009-10 (Revised Est)	2010-11 (Budget Est)
West Bengal	17.98	15.04	19.71	21.27
India	19.38	20.07	20.96	21.31

Source: Statement 31, Analysis of Budget Expenditure on Education, MHRD

As a result West Bengal stands at eighth place in terms of average annual budget expenditure on education as percentage to the total expenditure of the state in the preceding decade (Table A23 of Appendix B). While its rank in terms of annual budget expenditure on education fluctuated from 9th to 18th position during the preceding decade, it has advanced its position to 6th during the financial year 2009-10 to further improve to 4th in 2010-11.

West Bengal has not only provided a greater portion of its budgetary resources to education, but also has seemingly given in its recent budgets emphasis on secondary education (Table 40). While its percentage allocation in secondary education to that of total budget expenditure on education is fourth highest in the country, the same has increased from 45.5 percent in 2007-08 to 49.2 in 2010-11.

Table 40: Percentage expenditure on Secondary Education to total expenditure on education

States	2007-08 (Actual)	2008-09 (Actual)	2009-10 (Revised Estimate)	2010-11 (Budget Estimate)
Andhra Pradesh	31.15	33.69	32.46	29.1
Arunachal Pradesh	23.25	35.41	25.72	25.08
Assam	28.45	27.48	25.29	25.29
Bihar	16.97	22.57	18.13	23.73
Chhattisgarh	18.33	19.28	23.34	23.73
Goa	53.72	55.29	53.96	52.76
Gujarat	31.3	29.22	26.39	20.9
Haryana	32.74	35.12	32.42	34.25
Himachal Pradesh	30.81	32.7	29.83	29.8
Jammu & Kashmir	45.08	41.07	38.76	37.07
Jharkhand	12.59	17.7	14.49	13.48
Karnataka	30.52	30.98	33.03	30.83
Kerala	39.4	39.44	42.9	40.28
Madhya Pradesh	20.81	21.73	26.41	25.01
Maharashtra	40.39	39.18	41.75	42.99
Manipur	27.43	29.21	33.96	34.79
Meghalaya	25.87	29.59	30.18	30.18
Mizoram	25.28	25.55	25.71	24.51
Nagaland	26.29	82.16	29.36	38.17
Orissa	23.54	27.44	26.35	26.57
Punjab	66.64	62.99	63.66	63.37
Rajasthan	32.73	34.62	34.33	34.81
Sikkim	44	45.96	37.5	39.34
Tamil Nadu	40.27	40.65	42.45	42.16
Tripura	48.08	47.01	54.26	53.96
Uttarakhand	41.55	47.97	46.9	41.91
Uttar Pradesh	25.1	31.18	33.41	34.85
West Bengal	45.49	47.63	49.1	49.18
Total States	33.11	34.76	35.49	35.34

Source: Statement 9, Analysis of Budget Expenditure on Education, MHRD

Nevertheless, what remained a concern regarding secondary education in the state is its high non-plan expenditure, which was third highest in the country during the years 07-08 and 08-09, further deteriorated in the following years. While there is a clear indication (table 41) that most of the states tried to reduce non-plan expenditure including West Bengal, the state could not manage to make a better balance between plan and non-plan expenditure.

Table 41: Percent of non-plan expenditure to total revenue expenditure

	2007-08	2008-09	2009-10 (Revised	2010-11 (Budget	
State	(Actual)	(Actual)	Estimate)	Estimate)	
Andhra Pradesh	97.1	94.2	97.6		96.6
Arunachal Pradesh	38.6	28.5	68.7		87.1
Assam	96.4	98.0	93.7		93.7
Bihar	99.9	99.6	98.3		70.0
Chhattisgarh	38.8	31.5	26.2		25.0
Goa	88.2	87.9	88.6		91.9
Gujarat	97.3	94.2	92.7		92.4
Haryana	83.2	88.4	82.4		82.0
Himachal Pradesh	94.9	96.5	96.5		95.6
Jammu & Kashmir	100.0	100.0	95.0		91.3
Jharkhand	84.5	95.5	79.0		78.7
Karnataka	84.7	84.2	81.2		81.7
Kerala	97.7	95.6	94.0		95.5
Madhya Pradesh	90.7	82.7	76.3		81.2
Maharashtra	96.7	97.0	97.3		96.3
Manipur	91.4	94.0	89.2		91.9
Meghalaya	78.3	64.1	75.0		75.0
Mizoram	56.5	57.0	56.4		62.5
Nagaland	89.3	95.7	85.9		96.8
Orissa	83.1	90.2	88.7		87.6
Punjab	97.6	97.7	97.1		97.5
Rajasthan	98.4	97.6	96.7		96.3
Sikkim	62.7	60.6	74.0		75.0
Tamil Nadu	92.6	95.7	95.1		94.3
Tripura	95.0	93.8	92.2		85.1
Uttarakhand	76.3	73.6	89.4		85.6
Uttar Pradesh	97.1	96.2	89.8		91.3
West Bengal	99.5	98.7	97.7		97.4
Total States	93.8	93.3	91.9		90.9

Source: Statement 9, Analysis of Budget Expenditure on Education, MHRD

A deeper inspection of the data reveals that the non-plan expenditure itself does not show much consistency. While percentage expenditure on direction, inspection, administration and even teachers training has declined in consecutive budgets, the unspecified expenditure on the other hand increased. Moreover the huge non-plan expenditure on government and non-government secondary schools depict that much of the state budget is spent on only providing salary to the teachers.

Table 42: Non-plan revenue expenditures under various subheads in percentage of total revenue expenditure

	2007-08	2008-09	2009-10	2010-11
Subheads of revenue expenditure	(Actual)	(Actual)	(Revised Est)	(Budget Est)
Direction, Inspection and Administration	1.5	1.85	1.1	1.14
Government secondary schools	1.27	1.17	0.95	0.95
Assistance to non-Government secondary schools	96.13	95.25	95.65	95.29
Teachers Training	0.13	0.13	0.1	0.1
Other Expenditure	0.96	1.59	2.2	2.52

Source: Statement 9, Analysis of Budget Expenditure on Education, MHRD

10 Conclusion

The recognition of the demand for and recognition of the importance of expansion of opportunities of education for all have had some positive results, particularly at the elementary level. This success, however limited, and the rapidly changing socio-economic fabric of the nation have added urgency to the task of enhancing the opportunity of secondary education for all. It is not just the question of access to secondary schooling facilities, which is certainly a central issue, but also the quality aspect of education has been coming up as an equally important demand, manifested not only in societal discourses but also in public policy documents. The insistence has resulted in the Rastriya Madhyamik Siksha Abhiyan (RMSA)'s seeking to achieve an enrolment rate of 75 percent within five years (by 2014), universal access by 2017 and universal retention by 2020. In order to achieve universalisation of access, the working group on secondary education has estimated that 19946 additional secondary schools will be required to ensure 100 percent GER by 2017. On the other hand, the CABE report on Secondary

Education emphasises on the question of addressing manifold inequalities involved in the very process of education.

In West Bengal, access to secondary schools in general is better than the national average and overall participation in secondary education has increased manifold in recent years – the crude rate of increase in secondary enrolment between 1967 and 2011-12 is reported to be 103 percent. Also, 80 percent of the total 2413941 students, enrolled at secondary level, pursue free education.

Having recognised the achievements, the present exercise found some major gaps in the delivery of secondary education in the state. While some of the problems require much higher budgetary allocation and other long term interventions, remedies of many of them are linked with managerial reform which should not be a difficult task. For example, it is the social underdogs, Adivasis, Muslims and Dalits, who still suffer from the access problem; in fact, unavailability of secondary schools in accessible distance forces the students to drop out of school. The accessibility issue is, again, connected with another problem, namely, locational disadvantage: areas inhabited by the socially marginalised communities are often found to be geographically remote, rural and poorly connected with the mainland. Again, even the existing schools in these areas suffer from severe shortages, of classrooms, teachers, and other infrastructural provisions. While average Student Classroom Ratio (SCR) of schools with secondary section is 70 (154 schools reported no enrolment) the range varies between 37 in Kolkata to 106 in Kochbihar. This is just one example and the report finds enormous gaps intra-district variations, between rural and urban, advanced and backward areas. Again, schools with shortages of classrooms are also found to be suffering from shortages of teachers.

One major problem that students face in achieving quality education is clearly linked with the necessity of private tuition: while four fifth of the total children are enrolled in free-schools, huge expenditure on private tuition defeats the very idea of "free-education" by resulting in increase of the per capita cost of education manifold. And, this does not only lead to divide the students on the basis of economic affordability but also affect the quality of education to a great extent. The problem is so deep rooted now that there is no quick solution to eradicate this, and a much greater reform of the system is essential.

Though the state budget has increased during the last decade, it was not sufficient to provide adequate resources in secondary schools of the state. That higher budgetary allocation is needed is evident from the fact that only a minimal proportion of schools are facilitated with some of the basic requirements, such as ICT laboratory, computers, well equipped laboratories and libraries and most importantly subject teachers. For example, the average PTR in secondary section is 35.2, marginally above the RMSA recommendation, but, the inter-district variation is very high. While share of female teachers in secondary level is 35.4 percent in the state, their deployment remains highly skewed. Rural secondary schools have on average 29.2 percent female teachers against 51.4 percent in urban secondary schools.

The problems identified here are not insurmountable, and West Bengal has a good record of educational advancement, particularly in the field of elementary education. The reforms and interventions required at secondary level appear to be quite within the reach of the education authorities. Reform has a self-driving role; once initiated, the changes in secondary school system, particularly rationalisation of resource distribution and utilisation, can make this reach even more possible.

Appendix A

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Appendix B

Table A1: Secondary schools under various management and type

School Management	Boys	Co-ed	Girls	Total
Central Govt.	2	55	5	62
Department of Education	1,072	5,741	1,644	8,457
Madrasha Siksha Kendra	0	7	2	9
Madrassa Education	6	432	17	455
Municipal body	1	14	1	16
Others	1	1	0	2
Private (Unrecognised)	7	17	3	27
Private Aided	18	37	20	75
Private Unaided	27	417	39	483
Tribal/Social Welfare	1	17	5	23
Un-recognised	7	72	6	85
Total	1,142	6,810	1,742	9,694

Table A2: Secondary Schools and medium of instruction

District	Bengali	English	Hindi	Nepali	None	Odia	Others	Telegu	Urdu	Total
Bankura	439	6	0	0	0	0	0	0	0	445
Barddhaman	760	40	61	0	0	0	0	0	15	876
Birbhum	375	6	1	0	0	0	0	0	0	382
Dakshin Dinajpur	175	1	0	0	0	0	0	0	0	176
Darjiling	1	116	0	27	1	0	0	0	0	145
Haora	474	18	33	0	1	0	2	1	9	538
Hugli	598	7	16	0	0	0	5	1	4	631
Jalpaiguri	267	36	37	5	0	0	0	0	0	345
Koch Bihar	264	5	2	0	7	0	1	0	0	279
Kolkata	447	146	78	0	0	2	1	0	39	713
Maldah	336	0	1	0	4	0	0	0	0	341
Murshidabad	502	9	0	0	0	0	0	0	0	511
Nadia	448	5	1	0	0	0	0	0	0	454
North Twenty Four Pargana	907	14	43	2	1	1	4	1	12	985
Paschim Medinipur	750	17	7	0	0	1	0	3	3	781
Purba Medinipur	625	1	0	0	0	0	1	0	0	627
Puruliya	330	8	6	0	2	0	0	0	3	349
Siliguri	54	49	21	8	0	0	0	0	1	133

South Twenty										
Four Pargana	782	9	2	0	0	0	1	0	2	796
Uttar Dinajpur	177	2	1	0	0	0	0	0	7	187
										9,69
Total	8,711	495	310	42	16	4	15	6	95	4

Table A3: District-wise average enrolment per school in various levels

District	Primary	U. Primary	Secondary	Higher Secondary
Bankura	72.5	296.4	220.2	232.3
Barddhaman	106.5	405.7	219.0	245.6
Birbhum	96.8	335.7	235.0	280.6
Dakshin Dinajpur	84.1	410.5	303.1	279.0
Darjiling	44.5	190.7	137.9	188.9
Haora	106.5	380.6	209.0	152.4
Hugli	92.2	390.5	218.2	256.6
Jalpaiguri	98.7	363.6	355.3	302.9
Koch Bihar	97.1	356.4	334.6	307.0
Kolkata	113.4	287.3	158.2	256.5
Maldah	151.5	499.3	343.1	289.5
Murshidabad	139.8	440.2	377.1	327.2
Nadia	101.4	480.8	344.5	328.0
North Twenty Four Pargana	110.5	428.0	243.6	227.8
Paschim Medinipur	69.2	313.0	212.9	216.4
Purba Medinipur	77.6	342.1	233.0	210.3
Puruliya	86.4	267.1	235.7	132.3
Siliguri	121.6	428.6	264.5	241.3
South Twenty Four Pargan	128.1	449.6	248.2	251.4
Uttar Dinajpur	150.0	473.9	406.4	254.1
Total	102.3	382.0	253.0	242.6

Table A4: District-wise Residential secondary schools

District	No	Yes	Total
Bankura	442	3	445
Barddhaman	875	1	876
Birbhum	370	12	382
Dakshin Dinajpur	176	0	176
Darjiling	135	10	145

Haora	534	4	538
Hugli	631	0	631
Jalpaiguri	343	2	345
Koch Bihar	279	0	279
Kolkata	712	1	713
Maldah	340	1	341
Murshidabad	503	8	511
Nadia	420	34	454
North Twenty Four Pargana	983	2	985
Paschim Medinipur	765	16	781
Purba Medinipur	619	8	627
Puruliya	326	23	349
Siliguri	132	1	133
South Twenty Four Pargana	786	10	796
Uttar Dinajpur	180	7	187
Total	9,551	143	9,694

Table A5: District-wise distribution of schools according to number of Academic Inspection

District	0	1	2	3	4	5	More Than 5	Total
Bankura	210	102	85	18	11	5	14	445
Barddhaman	419	220	164	29	19	13	12	876
Birbhum	124	102	103	27	15	3	8	382
Dakshin Dinajpur	84	42	31	11	6	1	1	176
Darjiling	74	40	21	6	1	1	2	145
Haora	327	143	55	6	4	1	2	538
Hugli	376	165	69	9	5	3	4	631
Jalpaiguri	212	54	46	16	9	4	4	345
Koch Bihar	129	59	57	22	5	1	6	279
Kolkata	535	124	39	4	2	3	6	713
Maldah	185	75	59	10	4	3	5	341
Murshidabad	234	136	0	0	0	0	141	511
Nadia	306	87	44	5	6	1	5	454
North Twenty Four Pargana	649	196	97	23	9	1	10	985
Paschim Medinipur	385	222	126	21	14	6	7	781
Purba Medinipur	293	155	121	32	6	6	14	627
Puruliya	184	81	53	16	6	3	6	349
Siliguri	97	22	8	1	1	0	4	133
South Twenty Four Pargana	464	177	109	24	5	2	15	796
Uttar Dinajpur	101	32	27	10	8	4	5	187

		1						
Total	5,388	2,234	1,314	290	136	61	271	9,694

Table A6: District-wise status of computer laboratory in secondary schools

		Fully	Not	Not	Not	Partially	
District	N/A	Equipped	Applicable	Available	Equipped	Equipped	Total
Bankura	0	48	273	17	6	101	445
Barddhaman	11	48	638	29	13	137	876
Birbhum	0	18	291	16	4	53	382
Dakshin Dinajpur	0	19	121	1	0	35	176
Darjiling	0	11	92	9	5	28	145
Haora	10	49	315	11	7	146	538
Hugli	0	36	417	32	13	133	631
Jalpaiguri	0	15	19	78	114	119	345
Koch Bihar	0	19	206	4	6	44	279
Kolkata	108	114	313	12	9	157	713
Maldah	4	27	229	8	7	66	341
Murshidabad	0	35	334	15	13	114	511
Nadia	0	19	298	20	12	105	454
North Twenty Four Pargana	0	69	739	17	8	152	985
Paschim Medinipur	5	47	476	58	11	184	781
Purba Medinipur	0	48	319	81	7	172	627
Puruliya	2	33	230	12	4	68	349
Siliguri	0	14	84	6	1	28	133
South Twenty Four Pargana	0	52	528	30	14	172	796
Uttar Dinajpur	0	13	100	18	3	53	187
Total	140	734	6,022	474	257	2,067	9,694

N/A=Information Not Available

Table A7: District-wise status of availability of Head Teachers Room

			Not		
District	N/A	No	Applicable	Available	Total
Bankura	0	305	85	55	445
Barddhaman	11	522	255	88	876
Birbhum	0	243	99	40	382
Dakshin Dinajpur	0	107	15	54	176
Darjiling	0	81	19	45	145
Haora	10	265	173	90	538

Hugli	0	386	143	102	631
Jalpaiguri	0	247	4	94	345
Koch Bihar	0	156	57	66	279
Kolkata	107	263	147	196	713
Maldah	3	228	59	51	341
Murshidabad	0	401	49	61	511
Nadia	0	327	74	53	454
North Twenty Four Pargana	0	578	205	202	985
Paschim Medinipur	5	544	130	102	781
Purba Medinipur	0	553	4	70	627
Puruliya	2	262	49	36	349
Siliguri	0	34	74	25	133
South Twenty Four Pargana	0	561	135	100	796
Uttar Dinajpur	0	121	22	44	187
Total	138	6,184	1,798	1,574	9,694

N/A=Information Not Available

Table A8: Availability of toilets in boys secondary schools

District	No Toilet	1	2	3	4	5	More than 5	Total
Bankura	2	5	6	3	2	1	3	22
Barddhaman	7	38	37	18	11	5	24	140
Birbhum	1	7	2	3	4	1	2	20
Dakshin Dinajpur	0	0	3	1	3	0	2	9
Darjiling	1	2	3	0	0	1	5	12
Haora	0	17	23	13	5	2	8	68
Hugli	4	37	35	21	12	6	16	131
Jalpaiguri	2	5	4	6	3	2	5	27
Koch Bihar	1	2	0	1	0	1	3	8
Kolkata	3	33	46	38	40	14	68	242
Maldah	0	1	4	4	2	0	3	14
Murshidabad	2	8	5	5	5	5	3	33
Nadia	1	19	19	11	10	1	9	70
North Twenty Four Pargana	0	18	42	24	22	11	48	165
Paschim Medinipur	1	2	13	4	3	1	5	29
Purba Medinipur	0	11	12	10	5	5	13	56
Puruliya	2	5	3	0	4	0	2	16
Siliguri	0	0	1	2	0	0	1	4
South Twenty Four Pargana	1	16	18	8	8	8	12	71
Uttar Dinajpur	0	1	3	0	1	0	0	5
Total	28	227	279	172	140	64	232	1,142

Table A9: Availability of boy's toilet in Co-education secondary schools

District	No toilet	1	2	3	4	5	More Than 5	Total
Bankura	42	226	58	13	20	2	9	370
Barddhaman	87	256	141	46	29	16	26	601
Birbhum	2	243	64	6	5	1	5	326
Dakshin Dinajpur	1	39	46	27	15	8	14	150
Darjiling	30	35	15	11	11	2	10	114
Haora	14	139	92	30	13	8	20	316
Hugli	51	180	63	18	16	8	16	352
Jalpaiguri	31	83	68	28	14	12	28	264
Koch Bihar	19	117	75	13	8	3	13	248
Kolkata	42	32	33	18	12	7	44	188
Maldah	43	112	82	17	25	8	8	295
Murshidabad	26	174	108	46	30	13	26	423
Nadia	21	140	67	27	14	5	22	296
North Twenty Four Pargana	9	176	167	75	71	23	69	590
Paschim Medinipur	38	233	228	65	40	17	39	660
Purba Medinipur	20	158	132	41	43	14	43	451
Puruliya	118	127	29	8	4	3	9	298
Siliguri	2	25	46	9	9	4	17	112
South Twenty Four Pargana	25	252	150	55	52	20	44	598
Uttar Dinajpur	13	67	51	7	14	1	5	158
Total	634	2,814	1,715	560	445	175	467	6,810

Table A10: Source of Water

Water Facility	Rural	Urban	Total
Hand pumps	4,235	448	4,683
None	51	9	60
Others	262	136	398
Tap water	2,341	1,946	4,287
Well	215	51	266
Total	7,104	2,590	9,694

Table A11: Availability of toilets in girl's secondary schools

District	No toilet	1	2	3	4	5	More Than 5	Total
Bankura	0	11	17	11	3	3	8	53
Barddhaman	2	18	22	18	22	10	43	135
Birbhum	0	2	10	6	4	3	11	36
Dakshin Dinajpur	0	0	3	2	5	0	7	17
Darjiling	2	3	2	2	1	0	9	19

Haora	2	24	41	31	15	12	29	154
Hugli	0	21	36	25	16	11	39	148
Jalpaiguri	0	4	13	5	6	5	21	54
Koch Bihar	0	3	9	1	6	0	4	23
Kolkata	0	38	42	35	41	16	111	283
Maldah	1	1	5	5	2	4	14	32
Murshidabad	0	4	11	9	2	6	23	55
Nadia	0	11	15	10	17	11	24	88
North Twenty Four Pargana	0	17	44	35	30	16	88	230
Paschim Medinipur	1	2	18	21	14	10	26	92
Purba Medinipur	0	24	33	15	19	8	21	120
Puruliya	1	7	9	6	4	1	7	35
Siliguri	0	1	3	1	2	1	9	17
South Twenty Four Pargana	0	13	27	18	18	8	43	127
Uttar Dinajpur	0	4	2	5	4	3	6	24
Total	9	208	362	261	231	128	543	1,742

Table A12: Availability of Girls toilets in Co-education secondary schools

District	No Toilet	1	2	3	4	5	6	Total
Bankura	7	256	68	18	13	4	4	370
Barddhaman	13	213	190	91	42	21	31	601
Birbhum	11	221	79	7	3	2	3	326
Dakshin Dinajpur	0	33	55	36	11	5	10	150
Darjiling	15	36	20	16	14	1	12	114
Haora	8	140	109	24	12	7	16	316
Hugli	3	189	96	15	22	5	22	352
Jalpaiguri	4	81	70	34	26	16	33	264
Koch Bihar	20	119	73	16	11	2	7	248
Kolkata	2	65	40	15	19	9	38	188
Maldah	10	147	81	23	16	7	11	295
Murshidabad	10	192	120	46	22	14	19	423
Nadia	19	141	72	27	15	5	17	296
North Twenty Four Pargana	8	198	170	71	65	28	50	590
Paschim Medinipur	8	172	254	116	65	15	30	660
Purba Medinipur	2	198	127	52	33	12	27	451
Puruliya	21	187	59	14	5	3	9	298
Siliguri	2	26	44	15	4	6	15	112
South Twenty Four Pargana	7	278	154	54	50	25	30	598
Uttar Dinajpur	7	64	58	8	11	2	8	158
Total	177	2,956	1,939	698	459	189	392	6,810

Table A13: District and Management-wise Distribution of Secondary Schools with no Toilet

	Department of	Madrassa	Private (Unrecognised)	Private	Private	Un-	
District	Education	Education	Madrassa	Aided	Unaided	Recognised	Total
Barddhaman	1	0	0	0	1	0	2
Birbhum	0	0	1	0	0	0	1
Darjiling	8	0	0	0	3	0	11
Haora	2	0	0	1	3	1	7
Jalpaiguri	0	0	0	0	1	0	1
Koch Bihar	3	0	2	0	0	0	5
Kolkata	0	0	0	0	4	0	4
Maldah	2	1	0	0	4	0	7
Murshidabad	0	0	0	0	4	1	5
Nadia	0	0	0	0	5	0	5
Paschim Medinipur	0	0	1	0	3	2	6
Puruliya	15	0	0	0	2	2	19
Total	31	1	4	1	30	6	73

Table A14: Number of teachers according to subject applied for

	Subject	Number of teacher	Percentage
	Biology	857	1.26
	Chemistry	273	0
	Computer Science	135	0.2
	Engineering Drawing	92	0.13
	Mathematics	1,430	2
	Physics	364	0.53
Science	Science	1,428	2.09
Total		4,579	7
	Economics	115	0.17
	Geography	724	1
	History	620	0.91
	Philosophy	103	0
	Political Science	191	0.28
	Social studies	708	1.04
Social Science	Foreign Language	121	0
Total		2582	3.8
Language	Language	3,450	5.06
	Accountancy	115	0.17
	All subjects	53,853	79
	Art education	38	0.06
Other	Business Studies	320	0

Environ	nment studies	164	0
Fine A	rts	157	0.23
Health educati	physical on	436	1
Home S	Science	136	0
Music		98	0.14
Psycho	logy	12	0.02
Sports		144	0.21
Work e	education	432	0.63
other		189	0.28
Not me	entioned	1,471	2.16
Total		57565	84.4
Grand '	Total	68176	100

Table A15: List of Subjects Taught and number of teachers involved

Category	Subject Taught	No. of teachers	Percent	Category	Subject Taught	No. of teachers	Percent
cutegory	Biological Science	1,363	2	cutegory	English	2,521	3.7
	Biology	197	0.29		Foreign Language	12	0.02
	Chemistry	178	0.26		Hindi	329	0.48
	Computer Education	609	0.89	Language	Language	17,024	24.97
nce	Computer Science	896	1.31	angu	Other Languages	235	0.34
Science	Engineering Drawing	131	0.19	Ľ	Regional Language	1,219	1.79
	Mathematics	6,745	9.89		Sanskrit	567	0.83
	Physical Science	1,146	1.68		Urdu	15	0.02
	Physics	287	0.42		Accountancy	135	0.2
	Science	8,983	13.18		Agriculture	473	0.69
	Economics	89	0.13		All Subjects	3,307	4.85
0	Geography	555	0.81		Art Education	165	0.24
ence	History	1,529	2.24		Business Studies	6	0.01
Sci	Philosophy	54	0.08		Dance	999	1.47
Scocial Science	Political Science	517	0.76	i :	Environment Studies	2,141	3.14
Sco	Social Science	1,073	1.57	Other	Fine Arts	16	0.02
	Social Studies	5,918	8.68		Home Science	1,324	1.94
	Sociology	2	0		Music	403	0.59
					Not Mentioned	422	0.62
					Other	2,144	3.14
					Physical Education	1,394	2.04
					Psychology	358	0.53
	Total Teachers 68	176			Sports	1,233	1.81

Work Education 1,462 2.14

Table A16: District-wise distribution of teacher according to their academic qualification

			Aca	demic Qual	ification			
	Below		H.	lacille Qual	Post	M. Phil Or		
District	Secondary	Secondary	Secondary	Graduate	Graduate	Ph. D	Others	
Bankura	6	14	15	1086	2,032	32	3	3,188
Barddhaman	7	19	49	2213	3,398	93	4	5,783
Birbhum	0	4	27	897	1,510	44	2	2,484
Dakshin Dinajpur	2	6	7	834	569	15	4	1,437
Darjiling	3	7	31	527	436	11	13	1,028
Haora	4	15	45	1850	2,467	81	10	4,472
Hugli	18	82	94	2259	1,972	52	11	4,488
Jalpaiguri	9	23	52	890	904	15	8	1,901
Koch Bihar	8	4	13	842	969	14	1	1,851
Kolkata	0	28	81	1417	2,651	135	8	4,320
Maldah	5	20	26	1227	1,695	25	12	3,010
Murshidabad	2	9	29	1474	2,090	32	0	3,636
Nadia	1	5	8	1060	2,147	37	5	3,263
North Twenty Four Par	23	54	45	2448	3,839	91	21	6,521
Paschim Medinipur	19	15	21	2010	3,590	59	16	5,730
Purba Medinipur	16	16	31	1907	2,336	33	9	4,348
Puruliya	2	24	40	1402	1,522	26	9	3,025
Siliguri	0	8	30	376	601	16	1	1,032
South Twenty Four Pa	3	27	34	2119	2,551	45	5	4,784
Uttar Dinajpur	0	16	21	710	1,108	12	8	1,875
West Bental	128	396	699	27548	38,387	868	150	68,178

Table A17: District-wise distribution of teacher according to their professional qualification

District	Professional Qualification	
District	Professional Qualification	

	None	Dip or Certificate*	Diploma/Deg ree In Special Education	Bachelor Of Elementary Education	B.Ed. Or Equivalent	M.Ed. Or Equivalent	Others	Total Secondary Teachers
	1	2	3	4	5	6	7	8
Bankura	643	8	8	54	2,363	35	77	3,188
Barddhaman	1,621	20	21	58	3,881	78	104	5,783
Birbhum	478	2	1	78	1,870	27	28	2,484
Dakshin Dinajpur	242	12	4	12	1,121	20	26	1,437
Darjiling	250	41	13	9	615	35	65	1,028
Haora	1,132	23	20	52	3,069	86	90	4,472
Hugli	1,384	39	20	72	2,765	103	105	4,488
Jalpaiguri	289	15	1	10	1,523	35	28	1,901
Koch Bihar	536	16	0	19	1,194	35	51	1,851
Kolkata	952	83	15	80	3,060	49	81	4,320
Maldah	1,111	9	4	46	1,758	43	39	3,010
Murshidabad	1,211	17	1	30	2,264	47	66	3,636
Nadia	805	8	14	39	2,303	59	35	3,263
North Twenty Four Par	1,736	44	3	158	4,366	76	138	6,521
Paschim Medinipur	1,332	18	32	166	4,005	69	108	5,730
Purba Medinipur	1,068	15	32	90	2,944	51	148	4,348
Puruliya	881	9	29	25	1,946	50	85	3,025
Siliguri	408	12	1	15	540	22	34	1,032
South Twenty Four Pa	1,701	24	23	57	2,865	58	56	4,784
Uttar Dinajpur	511	3	4	39	1,247	28	43	1,875
Total	18,291	418	246	1,109	45,699	1,006	1,407	68,176

^{*}Diploma or Certificate in Basic Teachers Training of A Duration Not Less Than Two Years

Table A18: Management distribution of teachers according to gender, academic qualification and training

	Graduate &	Post Graduate		Female	Male	
School Management	Below	& Above	Trained Teachers	Teachers	Teachers	Total
Central Govt.	210	281	327	237	254	491
Department of Education	25,145	35,938	46150	21,448	39,635	61,083
Madrasha Siksha Kendra	27	12	2	16	23	39
Madrassa Education	1,578	1,474	1543	417	2,635	3,052
Municipal Body	42	58	70	35	65	100
Others	1	5	3	0	6	6
Private (Unrecognised	50	12	21	14	48	62
Private Aided	206	183	247	226	163	389

Private Unaided	1,478	1,219	1377	1,614	1,083	2,697
Tribal/Social Welfare	41	27	34	36	32	68
Un-Recognised	143	46	111	75	114	189
Total	28,921	39,255	49885	24,118	44,058	68,176

Table A19: Distribution of teachers according to main subject taught

District	Mathematics	Science	Biology	Chemistry	Physics	English	Physical Education	Art Education	Language
Bankura	322	303	149	1	150	283	79	24	672
Barddhaman	518	753	164	7	167	337	60	6	1,239
Birbhum	262	271	86	16	92	163	57	5	546
Dakshin Dinajpur	177	217	30	10	24	50	15	1	416
Darjiling Darising	139	147	20	3	12	25	8	1	240
Haora	416	723	45	10	21	35	71	12	1,204
	422	486	94		78	160	47		966
Hugli				13				3	
Jalpaiguri	184	253	29	0	40	62	16	7	526
Koch Bihar	187	247	49	1	48	94	59	1	454
Kolkata	523	713	60	15	46	119	49	20	1,261
Maldah	329	446	28	5	54	67	30	13	961
Murshidabad	417	350	12	0	34		128	5	1,077
Nadia	297	506	79	7	49	104	27	7	931
North Twenty Four Pargana	564	1,195	70	12	67	126	169	12	1,832
Paschim Medinipur	533	631	151	26	156	238	172	19	1,311
Purba Medinipur	401	518	168	18	126	229	164	2	897
Puruliya	273	285	108	17	94	123	87	4	608
Siliguri	76	147	15	0	16	29	20	2	238
South Twenty Four Pargana	503	563	123	13	122	191	118	19	1,149
Uttar Dinajpur	202	229	80	13	37	86	18	2	496
Total	6,745	8,983	1,560	178	1,433	2521	1,394	165	17,024

Table A20: Availability of ICT according to School Category

	Total	ICT a	vailable		vailable & ctional	Availability of Library		
School Category	Secondary Schools	Number	Percentage	Number	Percentage	Number	Percentage	
Pry with U Pry & Secondary	190	8	4.2	43	22.6	106	55.8	
Pry with U Pry & Secondary & H.Sec	555	67	12.1	196	35.3	325	58.6	
Secondary only	2	0	0.0	1	50.0	2	100.0	
Secondary with Hr. Secondary	1	0	0.0	0	0.0	0	0.0	
U Pry with Sec and HS	5,664	607	10.7	1,841	32.5	4705	83.1	
Upper Primary with secondary	3,282	139	4.2	512	15.6	2218	67.6	
Total	9,694	821	8.5	2,593	26.7	7356	75.9	
Schools Upto Secondary Section	3,474	147	4.2	556	16.0	2326	67	
Schools Upto H. Secondary Section	6,220	674	10.8	2,037	32.7	5030	81	

Table A21: Availability of ICT according to School Management

	Total	I	СТ		vailable & ctional	Availability of library		
C 1 114	Secondary	NT 1	D (N T 1	D (NT 1	D (
School Management	Schools	Number	Percentage	Number	Percentage	Number	Percent	
Central Govt.	62	23	37.1	45	72.6	52	83.9	
Department of Educati	8,457	735	8.7	2,256	26.7	6112	72.3	
Madrasha Siksha Kendra	9	0	0.0	0	0.0	1	11.1	
Madrassa Education	455	19	4.2	90	19.8	339	74.5	
Municipal body	16	0	0.0	1	6.3	13	81.3	
Others	2	0	0.0	0	0.0	2	100.0	
Private (Unrecognised)	27	0	0.0	0	0.0	4	14.8	
Private Aided	75	3	4.0	29	38.7	54	72.0	
Private Unaided	483	37	7.7	158	32.7	248	51.3	
Tribal/Social Welfare	23	3	13.0	5	21.7	11	47.8	
Un-recognised	85	1	1.2	9	10.6	27	31.8	
Total	9,694	821	8.5	2,593	26.7	6863	70.8	

Table A22: Average Enrolment in, Class Rooms and SCR in schools with secondary section

	Schools with secondary section							
District	Average Enrolment* Average classrooms S							
Kolkata	659	17.0	36.8					

Darjiling	535	11.3	46.2
Haora	852	15.2	54.6
Paschim Medinipur	829	14.0	58.5
Siliguri	1064	17.4	60.5
Purba Medinipur	891	14.2	62.9
Hugli	861	13.5	65.1
South Twenty Four Pargana	1048	15.9	66.1
Dakshin Dinajpur	1165	17.0	70.1
Barddhaman	874	12.5	71.8
Bankura	832	12.0	71.9
North Twenty Four Pargana	977	13.9	72.2
Puruliya	903	12.5	77.2
Birbhum	922	12.0	78.3
Nadia	1320	17.3	79.6
Jalpaiguri	1340	16.4	84.3
Murshidabad	1529	16.8	88.6
Maldah	1413	15.4	90.1
Uttar Dinajpur	1576	18.0	91.6
Koch Bihar	1228	11.8	105.9
Total	1001	14.6	69.7

^{*}Total number of classrooms irrespective of usage by various classes in the school

Table A23: Expenditure on Education* – As Ratio to Aggregate Expenditure

State	200 0-01	200 1-02	200 2-03	200 3-04	200 4-05	200 5-06	200 6-07	200 7-08	200 8-09	200 9-10	201 0-11	Ave rage	2011- 12	2012- 13
													(RE)	(BE)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Assam	25.5	21.9	22.4	22.3	17.0	20.8	20.4	20.1	18.8	16.4	22.0	19.0	18.7	21.1
Uttarakhan d	21.5	21.1	20.0	17.6	18.4	17.2	18.1	17.6	18.2	22.6	23.5	18.0	18.2	20.8
Bihar	23.7	20.7	18.4	18.9	15.8	19.6	19.7	17.6	18.5	18.1	16.3	17.3	16.6	19.5
Maharashtr a	22.3	22.1	18.9	15.5	14.0	15.7	16.4	17.2	17.0	19.1	20.8	16.6	19.9	19.8
Tripura	19.3	18.6	19.2	18.3	20.0	15.3	15.9	15.1	14.4	16.2	17.2	15.8	17.2	13.8
Kerala	20.0	19.0	17.6	15.7	16.2	16.6	17.1	15.9	16.7	16.8	17.0	15.7	17.6	17.0
Rajasthan	18.8	18.2	15.5	14.1	13.8	17.2	15.6	14.6	17.9	19.0	19.1	15.3	18.0	18.5
West Bengal	17.1	16.2	15.9	11.8	14.9	13.7	15.2	15.2	13.1	17.7	19.7	14.2	19.4	17.8
Meghalaya	16.6	17.9	15.3	15.2	15.0	15.5	14.1	15.5	12.8	14.8	16.1	14.1	17.0	16.5
Himachal Pradesh	17.0	16.2	14.5	12.4	13.5	14.1	14.1	15.4	16.2	16.3	17.9	14.0	18.8	17.5
Odisha	15.9	14.6	14.3	12.2	12.6	14.7	12.8	14.3	16.9	18.2	18.3	13.7	16.9	15.7
Karnataka	17.7	16.0	14.8	12.9	12.7	14.0	13.1	14.4	16.1	14.0	15.6	13.4	15.5	14.8
Jharkhand	_	16.2	19.0	14.2	14.9	15.8	15.2	15.1	18.6	15.4	15.8	13.4	17.0	17.0

Mizoram	16.2	16.0	14.5	12.0	13.8	13.4	13.8	13.2	14.1	14.9	14.9	13.1	15.7	14.5
NCT Delhi	15.1	13.7	12.1	10.9	13.1	14.9	15.1	13.3	15.8	16.3	16.3	13.1	17.8	17.6
Uttar Pradesh	16.8	16.0	14.6	9.1	12.5	15.2	14.7	14.1	13.2	13.8	16.1	13.0	17.4	17.6
Tamil Nadu	18.0	17.3	13.8	12.6	11.2	13.6	12.2	12.7	13.1	15.2	15.2	12.9	14.5	15.0
Manipur	20.2	13.7	13.3	13.1	15.3	15.4	11.9	14.2	12.0	11.9	10.7	12.6	11.3	9.9
Haryana	14.6	13.8	13.7	10.2	11.6	13.4	11.9	12.9	15.0	16.3	17.3	12.6	16.6	18.3
Chhattisgar h	13.1	12.4	11.0	10.8	12.3	13.4	12.9	13.5	14.4	15.6	18.6	12.3	19.0	17.8
Gujarat	13.6	12.7	13.5	11.2	11.5	12.6	12.7	13.4	11.7	13.8	15.9	11.9	16.1	13.4
Goa	11.9	10.5	12.0	12.1	13.9	12.3	13.7	12.3	13.3	14.1	15.4	11.8	16.6	15.4
Madhya Pradesh	16.3	12.5	12.2	9.9	8.8	10.2	12.4	11.1	12.8	13.0	14.2	11.1	13.3	14.8
Nagaland	13.8	11.0	11.0	10.8	11.0	11.6	12.3	11.4	11.2	11.3	13.4	10.7	12.0	12.0
Punjab	13.2	11.7	12.1	10.2	10.1	11.3	8.9	10.3	11.3	12.2	11.7	10.3	15.6	14.2
Andhra Pradesh	13.3	12.5	11.7	11.6	9.8	11.1	10.8	9.0	9.0	10.0	12.5	10.1	14.0	13.6
Sikkim	14.2	8.0	7.6	11.8	8.8	10.4	10.5	9.2	10.6	12.4	17.3	10.1	12.1	12.5
Arunachal Pradesh	6.4	13.3	12.1	9.1	10.7	9.9	10.7	10.8	11.4	12.2	10.8	9.8	9.1	8.3
Jammu and Kashmir	11.1	11.6	10.9	11.1	9.7	9.3	10.0	9.2	10.0	11.3	12.6	9.7	13.4	13.0
Puducherry	-	_	_	-	_	10.7	9.9	10.0	12.4	13.2	13.2	5.8	12.7	12.0
All States	17.4	16.2	15.1	12.6	12.7	14.2	14.0	13.8	14.3	15.3	16.6	13.5	16.6	16.5

Source: RBI

RE: Revised Estimates. BE: Budget Estimates.

Note: Figures for Jharkhand for the year 2010-11 (Accounts) relate to Revised Estimates.

Source: Budget Documents of the State Governments, State Finance Accounts, CAG for 2010-11 in respect of Jammu and Kashmir.

^{&#}x27;-': Not applicable/Not available.

^{*:} Includes expenditure on Sports, Art and Culture under revenue expenditure and capital outlay.