CHAPTER 1

INTRODUCTION

Education accounts for a significant proportion of public and private sector spending in the state and the country. The extent of employment that the sector generates is also substantial. Hence public as well as governments find it necessary to continually assess the performance (or effectiveness) of the education system. This calls for finding out how effective our education system is, what quality of education it is delivering, and how it can be improved so that the gains can be harvested by the beneficiaries in real life.

In this chapter the Critical Study looks at a host of factors which have a bearing on education in general and secondary and PU education sectors in particular.

Importance of Secondary Education

Higher education in India provides leadership-manpower in various sectors of national life and economy. Secondary Education has emerged, only next in importance to higher education, as the single largest provider of working people in all spheres of national productivity.

There are a variety of reasons calling for the expansion of secondary education –

a) It will help maintain and accelerate the pace of economic growth of the Indian Economy,
b) It will raise the minimum basic education of the population to a minimum 12 years of schooling as is common in most of the developed and developing countries,
c) It will help raise enrolment in higher education from the current level of about 6% to a targeted level of at least 20% of the concerned age group,
d) Due to the massive emphasis on Universalisation of Elementary Education (UEE), there is an increasing social demand for secondary education

In this context, this Study examines the various goals enunciated by a number of bodies interested in providing education for all.

Education For All (EFA)

India is an active participant in the world wide movement for universal education that began in Jomtien, Thailand in March, 1990 and continued in Dakar in 2000. The ultimate goal affirmed by the World Declaration on EFA was to meet the basic learning needs of children, youth and adults. These needs were further classified to consist of:

(a) Essential Learning Tools – such as literacy, oral expression, numeracy, and problem solving, and
(b) The basic learning content – such as knowledge, skills, values and attitudes.

Towards fulfilment of these objectives, the Declaration of EFA took a broadened view of basic education that consisted of formal schooling, non-formal education (NFE) and open learning systems, which cumulatively attempted to reach all children as well as adults.

The 'Frame Work for Action' adapted in Dakar, Senegal, (2000), identified six goals. These goals are –

i) Expansion of comprehensive ECCE, especially for the most vulnerable and disadvantaged children,
ii) Universal access to and completion of primary education of good quality – ensuring that by 2015, all children, particularly girls and those in adverse circumstances and belonging to ethnic minorities, are assured of the same,
iii) Improvement of learning achievement – ensuring that the learning needs of all young people and adults are met through equitable access to basic and continuation education,
iv) Reduction of adult illiteracy rate – achieving a 50% improvement in levels of adult literacy by 2015, especially for women, and equitable access to basic and continuing education for all adults,
v) Eliminating gender disparities in primary and secondary education by 2005, and achieving gender equality in education by 2015, with a focus on ensuring girls' full and equitable access
vi) Improving every aspect of the quality of education and ensuring excellence so that recognised and measurable learning outcomes are achieved by all, especially in literacy, numeracy and essential life skills.

This essentially meant expansion of provision for basic education, training in essential skills required by the youths and adults, increased acquisition of knowledge, skills and values (for a better living) by individuals and families, special provisions for girls and ethnic minorities for equitable access to appropriate learning and life skills, improved levels of adult literacy, elimination of gender and regional disparities, and overall improvement of the quality of education imparted. The fifth and sixth goals are relevant to Universalisation of Secondary education (USE) in the country.

Millennium Development Goals (MDGs)

In 2000 CE, the UN General Assembly declared eight MDGs with a target date for most of them set at 2015. These goals provide tangible benchmarks for measuring progress in eight areas. Progress towards MDGs reflects progress towards human development. These MDGs represent the most comprehensive and detailed set of goals ever adapted. They embody basic indicators for human development in many dimensions including income, poverty, education, gender equity, health, drinking water and sanitation, etc.

The Goals pertaining to education are –

1. Goal 2: 'Achieve Universal Primary Education. Ensure that all children are able to complete primary education'.
2. Goal 3: 'Promote gender equality and empower women. Eliminate gender disparity in primary and secondary schooling, preferably by 2005 and not later than 2015'.

Gender disparity at the secondary education level needs to be tackled. The study will be discussing this aspect in subsequent chapters.

KARNATAKA'S GENERAL FROFILE

Human Development Indicators

Human Development Indicators measure average achievements in basic human development in three broad areas:

1. Health & Longevity (as measured by life expectancy at birth)
2. Education (as measured by literacy and combined GER for primary, secondary and tertiary institutions)
3. Living Standards (as measured by GDP per capita in purchasing power parity in US dollars)

The Gender related Development Index (GDI), measures the levels of women's human development relative to men. Though the GDI in Karnataka (0.637) is much higher than the All India figure (0.609), Karnataka is sixth among major states in gender development and seventh in Human Development. (See Table 1.1)

UNDP has been regularly bringing out annual HDRs. GOI brought out a 'National Human Development Report (NHDR) in 2001. Karnataka has brought out two HDRs in 1999 and in 2005. The data contained in all these reports is used in this critical study.

Table 1.1
Comparison of some states by HDI and GDI 2001

State	HDI	Rank	GDI	Rank
Kerala	0.746	**1**	0.724	**1**
Maharashtra	0.706	**2**	0.693	**2**
Tamil Nadu	0.687	**3**	0.675	**4**
Punjab	0.679	**4**	0.676	**3**
Gujarat	0.655	**5**	0.642	**5**
Haryana	0.653	**6**	0.636	**7**
Karnataka	0.650	**7**	0.637	**6**
India	0.621	--	0.609	--

Source: HDR 2005
HDI: Human Development Index, GDI: Gender Development Index

The state stands fifth in terms of Education Index in the country. It needs to improve in all education sectors in order to see further improvement in the Education Index.

Table 1.2
Comparison of some states by Education Index 2001

State	Education Index	Rank
Kerala	0.887	**1**
Maharashtra	0.796	**2**
Tamil Nadu	0.764	**3**
Gujarat	0.726	**4**
Karnataka	0.712	**5**
India	0.652	--

HDR 2005

Population of the State

The population of the state as per 2001 Census was 5.3 crore, which was 5.13% of the country's population. It occupied the ninth position among 28 states and 7 union territories in the country in terms of population

However, in 2011, according to provisional Census figures, the state's population has risen to 6.11 crore (5.05% of country's population), recording a decadal growth of 15.67%, compared to 17.25%, in the previous decade. However, the state still occupies the ninth position in the country in terms of population.

Bangalore (Urban) District with a population of 95.88 lakhs (constituting 16% of the state's population) stands in the first position in terms of population in the state, whereas Kodagu district with a population of 5.54 lakhs (constituting 0.91% of state's population) is the least populated district in the state.

STATUS OF LITERACY & EDUCATION IN KARNATAKA

Literacy in Karnataka

Literacy is one of the important indicators of human development. Education and Literacy have also a close correlation. Literacy's positive association with improved socio-economic indicators underlines its importance in human development. Literacy is crucial for achieving all the goals of EFA. In India, it has a constructive role in the success of Universal of Elementary education. For the purpose of census, a person aged seven and above, who can both read and write with understanding in any language, is treated as a literate.

According to HDR 2005, poverty and literacy are closely linked. Female literacy is also directly associated with rates of fertility, population growth, infant and child mortality, and shows a positive association with female age at marriage, life expectancy, participation in modern economic development and improvement of girls' enrolment in schools.

The erstwhile Princely state of Mysore, was the first state in the country to implement a comprehensive literacy program to eradicate illiteracy In the state. Again Mysore was the second state in the country (after Baroda) to introduce compulsory primary education in the state through the 'Elementary Education Act, 1913'. As a result, at the time of independence, literacy in the Princely State of Mysore was 20.3% as against the country's average of 16.6%.

The state's literacy rate has increased from 66.64% in 2001 to 75.60% in 2011. Male literacy has increased from 76.10% to 82.85% and female literacy has increased from 56.87% to 68.13%. The gap between male and female literacy rate has come down from 19.23% in 2001 to 14.72% in 2011. The gender gap has narrowed down during the past decade in all the districts.

Table 1.3
Increase in literacy rates in Karnataka

Sex	1961	1971	1981	1991	2001	2011*
Male	42.29	48.51	58.73	67.26	76.10	82.85
Female	16.70	24.56	33.17	44.34	56.90	68.13
Total	29.80	36.83	46.21	56.04	66.64	75.60

*Source: Census of India-Karnataka, *Provisional figures*

The districts of Bangalore (Urban) (88.48), Dakshina Kannada (88.62), Udupi (86.29), Uttara Kannada (84.03), Kodagu (82.52), Shimoga (80.50) and Dharwar (80.30) have more than 80% literates. Even though these figures look impressive, seen from another angle, nearly quarter of the population of the state (including one third women) are still illiterate.

The districts of Koppal (67.28), Bijapur (67.20), Gulbarga (65.65), Chamarajanagar (61.12), Raichur (60.46), and Yadgir (52.36) are at the bottom of the table in literacy. The following districts have less than 60% female literacy rates which is also a matter of concern: Bagalkot (58.55), Bijapur (56.54), Raichur (49.56), Koppal (56.22), Bellary (58.28), Chamarajanagar (54.32), Gulbarga (55.87), and Yadgir (41.31).

The present literacy rate also reflects on the prevalence of the amount of illiteracy in the state. As on 2011 as many as 24.4% of the population is still illiterate – 17.15% male, and 31.87% female. This also means that nearly one third of the state's female population is still illiterate. The XI Plan had set the following targets and special focus areas:

- Achieve 80% literacy rate
- Reduce gender gap in literacy to 10%
- Reduce regional, social and gender disparities
- Focus on disadvantaged groups and adolescents

It is a matter of concern that the state has yet to achieve these targets.

Growth of Education in Karnataka – A Brief Overview

From the middle of the 19th century, the princely state of Mysore had been considered a progressive state in the country. It had put in place a modern system of education as early as in 1833, when the Raja's school was started in Mysore. The first government high school was set up in Bengaluru in 1858. It was upgraded as a first grade college in 1870 and named 'Central College' in 1875. Maharaja's College was started in Mysore in 1864.

The Department of Public Instruction, which now supervises elementary and secondary education in the state, was established as early as in 1857. Mysore was also the second state in the country, after Baroda, to introduce compulsory primary education almost a hundred years ago in 1913.

The state also has the distinction of establishing the country's first engineering college. Mysore University, one of the oldest universities in the country, was established in 1916. After reorganisation of the state in 1956, the education system in the state has grown steadily and has now an impressive network of educational institutions at all levels of education.

Regional Disparities

In spite of the impressive growth of educational facilities in Karnataka, regional and inter district disparities still exist. There are disparities in human development as well as education, across districts and even within districts. The presence of inter district and intra district variations, means that people's access to services is shaped by where they live, and their quality of life is determined to a certain extent, by regional disparities. Dr. Nanjudappa's Committee in 2002 identified 114 backward blocks across Karnataka.

Table 1.4
Backward Blocks in Karnataka

Area	Most Backward	More Backward	Backward	Total
Hyderabad Karnataka	21	5	2	28
Bombay Karnataka	5	12	14	31
Southern Karnataka	13	23	19	55
Total	**39**	**40**	**35**	**114**

Source: Annexure 6.4, Report of HPCFRRI,
(Dr. Nanjundappa's Committee report 2002)

The Human Development Report (HDR) 2005 identified the following districts as educationally backward districts. These districts are ranked in terms of education index by the HDR 2005 as shown below:

Table 1.5
Educationally Backward Districts

District Rank	District	Education Index	Literacy 2001	Literacy 2011	Decadal Difference	Rank 2001	Rank 2011
23	Bellary	0.618	57.40	67.85	10.43	23	24
24	Koppal	0.576	54.10	67.28	13.18	27	25
25	Gulbarga*	0.572	54.34	65.65	11.31	26	27
25	Yadgir*	0.572	39.90	52.36	12.46	30	30
26	Chamarajanagar	0.570	50.87	61.12	10.25	28	28
27	Raichur	0.524	48.81	60.46	11.65	29	29
	Karnataka	**0.712**	**66.64**	**75.61**	**8.97**		

**Gulbarga District was bifurcated into Gulbarga & Yadgir districts subsequently*
Source: HDR 2005 & Census 20011

All these districts have shown more than 10% difference in growth in literacy rates in the last decade. Even though all these districts have a higher decadal difference than the state average, their literacy rates continue to be at the bottom of the table. The Critical Study on Secondary and PU education has kept these districts as the main focus area, while conducting the study.

STATE'S EDUCATION VISION GOALS & OBJECTIVES

State's Education Vision

The Perspective Plan Document (2007) has articulated the 'State's Education Vision' as follows:

> ***Education Vision of the State***
>
> *'The Vision of the state should be to ensure that all the children of the state in the age group of 6 to 18 years, complete 12 years of quality education and are equipped with the specified knowledge, skills and values to enable them to become better human beings and productive and socially responsible citizens and to achieve excellence in whatever they do'*

'The children who come out of the education system should be physically strong and sound, intellectually competent, mentally and emotionally matured, intelligent, creative and exploring… Physical qualities should also include an internally sound and disease free life. The Vision should also keep in mind the larger social, national and global goals…'

The objective is to build the needed capabilities in those who pursue higher education and necessary skills for those who desire to enter the world of work. The vision should also keep in mind the rapidly changing world of work from a traditional one to a knowledge based one.

Edu-Vision Goals

The Edu-vision (2002) Document has articulated the goals and targets for secondary education for Karnataka as follows:

1. About 65% of children in the relevant age group should participate,
2. About 80% of those who join should successfully complete secondary education,
3. Education should enable secondary school leavers to participate in the rapidly changing world of work or to move to higher education.

Edu-Vision document has further set the priority areas for the government in the field of secondary education as: Quality Improvement, Curriculum Restructuring & Examination Reforms.

Objectives Set forth by the State Government:

For the first time, the state government started articulating its immediate objectives in its Annual Reports from the year 2008-09.

Tenth Plan Objectives:

1. 100% enrolment of children in the age group of 6 to 14 years,
2. Opening of Lower Primary Schools within 1 km and higher primary schools within 2 kms.
3. Reducing dropout rates in classes 1 to 5 to less than 6% and in classes 1 to 7 to less than 20% of the habitations,
4. Providing 4 teachers to each lower primary school and 6 to higher primary school.

Eleventh Plan Objectives: It laid more emphasis on consolidation rather than expansion in the education sector in the Eleventh Plan. It proposed to –

1. Restrict opening of schools and colleges in un-served areas of backward blocks,
2. Reduce dropout rates to 5% at the Lower Primary Stage and less than 10% at the higher primary stage.
3. Enhance literacy rate to 85%, by reducing gaps in male and female literacy.
4. Increase enrolment in 14-18 age group to 65%. This will be in classes 9 to 12 and +2 courses.
5. Emphasis is laid on quality concerns. It proposed to ensure that 80% students studying in classes 1 to 8 master 80% of competencies prescribed.
6. More stress will be laid on vocationalisation of education at the +2 level.

The 2009-10 Annual Report also speaks of concerns of equity and regional parity. In the foregoing chapters we will discuss how far the government is able to achieve these objectives in secondary and pre-university sectors in reality.

SECONDARY & PU EDUCATION SECTORS IN KARNATAKA

Significance of Secondary and Pre University Sectors

The tremendous emphasis given to elementary education and the subsequent rapid expansion of elementary education facilities during the last few decades has created a significant demand for secondary and PU education.

Secondary and PU education are critical stages in the education of an individual, because –

1. Secondary education serves as a bridge between elementary and higher education and is expected to prepare young adolescents in the age group of 14-18 years to the world of work and / or entry into higher education.
2. The secondary stage acts as a terminal stage for a majority of children. Importance given to secondary education has also significantly increased over the years as most jobs now prescribe a minimum qualification of Class 10. Thus, a large number of children need to complete secondary education in order to be prepared for employment and thus improve the quality of their lives.
3. It exposes students to the contributions of science, humanities, and social sciences in the building of the nation,
4. This is a stage where children become aware of their duties and responsibilities as future citizens of this country,
5. For all children, it is a decision making stage – a stage where they make educational and vocational choices. Hence the stage should enable them to take right decisions.

Priorities in the Secondary & PU Education Sectors

Based on this vision and goals, some of the priorities in this sector are given below:

a) The Education system should guarantee equitable access to quality education (both formal and non formal) that would equip the children of the state with the requisite knowledge and skills which will enable them to participate effectively in the country's fast paced economic growth.
b) For achievement of this objective, the system should be based on a world class curriculum, which will enable the children to compete in an international knowledge based economy.
c) At the same time the system should cater to the diversified needs of average and below average children who may not like to pursue higher education and who would enter the world of work at various levels.
d) Hence we need to build a system that is based on people's participation and institutional structures which are accountable to stakeholders.
e) There is also a greater need for organisation through strategic partnership between public and private initiatives.

Quality of Education is critical at this stage as this will improve the quality of input at the higher education stage as well.

Based on the data available and interaction with stake-holders in workshops conducted at various levels, this study has tried to analyse whether these goals have been met and if so to what extent?

Is there any need for a Change in Structure at Secondary Stage?

Within the overall pattern of 10+2 structure of school education, the secondary stage consists of classes 9 and 10 in 19 states/UTs. However, the secondary stage in 13 states/UTs (including Karnataka) covers classes 8 to 10. Several states like Andhra Pradesh, Assam, Goa, Gujarat, Maharashtra, Karnataka, Kerala, Orissa and others follow the classes 8 to 10 pattern at the secondary stage. The +2 stage is also treated as a separate stage in Karnataka.

In Karnataka all secondary schools (13,352) have classes 8 to 10, whereas only 3833 government upper primary schools have Class 8 in the elementary cycle. 65% of secondary schools in Karnataka are in private sector. All these schools have classes 8 to 10. Already pushing class 8 to the elementary cycle has proved disadvantageous to Karnataka. The experiment has also failed as students prefer to join class 8 in a high school rather than join class 8 in a higher primary school.

There are sound historical and educational reasons for 'Classes 8 to 10 Pattern' at the secondary stage, followed by several states. Hence the insistence of the Centre to adapt to a common pattern of 8+2+2 system does not seem appropriate to Karnataka.

TOWARDS UNIVERSALISATION OF SECONDARY EDUCATION (USE)

Since all these years, Elementary Education had been the only priority sector in education for both the Central and State governments. Hence secondary education did not receive the much needed attention previously. This is reflected in the allocation of resources to this sector both by the central and state governments.

The Tenth Plan Mid-term Appraisal document of the Planning Commission recommended: *'In order to plan for a major expansion of secondary education in the event of achievement of full or near full retention under SSA, setting up of a new Mission for Secondary Education, on the lines of SSA should be considered'.* Thus, the success achieved in elementary education sector led the central government to push for Universalisation of Secondary Education (USE) as a program goal.

Guiding Principles of USE

The USE necessarily has four 'Guiding Principles' of Universal Access, Equality and Social Justice, Relevance and Development, and Structural and Curricular Aspects. These are explained briefly below:

1. **Universal Access** – The concept of Access is envisaged in physical, social, cultural and economic terms – including a barrier-free access (to a disabled child, a child friendly curriculum, an attractive cultural ambience, etc.
2. **Equality and Social Justice** – which empowers a child to understand and deal with a whole lot of social issues. Here equality and social justice includes a whole lot of dimensions: gender disparity, economic disparity, socio-cultural disparities, physical and mental disabilities, and rural /urban disparities.

In Karnataka about 40% of schools are private unaided schools, and among them, the elite schools attract students from the privileged sections of the society. These children are deprived of the experience of interacting with children of different social classes and diverse cultural backgrounds. Hence it is inconceivable that such unaided schools can inculcate a sense of equality or social justice among their students or even help them appreciate the composite culture and plural character of India. This anomaly can be taken care of only when the private unaided schools are made part of the 'Common School System'.

3. **Relevance and Development** - The USE should take concrete steps to –
   i. Help in unfolding the full potential of the child,
   ii. Link the development of the child with society, with all its political, productive and socio-cultural dimensions,
   iii. Help the child to become a better citizen of a democratic, egalitarian, and secular society,
   iv. Take up a Inter-disciplinary approach to knowledge, concept formation, and its application in daily life and encourage attributes such as 'Critical thinking and Creativity'.
   v. Help the child to acquire competencies and skills, in the context of rapidly changing technology and the demands of a global economy,

4. **Structural and Curricular Aspects – (Vocational Education & Training)**
   Nationally, the 10+2 pattern of school education has become a reality. The Education Commission (1964-66) advocated a minimum of 10 years of common curriculum along with the concept of diversified courses at the +2 stage. However, the policy of vocational education and diverting at least 25% of students to vocational streams failed.

   Productive work must be introduced in the curriculum as a pedagogic medium for acquisition of knowledge, developing values and multiple skill formation from pre-primary stage to the +2 stage, This includes development of generic competencies that include critical thinking, transfer of learning, creativity, communication skills, aesthetics, work motivation and entrepreneurship-cum-social accountability. This will provide a firm foundation for building up a program of *'Vocationalised Education'* to be distinguished from 'Vocational Education'.

5. A nation-wide program of 'Vocational Education and Training' (VET) is to be built up in mission mode and be structurally and administratively placed outside the school system, incorporating modular courses with lateral and vertical linkages. VET is supposed to include –

   a) Flexible and modular certificate/diploma courses of varying durations,
   b) Multiple entry and exist points with in-built credit accumulation facility,
   c) Vertical and Horizontal linkages with the academic, vocational and technical programs,
   d) Accessibility all the way from the level of village clusters to the block and district levels, and also in urban areas,
   e) Provision for carving out 'workbenches' in the neighbourhood of existing economic activities, production and technical centres, etc.

VET was visualised as a program of national significance, but even after five years of conceptualisation is yet to take off. This Vision of VET again differs from the 'National Vocational Educational Qualification Framework (NVEQF)' indicating that there is no convergence of views at the GOI level itself.

But the BPOs, Call Centres and Centres for Medical Transcription, etc. have sprung up throughout the country and are thriving in the private sector. This study feels that the private sector should have been involved heavily from the drawing board stage of the program.

The Director, RMSA stated that on a pilot basis, 4 trades are proposed to be taken up in Karnataka in selected schools in urban areas in Karnataka:

1. Retail Management,
2. Automobile,
3. Information Technology (IT) and
4. Security Services

The modalities are yet to be worked out. It is also important that the state takes into consideration the short comings found in the implementation of the earlier vocational education programs are not repeated again in implementation of this VET. The 'Evaluation Document' of the previous vocational education program (JOC), prepared by IIM, Bangalore in 2005 deals extensively with the short comings of the program.

Setting up of RMSA

In 2006, the central government took a policy decision to universalize secondary education and allocate higher budgetary resources to this sector. With this in view the 'Rashtriya Madhyamik Shiksha Abhiyan' (RMSA) was set up in 2009 in Karnataka as a vehicle to realise this objective. The programs under RMSA are discussed separately in Chapter 6.

USE in the Karnataka Context

Universalisation of Secondary Education in Karnataka needs to fulfil three major criteria –

1. Universal Enrolment (in all the three Classes of 8, 9 and 10),
2. Universal Retention (achievement of zero dropout rate in all the three classes,
3. Universal Achievement (60% of students of Class 10 achieving 60% mastery over subjects and other learning tasks.

Universal Access may be possible to achieve through expansion of secondary schooling facilities in both formal and non-formal modes, special efforts are required for achieving equity, social achievements and student performance.

Status of Secondary & Pre University Education Sectors in Karnataka

In Karnataka, secondary education has two separate stages – high school (classes 8-10) which caters to the student population of 14-16 age-group and higher secondary/Pre-University (PU) (the +2 stage consisting of classes PU 1 and 2) which caters to student population of 16-18 age group.

Unlike in most states, the +2 stage has been treated as an independent one (and not as a part of the secondary stage) due to historical reasons. Conceptually, it is considered as a bridge between secondary and higher education (leading to professional courses, vocational education or general education). At the national level, the +2 stage is considered a part of the secondary stage itself. Even though, class 8 has been designated as a part of elementary education for the purposes of 'Universalisation of Elementary Education' by the government, there are very few primary schools having class 8, while every high school in Karnataka starts from class 8.

A significant feature of the state's secondary education scenario is the presence of a large private sector. Government institutions constitute only 35% in both the secondary and pre university sectors, while the remaining 65% is made of private aided and unaided institutions.

During the last two decades, the expansion of the secondary school network in the state is more impressive, even when compared to that of primary education. The number of secondary schools has seen more than a threefold increase from 4,192 in 1990 – 91 to 13,352 in 2010 – 11. Similarly, the number of pre university colleges has more than doubled from 1536 in 1990-91 to 3833 in 2010-11. There has been a similar increasing trend in both secondary and PU sectors in respect of student enrolment and various other education indicators. The status of secondary and PU sectors are discussed in detail in subsequent chapters.

Responsibility of the Private Sector in USE

Private institutions have a social responsibility in the context of the Constitutional Amendment, which has made elementary education a fundamental right of every child. The same can be said for achieving the goal of Universalisation of Secondary education. Even though most of the private schools cater mostly to the creamy layer (upper middle and rich classes) of the society, they should also realise their social responsibility and allocate a certain percentage of seats at a lower fee, towards needy children from the neighbourhood.

One of the key issues articulated for the X Plan, was providing for a greater focus on improving access and reducing disparities by emphasising the 'Common School System' in which it is mandatory for schools in a particular area to take students from low income families in the neighbourhood.

Key constraints to expansion of Secondary Education

The 2009 World Bank Report estimates that the average direct costs of secondary education are double those of elementary education and the costs of pre university education are four times as much. This definitely proves a burden on economically weaker sections of the society. The opportunity costs are probably even more. These parents would rather have their children work rather than send them to school and hence incur further costs. Some of the other constraints of expansion of secondary education in the state are –

1. Parents misperception of the benefits of secondary education especially for girls in rural families,
2. Insufficient and uneven distribution of schools

3. Heavy dropouts at the secondary and pre-university stages, which results in huge loss of human capital.
4. Delayed teacher recruitment resulting in existence of subject teacher vacancies for a fairly longer period of time
5. Inefficient teacher deployment
6. Failure of private sector to meet social objectives of education
7. Complete neglect of distance learning opportunities by the state which would have helped school dropouts and children of remote habitations (especially girls) to continue education
8. Low learning levels of children coming out of elementary schools (We have annual ASER reports)

Retention & Dropouts

For the first time, in 2000-01, the 'Edu-vision' document made an estimate of the proportion of children attaining different classes. It also gave an estimate of the number of children who dropped out of the system at different stages of education. The Perspective Plan also did a similar exercise in 2007.

In 2001, out of a hundred children entering Class 1, only 43 reached class 8. In 2006-07 there was some improvement with 49 children reaching class 8. This also showed that more than half of the children in the age group were still outside the secondary system. A majority of these children belonged to the socially and economically disadvantaged groups. There has been a definite improvement in this position in recent years.

We have also considered this factor in our critical study and estimated the number of children retained/dropping out of the system as in 2011. Considering enrolment at the secondary stage, there is a 17% dropout between classes 8 and 10. 23% of children in the age group of 14-16 years are still outside the secondary system and only 50% of children entering the education system are passing out of the system at the SSLC stage. In 2010-11, even though enrolment in class 10 was 7.82 lakhs, only 7.56 lakhs took the class 10 public examination, indicating further dropouts.

Table 1.6
Retention & Dropouts

Stages	2000-01*	2005-06**	2010-11***
Enter Class 1	100	100 (96-97)	100
Reach Class 4	89	--	**93**
Reach Class 5	85	--	**91**
Reach Class 7	65	--	**81**
Reach Class 8	43	49 (03-04)	**77**
Reach Class 10	33	40 (05-06)	**64**
Pass Class 10	25	28 (06-07)	**50**
Enter PUC	16	--	**43**
Pass PUC	12	--	**23**
Enter Higher Edn.	10	--	**16**

** As per Edu-vision Document, ** As per Perspective Plan 2007*
**** **Estimated in this Critical Study***

Previous Studies Relating to Secondary & Pre University Education Sectors in Karnataka

There have been very few studies on secondary and pre university education sectors in Karnataka. In 1999-2000, GOK identified 'Education' as a sector critical to promoting growth and development of the state human resources and thereby accelerating economic development cross-sectorally. It constituted a 'Taskforce on Education' which recommended policy initiatives directed towards improving school education.

Its next initiative was preparation of a 'Sector Report' which comprised 9 sub-sector studies including 'Secondary & Pre University Education' in 2001. Based on these sector reports, Dr. R Govinda of NIEPA, New Delhi, presented a 'Strategy Paper' called 'EDU-VISION' in 2002' which was the basis for several policy initiatives undertaken by the GOK then.

World Bank has also recently conducted a study on the status of Secondary Education in India. This report released in January 2009, analyses the sector on an All India basis, from the point of view of access, equity, quality, efficiency, management and financing. It proposes options for the improvement of secondary education in all these dimensions. However, the World Bank had chosen Rajasthan and Orissa for in depth studies, and hence not much material is available on Karnataka.

Preference of Private schools by Parents

There is a popular perception that the demand for English medium schools is one of the reasons for depleting strength in Government schools. The DISE data for 2009-10 shows that 79% of children from Bangalore Urban district are enrolled in private primary schools.

Akshara Foundation's 2009 household survey in Bangalore district shows that 77% of parents preferred Kannada medium schools for their children, 18% preferred English medium, 2% chose Urdu medium schools and 3% did not respond. This shows that medium of instruction is not a major factor for parents to prefer private schools. Probably, it is the quality of education provided by private schools which is a major factor for parents to send their children to private schools.

Education Districts

Karnataka State has 30 revenue districts. As far as elementary and secondary education sectors are considered, larger revenue districts have been bifurcated in to two education districts as per the following table.

Table 1.7
Bifurcation of Revenue Districts in to Education Districts

Revenue District	Education Districts
Bangalore (Urban)	Bangalore North Bangalore South
Uttara Kannada	Karwar Sirsi
Tumkur	Tumkur Madhugiri
Belgaum	Belgaum Chikkodi

Similarly, bigger revenue taluks have been bifurcated in to two education blocks for administrative convenience. Hence, as in 2011, there were 34 education districts and 203 education blocks in the state.

The Issue of Unviable Institutions

The issue of non-viable secondary schools and PU colleges has been dealt in detail in Chapters 2, 7 and 10. At the outset, more than a third of the institutions appear to be unviable (because of lack of required and adequate student strength), as institutions have been sanctioned indiscriminately, and without following a need based policy.

a) The government will have to take informed decisions on more than a thousand government and aided secondary schools and colleges as they are proving a financial burden on the state. Not all institutions can be immediately closed down as perhaps, they may be the only institutions existing in a particular area (like hilly region or difficult terrain, etc.)

b) Committees of government and non government officials will have to be formed at the district level. These committees will have to visit every such institution in the district, within a period of six months, and based on a number of factors will have to take decisions on whether to
   (i) Retain the institution with justification,
   (ii) Shift the institution, to a needy area, or
   (iii) Close down an institution and hand over the infrastructure to the local higher primary school.
   This process has to be completed within a time limit of six months.

c) In case of PU Colleges, which have no adequate workload of 16 periods per week, part-time lecturers may be permitted to be appointed instead of a permanent lecturer.

d) If there is a permanent lecturer without adequate work load, then he may be asked to teach in two nearby colleges.

e) There should be a system of identifying superfluous lecturers at the beginning of every academic year and redeploy them to needy institutions.

Secondary Education Management Information System (SEMIS)

In the case of elementary education, NUEPA maintains a dynamic EMIS called DISE. The DISE database contains a very large variety of school level information covering about a million primary and elementary schools in the country. In Karnataka, SSA maintains the DISE data base.

Unlike elementary education where comprehensive and reliable data base has been developed, secondary education did not have such authentic data, with annual updates. Data on secondary education was produced by the All India Education Surveys conducted by the NCERT. The frequency of data updating also was also slow.

In this context SEMIS has been developed as a data base for secondary education. This study found a lot of inconsistencies in the SEMIS data also. Probably, it will take a few years for the data developed by SEMIS to stabilise.

Adolescent Education Program (AEP)

There is a scheme on 'Adolescent Education' presently funded by NACO and implemented by MHRD. It started as a HIV/AIDS Awareness Program for school children. There was some aggressiveness with which some agencies tried to implement the program, as though it was the solution to all the health problems of school children. Hence there was considerable opposition to the program in Karnataka apparently and also due to printing of some revealing pictures in Teachers/Students Handbooks.

The tendency of adapting any material sent by any agency directly should therefore needs to be stopped. Any material should first be vetted by teachers, educationists and any objectionable material found, should be removed and then adapted to the local conditions prevailing in the state.

This program can still be utilised for creating awareness and health related education of adolescents. The subject of awareness of AIDS can be treated in a larger context of promoting health and life skill education and used for holistic development which covers health, physical education and sports activities. NIMHANS has developed a "Life Skills Program' which has been successfully implemented in several schools in Karnataka and which can be extended to the entire state.

EDUCATION OF CHILDREN WITH SPECIAL NEEDS

Educational development of children with special needs received an impetus with the enactment of the 'Persons with Disabilities Act, 1995'. The Act entrusts the appropriate governments and local authorities to provide children with disabilities access to education, employment, preferential treatment, non-discrimination, financial incentives, etc. Programs for attitudinal changes, capacity building among teachers and training institutions to educate children with special needs have been taken up.

The data on special children reveals that roughly one percent of the child population suffers from disabilities. This is probably a gross underestimation. Special children are also children who are disadvantaged as they are denied equal opportunities in education. In poorer families, a significant number of special children are subjected to deprivation and hardship.

The sub sector study on elementary education in 2001 identified the following issues relating to provision of equal opportunities for education of special children:

- Lack of proper infrastructure for identification of physically challenged children and lack of awareness among parents about incentives being provided to them for their welfare and education
- Need for flexible curriculum in de-segregated schools
- Individualised instruction for all learners with special needs
- Special support services in collaboration with other departments
- Compensatory and remedial measures to suit the special needs
- Lack of adequate training for all primary teachers in methods to handle specially challenged children
- Identification of gifted and talented children and to prepare a program to nurture their diverse and creative abilities.

The government has set aside a certain percentage of seats in almost all educational institutions for the physically challenged children. Even though some support has been given to education of special children at elementary stage, the issue needs to be tackled seriously at the secondary and PU stages.

In the context of USE, It is also necessary for the state to ensure that –

(1) Every child with a disability has access to free education in an appropriate environment.
(2) Promote the integration of students with disabilities in the normal schools.
(3) In respect of children with disabilities, which prevent them from accessing the neighbourhood school, the local authorities concerned (BEO/SDMC) should make adequate and appropriate arrangements for their education.
(4)The state should also set up special schools for those children in need of special education in such manner that children living in any part of the state have access to such schools.

Concessions given to Children with Special Needs

Children with special needs and also children with learning disabilities are permitted to take up study of only one language out of the three languages offered in the secondary course. Children with Dyslexia and learning disabilities and visually impaired children in lieu of science and Maths subjects, can take up any two other subjects such as Indian Sociology, Indian Economics, Indian Politics and Civics, and Music.

Children with learning disabilities can also take the help of a reader to read the question paper in the SSLC Public examination. They are also permitted to use simple calculators in the examination. Visually impaired children can also take the help of a writer, whose qualification is less than Class 10. These children are also eligible to be given extra time in the SSLC Public examination.

In the Service of the Visually Impaired

Shree Veereshwar Punyashrama, Gadag, founded in 1942, has been doing selfless service in feeding and educating the poor and blind children for the past 70 years. Its most noted personality is the late Pandit Padma Bhushan Dr. Puttaraj Gavai, who himself was blind and a famous musician.

The Ashrama runs 13 institutions dedicated to the cause of music and general education. Poor and blind children are given music education along with general education.

More than 1,100 children reside in the Ashrama. Out of them, 250 are blind, 50 are physically challenged and 800 children come from economically weaker sections of the society. They are fed and educated free of cost.

Many of the children who were educated in the Ashrama are now leading fruitful lives and have become teachers, stage-artists, musicians and professionals in various fields.

Inclusive Education of the Disabled at the Secondary Stage (IEDSS) Scheme
This centrally sponsored scheme has replaced the former IEDC scheme from 1/04/2009. This scheme aims at covering all the disabled children in the 14 to 18 age group. This scheme aims to cover all special children studying in classes 9 to 12 and aims to provide equal education opportunities and all facilities to such children.

Disabilities are defined in the Disability Act 1995 and the National Trust Act 1999. These are – Blindness, Low vision, Leprosy cured, Hearing Impairment, Loco motor disabilities, Mental retardation, Mental Illness, Autism and Cerebral Palsy.

The IEDSS scheme has been entrusted to the Directorate of Urdu & Other Minority Languages and implemented through the NGOs in the state. In 2009-10, 2017 beneficiaries were covered with 276 resource teachers through 55 NGOs. The students are given aids, appliances, learning material, hostel facilities, transportation, etc. at a unit cost of Rs. 3,000/- per student per year. The budget provided for the scheme in 2010-11 is Rs. 4.19 Crore.

Recommendations Relating to IEDSS Scheme
During the implementation of the previous (IEDC) scheme, the state faced problems with several NGOs – like duplication of teachers, misuse of funds, etc. there were several enquiries and 24 NGOs were blacklisted. Care needs to be taken that these are not repeated in the new IEDSS scheme, as the scheme is being implemented entirely by the NGOs. A system has to be put in place to appraise these NGOs on a regular basis.

Proposal for a Comprehensive Revision of Karnataka Education Act 1983
This Act was drafted more than 30 years ago. A number of changes have taken place since then, including amendments to the Constitution and commitment to the international treaties – that have in effect changed the conditions under which this Act came into force.

The Supreme Court has also given significant and far reaching judgments in a number of cases which have directly impacted the education policies of the state. The Central RTE Act of 2009 has changed the very complexion of administration in the elementary education sector. The State has also taken up Universalisation of Secondary Education in a big way. All these changes need to be reflected in the Karnataka Education Act.

Several provisions of the original Act have not been implemented at all. They are –

(i) The Constitution of the 'State level Education Advisory Council'
(ii) Constitution of 'Advisory Committees' for various departments in Education Sector.
(iii) Provision of ancillary services like medical examination and health, Constitution of Education Health Service, etc.

Hence it is recommended that the Karnataka Education Act should be comprehensively revised to suit the present day education needs of the state.

Dwindling Student Strength in Government/Aided & Kannada Medium Schools
The indiscriminate permission (given for opening of private schools) by the government, has created an adverse impact on the working of government and aided primary schools in the state. In 2009 government closed down as many as 886 primary schools because of dwindling student strength.

In 2011, government took a decision to merge 2095 government primary schools (595 with less than 5 children and 1500 primary schools with less than 10 children) in the state. Reasons given are migration of people from rural areas to urban areas, and parents opting for English Medium and private schools. The situation in the secondary and PU sectors is no different in this regard.

How Many Days do Educational Institutions Work in Karnataka?

As per rules all educational institutions are supposed to work for a minimum of 220 days in an academic year. However there are exceptions. Some of the larger institutions situated in district headquarters are burdened with conduct of all types of examinations (which happen throughout the year) by various examining bodies. This affects the academic work of these institutions to a great extent. The table below gives an estimate of the number of days lost to students in the conduct of examinations in bigger schools & PU colleges.

Table 1.8
Working Days Lost to Schools in an Academic year

Examination	***Number of Days Lost***
1. PUC Examination (Main & Supplementary) 18+18	*36 days*
2. SSLC Examination (Main & Supplementary) 6+6	*12 days*
3. D Ed I and II year	*12 days*
4. Departmental Examinations	*18 days*
5. NTSE/NMMS	*01 day*
6. Navodaya Entrance Examination	*01 day*
7. Morarji Desai Entrance Examination	*02 days*
8. Others	*05 days*
Total	***87 days***

Source: Block Education Officers of Gadag District

The department should make alternate arrangements so that, the academic work in bigger schools and colleges do not suffer as a result of conduct of these examinations.

COMMON SCHOOL SYSTEM

The Education Commission (1964-66) had recommended a 'Common School System' of Public Instruction as the basis of building up the National System of Education with a view to 'bring the different social classes and groups together and thus promote an egalitarian and integrated society'. The Commission warned that 'instead of doing so, education itself is tending to increase social segregation and to perpetuate and to widen class distinctions'.

It further noted that 'it is bad not only for the children of the poor, but also for the children of the rich and the privileged groups', since 'by segregating their children, such privileged parents prevent them from sharing the life and experiences of the children of the poor and from coming into contact with the realities of life … also render the education of their children anaemic and incomplete'.

The Commission contended that 'if these evils are to be eliminated and the education system is to become a powerful instrument of national development in general and social and national integration in particular, we must move towards the goal of a Common School System of Public education'. The Commission observed that such system exists 'in different forms and to varying degrees' in other nations like USA, France and the Scandinavian countries.

The NPE 1986, while advocating a National System of Education, resolved that 'effective measures will be taken in the direction of the Common School System, recommended in the 1968 Policy'.

The Common School System basically implies that all schools – irrespective of the type of their management, sources of income or affiliated to different Boards of Examinations, - will participate and fulfil their responsibility as part of the National System of Education. This system is based on the values and principles enshrined in the Constitution of India and provides education of a comparable quality to all children, irrespective of their caste, creed, language, economic, social or cultural background, geographic location or gender.

This is the perspective articulated by the NPE 1986 and further elaborated in NCF 2005. Such a system will be governed by certain minimum infrastructural, financial and curricular norms. The Common School System becomes sustainable only when implemented in all types of schools – including the elite privately managed unaided schools, throughout the country. Any systemic reforms would be feasible only within the framework of a Common School System.

This is important in the context of implementing both the UEE and USE as otherwise, merely putting a lot of money in to achieving these goals will not be successful. This is especially true of Karnataka as it has more than 65% of secondary schools (out of which 40% are unaided) in the private sector. This requires a strong political will, commitment and the ability to resist the strong and powerful private school lobby.

STUDENT ASSESSMENT & EVALUATION

Secondary (and PU) education is a terminal stage for a large majority of students. Present day evaluation system is guided and controlled by concerns for results in the examinations irrespective of the quality of learning. The competition for securing marks and first class outweighs all other considerations in the minds of the students, teachers and parents.

This creates a lot of stress in the minds of the young adolescent students. Every year around the time of the examination and around the time of declaration of results we hear and read of a number of suicides of students. Hence the attitude of the students, teachers, parents and the society at large towards examinations and examination results must change.

This also calls for far reaching examination reforms. In order to manage stress factor among students in examinations, we should move from memory based testing to sustainable learning based testing.

Hence it is necessary to reconstruct and redesign the examination system with attributes like flexibility, where a student can achieve mastery in learning in a flexible timeframe, and accumulate credits, eliminate fixed duration tests and adopt continuous and comprehensive evaluation (CCE).

Continuous Comprehensive Evaluation (CCE)

However, the CCE system has not really taken off in Karnataka at the elementary level, as every year, ASER studies show that not many students are achieving mastery levels in learning.

Table 1.9
Class-wise % of Children by Reading Level

Class	Nothing	Letter	Word	Level 1 (Class 1 text)	Level 2 (Class 2 Text)
1	21.6	52.4	21.2	3.5	1.4
2	7.3	28.1	43.1	14.5	7.1
3	3.6	16.4	36.7	24.7	18.6
4	2.5	12.2	25.4	30.9	29.0
5	2.8	7.4	15.9	28.9	45.0
6	2.1	5.0	12.2	26.7	54.0
7	1.6	3.4	8.0	21.5	65.7
8	***1.4***	***2.0***	***6.2***	***17.4***	***72.9***
Total	5.2	15.5	21.1	21.4	36.7

Source: ASER 2010

The above table shows that a majority of children entering secondary stage have serious learning difficulties. At class 8 level, 1.4% could read nothing, 2% could recognise only letters, 6.2% could read only words. About 72.9% could read a class 2 text and only 17.4% of children could read a Class 1 text. This is the pathetic situation in Karnataka with the CCE in place in elementary level for over a decade. A host of factors right from students, teachers and the system are responsible for this sort of a situation where a good system like CCE could not be effectively used.

Reforms are needed in school based assessment also. There is need for introducing student assessment based on grading, but there should be an external moderation to eliminate subjectivity in student assessment.

Question Paper Pattern

Examination questions should test the development of conceptual understanding, analytical reasoning, and problem solving skills. A typical question paper should contain a healthy mix of 'Multiple Choice Questions' testing higher order thinking, and Reflective (long answer) type of questions. An evaluation study of the present SSLC Question Paper is given in Chapter 4 on Quality.

Proposal for a Portfolio of Student Performance

Hence this calls for assessing the total being of a student in the nature of a 'Comprehensive Portfolio', rather than a 'Progress Card' which shows marks obtained by the student in scholastic subjects and declares a student as pass or failed. Therefore, it is necessary to assess the students' performance In a variety of domains like life skills, academic and non-academic and vocational subjects, personal qualities, etc.

Need for Guidance & Counselling

It is important to recognise the role that the guidance and counselling plays for meeting the needs of adolescent students, who come from diverse family backgrounds. These students face a fast process of socio-economic and cultural change and the traditional institutional frameworks like the family and the community are not adequate in helping the students meet the challenges and demands made upon them.

This stage in education coincides with adolescence – which is a period in an individual's life marked by personal, social and emotional crises, created by the demands of adjustment required in family, peer group and school/college environments. Trained Counsellors can guide the students and help them develop the right attitudes, and competencies to cope with the educational, personal, social and career related problems and issues.

Guidance and Counselling services can help in promoting students' retention and better scholastic performance in curricular areas. It helps in facilitating adjustment and career development of students, and further helps in developing right attitudes towards studies, self, work and others.

Guidance and Counselling is also necessary, as a majority of the children entering our secondary education system are first generation secondary school goers. Hence, there should be 'Guidance and Counselling Cells' in every secondary school and PU college, to help the students to make the right choices in their life. Every institution should have preferably two teachers (one male and one female) trained in guidance and counselling. The Guidance and Counselling should be an integral part of in-service training of teachers and also that of heads of institutions.

DISTANCE LEARNING

Distance Learning Systems and Open Schools

Irrespective of expansion of secondary education facilities, all adolescents in the age group of 14 to 18 years will not be able to take advantage of formal education as regular school/college timings coincide with the time of productive labour – in rural areas for agriculture and in urban areas for a variety of income generating activities, which the children of poorer families are forced to take up.

In Karnataka, according to the existing scenario, out of every 100 children entering class 1, only 77 children are likely to reach class 8 and 64 class 10, the state government has to make provision for educating the 36% of children who drop out of the education system before they reach class10.

In India, the present school education system is too rigid in that if a student fails or drops out due to various reasons, there is rarely an opportunity for him to improve or acquire a higher qualification. As in elementary education, we cannot expect to bring every child into the formal education stream in secondary education, as poorer households are less willing to send their children to school as they have to send their children to work. Hence it is necessary to design, create, and establish alternative educational provisions for such prospective learners.

We should develop a model where students who dropout, have access to distance/open learning systems, which will enable them to continue education along with work. Such facilities are also required in remote habitations where secondary schooling facilities do not exist. The costs of distance learning systems are also lower than formal systems.

The National Open Schooling facility has not at all been efficiently used in Karnataka. The recommendation is to set up a Directorate for Distance Learning in Secondary Education, and open distance learning centres in central higher primary schools throughout the state, and provide access to a large number of children who drop out of the formal system.

The present open schooling facility depends largely on print media and personal contact programs and counselling services. The students have to basically depend on print material, which the students may not be able to comprehend given their level of education. Hence it is possible to utilise the expertise in the present higher primary schools for counselling and tutorial services. The Open schooling and distance education systems can also make use of latest technological services like EDUSAT, SIT and possibly DTH delivery of education through the existing cable networks.

The existing open learning systems in higher education comprising open universities and distance education departments, are catering to 20% of students in the higher education sector. Similarly, the secondary open school network when fully developed should be able to cater to 15% of students in secondary education sector. There is also an urgent need to run secondary schools in the evenings in urban areas (just like evening colleges in the higher education sector), using the existing infrastructure in secondary schools, to cater to the educational needs of quite a number of working children.

Establishment of Quality Open and Distance Learning Facilities

Since it is not possible to universalize secondary education on the same pattern as elementary education, and since all the youth (in the age group of 14 – 18 years) will not be able to enter the formal school system due to a variety of reasons, it is absolutely necessary to establish quality open and distance learning facilities in collaboration with the National Open School, NGOs, and local educated youth.

Open schooling should receive full state support to ensure high quality education. Traditionally also, open schooling is a cheaper alternative to formal schooling. The open school network has to be created and expanded to ensure its availability to all those who need it. A separate directorate has to be established to operationalise and maintain the State Open School System as, at present, it is under private control in the state. This directorate has to enhance quality of open schooling through a variety of measures – opening distance learning centres in remote and inaccessible locations, distribution of quality print and text material, opening of counselling and tutorial services, etc.

In remote areas, the nearest higher primary schools can act as distance learning centres. In habitations with populations below 500 in which independent high schools are not viable, exclusive distance education centres need to be explored so as to cater to girls and (special) children who are not allowed by parents to travel to distant secondary schools.

RESEARCH & DEVELOPMENT IN EDUCATION

Education has turned out to be a highly successful commercial venture to people who supply materials for our schools and colleges under various schemes. This has resulted in our education institutions accepting sub standard materials from those people whose sole aim is to make a fast buck.

Research and Development (R & D) especially in education in the state (as well as in the country) has taken a back seat in the current education scenario. Unless continuous R & D as well as innovations are encouraged at all levels of education, our education institutions will continue to languish with sub standard materials supplied by middle men for our laboratories, libraries, sports materials, Teaching – Learning Materials, Low cost-no cost materials, etc.

It is absolutely essential that norms are determined and set by research teams for all types of educational equipment, along with sample testing. This will help schools to get better quality materials. It is also important that technologies are upgraded frequently, which will help our institutions to save on costs also.

In this fast developing computer age, schools are still supplied with old technology CPUs, desk tops, etc. The Study team saw a number of non-working diesel generators in schools. It would be prudent to go in for solar panels in such cases. The government should take the help of standard research institutions like Indian Institute of Science whenever, it goes in for purchase of equipment in bulk for supply to schools.

Similarly, teachers at all levels should also be encouraged to acquire higher qualifications. Some incentives may also be considered as it will motivate teachers to go for higher qualifications.

Incentives for Higher Qualifications

A lot of dissatisfaction exists among teachers at various levels regarding their pay and allowances. The lecturers teaching in PU colleges feel that even though they hold the same academic qualifications as college lecturers, they get pay far lower than college lecturers.

This situation can be remedied to a certain extent, through extending certain incentives for teachers acquiring higher qualifications. This will also help teachers to acquire a higher knowledge base which helps them professionally also. These teachers may be given one time bound promotion in their respective scales.

1. Primary Teacher acquiring a graduate degree,
2. Secondary Teacher acquiring a Post graduate degree in a teaching subject,
3. PU lecturer acquiring an M Phil degree,
4. PU lecturer acquiring a P h D degree.

COMMUNITY PARTICIPATION

Historically education was under the purview of local communities. With the introduction of modern system of education in 19th and 20th centuries, and with more and more active participation of the state, the involvement of local communities in education saw a decline.

However, programs like DPEP and SSA envisaged local community participation as an indispensable component of UEE and set up School Betterment Committees, and Village Education Committees to encourage community involvement in management of the local schools. The state government also came up with community friendly programs like constitution and empowering of SDMCs, conduct of 'Samudayadatta Shale' (School towards community), etc. to encourage participation of communities in the management of school education in the state.

A few examples of community participation are given below:

Community Support to an Aided School

An Aided High School situated at Hulgundi, Belur taluk, Hassan district is quite a popular school even though, it is situated in a remote place. The local people have donated 100 acres of land to the school. The institution has developed 75 acres and has planted 9000 trees under social forestry. The local people have also arranged transportation for the students of the school, as the school is situated at quite a distance from the village.

Contribution of Religious Institutions to the Cause of Education in Karnataka

For the past several centuries, religious institutions in Karnataka have been playing a prominent role in providing education to children of local communities without any caste distinctions. Along with education these institutions also provided free meals to these children.

During 20th century, several mathas have played a major role in educating thousands of children by providing free education and free meals to children of all classes and castes. This has greatly helped the economically weaker sections to get empowerment through education and employment. The Study Team collected data on the number of children getting free boarding, lodging and education in some of these mathas. Siddaganga Matha, Tumkur District. – 8,600, Sirigere Matha, Chitradurga District – 6,500, JSS Matha, Suttur, Mysore District – 4,000, Adichunchanagiri Matha, Mandya District – 3,500. There are also several other religious institutions in the state who cater to the educational needs of the poor and deprived children.

Sree Siddaganga Matha – A Temple of Education

The Siddaganga Matha (under the guidance of the 105 year old Dr. Shivakumara Swamiji) is doing yeoman service in providing free education for the children of the poor and economically weaker sections of the society for the past one hundred years. Many of the students who have come out through free education and hostel facilities of the Matha have reached top positions in their respective fields (IAS,IPS,etc.) and fondly remember the Matha which empowered them to lead successful lives.

Currently, 8,619 students (among them 4,315 are high school and 614 are PU students) are getting free education in institutions run by the Matha, and are staying in free hostels provided by the Matha. The distribution of students category-wise is given below: I – 682, IIA – 2,312, II B – 133, IIIA – 964, IIIB – 2544, General – 146, SC- 1,064, ST – 774, Total 8,619. Three free meals are provided to these children every day.
There is some support from the government through 'orphanage grant' of Rs. 150 per month for 2,500 students. 711 quintals of rice and 355 quintals of wheat per month are also provided to the Matha at concessional rates.

However, the Matha meets the major part of the expenditure on free meals scheme (known as 'Dasoha') through public contributions. The Matha spends more than one lakh rupees a day for maintenance of the three free meal-a-day program.

Improvement of Sports Facilities in Schools & Colleges

Panchayati Yuva Kreeda Khel Abhiyan (PYKKA) is a program of the Sports and Youth Services Department. Under this program, play grounds of government primary, high school and PU colleges are developed. Each school gets a prepared play ground at a cost of one lakh and each PU College gets a prepared play ground at a cost of two lakh fifty thousand.

Panchayati Yuva Kreeda Khel Abhiyan (PYKKA)

The Study Team visited a few Schools and colleges in Belur taluk in Hassan district. The grounds under the program had been developed beautifully:

1. Government PU College, Hagare,
2. Govt. PU College, Harohalli,
3. GHS Rajana Siriyur,
4. GHS Hanumaghatta,
5. Govt. HPS Hulugundi

This is a very useful program which has benefitted quite a number of schools and colleges throughout the state. This program needs to be up-scaled.

Annual Reports of the Education Department

In the beginning of the decade, the annual reports of the education department, were very brief with bare facts and figures. These annual reports however evolved slowly and by 2009-10, gave detailed accounts of each program, with facts, figures and also photos. However, these reports conceal far more than what they reveal. What these reports do not state, is the extent of success/failure, a program initiated by the department, has achieved. These reports should also contain the reasons for the failure/success/partial success of any program.

It is also desirable that these annual reports contain the results of evaluation studies of any program, conducted by the department or external agencies. This will also help the department to do any mid course corrections of a program. The report of the Karnataka Textbook Society also needs to be included in the Annual Reports of the Education Department.

Implementation of Right to Education Act

The State is yet to notify the rules under the Right to Education Act, even after two years of the Act coming into force. In this context, it is necessary that the annual reports of the state government contain the status of the implementation of the Act containing the following information –

a. A report on the programs including creation of infrastructure, recruitment of personnel and creation of implementation and monitoring structures, carried on under the Act.
b. The annual Central and state budgetary allocation for the implementation of The Act.
c. The amount required to be allocated for implementation of the Act in that financial year.
d. Reasons for shortfall or excess in allocation
e. Additional infrastructure and other resources required for the implementation of the Act
f. Number of drop outs/out of school children
g. Number of reported violations of the Act and the number of cases in which action was taken or penalties levied with regard to any such violations.

PART A

A CRITICAL STUDY OF

SECONDARY EDUCATION

IN

KARNATAKA

2. Status of Secondary Education in Karnataka

3. Management of Secondary Education in Karnataka

4. Quality Issues in Secondary Education

5. A Brief Review of Centrally Sponsored Schemes in Karnataka

6. A Brief Review of Rashtriya Madhyamik Shiksha Abhiyan (RMSA)

CHAPTER 2

Status of Secondary Education in Karnataka

The status of Secondary education in Karnataka is analysed under the following headings – Access, Enrolment, Human Resources, Infrastructure and Performance of Social Groups. The other factors like management, quality, grant-in-aid, financing, etc. are analysed in subsequent chapters.

The source of all data is the Department of Public Instruction: Annual departmental Reports/CPI/DISE/SEMIS/RMSA (unless otherwise stated). The data provided by the department in respect of schools affiliated to central and other boards, are excluded from this analysis.

ACCESS

Growth of Secondary Schools

There has been a rapid expansion of secondary school system in Karnataka during the past two decades. Between 1990-91 and 1999-2000 the number of secondary schools almost doubled. Between 2000-01 and 2010-11, the growth rate was slightly lower at 62.3%, but still quite impressive.

Table 2.1
Growth in Secondary Schools

Year	No. of High Schools
1990- 91	4,192
1994- 95	6,171
1999-00	8,248
2001-02	8,786
2004-05	9,062
2005-06	9,382
2006-07	10,537
2008-09	11,763
2009-10	12,356
2010- 11	13,352

Source: Annual Reports

Between 1990-91 and 2010 – 2011, there has been more than a threefold increase in the number of secondary schools in the state. On an average, there is one high school for 2.5 higher primary schools in the state (2011).

Distribution of Secondary Schools in Karnataka

There are on an average 392 secondary schools in an educational district of the state. There are 7 secondary schools per 100 square km area on an average. Similarly, there are on an average 65 secondary schools in an education block.

However these secondary schools are not evenly spread out in all the districts of the state. The distribution pattern of high schools is also not in proportion to the area, size of the population or socio-economic needs of the student population.

The 13 educational districts of Bangalore North and South, Belgaum, Bellary, Bidar, Dakshina Kannada, Davanagere, Gulbarga, Hassan, Mandya, Mysore, Shimoga, and Tumkur have more number of secondary schools than the state average. The least number of schools (less than 200) are found in the districts of Chamarajanagar and Kodagu.

Bangalore (Urban) District which consists of Bangalore North and South education districts has a total number of 2022 secondary schools constituting 15% of all the secondary schools in the state. This excludes CBSE/ICSE/International schools. However, Bangalore (Urban) district accounts for 15.69% of state's population.

Distribution of Secondary Schools (Rural/Urban)

During the past decade, the disparity in access in respect of rural and urban areas has been more than made up through opening of more secondary schools in rural areas. Now the number of secondary schools in rural and urban areas is in the proportion of 7:5 in favour of rural areas.

The table below shows the distribution of schools in rural and urban areas in the educationally backward districts and also in the state.

Table 2.2
Educationally Backward Districts
Availability of Secondary Schools in Rural & Urban Areas

	District	Rural	Urban	Total
1.	Bellary	227	175	402
2.	Koppal	171	57	228
3.	Gulbarga	259	228	487
	Yadgir	142	70	212
4.	Chamarajanagar	124	50	174
5.	Raichur	182	129	311
	Karnataka	**7043**	**5110**	**12,159**

Source: DISE 2009

Distribution of Government Secondary Schools

There are now more secondary schools in rural areas than in urban areas. Among the government secondary schools, 82% are located in rural areas, and 18% are located in urban areas. About 3.1% of schools are located in remote, tribal and hilly areas of the state.

Distance as a Barrier to Access: Distance from home to school has been a significant barrier to access especially in rural Karnataka. This affects girls more than boys. According to an analysis of NSS 58th Round, in Karnataka 70% of villages are within 5kms of a high school, where as only 56% of villages are within 10km of a PU college.

Uneven Distribution of Secondary Schools

In urban areas too, secondary schools are not distributed evenly. There are many good schools in prominent localities where as this is not the case in poor localities and slums. This disadvantage is more prominent in the case of children of disadvantaged groups, as they have to commute longer distances to reach secondary schools, more than children of general categories.

Population-wise Distribution of Secondary Schools

Distribution of Secondary Schools per Lakh Population

In 1990-91, there were 18 secondary schools per lakh population on an average (as per the 2001 Sub-Sector Study Report). As per 2011 provisional Census figures, now there are on an average of 22 secondary schools per lakh population.

This average of 22 per lakh population is exceeded in the following 18 districts: Bangalore North and South (27.41), Bidar (26), Chikkamagalur (27), Chitradurga (24), Dakshina Kannada (24), Davanagere (24), Gadag (26), Hassan (30), Kodagu (29), Madhugiri (33), Mandya (23), Ramanagara (24), Shimoga (25), Tumkur (23), Udupi (23), Uttara Kannada (24) and Yadgir (25).

The following 15 districts have equal to or less than the state average of 22 secondary schools per lakh population: Bagalkot (20), Bangalore Rural (22), Belgaum (16), Bellary (20), Bijapur (20), Chamarajanagar (18), Chikkaballapur (21), Chikkodi (22), Dharwar (20), Gulbarga (21), Haveri (22), Kolar (20), Koppal (19), Mysore (22), and Raichur (19).

The following educationally backward districts need special attention of the government in the matter of access to secondary education: Bellary, Koppal, Gulbarga, Chamarajanagar, and Raichur – all these districts have secondary schools lower in number than the state average.

Category-wise Growth of Secondary Schools

The category-wise growth of secondary schools is quite uneven during the past two decades. In 1990-91, the private aided schools were the dominant players in the secondary education sector in the state. Government secondary schools constituted only 30% of the total number of schools in the state, while private aided schools accounted for 49% and private unaided schools 21% of all schools in the state.

This scenario changed by 1999-2000. The number of government schools doubled during the period and almost equalled the number of aided schools. In the mean time, the private unaided schools grew spectacularly from 871 to an impressive 3,059, recoding a threefold increase and a historic growth of 251%. During the next decade (2000-01 to 2010-11), the number of government schools continued to grow impressively from 2,684 to 4,726 again, recording an impressive growth of 85.55%. In the same period, the state government added another 837 schools to the aided category. Meanwhile, the private unaided schools grew at a good 72% rate.

Distribution of Secondary Schools by Category

In 2010-11, out of a total of 13,352 secondary schools in Karnataka, Government schools accounted for 35%, private aided schools accounted for a good 25% and the rest (40%) were private unaided schools.

The reason for the rapid growth of private unaided schools in the state during the past decade, is the lure of 'English Medium' which attracts children of a large number of middle class (and even poorer class) families to these schools especially in urban and semi urban centres.

Table 2.3 gives a vivid picture of the growth of different categories of secondary schools in Karnataka during the past two decades.

Table 2.3
Management-wise Growth of Secondary Schools

Year	Govt.**	Private Aided	Private Unaided	Total*
1990-91	1,276	2,045	871	4,192
2000-01	2,684	2,524	3,184	8,392
2001-02	2,798	2,524	3,444	8,786
2003-04	2,893	2,582	3,882	9,357
2005-06	2,998	2,682	3,782	9,462
2006-07	3,771	2,633	4,133	10,537
2007-08	4,138	2,820	4,567	11,525
2008-09	4,397	2,997	4,369	11,763
2009-10	4,504	3,273	4,579	12,356
2010-11	4,726	3,367	5,259	13,352
Percentage^	**35%**	**25%**	**40%**	**100%**

***These figures exclude schools affiliated to central & other Boards*
*** These figures include schools run by other departments & Local Bodies*
^ Percentage calculated for 2010-2011 figures

During 2008-09 and 2009-10, no new government schools were sanctioned and in 2010-11 only 80 government higher primary schools were upgraded as secondary schools. Yet the annual reports show a steady increase in the number of government secondary schools between 2008-09 and 2010-11.

Is the Department Aware of Closure of Secondary Schools?

Under ICT Phase 3, Government sanctioned computers to several government and aided schools. Only when the computer companies went to install the computers, it came to light that these schools had closed down. A list of such schools in Hassan district is given below:
1. Municipal High School, Hassan,
2. Swami Vivekananda High School, Vanagur,
3. GHS, Kaggere, Channarayapatna, taluk,
It seems that many such schools have closed down in each district The department needs to constantly monitor such schools.

Composition of Secondary Schools

The following table gives the composition and growth of secondary schools by management during the past two decades. The share of private aided schools has steadily declined during the period even though they have increased by more than 1300 in number. Meanwhile, the share of private unaided schools has doubled during the period.

Table 2.4
Management-wise Distribution of Secondary Schools
Figures in Percentages

Management	1990-91	1998-99	2003-04	2008-09	2010-11
Government	31.06	28.25	33.61	37.32	35.15
Private Aided	48.78	33.44	29.08	25.49	25.04
Private Unaided	20.16	38.30	37.31	37.17	39.82

When we consider private aided and unaided schools together, the private schools constitute 65% of all secondary schools in the state. However, when viewed from the financing point of view, Government finances 60% of all secondary schools (Government and aided) in the state.

How many Government Secondary Schools are there in Karnataka?

The Study Team was surprised to find different authorities giving different figures for the number of Government Secondary Schools in Karnataka.
1. *'Education in Karnataka 2010-11' the official publication of the department, places the figure at 4,278 as per DISE 2010-11.This figure alone has been taken in all our analysis.*
2. The 'Performance Budget' for the year 2010-11 gives the following figures for a three year period: 2007-08 - 4,138; 2008-09 - 4,142; 2009-10 - 4,168
3. The Annual Report of the Education Department for the year 2009-10, places the number of government secondary schools at 4,504 (page 5)
These figures need to be reconciled by the department. The soft copy of the list of aided schools (given to the Study Team) contains aided Madrasas too.
It is important to note that variation in figures affects the very planning process.

Medium-wise Distribution of Secondary Schools

Kannada medium schools are in a majority. There are many schools having more than one medium. But if a school has more than one media including Kannada, then that school is considered a Kannada medium school. Hence the total numbers do not tally. But the following table gives a fair idea of distribution of secondary schools medium-wise.

Table 2.5
Medium wise Distribution of Secondary Schools
In Percentage

Medium	Kannada	English	Urdu	Tamil	Telugu	Marathi	Hindi
Number	10,043	4421	485	5	20	266	85
% of Schools	65.53	28.84	3.16	0.03	0.13	1.73	0.55

Division-wise Distribution of Secondary Schools

The following table gives the division-wise distribution of secondary schools in percentages. Please note that the management-wise composition of the secondary schools changes in each division:

Table 2.6
Division-wise Distribution of Secondary Schools
In Percentage

Division	Govt.	Aided	Unaided	Others	Total
Bangalore	25.52	24.18	49.61	0.69	100.00
Belgaum	34.79	37.08	27.21	0.92	100.00
Gulbarga	46.08	14.75	37.89	0.48	100.00
Mysore	42.85	22.13	34.32	0.70	100.00

Education in Karnataka 2010-11

The above table reveals that the percentage of government schools is the highest in Gulbarga division, where as the highest percentage of aided schools is found in Belgaum division. Bangalore division has the highest percentage of unaided schools followed by Gulbarga division. Belgaum division has the least number of un-aided schools. Bangalore division has the highest number of secondary schools (5,096), followed by Belgaum (3,050), Mysore (3,010) and Gulbarga (2,291) divisions.

Sanction of Government Secondary Schools

Sanction of government secondary schools by government appears to be very haphazard and without proper planning and school mapping. Most of the schools sanctioned appear to be not based on need.

Table 2.7
Sanction of Government Secondary Schools

Year	No. of Govt. Schools Sanctioned	Year	No. of Govt. Schools Sanctioned
2000=01	17	2006-07	485
2001-02	134	2007-08	609
2002-03	75	2008-09	--
2003-04	117	2009-10	--
2004-05	--	2010-11	80
2005-06	126		

As seen from the above table, in some years no government schools were sanctioned. However, in 2006-07 and 2007-08, more than a thousand government secondary schools were sanctioned. This shows that there was no systematic school mapping or proper planning in sanction of government schools.

ENROLMENT

Enrolment & Attendance at Secondary Stage

On a rough estimate, if the average number of children joining Class 1 eight years ago was 11.97 lakhs (2003 – 04 figures) and taking the actual enrolment in 2010 –11 in class 8 (which is 9.56 lakhs), the percentage of children not reaching class 8 is still above 20 %. Drop out at the secondary stage stands at 21.57%. This means that around 42% (20% + 21.57%) of the child population in the 14 – 16 years age group are not attending secondary school. A majority of these children are from socially disadvantaged groups who find other vocations more attractive than schooling.

Even among those who are enrolled, taking the average daily attendance of children in secondary schools into consideration (which is less than 80% in most schools), more than 20% of enrolled children are not attending schools regularly.

Taking the number of students who actually appeared for the SSLC examination into consideration (7.56 lakhs in 2011), it is estimated that 36.84% of children had dropped out of the secondary education system by the time they appeared for the SSLC examination. We will examine the issue of enrolment, drop-outs and retention in a little more detail below.

Secondary School Enrolment

The secondary school enrolment in the state has more than doubled during the past two decades.

Table 2.8
Growth in Enrolment

Year	Enrolment*
1990 – 91	13.30
1999 –00	16.89
2000 – 01	19.33
2002 – 03	20.61
2004 – 05	21.64
2005 - 06	21.91
2006 – 07	24.11
2008 – 09	25.22
2009 – 10	25.60
2010 – 11	26.04

In lakhs

During the period 1990-91 to 1999-2000, the secondary school enrolment grew only by 3.59 lakhs, registering a growth rate of 27%. However in the next decade 2000-01 to 2010-11, the increase in secondary school enrolment was quite impressive as it rose from 16.89 lakhs to 26.04 lakhs, registering a growth of 9.15 lakhs in absolute terms and a growth rate of 54%. The main factor responsible for this rapid growth is the success of UEE programs undertaken by SSA.

District-wise Secondary School Enrolment

25 education districts account for more than 2% (each) of the state's secondary school enrolment, where as 9 education districts account for less than 2% (each) of secondary enrolment. The table below gives the percentage of enrolment in top 6 and bottom 6 districts of the state.

Table 2.9
Top Six & Bottom Six Districts in Secondary Enrolment

Top Six	% Of Enrolment	Bottom Six	% of Enrolment
Bangalore South	7.42	Bangalore Rural	1.57
Bangalore North	5.61	Chamarajanagar	1.55
Mysore	5.10	Uttara Kannada	1.31
Chikkodi	4.61	Yadgir	1.29
Gulbarga	4.04	Sirsi	1.20
Dakshina Kannada	4.00	Kodagu	1.05

Transition Loss between Class 7 and Class 8

Transition from class 7 to class 8 has been an area of concern. Even though class 8 has been declared as part of the elementary education cycle, historically, class 8 has evolved with the high schools in Karnataka. Lack of secondary schooling facilities in the area is one of the reasons for the dropping out of children when they complete class 7. There is a transition loss of 4.30% when we consider the enrolments between classes 7 and 8. Girls have dropped out at a higher rate than boys.

Table 2.10
Transition Loss between Class 7 (HPS) & Class 8 (H S)
Enrolment Figures in Lakhs

	Enrolment in Class 7 In 2009-10	Enrolment in Class 8 2010-11	Difference In Enrolment	Transition Loss
Boys	5.17	4.99	0.18	3.48 %
Girls	4.82	4.57	0.25	5.18 %
Total	9.99	9.56	0.43	4.30 %

Enrolment of Students by Gender

Even though, improvement in secondary school enrolment has been quite impressive over the years, there is considerable difference in enrolment figures between boys and girls. In 2010-11, only 92 girls were enrolled for every 100 boys in secondary schools.

Table 2.11
Enrolment in Secondary Schools by Gender
Figures in Lakhs

	2009-10	2010-11
Boys	13.42	13.51
Girls	12.36	12.54
Total	25.78	26.04

Gender Disparity

Gender disparity in access leads to gender disparity in opportunities for earning as well. Retention rate of girls declines as one proceeds up the secondary education ladder.

Gender Disparity in Enrolment

An important factor to be considered in secondary school enrolment is the gender disparity noticed in every class. In class 8 it was 0.41 lakh, in class 9 it was 0.37 lakh and in class 10 it was 0.18 lakh, giving a total gender differential of 0.96 lakh for the secondary stage. This shows that considerable efforts are needed to enrol all girls at the secondary stage.

Table 2.12
Gender Disparity in Enrolment (2010-11)
(Figures in lakhs)

	Boys	Girls	Gender Differential
Class 8	4.99	4.58	0.41
Class 9	4.51	4.14	0.37
Class 10	4.00	3.82	0.18
Total	13.50	12.54	0.96

When it comes to gender equity, government schools show the highest enrolment in girls. This indicates that these schools are serving the demands of equity. They also indicate that parents are unwilling to incur higher costs of private schooling for their wards.
The reasons are many:

(a) Early marriage of girls which is still prevalent in rural areas and backward districts.
(b) Sibling Care
(c) Many parents view educating boys as an investment, whereas having girls is often seen as a liability, as whatever benefits might accrue from her education and work will go to her husband's family.

Distribution of Enrolment by Medium of Instruction

About 71.06% of children in secondary schools are studying in Kannada medium followed by 23% children studying in English medium schools. The remaining 6% of children are studying in other media.

Table 2.13 (2010-11)
Enrolment by Medium of Instruction

Medium	Enrolment *In Lakhs*	Percentage
Kannada	18.50	71.06
English	5.99	23.00
Urdu	0.92	3.54
Tamil	0.004	0.01
Telugu	0.03	0.11
Marathi	0.52	2.00
Hindi	0.05	0.21
Others	0.02	0.07
Total	26.04	100.00

There has been a steady decline of children studying in other media, and this is in favour of growth of enrolment in English medium schools.

Gross Enrolment Ratio (GER)

At the secondary stage, GER is defined as the percentage of enrolment in secondary stage to the estimated child population in the age group of 14 to 16 years. But RMSA maintains data with respect to Classes 9 and 10 only.

Table 2.14
GER Classes 9 & 10 (2009-10)

Year	Boys	Girls	Total
All Communities	75.14	75.46	75.29
SCs	67.05	66.51	66.80
STs	63.99	59.94	62.07

Source: RMSA

Only Bangalore Urban, Chikkamagalur and Dakshina Kannada districts had a GER above 100. The following districts had a GER below 60: Bellary (52.16), Bijapur (58.51), Koppal (59.21), Raichur (50.41) and Yadgir (42.59). Yadgir is at the bottom of the table in respect of GER of SCs (32.49) and STs (36.45) also. More attention needs to be given in respect of these districts.

Net Enrolment Rate (NER)

NER at the secondary stage is defined as the number of students enrolled at the secondary stage (in the age group of 14 to 16 years) as a percentage of population in that age group. NER in respect of the state is only 45.07 indicating that the state has to take steps to bring all children in the age group of 14-16 years, into the secondary education stream on a priority basis.

Table 2.15
NER Classes 9 & 10 (2009-10)

Year	Boys	Girls	Total
All Communities	44.51	45.69	45.07

Age wise enrolment of SC/ST was not available to calculate NER.
Source: RMSA

13 districts are below this state average: Bagalkot (40.59), Bangalore Rural (40.08), Belgaum (39.21), Bellary (30.48), Bidar (30.64), Bijapur (36.73), Chamarajanagar (38.95), Chitradurga (39.19), Gulbarga (30.95), Koppal (26.85), Raichur (29.90), Uttara Kannada (41.91) and Yadgir (21.82). These districts need more attention in tackling enrolment issues.

Management wise Growth in Secondary Enrolment

In 1990-91, the maximum enrolment was in private aided secondary schools. They accounted for 54% of secondary enrolment, while government schools contributed 33.5% and private unaided schools a mere 12.5% of secondary enrolment.

Even after a decade, in 1999-2000, the situation was similar with Government schools 33%, private aided 45% and unaided 22% contributing towards secondary enrolment. The decrease in percentage of enrolment (9%) in aided schools was more than offset by an increase in percentage of enrolment (of 10%) in private unaided schools.

Table 2.16
Management wise Growth in Secondary Enrolment

Year	Govt*.	Aided	Unaided	Total
1990-91	4.31	6.97	1.62	12.90
1999-00	5.60	7.55	3.74	16.89
2004-05	9.10	8.07	4.48	21.64
2007-08	10.89	7.55	6.35	24.79
2009-10	11.43	8.25	5.91	25.60
2010-11	11.30	8.34	6.40	26.04

**includes local bodies schools, Figures In Lakhs*

However, the government schools contributed to the growth in enrolment to the maximum extent between 2000-01 and 2010-11.

Category-wise Distribution of Secondary School Enrolment

Government schools account for 43%, Private aided 32% and private unaided 25% of all secondary enrolment in the state. Government thus finances 75% of secondary enrolment.

It is significant to note that even though private unaided schools constitute 40% of all secondary schools in the state, enrolment wise their contribution is only 25% to the total secondary enrolment.

Out of School Children at Secondary Level

According to the ASER 2010 report, about 15.2% of children in rural areas in the age group of 14 -16 years, are not in school at class 8 level. Among them are 14.3% of girls and 16.2 % of boys. The reason for more number of boys being out of school in this age group is because of their employment. Probably, the proportion of children in urban areas not in school is higher, as a large number of the age group children from poorer households go for work. This issue Is also directly connected to the students' drop out at the secondary level, which is discussed below.

Student Drop-out in Secondary Schools

There has been a steady decline in dropout rate in secondary education (classes 8 to 10) over the years. In 1999-2000, Kodagu had the lowest dropout rate (23%) and Gulbarga the highest (76.55%). The dropout rates of girls varied from 16% in Kodagu to a high of 79% in Gulbarga.

Students Drop-out at the Secondary Stage

The class wise enrolment figures at the secondary stage shows a declining scenario in enrolment from class to class. Out of 9.64 lakh children who entered secondary stage at class 8 level in 2008-09, 0.82 lakh dropped out by the time they reached class 9 in 2009-10, and 1.82 lakh had dropped out by the time they reached class 10 in 2010-11.

Again, out of 7.82 lakh children who reached class 10, only 7.56 lakh appeared for the 2011 SSLC examination, indicating that 2.08 lakh children had dropped out at the secondary stage giving a dropout rate of 21.5%.

Table 2.17
Dropouts at Secondary Stage

Year	Class	Enrolment*	Dropouts	Percentage
2008-09	8	9.64	--	
2009-10	9	8.82	0.82	8.50%
2010-11	10	7.82	1.82	18.87%
Appeared for SSLC		7.56	2.08	21.57%

*(*Figures in Lakhs)*

Reasons for Dropouts

1. One important reason for drop out is that these students find it difficult to cope up with the academic load, syllabus and threat of failure in the examinations.
2. Poverty has also been identified as one of the main reasons for the high incidence of drop-outs in the state, as children in the age-group are easily attracted to the unskilled job market.

3. Economic necessity also forces parents to send their children for jobs to earn an income to supplement the family income.
4. Girls drop out at a higher rate as they are pulled out of school to manage home and assist in sibling care.
5. Language Mismatch: If the child's mother tongue is Urdu, and has studied the primary school in Urdu medium and the medium of instruction in the secondary school is either Kannada or English, the child finds it difficult to understand all the subjects taught in Kannada/English medium.
6. Negative Peer Pressure: Children come under the negative influence of other spoilt children – to play cards, smoke, steal, take drugs, etc. We see such children in Railway stations, bus stands, market places, etc.
7. Children are not interested in studies.
8. Migration: Farm, Construction and other forms of temporary and seasonal labour require their families to move locations at various times of the year.

Students' Dropping Out – A Study by Akshara

A study conducted by Akshara Foundation in Bangalore in Government primary schools showed that 39% of students were absent for more than 105 days of a school year. The study also showed that absenteeism increased as the school year progressed.

Enrolment in Rural and Urban Areas

Over all, the ratio of secondary schools in rural areas to urban areas is 7:5. There are more number of secondary schools in rural areas than in urban areas in all districts, with the exception of – Bangalore North & South, and Dharwar districts.

ASER 2010 has reported that 61.1% of rural children are studying in government schools, where as only 23.4% of children are studying in private schools. Girls' enrolment is higher in government schools whereas boys' enrolment is higher in private schools.

Table 2.18
Distribution of Children in Rural Schools (15-16 years)

	Govt.	Private	Others*	Not in School
Boys	59.4	24.2	0.2	16.2
Girls	62.7	22.7	0.3	14.3
Total	61.1	23.4	0.3	15.2

Source: ASER 2010

**Others includes children studying in Madrasas and EGS centres*

It is significant to note that government schools attract more girls and private schools attract more boys.

Student Absenteeism

Daily absenteeism of students in schools and colleges is a common feature in Karnataka. The Study found that student absenteeism was more in North Karnataka (around 30%) than in South Karnataka (around 20%). However, there were exceptions too.

Student absenteeism was more in rural areas than in urban areas. Absenteeism among boys was more when compared to girls. Absenteeism during agricultural season was also found to be more in rural areas.

Absenteeism was also more among social groups like SC/ST and minority communities. In Hoskote, attendance pattern was SC 80%, ST 80%, OBC 91%, Minority 62%, General 94%. Absenteeism in Government High School, Deodurg, Raichur district on the day of the Study Team's visit was as high as 42.17% and in an unaided school in the same town it was 15%. In an interior school like Government High School, Gabbur, Deodurga taluk, it was around 25%. Another Government High School, Sunkeswaraala, Deodurg taluk reported 20% student absenteeism, an interior unaided school at Gabbur reported 15% absenteeism. All higher primary schools uniformly reported 20% student absenteeism.

Student Absenteeism – A Comparison

Government Boys High School, Deodurg, Raichur District

Deodurg is considered to be one of the most backward taluks in the state. The Strength and attendance in Government High School, Deodurg on the day of visit of the Study Team (17/1/2012) is given below:
Class 8:56/102, Class 9: 74/151, Class 10: 73/98
Students Attendance: 57.83%, ***Students Absent: 42.17%***
There are 5 vacancies of teachers in Kannada Section and 3 vacancies of teachers in Urdu Section. The school does not have teachers in Maths, Science, English and Hindi. It is a miracle that the SSLC Examination Results of the school are still around 40%.

Government Girls High School, Deodurg, Raichur District

The Girls High school seems to be in a better position than the Government Boys School, Deodurg. Out of 10 teachers' posts, only the posts of English and Hindi teachers are vacant. Student attendance was better and 20% of students were found to be absent on the day of visit. The SSLC examination results are also better at 72%.

Basaweswara High School, Deodurg, Raichur district

This is an unaided school having minimal basic facilities and is run in a rented house. The school does not have lab, library, computers, playground or any other such facilities. The school has 142 students and student absenteeism is around 15%. Annual fee is around Rs. 2,500/ student. The school has 5 teachers and each teacher is paid less than Rs. 3,000/- month. But the SSLC examination results are around 90% and parents prefer this school to the other two government schools.

Issue of Unviable Schools

For a secondary school with three classes (8, 9 and 10) to be viable, the school should have at least 40 students in each class. That means each school should have a minimum strength of 120. Even in such a scenario, the average work load of a teacher will be 18 periods per week, which is less than the normal work load of 26-28 periods per week.

If all the teachers have to get a minimum work load of 26-28 periods per week, then the school should have a minimum of two sections in each of the three classes 8, 9 and 10. However there are a large number of unviable schools with only three classes and less student strength.

Table 2.19
Schools with low Student Strength 2010-11

Student Strength	Govt.	Aided	Unaided	Total
Less than 50	155	93	1,379	**1,627**
50-75	222	44	904	**1,170**
75-100	381	216	803	**1,400**
Total	**758**	**353**	**3,086**	**4,197**

As per the above table, almost one third of the secondary schools have less than 100 student strength. ***Among these schools 758 government schools and 353 aided schools are a direct burden on the finances of the state.***

High Schools with Zero Enrolment in Class 8

On a perusal of DISE figures, the Study Team was surprised to find a number of Government Secondary Schools in the state with zero enrolment in Class 8 in 2011-12:

1. GHS, Saralikatte, Belthangadi, taluk,
2. GHS, Nagashettykoppa, Dharwar,
3. GHS, Muttigepura, Mudigere,
4. GHS, Koralakunte, Challakere,
5. GHS, Naravi, Belthangadi,
6. GHS, Giddalahalli, Madhugiri,
7. GHS, Andalgi, Mundagod, Uttara Kannada

There is a need to arrest this trend.

Government Schools with Low Student Strength

The Government of India is planning more secondary schools as a part of USE to be started during the XII Plan period. As per a report, Karnataka needs 1,241 additional secondary schools to achieve cent per cent gross enrolment. This appears to be a myth given the current secondary education scenario in the state. Let us take a look at some of the government secondary schools which are having very low student strength in the state.

Table 2.20
Are These Schools Viable?

School	Student Strength			Total
	Class 8	Class 9	Class 10	
KS Rao Memorial GHS, Chitrapur, Mangalore Tq.	8	13	11	32
GHS (Urdu) Sonth, Sedam	10	12	13	35
GHS, Handarki, Sedam	10	7	7	24
GHS, Maranahalli, Sakleshpur tq.	10	9	11	30
KGBV, Moka, Bellary East	1	0	0	1
Govt. Boys High School, Bagepalli	12	5	1	16
GHS, Machagondanahlli, Birur	6	5	0	11
GHS, Lingapura, Koratagere tq	13	1	1	15
GHS, Andalgi, Mudagod, UK dt	0	42	2	46
GHS, Chincholi, Surapur tq	16	19	11	46
GHS Nagashettykoppa, Dharwar	0	17	0	17
GHS, Devaladakere, Sakleshpur tq	18	18	10	46

Source: CPI, Bengaluru

These schools are a definite burden on the state's resources. The reasons for the poor strengths in these schools are many:

1. Sanctioning of secondary schools indiscriminately, without taking in to consideration, the need for a secondary school in the area.
2. The enrolment in these schools might be dropping because of the opening of a large number of other category secondary schools in the area.
3. Parents preferring to send their children to English medium private schools rather than Kannada medium government schools.
4. Some of these schools may also be newly started schools with less than 3 classes or otherwise not yet in a position to attract the full complement of students.

These schools have to be dealt with on a case by case basis by the government only after due school mapping. Some of these schools might have to be still retained if no other secondary school exists to cater to the needs of the children of the locality/habitation within a radius of 5km. Institutions situated in hilly region or difficult terrain, etc. might have to be retained even if they are unviable, to provide adequate access.

Committees of government and non government officials will have to be formed at the district level. These committees will have to visit every unviable institution in the district, within a period of six months, and based on a number of factors will have to take decisions on whether to –

(iv) Retain the institution with justification,
(v) Shift the institution, to a needy area, or
(vi) Close down an institution and hand over the infrastructure to the local higher primary school.

This process has to be completed within a time limit of six months.

Government Schools having Large Enrolment

There are government high schools in bigger villages and towns with large enrolments. These schools have good enrolments even when there are private schools in the same towns/localities. Some examples from the primary study are given below:

Table 2.21
Government Schools with Large Enrolments

High School	Class 8	Class 9	Class 10	Total
Govt. PU College (Boys), Chamarajanagar	208	238	162	608
Govt. High School, Indi, Bijapur district	310	282	228	820
Govt. PU College, Aurad, Bidar district	222	211	180	613
Govt. PU College, Siraguppa, Bellary Dt.	172	207	135	514
Govt. Boys High School, Deodurg, Raichur Dt.	156	230	169	555
Govt. Girls High School, Deodurg, Raichur Dt.	129	116	117	362
Govt. High School, Arakera, Raichur Dt.	112	110	129	351

Increase in Number of Students Appearing for the SSLC (Class 10) Public Examination

The data on the number of students appearing for the SSLC Public examination each year is more reliable when compared to enrolment data collected by the department. Over the years the number of students appearing for the SSLC public examination is increasing steadily.

Table 2.22
Increase in the Number of Students Appearing for SSLC
Figures in Lakhs

	2000	2002	2003	2005	2008	2011
Boys	2.54	2.93	2.93	3.30	3.80	3.84
Girls	2.05	2.46	2.53	2.94	3.52	3.71
Total	4.60	5.40	5.46	6.25	7.33	7.56

Source: KSEEB (Fresh Candidates only)

The gap between the number of boys and girls appearing for the examination has also narrowed down considerably over the years as seen from the above table.

Issue of Defunct Schools

Even though, there were 13,352 secondary schools registered in the state as per departmental records, only 11,968 schools sent up their students for the 2011 SSLC Public Examination. That means 1384 schools did not send their students for the SSLC examination. The reasons are many – some may be defunct schools, some may be newly opened schools having only class 8 or classes 8 and 9.

It is important that the department identifies the defunct schools and withdraws permission and recognition to these schools. Otherwise there is every possibility of misuse of the permission and recognition granted to such schools.

Retention and Dropouts

Even though there is a steady growth in enrolment at the secondary stage, the issue of retention and drop-outs is still a major problem at both the secondary and pre-university stages.

Table 2.23
Enrolment & Retention of Students in Classes 1 – 10

Year*	Class	Boys	Girls	Total	**Retention**
2002-03	1	6.32	5.92	12.24	**100**
2003-04	2	6.01	5.66	11.97	**96**
2004-05	3	5.99	5.64	11.63	**95**
2005-06	4	5.88	5.54	11.42	**93**
2006-07	5	5.75	5.40	11.15	**91**
2007-08	6	5.38	5.05	10.43	**85**
2008-09	7	5.13	4.78	9.91	**81**
2009-10	8	4.95	4.52	9.47	**77**
2010-11	9	4.50	4.13	8.63	**71**
2010-11	10	4.00	3.82	7.82*	**64**

**Since 2001-02 figures were considered, not reliable, 2002-03 figures have been taken for the study. Hence we have considered the existing enrolment in 2010-11, for both classes 9 and 10.*

In 2001, out of a hundred children entering Class 1, only 43 reached class 8. In 2006-07 there was some improvement with 49 children reaching class 8. This also showed that more than half of the children in the age group were still outside the secondary system. A majority of these children belonged to the socially and economically disadvantaged groups.

There has been a definite improvement in this position in recent years. Considering enrolment at the secondary stage, there is a 17% dropout between classes 8 and 10. In 2010-11, even though enrolment in class 10 was 7.82 lakhs, only 7.56 lakhs took the class 10 public examination, indicating further dropouts.

Out of 7.56 lakhs who took the examination, 6.11 lakhs have passed in 2011, giving a pass percentage of 80.79. This means that out of 100 children who entered class 1, 64 children reached class 10, 62 appeared for the examination, and 50 passed the examination.

This Critical Study has estimated that out of every 100 children entering Class 1, 77 reach Class 8, 71 reach Class 9 and 64 reach class 10. Out of these, 50 pass out of Class 10. This needs further improvement under USE.

HUMAN RESOURCE (Teachers)

The growth in the number of secondary school teachers is in direction proportion to the growth of secondary schools in the state. Between 1990-91 and 1999-2000, the number of government schools almost doubled and between 2000-01 and 2010-11, the government schools grew by a good 85.55%. In 1990-91, Government teachers accounted for 29%, private aided teachers 53%, and private unaided teachers 18% of all secondary teachers in the state.

This scenario changed by 2000-01, the number of government secondary teachers almost trebled during the decade. They accounted for 39% (a raise of 10%), where as private aided teachers accounted for 38% (down 15%) and private unaided teachers 23% (up 5%) of all secondary teachers in the state.

Table 2.24
Category-wise Number of Secondary Teachers

Year	Govt*.	Aided	Unaided	Total
1990-91	10,904	20,137	6,729	37,770
2000-01	28,286	25,537	22,318	75,961
2002-03	28,286	28,123	23,087	79,496
2005-06	24,708	22,339	30,045	77,092
2007-08	30,459	21,833	37,957	90,249
2008-09	35,619	24,045	39,443	99,107
2009-10	37,159	26,771	43,837	1,07,767
2010-11	46,293	32,450	53,210	1,33,742**
Percentage	34%	24%	42%	100%

**includes local bodies,*
*** Includes others for which information is incomplete*

Category-wise Distribution of Secondary Teachers

In 2010-11, the government secondary teachers accounted for 34%, private aided teachers 24% and private unaided teachers 42% of all secondary teachers in the state.

Thus government is financing the salaries of 58% of secondary teachers. One significant factor is that all secondary teachers working in secondary schools affiliated to KSEEB are trained teachers. But same is not the case in schools affiliated to central and other boards.

Vacancies of Secondary Teachers

For the past 5 years, there has been a steady increase in the number of vacancies of teachers in secondary schools due to irregularity in their recruitment. When a vacancy of a secondary school teacher occurs (either due to additional sanction, promotion, retirement, death, transfer, etc.) during an academic year, the vacancy remains unfilled during the year.

Delay in recruitment of teachers is a common phenomenon in Karnataka. As 2010 - 11, there were 5,102 vacancies of secondary teachers in the state's government schools.

Table 2.25
Vacancies of Secondary Teachers
Government Schools Only

Year	Sanctioned	Working	Vacancies	Percentage
2006-07	32,247	27,832	4,415	13.69
2007-08	35,732	30,459	5,273	14.76
2008-09	39,727	33,933	5,794	14.58
2009-10	40,962	34,767	6,195	15.12
2010-11	42,854	37,752	5,102	11.91

In 2010-11, nearly 12% of secondary teacher's posts were vacant in government secondary schools. This usually impacts the academic work in government schools.

Table 2.26
Management-wise Vacancy Position in Secondary Schools 2010-11

	Sanctioned	Working	Vacancies	Percentage
Government	46,293*	40,693*	5,600*	12 %
Aided	32,450	28,348	4,102	13 %
Unaided	53,210	51,738	1,472	3 %

**Includes teachers in schools run by other government departments also*

Even though aided schools had 13 % vacancies, they usually make alternative arrangements so that the academic work of the schools does not suffer.

Head teachers' Posts in Government Secondary Schools

As on 31/12/2011, there were 1441 vacancies of high school head teachers' posts in the state. This also means that 1441 high schools (30% of 4775 government high schools) have gone without head teachers for more than one year. This is indeed a matter of serious concern. Recruitment of head teachers' posts should be regular like the KAS recruitment.

Secondary Teacher Recruitment in Government Schools

The recruitment of government secondary teachers over the years shows an uneven trend and is neither systematic nor based on scientific projections. A large number of vacancies exist in government secondary schools at any given point of time. Alternative arrangements cannot be made in respect of secondary school vacancies as the posts are subject teachers' posts limited to one per school in smaller schools. The problem can be solved to a certain extent through appointment of retired teachers to fill the posts on a temporary basis.

Women Teachers in Secondary Schools

The presence of women teachers, especially in rural areas, actively enhances the enrolment and retention of girls at the secondary level. In rural areas, parents hesitate to send their teenage daughters to schools if they are staffed exclusively by men.

The percentage of female teachers in the state was 33.37% in 1998-99. It has increased to 38.95% in government schools in 2010-11. Private unaided schools have the highest percentage of women teachers (64.08%).

Table 2.27
Distribution of Women Teachers in Secondary Schools

	Govt.	Aided	Unaided	Average*
Women Teachers	38.95 %	23.89 %	64.08 %	46.33 %

**Average Percentage in respect of all schools*

However, when compared to elementary education sector, (where the percentage of women teachers is 49% in government schools), government has to improve the position in government secondary schools by recruiting more women teachers. There is an unfortunate trend of women teachers concentrating in urban areas. The percentage of women teachers in rural areas is even less than half the number in urban areas in almost all districts (according to VII All India Education Survey).Educationally Backward districts, which are also having lower retention of girls are also below the state average in terms of women teachers.

Among the teachers interviewed in the primary survey, around 65% were male and 35% were female teachers in government schools. In aided schools, the proportion was 76% male and 24% female teachers, where as in unaided schools, 57% were male and 43% were female teachers.

Teacher Absenteeism

Teacher absenteeism is a major problem in government secondary schools in Karnataka. The World Bank Study in 2004 on teacher absenteeism in elementary schools found that 21.70% of teachers were not present when its teams visited schools in Karnataka. Even when present, the teachers spent only 68% of their time in academic work, while the remaining 32% of time is spent on non-academic work. The situation in secondary schools is not much different.

The reasons for teacher absenteeism are many. Teachers are entitled to casual leave, earned leave, medical leave, and maternity/paternity leave. Besides, there is also the problem of unauthorised absence of teachers, due to lack of public awareness. With women teachers exceeding 30% of the teacher population in secondary schools, their going on long leave and maternity leave compounds the problem.

In elementary schools, a teacher can always be replaced by another teacher, as every teacher is supposed to teach all subjects. In secondary schools it is not so. Every teacher being a subject teacher cannot be replaced by another teacher teaching a different subject. As a result, the academic work of the school suffers.

Since a majority of teachers live in urban areas (for various reasons including education of their children), or in their native places, or other central locations (from where both husband and wife travel to their places of work), and commute to schools through public transport such as buses or private vehicles, and jeeps, there are instances of teachers not coming to schools on time as well as instances of habitual absenteeism. This problem can be tackled by effective monitoring by SDMCs.

One of the main reasons for teacher absenteeism is that a majority of teachers in government schools do not stay in places where they work. The study found that - in North Karnataka, around 54% stay near the school and the rest travel. In South Karnataka, 27% stay near the school and the rest travel from convenient locations.

More than 40% in North Karnataka and 23% in South Karnataka did not state the distance of the school from their homes. According to the primary study, 25% travelled by bus, 17% by Auto and 14% by 2 wheelers.

Where do our Teachers Disappear?

The Government has put a permanent ban on teachers being posted or deputed to non-academic posts as it severely affects the academic work in schools. In spite of this ban, our teachers and other education department personnel continue to become personal assistants of MLAs/Ministers, etc. or get deputed to offices of their choice. Out of many examples one is high- lighted below:

In an interaction session with the study team at Gadag, the SDMC Chairman of Government High School, Hulakoti, brought to the notice of the team, that the Hindi Teacher of the school Smt. A L Hebballi has been deputed to the Head office of RMSA for the past one year (she still draws her salary from the High School) and there is no Hindi teacher to teach Hindi to class 10 students who are appearing for the April 2012 examination. He further stated that his representations to the department have not been heeded by anybody.

Deputation of Teachers, Head teachers, Lecturers of DIETs/CTEs and PU Colleges to non-academic work should be strictly banned.

Political Interference in Management of Education

Political interference in management of education has become a regular affair, as a result schools in remote areas suffer, as influential teachers working in these schools get themselves transferred/ deputed to schools in towns and cities or to their native places using political influence. One such example is given below:

Political Interference in Management of Teachers

Smt Girijamma, PCM teacher in Government High School, Sunkeswarala, Deodurg taluk is on deputation and working at Government High School, Gajgarpet, Raichur City, where there was no need. She is reported to be a close relative of one of the powerful members of the ZP.

The villagers of Sunkeswarala, are forced to make alternate arrangements and have appointed an untrained B Sc graduate (Mahesh) on honorary basis to teach Science and Maths to the students of the school.

SECONDARY SCHOOL INFRASTRUCTURE

Infrastructure plays an important part in the quality of education provided by the school. Research has shown that the school's infrastructure and environment are important factors in enhancing learning and contribute to the quality of education provided by the school. Location of the school, building, laboratory, library, teaching learning materials, play ground, play materials all contribute to the quality of the school.

The HDR 1999 notes –"Notwithstanding the spectacular expansion of high schools in physical numbers, infrastructural facilities in most schools are much below minimum requirements - Only 49% of the High schools have toilets, only 37% have laboratories and only 15% have libraries".

The situation is not much different even in 2011. Prior to implementation of RMSA, a majority of secondary schools received only Rs. 10,000 for school building repairs.

Except in the case of well established government and private schools, the infrastructure in high schools in the state does not present a rosy picture. This is due to many reasons. The tendency of the government is to sanction a high school first and then provide infrastructure in a phased manner spread over a period of several years. Until fully developed, the school functions in cramped accommodation or in the shift system in the local higher primary school building or some temporary or rented accommodation causing inconvenience to both students and staff. The same is also the case with private schools which take many years to develop and have their own buildings.

When these schools are further upgraded as PU colleges, the same story is repeated as the high school and PU colleges operate in the shift system. There were 379 government high schools/PU colleges running in the shift system as per data available in 2006. Additionally, it was found that 60% of the schools did not possess minimum infrastructure and playground facilities.

When we now consider the status of government secondary schools regarding infrastructure facilities, only 83% of schools have own buildings. Out of 4278 secondary schools, only 3,547 schools have own buildings, where as 121 schools do not have own buildings, and 398 are running in rent free buildings. 164 schools have reported that their buildings are not fit for use. Even when government schools have own buildings, many of them have overcrowded classrooms necessitating requirement of additional infrastructure. At present the Student-Classroom Ratio in government secondary schools is quite high at 46.71 which indicates overcrowding in government schools.

The 4278 government schools have only 20,624 classrooms (and 13,307 other rooms) giving an average of 4.82 classrooms per school. An ideal secondary school with 3 classes needs a minimum of 8 rooms, when we consider rooms for laboratory, library, sports, staff room, and HM's room. Out of a total of 20,624 class rooms available in government schools only 65% (13,535) of class rooms are considered to be in good shape and usable. Besides, 1,974 class rooms in 2010-11 were recommended for major repairs.

The government identified 5 infrastructure facilities that every school should compulsorily possess and called it 'Pancha Soulabhya'. They are drinking water, toilet, play ground,

compound wall and school building. These are included in the 8 basic facilities identified by the MHRD. The status of these facilities is given in the following table.

Table 2.28
Infrastructure facilities in Government Secondary Schools

Infrastructure Facility	Number of Schools	Percentage
Common Toilet	2,497	69.47
Girls' Toilet	2,292	68.09
Drinking Water	3,429	86.77
Electricity	2,780	73.49
Playground	2,780	74.75
Computers	1,581	38.17
Ramps	900	24.99
Compound wall	2,856	58.16
Library	3,295	92.94

Source: DISE 2010-11

The North Karnataka districts are in a disadvantageous position as far as infrastructure facilities in government secondary schools are concerned. For example, when we consider the percentage of schools having separate toilets for girls, Bellary (30%), Bijapur (40%), Dharwar (39%), Gulbarga (34%), Raichur (45%), and Yadgir (35%) come at the bottom of the list.

Over all, the following twelve districts are at the bottom of the table in respect of infrastructure facilities in secondary schools: Dharwar, Chamarajanagar, Yadgir, Koppal, Gulbarga, Uttara Kannada (& Sirsi), Bellary, Belgaum, Raichur, Bidar, Chikkodi, and Bijapur.

The annual budgets of the education department were providing very little support in terms of creating infrastructure facilities in secondary schools as more than 90% of the budgets was being earmarked for salaries.

Budget Provided for Infrastructure in 2010-11

Rs 65 crore was sanctioned under 'Pacha Soulabhya' for providing basic facilities in high schools. Rs. 35 Crore was provided for construction of School buildings, and Rs. 30 Crore was provided for construction of compound under 'Special Component Plan'. For construction of classrooms in urban areas Rs. 7.94 Crore, and for repairs of school buildings Rs. 11.70 Crore was provided under Non-Plan.

Improvement of Infrastructure in High Schools in Backward Blocks

In 2009-10, government sanctioned Rs. 50 Crore for construction of school buildings for high schools located in backward blocks identified by Dr. Nanjundappa's Committee Report. Similarly funds have been released under RMSA for providing drinking water facilities and toilets.

Kuvempu Centenary Schools

Kuvempu centenary schools are functioning one in each of the 34 educational districts. In 2009-10, Government provided Rs. 80 lakhs as grants for improvement of infrastructure in these schools. The funds are released to ZP for implementation.

Funds Released for improvement of Infrastructure

Secondary School infrastructure got a boost from 2005-06, when the state government undertook construction of school buildings and additional classrooms under RIDF programs. Between 2007-08 and 2009-10, government released a total of Rs. 227.86 crore for improvement of infrastructure in several secondary schools, through taking up of construction of 9,041 classrooms at a total approximate cost of Rs.290.26 Crore..

Table 2.29
Construction of School Buildings under RIDF

Year	RIDF	Financial*	Physical**
2005-06	RIDF 10	56.40	2,977
2007-08	RIDF 12	62.85	2,507
2008-09	RIDF 13	115.00	2,300
2009-10	RIDF 14	50.01	1,055
2009-10	RIDF 15	10.00	202
	Total	290.26	

**In Crore, **Classrooms*
Source: Performance Budget 2010-11

Sanction of School Rooms under RIDF
Even in Places where High Schools do not Exist

There have been several reported cases of sanction of school buildings under RIDF, even though there are no Government High Schools in these places.
A sample list is given here: Singana Kuppe, Hassan taluk; Hale Belur, Sakleshpur taluk; Shanivarasante, Sakleshpur taluk. However, the DDPI, Hassan reported that there are no Government High Schools in these places.
It appears, a few such sanctions exist in each district. facts need to be ascertained and remedial action taken so that such mistakes are not repeated.

Besides, in 2009-10, funds were released for construction of separate toilets for boys and girls and construction of high school buildings in 36 most backward blocks identified by the Dr. Nanjundappa's Committee. Funds were also provided for educational infrastructure for Kuvempu Centenary Schools functioning in 34 educational districts. Besides, every year an amount of around Rs. 5 crore was released to the 33 districts for maintenance and repairs of school buildings under Non-Plan.

Infrastructure in Private Schools

Except for a few well established private schools, infrastructure in other private schools is woefully inadequate. Private schools in urban areas, construct school buildings on residential sites or 'Civic Amenity' (CA) sites given by the local municipal authorities. The space available is not sufficient to build school buildings let alone provide other facilities like play ground. The department does not have adequate information on infrastructure facilities in these private schools. Many of the private schools run in crowded and cramped classrooms.

Most of the newly started private schools run in rented buildings, which are not fit to run schools. Teachers and children are put to a lot of inconvenience in such schools. Laboratories and Libraries in such schools exist only on paper. Even if some laboratory equipment is available, they are seldom used to conduct experiments.

EDUCATION OF CHILDREN OF SOCIAL GROUPS

Indicators of Social Disparities

The HDI for SCs was 0.575 and was higher than that of STs at 0.539 but much lower than that of the state's figures of 0.650. The gap was of the order of -11% for SCs and -17% for STs. The disparities among these social groups are given in the following table:

Table 2.30
Indicators of Social Disparities (2001)

Category	Literacy	Female Literacy*	Health Index	Education Index	Income Index	HDI
SC	52.87	41.72	0.617	0.633	0.475	0.575
ST	48.27	36.57	0.613	0.563	0.422	0.539
Karnataka	66.64	56.87	0.680	0.712	0.559	0.650

*Source: HDR 2005, *2001 Census Figures*

The indices for female population among these social groups are much lower as is evident from female literacy rates. The largest gaps are in income and education with SCs being 15% and STs 20% below the state income index, and 11% and 21% respectively below the state education index for 2001. In the matter of gender disparity as measured by GDI, SC women are better off than ST women, but this is only a matter of degree.

According to the children's census of 2005, the percentage of out-of-school children in the age group of 7 – 14 was highest among STs (2.42) followed by SCs (2.22). These two social groups had the highest percentage of out-of-school girls too.

According to a sample survey of the Directorate of Economics and Statistics (DES 2004), there was little difference between SC children (4.235), ST children (4.166) and the rest of the children (4.458) with regard to the mean years of schooling. The DES sample survey (2004) revealed that the dropout rate in SC population increases with levels of education. About 50% were not literate while 17% possessed below primary education, 12% primary, 10% upper primary, 7% high school, and 2.30% had gone up to the PUC level. Only 1% held graduate or above qualifications.

Enrolment, Retention & Dropouts among Children of Social Groups

There has been a steady drop out of children of all social groups at the secondary stage. While children from SC and ST communities dropped out by 24%, the children of minority communities dropped out by 29% between classes 8 and 10.

Table 2.31
Retention of Social Groups at Secondary Stage 2011
Enrolment & Dropout Figures in Lakhs

Social Groups	Enrolment Class 8	Enrolment Class 9	Enrolment Class 10	Drop outs	%
SCs	1.71	1.47	1.30	0.41	24%
STs	0.71	0.61	0.54	0.17	24%
Minorities	1.29	1.12	0.92	0.37	29%

In terms of outcomes (the performance in the SSLC Public Examination), SCs and STs stood far lower than the others, but were found to be showing improvement year on year. In most of the years ST children performed better than SC children. Girls performed better than boys in all the social categories.

Table 2.32
Performance of SCs/STs in SSLC Public Examination

Year	All		SCs		STs	
	Girls	Boys	Girls	Boys	Girls	Boys
2001	52.44	40.22	38.09	39.05	40.47	38.24
2003	58.54	52.19	41.15	39.06	43.47	39.84
2005	66.10	59.30	50.31	47.29	55.18	49.55
2007	80.26	75.50	65.95	63.41	71.27	67.38
2011	82.06	75.79	74.67	70.00	75.82	70.31

Source: KSEEB

The reasons for lower achievement levels of these social groups are:

1. They tend to get poor education infrastructure facilities and inadequate number of teachers. They are unable to derive full benefits from available facilities.
2. Language is a barrier in most cases as they speak a slightly different language or dialect from what is taught in schools
3. Children experience subtle form of discrimination from upper caste students and teachers
4. Since they sometimes have their own separate and independent cultural and social identities, they find it difficult to survive in a rigid and unresponsive school system.
5. Low participation of these groups in village level committees and SDMCs is also a significant factor determining lower enrolment, participation and achievements.
6. Economically weaker communities fundamentally do not attach much value to education

PROMOTION OF SPORTS & CULTURAL ACTIVITIES

Promotion of Physical Education

Government of Karnataka in its order dated 27/06/2006 constituted an expert committee under the chairmanship of Prof. L R Vaidyanathan for a comprehensive review of physical education policy. The committee submitted its report on 27/06/2007. Another committee headed by Dr. Ananda Nadiger, reviewed this report and submitted 14 recommendations to the government. Some of these recommendations pertained to creation and up-gradation of posts at various levels to improve administration of physical education in the state. Other important recommendations related to –

a) Making Physical Education an examination subject from classes 6 to 9,
b) Provision of sports materials and improvement of sports grounds in schools initially located in the 144 backward blocks identified by Dr. Nanjundappa Committee.

The state government has implemented a majority of these recommendations. Textbooks have been prepared and supplied to schools. Sports Competitions are being held at various levels to identify sports talent among students and encourage sports activities in schools. The physical education teachers are being regularly trained.

However, a majority of schools still do not have play ground facilities in the state. Existing grounds need improvement. A comprehensive plan has to be drawn by the state to improve sports facilities in a phased manner in collaboration with the Department of Youth Services and Sports and other social sector departments.

'Pratibha Karanji' Program

Pratibha Karanji means 'Fountain of Talent' is an innovative program conducted to explore and recognize the innate talents of children. It is a multidimensional cultural activity where children get opportunities to exhibit their innate talents in individual and group contests. The children of a district show their rich cultural heritage to the children of other districts. Thus it paves way for appreciating the cultural extravaganza of other districts, which in turn make children discover the rich cultural heritage of Karnataka. It also develops the spirit of 'National Integration' among teachers and children. Parents and members of school development and monitoring committees also play active role in organising these cultural festivals.

Competitions are conducted for both primary and secondary school children at school, cluster, block, district and state levels to encourage pupils in their all round development. Several competitions are held to identify and encourage talent in non-scholastic activities. The cooperation of the local community is also taken for conduct of the programs at various levels.

The program was started in the year 1997-98, with just a budget of Rs.10,00,000/-[Rs.Ten Lakhs]. Now the Budget is Rs.3,10,00,000/-[Rs. Three crore Ten Lakhs]. This Budget covers prize money, T.A./D.A to the participants, teachers and judges and also honorarium to judges. Boarding and lodging facilities are provided to the children and teachers accompanying them.

8 individual and 4 Group events for children of classes 1 to 4, 9 Individual and 4 Group events for children of classes 5 to 7 are conducted and competitions are held from school to District level. 17 Individual and 6 Group events are identified for students of classes 8 to 10 and competitions are held from school to State level. A boy and a girl who get 1st rank in the S.S.L.C. Public Examination in KANNADA Medium in each district are honoured with prizes on this occasion.

In 2009-10, SSA contributed Rs. 20 lakhs for conducting 'Pratibha Karanji' activities at various levels. The GOK sanctioned Rs. 5 lakhs for conduct of similar activities for children of minority schools. The state level competitions were held in Sirsi in Uttara Kannada district in January 2010, where 8,000 students and teachers participated.

Educational Excursions

RMSA contributes Rs. 200/- for every Class 10 student towards his educational excursion. SSA also funds educational excursions for SC/ST children under 'Chiinara Zilla Darshana' program.

RECOMMENDATIONS

1. The objectives set forth by the department for secondary education even ten years ago have not been met. In this context the RMSA goals of 'providing good quality education available, accessible and affordable to all young persons in the age group of 14-18 years' need to be taken seriously and implemented.

2. It is not feasible or correct to make secondary education compulsory at this stage (and without the constitutional mandate), as young persons in the age group of 14-18 years, coming from disadvantaged and BPL families simply need to work in order to

contribute to their family incomes. Instead of making secondary education compulsory, government should make alternative avenues (like open learning systems) available so that the children in this age group can work and continue their education simultaneously.

3. Equity Issues

(a) Several factors are affecting the high dropout of girls at the secondary stage. This is a challenge that needs to be effectively tackled to ensure that benefits of education reach all girls from the socially disadvantaged sections of society. Retention of girls in the secondary system may also be ensured by ensuring a minimum of number of female teachers in every school.

(b) The increasing popularity of private schools is a matter of concern from an equity perspective. Already private schools have challenged the provision of 25% reservation in admissions in elementary education sector for the economically weaker sections of the society. Unless government comes up with a suitable state policy, it will be difficult for economically weaker sections to afford private schooling specially in areas where government schools are not available.

4. School Mapping

The state has so far resorted to manual school mapping exercises. The mapping should be GIS based covering government, private aided and unaided institutions, which will help in efficient use of available capacities and maintain data base of government, aided and unaided institutions, with respect to all parameters – infrastructure, facilities, enrolment capacities, teacher availability, etc. The data should be cross referenced against secondary-age population distribution from census data.

5. Tap underutilised capacity in existing private institutions through PPP/or introduction of voucher system which will help poorer families to access quality education, In large urban areas, where there are capacity constraints, run these institutions in double shift by suitably providing additional teachers and facilities,

6. Proposal for creation of Additional Education Blocks

There are 13,352 secondary schools in the state and 205 education blocks in charge of these schools in the state. We get an average of 65 secondary schools per bloc. When we take into consideration the number of teachers working in government, aided and unaided schools in both elementary and secondary schools in each block, we can estimate the work load on the BEOs.

Currently there are 3.47 lakh elementary teachers, and nearly 1.33 lakh secondary school teachers in the state. This number works out to an average of 2300 teachers per block. The Perspective Plan in 2007 took 1200 teachers as the ideal work load for an education block. It estimated that the state needed another 74 Education Blocks.

Hence there is need for creating more education blocks in urban areas to improve efficiency in management of both elementary and secondary education sectors.

7. Issue of NOCs

Earlier there was a procedure for issue of NOCs to private schools to get affiliation to CBSE/ICSE. The state government later dispensed with this procedure and started issuing NOCs without any screening. This has resulted in a large number of private schools taking undue advantage. The schools that get NOCs are out of the purview of the state education department's supervision and regulation. They avoid implementing the state's policies (including language policy), charge higher fee and fleece parents, and have become a law unto themselves. There is need for regulation of these institutions.

8. Introduction of Pre-Vocational Courses at the Secondary Stage

One of the reasons for the heavy dropout of students at the secondary stage is their perceived difficulty in understanding subjects like English, Science and Mathematics. Thus the potential human resource is lost to the unskilled (low productive and least remunerative unorganised) labour sector. There is also a possibility that many of the dropouts may take to anti-social activities and become a menace to the society.

Students who leave the education system after completing class 10, do not have sufficient skills – either vocational or communicative, to take up meaningful jobs. Even the job opportunities at this stage are limited.

The HDR 2005 has recommended addressing this area from a fresh perspective and has also recommended for developing vocational courses for dropouts from the school system. RMSA framework speaks of Vocational Education and Training. There is still lack of convergence at GOI level on the shape of vocational education that will be introduced in the near future.

It is strongly recommended for introducing pre-vocational courses at the secondary stage, to cater to the needs of a large number of students who drop out before completion of high school education.

9. Other Recommendations

1. The state has yet to reach the stage of providing Universal Access in USE at this stage. But the state does not have a clear policy regarding sanction of new secondary schools. Schools should be sanctioned only on the basis of need, based on a comprehensive school mapping exercise.

2. Every year careful projections of the demand should be made based on the strength of children studying in class 7, and based on this report, facilities should be made available for additional schools or additional sections in existing schools to accommodate all children entering class 8.

3. No permission should be given for any private unaided institution to come up if within a 3km radius, there is already an existing government or private aided institution.

4. Even after sanction, before granting recognition, there should be a strict procedure of verification to find out whether the school has satisfied all prescribed conditions like providing minimum infrastructure, minimum laboratory, library, sports and other facilities as per norms laid down for the purpose.

5. Even if existing private institutions are not having infrastructure facilities and other prescribed facilities as per norms, or having less than the prescribed student strength, the government should not hesitate to close down/shift unviable existing institutions after giving due notice.

6. The 6 Educationally backward districts of Bellary, Koppal, Gulbarga, Yadgir, Chamarajanagar and Raichur have consistently performed poorly in respect of most of the educational indicators, when compared to the rest of the state. Hence these districts need special attention in implementing secondary education programmes and in allocation of resources.

7. Even in other districts, there are educationally backward blocks which require a similar attention in implementing programmes and allocation of resources. For example Pavagada in Tumkur, Bagepalli in chikkaballapur, etc.

8. Filling of vacancies of government school teachers is not being regularly done and hence the schools suffer because of vacancies of subject teachers for quite long periods sometimes stretching to an entire academic year. This situation drastically impacts the academic performance of the school. Hence filling up of teacher vacancies should be done on annual basis and recruitment process should be completed before the beginning of the academic year.

9. **School Development Plan (SDP):**
   Every school needs to have its own identity and a vision. Hence, each school needs to develop a comprehensive SDP spanning at least five years, with goals and objectives to be achieved within a certain timeframe. The SDP should be developed in consultation with all the stakeholders. This will help the school in pooling a major portion of the resources from the local community. The academic goals fixed will bring a sense of accountability among teachers.

10. Suggestions for Planned Expansion of Secondary Education

Several options are available for planned expansion of secondary education in the state:

1. Financial assistance for children from disadvantaged groups, to offset direct costs of education and overcome household resistance to send their children (especially girls) to school.
2. Opening of schools based on school mapping and only in areas where secondary schooling facilities are required.
3. Exploring innovative PPP models in running of schools, provision of additional infrastructure, teacher training,
4. Expansion of distance learning systems including open schooling,
5. Public campaigning on social issues like benefits of schooling and delayed marriages of girls,
6. Qualitative improvements like curriculum revision, better quality textbooks, in-service teacher training, examination reforms, etc.

CHAPTER 3

MANAGEMENT OF SECONDARY EDUCATION

Education is a concurrent responsibility of both the Centre and the States since 1976. However, historically the states have played a dominant role in the management of secondary education from the very beginning as they have borne most of the responsibility for providing and financing of secondary education.

> *As in 2010 – 11, in Karnataka, 35% of government secondary schools and 25% of private aided secondary schools (an effective 60% of all secondary schools), are financed by the state. This makes the state government the biggest provider and manager of secondary education sector in the state.*

Management is defined here as covering administrative aspects of secondary education institutions, financing, teacher recruitment and deployment, regulation of schools and information gathering and processing. There are three categories of institutions by management. Government run institutions, Government aided private institutions and Un-aided private institutions. Let us examine the role of each level of authority in the management of secondary education in the state. Management of PU Education has been dealt with separately in this chapter.

Role of the Centre in the Management of Secondary Education

In respect of secondary education, the Centre has responsibility to –

1. Formulate policies in respect of Universalisation of Secondary Education in the states,
2. Prepare periodically a National Curriculum Frame work (NCF) through NCERT as a guideline for the states to follow in framing of their own curricula and syllabi,
3. Finance strategically important activities in secondary education sector through centrally sponsored schemes (CSS), in addition to general purpose fiscal transfers, Some of the most important of CSS are OB, DPEP, SSA, RMSA, Teacher Education Scheme, etc.
4. Establish national level Apex institutions for Research and Training like the NCERT, NUEPA, etc.
5. Directly manage central schools and other institutions of national importance like the Kendriya Vidyalayas, Navodaya Vidyalayas, and National Institute for Open Schooling,

Role of the State in Management of Secondary Education

From the beginning, the state government has borne most of the responsibility for providing and financing of secondary education in the state. The Grant-in-Aid Policy of the state is more than a hundred years old. In the beginning this policy helped the private sector to open secondary schools in areas where the state was not in a position to open them.

But in recent years, the policy of successive governments in extending 100% salary grants to institutions (on the basis of longevity of the institution alone and) without adhering to performance, accountability and other parameters is proving a heavy burden on the states' finances. In Karnataka, management of Secondary Education is done at multiple levels.

A. Management At The State Level

Policy directions in respect of almost all aspects of management of secondary education is decided at the state level as most of these policies get linked to the budget available with the state to implement them. Some of the major policy decisions are –

1. Determination of Budget to the Secondary Education sector and allocation of budget and flow of funds to the districts,
2. Laying down norms and standards like the determination of the class size, sanction of staff, qualification of teachers, length of the academic year, criteria for declaration of results of students, etc.
3. Framing of Curricula & Syllabi, laying of guide lines for teacher training, etc.
4. Development, Printing and Publication of Textbooks in time annually,
5. Laying out the language policy of the state and determination of the medium of instruction,
6. Sanctioning of Government Secondary Schools and sanction of additional teachers' posts to schools based on strength of the school.
7. Resource Allocation for construction and major repairs of government school buildings.
8. Recruitment of Secondary school teachers – Recruitment of teachers is a state level process made by the State Education Department, through the Central Admission Cell. Once the teachers are selected through the process, they are allotted to the districts.
9. Promotion of teachers to next higher cadres,
10. Organisation of Public Examinations and Certifying of Students,
11. Determination of the nature and quantum of incentive schemes and scholarships provided to students,
12. Sanction of Private Unaided (English Medium) Schools,
13. Framing of Policy regarding Grant-in Aid to Institutions and extending of grants to private unaided schools and colleges,
14. Approval of appointment of teachers, in grant-in-aid institutions, made by the private managements,
15. Flow of funds from state to district levels,

Some of these functions are carried out by the government, through the Commissioners of Public Instruction and the various directorates of the education department. The Government, Commissioners and directors also act as appellate authorities under the Karnataka Education Act, in disputes between private school managements and staff.

Management of the RMSA Program

The RMSA State Mission Project Office, headed by the State Project Director, monitors all aspects of implementation of RMSA programs, (including performance of each district, frame guidance for implementation of each component of the Program), monitors the quality and pace of implementation of all the components, (for which funds are released by it), maintains state level SEMIS, liaises between the State and the Central Governments and sends consolidated reports on the implementation of the program once every six months.

B. Management at The District Level

Secondary schools and elementary schools come under the DDPI at the District level and consequently under the control of Zilla Panchayats. The DDPIs are responsible for –

1. Carrying out the policy directions of the state government,
2. Spend on infrastructure and other requirements within the budgets fixed by the state,
3. Transfer of teachers within the district,
4. Re-deployment of excess teachers in private aided institutions to other needy schools,
5. DDPI is the disciplinary authority in respect of all secondary teachers. Usually the recruiting authority is made the disciplinary authority and in respect of secondary teachers, DDPI is the recruiting as well as disciplinary authority. After a due enquiry a government teacher is subjected to disciplinary proceedings. There is scope for appeal to higher authorities and government as well as courts of law.
6. DDPI monitors the programs of RMSA through the District Project Office, which is under his/her control. He monitors all aspects of the program including timely flow of funds, for the various components of the program.
7. He is also responsible for collection and analysis of data under SEMIS.

The DDPI at the district level spends quite a number of days in attending meetings at his headquarters, with the ZP, DC, standing committees of the ZP, etc. He also spends a number of days in attending meetings and also Court Cases at Bengaluru. He has to organise District level sports, Pratibha Karnaji, Science Exhibitions and such other programs. In several districts, DDPIs are also burdened with non-education activities given by the ZP. Recently, some of the lopsided policies adapted by the state, has resulted in the district level and block level officers, wasting their precious time in non-academic tasks like sale of text books to private schools, which can best be left to the private vendors, as was the case previously.

C. Management at the Block level

The BEO at the block level is directly responsible for managing both the elementary and secondary schools coming under the particular education block. The BEO is responsible for all the three types of institutions – Government, Aided and Unaided. The BEO is responsible for:

1. General administration of secondary education in the respective education block,
2. Maintenance of school buildings through Taluk Panchayats,
3. Release of grants and payment of salaries to staff of grant-in aid institutions through countersignature of salary bills,
4. Smooth flow of all incentive schemes to the beneficiaries at the school level,
5. Release of government and RMSA funds to schools and general monitoring of the various programs,
6. Getting compliance of private institutions (both aided and unaided) to rules and regulations,
7. The BEO coordinates the teacher training programs conducted through various agencies,

Analysis of Time Spent by BEOs of Gadag District

The Team has made a study of time spent by officers of the education department in non-academic activities. Below is an analysis of time spent by BEOs at the block level.

Analysis of Time Spent by BEOs of Gadag District
In December 2011

The BEO hardly finds time to visit schools or take up any academic supervision as he has to attend a number of meetings at both district and block levels. Here is an analysis of time spent by BEOs on various items of work, in a month.

Total Number of Working Days in December 2011 *26 days*

1.	*Meeting called by DDPI at Gadag*	*1 day*
2.	*Meeting at DIET, Gadag*	*1 day*
3.	*ZP Meeting*	*1 day*
4.	*Taluk KDP Meeting*	*1 day*
5.	*Taluk Panchayat Meeting*	*1 day*
6.	*ZP Standing Committee meeting*	*1 day*
7.	*RMSA/SSA meetings*	*2 days*
8.	*CRC Meeting*	*1 day*
9.	*Primary HM's Meeting*	*1 day*
10.	*Secondary H M's Meeting*	*1 day*
11.	*Meetings called at short notice*	*2 days*
12.	*Court Cases (Average)*	*1 day*

Thus a BEO spends an average of 14 days in a month in attending meetings. He has hardly 12 working days in which he has to attend regular office work, conduct school inspections, do academic supervision and make surprise visits to schools. He has also to receive visiting dignitaries and take them round the schools. In several cases they are also appointed as Administrators of Grama Panchayats, conduct of grama sabhas, Jamabandi, etc.

All the BEOs stated that they hardly had time to conduct detailed academic supervision of schools.

D. Management at the institution level

1. Government Schools

The Universalisation of Secondary Education calls for a strong school based management system. This will go a long way in effective decentralisation of the management of secondary education to the school level. This is indeed necessary, if the school has to address several important issues like access, equity and concerns regarding quality.

At present, the government secondary schools in the state are managed by heads of institutions on a day-to-day basis, as per the guidelines laid down by the education department. The heads of institutions are responsible for drawl and payment of salaries, sanction of leave of staff, disciplining of the students, academic supervision of teachers, conduct of examinations and declaration of results. They have no disciplinary powers over the staff and they have to report to BEO/DDPI about any misconduct of the staff. But their powers to take independent decisions are extremely limited as practically they have very little financial powers.

Technically, each government secondary school has a School Development and Monitoring Committee (SDMC), headed by the local MLA or his nominee and hardly meets regularly. There is considerable scope for strengthening the roles of these SDMCs and for giving school head teachers increased autonomy for better school management.

When properly empowered, these committees can effectively act as the management of government secondary schools and perform a range of activities – budget allocation, mobilising community resources for the improvement of the school, monitoring and proper and timely distribution of incentives given to the students of the school, monitor teacher and student performance. They can also act as a bridge between the school and the community. However, the head teachers as well as members of the SDMCs need to be trained and made aware of their roles and responsibilities.

Apart from the SDMCs, the RMSA Framework also envisages the monitoring of the implementation of all the components of RMSA at the school level. The Gram Panchayat is supposed to monitor – Teacher attendance, Student attendance, conduct of teachers and students, health condition and immunisation of students, law and order situation in and around school premises, quality aspects, equity aspects (like problems encountered by girls, SCs, STs, Children belonging to BPL families, Educationally Backward Minorities, etc.). This requires proper orientation and training of the Grama Panchayat members as well as heads of institutions, throughout the state.

Shortage of Teachers in Government Schools

The most important issue facing management of government primary and secondary schools today is shortage of teachers. Combined with this shortage, if the number of teachers who go on various kinds of leave, deputation, training, etc are taken into consideration, the actual number of teachers present on any given day in any government school is much less.
The shortage of teachers is felt more in secondary schools as all the posts are subject teachers' posts and other teachers cannot be asked to handle their classes.
In Govt. Boys High School, Deodurg, Raichur district, there are 5 vacancies of teachers in Kannada section and 3 vacancies of teachers in Urdu section. The school does not have teachers in Maths, Science, English and Hindi.

In Bellary District alone, there are 1,034 vacancies of teachers in government primary and high schools. By the end of the current academic year, some more vacancies are expected due to retirement of teachers. No recruitment has taken place for the past three years. The shortage of teachers is acute in educationally backward blocks of Bellary, Siraguppa and Sandur.
Bellary district has 1,362 government primary schools and 161 government high schools. In these schools, currently there is a shortage of 809 primary teachers and 225 high school teachers.
The vacancy position of primary teachers block-wise is –Siragppa 197, Bellary East 114, Bellary West 108, Hospet 128, Kudligi 72, Hoovinahadagali 49, Hagaribommanahalli 35, and Sandur 55. Of these posts, nearly half the number of posts belongs to Kannada teachers.

In Government Model Primary school, Tekkalakote, Sirguppa, Bellary district, on the day of visit of the Study Team, out of 7 teachers, 2 were on maternity leave, one was deputed to another school, one was on leave, and only 3 teachers were present. There was no teaching taking place as the teachers were busy in maintaining discipline. This type of shortage severely affects the academic work and also management of schools.

2. Private Aided Schools

Private aided schools are run by private individuals/societies/corporate bodies or trusts. These aided schools may be considered as a form of Public Private Partnership (PPP). They are subject to substantial regulations by the government. The World Bank Report has called this a supply side financing mechanism, whereby the public sector (Government) taps the capacity of the private sector to provide secondary education.

All these schools get 100% salary grants from the government. The number of teachers eligible for salary grants is decided as per the pattern prescribed by the government. Private managements are responsible for school infrastructure and administration. When compared to unaided schools, aided schools are in a better position with issues related to equity and access of various disadvantaged groups.

However, the government does not timely cover all vacancies which occur in an aided school with salary grants. This in turn allows the managements of these schools to appoint teachers on an ad-hoc basis and on monetary consideration with a promise to teachers that they will be covered under government grants at a future date. Issues connected with grant-in-aid schools are discussed in a separate chapter.

However, there are a few private schools, where Government finances only the tuition and other fees of a fixed number of students every year (and not the salaries of teachers). Kittur Rani Chennamma School, Belgaum, is an example of such a school belonging to this category. The school collects fees from other students for meeting its expenditure.

3. Private Un-aided Schools

The rapid expansion of private unaided school system in the state has to some extent freed the state government to use its scarce resources in other sectors. The cost effectiveness of private unaided schools (as they pay lower salaries to teachers), when compared to government and aided schools has encouraged several private school managements to freely open unaided schools to meet the demand of the middle class who favour English medium education for their children.

Most of the private institutions treat education as a commercial activity with the exception of a very few reputed managements. These schools are mainly responsible for commercialisation of education and creating unhealthy competition in the secondary education sector. Some private schools are also started with political patronage which deter departmental officers from take any action against the institutions, when they commit irregularities.

There are several instances of these schools mushrooming in unhealthy surroundings with poor infrastructure and under qualified and inexperienced staff. It is common for most of the private managements to charge heavy donations and fees, pay lower salaries to staff, provide poor infrastructure and disregard government rules and regulations.

These schools run by private managements, get permission to start the schools and then apply periodically, for getting recognition from the government. They do not get any grants from the government. However they manage to get several concessions from the government. Several private institutions (especially those belonging to SC/ST and minorities) get land and

other benefits from government and civic bodies at concessional rates. Also income from private institutions, if managed by a public charitable trust is exempt from income tax. This is a major incentive for the private sector to establish and run the educational institutions.

Recruitment of Teachers in Unaided Institutions

Unaided institutions largely ignore the government recruitment and reservation policy. The only criteria the institutions have to fulfil is that the teachers recruited should be trained and should have minimum prescribed qualifications – PUC and D Ed, in respect of primary schools, and a basic degree (in Arts or Science) with a B Ed degree in respect of secondary schools. Similarly in colleges, the candidates should have a post graduate degree in the particular subject along with NET/SLET.

Unethical Practices in Unaided Schools

These schools purely rely for financing – on donations and fees that they collect from parents of students. Established and reputed private unaided schools in urban areas charge heavy fees and donations, which the government has not been able to control or regulate. They also indulge in several unethical practices like imposition of costly uniforms, prescribing costly additional books, (apart from government prescribed text books), collection of additional funds from students under various pretexts, conduct of costly school excursions, extra-curricular activities, and so on.

Salaries of Teachers in Unaided Schools

Teachers' salaries constitute the single largest expenditure (around 95%) incurred by the managements of private unaided institutions. In a majority of the cases, the fixation of salaries is determined by market forces. Generally, teachers in these institutions are paid far lesser than their counterparts in government institutions.

In most of these schools, the teachers are at the mercy of the private managements, receive lower pay and suffer harassment. These schools also often hire untrained teachers for still lower pay and thus save on salaries.

The sub sector study report (2001) on private institutions found that salaries of teachers in some of the best unaided schools in Udupi district was no more than two-thirds of what their counterparts in government schools got. In some schools in Bijapur district, the position was pathetic as the monthly salary paid for a school teacher was a mere Rs. 500/- per month. The situation has not changed much even after a decade. At entry level, a government primary teacher receives a minimum of Rs. 10,000 and a government secondary teacher gets a minimum of Rs. 15,000 as monthly salary. Compare this with what the teachers in unaided schools are getting as monthly salaries.

Salaries of Teachers in Unaided Schools

Except for a few reputed and well established schools, teachers in a majority of unaided schools in the state, are paid a pittance when compared to their counterparts in government and aided schools. During the Critical Study Survey, teachers were not prepared to state their salaries openly for fear of angering their managements. Many of them stated that they were getting salaries as per government scales. However discreet enquiries revealed the following picture:

Unaided primary teachers in North Karnataka receive anywhere between 1,000 to 1500 rupees. Secondary teachers receive between 2,000 to 3,000 rupees. Perhaps an agricultural labourer earns a higher monthly income than this measly amount.

The situation in South Karnataka and urban areas and cities seems to be slightly better. Here the primary teachers are paid between 2,000 to 5,000 rupees. Secondary teachers are paid between 5,000 to 7000 rupees almost half of what government teachers at entry level are getting. Even here, English, Science & Maths teachers command more salary than Arts and other language teachers.

There are also instances when a good physical education teacher is paid a higher salary discretely when compared to the salary of the head teacher of the school. There are also stray examples of teachers working for free, in anticipation of getting full salary, when these institutions become aided ones.

Teachers in unaided schools work for such low salaries for a number of reasons. A majority of them are women teachers. According to them, since the schools are situated near their homes and hence anything seems to be better, rather than sitting at home with no income. In many cases, these teachers happen to be relatives of people in the management and hence are unable to demand more salary. There is also an everlasting hope among them that someday their school will become aided and then they will be entitled for government salaries.

There are also some reputed schools and international schools paying more than government salaries. In Bengaluru, a good Maths teacher commands a salary of Rs. 50,000 per month in such schools. There are also instances of a head teacher drawing one lakh rupees in such schools. But these are rare cases confined to a few schools in Bengaluru.

The 2009 World Bank survey notes that on an average an aided secondary school teacher earns about Rs. 13,800 per month where as a private unaided school teacher receives just Rs. 4,200 a month. The survey also notes that one half of unaided secondary teachers earn less than Rs. 3,000 per month.

There are several reasons as to why teachers work for lower pay in these schools. There are limited job opportunities for graduates with average achievement in other sectors. As soon as teachers come out of training colleges, they look for job opportunities in unaided schools, and treat their stay in these schools as a stop-gap arrangement, pending getting permanent jobs in govt. schools. Some amount of prestige is also attached for teaching in English medium schools. This gets them an opportunity to coach students and earn some extra money privately.

Private unaided secondary schools also face a problem of non-retention of teachers in their schools. A number of teachers working in these schools leave every year as they get better jobs, better pay in other schools or on being recruited in government schools. This forces the schools to hunt for better teachers every year.

Critical information about these schools – such as level and quality of infrastructure, number of teachers, PTRs, enrolments, proportion of female students, and sources and quantum of funds, salaries paid, fee charged, is not available with the department.

4. **Private Un-aided & Unrecognised schools**

When these schools fail to get recognition from the government, they still operate clandestinely and manage to make their students sit for the X Standard Public Examination through a nearby recognised school. Officially no data is available on private unrecognised schools. But the BEOs publish a list of such schools at the beginning of each academic year, for the benefit of the parents. No further action is taken by them.

Regulation of Private Schools

The government has an important role to play in the regulation of the private school system in the state. This is also necessary in the public interest. The Karnataka Education Act 1983 regulates the management of private institutions in the state. It was drafted more than 30 years ago. A number of changes have taken place since then that have in effect changed the conditions under which this Act came into force. The Act needs to be revised immediately.

At present there is no mechanism to distinguish between an acceptable quality private school and a low quality private school. This puts the parents of children in a helpless situation where they pay exorbitant fee for low quality education in these private schools. However, lack of political will, a weak governance structure and lack of adequate monitoring staff at various levels, appear to be the reasons behind the failure to properly regulate the private unaided school sector in the state.

The Supreme Court of India in its landmark 1994 judgment in 'Unnikrishnan Case' acknowledged the role of the private sector in the current education scenario in the country. It observed that unaided private schools have also a role to play. "They meet the demand of that segment of the population who may not wish to have their children educated in state run schools. They have to necessarily charge fees from students".

The Supreme Court took up a detailed review regarding the regulation and control of private institutions by the states in another landmark judgment, in 'TMA Pai Foundation and others Vs the State of Karnataka' (2002). The Apex Court, further in 'Islamic Academy' (2003) and 'Inamdar' (2005) cases issued clarifications which helped in promotion of private educational institutions in the country.

Even though the Apex court has given maximum autonomy to private unaided institutions, it has also permitted the authorities granting recognition/affiliation to lay down conditions pertaining to academic and educational matters and welfare of students and teachers. The Apex court has categorically stated that all private schools in India must be non-profit in nature. This appears to be a widely ignored ruling both by the state and by the private schools.

Some of the other highlights of rulings of the Apex Court are extracted here:

1. The right to establish and administer an institution comprises the following rights:

a) to admit students
b) to set up a reasonable fee structure
c) to constitute a governing body
d) to appoint staff (teaching and non-teaching)
e) to take action if there is dereliction of duty on the part of any of the employees.

2. The Constitution in Part III does not contain or give any absolute right… The right to administer does not include the right to mal-administer. The right to administer is not absolute but must be subject to reasonable regulations for the benefit of the institutions.

3. The right under Article 30 (1) is not so absolute as to prevent the government from making any regulation what so-ever. Any regulation framed in the national interest must necessarily apply to all educational institutions whether run by majority or minority. Such a limitation must necessarily be read in to Article 30.

4. Educational institutions receiving state aid cannot claim to have complete autonomy in the matter of administration. They are bound by various statutory provisions which are enacted to protect the interests of education, students and teachers. The state can insist that in order to grant aid the state may prescribe reasonable regulations to ensure the excellence of the institutions to be aided – to make certain healthy surroundings for the institutions, existence of competent teachers possessing requisite qualifications and maintaining fair standard of teaching. Such regulations are not restrictions on the right but merely deal with the aspects of proper administration of an educational institution to ensure excellence of education and avert maladministration in minority educational institutions and will therefore be permissible.

- 'Collection of capitation fee being the worst part of mal-administration, can properly be the subject matter of regulatory control of the state'.
- 'Laws of the land, including rules and regulations, must apply equally to the majority institutions as well as minority institutions'.
- Private unaided minority institutions are entitled to autonomy in matters of recruitment of staff, charging of fees and admission of students. In states where the entire pay and allowances for the teaching and non-teaching staff are paid by the state, the state has got ample power to regulate the method of selection and appointment of teachers.

The state government is yet to incorporate these rulings through amendments to the 'Karnataka Education Act 1983'. Lack of political will is sighted as one of the main reasons for this enormous delay in the implementation of these rulings.

Comparison of Government & Private Schools

One significant advantage a private institution has over a government one is in the area of management. Policy and decision making processes are faster. This translates into a higher degree of efficiency in management and therefore a higher degree of productivity.

Issues of Quality

Students, parents and the general public have strong perceptions of quality based on which they rate an institution. In their view generally private institutions score over government ones. Most important factors that a parent takes into consideration while admitting his child to a private institution are 'quality' (as they perceive based on examination results) and English Medium education. Established private schools score over government schools on both these counts.

Hence a major issue is how these different categories of institutions perform in terms of learning outcomes or quality as measured in terms of X standard public examination results. This is separately discussed in the chapter on quality.

Issue of NOCs

Earlier there was a procedure for issue of NOCs to private schools to get affiliation to CBSE/ICSE. The state government later dispensed with this procedure and started issuing NOCs without any screening. This has resulted in a large number of private schools taking undue advantage. The schools that get NOCs are out of the purview of the state education department's supervision and regulation. They avoid implementing the state's policies (including language policy), charge higher fee and fleece parents, and have become a law unto themselves. There is need for regulation of these institutions.

Teacher Recruitment & Deployment

Teachers' salaries consume the largest share of education budget. Quality of teaching plays a significant role in student achievement. In this context, teacher recruitment and deployment becomes an important component of secondary education management system in the state. The minimum qualification for a secondary teacher is a Science/Arts degree with the B Ed degree. Commerce graduates are not permitted to become secondary teachers in the state as per present rules. A graduate should have studied at least two subjects taught in high schools at the degree level to become a secondary teacher. 30% of secondary teachers' posts are reserved for women.

The state has been a pioneer in introducing many reforms in teacher recruitment and deployment areas. In 1993, it introduced a merit cum roster based recruitment system to improve objectivity and transparency in selection of teachers. It also ensures equity in teacher selection. Subsequently, this system has been refined and the entire recruitment process has been totally computerised (from 1999-2000). There are clear guidelines even in posting of teachers.

Currently, secondary school teachers are recruited at the state level through a competitive examination and through a merit cum roster system through the Central Admission Cell attached to CPI. The Cell then allocates the teachers to the districts. The DDPI appoints them and posts them to existing vacancies in the district.

However, the recruitment of government secondary teachers over the years shows an uneven trend and is neither systematic nor based on scientific projections. A large number of vacancies exist in government secondary schools at any given point of time. Alternative arrangements cannot be made in respect of secondary school vacancies as the posts are subject teachers' posts limited to one per school in smaller schools.

Recruitment of teachers was streamlined to some extent in 2003-04, when teacher recruitment was removed from the ambit of economy measures. However, it still takes several years for the education department to get the requisite approvals to fill up the vacancies. Hence even now the gap between occurrence of vacancy and filling up of the post is more than several years resulting in seriously affecting the quality and academic work of the schools. Some schools where there are proactive SDMCs, make alternative arrangements by making temporary arrangements, appointing local graduates to work against these vacancies. However such cases are few and far in-between.

As on 23/06/2011, there were 4,104 vacancies of secondary teachers in the state's government schools. Since teacher recruitment and deployment is an important component of the secondary school management system, the government should make teacher recruitment a compulsory annual affair and see to it that all teachers are in position before the beginning of the academic year.

There is also a lack of coordination between the department and teacher training colleges contributing to the mismatch between demand and supply. There is always lack of sufficient intake for English, Science and Maths teachers in these training colleges.

Teacher Recruitment in Aided Schools

In respect of aided schools, there is a considerable gap between the occurrence of vacancy and recruitment of teachers due to the economy measures enforced by the government. However, usually the private managements make alternative arrangements through temporary appointment of teachers (on low pay). The ban on recruitment of teachers is lifted periodically by government. The appointment of teachers is regularised by government only if the private managements fulfil the roster and other criteria laid down by the government.

Several aided schools also face the problem of declining student strength and consequent redeployment of excess teachers in these schools by government.

Recruitment of Secondary Head Teachers in Government Schools

There are numerous instances of high schools going without head teachers for considerable periods of time. This is due to considerable delay in effecting direct recruitment of head teachers and also delay in effecting promotions from the cadre of secondary school teachers.

The vacancies of head teachers in government secondary schools are filled up by the following methods by the government.

1. 25% of vacancies are filled up by direct recruitment through competitive examination conducted by the Karnataka Public Service Commission.
2. 75% of vacancies are filled up by the department through promotion from the cadre of secondary school assistants.

For the department of public instruction, direct recruitment to head teachers' posts is the entry level. Officers recruited at this level, over a period of time, climb up the administrative ladder and based on ranking, can ultimately become directors in the department.

As in 31/12/2010, there were 1441 vacancies of high school head teachers' posts in the state. This also means that 1441 high schools (30% of 4775 government high schools) have gone without head teachers for the past one year. This is indeed a matter of serious concern.

Because, direct recruitment is not regular, is beset with many problems and bogged down by a number of court cases. Usually recruitment of head teachers is done once in several years, resulting in recruitment of large batches at a time. This creates a host of management problems for the department - stagnation in lower cadres hampering efficiency, retirement of large number of people within a short period creating vacuum in administration at different levels, etc. Recruitment of head teachers should be in small batches, periodical and if possible should be an annual affair.

Promotions
The seniority and gradation lists have to be compulsorily published every year for all cadres. Promotions to all levels within the department should be done every year as per a prescribed time table. This will eliminate stagnation, boost the confidence level of the staff, and will have a direct impact on the efficiency of the management of education at every level. The team recommends introducing of eligibility test at each level for promotions.

Teacher Transfers
Government frames guidelines for teacher transfers every year. However, the process of transfer of teachers should be completed before the beginning of the academic year. Teachers' reluctance to work in remote areas, is one main reason for several schools going without teachers for long periods of time. Some monetary incentives (5% of basic pay) can be considered for teachers working in remote schools. The other alternative is to build quarters at central places for teachers so that the teachers can commute from these central places to the remote schools.

Issues of Transparency
Chapter X of the RMSA Frame work on transparency and accountability reads –

' The Right to information Act should be followed in both letter and spirit by the implementing machinery of the government departments ... Key documents ... should be proactively disclosed to the public, without waiting for anyone to apply for them. ... Public access to key records and key information should be ensured at all levels. This should also be displayed on the website….'.

This direction of the GOI needs to be implemented in letter and spirit by the state government at all levels. The website of the Department of Public Instruction in Karnataka is not adequately managed and needs to be updated periodically.

Issues of Accountability
Officially, the only instrument of evaluating the performance of teachers is the 'Annual Confidential Report'. It is filled in a very mechanical manner and is used only when considering promotion of teachers to the next higher level. Teachers also get awards as incentives for better performance and even here, the process is subjective and not totally free from outside influence.

A system of accountability has to be brought among teachers. Every teacher may be appraised and graded once in three years. Similarly, there should be a provision for removing incompetent teachers.

The department should develop self evaluation tools for teachers, head teachers as well as supervisory staff. This can also form part of the Annual Performance Report. The state can also take steps to evaluate the performance of teachers based on student performance.

Accountability at the Institution Level
Every institution should bring out an Annual Performance Report. This report should include goals, targets set, activities conducted, achievements, areas of constraints, alternate solutions to overcome them, implementation of the School Development Plan, remedial programs undertaken by the school, etc.

Management of School Education
The most important managerial positions at the district and the block levels are the DDPI and the BEO. They appear more occupied with administrative matters and attending meetings. They spare very little time for academic supervision. They need to be periodically trained so as to empower them with management skills.

Need for flexibility in Implementation of Programs
The state has towed the Centre's line and considers only Classes 9 and 10 as belonging to the secondary stage. The state has not been able to integrate class 8 into elementary cycle, in spite of its best efforts so far. Besides 65% of schools are private secondary schools starting from class 8. Leaving class 8 and considering only classes 9 and 10 for all planning and funding purposes, results in formulating policies which are far from reality. This is a grave mistake being committed by the state.

RECOMMENDATIONS

1. Proposal for Creation of the Education Advisory Council
The state should constitute the 'State Education Advisory Council' as per provisions of the Karnataka Education Act. This will help to look at various issues in education in the right perspective, as the Council will have experts from all related fields. This will in turn help in streamlining education management system in the state.

2. Registration of CBSE/ICSE/Other International Schools
Several schools, claiming affiliation to various national and international Boards are in existence in the state today. Neither the Government of Karnataka nor the state Education Department, are even aware of their existence. It is also possible that several of these institutions which claim to have affiliation, do not have any evidence to show that they are indeed affiliated to such Boards.

The state government should make it mandatory for all such institutions to be registered with the state Education Department as it will help serve a number of purposes –

1. The state becomes aware of the existence of such institutions,
2. The state can get essential information on such institutions (like number, enrolment, etc.) which will help it to plan the secondary education sector properly and methodically,
3. The state can take legal action if any malpractice is reported in such institutions.

3. **Other Recommendations**

1. There is potential to increase school based management in respect of both government and private schools. This can further lead to –
   a) Data gathering and validating data gathered will help in better planning and efficient use of resources.
   b) Improved decision making based on better information.

2. There should be Increased parental and community involvement in school affairs. This can further lead to accountability of the school and teachers to all the stake holders,

3. The state should put in place a 'Comprehensive Human Resource Management System' which can forecast demand, ensure teacher recruitment within a specified

time frame and further ensure that all teachers are in position at the beginning of every academic year.

4. In order to meet temporary shortage of teachers in schools, the SDMCs must be permitted to hire qualified teachers locally at least on a part time basis. Vacancies are caused in schools by death, retirement, resignation, long term of leave of absence by teachers like maternity leave, etc. These vacancies affect the academic work of the school (as all the teachers' posts are subject teachers' posts). This in turn has a direct impact on student achievement. Some safe guards are to be put in place to prevent misuse of this power.
5. In order to meet the demands of knowledge based economy, teachers need to continuously upgrade their subject knowledge. Hence existing secondary teachers may be encouraged to seek higher qualifications through a system of incentives.

6. Provide ICT and internet based support to all schools, so that schools become knowledge centres.

7. Each school should have a vision document and a 'Comprehensive School Development plan' (SDP). There should be a mechanism to evaluate the performance of the school based on this SDP.

8. The head teacher should be periodically trained in planning, decision and management skills.

9. Rural Service of at least 5 years should be made compulsory for all secondary teachers as no teacher wishes to work in a rural area and will constantly try to come to urban schools.
10. The Study Team recommends the introduction of eligibility test at each level of promotions.

Management of education is an important aspect of secondary education. Important decisions need to be taken by the state in order to improve efficiency of the management system.

CHAPTER 4

QUALITY ISSUES IN SECONDARY EDUCATION

A good education system needs to provide good quality education and at the same time ensure equity. In this chapter we discuss various issues associated with the term quality, specially keeping the secondary education sector in view.

Assessment of 'Quality'

The term 'quality' defies definition. It is relative in nature and cannot be absolute. Assessment of quality in education has both objective and subjective dimensions. Views, opinions, and individual perceptions are as valuable as conclusions based on quantitative information. However one can arrive at certain indicators or criteria to determine quality.

1. An important indicator of quality of a student as perceived by parents, teachers, educational administrators and the society at large is the marks scored by a student or a class obtained by him/her in a public examination. However, this cannot be taken in isolation as a measure of quality.
2. Another indicator of quality of an education institution is the percentage of passes/first classes obtained in a public examination.
3. Thus learning achievement is considered as an important measure of quality of education. However, learning achievement alone cannot be taken in isolation as a measure of quality.

Because, the ultimate aim of education is to '*enable the students (passing out of the system) to become good human beings and productive and socially responsible citizens and to achieve excellence in whatever they do'.*

Perceptions about Quality

Now-a-days the term 'quality' has become a highly marketable commodity, which is generally associated (by the parents and the public) with private schools. For instance, in the perception of parents, private education institutions generally score over government ones and in secondary sector, English medium schools over other language ones. The social awareness of urban parents about the importance of education, leads them to pay substantial sums to private schools for getting quality-English education for their wards.

Established private institutions typically provide better infrastructure such as class rooms, laboratories, libraries, and other resources such as sports facilities. But each of these facilities carries a price-tag. In terms of quality, government institutions have qualified teachers selected on the basis of merit. But in terms of motivation and outcomes private schools do better. In some of the districts most of the government institutions are really doing well. They are competing with private schools by providing good quality education. Their results in SSLC Public examination are also impressive. Please see the case study of Bangalore Rural district, which is discussed at a later stage in this chapter.

Factors Influencing Quality

The quality of learning depends on several factors:

1. The Student – his innate ability, intelligence, age, gender, etc.
2. The Teacher – his/her age, gender, qualification, experience, training, etc.

3. The Institution – the type of institution, infrastructure, quality of facilities available, quality of learning, learning ability of the peer group, collective performance of all the students, etc.

We will be discussing each of these factors in this and subsequent chapters.

Education Institution as a Critical Factor in improvement of Quality

Education Institution plays a significant role in determining student achievement. The World Bank 2009 Study estimates that the role of the school in student achievement is around 50%. Schools to some extent overcome the disadvantages of socio economic backgrounds of children.

Availability of qualified and trained teachers, quality of class room teaching, peer motivation, curriculum and textbooks, quality and availability of learning materials, school supervision, learning assessment and examinations also play an important role in improvement of quality.

Quality of Students Entering the Secondary System

Quality of students entering the secondary education system is an important factor as it helps us to analyse and assess the quality of inputs into the system.
Unlike elementary education, there are no national assessment studies of student learning at the secondary level. This is a critical gap. Unless quality is measured, it may not be possible to know whether quality is improving or declining.
The quality of students entering the secondary education system in the state is assessed here through an analysis of the following learning achievement studies – ASER 2010 survey, KSQAO Learning Achievement Study of Class 8 (2008-09) and KSQAO Base line study of class 9 (2009-10),

ASER (Rural) 2010 Report

Over the years from 2005, ASER has tried to measure children's progress in learning across the country. The aim of the surveys was to understand whether the country was moving towards UEE – whether all the children were attending regularly, whether they continued to stay in school, and whether they were learning well. The ASER 2006 assessment revealed that only 31% of children completed up to class 10 and 42% up to class 8.

ASER (Rural) 2010 Karnataka survey gives a vivid picture of the education attainments of children studying in class 8, along with attainments of children studying in various classes of elementary education cycle in Karnataka. This in turn gives a fair idea of the quality of students entering the secondary education system.

1. **Language:** In Class 8, 1.4% of children could not read even letters, 2% could read only letters, 6.2% could read only words, only 17.4% could read the class 1 text, and 72.9% could read the class 2 text.

2. **Arithmetic:** In Class 8, 1.4% could not even recognise numbers 1-9, 1.6% could recognise numbers up to ten but not more, 20.2% could recognise numbers up to 100 but cannot do subtraction, 31.3% could do subtraction but not division, and only 45.6% can do division.

Another interesting finding of the ASER report was that in 2010, 7% of children studying in government schools and 18.9% of children studying in private schools, in Class 8, went to paid private tuition.

KSQAO Learning Achievement Studies (2008-09 & 2009-10)

KSQAO conducted a learning achievement study of students of class 8 in 2008-09 and a baseline study (for RMSA) of students studying in class 9 covering all government and aided school students. In 2009-10 study, the sample size was quite large (98,055 boys and 92,160 girls, Total 1,90,215).

Results of KSQAO Learning Achievement Studies

In the class 8 study, the average learning achievement was between 54.00 % and 59.17%. But for Kannada medium students it was still lower between 49.46 % and 51.24 %.

In the Class 9 study conducted a year later, similar trends were noticed, even though, the average learning achievement came down to between 48.44% and 51.83%. Girls outperformed boys in both the studies by a statistically significant margin.

Table 4.1
Comparison of Learning Achievement in the Two Studies
In Percentage

Medium	Achievement in Class 9 (2009-10)			Achievement in Class 8 (2008-09)		
	Boys	Girls	Total	Boys	Girls	Total
Kannada	48.06	51.09	50.03	49.46	53.08	51.24
English	48.33	52.62	50.43	49.27	52.16	51.88
Urdu	54.08	57.41	61.60	60.80	66.19	64.37
Marathi	57.16	62.30	56.60	60.80	66.19	55.63
Tamil	44.27	46.29	44.57	52.20	60.07	56.43
Telugu	62.44	59.96	61.48	59.02	64.11	61.57
Total	**48.44**	**51.83**	**50.14**	**54.00**	**59.17**	**56.58**

Source: KSQAO Study Reports: 2008-09, & 2009-10.

When we analyse the subject wise performance, we notice that –

1. Performance of Kannada Medium students was poor(39.99) in II language (English),
2. Performance of students was poor in Maths and Science subjects in both Kannada and English media.
3. In fact, English medium students performed lower than Kannada medium students in these two subjects.

Table 4.2
Subject wise Learning Achievement
In Percentage

	Kannada Medium	English Medium
I language	58.17	59.52
II Language	39.93	54.17
III Language	58.92	63.21
Maths	33.99	32.75
Science	42.78	37.75
Social Science	47.17	41.30
Part B	69.23	64.29
Total	50.03	50.43

Source: KSQAO Baseline Study, Class 9 (2009-10)

4. However it is surprising to note that performance of students in Social Science was not satisfactory as the scores were only 47.17% in Kannada medium and 41.30% in English medium.
5. If Part B scores are taken out, then the average achievement scores in the examination subjects, would still be far lower (around 46%) than the current achievement scores of 50%.
6. There is almost a 30 point difference between the top three performing districts and the bottom three districts in learning achievement levels.

7. The following districts have scored lower than the state average In Kannada medium – Haveri (49.49), Hassan (49.42), Shimoga (48.76), Tumkur (48.43), Kolar (44.30), Bengaluru North (44.10), Davanagere (43.34), Chamarajanagar (42.57), Mysore (41.93), Bangalore Rural (40.78), Ramanagara (40.38), Bangalore South (38.41), Bidar (37.63), and Chikkaballapur (30.77).

8. Another important aspect of the study is that it found that most students have fared well in answering questions related to knowledge and understanding, whereas questions pertaining to application, analysis and synthesis were rarely attempted by the students or answered wrongly.

9. 10% of the total enrolled students were absent for the assessment. These students belong to the irregular category and tend to drop out at various levels.

Academic Supervision of the School & Teacher Guidance

Over the years, academic supervision of schools has become almost dysfunctional. With the expansion of schooling facilities – of both schools and teachers – there was no corresponding increase in the supervisory personnel. Whatever inspectorate staff the state has, is largely involved in administrative work. Academic supervision of schools – especially that of secondary schools – has become a thing of the past. Quality universal secondary education warrants a well developed system of inspection and supervision.

In the elementary education sector, the network of BRCs and CRCs partially makes up for the inadequacy of school monitoring, inspection and for promoting academic guidance and support to teachers. No such mechanism exists at the secondary level.

Despite the increase in number of secondary schools in the past 40 years, the number of posts of subject inspectors in each district has practically remained the same. There are 5 posts of subject inspectors in each district – one for each academic subject – English, Kannada, Physical Science & Maths, Biological Science, and Social Science. Besides, there is one inspector each for crafts and physical education. This scale of inspectorate at district level is completely inadequate for taking up academic supervision of nearly 500 schools in an educational district.

Most of the people working in these posts do not have any additional or special qualification to hold these posts. Hence it is doubtful whether they are academically competent to guide the subject teachers in the schools. Hence most of the time, both the officers and inspectors focus on compliance with rules and regulations, rather than academic capacity building of teachers.

It is very rare for these inspectors to go in teams to visit a school. Most of the time they are entrusted with non-academic duties like attending meetings, teacher recruitment, attending court cases, enquiry, conduct of training programs, liaison with other departments, etc.

Academic Supervision at the Block Level

At the block level there is practically no monitoring mechanism to monitor academic standards of secondary schools. There is an average of 65 secondary schools in an educational block. One Block Education Officer has to pay attention to (hundreds of) elementary schools as well as secondary schools in his block. Consequently academic monitoring of secondary schools has become the casualty.

Thus the only indicator by which the quality of a secondary school is measured is the SSLC Public examination results.

An Analysis of
SSLC (Class 10) Public Examination results

Valid examination results can become a benchmark of quality of both teaching and learning in classrooms. The Karnataka SSLC (Class 10) Public Examination is the first public examination that a student faces in his life time. For many students it becomes the terminal examination as they discontinue education after this examination and take up employment.

For those who pass and continue education, this is a high stakes examination. A good performance in this examination helps a student to enter an education stream and a good college of his/her choice.

Over the years there has been a steady improvement in the public examination results from 54.65% in 2003 to 80.79% in 2011. In every examination girls have outperformed boys by a statistically significant margin.

Table 4.3
SSLC Results (Fresh Candidates Only)

	2003	**2005**	**2008**	**2011**
Boys	52.18	61.22	68.50	78.79
Girls	55.11	66.90	70.85	82.86
Total	54.65	63.89	69.63	80.79

Source: KSEEB

The above table also shows a fair amount of inconsistency in SSLC Examination results. The 2011 results appear to be unnaturally high when we compare them with other quality parameters. When we compare the SSLC results with the KSQAO achievement /base line surveys or even, the ASER survey results, it is difficult to explain the extremely high results in the SSLC Public examination. One of the reasons for high performance in SSLC examination is the gracing policy followed by the board.

The baseline survey gives an average of 50% results (2009-10) where as the SSLC is giving an average of 80% results (2011). The students who participated in the baseline survey in 2009-10 as class 9 students are the students who appeared for the SSLC Public examination in 2011.

However, if we take into consideration the results of all candidates (freshers, repeaters and private candidates), the annual results are lower by a good two percentage points.

Table 4.4
SSLC Results (All Candidates)

	1991	2001	2007	2008	2009	2010	2011
Boys	57.09	49.68	70.75	66.08	71.31	63.72	75.79
Girls	61.88	52.44	76.14	70.05	76.38	70.15	82.06
Total	58.72	50.92	73.21	67.96	73.71	66.81	78.82

Source: KSEEB

In all the examinations, girls have outperformed boys by a statistically significant margin. However, the performance of repeaters and private candidates are poor in all the years:

Table 4.5
SSLC Results Repeaters & Private Candidates

	2005	2008	2010	2011
Repeaters	36.30	52.02	21.56	24.10
Private Candidates	10.51	13.26	7.26	11.64

Source: KSEEB

Performance of Students from Private Institutions

The performance of students from private institutions is decidedly better as seen from the results. There was an average fifteen percentage point difference in performance of students between government schools and private schools over the years, which has narrowed down to about six percentage points in 2011. The consistent and improved performance of private schools is largely due to higher quality of students at entry level, better infrastructure, and probably better classroom teaching.

Table 4.6
SSLC Public Examination Results by Type of School

Results	1990	1993	1995	1997	2001	2003	2005	2006	2011
Government	45.4	39.8	30.6	32.5	42.5	51.2	58.5	64.8	75.38
Private	60.0	56.7	51,5	57.2	56.3	58.6	66.5	74.7	81.53

Source: KSEEB

Category wise performance of Students

Performance of students studying in government, private aided and private unaided schools have steadily increased over the years. However, in each of the years, private aided school students have performed better than government school students. Similarly, private unaided school students have performed better than both private aided and government school students.

Table 4.7

	2003	2008	2009	2010	2011
Government	51.47	62.01	54.28	60.81	75.38
Private Aided	57.33	70.33	55.87	67.29	78.59
Private Unaided	61.29	74.10	53.80	76.10	84.48
Total	56.69	67.96	54.74	66.81	78.83

Source: KSEEB (All students)

Some of the reasons for lower performance of students in government schools appear to be:

- Inadequate infrastructure in government schools – buildings, crowded class rooms, lack of drinking water and toilet facilities
- Unfilled vacancies of subject teachers (for a long time) especially in English, Science and Mathematics
- Lack of supplementary teaching materials and teaching aids in schools
- Inadequate laboratory and library facilities – Non use of these facilities, even when they exist
- Low motivation levels of teachers in government schools
- Lower quality of students entering Class 8 in government schools when compared to the quality of students being admitted in private English Medium schools.

Subject wise Performance of Students

The average performance of candidates has increased significantly over the past ten years. The performance of students in English, Science and Maths, considered difficult subjects has dramatically improved over the past ten years. Performance in English has increased from 62.93 in 1999 to 85.97 in 2011. Similarly, performance in Maths has increased from 44.63 in 1999 to 85.09 in 2011. Performance in Science has increased from 54.27 to 85.98 in 2011. Girls have performed better than boys in all the subjects in all the years.

Table 4.8
Subject wise Performance

Subjects	April 1999			March 2008			March 2011		
	B	G	T	B	G	T	B	G	T
I Language	81.05	88.77	84.43	89.41	94.15	91.67	84.90	91.80	88.24
II Language	61.17	65.21	62.93	87.63	89.70	88.61	83.87	88.20	85.97
III Language	79.29	84.89	81.73	94,24	96.12	95.14	89.07	93.10	91.02
Maths	43.15	46.55	44.63	71.17	74.52	72.77	82.62	87.73	85.09
Science	53.53	55.23	54.27	85.25	87.74	86.43	83.43	88.70	85.98
Social Science	75.05	76.65	75.75	89.74	88.99	93.40	84.01	88.55	86.20
Total	55.02	58.92	56.72	86.24	88.53	88.00	84.65	89.68	87.08

Source: KSEEB (Fresh Candidates)

Performance of Students of Social Groups in the SSLC Examination

The trend in the SSLC Public examination has always been as follows: Category 1 students perform better than SC and ST Students. ST students perform better than SC students. In all categories girls have always outperformed boys by statistically significant margins.

Table 4.9
Comparison of Performance of Students of Various Social Categories in the SSLC Examination
Figures in Percentages

	Boys 2011	Girls 2011	Total 2011	April 2010	April 2006
SC	70.00	74,67	72.20	56.93	60.60
ST	70.31	75.82	72.91	57.76	65.62
Category 1	74.55	80.15	77.15	63.28	68.16
Others	77.81	84.24	81.04	66.81	73.60
Total	75.79	82.06	78.82	66.81	68.45

Source: KSEEB

There has been a steady improvement in the results of the students of both the SC/ST categories over the years. There has been a significant improvement in the results from the year 2006 when the question paper pattern was changed.

Table 4.10
Performance of SC/ST Students Over the Years
Figures in Percentages

Year	SC	ST
1996	31.83	34.69
2000	39.33	40.63
2001	38.66	39.10
2002	36.70	38.66
2003	39.95	41.30
2006	60.61	65.62
2007	64.57	69.07
2008	56.99	60.55
2010	56.93	57.76
2011	72.20	72.91

Source: KSEEB

In all the examinations, ST students have performed better than SC students by a statistically significant margin.

District wise Performance in SSLC Public Examination

In the April 2011 public examination, the average performance of fresh candidates is 80.79%. The following 14 districts have performed better than the state average: Bangalore Rural (87.43), Chikkodi (87.01), Mandya (85.53), Sirsi (85.30), Karwar (84.75), Udupi (84.40), Bagalkot (82.81), Kolar (81.46), Hassan (81.32), Bijapur (80.88), Belgaum (80.84), Kodagu (80.09), Dharwar (80.05), and Davanagere (80.01). All other districts have secured above 74% results. Only Bidar has secured 53% results and is in the last place.

When we compare the above performance with the performance of the districts in the previous years, a different picture presents itself. In 2008 the first 14 districts were: Chikkodi (84.71), Chitradurga (79.53), Udupi (79.44), Gadag (79.16), Haveri (76.47), Mandya (76.33), Belgaum (76.96), Uttara Kannada (73.42), Bangalore Rural (73.40), Mangalore (73.27), Hassan (72.87), Bijapur (70.99), Bangalore North (70.00), and Yadgir (68.97). All other districts had secured a minimum of 55% results. Bidar as usual had secured the last place with 27.39% results.

Table 4.11
Variations in District Performance – Ranking of Districts

District	2007	2008	2010	2011
Bangalore Rural	12	9	2	1
Chitradurga	10	2	15	17
Haveri	7	5	29	33
Bijapur	26	12	16	10
Kolar	28	23	30	8
Hassan	21	11	18	9
Mysore	24	20	26	16
Madhugiri	9	25	17	31

Source: KSEEB

Every year a wide fluctuation in the performance of districts in the SSLC examination is noticed. For example Haveri was in the 33rd place in the 2011 examination, where as it had secured the 5th place in the 2008 examination. Similarly, Kolar which was in the 30th place in 2010 examination has secured 8th place in the 2011 examination.
Bagalkot has secured the 7th place in the 2011 examination, where as it stood in the 16th position in the 2008 examination. Table 4.11 gives the extent of variation in the performance of some of the districts in different years: 2007, 2008, and 2010, 2011.

The reasons for such wide fluctuations are many:

1. An improvement in performance may be due to the fact of a good academic oriented officer being posted as district DDPI, as in the case of Bangalore Rural district in 2010-11. In fact, his (Sri. H V Venkateshappa) contribution to the improved performance of Bangalore Rural district is discussed in detail separately below.
2. The performance of the district may also go down when a good officer is transferred from the district.
3. It is also possible that the performance of a district may be directly linked to the lack of adequate supervision in the examination and rise in malpractice cases.

Performance of Schools in the 2011 SSLC Public Examination

One important feature of the 2011 results is that 61.78% of secondary schools have secured more than 80% results. Of them, 36% are government schools, 21% are private aided schools, and 43% are private unaided schools. Alternately, 60% of government schools, 55% of private aided schools and 67% of private unaided schools have secured above 80% results. Overall, 87.34% of schools have secured more than 60% results.

Table 4.12
Category wise Performance of Schools 2011

Pass Percentage	Govt.	Aided	Unaided	Total
0	0	4	40	**44**
0 - 40	87	87	246	**420**
40 - 60	381	289	380	**1050**
60 - 80	1273	903	884	**3060**
Above 80	2660	1582	3152	**7394**
Total	**4,401**	**2,865**	**4,702**	**11,968**

Source: KSEEB

Schools with Zero Percent Results

4 private aided and 40 private unaided secondary schools, have secured 0% results in the 2011 examination. Incidentally no government school has secured 0% results in this examination. But in 2008 examination, 2 government, 5 private aided and 57 private unaided schools had secured zero percent results.

Table 4.13
Zero Percent Results

Category	2008	2011
Government	2	0
Aided	5	4
Unaided	57	40
Total	64	44

Source: KSEEB

The department will have to take suitable action in respect of schools securing zero percent results, whether they are government, aided or unaided schools..

Other Poor Performing Schools

In 2011, in the 0 to 40% category (Refer Table 5.11), there were 87 government, 87 private aided and 246 private unaided schools (Total 420). In comparison, in 2008, there were 418 government, 322 aided and 580 unaided schools (a total of 1320 schools) in the 0 to 40% category. Since there is such wide variation in performance, the education department has to check the performance of schools in this category, during the past 3 years and take suitable remedial action in this regard.

Schools Securing 100% Results

When compared to government and private aided schools, private unaided schools have performed well under this category. In 2011, a total of 1468 schools secured 100% results. Out of them, 401 were government, 108 private aided and 959 were private unaided schools. Compared to this, in 2010, 155 government, 51 aided and 608 private unaided schools (a total of 814 schools) secured 100% results. This presents a wide variation in schools securing 100% results in subsequent years.

Both in 2011 and 2010, Bangalore North district had the most number of schools (142 &133) followed by Bangalore South district (127 &77) in this category. Bidar is at the bottom of the list with only 11 schools (1 government and 10 unaided schools) in this category. Surprisingly in 2010, Bidar (as well as Yadgir) did not have a single school in this category.

Good Performance by Government Run Residential Schools

The Karnataka Residential Educational Institutions Society, Bengaluru under the aegis of the Social Welfare Department is managing 548 residential schools and colleges in the state. All the students though merited, belong to economically weaker sections of the society. The infrastructure and other facilities in most of the institutions are far from satisfactory (Please see Chapter 17). But these institutions are producing consistently commendable performance in the SSLC examinations for the past several years.

In the 2011 SSLC Examination, 9,036 students passed out of 9,565 students (who had appeared) giving a pass percentage of 94.47%. There were 682 distinctions and 5,169 first classes. 120 of the Residential Schools produced 100% results.

Teaching of English, Science and Mathematics

Much of teaching in Science is text book based. Experiments are sometimes shown on the blackboard. It is also perceived that the level of subject mastery of teachers is low.

> *In the primary study, only 37% of teachers stated that they use the lab facilities for science teaching. 54% stated that their school labs did not have necessary equipment to teach current syllabus in science.*

Special projects to improve teaching of English, Science and Mathematics in the underperforming schools need to be taken up. There is need for enhancing budget allocation to science activities and also teacher training in all the 3 subject areas. DSERT needs to draw up minimum standards of laboratory and library facilities which must be rigorously enforced. A mechanism to monitor their effective use in all the schools also needs to be put in place.

RMSA is providing Rs 50,000/- annually as school grant for each government secondary school in the state. The break up is: Rs. 25,000 for lab consumables, Rs. 10,000/- for sports and Rs. 15,000/- for improving library facilities. These grants need to be efficiently used by the schools.

A Case Study
On the performance of Bangalore Rural District
In the SSLC Public Examinations

District Profile

Bangalore district was bifurcated in to Bangalore (Urban) district and Bangalore Rural district in 1986. In 2008 Ramanagara district was carved out of Bangalore Rural district. Presently, Bangalore Rural district has four taluks (as well as 4 education blocks) – Devanahalli, Doddaballapur, Hoskote and Nelamangala. The population of the district is 9.87 lakhs. The district has 958 females for every thousand males. The district Literacy rate has improved from 69.33 in 2001 to 78.29 in 2011. Male literacy rate stands at 85.44, whereas the female literacy rate is 70.33, which are both above the state average.

Secondary Education Profile of Bangalore Rural District

Though Bangalore Rural district is predominantly agricultural, there is substantial urbanisation in areas bordering Bangalore (Urban) district. This has substantially effected the composition of secondary schools in the district. Out of 201 secondary schools 61 (30%) are government schools and the rest are private schools (70%).

Table 4.14
Block wise Distribution of Secondary Schools

Education Block	Govt.	Private Aided	Private Unaided	Total
Devanahalli	15	06	29	50
Doddaballapura	16	12	22	51*
Hoskoate	19	05	32	56
Nelamangala	11	14	19	44
Total	61	37	102	201

*Source: DDPI. B-Rural Dt., *The Block has one Central School*

The Position of Bangalore Rural District in Human Development

Bangalore Rural district (which then included Ramanagara district also) ranked 6th among the then 27 districts, in the Karnataka HDR (2005). This was because of its better performance in health and income sectors as seen in Table 4.15. Both in Health and Income indicators, the district performed well over the state average. In GDI, the district is one among the seven districts, with above the state average value.

However, the district ranked 20th in Education Index indicating that it was still an educationally backward district. Its Education Index was well below the state average.

Table 4.15
Human Development Indicators of Bangalore Rural District

	Health		Education		Income		HDI*		GDI**	
	Index	**Rank**	**Index**	**Rank**	**Index**	**Rank**	**Index**	**Rank**	**Index**	**Rank**
B'lore Rural District	0.692	6	0.662	20	0.605	4	0.653	6	0.640	6
Karnataka	0.680	-	0.712	-	0.559	-	0.650	-	0.637	-

Source: Karnataka HDR 2005,
**HDI: Human Development Index, ** Gender Development Index*

Improvement in Ranking in SSLC Examination Results

Bangalore Rural district was in the 9th place in the 2008 SSLC public examination. It had slipped down to 22nd place in 2009. Due to persistent efforts of the DDPI, the supervisory staff and teachers of secondary schools of the district, it climbed to 2nd place in 2010 and finally reached the top position in 2011.

Table 4.16
Performance of Bangalore Rural District in SSLC Exam. In Recent Years

District	2007	2008	2009	2010	2011
Bangalore Rural	12	9	22	2	1

Source: KSEEB

Some of the actions taken by DDPI for improvement of results are listed below:

a) <u>Administrative</u>

1. The schools were asked to conclude all their co-curricular activities before 31st December, 2010
2. Alternative arrangements were made to fill up existing subject teacher vacancies through deputation of graduate teachers from higher primary schools or temporarily appointing retired teachers.
3. The head teachers reviewed the work of subject teachers every week.
4. Every school displayed a sign board prominently in the school to remind the students, the number of days left for the commencement of the SSLC examination.
5. This created awareness among teachers and students about the forth coming examination and helped them to plan and prepare accordingly.
6. The DDPI had prescribed the number of schools to be visited by an officer each week. The DDPI himself visited 10 schools per week. These district/block level officers reviewed the work done by the students, teachers and schools during their weekly visits.

7. The schools conducted monthly parent-teacher meetings to appraise the parents about the progress of their children and also to impress upon them the need to create suitable environment for their children's studies.

b) *Academic*

1. The teachers completed the portions in their respective subjects by December and used the remaining three months for revision and remedial teaching.
2. The revised question paper pattern in all the six subjects was printed and distributed to every student appearing in the SSLC Public examination.
3. Every subject teacher in the district was oriented to guide the students, the mode of answering each question in the subject.
4. All the students were religiously taken through the unit test, monthly test, and preparatory tests to help them to practice writing answers of suitable length according to the marks prescribed for each question.
5. After completing each chapter, the students were divided into groups, and were trained to set questions based on the question paper pattern. The students were further trained to discuss answers for these questions and write them. These sessions were supervised by the head teacher and the subject teachers.
6. Each student was made to prepare a weekly action plan, so that he/she will adapt time management techniques in his/her daily life and use maximum time for studies.
7. During 2010-11, eight model tests were conducted to help students prepare for the final examination. The progress of the student was critically analysed and remedial teaching was initiated wherever the student had not reached the expected standards.

As a result of these actions –

1. The Bangalore Rural district reached the top position in the state in the 2011 SSLC public examination results, with as many as 88.51% of students passing the examination.
2. The block wise and category wise results are given below:

Table 4.17
Analysis of 2011 SSLC Results of Bangalore Rural District
Figures in Percentages

Block	Government Schools	Private Aided School	Private Unaided Schools	Total
Devanahalli	88.31	87.91	96.20	90.77
Nelamangala	88.77	90.70	92.16	90.40
Doddaballapura	85.72	88.87	96.73	89.22
Hoskote	83.18	73.46	92.19	84.24
Total	86.06	86.40	94.38	88.51

Source: DDPI, Bangalore Rural district

3. As many as 46 high schools secured 100% results. Government and aided schools performed well with more than 86% results. Private unaided schools performed better with 94.38% results.

4. The performance of all the schools in the district was remarkable as only one unaided school secured less than 34% results.

Table 4.18
Performance of Schools in Bangalore Rural District

	0-34%	35-49%	50-59%	60-74%	75-84%	85-100%
Government Schools	0	0	2	5	7	45
Aided Schools	0	0	0	2	5	30
Unaided Schools	1	0	2	5	5	77
Total	1	0	4	12	17	152

Source: DDPI, Bangalore Rural district

5. Out of 186 secondary schools which sent their students to the SSLC examination, 152 schools (81.72%) secured results between 85 and 100%, which is a commendable performance.
6. The performance of social groups in the SSLC examination has also been noteworthy:

Table 4.19
Performance of Social Groups in Bangalore District

	Boys	Girls	Total
SC	82.22	84.93	83.54
ST	80.39	88.92	84.57
Muslims	74.62	76.67	75.66

Source: DDPI, Bangalore Rural district

7. As usual, girls have outperformed boys in all the three categories. STs have done better than SCs over all. But SC boys have done better than ST boys.

AN ANALYSIS OF KARNATAKA SSLC QUESTION PAPERS

Assessment of Instructional Objectives

Azim Premji Foundation carried out an analysis of Karnataka SSLC question papers in 2005 in its study entitled 'The Assessment of Instructional Objectives in Secondary Examinations'. This involved an analysis of design and content of question papers of the Karnataka SSLC examination. This study revealed that the question papers had design problems.

1. There was marked non-compliance of the question papers to the design with regard to the weight-age to the four different instructional objectives. The weight-age was skewed in favour of lower recall based on knowledge and the assessment of higher order objectives stood neglected.
2. The KSEEB has allotted lower weight-age for the assessment of the higher order objectives in its design, which is contradictory to the proclaimed objectives outlined in the syllabus.
3. At the macro level changes in the assessment framework are needed which could signify a reconstruction of the model of instructional objectives developed by NCERT.
4. There is an urgent need to improve and upgrade the human resource component itself. The study brings out the fact that classroom teachers and paper setters need greater clarity on what the instructional objectives stood for and the intricate distinctions between them.

This analysis was based only on the test paper design and did not look at how the students actually performed in the examinations. It was felt that an analysis of the response pattern by the students would provide significance insights. This prompted a second study.

An Analysis of SSLC Examination Answer Papers

In 2009, Azim Premji Foundation took up the second study. KSEEB provided the actual answer scripts of a sample of students in three subjects – Maths (1273), Science (347), and English II (1088). The marks given to each question were data entered and resultant data file was analysed on several parameters like the difficulty level and curricular objectives.

Some of the key observations were –

a) Designing examination papers is a very serious and difficult task involving scientific processes. The papers seem to lack significant rigour in their design.
b) There is poor correlation between the performance of the student in the Multiple Choice Section and the Open Ended Question Section.
c) There is only a small difference in the performance between boys and girls on overall basis. However, girls perform better than boys in the open ended question in all the three subjects.
d) Performance of students in government schools is significantly poorer than students from unaided and aided schools.
e) Performance of general category students is significantly better than other categories consistently.
f) Performance of urban students is better than their rural counterparts in Maths and English (but not in Science).
g) Question-wise analysis demonstrates the wild swings in the performance for different questions.
h) The difficulty level analysis indicates that there is considerable difference between what the paper setter planned and what was actually experienced by the students.
i) The analysis by objectives also shows that in all the three subjects, many knowledge questions were found to be difficult, and some application questions were found to be easy.
j) The item analysis presented in the report provides insights into which specific items need to be relooked at from the point of view of restructuring. Also, the distracters used for each item can be studied to understand how students are responding.

The study points out that there is a need to take very careful look at the process of design of question papers to ensure that the paper setters address assessing the curricular goals better. The study also points out that there is an opportunity to shift the focus from assessment of learning to assessment for learning and also add greater transparency to the entire process of examinations.

QUALITY OF LEARNING IN PRIVATE SCHOOLS

The general observation is that government schooling stands for ‘poor quality’ in education, typically characterised by poor learning achievement. This is a gross misconception because even some of the elite and top schools are found to be short on some of the parameters that define quality.

In order to understand how well children learn in private schools, a study (Student Learning in the Metros – 2006 by Educational Initiatives and WIPRO) was conducted in some of the

'Top' schools in the five metros (New Delhi, Mumbai, Kolkata, Chennai and Bangalore) of the country.

The 'Top' 40 schools that were identified in each metro through a popular survey were invited to participate. Over 32,000 students from Classes 4, 6 and 8 (from 142 schools) were involved and the number of participating schools ranged from 23 in Kolkata to 37 in Chennai. A group of educationists and school principals formed an expert panel which oversaw the study.

Table 4.20
Schools Tested for the Study

	Bangalore	**Chennai**	**Delhi**	**Kolkata**	**Mumbai**	**Total**
Schools tested	26	37	24	23	32	142
Students tested (main study)	3286	4738	2814	2555	3845	17238
Students tested (Secondary Study)	2996	4424	2610	2529	3889	16448

Source: Student Learning in Metros 2006 by Educational Initiatives & WIPRO (2006)

Students from the participating schools were tested in learning achievement in English, Mathematics and Science. The tests tried to measure how well they had *understood* key concepts in each of these subjects. Apart from multiple-choice questions, they were required to write a paragraph (essay) so as to study their writing competencies.

A secondary study was also conducted to understand the progression of learning achievement across classes. In this study a common test was administered to students of Classes 4, 6 and 8 to gather insights into the retention and development of knowledge as the students move to higher classes. Additionally 25% of questions in this paper were taken from an international assessment study (TIMSS) for which performance data of students from 40 countries was available.

The results did not present a happy picture. Students seemed to be learning mechanically and were able to answer questions based on recall or standard procedures quite well. However, their performance on questions testing understanding and application was far below what was considered to be acceptable levels. An analysis of their performance showed that even in these 'Top' schools, students were not learning with understanding. With schools laying disproportionate emphasis on rote and procedural learning, original thinking and creativity were naturally replaced as students struggled to tackle questions that appeared slightly different from what they were taught in the class. The ability to apply whatever they had learnt to new and unfamiliar situations was not very high.

Consider the following example: The question asked was:
"What is the chemical formula for pure steam?" (Class 6)
The choice for response was:
A. CO (9%) **B.** H20 (16%) **C.** O2 (8%) and
D. Pure steam does not have a chemical formula (65%)
(Figures in brackets indicate the percentage of students who chose that option)

This meant that even though the students knew the chemical formula for water, its physical and chemical changes, they were unable to link the two facts. Similarly, the students were also found to be weak in certain real life competencies like measurements and problem solving.

Many of these points were also corroborated by the secondary study in which learning levels were compared. While there was improvement in learning from Class 4 to 6 to 8, a number of students seemed to be learning concepts of classes 3 and 4 only in Class 6 or much later. A number of misconceptions in English, Science and Mathematics were also identified among students.

One of the most significant findings of the study was the poor performance of students as compared to the average performance of students from 43 other countries. Across the sample of 11 questions in Maths and Science, our Class 4 students performed below international average on all of them.

A comparative analysis of the five metros again threw up some surprises. Kolkata, New Delhi and Mumbai clearly outperformed Bangalore and Chennai. Schools affiliated to ISCE outperformed CBSE schools which in turn outperformed state board schools. Boys outperformed girls by a statistically significant margin in Mathematics in all classes and in Science in Class 8. None of the factors like class size or school facilities seemed to be strongly correlated to student performance in tests. This study clearly indicates that the quality of learning even in our elite and top schools is far from satisfactory.

The 'Wipro – Education Initiatives Study' conducted again in 2011 also confirmed the same findings that private school students did well only on questions that tested 'rote memorisation' and did not do well on questions that tested conceptual understanding and application.

Quality Improvement in Schools Affiliated to Central Boards

In respect of schools affiliated to central boards, they come into contact with the boards at the time of obtaining initial affiliation, up-gradation or renewal of affiliation. Once this is completed there is hardly any monitoring or quality check by the Boards. The only quality indicators are the Class X and Class XII examination results.

In the wake of concerns regarding lack of quality in education being imparted by schools affiliated to central boards, The CBSE took a decision to conduct a quality check of all the 11,000 schools affiliated to it. The quality check is said to cover all aspects of school functioning – scholastic and co-scholastic domains, infrastructure, human resources, management, administration, leadership and beneficiary satisfaction.

After completion of the exercise, schools will be given accreditation by the board, which will signify that the schools meet the standards at an 'acceptable level' and are willing to meet these standards and improve their educational program by implementing recommendations made by the quality assessment team.

The accreditation is supposed to ensure that the schools prepare their students for citizenship responsibilities, careers, acquisition of life skills, etc. The only issue appears to be that given the limited manpower resources the CBSE has, whether it can implement these decisions in all the schools affiliated to it.

Reasons for inequalities in educational outcomes of children of disadvantaged groups

There are many factors that negatively influence the educational outcomes of the children of poor and disadvantaged social groups which, in turn, contribute to the inequality in educational outcomes. They are:

1. Poverty, which prevents parents from supporting their wards financially
2. First generation learners, as parents are either not educated or have very low education levels
3. Lack of supportive home environment
4. Irregular school attendance, as children are frequently withdrawn from schools to support parents for paid/unpaid work outside/within homes
5. Poor child health and nutrition problems which keep children away from school apart from affecting concentration while in school
6. Seasonal migration of agricultural labour, which affects the academic progress and continuation of children's education
7. Reluctance of rural parents to send matured girls to school
8. Sibling care by elder girls

There are also several factors within the existing system which reinforces the disadvantages these children face in school– indirect harassment by children of higher castes, social attitudes, behaviour and discrimination practised by teachers within the classroom, etc, This situation has naturally led to:

1. Students tending to receive poor quality classroom instruction
2. Teachers tending to have lower expectations from these students
3. Teachers tending to devote less time and attention to them in the classroom
4. Lack of expression and confidence in these students.
5. Poor quality of education in government schools

All these factors lead to dropout of these children at the upper primary, secondary and higher levels of education. Another important issue is the medium of instruction. The children of these groups who have studied in Kannada (or Mother tongue) medium in government schools find it difficult to pursue higher levels of education in English.

Inspire Award Program

INSPIRE (Innovation in Science Pursuit for Inspired Research) is a GOI program under the XI Plan. The program has 5 components. The first component is the 'Scheme for Early Attraction of Talents for Science' (SEATS). Under this program, students of the 10 to 16 age group studying in classes 6 to 10 are eligible. Two students each from primary and secondary schools are eligible for these awards.

Awards are given on the basis of preparation of science projects and exhibiting them in science exhibitions. Karnataka has made use of this program extremely well and 64,250 students have each been awarded the award amount of Rs. 5,000/- per student.

Awardees under INSPIRE program

The following students have won prizes under the program for their innovative projects in 2011:

1. D S Naveen – for devising automatic gates in unguarded Railway Crossings,

2. M J Pratibha – Walking stick with rest chair,

3. B Yashaswini – Production of Electricity by vehicles moving over fly over bridge,

4. Kartik – Hydraulic JCB

COMPUTER EDUCATION

The advent of computer and internet based education methods offer a new exciting learning medium that can literally transform the concept of school and classroom from physical to virtual realities. Experience shows that computer based educational methods can lead to a much faster rate and higher quality of learning, which is much more interactive and motivating for students at all levels. It is extremely effective for enhancing reading and language skills, general knowledge, and learning difficult subjects like Science and Mathematics.

Computer education and computer-based education was taken up in 1000 government secondary schools from March 2001 as a 5 year scheme under the *'Mahiti Sindhu Program'* which was an ambitious program of the education department. Further, computers were supplied to 150 government secondary schools under the *'Revised Class Project***'** and to 88 more schools under the *'XI Finance Commission Project'* from 2003 – 04**.** *'Under the ICT @ schools scheme'* the GOI sanctioned computer education to another 480 secondary schools during 2005 – 06. Thus, a total of 1718 government secondary schools (out of 3452 government secondary schools) were covered under the computer education program.

In these schools, in addition to computer education, students learnt difficult concepts in English, Social Science, Science and Mathematics through CD ROMS. They were also given hands-on experience in simple programming, e-mail and internet. A majority of the secondary teachers were trained by Intel to use computers for teaching their subjects. Microsoft also providing a 10 day training program for secondary teachers, through its Computer Academies situated at Bangalore, Gulbarga and Dharwar.
It is interesting to note that several students across the state who passed out of these schools were able to use their knowledge of computers for gainful employment by setting up cyber cafes in their towns and villages.

Evaluation Study of the Computer Education Program
The evaluation study conducted by C D M R, Dharwar highlighted the impact of the 'Mahiti Sindhu Program' as follows –

- 'Significant improvement in enrolment and attendance in these schools
- Reduction in dropouts
- Increase of computer literacy among students
- Majority of teachers are trained in computers and are able to use them in classroom teaching'.

Intel – IMRB Survey Report
The Intel – IMRB survey 2006 highlighted the following points:

> *"Even though Karnataka has displayed a high infrastructure growth post the implementation of the program, infrastructure and support issues are the major challenges faced by the state. Inadequate access to internet and lessons not fitting well into the curriculum are the main reasons for not implementing technology based lessons among teachers. Computer knowledge is a motivating factor. There is high satisfaction among teachers about the program across districts."*

RECOMMENDATIONS FOR IMPROVEMENT OF QUALITY

Many factors contribute to the quality of education such as a good curriculum, quality text books, suitable infrastructure facilities, quality teachers and level of classroom transaction. Government should have long term, medium term and short term plans to improve quality of education in government institutions. These further require improvement of quality in pre service and in service teacher training, curriculum reform, quality assurance, examination reforms, and efficient systems to test quality in schools.

In this study, curriculum and textbooks as well as in-service teacher training are taken as separate sub studies and as such are dealt with separately. School Infrastructure has been dealt in Chapter 2 relating to 'Status of Secondary Education in Karnataka'. Recommendations are made on the remaining points below:

1. Teacher Qualification & Teacher Testing

With the proliferation of a large number of elementary and secondary teacher training institutions in the state, there is a big question mark on the quality of teachers entering our elementary and secondary schools in the state.

To overcome this problem, NCERT has come out with guidelines regarding teacher qualifications:

1. For Classes 1 to 5, the minimum qualification prescribed for a teacher is senior secondary (ie, PUC) and a 2 year diploma course in elementary education (D Ed) or other equivalent qualifications,
2. For Classes 6 to 8, the minimum qualification prescribed is for a teacher is BA/B Sc with a 2 year diploma in elementary education, or a one year B Ed course or other equivalent qualifications,
3. NCERT has also prescribed a pass in 'Teacher Eligibility Test' conducted by the state government.
4. NCERT has to come up with similar guidelines for secondary teachers also.

It would be in the interest of quality of education in our schools, if the state government implements these guidelines at an early date and introduces 'Teacher Eligibility Test' immediately. The state government should make it mandatory for all government, aided and unaided schools to appoint only teachers who pass the 'Teacher Eligibility Test'.

2. Examination Reforms

1. The education system should enable students and give them more opportunities to succeed, rather than make them fail and eliminate them from the system. There should be options for those who wish to continue education and for those who wish to leave the system.
2. Examination reforms are needed in academic areas – like the change in the nature of questions being asked:
   (a) increase the focus on problem solving and reasoning skills,
   (b) decrease emphasis on rote memorisation,
   (c) test the ability to apply knowledge learnt in the classroom to real life situations.
   (d) Deepening of insight, observation and reflection.

(e) More emphasis should be given to higher order thinking.

3. The very wide variations in the ranking of districts each year in the SSLC Public examination suggests that the SSLC examinations are not conducted strictly throughout the state. A district like Kolar ranked 30 in the 2010 examination, securing 8th rank in 2011 examination shows that there is serious lacuna in the examination system. Urgent reforms are needed in this area.
4. The World Bank study has suggested that the present system can be replaced by

(a) An optional exam for those who want to leave the system and obtain a certificate for jobs/job oriented courses.
(b) An optional exam for those who want to enter high education.
CBSE is experimenting with this system during the past few years.

5. Continuous and Comprehensive Evaluation of learning outcomes supported by remedial education must be implemented throughout the academic year at least in Classes 8 and 9.

3. Capability and Competence among Students

(a) The high level of dropout rate at the secondary level is partly due to lack of attaining minimum levels of learning by a majority of students at the elementary level. Hence conduct of bridge courses at the beginning of the academic year, will help students reach the minimum standard in VIII standard and help them to continue studies without dropping out.
(b) Several districts (roughly half the number) consistently perform below the state average in the Class 10 examination.
(c) The performance of students tends to be poor in English, Science and Maths.
(d) Poor performance in Science is not surprising, as science teaching is largely textbook and blackboard based as majority of schools lack proper lab facilities. Even where there are such facilities, they are not used properly.

4. Improvement of Quality in Government Schools

Examination results indicate that government and rural high schools do not perform as well as private and urban high schools. Since government schools cater to the low socio-economic groups, girls, SCs/STs, it is a matter of serious concern. Special quality improvement programmes have to be implemented in these schools to improve their performance and bring them on par with the rest of the state.

5. Accreditation of Secondary Schools

In order to make secondary schools maintain certain standards of quality, the government should set quality parameters for assessing the quality of institutions so as to grade them. This may be done based on national accreditation criteria issued by NAAC. All schools should be encouraged to undertake self assessments. The government can also entrust the accreditation of schools to an external agency.

6. Teacher Accountability

Government and aided school teachers enjoy job security, pension, periodical increase in salaries which are not linked to performance. Some of these factors are responsible for under-performance of teachers and declining teacher accountability effecting quality of classroom transaction. Teacher absenteeism is also a major factor affecting quality in secondary education.

Teacher accountability can be measured by some of the following parameters:

1. Regularity in teacher attendance,
2. Actual time spent in teaching,
3. Preparing for lessons beforehand,
4. Pedagogical techniques used,
5. Homework assignment and review,
6. Continuous assessment practices,
7. Student learning,
8. Examination Results,

7. Efficiency in Use of Teachers in Schools

In elementary education, a teacher is supposed to teach all subjects and hence teachers of every class and subject are interchangeable. However in secondary education the teacher pattern is completely different with subject teachers teaching every subject. Hence a Social Science teacher cannot replace a Science or Maths teacher.

In smaller secondary schools (where enrolment is small as is the case in rural schools), teachers are underutilised. In a school with only three classes a subject teacher gets a work load of only 18 periods/week (6 periods per subject per class), (a CBZ teacher gets only 12 periods) where as the average work load of a secondary teacher is prescribed as 28 periods per week. If school complexes are made effective, these underutilised teachers can be used to teach upper primary classes in feeder higher primary schools also.

In larger schools especially in urban areas, teachers tend to get over loaded as they will have to take more than 28 periods/week or combine more than one section to teach their subject. This causes impact on standards and quality of classroom transaction which further impacts on student achievement.

8. Efficient Use of ICT

ICT can empower teachers and learners, promote change and foster development of skills for living in present day society. The limited availability of ICT at the secondary level, limits teachers' ability to upgrade their subject matter knowledge, and students' ability to access essential learning materials. The students are also deprived of acquiring ICT based skills needed to succeed in a global economy.

9. School Complexes

The Education Commission 1964 first conceived the idea of the school complex. The Commission, while discussing the role of universities and colleges, recommended that for maintaining standards in education, they should assist secondary schools through extension work and guidance and make secondary schools the testing ground for trying out innovative ideas to improve teaching methods and carryout other experiments in the field of pedagogy. However, this concept did not take off at this level.

The NPE 1986 and POA 1992 emphasized the promotion of school complexes for effective implementation of planning and management at the local level. In Karnataka, the concept of the school complex was tried out at a lower level. Feeder higher primary schools were attached to a designated high school. This enabled the primary schools to share the resources of the high school for academic work. This concept worked as long as some budget was allotted to the school complex. Only in some blocks where the individual BEOs took special interest, the school complex worked well.

As a part of quality improvement initiatives, it is important for the government to implement a well thought out program of school complexes in all the secondary schools in the state.

10. The Composite High School Concept:
The composite high school will help to integrate a high school with the feeder higher primary schools situated in the same locality. The administration of such primary schools gets transferred to the Head teacher of the high school. Similarly, high school teachers who have less workload will get to handle upper primary classes, which benefit the children.

11. Improvement of Teacher Support Services
There is also a proposal made in the perspective plan to establish a 'Block Resource Centre' (BRC) for secondary education in each education block, which should be implemented immediately in order to improve quality monitoring at the secondary level. The World Bank Report has also suggested for providing more staff and adequate travel budget for school inspection and supervision.

It is also imperative to revive subject teacher clubs at the block level, which is the right forum for teachers to discuss their problems and find solutions. Teachers must be encouraged to innovate through incentives. Some amount of finance may be given to the monthly meetings of these clubs.

12. **Teacher Appraisal**
A system of accountability has to be brought among the teaching community. Every teacher may be appraised and graded once in 3 years. Incentives may be given to outstanding teachers. Similarly, there should be a provision in the service conditions to compulsorily retire incompetent teachers.

The department should develop self evaluation tools for teachers, Head teachers and supervisory staff. This can also form part of the Annual Confidential Report. Every institution at every level should bring out an Annual Performance Report, much on the lines of the Performance Budget brought out by the department. This report should include the goals, targets set for the unit, activities conducted, achievements, areas of constraints, and alternative solutions to overcome them.
Quality improvement programs should focus on identifying and taking remedial action in respect of underperforming specific regions, specific groups and specific schools.

13. Computer Education

a) The state must develop a comprehensive ICT policy to boost its primary and secondary education system through technology adoption and appropriate ICT driven education reforms.
b) Modernizing curriculum with real life contextualization and ICT driven content will bring in world class professional development practices for school administrators and, most importantly, teachers.
c) Revamping the whole ICT infrastructure will increase and enhance student-teacher access to ICT, and at the same time, make the next generation ICT infrastructure cost effective.
d) Every secondary school should compulsorily have a computer centre (10 computers for every 250 children) to impart both computer education and computer-aided education to every student.

e) Since funding is a key constraint in up-scaling ICT infrastructure, all funding options should be explored: FDI/international donors/long term loans from world bank/ADB/ corporate funding/school adoption for computerization/ lease cum purchase from financial institutions / public – private partnerships, etc.

f) Training programs should support teachers to effectively integrate computers and internet technologies into their classroom transactions by aligning curriculum, exams, and incentives with the educational outcomes.

g) Computer education must be made a compulsory subject in the X standard public examination.

h) Development of synergy between Edusat and ICT and conversion of content to digital form, at least in Science and Mathematics, will help improve quality of classroom transaction in these subjects.

CHAPTER 5

Centrally Sponsored Schemes (CSS) in Education in Karnataka
A Brief Review

Centrally Sponsored Schemes are in existence for the last several decades. The CSS either comes as a non-matching transfer scheme, where the scheme is 100% funded by the central government. The second type of CSS comes as a matching transfer scheme, where the state government contributes a matching grant in order to become eligible to get central funds. A CSS in Education, is formulated and funded by the MHRD and implemented by the State Education Department through one of its directorates in Karnataka. Central funding has been done through CSS and special programs like DPEP and SSA as well as through budgetary support to initiatives and projects mentioned below.

> *Though comparatively small, when compared to expenditure incurred by the states, central funds have always influenced state policy in the choice of new programs, prescribing priorities, and so on.*

An analysis of sector wise central expenditure on education is given below:

Table 5.1
Central Expenditure on Different Sectors on Education

Sector	Percentage
Elementary	61%
Secondary	9%
Adult Edn.	1%
University	11%
Technical	9%
General	8%
Others	1%
Total	100%

Source: Mid-Decade Assessment 2008

States have accepted central funds from the central government under various schemes for improvement such as financing of additional teachers, construction of classrooms, equipping science laboratories and libraries in schools, provision of Teaching Learning Materials (TLM), teacher training, computer education, etc.

Major Centrally Sponsored Schemes in Education in Karnataka

Some of the major programs under CSS in Karnataka in the education sector for the past few decades are –

1. Operation Black Board (OBB),
2. Non Formal Education (NFE),
3. District Primary Education Program (DPEP)
4. Teacher Education (TE),
5. Computer Education (ICT@schools),
6. National Program for Nutritional Support (The midday meal program)
7. Sarva Shiksha Abhiyan (SSA)
8. Rashtriya Madhyamic Shiksha Abhiyan (RMSA)

Even though some of these schemes had certain scope for modification to suit the state's needs, the state accepted the general parameters set by these schemes. This impacted both the planning and implementation process, as it became a top down approach. In recent times, the state has increasingly relied on CSS for raising the magnitude of the state's plan expenditure on education.

Implementation Structure in CSS

The CSS schemes fall into two kinds of implementation structure – the Treasury model and the Society Model.
The treasury model is an implementation structure, where the central government transfers funds to the state treasury and the scheme is implemented by the concerned department. Many of the programs (like OBB, TE, NFE, ICT @ schools, Midday meal program, etc.) fall under this category.
Under the Society model, the central government transfers funds to a state (district) level society (especially created for the purpose) by passing the central funds directly to the society. DPEP, SSA and RMSA are education programs under the Society model.

There are arguments on both sides for and against both the models. In the Treasury model, funds flow get slowed down resulting in delay in implementation of the programs. In the Society model, flow of funds is faster, there is greater flexibility in hiring of staff and prevents diversion of funds for other purposes. It also leads to alienation among the departmental staff, causing limited ownership. Many of the initiatives introduced in the Society model, die with the scheme (without causing any impact on the regular line department), once the scheme comes to an end.

It would be desirable to introduce certain amount of flexibility, that the society model has in the regular department managed schemes and avoid creation of parallel structures for long term gains and reform in the sector.
Both SSA and RMSA in Karnataka have created parallel structures and have duplicated the functions of the line departments to a large extent. This is certainly avoidable when implementing CSS schemes.

Perceived Deficiencies in Centrally Sponsored Schemes

Even though many of these CSS programs were implemented effectively on quite a large scale, due to some of the rigid central government norms, there were several problems in their implementation. Praveen Jha & others, in their book 'Public Provisioning for Elementary Education in India' have brought out the following points:

1. Coverage was not universal and need-based under many of these programmes which resulted in sharp variations even at the level of implementation across states and districts within a state.

2. CSS, by design, favoured economically better-off states as they were easily able to contribute matching grants. They also had better capacity to utilise the central funds. In contrast, the poorer states were at a disadvantage regarding these matters and hence they suffered from delay in release of central funds.

3. The design of the CSS (with rigid guidelines) failed to address problems specific to states with the latter being rarely permitted to amend the norms/guidelines of the programmes.

4. Delays in release of central funds resulted in non-achievement of targets within the prescribed timeframes. Also, states were not able to properly utilise funds due to several inherent constraints which resulted in delay or non-receipt of further central grants, thus directly impacting the programmes.

5. Several of these programmes lacked community participation during their implementation. Efforts on this front did not yield encouraging results.

6. Resource crunch resulted in a number of states exploring expansion of schooling facilities through low cost, non-formal alternatives such as appointment of para/part time teachers which directly impacted quality.

7. Lack of proper accountability, inability to ensure correctness of data reported by the states, indifferent attitude of the states towards central schemes and misuse of funds were some of the major factors impacting the proper implementation of these schemes.

Some of the CSS schemes in Karnataka are briefly discussed below:

1. OPERATION BLACK BOARD (OB)

The OBB scheme, introduced as a sequel to the NPE 1986, as a CSS and was implemented in Karnataka in 8 phases from 1987-88 to 1994–95, with 4 extension phases from 1994–95 to 1999-2000. It financed construction of additional classrooms, appointment of additional teachers and supply of TLMs in primary schools.

Salary grant was 100% for additional teachers appointed under the OBB, till the end of the ninth plan. Each school was given TLMs worth Rs. 40,000/- with a mandate that additionally there should be a people's contribution of Rs. 10,000/-. In reality, this never materialized in a majority of the schools. Under the OBB scheme, the state constructed 20,222 classrooms from 1987 – 88 to 1999 – 2000 against a target of 25,530.

The state utilised the scheme reasonably well. The achievement was 79.2% in classroom construction, 98.33% in recruitment of teachers and 100% in respect of TLM. Also it was able to convert a majority of single teacher schools to double and multi teacher schools depending on the strength of children.

In OBB, the evaluation studies pointed out that quality of classrooms constructed were unsatisfactory as same norms and provisions were applied to all areas – hilly terrains, black cotton soil areas, etc. Also there was no provision for maintenance and repair. Hence many of the school buildings fell into disrepair within a very short span of time.
Centralised procurement of teaching learning equipment got mired in vigilance enquiries and court cases continued for a decade.

2. DISTRICT PRIMARY EDUCATION PROGRAM (DPEP)

The DPEP was launched in 1994 with assistance from the World Bank. It targeted universalisation of primary education (UPE) through decentralized planning and management, community mobilization and, district- and population-specific planning. The districts selected were those where female literacy was below the national average and where the Total Literacy Campaign (TLC) had been successful, leading to greater demand for elementary education. Though DPEP was a project, its goals were actually sectoral and achievement of the same depended not only on the project activities but also on the performance of the entire elementary education sector.

Coverage under DPEP

In Karnataka DPEP originally covered 11 districts (Later 16 districts as bigger districts were bifurcated) covering the entire northern and eastern parts of the state which were traditionally considered more backward than the rest. The program was based on micro planning, participatory processes and empowerment of local communities, especially weaker sections of these communities.

DPEP aimed at augmenting the state's efforts at achieving universal primary education in these districts by providing access to all children through formal and non formal systems, ensuring universal participation of children and improving the quality of teaching-learning transactions at the lower primary stage. The focus was on mainstreaming children belonging to marginalized groups, particularly girls and SC/ST.

Perceived Deficiencies in DPEP

DPEP covered only 16 educational districts. Hence it had only limited coverage and consequently to that extent a limited impact in the state's primary education sector. The progress in implementation of DPEP was uneven across districts.

> *Under DPEP, Non formal education (NFE) system for out-of-school children never really took off. Some of the issues that remained even after implementation of DPEP were – large number of out-of-school children, quality concerns in achievement levels of children, lack of continuous resource support to teachers, etc.*

There was no concentrated effort to tackle the issues in multi-grade situations found in a majority of government primary schools. The children, who had continued in Nali-Kali up to Class 3, had to revert to the old system in Class 4, due to which the transition from one system to another was not smooth. Efforts to introduce it in the northern districts failed totally due to lack of sustained academic support to teachers and proper monitoring at the school level.

Even after DPEP, a large number of out of school children remained in the project districts. Upper primary stage was totally neglected under DPEP.

3. SARVA SHIKSHA ABHIYAN (SSA)

Launched in 2001–02 in mission mode, SSA was the flagship elementary education programme of the GOI. It aimed at achieving the long cherished goal of UEE through a time-bound integrated approach in partnership with the states (and with some funding support from external agencies). It was designed based on the experience of earlier primary education programmes including DPEP, Shiksha Karmi and Lok Jumbish, It incorporated several kinds of interventions in the elementary education sector and was intended to be an umbrella programme.

Goals of SSA

SSA originally sought to achieve the following goals:

a) Provision of access to all children in the age group of 6-14 years through formal primary schools or alternative delivery means by 2003
b) Completion of primary education of all children by 2007
c) Completion of eight years of elementary education of all children by 2010
d) Provision of education of satisfactory quality for all by 2010.

Since all these objectives could not be achieved within the prescribed timeframes, the state has revised them from time to time. The implementation of SSA led to significant achievements in the field of elementary education. Alternative strategies for mainstreaming children who were left out of the schooling process were implemented. School infrastructure improved. There was qualitative enhancement of teaching methods and in learning outcomes.

SSA has to a certain extent succeeded in bringing large amounts of resources to decentralised levels (school levels) to address the infrastructural, structural and human resource related gaps and improve the delivery processes in education.

> *However SSA did not fund the eligible components that had already been introduced by the state government. For example, It did not cover free textbooks for that reason, even though it funded free textbook programs in other states. In fact such rigidity prevents the state government in introducing any new initiative for fear of losing out on central assistance.*

However, in Karnataka over the years, the SSA State Project office developed as an independent power centre replicating most of the administrative responsibilities of the concerned administrative line department.

Low Achievement Levels

In spite of a rigorous implementation of DPEP and SSA programs in Karnataka, the issue of learning achievement in elementary education is still a matter of serious concern as seen from a number of studies. The achievement levels of children have continued to be low as per NCERT and annual ASER survey assessments. Quality of education provided by the non-formal systems, especially in disadvantaged regions, remains a big question mark.

Indiscriminate Opening of Government Primary Schools

Indiscriminate opening of primary schools by SSA led to a situation of dwindling student strength in government schools in rural areas. In 2009 government closed down as many as 886 primary schools because of dwindling student strength. In 2011, government announced merging of 2,095 primary schools in rural areas, which were having less than ten student strength.

If established schools are closed down in this manner, it is a tremendous waste of public resources, as school buildings and other infrastructure facilities will not be used for the purpose for which they are created.

Integration of Class 8 with Elementary Education Cycle

Elementary Education stage consisted of classes 1 to 7 in Karnataka. Even though Class 8 has been declared as a part of elementary cycle, very few government higher primary schools (only 15% of 33,000 HPS) in the state have class 8, whereas, every one of the 13,352 secondary schools in the state have class 8. Moreover, 65% of secondary schools are in the private sector.

The state has not been able to integrate class 8 into the elementary education cycle (even In government schools) even after nearly 10 years of its implementation. The standard of teaching in class 8 is also not up to the desired level. Up-gradation of several higher primary schools by adding Class 8 created several problems which are yet to be solved.

In most of the schools, physical uniformity has been achieved without giving adequate attention to its impact on the quality of classroom instruction. In several schools, only one PCM graduate teacher are made available and hence some subjects are still handled by undergraduate teachers who lack depth in subject specific knowledge. Moreover, these graduate teachers are made to work under non-graduate headmasters, creating tension among the staff. Given a choice, the parents tend to admit their wards to the Class 8 of a high school rather than to the Class 8 of a higher primary school.

The insistence of the Centre to include Class 8 under elementary education shows that the state will have to face severe academic and administrative issues in implementing the same.

Liability for the State

At present a significant proportion of SSA funding goes to non-plan expenditure like school grants, teacher grants, maintenance grants, TLM grants, salaries of teachers appointed under SSA, - which the state has to take over as a committed liability at the end of the program period.

4. TEACHER EDUCATION

After adoption of NPE-1986, and in pursuance of its provisions of teacher education, a CSS of 'Restructuring and Re-organization of Teacher Education' was approved in October, 1987, by the GOI. The five components of this scheme were -

a) Setting up of DIETs to organize pre-service and in-service courses for elementary school teachers and for personnel working in non-formal and adult education sectors
b) Strengthening of about 250 secondary teacher education institutions – about 50 of them as Institutes of Advanced Study in Education (IASE) and the remaining 200 as Colleges of Teacher Education (CTEs)
c) Mass orientation of about five lakh school teachers annually to make them aware of their role in the context of the new policy thrusts, and to improve their professional competence under the supervision of NCERT
d) Strengthening and revitalization of SCERTs
e) Establishment and strengthening of 'Departments of Education' in universities through the UGC.

Objectives of DIETs
DIETs were expected to play a pace-setting role in the areas of elementary and adult education, involving three major functions- training (both induction level as well as continuing varieties), resource support and action research. They were envisaged to provide academic resource support at the grassroots level for the success of various strategies and programmes with the following objectives-

a) Universalisation of Primary/Elementary Education
b) NLM targets with respect to functional literacy in the 15-35 age group.

DIETs were supposed to function in a cohesive and comprehensive manner towards teacher development and, undertake curriculum and material development in close co-ordination with other state institutions, BRCs, CRCs and schools.

As far as curriculum transaction was concerned, they were expected to design programmes that were based on the needs of participants and with a child-centred approach. Participants were to be enabled to experiment, discover, learn, practice and innovate for themselves in addition to making use of the local environment in the learning process.

Coverage of DIETs/CTEs
In Karnataka, 27 DIETS were established in three phases between 1993 and 2006. Six Government Colleges of Education and four private teachers' colleges were upgraded during the same period as CTEs. RV Teachers' College was upgraded as an Institute for Advanced Studies in Education (IASE).

There were many deficiencies in implementing the 'Teacher Education Scheme'. The states felt that DIETS/CTEs were created by the centre and hence they were the centre's babies. The completion of construction of the DIETs/CTEs were delayed by several years, as a result, the institutions had to function in cramped surroundings. Neither the centre nor the states made any provision for repairs and maintenance, as a result of which the buildings of the institutions presented a pathetic picture.

These institutions also could not fulfil the objectives set for them when they were created due to various reasons. In Karnataka, these institutions could perform only two functions effectively – provide pre-service and in-service teacher training. All the other functions were totally neglected.

Issues in implementation of the Teacher Education Program
Several evaluation studies pointed out that –

a) The objectives with which CTEs/DIETS were started had not been realised. There were no clear perspectives about their roles and functions.
b) DIET guidelines only provided for teacher educators and hence primary school teachers and persons working in primary education field could not become DIET faculty. Hence the persons who had no knowledge of field realities at primary level, became DIET faculty and started providing training to primary school teachers.
c) In Karnataka, there was no separate cadre of academicians to staff these institutions resulting in low academic profile and lack of capacity of the faculty.
d) The seven branches of DIETs considered themselves as water-tight compartments. Many of the departments did not have well defined tasks at the DIET level.
e) The existing primary teacher training institutions were totally neglected, as the focus shifted to the newly started DIETs.
f) The XI Plan document noted that 'DIETS have been facing an identity crisis as 'Centres of Excellence'.
g) Finally Planning Commission (GOI) noted that 'they have not justified their existence in terms of outcomes in spite of their existence for over two decades.

5. RMSA

In this chapter only one drawback of RMSA is discussed here. The central government considers that classes 9 and 10 form the lower secondary stage and classes 11 and 12 form the senior secondary stage.

Historically in Karnataka, classes 8, 9 and 10 are considered as the secondary stage. As already seen above, the effort of the state government under SSA to make class 8 as a part of the elementary stage has not yielded the desired results even after a decade.

In Karnataka all the 13,352 secondary schools have classes 8, 9 and 10. Out of 13,352 secondary schools in Karnataka, only 35% are government secondary schools and the remaining 65% are private schools. If the RMSA deals only with classes 9 and 10 of government schools, then in terms of coverage, RMSA technically covers only 23% of the secondary education sector.

Now the state government is forced under RMSA to consider classes 9 and 10 only as the secondary stage in order to obtain funds from the central government under the CSS. This is an anomaly as far as the state is concerned.

The data being gathered by the state government appears to be defective, as SSA gathers data for class 8 (which is technically not within its jurisdiction) and RMSA gathers data of only government secondary schools forming 35% of all secondary schools in the state.

This study had to contend with different sets of figures provided by different agencies, while analysing data on secondary education. Hence, in conclusion, we can only say that some of the Centrally Sponsored Schemes have created more problems for the state, than helping it.

Perceived Draw Backs of the CSS

1. The Central guidelines are sometimes too rigid to adapt to the state specific conditions and (sometimes district/local specific conditions) requirements.
2. Since local specific conditions are not considered in CSS, it impacts efficiency in implementation. Some flexibility in guidelines is needed to make the schemes more effective.
3. The guidelines need to be clear and detailed, yet flexible to enable effective implementation.
4. In several cases, provision of staffing at various levels, is inadequate or totally non-existent, which affects the implementation of the program.
5. The CSS design needs to carefully examine the features that act as incentives/disincentives before implementation.
6. When there is conflict with state's interests, it would be prudent for the state to not to accept some of the rigid conditions laid down by the centre.
7. The CSS schemes should develop alternate models so that the states get rewarded rather than punished for introducing new initiatives. One probable option could be making such states eligible for higher level of flexi funds.
8. In several cases, the states are not aware of the criteria for allocation of funds from the centre to the state.
9. There is also a need for flexibility for the use of funds for various components within the scheme.
10. Though there are monitoring and reporting structures and guidelines, but this component is considered as the weakest link in most of the schemes.

11. Very few schemes have third party monitoring systems in place. The centre usually focuses mainly on provision of budget and release of funds, rather than monitoring its effective and efficient use to achieve the set targets. Evaluation of schemes need to focus on district level indicators, which will help in local specific needs.

The Tenth and Eleventh Five year Plans have recommended for rationalising the CSS, in order to make functioning of these schemes more efficient.

Proposal for Restructuring Centrally Sponsored Schemes

The Planning Department in the state government also commissioned a study for Restructuring Centrally Sponsored Schemes in Karnataka. The study stresses on involvement of the states to address regional variations, incorporate learning of the states in implementing schemes, enhancing the understanding of the states and creating ownership of the schemes.

Flexi Funds

The Study has also discussed the use of flexi funds, which can be introduced at various levels:

1. Flexi funds provide flexibility within the scheme. 10-15% of funds in the scheme can be provided as flexi funds, where the state can decide on where to use them.
2. Flexi funds can be provided at the sector level also. The departments implement various innovations in the sector from the flexi funds.
3. Flexi funds can also be allocated at the state or district level, across sectors. All sectors can bid for projects to be funded through flexi funds. Giving funds at this level can also promote inter-sectoral and comprehensive projects which are not generally addressed by any other scheme.

Flexi funds help in filling the gaps In regional variations. For the districts with particular variations and problems, flexi funds can help in addressing those issues through special programs which cannot be addressed in Centrally Sponsored Schemes that follow standard formats for the whole country.

CHAPTER 6

A Brief Review of
RASHTRIYA MADHYAMIK SHIKSHANA ABHIYAN (RMSA)

Background

Since 'Universalisation of Elementary Education' has become a constitutional mandate, the Government of India envisioned moving towards the next obvious goal of 'Universalisation of Secondary Education (USE)' as the next logical step. The X Plan 'Mid-term Appraisal document of the planning Commission recommended: 'In order to plan for major expansion of secondary education in the event of achievement of full or near full retention under SSA, setting of a new mission for secondary education, on the lines of SSA, should be considered'.

The government of India also noted the pressure being felt due to the success of enrolment and retention components of elementary education under SSA. It also noted that eight years of elementary education was insufficient to equip a child to the world of work. Hence it felt that access to secondary education should be universalised leading to enhanced participation of children in secondary education.

Goals of RMSA

MHRD states in its RMSA document that the vision of secondary education – *"is to make good quality education* ***available, accessible and affordable*** *to all the young persons in the age group of 14 – 18 years.* With this vision in mind, the following objectives were set to be achieved:

1. To provide a secondary school within a reasonable distance of any habitation – which should be 5 km for secondary schools and 7-10 km for higher secondary schools,
2. Ensure Universal Access of secondary education by 2017 (GER of 100%) and
3. Universal Retention by 2020,
4. Providing access to secondary education with special references to economically weaker sections of the society, the educationally backward, the girls and the disabled children residing in rural areas and other marginalized categories like SC, ST, OBC and Educationally Backward Minorities (EBM).

To achieve these objectives, the RMSA launched the 'Scheme of Universalisation of Access for Secondary Education (SUCCESS)' in 2009. In this context, the scheme aims at providing large scale inputs in terms of additional schools, additional classrooms, teachers and other facilities to meet the challenge of increasing number of students entering secondary education. The scheme aims at initially covering up to Class 10 and aims at taking up higher secondary stage at a later stage.

Objectives

The above goals translate into the following objectives:

1. To ensure that all secondary schools have physical facilities, staff and supplies at least according to the prescribed standards through financial support in case of Government/Local body and Government aided schools and appropriate regulatory mechanism in the case of other schools.
2. To improve access to secondary schooling to all young persons according to norms through proximity location (Secondary Schools within 5 km and Higher Secondary Schools within 7-10 km) or through efficient transport arrangements/residential

facilities, depending on local circumstances including open schooling. However in hilly and difficult areas these norms can be relaxed. Preferably residential schools may be set up in such areas.

3. To ensure no child is deprived of secondary education of satisfactory quality due to gender, socio economic disability and other barriers.
4. To improve quality of secondary education resulting in enhanced intellectual, social and cultural learning.
5. To ensure that all students pursuing secondary education receive education of good quality.
6. Achievement of the above objectives would also, inter-alia, signify substantial progress towards the 'Common School System'.
7. RMSA also aims at focusing on total development of children, encouragement of sports, cultural activities, project work involving interaction with social and natural surrounding, activity based learning, exposure to life skills with regard to health, nutrition, professions, etc.
8. Encouragement to work experience would require the attachment of children with professionals, farmers, artisans, in order to master the social and natural context.

Management Structure of RMSA

At the national level, there is the National Mission on Madhyamika Shiksha Abhiyan, headed by the Union Minister for HRD. It also has an Executive Committee (called the Project Approval Board) headed by the Secretary, Department of School education and Literacy. There is also a 'Technical Support Group' for project appraisal at the national level.

At the state level, there is a 'State Mission' of RMSA called the 'Governing Council', headed by the Chief Minister. The 'executive Committee' is the decision making body and is headed by the Secretary, Primary and Secondary education, GOK. The Executive Committee is responsible for project appraisal at the state level.

At the district level, the District Program Coordinator (the District DDPI) is responsible for all RMSA activities relating to planning, management and implementation of all components of the scheme. At the school level, the SDMC is responsible for all activities including planning, collection of Data under SEMIS, implementation, monitoring, evaluation and for taking remedial measures on all components of the RMSA scheme. Parent Teacher Association for every school is also envisaged under the scheme.

CABE Committee Recommendations on USE

The Central Advisory Board of Education (CABE) committee, in its report in June 2005 made the following recommendations –

- The guiding principles of universal secondary education must be universal access, equality and social justice, relevance and development and structural and curricular considerations
- Norms for schooling must be developed for each state with common national parameters as well as state specific parameters.
- Each state must develop a perspective plan for implementing universal secondary education with focus on decentralized micro planning.
- Financial requirements for covering the cost of universal elementary and secondary education will form approximately 5.1% of the GDP. Hence, the immediate allocation of 6 % of the GDP for education, and progressive increase in this proportion will be

necessary to move towards universalisation of secondary education.

- The pressure on secondary education is already being perceived. It will neither be possible nor wise to wait till 2010 when the pressure may become unbearable.

In this context, the MHRD had advised the states to take up the following preparatory steps for universalisation of access and improvement of quality of secondary education in the country:

- Identifying under-served areas to establish new schools
- Developing state specific norms for physical facilities
- Identifying deficiencies in existing schools
- Streamlining of non-governmental schools
- Identifying causes for low participation of girls, SCs/ STs and other disadvantaged classes and taking remedial measures
- Revision of curriculum in line with NCF 2005
- Making evaluation system more meaningful
- Decentralization of school education with adequate delegation of powers to local bodies, management committees, etc.
- Establishment of quality open and distance learning facilities
- Formulating policies to encourage private sector to establish and run quality secondary schools
- Allocating adequate resources in the state XI plan for secondary education
- Rationalizing policies in respect of teachers' recruitment and deployment
- Improvement of pre-service and in-service training of teachers with emphasis on use of ICT.

The state government is yet to take up majority of these activities for various reasons.

RMSA STRATEGIES FOR UNIVERSALISATION OF SECONDARY EDUCATION

In the context of USE, RMSA recognises that large scale inputs in terms of additional secondary schools, additional classrooms, teachers and other facilities have to be provided on a need basis to meet the increase in enrolment in secondary schools and to ensure quality. This requires assessment of educational needs of each institution based upon projected enrolment patterns. RMSA initially is intended to cover up to Class 10 and later extend up to Class 12 (the +2 stage) – probably within another two years of implementation.

Access:

There is a wide disparity in secondary schooling facility across the state. There are disparities among private schools and between government and private schools. For providing Universal Access to quality secondary education, it is necessary to take the local conditions into consideration while formulating strategies. RMSA proposes that the norms for secondary schools should be generally comparable to that of Kendriya Vidyalayas.

The RMSA strategy based on requirement proposes to –

1. Expand existing secondary schools,
2. Upgrade existing Upper primary schools,
3. Upgrade secondary schools to higher secondary schools (PU Colleges),
4. Open new secondary schools/higher secondary schools in un-served areas,
5. Existing secondary schools to be made disabled friendly.

6. Rain-water harvesting systems to be installed in new and existing secondary school buildings,
7. New schools will also be set up on PPP mode,

Quality: RMSA proposes to ensure adequate emphasis on quality by taking up the following:

1. Providing required infrastructure – Black board, furniture, libraries, Science & Maths laboratories, computer labs, toilet clusters, etc.
2. Appointment of additional teachers,
3. Provide in-service training of teachers,
4. Provide bridge courses for enhancing quality of students passing out of class 8,
5. Review of Curriculum to meet NCF 2005 norms,
6. Providing residential accommodation for teachers in rural and difficult hilly areas – Preference will be given to female teachers while providing accommodation.

Equity: RMSA proposes to address gender concerns as well as inequities among SC/ST/ and educationally backward and economically weaker sections of the people. Distribution of uniforms, bicycles, textbooks, scholarships, middy-meal schemes and other such schemes try to address some of these concerns.

The equity aspect is also supposed to be taken care of by the following measures:

1. Free lodging/boarding facilities for students belonging to SC/ST/OBC/ and minority communities,
2. Hostels, Residential Schools, cash incentive, uniform, books, separate toilet for girls,
3. Providing scholarships to meritorious/needy schools at secondary level,
4. Inclusive education will also be given importance, Efforts to be made to provide all necessary facilities for the differently-abled children in all schools,
5. Expansion of Open and distance learning needs to be undertaken, especially for those who are not in a position to pursue full time secondary education. This is proposed to cover out-of school children as well.

Institutional Reforms & Strengthening of Resource Institutions

The Centre has made administrative reforms in each state as a pre-condition for central assistance. These institutional reforms include –

a) Reforms in School Governance – Improving schools' performance by decentralising their management and accountability – Even though School Development and Monitoring Committees (SDMCs) are in place, there is need for improvement in effective functioning through periodic training of SDMC members.

b) Adopting a rational policy of teacher recruitment, deployment, training, remuneration and career advancement – There is need for improvement in all these areas. Teacher recruitment and deployment has to be an annual affair and should be completed before the commencement of the academic year. Secondary teacher training also has to be periodical and cover all teachers – government, aided and unaided.

c) Undertaking reforms In educational administration, including modernisation/e-governance and delegation/decentralisation – The state has progressed sufficiently in

these areas, however, secondary institutions have to be made autonomous by giving full powers to heads of institutions.

d) Provision of necessary professional and academic inputs in the secondary education system at all levels, i.e, from the school level upwards. – This is absolutely necessary to improve quality in these institutions.

e) Streamlining financial procedures for speedy flow of funds and their optimal utilisation – RMSA will have to ensure flow of funds and also have appropriate monitoring mechanism to ensure proper utilisation of funds by the secondary institutions.

f) Necessary strengthening of resource institutions at various levels – DSERT, CTEs, IASEs, and even DIETs where a secondary education wing may be opened. Each block needs to have a 'Block Resource Centre (BRC) for Secondary education' on the lines of BRCs for Elementary Education under SSA.

g) There are four Centrally Sponsored Schemes operated by the Central Government:
(1) ICT @ Schools for providing assistance to state governments for computer education and computer aided education,
(2) Integrated Education for Disabled Children (IEDC) for assistance to state governments and NGOs for main streaming disabled children in school education,
(3) Strengthening of Boarding and Hostel facilities for girl students,
(4) Quality improvement in schools through introduction of Yoga, improvement of – science education, environment education, and population education in addition to supporting International Science Olympiads,
All these schemes in their present/modified forms are supposed to be subsumed by RMSA.

h) Besides, 'provision for earning while learning' for financially weaker children by preparing them for self employment or part time employment, through establishment of Vocational Training Centres, at the block and district levels.

The RMSA Planning Process

District is the unit of planning for implementing the scheme. Based on school level plan, each district prepares a 'Perspective Plan' and an 'Annual Plan'. The perspective plan is a plan of universalisation within the time frame of RMSA. It is based on existing position with respect to attendance, retention, transition rates, dropout and learning achievement. The Perspective Plan will work out the total requirement for universalisation, spread over a number of years. A clear plan for improving access, increasing retention, and ensuring learning achievement forms a part of the 'Perspective Plan'.

Annual Plans are to be based on a broad indication of resource availability to a district in a particular year. The National and State Missions are supposed to finalise the resource which is likely to be allocated to a particular district at least six months before the first instalment is released to the district. The State Executive Committee appraises the Annual Plans. The Project Approval and Appraisal Committee at the MHRD appraises the District Plans and the State Plan at the national level.

The state Plan will indicate –

a) The overall GER target for the state,
b) Separate GER targets for SC, ST, educationally backward minorities and other weaker sections,
c) Separate GER target for rural and urban areas,
d) Enrolment rate for secondary classes and transition rate from class 8 to class 9.
e) Physical facilities required based on the GER target,
f) Learning achievement targets.

Creation of Infrastructure under RMSA

RMSA envisages proper assessment of the infrastructure requirement for each district. The scheme gives first importance to 'Rural Employment Program' and various other development programs for constructing school buildings. It also stipulates a ceiling of 33% of RMSA funds approved under the Perspective Plan for civil works.

All schools are to be fitted with 'Rain water harvesting systems' and disabled friendly provisions. Incorporation of child-friendly internal and external elements is compulsory in all new construction and repair works. The scheme also encourages use of locally available materials and low cost technologies.

Funds spent on repairs are not included for calculation of the 33% ceiling on civil works. The Program empowers the SDMCs to carry out civil work activities through a transparent system of account keeping.

Schemes Subsumed by RMSA

At the national level, the following schemes have been subsumed by RMSA –

1. ICT @ Schools,
2. IEDC, which has been replaced by IEDSS scheme (See Chapter 1)
3. Open and Distance Learning,
4. Scheme for Strengthening Boarding & Hostel Facilities for Secondary and Higher Secondary Girls,
5. National Incentives for Girls of Secondary Schools,
6. National Merit cum Means Scholarships

However, as far as the state is concerned these schemes will continue to be operated by the concerned directorates of the Primary and Secondary Education department.

IMPLEMENTATION OF RMSA PROGRAMS IN KARNATAKA

Management of RMSA

The RMSA project has yet to appoint staff for implementing RMSA programs in most of the districts. At present the Deputy Project Coordinator (Dy PC) of SSA is also looking after the implementation of RMSA programs in several districts. No additional staff has been sanctioned for RMSA at the district level. This seems to be an additional burden on the already over burdened SSA staff at the district level.

Preparatory Phase: The preparatory phase of the program started in 2008-09. GOI approved Rs. 3.30 crore to initiate pre-project activities like creating awareness in the community, teachers, officers; to prepare perspective plan and annual plans for implementing the 'USE'. But it released only 95 lakhs.

RMSA envisages preparation of Annual Work Plans every year. Based on these plans, the needy schools will be given additional classrooms, laboratory, library and other facilities, All government secondary schools are sanctioned Rs. 40,000/- each as school grant for effective management and maintenance of the school. Similarly all government secondary schools with own buildings are sanctioned Rs. 25,000/- each for minor building repairs.

Programs During 2009- 10:

1. The program activities started from 2009-10. A sum of Rs. Rs. 46.49 crore was approved for the year 2009-10. But only 95 lakhs were released out of which only 25 lakhs were spent.
2. School mapping exercise was conducted in all the 34 districts and,
3. 80 higher primary schools were identified for up-gradation as secondary schools by adding Classes 9 and 10.

Programs During 2010-11:

1. The up-graded schools started functioning from 2010-11.
2. 249 upper primary schools were approved for up-gradation as secondary schools, along with 7 teachers and a building. But only 80 were upgraded.
3. Cost of providing building for each of these schools was estimated to be Rs. 58.12 lakh. But no money was spent.
4. 4,228 government schools were given school grants,
5. 3,261 government schools were sanctioned minor repairs,
6. Rs. 200/- was sanctioned to all class 10 students for educational excursion.
7. Out of an outlay of Rs. 4.56 crore, only 33 lakhs was released and only 40 lakhs were spent.

Status of Schools under RMSA

In the Study Team's interaction session with HM, Government High School, Mominpur, Gulbarga, she said that the school is running in a higher primary school building, and hence did not receive maintenance grant of Rs. 25,000/- as it did not have own building. Out of 301 student strength, 250 were girls. The school did not have laboratory. There were no toilets or drinking water facility.

In-service Training of Teachers

A 5-day in-service training of all government and aided secondary school teachers is proposed under the RMSA program. It aims at empowering teachers in use of information technology in classroom transaction in respective subjects, at a unit cost of Rs. 200/- day per teacher,

RMSA Teacher Training Programs in January, February?

The months of January & February are the busiest months in the academic calendar of schools, as the teachers have to complete portions, conduct remedial teaching for slow learners and conduct preparatory examination for SSLC students. If teachers are called for training programs, it will derail the entire academic process in schools. On the other hand officials expressed their helplessness as they had to spend the funds before March end!

(Adarsh Vidyalayas) Model Schools

A model school has been sanctioned to each of the 74 'Educationally Backward Blocks'. These schools have been opened in make shift arrangements from the year 2010-11. 5,513 children have been enrolled in these schools after an initial test. The students from classes 6 and 7 are taught in the English medium. These schools are to be given facilities on par with Kendriya Vidyalayas.

Adarsha Vidyalaya, Gulbarga

The Study Team visited one Adarsh Vidyalaya at Gulbarga. 129 students (out of 159 students in classes 6 and 7) were present at the time of the team's visit. Even after two years of starting of the school, the HM's post has not been sanctioned.

A HM from a neighbouring school has been placed in-charge of this school and she visits the school on alternate days. Seven teachers are outsourced through an external agency. There were a set of documents on the HM's table and she was unable to explain the discrepancies in these documents saying she was only an in-charge HM. The HM and Staff were unaware of the aim of starting of Adarsh Vidyalayas.

The school lacks any kind of academic atmosphere and is running in a higher primary school building surrounded by demolished debris of an old building. The school has no laboratory, library or any kind of furniture. Students sit on the bare floor. Last year Rs. One lakh was sanctioned and some material bought out of these funds were seen stored in the staff room. No fund has yet been sanctioned for the construction of the school building.

Girls Hostels

In order to promote education of girls, girls' hostels were sanctioned in each of the 62 'Educationally Backward Blocks'. These hostels provide boarding and lodging facilities to class 9 girls. Preference has been given to KGBV girls. Each hostel has an intake capacity of 100 and enrolment in 2009-10 was 1,224 girls.

It was also reported that funds were not being released regularly, which affected the providing of food for the girls. Even though, the hostels started working in June, the funds were released in November thus seriously effecting the work of the Hostels.

RMSA Hostel, Gulbarga

The study team during its visit to Gulbarga, visited the Girls' Hostel at Gulbarga run by RMSA. At the time of the visit, only 22 girls (out of 34 enrolled) were present. The situation was pathetic as there seemed to be no proper supervision of the hostel. A male CRC was in-charge of the girls' hostel, which at the outset is objectionable as all the girls are adolescent girls. These girls had to make do with cold water even during severe winter for bathing and there were only two bathrooms and toilets for the girls.

There were no co-curricular activities during the evenings and the hostel girls were seen sitting without doing anything inside the class room, even though other girls from the neighbouring KGBV school (situated in the same premises) were playing.

Budget & Expenditure under RMSA

The budget, releases and expenditure under RMSA is shown below:

Table 6.1

Budget & Expenditure under RMSA

Figures in Crores

Year	AWP Outlay	Approved by MHRD	Releases	Expenditure
2008-09	--	--	--	--
2009-10	8.05	3.79	0.95	0.25
2010-11	9.57	4.56	0.33	0.40

Source: Audited Reports of RMSA, Karnataka

There is a wide gap between Outlay, Approvals and Releases in both the years 2009-10 and 2010-11. Funds released under RMSA forms a miniscule percentage (0.35%) of the state's secondary education budget, and hence it is doubtful whether the program will make any credible impact on the Secondary Education System in the state.

In 2011-12 out of a budgeted and approved outlay of Rs. 89 crore for Karnataka state, only Rs. 25 crore (28% of budgeted outlay) has been released till January 2012 as stated by Director, RMSA.

Monitoring & Evaluation

RMSA has to have a verification and quality audit process by external and independent institutions at both state and district levels. Monitoring on line is to be done through SEMIS through checking of key performance indicators. Field visits, inspections and sample checks (internally and externally) are to be undertaken on a regular basis to ensure comprehensive and continuous assessment of the Program.

In addition, the online monitoring and evaluation system has to monitor certain performance outputs like GER, Drop-out rates, Transition rates, Completion rates, examination results, Sample Achievement Surveys, Number of children representing in sports and co-curricular activities, etc. The evaluation methods are to also include regular evaluation and district level sample surveys, through well known research institutions. The findings of these surveys are to be used in undertaking corrective action.

Research Activities

Besides the above inbuilt mechanism of 'Monitoring & Evaluation', the Centre and State Governments are supposed to conduct independent research studies on different activities of RMSA by engaging independent research institutions. The findings of these research studies are supposed to be communicated to all concerned for taking up corrective measures in strengthening and implementation of the Program.

Transparency & Accountability

The RMSA Framework envisages the following of 'Right to Information Act' both in letter and spirit by all implementing agencies in all matters relating to RMSA. All key documents is supposed to be proactively disclosed to the public, without waiting for any one to 'apply' for them. A list of key documents should be prepared by the State Mission and updated from

time to time. Public access to key records and key information is to be ensured at all levels. Key information also needs to be displayed on the web-site.

The Centre and State governments are also required to prepare 'Annual Reports' on the implementation of RMSA (including involvement of PRIs). The State Annual Report is required to be laid before the state legislature.

Month wise updated data on the progress of each component of the scheme, progress of expenditure and utilisation, is to be made public in a format outside all offices involved in implementation of the scheme. The school display board is supposed to show all investments being made in the school. The teacher attendance is also required to be publicly displayed.

VOCATIONAL EDUCATION & TRAINING (VET)

This subject has already been mentioned under 'Curricular and Structural aspects' of the 'Guiding Principles of USE in Chapter 1. NCF has recommended the creation of 'Work Benches' which will consist of certified productive units, where children can receive vocational training. The RMSA Framework also mentions VET in the context of using the services of Private sector for vocational education in schools.

This needs intensive district level planning, where individual 'work units' in both private and public sectors in each district, have to be surveyed, identified and certified by an appropriate authority. A certain number of children from each secondary school may be attached to the nearest 'work unit' for gaining vocational skill and experience under supervision of a school teacher. Co-operation of the local communities – Panchayats or Municipal councils, also need to be taken to avoid exploitation of children by the work units.

RMSA framework mentions that private sector can help greatly as most of the teaching learning can take place profitably in the premises of private sector companies and factories. Private sector, needs to be involved right from designing the curriculum, testing and certification system so that the demand for the appropriate skill in the industry can be met.

Is VET taking Off In Karnataka?

As at the time of submitting the report, the VET had not yet taken off in Karnataka. The Director, RMSA, stated that for Karnataka it was proposed to take up the following trades under VET that too in some schools in urban areas on a pilot basis:

1. *Retail Management,*
2. *Automobile Repair,*
3. *Information Technology (IT) and*
4. *Security Services.*

It is not known under what criteria, these trades were selected for Karnataka. The state is yet to work out the modalities of implementation of the program.

ISSUES IN IMPLEMENTATION OF RMSA

1. In its proposal to the Centre, RMSA had proposed during 2009-10, to upgrade 558 higher primary schools in the state which were already having Class 8, by adding Class 9. However, the Centre agreed to upgrade only 80 higher primary schools, which were likely to have an enrolment of 70 in Class 9. These 80 upgraded high schools were sanctioned one head teacher and six assistant teachers (Kannada, English, Arts, PCM, CBZ and Hindi).

   However, these upgraded high schools are running without the requisite teaching faculty in place for the past one year. Currently there are 1,824 teacher's vacancies in these upgraded schools.

2. RMSA was supposed to prepare a master list of secondary schools before starting data entry for 2011-12. The lists given to the Study Team had a lot of discrepancies as pointed out in Chapter 2.

3. The goal of RMSA is to make good quality education ***available, accessible and affordable*** to all the young persons in the age group of 14 – 18 years. With 65% of secondary schools (and PU colleges) in the private sector, it is not clear how the RMSA will go about achieving this goal.

4. The private schools and colleges continue to charge heavy donations and fee. Will the RMSA program subsidise such fee to children (of economically weaker sections and depressed communities) studying in private aided and unaided schools of the state? The programs implemented so far under RMSA do not reflect how these goals are to be achieved.

5. The coverage of RMSA is a matter of concern, as RMSA covers only classes 9 and 10 in government secondary schools. Only 3833 Upper primary schools have class 8 in the elementary cycle, where as all the 4,728 government secondary schools start from class 8. Leaving class 8 in government high schools by RMSA, distorts the planning process and ultimately the state is the loser. This lacuna requires urgent rectification.

RECOMMENDATIONS

1. There is a significant transition loss (of 4.30%) in enrolment between classes 7 and 8 due to various factors including Access. RMSA should develop programs to ensure that all children leaving higher primary schools get enrolled in secondary schools.

2. The gender disparity in enrolment is as high as one lakh in the three classes of 8, 9 and 10. Efforts should be made to bring all girls into the secondary stage by designing suitable incentives.

3. As discussed in Chapter 2 (Table 2.21), out of 100 children entering class 1, only 77 reach class 8. 23% of children in the age group of 14-16 years are still outside the secondary system and only 50% of children entering the education system are passing out of the system at the SSLC stage. Further there is a 17% dropout at the

secondary stage between classes 8 and 10. Programs should be designed and implemented to improve enrolment and reduce drop-outs at the secondary stage.

4. Since government secondary schools form only 35% of all secondary schools in the state, the impact of RMSA on the state's secondary education scene appears to be only minimal in nature. Ways and means have to be explored to ensure the cooperation of private schools also in order to ensure the success of USE.

5. Both the approved budget and releases so far under RMSA do not inspire much confidence as this miniscule funding will not make any significant contribution to USE. The RMSA budget should cover at least 20% of the state's secondary education budget and should be able to take care of all non-salary developmental expenditure of the secondary education sector.

6. The student to classroom ratio in government secondary schools is 46.71 which indicates overcrowding in classrooms of government schools. Out of 20,624 classrooms available, only 65% are considered to be in good shape. Hence school infrastructure requires a lot of attention and programs should be so designed that every secondary school should have sufficient accommodation and classrooms in a period of 3 years.

7. Again opening of Residential schools, girls hostels etc. by RMSA means duplication of activities already carried by other social sector departments. These activities need to be handed over by RMSA to the already functioning 'Karnataka Residential Education Institutions Society' and concentrate on activities to improve access and quality in the existing secondary schools.

8. Having too many programs under RMSA (as in SSA) will also impact the quality of the programs. Hence the RMSA programs should be well structured so that they can achieve the objectives with which the programs are implemented.

9. *Participation of Private Unaided Schools in promotion of USE:* The RMSA Framework Document states: 'all types of schools, including private schools will also contribute towards USE by ensuring adequate enrolments for children from under privileged society and the children of BPL families'. For this to be implemented in the state, rules have to be framed to reserve a certain percentage of seats in private unaided schools for BPL families and also to subsidise the education of such children.

12. Apart from framing of such rules, the state will have to convince the private school managements about their social responsibility, which will help the state as well as private school managements to implement the same in letter and spirit.

PART B

A CRITICAL STUDY OF

PRE UNIVERSITY EDUCATION

IN

KARNATAKA

7. Status of PU Education

8. Management of PU Education

9. Quality Issues in PU Education

CHAPTER 7

STATUS OF PU EDUCATION IN KARNATAKA

The State's Vision on PU Education

The 2007 Perspective Plan document states the Vision for the PU stage of education in the state: ***'The state ensures that at least 80% of children (in the age group of 16 to 18 years) completing 10 years of schooling also complete high quality pre-university education suited to the diversified needs of adolescents in the state'***

Historical Background

A one year pre university course was introduced in the state in 1956-57, with the abolition of the 'Intermediate Course'. The examination for this one year Pre-University Course was being conducted by the respective universities.

As per the report of the Education Commission (1964-66), the state accepted the 10+2+3 pattern of education and the one year pre university course was converted in to a two year pre- university course from 1971-72.

Establishment of the Department of Pre University Education

In order to administer the +2 stage of education, the 'Karnataka Pre University Board' was established in 1971. The Board was abolished in 1988 and it was converted into the 'Directorate of Pre-university Education' in 1992. All colleges imparting PU education come under the purview of the Directorate. The Directorate looks after the administration, examination and academic matters of the PU stage.

Since, the government created a separate department to manage pre university education and created a separate cadre of lecturers and principals to staff the government PU colleges, PU stage has come to be treated as a separate stage as well as a separate sub sector of education in Karnataka. However for budgetary purposes, PU education gets its funds from secondary education budget-head only.

The Pre-University Course

Pre University education is mainly regarded as preparation for university courses. The course provides for two languages and 4 electives, which are to be selected from a wide range of subjects. These electives are classified under three different subject combinations: Arts, Science and Commerce.

Hence the Course separates students into the three main academic streams of Arts, Science and Commerce combinations. There was a parallel vocational stream, and the policy was to bring 25% of students into the vocational stream. CABE in 2005 reversed the policy of ,vocationalisation of education, in favour of integrating general education with work skills, in line with international trends. Hence the existing vocational courses at the +2 stage were abolished in the state in 2010.

The data used for analysis in this chapter, is taken from the Annual Reports and Performance Budgets of Education Department and data provided from the Department of Pre University Education, unless otherwise stated.

Integration of PU stage with the Secondary Stage

The Edu Vision Document (2001) suggested integrating the two stages to bring in uniformity with the national pattern and cited the following advantages:

1. Lengthening of Elementary cycle (classes 1 to 5) and delinking of higher secondary classes from degree colleges (both of which have already taken place)
2. Integration will create a critical mass of teachers in each school.
3. It will also lower the cost of operating schools,
4. It will help merge the two examining bodies dealing with Class 10 and Class 12 (PU) Examinations.
5. Adapting an integrated framework of 12 years of schooling will bring Karnataka on par with national and international norms allowing for easy mobility of graduates.

This has so far not been possible due to several practical issues involved:

1. Whereas there are only 1,202 government PU colleges (constituting 31% of all PU colleges), there are 2,750 private PU colleges constituting 69% of all PU colleges in the state.
2. Even the government PU colleges have been completely de-linked from the government secondary schools, from which they were previously upgraded.
3. The creation of separate cadre of lecturers and principals and the demand of those working in these posts, that their pay and allowances should be on par with faculty teaching in degree colleges,
4. The concept so far created that pre-university is a separate stage in the state's education system.
5. Merger of the two examining bodies may create more problems due to various reasons. The national thinking is now to do away with the Class 10 examination or at least make it optional for students.

The above factors have prevented the merger of the two stages. When in 2006-07, the Perspective Plan Committee interacted with the associations of lecturers as well as that of secondary school teachers, none of them were in favour of the merger of the two stages. They cited a number of practical problems which should be first solved in order to effect merger of the two stages:

Most of the principals and lecturers of PU Colleges are not professionally oriented to adopt scientific methodologies used in classroom teaching in secondary schools. This problem can be overcome by giving well designed short term certified courses in pedagogy, adolescent psychology, education technology and management of educational institutions, conducted by several education research institutions/Universities. Since the existing B Ed degree course is not designed to train PU lecturers, Universities, KSOU, IGNOU, NUEPA and other national institutions may be requested to design suitable certified courses for professional training of PU college lecturers.

Medium of Instruction

The medium of instruction in science combination is English. But students are permitted to answer either in English or Kannada. In Arts combination, a majority of colleges offer education in Kannada medium. As for as Commerce combination is concerned, Accountancy is taught in English medium the remaining subjects are taught in Kannada medium.

ACCESS AT PU STAGE

There is an inherent limitation in the provision of Access at the Pre-University stage. Not all children who enter Class 1 of 'Elementary Education Cycle' enter the secondary and PU stages in Karnataka. The 'Edu-Vision' Document had estimated the number of children entering PUC at 16, (out of every 100 children who entered Class1 in 2000-01). This study has estimated the current position as in 2010-11 as follows:

The following table extracted from Table 1.6 (of Chapter 1 – Introduction) gives an idea of the proportion of children entering PUC.

Table 7.1
Growth in Proportion of Children Entering PUC

Stages	2000-01*	2010-11**
Enter Class 1	100	100
Reach Class 10	33	64
Pass Class 10	25	50
Enter PUC	16	43
Pass PUC	12	23
Enter Higher Education.	10	16

** As per Edu-vision Document (2001), ** Estimated in this Critical Study (2011)*

After a decade, the proportion of children entering PUC has definitely improved from 16 in 2000-01 to 43 in 2010-11. The proportion of children entering PUC in the state, is expected to rise further, with the proposed implementation of 'Universalisation of Secondary Education' program in the coming years.

The state has to plan for providing enhanced access at the PU stage for this increased number of students in the coming years.

Expansion of Pre University Education in Karnataka

The state has seen a steady expansion in the PU education stage for the past two decades. In 1990-91 the Government institutions accounted for 26%, private aided 35% and private un-aided 40% of all PU institutions in the state. The number of P U Colleges has increased over the years from 651 colleges in 1981 to over 3,900 colleges in 2011.

During the past two decades, government institutions registered a more than four-fold increase in the number of institutions and now constitute 31% of all PU institutions in the state. During the period, government brought in nearly 107 institutions under grant-in-aid. However, there was a sharp fall in the share of aided institutions from an impressive 35% in 1990-91 to a 16% in 2009-10 due to the rapid increase in the number of government and unaided institutions.

Private unaided PU institutions grew spectacularly registering a threefold increase during the period from 607 in 1990-91 to 1,936 in 2010-11. Currently they account for 49% of all PU institutions in the state and are the dominant players in the PU education sector.

Table 7.2
Management-wise Growth in PU Colleges

Year	Govt*.	Aided	Unaided	Total
1990-91	398	531	607	1,536
2000-01	681	531	678	1.890
2002-03	690	531	764	1,985
2006-07	1,034	531	1,352	2,917
2009-10	1,202	638	1,719	3,561
2010-11	1,202	636	1,936	3,952**

Includes Colleges run by Local Bodies, Includes others,*

Currently government institutions account for 31%, private aided 16% and private unaided institutions 49% of all PU institutions in the state. The remaining 4% of institutions are local body and other institutions.

PU Evening Colleges

There are 38 evening PU colleges of which 33 are in Bengaluru. Arts and Commerce combinations are taught in these colleges. There is a need for introducing Science combinations also in these colleges.

Change in Composition of PU Colleges during the past Decade

Even though, the number of Government PU colleges has doubled during the past decade, their share has come down from 35.5% to 31%. Similarly, the share of aided institutions has come down from 28% to 16%. But the private unaided colleges have registered a higher percentage of growth (an unprecedented 185%) and increased their share from 36% to 49% during the decade.

Table 7.3
Change in Composition of PU Colleges

Management	2000 - 01	Percentage 2000-01	2006-07	2010-11	Percentage 2010-11
Government	670	35.5 %	856	1,202	31 %
Private Aided	531	28.0 %	531	636	16 %
Private Unaided	678	36.0 %	1,352	1,936	49 %
Others	11	0.5 %	178	173	4 %
Total	1,890	100 %	2,917	3,952	100 %

Even though private institutions (aided 16% and unaided 49%) with 65% share are the dominant players in the PU sector, government finances (government 31% and aided 16%) 47% of all PU institutions in the state.

Students Preferring Government Colleges

Even though, the popular belief is that a majority of students prefer private institutions, we see exceptions to this general perception, especially in towns and cities in several districts. Here is one such example:

The Government Ex-Municipal PU College, Bellary has a student strength exceeding 2,500 in spite of its very poor infrastructure facilities. There are 3 other government and 10 private PU colleges in the vicinity of this institution. But still this government PU College attracts a large number of students.

There are a total number of 32 sections in this college and some of the sections have students in excess of 280. Even though the sanctioned number of posts of lecturers is 52 in this college, only 40 are working. Even though, the physical education lecturer's post has been sanctioned, it has not been filled up.

The college has made good this deficiency by appointing part time and guest lecturers. In spite of several handicaps, the college has produced consistently good results (2011 – 67%) and this may be the main reason for enrolment of such a large number of students in this college.

DISTRIBUTION OF PU COLLEGES IN THE STATE

There are on an average of 131 PU colleges in a revenue district of the state. Similarly, there are on an average of 2 PU colleges in every 10 sq. km area in the state. Population-wise, there are on an average 6.46 PU colleges for every one lakh population (2011 Census).

Similarly each PU college is served by 3.4 high schools on an average. However, much like the secondary schools, the spread of PU colleges is quite uneven across the state. The distribution is also not in proportion to the area, size of the population or socio economic requirements of the student population.

Division-wise Distribution of PU Colleges

The PU colleges are not evenly distributed in each of the four revenue divisions of the state. Mysore division has the highest percentage (42.81%) of government colleges, followed by Gulbarga division (29.91%). Just like the secondary schools, the highest percentage of private aided PU colleges is found in Belgaum division. Gulbarga division followed by Bangalore division have the highest percentage of unaided colleges in the state.

Table 7.4
Division-wise Distribution of PU Colleges
In Percentage

Division	Govt.	Aided	Unaided	Others	Total
Bangalore	25.37	15.75	55.02	3.86	100.00
Belgaum	27.26	24.35	42.56	5.83	100.00
Gulbarga	29.91	10.26	57.18	2.65	100.00
Mysore	42.81	12.67	40.36	4.16	100.00

District-wise Distribution of PU Colleges in the State

The district wise distribution of PU colleges in the state is analysed below. This analysis is in exclusion of institutions running Classes 11 and 12 affiliated to Central and Other Boards. The following ten districts have the highest number of PU colleges in the state. Population-wise, each of the ten districts has more than 5 colleges per lakh population. Both Hassan and Dakshina Kannada districts have more than 8 colleges per lakh population.

Table 7.5
Distribution of PU Colleges 2011
(Top Ten Districts with Highest Number of Colleges)

Sl. No.	District	Population (in lakhs) 2011 Census	Number of Colleges	Colleges/ Lakh population
1.	Bangalore South*	95.88	301	5.59
2.	Belgaum	47.78	258	5.39
3.	Bangalore North*	95.88	235	5.59
4.	Tumkur	26.81	213	7.94
5.	Mysore	29.94	197	6.57
6.	Gulbarga	25.64	191	7.44
7.	Dakshina Kannada	20.83	169	8.11
8.	Bijapur	21.75	153	7.00
9.	Hassan	17.76	151	8.50
10.	Davanagere	19.46	145	7.45

**Bangalore (Urban) District consists of Bangalore North and South Education districts. Hence both education districts are taken together for calculating number of colleges per lakh population.*

Among all the districts, Bangalore (Urban) district alone accounts for 536 PU colleges (14% of all PU colleges). This is in addition to a large number of senior secondary schools attached to various boards. Besides, each of the four districts of Bangalore South and North, Belgaum, and Tumkur has more than 200 PU colleges.

The following ten districts have the least number of PU colleges (less than 100 colleges per district) in the state.

Table 7.6
Districts having Least Number of PU Colleges

Sl. No.	District	Population (in lakhs) 2011 Census	Total	Colleges/ Lakh population
1.	Uttara Kannada	14.36	88	6.12
2.	Kolar	15.40	85	5.51
3.	Chikkamagalur	11.37	78	6.86
4.	Chikkaballapur	12.54	75	5.98
5.	Ramanagar	10.82	72	6.65
6.	Koppal	13.91	72	5.17
7.	Chamarajanagar	10.20	56	5.49
8.	Kodagu	5.54	55	9.92
9.	Yadgir	11.72	46	3.92
10.	Bangalore Rural	9.87	42	4.25

Kodagu district has the highest number of colleges per lakh population (9.92) in the state. Most of these districts, have more than 5 colleges per lakh population. However, both Yadgir and Bangalore Rural districts are below this average and may need more PU colleges. The exact number can be determined only after a college mapping survey.

Management wise Distribution of PU Colleges

The management wise distribution of PU colleges in the state is analysed below. Even though, Bangalore Urban district has the highest number of PU colleges in the state, among all the top ten districts, Bangalore has the least number of government PU colleges. This is however compensated by the fact that Bangalore North and South districts have together the highest number of unaided colleges (404) in the state.

Hassan district has the maximum number of Government PU Colleges (89) in the state, followed by Tumkur, Mysore, Belgaum, Dakshina Kannada, and Davanagere districts. Tumkur district (followed by Belgaum and Bijapur districts) has the highest number of aided PU colleges in the state.

Table 7.7
Distribution of PU Colleges 2011
(Top Ten Districts with Highest Number of Colleges)

Sl. No.	District	Govt.	Aided	Un-aided	Others*	Total
1.	Bangalore South	20	23	225	33	301
2.	Belgaum	60	58	125	15	258
3.	Bangalore North	13	27	179	16	235
4.	Tumkur	71	75	64	3	213
5.	Mysore	68	21	101	7	197
6.	Gulbarga	45	19	122	5	191
7.	Dakshina Kannada	53	27	76	13	169
8.	Bijapur	30	45	74	4	153
9.	Hassan	89	18	42	2	151
10.	Davanagere	48	28	65	4	145

**Others include corporation, bifurcated, etc.*

The following districts have the lowest number of PU Colleges in the state –

Table 7.8
Districts having Least Number of PU Colleges

Sl. No.	District	Govt.	Aided	Un-aided	Others*	Total
1.	Uttara Kannada	38	17	24	9	88
2.	Kolar	32	4	48	1	85
3.	Chikkamagalur	40	15	21	2	78
4.	Chikkaballapur	21	6	46	2	75
5.	Ramanagar	34	5	31	2	72
6.	Koppal	34	7	30	1	72
7.	Chamarajanagar	24	3	28	1	56
8.	Kodagu	15	11	26	3	55
9.	Yadgir	23	2	20	1	46
10.	Bangalore Rural	16	4	22	0	42

**Others include corporation, bifurcated, etc.*

Each of the above districts has less than 90 colleges. With the exception of Uttara Kannada and Chikkamagalur, many of these districts are smaller districts both in terms of size and population. Among these districts, Chamarajanagar, Yadgir, Bangalore Rural and Kodagu districts have the least number of government PU Colleges. Each of these districts also has fewer number of aided colleges. Kolar and Chikkaballapur have the highest number of un-aided colleges.

Distribution of PU Colleges in Rural and Urban Areas

At secondary stage, there are more number of secondary schools in rural areas than in urban areas. The ratio of rural schools to urban schools is 7:5 in favour of rural schools. However, at PU stage, the scenario is reversed with more number of PU colleges situated in urban areas rather than in rural areas. The same situation also exists in some of the six educationally backward districts of the state.

The distribution of PU colleges in rural and urban areas in the state, is almost 4:6 in favour of urban areas. This shows that there is need for PU colleges in many rural areas of the state, which can be identified through GPRS college-mapping exercise. The following table shows the distribution of PU colleges in Karnataka as also in the identified educationally backward districts of the state.

Table 7.9
Educationally Backward Districts
Availability of PU Colleges in Rural & Urban Areas

	District	Rural	Urban	Total
1.	Bellary	41	85	126
2.	Koppal	41	31	72
3.	Gulbarga	40	151	191
4.	Yadgir	15	31	46
5.	Chamarajanagar	27	29	56
6.	Raichur	41	70	111
	Karnataka	**1533**	**2419**	**3952**
	Percentage	**39%**	**61%**	**100 %**

Availability of PU colleges in rural areas of the six educationally backward districts is extremely limited.
In Gulbarga, only 40 out of 191 colleges are situated in rural areas. In Bellary only 41 out of 126 PU colleges are situated in rural areas. In Raichur only 41 out of 111 PU colleges are situated in rural areas. Only in Koppal, there are more PU colleges in rural areas (41) than in urban areas (31). Chamarajanagar district has almost an equal number of PU colleges in urban and rural areas.

There is also a tendency among the student population (mostly male) from rural areas to get admitted to PU colleges in urban areas, (due to bus pass facility) even though PU colleges exist near their areas. Many of these students perceive that the quality of instruction in urban areas to be better than that of PU colleges in rural areas. Another reason is that several urban areas are served by free hostels run by Karnataka Residential Educational Institutions Society.

Sanction of New Government PU Colleges

An analysis of the number of government PU colleges sanctioned during the past several years, shows that PU colleges are not sanctioned on a need basis. Hassan a relatively smaller district has the highest number of government PU colleges (89) in the state.

The years 2006-07 and 2007-08 saw the opening of the maximum number (492) of new government pre-university colleges in the state. However, from 2008-09, no new government PU college has been sanctioned in the state.

Table 7.10
Sanction of New Government Colleges

Year	Govt.
1996-97	60
2005-06	22
2006-07	199
2007-08	293
2008-09	NIL
2009-10	NIL
2010-11	NIL

Sanction of New Private PU Colleges (Un-Aided)

However, private unaided PU colleges are being sanctioned every year. There is no fixed criteria for sanctioning of these colleges. This indiscriminate sanction of private unaided PU colleges has affected the strength of existing colleges in the area.

Table 7.11
Sanction of New Un-aided Colleges

Year	Private
2004-05	103
2005-06	216
2006-07	275
2007-08	171
2008-09	92
2009-10	141
2010-11	208

The private colleges need to be sanctioned on need basis and also based on certain criteria (like adequate infrastructure, qualified staff, etc.).

ENROLMENT IN PU COLLEGES

Decadal Growth in Enrolment

In 2000-01, out of every 100 children entering Class 1, only 16 entered the PUC course, the remaining 84 children dropping out of the education system at various stages. There has been considerable improvement in this position during the past decade. In 2010-11, out of every 100 children entering class 1, at least 43 children enter PUC. The ultimate goal of USE is to provide 12 years of education to every child who enters Class 1.

The number of students enrolling in PU courses is increasing year on year. It is also in direct proportion to the increase in the number of students passing out of the Class 10 Public Examination in the state.

However, not all students who pass the Class 10 public examination enter PUC, as there are other avenues like Industrial Training Institutes, Polytechnics, and other diploma courses. Still many others take up jobs. The percentage of students entering the PU course showed a declining trend between 1996 and 2006 but it increased to 81.80% in 2011. Probably this was due to abolishing of vocational courses and improved SSLC pass percentage.

Table 7.12
Trends in Enrolment**

Year	Passed Class 10*	I PUC Enrolment*	Percentage Enrolled	Percentage Discontinued
1996	2.72	2.43	89.38	10.62
2006	5.64	4.27	75.70	24.30
2011	6.32	5.17	81.80	18.20

** In Lakhs*

There is also some migration of students studying in schools attached to central boards towards PU colleges attached to the State PU Department, which is discussed below.

Enrolment of Students in PUC from other Boards

There has also been a steady increase in the number of students entering I PUC from Central and other Boards. Even though the number is small compared to students from the State Board, it is equally significant.

Table 7.13
Entry of Students to I PUC from other Boards

Year	Number
2009-10	17,213
2010-11	20,258
2011-12	21,296

About 50% of these students join I PUC in colleges in Bangalore City. After Bangalore, the districts of Dakshina Kannada (3000) and Mysore (1100) attract the most number of students from Central Boards. The reason given by the students is that the syllabus in I PUC is much easier, when compared to syllabus in the Central Boards.

Transition Loss in Enrolment

In 2001-02, the number of students enrolled in I PUC was 2.91 lakhs. It increased to a peak of 5.55 lakhs in 2009-10 and fell to 5.17 lakhs in 2010-11. The table below gives the growth in enrolment during the past decade. However, there is a transition loss between I PUC and II PUC in enrolment which is discussed in a separate section in this chapter.

Table 7.14
Enrolment in PUC **In Lakhs*

Year	Enrolment* I PUC	Enrolment* II PUC
2001-02	2.91	2.78
2002-03	3.21	2.81
2003-04	3.18	2.91
2004-05	3.72	3.25
2005-06	4.12	3.40
2006-07	4.27	3.61
2007-08	5.29	4.33
2008-09	5.34	4.34
2009-10	5.55	4.28
2010=11	5.17	4.51

District-wise Distribution of Enrolment

District-wise distribution of enrolment shows a direct correlation between the number of PU colleges in each district and the student enrolment. However, there are exceptions. For example, even though Dakshina Kannada district is seventh with 169 colleges, it stands fourth in enrolment, ahead of Tumkur, Mysore and Gulbarga, which have more number of PU colleges.

This shows that student awareness and participation is more in Dakshina Kannada district, when compared to Tumkur, Mysore and Gulbarga districts. The other possibility is that these districts have more number of smaller PU colleges.

Table 7.15
Distribution of Student Enrolment in Top Six Districts 2011

Top Six Districts by No. of Colleges			Top Six Districts by Enrolment		
Sl. No.	**District**	**Total**	**Sl. No.**	**Top Six**	**% Of Enrolment***
1.	Bangalore South	301	1.	Bangalore South	8.48
2.	Belgaum	258	2.	Belgaum	7.74
3.	Bangalore North	235	3.	Bangalore North	7.43
4.	Tumkur	213	4.	Dakshina Kannada	5.57
5.	Mysore	197	5.	Tumkur	5.20
6.	Gulbarga	191	6.	Mysore	5.02

**Percentage of Enrolment to Total State Enrolment*

In respect of the bottom six districts, the student enrolment is almost in direct proportion to the number of colleges, though with minor variations. In respect of some districts like Kodagu, population is a limiting factor for enrolment. But in respect of other districts like Chamarajanagar or Koppal, population does not seem to be a limiting factor for enrolment.

However, there are a host of other factors like poverty, unwillingness of parents to send their children for further education, early marriage of girls, etc. which has been discussed in Chapter 2 under 'Reasons for Drop-outs'.

Table 7.16
Distribution of Student Enrolment in Bottom Six Districts

Bottom Six Districts by Colleges			Bottom Six Districts by Enrolment	
Sl. No.	**District**	**Total**	**Bottom Six**	**% of Enrolment***
1.	Ramanagar	72	Ramanagar	1.63
2.	Koppal	72	Bangalore Rural	1.44
3.	Chamarajanagar	56	Koppal	1.40
4.	Kodagu	55	Chamarajanagar	1.35
5.	Yadgir	46	Kodagu	1.01
6.	Bangalore Rural	42	Yadgir	0.89

**Percentage of Enrolment to Total State Enrolment*

Gender Disparity

As far as Pre university education is concerned, the sub sector study report on secondary and Pre university education (2001), commented that "irrespective of the fact that whether it is a poor college or a good college, whether it is a private college or a government college, the enrolment of girls is low as compared to that of boys".

Table 7.17
Gender Disparity in Enrolment of Girls in PUC 2001

Category	Private		Government		Total	
	Poor	Good	Poor	Good	Poor	Good
Boys	68	64	70	67	69	65.50
Girls	32	36	30	33	31	34.50

Source: Sub Sector Study Report 2001, Figures in Percentages

However, the situation has improved over the years. Now, the gender disparity has declined from 13% in 2001 to 1.16 % in 2011 in terms of P U admissions. The Gender Parity Index for Karnataka shows an increasing trend from 0.85 in 2001 – 02 to 0.94 in 2003 -04 (MHRD figures)), which is also a healthy sign. However, a majority of girls have to complete household chores before attending college – taking care of siblings, bringing water from a distance, do odd jobs, besides cooking.

The MHRD Report (2006) places the gender parity index in secondary education (classes IX to XII) at 0.94, which is better than the all India figure of 0.80. But Karnataka is still behind neighbouring states which have better gender parity ratios – Kerala 1.01 and Tamil Nadu 0.98. Even though enrolment of girls has increased year on year, the gender disparity still persists even though with a reducing trend as shown by the table below:

Table 7.18
Enrolment in I PUC
Figures in lakhs

Year	Boys	Girls	Gender Differential	Gender Disparity Percentage
2001-02	1.84	1.42	0.42	12.88
2002-03	1.81	1.45	0.36	11.04
2003-04	2.06	1.71	0.35	9.28
2004-05	2.25	1.87	0.38	9.22
2005-06	2.29	1.98	0.31	7.25
2006-07	2.81	2.36	0.45	8.70
2007-08	2.80	2.55	0.25	4.67
2008-09	2.70	2.57	0.13	2.46
2009-10	2.88	2.71	0.17	3.04
2010-11	2.62	2.56	0.06	1.16

Certainly, this is a healthy sign, which has been possible because of a number of schemes given to girls for continuing their education.

Category wise Distribution of PU Enrolment

Six years ago the distribution of enrolment by management was: Government PU Colleges 40.58 %, Private aided colleges 34.13 % and Private Unaided colleges 25.28 %. This trend has changed substantially over the years as seen from the following table.

Table 7.19

Enrolment in lakhs

Year	Govt.	Aided	Unaided	Bifurcated	Total
2005 - 06	2.52	2.12	1.57	--	6.21
2006 - 07	2.89	2.24	2.15	1.36	8.70
2007 - 08	3.31	2.31	2.62	1.39	9.63
2008 - 09	3.23	2.23	2.79	1.36	9.61
2009 – 10	3.28	2.36	2.84	1.35	9.83
2010 - 11	3.11	2.14	3.00	1.29	9.54

Even though government PU colleges constitute 31% of all colleges, enrolment in them is about 33%. Similarly, private aided colleges which constitute 16% of all colleges account for 22% of enrolment.

Distribution of Enrolment in PU Colleges

A significant factor to be noted is that the percentage of enrolment need not directly correspond with the number of colleges in each management category. For example, private aided colleges constituting 16%, are contributing 22.45% towards PU enrolment.

Table 7.20

Distribution of Enrolment in PU Colleges

Colleges	Percentage of Colleges	Percentage of Enrolment
Government	31 %	32.59 %
Private aided	16 %	22.45 %
Private Unaided	49 %	31.44 %
Others	4 %	13.52 %
Total	100 %	100.00 %

Another significant factor to be noted is that even though private unaided colleges constitute 49% of all PU colleges in the state, they contribute only 31.44% towards PU enrolment. This also means that these private unaided colleges are managing with lesser student strength.

Stream wise Enrolment of Students

Historically, 57% of students opted for Arts stream, 25% of students opted for Science stream and 18% of students opted for Commerce stream. This was the position prior to 2000. This trend has changed a little with more number of students opting for commerce stream of late.

Students from urban areas prefer to take Science Combination with an intention to enter engineering or medical field. The highest number of students taking the science combination is from Bangalore City.

Students from rural background and those who are from Kannada medium hesitate to take science stream. More number of students prefer the Arts Combination, the reason being it is

the least difficult combination and they can easily study the subjects in Kannada medium. Even though, there are fewer career opportunities in Arts subjects, students prefer Arts combinations, so that they can complete their education with a formal degree.

Table 7.21
Stream-wise Enrolment in I PUC
Enrolment in lakhs

Year	Arts	Science	Commerce	Total
1998 - 99	1.24	0.56	0.40	2.20
2006 - 07	2.65	1.26	1.05	4.96
2007 - 08	2.72	1.39	1.24	5.35
2008 - 09	2.58	1.31	1.38	5.27
2009- 10	2.82	1.30	1.47	5.59
2010 - 11	2.35	1.31	1.52	5.18

The trend as in 2011 is that 45% of students opt for Arts stream (down 12% from 2000), 25% of students still opt for science stream (no change from 2000), and 30% of students opt for commerce stream (up 12% from 2000).

The increase in enrolment in commerce stream is probably due to the increasing career opportunities as a result of globalisation of the Indian economy.

Wastage and Stagnation at PU Stage (Drop-outs)
Even though the enrolment in I PUC is increasing every year, which is an encouraging sign, there is a considerable wastage and stagnation within the 2 year Pre University Course, and it is fluctuating every year as is evident from the considerable difference in enrolment figures of I PUC and II PUC. The department should take immediate steps to arrest such heavy dropouts through remedial measures.

Table 7.22
Wastage & Stagnation at PU Level

Figures in Lakhs

Year	Enrolment in I PUC	Enrolment In II PUC	Drop-outs	Percentage of Drop-outs
2002	3.21	2.81	0.40	12.46
2003	3.18	2.91	0.27	8.49
2004	3.72	3.25	0.47	12.63
2005	4.12	3.40	0.72	17.47
2006	4.27	3.61	0.66	15.45
2007	5.29	4.33	0.96	18.14
2008	5.34	4.34	1.00	18.72
2009	5.55	4.28	1.27	22.88
2010	5.17	4.50*	0.67	12.95*

However only 4.03 lakhs appeared for the II PUC examination in 2010 giving a (drop-out) wastage percentage of 22.05%

Out of 5.55 lakh students who entered I PUC in 2009-10, only 4.03 lakh students took the II PU examination in 2010. Nearly 1.14 lakh children dropped out of the system after entering I PUC. This is a serious and worry-some issue.

The reasons for the Drop-outs are many:

1. Heavy academic load, which the students find it difficult to comprehend,
2. Change in Medium of Instruction – Students from other language media are forced to choose either English or Kannada medium in which these students are not proficient, This especially effects students who have taken Urdu as the medium up to Class 10.
3. Economic necessity also forces children to drop out and seek any unskilled jobs,
4. Marriage of adolescent girls by parents,
5. Negative Peer pressure – Students travel (as far as 8-10 km) to their colleges from their homes, Consequently they fall into bad company, fall prey to such habits as drugs, smoking, substance abuse, etc. and hence lose interest in studies and drop out.

Substance Abuse by Students

Formerly, substance abuse was found to be prevalent only among street children and children of economically weaker sections of the society in urban areas. Now this has spread to children of upper classes also. This was not so common among youth from well to do families in 1996.

According to Dr.Vivek Benagal from the Department of Psychiatry, NIMHANS, more young people from higher socio-economic background are visiting clinics. He says that it means children of doctors, engineers and journalists are all exposed to such addiction. This is mainly because of its 'cool factor' and these children get higher acceptability in (peer) groups in schools and colleges.

This is another important factor which calls for proper guidance and counselling to students at the per-university stage.

Distribution of Enrolment by Social Groups

Even though enrolment in I PUC is increasing over the years, the number of students from SC/ST/Minority communities entering I PUC has remained almost the same or has slightly decreased as is evident from the following table.

Table 7.23
Enrolment by Social Groups *(In Lakhs)*

Year	SC	ST	Minorities	Others
2007 - 08	0.89	0.29	0.47	3.69
2008 - 09	0.85	0.29	0.48	3.63
2009 - 10	0.93	0.32	0.51	3.81
2010 - 11	0.83	0.28	0.47	3.58

Clearly, the incentives that are being provided to students of these communities like hostels, scholarships, awards, etc. have not made any significant impact on enrolment of students of these communities at the PU stage.

Issue of Unviable PU Colleges

The 2001 sub sector study report had found that 407 institutions (20% of the then existing institutions) were unviable as the student strength was below 25 in II PUC in these institutions. Among these 44% were govt. institutions and the rest were private. This is also a pointer to the indiscriminate growth of private colleges, even when there was no need to start new colleges especially in urban and semi-urban areas. After a decade, we do not know what action was taken then, and whether any such institutions were closed down.

In order for a PU college to be viable, it should have a minimum of 4 sections (2 in I PUC and 2 in II PUC) with a total student strength of 200, and a minimum class strength of 40. This will also enable a teacher handling a particular subject to have a minimum work load of 16 hours per week (4 periods per week for each of the 4 sections in each subject).

However, as per 2010-11 data, the state still has a number of unviable institutions, as seen from the following table.

Table 7.24
PU Colleges with low Student Strength 2010-11

Strength	Govt.	Aided	Unaided	Others	Total
Less than 25	113	--	264	1	378
26 - 50	274	52	410	4	740
51 - 75	210	81	275	7	573
76 - 100	121	99	198	11	429
Total	718	232	1147	23	2120

In our opinion, there are nearly a thousand government and aided institutions having student strength of less than 100, and these are considered unviable and hence certainly a drag on state's resources. The Government should also take a firm decision with regard to such unviable unaided PU colleges.

Most of these colleges are situated in close proximity to each other and located mostly in urban areas and provide unhealthy competition to existing and well established government and aided institutions.

Government should examine and study this problem on a case by case basis, and take a decision to either close down such unviable colleges or merge them with the nearest colleges, or shift them to needy areas, which will help in more efficient use of available resources.

These colleges have to be dealt with on a case by case basis by the government only after due mapping. Some of these colleges might have to be still retained if no other PU college exists to cater to the needs of the students of the locality/habitation within a radius of 5km. Institutions situated in hilly region or difficult terrain, etc. might have to be retained even if they are unviable, to provide adequate access.

HUMAN RESOURCE

Teaching Faculty

The number of teaching faculty in PU colleges depends on the number of sections in each college. Every faculty member is required to handle 16 hours per week. For a science lecturer, the work load is 20 hours a week including practicals. The principal also has to take a fixed number of classes depending on the number of sections.

The strength of each section is fixed at 80. A second section in the same combination is permitted when the student strength crosses 120. The minimum strength required to start a new combination is 40. A minimum of 10 students is required for teaching a language under Part I.

For a college with one Arts, one Science and one Commerce section each in I and II PUC, the number of teachers required is 11 (2 for languages, 4 Arts, 1 Commerce, 4 Science lecturers) and 1 Principal. The table below gives a picture of the growth of the teaching faculty in PU Colleges over the years.

Table 7.25
Growth of Teaching Faculty in PU Colleges

PU Colleges	1999-00	2006-07
Government	4,859	7,147
Aided	5,466	6,587
Unaided	4,074	5,295
Total	14,399	19,029

However, the consolidated figures for aided and unaided colleges are not now collected at the state level, as the power of countersigning of grant-in-aid bills has been delegated to the district Deputy Directors. Hence only the growth in number of government PU college lecturers is given in the following table.

Table 7.26
Growth in Number of PU Lecturers

Year	Govt. PU College
1999-00	4,859
2006-07	7,147
2008-09	7,599
2009-10	9,661
2010-11	9,786

It can be seen from the above table that the number of lecturers has more than doubled during the past decade, which is in direct proportion with the increase in number of Government PU colleges during the decade.

However, there is an alarming proportion of vacancies of lecturers in Government PU colleges. As in 2010-11, there were on an average of more than 2 vacancies of lecturers in every government PU college in the state. In a remote Govt. PU College like Deodurg, 8 out of 11 sanctioned posts are vacant. This naturally affects the quality of education in the college, even if temporary arrangements are made through local or part time appointments.

Table 7.27
Vacancies of PU Lecturers in Govt Colleges

Year	Sanctioned Strength	Working	Vacancies	Percentage of Vacancies
2008- 09	10,775	7,599	3,176	29.47%
2009 -10	10,807	9,661	1,146	10.60%
2010 - 11	12,709	9,786	2,923	22.99%

The number of vacancies in rural PU colleges will be naturally higher, as the tendency of all teachers is to move towards urban areas from rural areas. This is due to several reasons:-

1. Lecturers opting to stay near their native places,
2. Lecturers opting for urban areas in order to pursue higher education for their children,
3. Both husband and wife work and desire to stay together, etc.

Distribution of Lecturers in P U Colleges by Gender

The presence of women lecturers, especially in rural areas, actively enhances the enrolment and retention of girls at the PU level. In rural areas, parents hesitate to send their teenage daughters to colleges if they are staffed exclusively by men. About thirty percent of lecturers in Government PU Colleges are women, where as 19% of lecturers in aided and 38% of lecturers in private unaided colleges are women.
72% of lecturers interviewed in the primary study were male and 28% were female. In North Karnataka 74% were male and 26% female faculty. In South Karnataka, 68% were male and 32% were female.

Table 7.28
Distribution of Lecturers in P U Colleges by Gender

	Govt.	Aided	Unaided	Total
Men	7,071	5,155	4,810	17,036
Women	3,168	1,212	3,078	7,458
Total	10,239	6,367	7,888	24,494

Source: Data on the basis of valuator's list

Overall, women constitute 30% of lecturers in all PU Colleges in the state. This figure needs improvement as most of the women lecturers are concentrated in PU Colleges located in urban areas.

Recruitment of Lecturers in Government PU Colleges

There are two methods of recruitment in Government PU Colleges. One is by 'Direct Recruitment' of PU lecturers through KPSC/Centralised Admission Cell. The second method is by promotion of qualified government secondary school teachers, who have acquired post graduate qualification. The Table below shows both types of filling up of vacancies of lecturers' posts in Government PU Colleges.

Table 7.29
Recruitment of PU Faculty in Government PU Colleges

Year	By Direct Recruitment	By Promotion	Total
2000 - 01	-	338	338
2001 - 02	-	-	-
2002 – 03	750	-	750
2003 - 04	14	-	14
2004 – 05	01	357	358
2005 – 06	-	561	561
2006 – 07	469	1418	1,887
2007 – 08	27	669	696
2008 – 09	2,384	104	2,488
2009 - 10	137	-	137

As can be seen from the above table, both recruitment and promotions have not taken place as a matter of course every year. In some years there was no recruitment and in some years no promotions were effected even when there was large number of vacancies. This is probably due to the fact that obtaining approval for filling up vacancies at the government level takes a longer time, which naturally affects the academic work of these colleges.

Vacancies of Government College Principals

The posts of principals are also not filled up regularly as can be seen from the table below. This naturally affects the academic performance of the colleges.

Table 7.30
Vacancies of Principals in Govt. PU Colleges

Year	Principals		
	Sanctioned	Working	Vacancies
2005-06	707	692	15
2006-07	907	675	232
2009-10	1200	1099	111
2010-11	1200	1034	166

It is desirable that the posts of Principals are filled up annually and on a regular basis. At least 25% of the posts of Principals should be filled up by direct recruitment to infuse fresh blood in to the system. There has been no direct recruitment of principals since 1975.

INFRASTRUCTURE FACILITIES IN PU SECTOR

As far as Government PU colleges are concerned, infrastructure facilities are woefully inadequate. Many of the govt. PU colleges even after several decades, are still running in shift system and share the infrastructure facilities with primary/high schools.

Govt. PU Colleges Running in Shift System

Out of a total of 1202 government PU colleges in the state, 362 government PU colleges (30% of colleges) are running in shift system. This indicates several things. These colleges are not having own buildings. These colleges are running in buildings of other institutions causing inconvenience to both the institutions. Colleges running in shift system, work only for 4 hours a day, which is also a limiting factor to both academic and non-academic activities in the colleges. Even here some of the districts are disadvantageously placed in this regard. For example, in Belgaum 55 out of 60 (92%) colleges are working in shift system.

Table 7.31
Districts with Most Colleges in Shift System

District	No. of Govt. Colleges	Colleges in Shift System
Bangalore South	20	12
Belgaum	60	55
Bagalkot	39	23
Bijapur	30	25
Hassan	89	42
Yadgir	23	11

This situation needs urgent attention of the government.

Status Regarding other Infrastructure Facilities in Govt. PU Colleges

The situation is no different with regard to other infrastructure facilities in Government PU Colleges.

Table 7.32

Infrastructure	Colleges	Percentage
Colleges with Separate library room	126	10.48
Colleges with 3 Laboratories	194	16.13

information regarding other infrastructure facilities like Computer labs, Drinking water, Electricity, Sports facilities, Separate toilets for boys, girls and teaching faculty, ramps, etc. are not available with the department.

What do Girls do when there are no Toilets in a College?

One of the Study Team members was witness to an extraordinary event in a rural Government PU College which had no toilet facilities. 8-10 girls walk for a considerable distance from the college and stand in a circle facing outward. One girl uses the covered middle ground for the toilet. Then she come back and stands in the circle and another girl takes her place. The process is repeated till all girls have used this facility and the girls walk back to the college. Such is the pathetic case of our adolescent girls in most of government PU colleges in North Karnataka.

Infrastructure – The Facts at the Field Level

The Study Team during its interaction at Gulbarga with the principals of Govt., aided and unaided PU colleges found that the infrastructure facilities in PU colleges in Gulbarga district, are far from satisfactory.

The Government PU College (for Girls) at Gulbarga is one of the oldest institutions in Gulbarga division. The college building does not have any classroom which can accommodate 60 students. However the actual class strength in each section exceeds 80. The College has a strength of 1,800 and is also running in the shift system. The Government PU College at Malkhed has no toilets even for girls. The College has a strength of 110 and has no peons, and no clerks either.

The Government PU College, old Jewargi Road, Gulbarga, has a strength of 207, with 75% girls. It is running in Government High School building. The College does not have toilets even for staff members. The College also does not have drinking water facilities.

In the MPHS (Boys), Gulbarga, only 6 rooms are fit for occupation. The building of Govt. PU College at V K Salgar is standing incomplete for the past 3 years.

The Government Ex-Municipal PU College, Bellary has a student strength of nearly 3,000. The Principal stated that all the 32 rooms leak during the rainy season and it is very difficult to conduct examinations. In Commerce combination each class has an average strength of 280 and students are packed like sardines. They also sit on window sill and verandahs, etc. Such a big college has no usable girls' toilet. The building needs to be demolished as it is not in a usable state. An estimate of Rs. 1.6 crore for a new building is pending for the past several years.

Outlay for Infrastructure

In the beginning of the decade, every year the outlay provided for infrastructure was totally inadequate and formed around one percent of the total PU outlay. This has steadily increased to around 8% of the total outlay in 2009-10 and 2010-11.

Table 7.33
Infrastructure Outlay
In Crores

	2006-07	2007-08	2009-10	2010-11
Budget for Infrastructure	2.10	6.69	55.00*	80.00*
Total Outlay	363.90	463.35	638.29	912.78
Percentage	0.57 %	1.44 %	8.61 %	8.76 %

**Includes Financing under RIDF*

However, infrastructure facilities in government PU colleges got a boost with the taking up of classroom construction under RIDF schemes:

Table 7.34
Improvement of Infrastructure under RIDF

RIDF	Year	Classrooms	Buildings	Lab	Expenditure* *In Crore*
RIDF 11	2006-07	946	---	42	Rs. 44.57
RIDF 12	2007-08	656	96	---	Rs. 90.67
RIDF 13	2008-09	748	46	---	Rs. 79.85
RIDF 14	2009-10	646	---	---	Rs.37.19
RIDF 15	2009-10	584	---	---	Rs. 47.38
	Total	3,580	142	42	Rs. 299.66

Besides construction of 237 college buildings have been taken up at a cost of Rs. 70.92 crore through PWD.

Infrastructure facilities in Private Aided & Unaided Colleges

The department does not maintain any data regarding infrastructure facilities in private aided and unaided PU colleges of the state. While granting recognition, the department puts conditions that the colleges should establish facilities as per prescribed norms. There is no mechanism to find out whether the colleges establish infrastructure facilities as per these norms. It is left to the district deputy directors, to check whether colleges adhere to these norms.

Only certain well established private colleges adhere to these norms by establishing the requisite facilities and maintaining them properly. However, most of the newly started PU colleges, seldom follow these norms. It is also a fact that a college requires a number of years to establish itself and provide all the infrastructure facilities. Even then, providing such facilities as per norms depends on the financial health of the college.

Social Obligations of Private Institutions

The Private institutions too have an obligation towards society. Government and aided institutions admit students as per the prescribed roster mechanism. However, unaided institutions seldom admit candidates from reserved categories unless they pay the same amount of fee and donations as students from general categories pay. However, there are some rare exceptions. Several colleges offer seats to reserve category candidates at concessional rates. One such example is highlighted below:

Social Obligation of Private Institutions

It is a common fact that most private educational institutions charge heavy fee besides donations, as their sole aim is commercial in nature. However, we do find some private institutions trying to meet their social obligations by admitting students from weaker sections of the society by providing fee concessions.

The Study Team visited ***Shree Guru Vidya Peetha****, a private Unaided Independent PU College of Science, - a prestigious institution in Gulbarga. The Team was surprised to find that the College had admitted 17 students from rural areas and belonging to SC/ST and economically weaker sections of the society (through an entrance test) without charging any kind of fee to I PUC. Out of the 17 students, 15 are girls. All the 17 students are merit students having secured more than 84% average marks in the 2011 SSLC examination.*

The Principal of the College told the Study Team that the College intends to admit 50 such students (preferably girls) free every year and foot the bill for their entire education, even beyond PUC. This would include Boarding, Lodging, Educational kit and all other expenses including fee for these students.

There are several such institutions in the state, serving the cause of education of the children of the weaker sections of the society.

PROMOTION OF SPORTS & CULTURAL ACTIVITIES

Sports Activities

The Department of PU education conducts sports competitions for PU students (under the age group of 19 years). The competitions are held at College level, District level, Divisional level and State levels. The winners at the state level are sent to National level competitions held every year at different places in the country under the auspicious of 'School Games Federation of India' (SGFI).

The student athletes from Karnataka have distinguished themselves in several national competitions every year. Karnataka teams have won the overall prize at the national level for several years. During 2009-10, Karnataka Students secured 19 gold, 7 silver and 11 bronze medals in the National Swimming Competitions. Besides, they secured first place in Volley ball, second place in throw ball, and third place in Kho Kho and wrestling.

In order to encourage talented sports men and women at the PU stage, the department has instituted cash prizes to the winners as follows: Rs. 10,000 for gold medallists, Rs. 7,500 for silver medallists and Rs. 5,000 for bronze medallists.

National Social Service (NSS) Activities

NSS came into existence in 1969. The central and state governments share the expenditure on NSS in the ratio 7:5. Each college unit conducts 10 day special NSS camps. In these camps several theme based activities like rainwater harvesting methods, environmental awareness, social service, health and hygiene, AIDS awareness, literacy campaigns, etc. are conducted. Students are also encouraged to participate in blood donation camps.

During 2010-11, a total number of 34,150 students participated in NSS activities in 683 camps held at state, division and district levels.

Cultural Activities

Cultural competitions are conducted in 11 areas and is funded by the Students' Welfare Fund. The competitions are conducted at College, District, Division and State levels. The PU department also conducts 'Youth Parliament' in collaboration with Law & Parliamentary Affairs Department at district and state levels.

SCHOLARSHIPS

1. **Central Sector Scholarships for University & College Students**

   Government of India has instituted scholarships for students who have secured more than 80% stream-wise in II PUC /12th Standard Public Examinations and who have continued their studies in degree courses. The number of scholarships depends upon the population of the state. The Karnataka quota is fixed at 4237 scholarships.

   Scholarships are distributed at 50:50 for boys and girls. Science, Commerce & Arts students are awarded scholarships in the ratio of 3:2:1. There is reservation also for different categories of students: SC 15%, ST 7.5%, OBC 27%, GM 49.5%. The students should not belong to the creamy layer as there is an annual income limit of Rs. 4.5 lakhs per year.

   Selected students are awarded scholarships Rs.1000/- per month for 10 months in a year. Post graduate students get Rs. 2,000 per month. Further they are required to maintain a percentage of 60% marks and an average attendance of 75% every year.

2. **Kittur Rani Chennamma Puraskar**

   Under this program, the state government financially supports 10 girls (selected on the basis of merit in the II PUC examination and belonging to BPL families) from each district, and who join professional courses in Engineering, Medicine and Agriculture subjects.

3. **Free ship for Merit Students**

   Under this program, the state government bears the course fee (in professional courses in Engineering, Medical and Agricultural subjects) for those students who have secured a minimum of 80% in II PUC examination and belonging to BPL families. These students should have studied in government and aided PU colleges.

4. **Inspire Students Scholarship**

   This is a program of Science and Technology Department, Government of India. In order to promote basic sciences, top one percent of Science students are given Rs. 80,000 scholarship, if they join B Sc. Course. The scholarship is continued till the students complete postgraduate courses. The cut-off percentage of top one science students is given by the PU department.

5. **Ambedkar National merit Award for Top SC Student**

   Dr. Ambedkar Foundation, Ministry of Social Justice & Empowerment, GOI, awards 3 SC boys and 3 SC girls who have secured the highest marks in the II PUC examination in Science, Commerce & Arts streams. This is a onetime award. The amount of award is as follows:

   i. Boy standing first: Rs. 60,000/-
   ii. Boy standing Second: Rs. 50,000/-
   iii. Boy standing third: Rs 40,000/-
   iv. Girls standing at fourth, fifth and sixth places: Rs. 20,000/- each.

ISSUES AT P U STAGE

1. **Teaching of Science Combinations**

   The low (25%) strength of students studying science combinations at PUC stage, is an important issue which has serious implications for both the state and the country. The few who opt for science combinations, prefer to become doctors or engineers. Already research institutions in the country are facing shortage of science graduates.

   Education sector has seen the maximum impact as there is a shortage of science teachers in secondary schools. Even the nursing and pharmacy degree courses are not able to get adequate students due to shortage of students who have taken Science combinations at the PU level.

   In 2001, only 40% of colleges had science education facilities. Among them 33% of colleges were government, 47% were private aided, and 47% were private un-aided colleges, which were having science teaching facilities. The situation is very similar in 2011 also. It is found even where science education facilities are available, a majority of students prefer Arts or Commerce combinations.

Any Takers for Science Combinations?

The Government PU College, Arehalli, Hassan district has no students in Science section. In Government PU College, Halebeedu, Hassan district, there are only 17 candidates in Science section. The Government PU College, Tekkalakote in Bellary district, has only one candidate in II PUC and 15 candidates in I PUC in the Science Combination. The Government PU College at Arakere, Deodurg taluk, Raichur district has 6 students in I PUC (Science) and no candidates in II PUC (Science).

In many colleges, Science combination has been sanctioned without providing requisite laboratory facilities. This is more or less the scenario in several PU colleges in rural Karnataka. There are a host of reasons for students to prefer Arts Combinations to Science Combinations. One of the main reasons appears to be the English medium, in which the rural students are not proficient.

2. Karnataka Residential Educational Institutions' Society, in order to attract talented and merited girl students from economically weaker sections of the society to Science stream, has started Residential PU Colleges in the state. a) SC 12, b) ST 2, c) BCM 12 and d) Minorities 3. This is definitely a step in the right direction.

But many of these colleges suffer from poor infrastructure facilities. Most of these colleges are yet to be provided with lab and other facilities.

3. Many of the PU colleges (both under government and private managements), which have been bifurcated from secondary schools, still run in the same school buildings and in several cases in the shift system, creating inconvenience to both secondary schools and PU colleges.

4. **Poor Enrolment in many Government PU Colleges**

   Even though there are large government PU colleges in several district towns and cities, several government PU colleges languish for lack of enrolment due to various reasons. One such example of poor enrolment in a Government PU college is given below:

Poor Enrolment in Govt. PU College, Deodurg, Raichur District

Deodurg is one of the most backward taluks in the state. Govt. PU College at Deodurg, established in 1973 is one of the oldest colleges in the district. The enrolment pattern in this college is given below:

1. I PUC – Arts - 55, Science – 0, Commerce – 0,

2. II PUC – Arts – 20, Science – 03, Commerce – 0,

This poor enrolment is attributed to many reasons:

a) The Principal's post is vacant for the past three years,

b) Out of 11 sanctioned posts of lecturers, only 3 are filled up and 8 posts are vacant for the past several years,

c) Some lecturers come from nearby government PU colleges three days a week to teach subjects like Kannada, English, Political Science & Chemistry.

d) Other subjects are left to the students for self study. Consequently the II PUC results have never crossed the 40% mark.

e) Infrastructure is very poor – no office room, no laboratory, no library, no peons, no water and toilet facilities, In-adequate furniture is also an issue.

f) There are 3 private PU colleges and one Morarji Desai Residential PU college in the town.

The in-charge principal of Govt. PU College, Deodurg, told the Study Team that the condition of the college has been like this for the past 10 years. He also stated that neither political representatives nor department officers have bothered to provide basic facilities and also adequate staff for the college in spite of many representations in this regard.

6. Student Absenteeism in PU Colleges

As discussed in chapter 2, student absenteeism is prevalent in all PU colleges throughout the state. Private colleges are better off at controlling student absenteeism, as they take disciplinary action against students who habitually absent themselves. But government PU colleges usually do not take action against absentee students. Lack of proper infrastructure facilities is also a contributory factor for student absenteeism. In Government PU Colleges in North Karnataka, the student absenteeism is as high as 30%.

RECOMMENDATIONS

1. Even though, Bangalore Urban district has the highest number of PU colleges in the state, it has the least number of government PU colleges. Every year admission in some of the government colleges (Ex. Govt. PU College, Peenya) are refused for want of space. As the private unaided colleges do not cater to the urban poor and weaker sections of the society, there is an urgent need for sanction of more government PU colleges for the city.

2. There is need for introducing new subjects in the PU course to cater to the aspirations of different sections of the student community – Geography, Statistics, Business Maths, Computer hardware, fashion designing, Hotel Management, etc.

3. Students may be offered pre-induction/bridge courses to bring them on par with the PU syllabus and also provide them skill sets required in the PU course. This will also reduce wastage and stagnation at the PU level.

4. There is an urgent need to open 'Guidance and Counselling Centre' in each PU colleges as these centres will help to give proper guidance to the students at an important stage (adolescent stage) in life.

5. There is a definite need for introducing academic reforms in the 2 year PU Course. The first year PU Course is a district level examination, which not many students and teachers take too seriously. The percentage of results in this examination varies anywhere between 70 to 90% from district to district. Suddenly in the II PU public examination, the results come down to around 50%, which gives a severe jolt to the academic aspirations of these students.
   The academic and examination reforms will have to tone up the system, bring seriousness among students and teachers and improve quality. All of 2 years will have to be properly used by the students for learning. It will also help PU students prepare better for tougher professional courses ahead.
   One option is to introduce semester system in the PU course. The other option is to introduce a public examination for the I year also. This will help evaluate students continuously as it is a better system than a single public examination at the end of the 2 year PU course. Cost should not be a factor in taking such a decision.

6. To bring the Karnataka Education system in line with the national pattern, there is a very strong case for integrating the secondary and PU stages in Karnataka. Even though, the government may face strong opposition from teachers' associations, the integration will bring lot of benefits to the state in the long run.

7. There is need for conducting eligibility test for promotions for the posts of both lecturers and principals of PU colleges. This will help improve efficiency in the PU system. This will also help to test the minimum competencies of those who wish to become PU Principals /lecturers.

8. **College Mapping:** The Department should take up 'College Mapping' exercise in order to identify un-served areas and ascertain the availability of access in all areas of the state. This will also help identify colleges which are having low student strength, which can be merged or shifted to needy areas. The mapping exercise will also help to identify the needs of the existing colleges.
9. The department should open new colleges only on need basis and not on political considerations. The 10 km norm can be relaxed in case of educationally backward districts and blocks, in areas which are having population belonging to economically weaker sections.
10. Since there are more than a thousand government PU colleges, there is need to bring in fresh blood in to the stream through direct recruitment of at least 25% of posts of Principals. The minimum qualification for these principals should be an MBA or a PG diploma in education management from a recognised university or IGNOU along with a Masters degree in a teaching subject from a recognised university.

11. Similarly, in order to infuse quality and efficiency into the system, promotion to the cadre of principals should be restricted to those who have obtained a degree or a diploma in education management.
12. IGNOU may be requested to design a suitable course for lecturers which will help them to enhance their knowledge and skills in their teaching subjects.

CHAPTER 8

MANAGEMENT OF PRE UNIVERSITY EDUCATION

In Karnataka, the state government plays a dominant role in the management of PU sector. 31% of government PU colleges and 16% of private aided PU colleges (an effective 47% of all PU colleges) are financed by the state. This makes the state government the biggest financer and manager of pre university education sector in the state.

Management here is defined as covering administrative aspects of PU education institutions, financing, faculty recruitment, training and deployment, regulation of institutions, academic supervision, information gathering and processing and a host of connected activities. In PU sector also, there are three categories of institutions by management – Government run institutions, Government aided private institutions and unaided private institutions.

Role of Central Government in PU sector

Unlike elementary education sector or even secondary education sector, the responsibility of the central government is extremely limited in the PU sector. Though the Central Government has announced the scheme of 'Universalisation of Secondary Education' (covering classes 9 -12) and created RMSA as the agency to implement the same, for the present, it has limited itself to formulating schemes for the lower secondary stage comprising classes 9 and 10 only.

Management of PU Education at the State Level

The management of PU education in Karnataka, is carried out by the state government through the Department of PU education. The Department is responsible for the overall supervision of all the PU colleges in the state and also for conducting the II PUC Public examination. It also prescribes the academic calendar of events for all colleges. Some of the other functions of the Department of PU Education are:

1. Allocation of budget and flow of funds to the districts,
2. Submission of Proposals (to government) for Sanction of new PU Colleges,
3. Framing of Curricula & Syllabi for PU Courses,
4. Development, Printing & Publication of Language Textbooks,
5. Deployment of teaching and non-teaching staff in government PU Colleges,
6. Sanction of grants to GIA institutions,
7. Conduct of orientation courses to the teaching faculty,

The Department of PU education is headed by a Commissioner (of the IAS Cadre). He/she looks after the administration, supervision and conduct of II PUC examinations. He/she is also in charge of the Karnataka Examination Authority, which conducts the common entrance test to the professional courses and conducts counselling for students for admission to both medical and engineering courses.

Management of PU education at the District Level

On an average, there are 127 (46 government, 21 private aided and 60 private unaided) PU colleges in a district. The management of PU education at the district level is made by the Deputy Director, Pre University Education (DDPU). One major difference between secondary education and PU education is that, management of PU education at the district level is made by the department (and not Zilla Panchayats).

The DD PU is responsible for –

1. Overall management and supervision of PU education at the district level,
2. Effects deputation of lecturers in government colleges as per need,
3. Conducts annual inspection of all PU colleges in the district,
4. Conducts academic programs related to PU education in the district,
5. Sends proposals for approval of appointment of aided college lecturers to the state level,
6. Countersigns the monthly salary bills of aided colleges and CG bills of government colleges,
7. Coordinates with the PWD regarding construction and repair of government PU college buildings,
8. Conducts the I PU examination at the district level and is responsible for valuation and declaration of I PU results in the district,
9. Supervises the II PU Public examination and is responsible for the smooth functioning of the examination in the district,

MANAGEMENT OF PU EDUCATION AT THE INSTITUTION LEVEL

In Karnataka, as already discussed, government PU colleges form 31%, private aided PU colleges form 16%, and private unaided PU colleges form 49% of all PU colleges in the state. This section discusses the management of each type of these institutions at the institution level.

a) Government PU Colleges

The management of government of PU colleges rests with the government. It is responsible for providing proper infrastructure and all other facilities to these colleges as per norms. It is responsible for sanction and deployment of all staff.

At the college level, the Principal of the college manages the affairs of the college. If it is a composite college (now bifurcated) then he/she will have to coordinate with the Vice Principal or the senior most teacher in the school regarding sharing of available facilities. If the College and high school are running in shifts, then the academic work of both the institutions suffer due to time constraints. In such cases, the PU college works for just 4 hours.

The Principal is not formally trained in institution management. There is no opportunity for him to enhance his academic competence or his managerial skills. He is appointed as principal, based on his seniority in the cadre of lecturers. In a majority of cases, the lecturers do not get practically any academic guidance from the Principal.

The functions of the Principal in a government college include –

1. Management of the institution,
2. Acts as the Secretary of College Development Committee,
3. Drawing salary of all the staff of the institution,
4. Collection of tuition and other prescribed fee,
5. Operation of Personal Deposit Account,
6. Conduct of Examinations,

Principal's Absenteeism

There are some rare cases of Principals being habitual absentees in remote colleges of the state. One such example is given below:

Habitual Absenteeism of Principals

Gabbur in Deodurg Taluk is a remote village. Sri B L Marpallikar, the Principal, Government PU College, Gabbur, hails from the distant Bidar district.

The staff reported that he comes to the college once in a while, only when there is need for him to sign bills. All attempts by the study Team to meet him were unsuccessful, as he remained elusive and on 'leave'.

The Study Team approached the DD, PU and obtained his phone number and had to collect information from him over phone. Like the Principal, the computer operator (Chand Pasha) also is irregular.

The college has failed to collect scholarships for the students and hence many students are deprived of their legitimate scholarships. II PUC results are only 34% in this college.

Recruitment of Government PU College Principals & Lecturers

During the interaction meetings the Study Team had with Stakeholders, educationists, people's representatives, Principals and Deputy Directors (PU) at various places, one major concern expressed was the deteriorating standards in college administration.

Several educationists suggested amending the Cadre & Recruitment Rules for introducing eligibility test for promotions to the cadre of both lecturers and Principals (as well as following the policy of seniority cum roster). There was also a suggestion for making provision for direct recruitment of Principal's posts in Government Colleges, which will help infuse fresh blood into the education management system.

There is also a need for periodic orientation training of these Principals and lecturers, to bring them up to date with the changes taking place in the field of education as well as imbibe them suitable skills.

b) Management of Private Aided Colleges

In respect of private aided colleges, their management lies with the private bodies who have established the institutions. Government gives permission and recognition to run these colleges. It further provides salaries of those teaching and non-teaching staff, whose appointments are approved by it. The managements are expected to provide capital expenditure in these aided institutions.

In these colleges, the private management appoints the principal and the appointment is based on guide-lines and merit cum roster policy of the state government. In such colleges, the principal is answerable to both government and private managements. But the duties, functions and activities are similar to those of principals of government colleges.

c) Management of Private Unaided Colleges

As for as private unaided colleges are concerned, the entire responsibility of establishing and managing these colleges lies with the private managements. Government gives them first permission and then recognition to the private managements to run these colleges.

These institutions do not receive any grant from the government and have to financially sustain on their own. These institutions have to incur the cost of capital expenditure as well as recurring expenditure through levying a substantially higher fee. Hence these institutions cater to only certain classes of the population which can pay.

The management appoints the principal in case of these unaided institutions. Here the Principal is totally answerable to the management. However, he is also bound by the rules and regulations of the department as far as academic work of the college is concerned.

The general issue of private unaided institutions, their regulation, rulings of the Supreme Court, etc. are dealt with in detail in Chapter 3, under 'Management of Secondary Education'.

Regulation of Private Aided and Unaided PU Colleges

In order to effectively regulate the academic management of private PU Institutions the state government, brought in to force the 'Karnataka Pre University Education (Academic, Registration, Administration, Grant-in-Aid, etc.) Rules' in 2006. These rules classify the PU Colleges into Government, Local body, Private Aided and Private Unaided colleges. The Private Aided and Unaided Colleges are further classified into the following categories:

a) **Category A:** PU Colleges with own land and building with full supplement of teaching and non-teaching staff.
b) **Category B:** PU Colleges with own land and building (but not with sufficient land and building) as required under the rules, but with full supplement of teaching and non-teaching staff.
c) **Category C:** PU Colleges with own land and located in an unsuitable and insufficient building, but with full supplement of teaching and non-teaching staff.

These Rules specify the minimum infrastructure requirements for establishing a PU college. The minimum staff requirement as prescribed is as follows:

1. One Principal,
2. One lecturer for each subject permitted to be taught, including the subject taught by the Principal,
3. One clerk, one peon, and where Science subjects are taught, one laboratory attender

According to the rules, a section may consist of minimum 40 students and not more than 80 students. Additional sections may be permitted by the Director, depending on the student strength, infrastructure facilities, and requirement of area.

MANAGEMENT OF PU ADMISSIONS

Every year the PU Department issues guidelines and common academic calendar of events to all colleges, in order to maintain uniformity in the academic work of all the PU colleges in the state.

PU Academic Calendar

The Common Academic Calendar for the year 2011-12 is given below:

1. Opening of Colleges – 30-5-2011
   (Including Commencement of Classes for II PUC students)
2. Mid-term Holidays – 5-10-2011 to 27-10-2011
2. Last working day of the College – 10-4-2012

Common Calendar of Events for Admissions

Every year the department announces common calendar for the admission process to I PUC, which has to be compulsorily followed by every college. As an example, the Calendar for admissions to I PUC for the year 2011-12 is reproduced below:

Table 8.1
Calendar for I PUC Admissions 2011-12

	Event	Date
1.	Announcement of Combination wise/Roster wise availability of seats in the College & Distribution of Application forms Announcement of SSLC Results Last day for Distribution of Application forms	 02-05-2011 13-05-2011 19-05-2011
2.	Last day for submission of filled in application forms by students	23-05-2011
3.	Announcement of Merit-cum Roster list of all applicants by the colleges	25=05-2011
4.	Announcement of I List of selected candidates	28-05-2011
5.	Last day for payment of fee by students selected in the I List	01-06-2011
6.	Announcement of II List of selected candidates	03-06-2011
7.	Last day for payment of fee by students selected in the II List	07-06-2011
8.	Announcement of III List of selected candidates	09-06-2011
9.	Last day for payment of fee by students selected in the III List	13-06-2011
10.	Announcement of list of candidates who have been admitted after payment of fees. Announcement of Cut-off percentage of the last candidate in every combination	15-06-2011
11.	Commencement of I PUC classes	16–06-2011
12.	Admission without fine	15-06-2011
13.	Admission with a fine of Rs. 420/-	22-06-2011
14.	Special admissions (with delay) Rs. 1,400 + Rs. 420/-	30-06-2011
15.	Last day for admission of candidates who have passed the SSLC Supplementary Examination only	25-07-2011

Source: Circular from Director, PU, Dated 10-05-2011

Reservation of Seats in I PUC Admissions as per the Roster System

Every college has to adhere to the merit cum roster system in admission to I PUC as noted below:

Table 8.2
Reservation as per the Roster System

Category	Percentage
General	50%
Scheduled Caste	15%
Scheduled Tribe	3%
Category I – Most Backward	4%
Category 2A – Relatively More Backward	15%
Category 2 B – More Backward	4%
Category 3 A – Backward	4%
Category 3 B – Relatively Backward	5%

Within the reservations as per the above categories, the colleges have to accommodate candidates under the following sub-categories –

1. Physically Handicapped and dyslexia students – 5%,
2. Children of retired soldiers – 2%,
3. Students who have won awards in National/State Sports Competitions – 5%,
4. Displaced Persons under Rehabilitation Programs – 5%,
5. NCC Cadets (Possessing B Certificate & Participated in Republic day parades) – 5%,
6. ICSE/CBSE Students – 5%,

Admission quotas for various types of PU Colleges
Government Colleges have to allot all available seats as per merit cum roster system. Private aided colleges have to allot 80% of seats (combination wise) on merit cum roster system and the college management can allot 20% of seats at its discretion.

Qualification of Lecturers in PU Colleges
The minimum qualification of a lecturer is a second class Masters degree in the concerned subject, from a recognised university. There are no opportunities for up-gradation of their subject knowledge and teaching skills once they join as lecturers. There are also no incentives for acquiring higher qualifications like M Phil and Ph D, which are available to lecturers of degree colleges.

Recruitment of PU Lecturers

In Government colleges, PU lecturers are not being recruited regularly, which has seriously impacted the academic work in these colleges. The students go without lecturers in many subjects for more than a year and this is one of the reasons for the decline in quality and low results in II PU examination. In 2011 the state government had notified 1,765 vacancies of lecturers in 14 disciplines.

Further, in 2011, the state decided to recruit PU lecturers through a different system. It withdrew the recruitment of lecturers from the ambit of the KPSC. Along with the post graduate degree, it made the B Ed degree mandatory, for a candidate to apply for a lecturer's post in government PU colleges. The selection is based on the marks scored by the candidate in the entrance test conducted by the Central Admission Cell.

This changed policy has created a host of problems for the government. Firstly, the B Ed colleges in Karnataka are not admitting Commerce graduates for the B Ed degree. Besides, lecturers in subjects like Logic, Economics, Commerce, Computer science, etc will not be able to find suitable methods for teaching practice in the B Ed degree. Limiting the recruitment process to only B Ed trained post graduates, will limit the quality of people applying for the posts of lecturers in PU colleges.

It is always in the interest of quality that merit should be the criteria in selection of lecturers rather than a B Ed degree. After appointment, the newly recruited lecturers can undergo a rigorous and well structured orientation certificate course.

Professional Training of PU faculty
At present, there is no program of a structured professional training of principals and lecturers of PU education. Since most of the direct recruited lecturers are not having professional training, it is essential that they are imparted training in several competencies required by a regular classroom teacher. Some of the competencies required by a professional teacher are listed below:

1. Communication skills – Verbal and Non-verbal, & Soft Skills,
2. Teacher Effectiveness – Qualities of an effective teacher, code of conduct,
3. Performance Appraisal and Accountability,
4. Administrative skills – Decision making, Human relations, and work culture,
5. Educational Management – Institutional management, conduct of examinations, hobby clubs, sports and cultural activities, personnel management, HR practices,
6. Leadership, team building and creativity,

7. Student Counselling and Guidance,
8. Thinking skills, scientific temper,
9. Mental Health, Attitudes and values,
10. Career Planning and Time Management,
11. Information & Communication Technology – computer applications, multimedia, computer aided learning, use of internet, etc.
12. Ability to take up Research Projects including Action Research,
13. Curriculum Design and Development,
14. Evaluation and Feed back, Blue Print, Question paper design and setting,
15. Alternate methods of learning – Distance and Open Learning, self-learning, Programmed Learning,
16. Designing need based remedial courses,
17. Teaching Pedagogy – Methods and Materials of Teaching, Effective classroom teaching techniques, projects and assignments, Use of Technology in teaching.

All Principals/lecturers who undergo professional training must undertake a test at the end of the course.

There is an academic wing in the Directorate of PU education. Government in its order dated 17/05/2008, made provision of a Reader's post and 2 lecturer's posts in each of the 6 Government Colleges of Teacher Education. But this decision has not been implemented for the past several years.

However training is being imparted to teaching faculty both through direct and indirect methods. Several satellite based training programs are being held on a regular basis. Some of these programs are mentioned below:

1. Principals and lecturers were oriented in 13 subjects from 3-8-2010 to 31-8-2010, through the satellite based programs. An estimated 11,790 faculty were covered under the program,
2. Training programs were conducted to the faculty of ten districts which had secured low results in the II PU examination. 11 subjects were covered under the program. 4,000 lecturers were trained in two batches: 19-10-2010 to 23-10-2010 and 26-10-2010 to 30-10-2010.
3. 900 lecturers who were recently appointed through KPSC were given orientation program in several batches during 18-11-2010 to 21-11-2010 in evaluation techniques.
4. A 2 day orientation program in administration was given to principals of private aided and unaided PU colleges on 11-12-2010 and 12-12-2010 in all district headquarters.
5. Science lecturers were given special training in several batches. But not all lecturers are covered in these programs.

However, these programs seem to be adhoc arrangements made every year. There is need for well structured orientation courses suited to the needs of different subject lecturers. Newly appointed lecturers need to be given at least a 2 week orientation program covering several important topics like –

1. Development of Communication, teaching & Interpersonal skills,
2. Counselling & Guidance,
3. Health and AIDS awareness,

4. Issues related to handling of adolescent students,
5. A week computer education course, including use of internet for getting source material in their respective subjects,
6. Handling of equipment like OHP, LCD projectors, smart boards, etc.

Salaries of Teaching Faculty in Unaided Colleges

The 2009 World Bank survey notes that on an average an aided secondary school teacher earns about Rs. 13,800 per month where as a private unaided school teacher receives just Rs. 4,200 a month. At the senior secondary level, an aided teacher earns about Rs. 15,200 per month where as an unaided teacher earns about Rs. 5,700 per month. The survey also notes that one half of unaided secondary teachers and one third of unaided senior secondary teachers earn less than Rs. 3,000 per month. The situation is no different in Karnataka.

When the study team visited several unaided colleges, the lecturers were not willing to disclose their salaries for fear of angering the managements. When lecturers were called for discussions and filling up formats, the Principals were invariably present in the room. Most of the lecturers stated in the formats that they were being paid government scales. In urban areas, lecturers preferred to work in two colleges (part time) to make both ends meet.

Salaries of Unaided College Lecturers

The pay paid to the lecturers depends on the financial health of the college, its location in a rural or urban area, the subject they teach and finally merit. Lecturers in urban areas earn more than lecturers in rural colleges. Lecturers in English and Science subjects command more pay than lecturers in other subjects. Discreet enquiries revealed that part time lecturers on an average earn between 3000 and 5000 a month. Full time lecturers earn between 5000 to 8,000 a month, which is less than the the salary, a primary school teacher gets in a government school.

ISSUES & RECOMMENDATIONS

1. Is Commissioner of PU Education Overburdened?

In Secondary Education, Under the Commissioner of Public Instruction, there are different directors, who perform different functions: Administration by Director (Secondary Education), Academic work by Director, DSERT, bringing out Textbooks by the MD, Textbook Society and conduct of SSLC examination by Director (Examinations) in the Examination Board. Besides, there are two Additional Commissioners at Gulbarga and Dharwar, to take care of regional administrative matters in secondary education.

However, the Commissioner of PU education is in-charge of all these functions at the PU level, besides being in-charge of the 'Karnataka Examination Authority'. The Commissioner administers 3,952 PU colleges, which are nearly one third of the number of secondary schools in the state. It is in this context, the PU Department needs strengthening for efficient management of PU institutions in the state.

2. Can Colleges Run Efficiently with Insufficient Office Staff?

The Government Ex-Municipal PU College, Bellary has a combined strength of 3000 students in I and II year PUC. The College has 32 sections. However, there is acute shortage of office staff. The college does not have a superintendent or a First Division Clerk. Out of 5 posts of second division clerks only 2 are working. Out of 5 posts of peons only 2 are working. Even though, there is a sanctioned post of a physical education lecturer, it is yet to be filled up.

The Government PU College, Malkhed, Gulbarga district, has no clerks and no peons. There are several such examples throughout the state.

Is it possible to expect such colleges to run efficiently?

3. There is a need to maintain data on PU Colleges on the lines of SEMIS, to help integrate secondary and PU education.
4. There is need for improving the administrative efficiency at both the district and institution levels.
5. The offices of the DDPUs should be upgraded by providing computers and data entry operators so that the required information can be assessed easily whenever required. This will also help in taking quick decisions at the administrative level.
6. The Colleges also should have full complement of office staff as otherwise, Principals tend to depend on lecturers for day to day administration, maintenance of office records and collection of fee. This will also have an indirect impact on the academic work of the college,
7. All the PU colleges should be provided with computers, computer operators and internet facilities so that all the administrative and management work can be done online which would enhance the administrative efficiency of the colleges.
8. As discussed before, 30% of government PU colleges are running in shift system, which seriously affects the academic work and efficiency in management of the colleges. There should be a comprehensive and time bound plan to provide adequate infrastructure to these colleges.
9. For direct recruitment of PU lecturers, minimum qualification of 55% marks in PG course has been prescribed. But there is no such minimum marks fixed for promotion to the posts of lecturers. Hence in order to encourage merited candidates, the department should fix minimum marks of 55% in the PG degree (along with eligibility test) for promotion to the posts of lecturers also.

The issues in Grant-in- Aid to PU colleges are dealt with separately in chapters 10 and 11.

CHAPTER 9

QUALITY ISSUES IN PRE UNIVERSITY EDUCATION

As stated in Chapter 4, a good education system needs to provide good quality education and at the same time ensure equity. Many factors contribute to the quality of education such as a good curriculum, quality text books, suitable infrastructure facilities, quality teachers, motivated students with basic abilities and the level of classroom transaction. The various dimensions of quality have also been discussed in Chapter 4. In this chapter we discuss various issues associated with quality in the pre-university education sector.

CURRICULUM & TEXTBOOKS

Background

Pre University education is an important stage in the life and career of an individual as this stage coincides with the stage of adolescence in his/her life. This period in an individual's life is marked by personal, social and emotional crisis created by academic and social pressures, as well as, demands of adjustment required in the family, peer group and in college.

Pre University education is also the stage, where students make informed choices, based on their interests, aptitudes and needs regarding their future career. This leads to choosing optional courses of study for exploring and understanding different areas of knowledge, both in relation to one's interest and one's future career.

The choice of courses is however restricted to subjects under the 'Science stream', 'Arts stream' and the 'Commerce Stream'. The choice of courses is also restricted by the popularity of some combinations and subjects, because of the perceptions of students and their parents in choosing these subjects.

The preferred choice of many students in the science stream is always to prepare for medical or engineering courses. Thus the combinations of 'Physics, Chemistry, Maths, and Computer Science/Electronics or Biology' become the preferred combinations, closing all other possibilities in the science stream.

Similarly students who wish to opt for Arts and Commerce subjects are left with very few options. The courses offered at the PU stage need to be alive to recent and current developments in the various disciplines as new knowledge enters and multi disciplinary studies develop.

P U CURRICULA

The Department of Pre University Education is responsible for preparing the curriculum and syllabus for the first and second year Pre university classes in Karnataka. The syllabus is revised periodically (but not always) in tune with the revision of syllabus in secondary schools. The department constitutes a Coordination Committee under the chairmanship of a distinguished educationist for syllabus revision. This committee frames broad guidelines for framing of syllabus and procedure for evaluation.

The department further constitutes sub committees for each subject. These committees are supposed to examine the current syllabus prescribed in the particular subject at the secondary, pre university and degree levels as also the syllabus prescribed by the NCERT and

neighbouring states, and prepare the draft revised syllabus in the particular subject. This draft is sent to different colleges that are selected on a random basis for discussion, suggestion and critical comments.

The department also conducts divisional workshops in collaboration with the Principals' and Lecturers' Associations for a critical review of the draft syllabus. The sub committees incorporate the feedback thus obtained after a thorough discussion and finalise the syllabus for the respective subjects.

The issue of huge wastage and stagnation at the P U level needs to be considered and courses have to be designed (with in-built bridge courses) to address this critical issue. The curriculum should be so designed as to enable students to access a range of vocational jobs.

The Present Curriculum

1. Languages: At present, a student has a choice of studying in any of the two languages: Kannada, English, Hindi, Tamil, Telugu, Malayalam, Marathi, Urdu, Sanskrit, Arabic and French.

2. Subject Combinations: The Students have a choice of selecting Arts, Science or Commerce Combinations. The subjects are given below and the students are permitted to choose prescribed subject combinations.

1. Optional Kannada	8. Political Science	15. Biology
2. English	9. Accountancy	16. Electronics
3. Hindi	10. Statistics	17. Computer Science
4. Logic	11. Psychology	18. Education
5. Geography	12. Physics	19. Karnatic Music
6. Business Studies	13. Chemistry	20. Home Science
7. Sociology	14. Mathematics	21. Basic Maths.
		22. Hindustani Music

Adaption of 'National Core Curriculum in Science and Mathematics' in PUC

The State Government in its order No: ED 97 TPU 2011, dated 7/12/2011, has approved the introduction of the 'National Core Curriculum in Science and Mathematics' for the I PUC from 2012-13 and for the II PUC from 2013-14. This Curriculum has been developed by COBSE in collaboration with NCERT. This curriculum is being introduced in 10 states and institutions affiliated to CBSE and ICSE from 2011-12.

The reason for this introduction is that the Supreme Court has issued directions that there should be a single and common entrance test (named 'National Eligibility –cum-Entrance Test' NEET) to be conducted by the 'Medical Council of India' for admission to the under-graduate 'medical course'. MHRD has also indicated that it will conduct a single common entrance test to the 'Engineering Courses' from 2013-14. This decision is aimed to avoid stress among students, when they have to take multiple entrance tests for admission to various engineering and medical colleges.

In this context, the state government has decided to adapt the National Core Curriculum in Science (NCCS) and Mathematics. However there are several issues involved in implementation:

1. A majority of colleges do not have the needed equipment to teach the Science Curriculum. The situation in government colleges is even worse. In the primary study, the faculty of 90% of the Govt. PU Colleges interviewed, reported that there was no needed equipment in their college laboratories, to teach Science. In these colleges Science is taught on the blackboards.
2. A massive infusion of funds to equip the science laboratories in government PU colleges, is required urgently if the program of introduction of National Science Curriculum has to be successful.
3. At the high school level, the education department is yet to introduce the revised curriculum as per the NCF 2005. As it is, there is a sizeable academic gap between the state curriculum and the NCERT curriculum at the high school stage, students who have been taught in the old syllabus will find it difficult to a certain extent to cope up with the transition at the PU stage.
4. With the upgrading of the Science Curriculum to the National level, we should also think of the future of students, who take science subjects and fail and drop out of the education system. This amounts to a sizable 'wastage and stagnation' at the PU level which is already more than 50%. Hence it is desirable that some alternative courses are designed and offered to such students in lieu of the NCCS science stream.
5. The state is already facing a shortage of science graduates and science teachers for our secondary schools. A sudden introduction of a higher level curriculum will have a cascading effect on various related issues which the state will have to cope with.
6. As it is, the percentage of students who are opting for Science stream is stagnant at 25% for the past decade. With science steam results around 53%, at the II PUC level, the percentage of science students who are passing out of the PU system is barely 13% of the total number of students entering the PU level. This calls for urgent steps to attract bright students to the science stream as many of them opt for Commerce combination to enter industry which offers a higher pay packet.
7. The incentives can be in the form of scholarships to students who have secured more than a certain percentage of results in science subjects in SSLC (for example 80%), to continue studies in science stream in PUC.
8. We should also think of the other streams – Arts and Commerce, as the students in these streams will be studying the (unrevised and existing) state syllabus and there will be a sizeable gap in quality levels between science stream and Arts and Commerce stream students. This is not desirable and the state should take immediate steps to revise the curricula in other streams as well. The GO speaks of adapting national curriculum being prepared by COBSE in respect of Economics and Commerce subjects only. In fact the syllabi of all the subjects in Arts and Commerce Combinations need revision and up-gradation. This also calls for orientation of the subject teachers to the revised curricula.

The Department has taken a number of measures in this regard –

a) The students who are entering I PUC (Science Stream) in 2011-12 are to be given a 2 month bridge course to bring them on par with the National Curricula in Science and Mathematics.
b) There is a program for providing orientation programs for all the Science and Mathematics lecturers in government, aided and unaided colleges throughout the state during summer holidays.

c) The department proposes to distribute a textbook- cum-workbook to science students. It will also broadcast science classes on Doordarshan and private TV channels and the department's web site from 1st April 2012. After the commencement of the colleges, the students will also undergo a 2 month bridge course.
d) The colleges will also be given training modules and there is a proposal to train all science lecturers in batches of 40-60 during April-May 2012.

Pre University Text Books

The department brings out only language text books and workbooks in the prescribed 12 languages. The language textbooks are prepared by the Text Book Committees. Each Committee has a chairman and 5 to 6 members. These text books and workbooks are scrutinized and finalized by a scrutiny committee and are then printed and distributed by the Government Press. The adequacy, availability, and frequency of supply of textbooks/workbooks to the students are not monitored by any other agency.

In respect of core subjects, various authors and private publishing houses prepare text books based on the syllabus prescribed by the department. Hence a number of text books are available for a particular subject in the market. The teachers in colleges recommend a particular text book of their choice to the students.

However, the department does not monitor quality, content and adequacy of these textbooks as well as competencies of the authors who write these textbooks. There is also a flip side to this - the prices of text books published by the private publishers are exorbitant compared to the departmental ones. Thus there is a continuous demand from students and teachers for the department to prepare text books in all the subjects. This will help in bringing uniformity in content, quality and cost. This will also help the department to maintain equivalence in standards of textbooks. From 2012-13, the state will adapt NCERT science textbooks in respect of science subjects only.

Assessment & Evaluation

In the Indian Education System, the term 'Evaluation' is associated with examination, mental pressure, stress and anxiety. Labeling children as pass or fail has become the sole purpose of our examination system. The ill effects of the examination system may also leave lasting mark on the psychological set up of the individuals.

Pre University examination has become a high stakes examination. Consequently, every year, we read about several cases of student suicides. These take place either at the time of examination or immediately after the announcement of results. This leaves a big question mark on the efficacy of the present education and examination system.

Education is concerned with preparing students to become good citizens and lead a meaningful and productive life. Hence evaluation should become a means of providing a credible feedback on the extent we are able to impart such an education. The current process of evaluation assesses and measures only a limited number of faculties. It does not provide a complete picture of an individual's abilities and progress. Even the limited objective of measuring a student's scholastic and academic development is not being achieved.

An Analysis of
II PU PUBLIC EXAMINATION RESULTS

Performance of Students in II PUC Examination

Unlike the SSLC Examination results, the II PUC Public Examination results exhibit a certain amount of consistency over the years. During the past decade, the II PUC Public Examination results have shown a gradual improvement from 39% to a decade high of 52% in 2005. Again from 2005 the results declined to a low of 41% in 2008 before stabilising at around 48% in 2011.

These results are almost in line with various studies which show that the academic performance of students in our educational institutions is around 50%. (Please see tables 4.1 and 4.2 in Chapter 4)

Table 9.1
Performance over the Years in II PU Examination

	1999	2001	2003	2005	2007	2008	2009	2010	2011
Percentage of Passes	39.10	39.28	45.19	52.77	50.63	41.31	42.48	49.27	48.93

These results also show that more than 50% of PU students fail in the first attempt, even though a small percentage of students pass in subsequent attempts. Hence for quite a number of students (around 40% of PU students) the PU stage becomes a terminal stage in education in their lives. There is no system of further tracking the lives of these failed students.

Management-wise Performance of Students in II PU Examination

Performance of students studying in government, private aided and private unaided PU colleges have steadily increased over the years. The performance of students from private institutions is decidedly better as seen from the results (Table 9.2). There was an average ten percentage point difference in performance of students between government and private aided PU colleges over the years. This has narrowed down to about five percentage points in 2011.

Table 9.2
Management-wise Performance in II PU Examination

Year	Govt.	Aided	Unaided
2006	48.75	58.99	56.92
2008	41.15	49.25	50.13
2009	43.32	51.62	55.08
2010	54.66	59.78	62.36

Meanwhile, Unaided PU colleges which were previously performing lower than aided PU colleges, started performing better and as in 2011, there is almost a 3% difference between aided and unaided colleges.

The consistent and improved performance of some private institutions is probably due to higher quality of students at entry level, better infrastructure, and probably better classroom teaching. These are premises which need further study.

Some of the reasons for lower performance of students in government PU colleges appear to be:

- Inadequate infrastructure in government PU colleges – buildings, shift system, crowded class rooms, lack of drinking water and toilet facilities,
- Poor laboratory & library facilities in several colleges,
- Unfilled vacancies of lecturers in certain subjects,
- Lack of supplementary teaching materials and teaching aids in institutions,
- Low motivation levels of teachers in government institutions.
- Lower quality of students entering I PUC in government colleges, when compared to the quality of students being admitted in private PU colleges.

Performance of Students by Gender

In every year, girls have outperformed boys by a statistically significant margin. In 2006 there was a gap of 10% between the performance of boys and girls. This gap has only increased over the years. In 2010, the gap between performance of boys and girls was almost 16% and in 2011 it was around 14%.

Table 9.3
Performance of Boys & Girls in II PUC Examination
In Percentage

Year	Boys	Girls	Total
2006	49.00	59.75	56.97
2007	44.74	57.76	50.63
2008	35.45	48.65	41.31
2009	36.83	49.32	42.48
2010	40.98	56.06	47.82
2011	42.19	56.92	48.93

Performance of Students by Social Groups

Unlike SSLC, the results of the students of both the SC/ST categories have been below par. During the past decade, the results of both SC and ST students have not significantly changed. ST students have always performed better than SC students in almost all the years. However, around two-thirds of SC students and around 60% of ST students fail in the II PUC examination. A majority of these students drop out of the system.

Table 9.4
Performance of Social Groups in II PUC Examination
In Percentage

Year	All Students	SC	ST
April 99	47.88	34.19	41.96
April 00	46.48	27.66	28.21
April 01	39.28	26.06	26.11
April 02	45.96	34.47	34.65
April 05	52.77	41.86	43.30
April 06	59.75	43.77	45.40
April 07	50.64	38.81	41.82
April 08	41.31	28.93	31.02
April 09	42.48	30.45	32.47
April 10	47.82	34.65	37.52
April 11	48.93	36.66	40.40

Stream-wise Performance of Students

In all the years, Commerce students have performed better than Science students, who in turn have performed better than Arts students. Even though 45% of all enrolled students take the Arts stream, thinking that Arts subjects are easy, we find the maximum number of failures in this stream.

Table 9.5
Stream-wise Performance

Year	Arts	Science	Commerce	Total
April 2005	48.74	55.39	61.69	52.77
April 2006	52.98	49.29	64.63	59.75
April 2007	48.76	47.79	63.69	50.63
April 2008	36.21	41.26	54.79	41.31
April 2009	35.31	45.70	54.69	42.48
April 2010	39.54	53.89	57.95	47.82
April 2011	42.08	53.48	57.22	48.93

There needs to be an awareness campaign and guidance counselling to students who prefer Arts to take up other combinations, as they have better career prospects.

Medium-wise Performance of Students

English medium students have always performed better than Kannada medium students in all the years. In 2011, there was a 13 % difference between the performance of English and Kannada medium students. This shows that Kannada medium students are at a big disadvantage considering their underperformance in the II PUC examination every year.

Table 9.6
Medium-wise Performance

Year	Kannada	English	Total
2006	51.83	56.15	56.97
2007	47.72	53.78	50.63
2008	36.01	47.41	41.31
2009	36.05	49.70	42.48
2010	40.69	55.96	47.82
2011	42.79	55.82	48.93

District-wise Performance

Unlike the SSLC Public examination, there is fair amount of consistency over the years in the performance of districts in the II PUC Public examination. The top ten districts in terms of performance and their ranking each year is given below. The year 2005 is taken as the base year when comparing ranking between the districts.

There is a competition between Dakshina Kannada and Udupi to secure the top position every year. The first eight districts show consistency in performance and are ranked between 1 and 10 every year. Belgaum district has slipped from 10 to 24 in ranking over the years.

Table 9.7
Ranking of Top 10 Districts in the II PU Examination

District	2005	2006	2007	2008	2009	2010	2011
Udupi	1	1	2	2	2	1	1
Dakshina Kannada	2	2	1	1	1	2	2
Kodagu	3	3	4	3	7	4	4
Chikkamagalur	4	4	5	6	5	10	7
Uttara Kannada	5	5	3	4	3	3	3
Bangalore North	6	7	7	7	6	9	8
Bangalore South	7	11	9	8	4	7	9
Shimoga	8	6	6	5	8	8	10
Hassan	9	9	10	10	11	16	13
Belgaum	10	16	11	19	22	22	24

However, there are some variations in the ranking of the bottom districts in their performance in the II PU examination every year. The bottom ten districts in terms of performance in the II PUC examination and their ranking each year is given below.

Table 9.8
Ranking of Bottom 10 Districts in II PU Examination

District	2005	2006	2007	2008	2009	2010	2011
Chamarajanagar	19	8	14	15	12	5	5
Kolar	20	19	19	16	17	21	21
Gadag	21	20	16	23	25	28	25
Bagalkot	22	23	21	22	24	23	16
Mandya	23	18	17	13	15	20	22
Bellary	24	24	22	25	20	15	20
Chitradurga	25	25	23	26	23	25	23
Gulbarga	26	27	26	28	29	27	26
Bidar	27	28	28	30	26	24	28
Koppal	28	26	24	24	27	30	30

Chamarajanagar has risen from a low of 19 in 2005 to 5th position in 2010 and 2011. Otherwise all other districts have shown poor performance and are at the bottom of the table in rankings.

The educationally backward districts of Gulbarga, Bidar and Koppal are the lowest ranked districts in almost all the PU examinations. In comparison, in the SSLC examination of 2011, these districts have secured the following rankings – Gulbarga (32), Koppal (20) and Bidar (34).

Performance of Institutions in 2011

The 2001 sub sector study had found that 472 institutions (18% of the then existing institutions) had secured less than 30% results in the II PUC examination. Out of these 38% were government institutions and the rest were private.

The scenario is very much the same in 2011. In this year, 565 institutions (14% of the existing institutions) have secured less than 30% in the 2011 examination.

Table 9.9
Performance of Institutions 2011

Pass Percentage	Govt.	Aided	Unaided	Others	Total
0	**4**	**--**	**36**	**--**	**40**
0-10	3	4	48	1	56
10.01-20	33	22	132	4	191
20.01-30	71	34	162	11	278
30.01-40	170	61	179	23	433
40.01-50	221	103	198	28	550
50.01-60	218	123	145	29	515
60.01-70	168	111	151	28	458
70.01-80	158	102	125	27	412
80.01-90	98	48	123	15	284
91-100	51	28	132	12	223

There are 40 PU colleges (including 4 government) which have secured zero percent results. Apart from these 40 PU colleges, 247 PU colleges (including 36 government) have secured less than 20% results.

Performance of Government PU Colleges
12% of government PU colleges have secured above 80% results. These colleges have done extremely well considering the fact that the overall results in the 2011 examination are only 48.93%. Among the remaining government colleges, 45% of government PU colleges have done reasonably well by securing above 50% results.

However, 9% of government PU colleges have done extremely poorly by securing less than 30% results. Among them are 4 colleges with zero percent and 3 colleges with less than 10% results. Hence some remedial action is called for, in respect of these government colleges.

Performance of Private Aided PU Colleges
Just like government colleges, 12% of private aided colleges have secured above 80% results. However among the remaining private aided colleges, 53% of colleges (compared to 45% government colleges) have done reasonably well by securing above 50% results.

However, just like government colleges, 9% of private aided PU colleges have done extremely poorly by securing less than 30% results. Again among them, 4 colleges have secured less than 10% results. Hence some remedial action is called for in respect of these aided colleges.

Performance of Private Un-aided PU Colleges
13% of private unaided colleges have secured above 80% results. However among the remaining private unaided colleges, only 22% colleges (compared to 45% government and 53% private aided colleges), have secured above 50% results.

However, nearly 20% of private unaided colleges have done extremely poorly by securing less than 30% results. (This is in direct comparison to 9% of government and aided colleges in their respective category). Among the private unaided colleges, 36 colleges have secured zero percent and 48 colleges have secured less than 10% results. Hence some remedial action is called for in respect of these unaided colleges.

Good (Better Managed Colleges) Colleges
Here, we have defined a good college as a college which has secured 80% and above results. In all, 480 colleges out of a total of 3952 PU colleges (in the state) have secured above 80% results in the 2011 II PUC examination. Compared to their respective totals in each category, these colleges appear evenly spread among government (12%), private aided (12%) and private unaided (13%) colleges.

However, when compared to the total number of PU colleges in the state, good government colleges constitute 4 %, good private aided colleges constitute 2%, and good private unaided colleges (mostly situated in urban areas) constitute 6 % of the total number of colleges in the state.

Poor Colleges
Here, we have defined a poor college as a college which has secured less than 30% results. In all 549 colleges out of a total of 3952 PU colleges (in the state) have secured less than 30% results in the 2011 II PUC examination. However these colleges are not evenly spread among the three categories of colleges. 9% of government, 9% of private aided and 20% private unaided colleges fall under this category.

When the total number of PU colleges in the state is taken into consideration, poor government colleges constitute 3%, poor private aided constitute 1.5%, and poor private unaided constitute 9.5% of all PU colleges in the state.

RECOMMENDATIONS

The following recommendations for improvement of quality are made to enable the state to take necessary steps to improve quality and maintain essential standards in all educational institutions in the state:

1. How many hours should the PU Colleges Work?

It is important that every PU college must compulsorily function for at least 6 ½ hours every day (including lunch time). This will help improve quality and also contribute to the all-round personality of students.

At present most of the PU colleges (especially those working in shifts) work for only four hours a day, without providing any time for additional academic or extra-curricular activities.

The staff must also stay for at least 6 ½ hours on working days of the college. This will help students to get proper guidance and counselling from the faculty. The job chart must detail the various obligatory academic and non-academic responsibilities of the faculty.

2. Curriculum & Textbooks:
There is need for the formation of a **'State Curriculum Development Authority'** which will help to bring in continuity and standards at all levels of primary, secondary and PU education sectors. This Authority should be a purely academic body consisting of educationists working at different levels of education, classroom teachers and NGO's working in the field of education. The 'Curriculum Development centre' proposed under the DSERT should come under this Authority.

3. Other Recommendations are:-

1. The State has to revise the PU Curriculum to incorporate the latest developments taking place in the individual disciplines and also to conform to the pattern prescribed in the NCF 2005.

2. The courses offered at the PU stage need to be alive to recent and current developments in the disciplines as new knowledge enters and multi disciplinary studies develop.

3. Department of PU Education should bring the Arts and Commerce Curriculum also on par with the national level.

4. The curriculum should cover important aspects of learning – practicals, assignments, field trips, reference work, project work, presentations, etc.

5. Well equipped laboratories, libraries and access to computers are essential at the PU stage and the state should make all efforts to equip the PU colleges with these facilities and resources.

6. The department should prepare text books in all the subjects including core subjects. This will help in bringing uniformity in content, quality and cost.

7. There is a need for introducing 'Geography' subject as a part of Arts combination and 'Business Maths' as a subject as a part of the Commerce Combination.

8. There is need to introduce suitable combinations and subjects to encourage potential drop outs to complete PU education without dropping out.

9. The students should be allowed change of combinations, midway, which will also help reduce drop outs among students.
10. All students should be given a 2 month bridge course in all subjects, to bridge the gap between SSLC and PUC. The department should scientifically design bridge courses in each subject keeping the standard of students entering the PUC course.

4. Guidance and Counselling:

a) Guidance and Counselling by trained professionals must be compulsorily made in every PU College, to enable students to make informed choices about their future career.

b) Every faculty should be trained in imparting soft skills to the students. Each institution should have two faculty trained in 'Counselling and Guidance' to help students take considered career decisions and overcome personal crisis during their student life.

c) There needs to be an awareness campaign and guidance counselling to students who prefer Arts to take up other combinations, as they have better career prospects.

5**. Grading of PU Colleges**

The state shall also prescribe standards regarding quality. Every educational institution shall be graded on a five point scale on a set of quality parameters. The institutions falling in the last two grades (D/E) shall be targeted for remedial measures and be given an opportunity for improving their standards for a year.
Necessary action shall be initiated against institutions failing to maintain essential standards or fall in the last two grades even after opportunity is given for improvement. This should include both government, aided and unaided PU colleges. This grading can be entrusted to an independent external agency.

In case of grant-in-aid institutions, falling in the last two grades, or achieving less than 30% results in the II PUC examination, the state after due procedure, should take action to stop grants to such institutions or bring them under disincentive schemes.

In the case of an unaided institution, the department should initiate suitable remedial measures to improve the institution. If within a period of three years, the institution does not improve, the department shall take action to close down the institution by withdrawing the recognition.

6. **II PU Examination**

a) Take up an independent study to analyse the results of different categories of colleges, streams and social groups, identify reasons and suggest specific remedial measures.
c) Take up an independent study to analyse the PU question papers, as such an analysis will help to improve the quality of the question papers in the coming years. Such a study has been done for SSLC question papers. (See Chapter 4)
d) Track some percentage of failed students to find out what happens to them after PUC so that it will help to design suitable courses for them at the PUC level itself.

7. **Orientation Programs**

Capacity building of the teaching faculty belonging to the PU colleges must be a priority of the department, to meet the emerging challenges in the education field.

(a) The Department must develop faculty improvement programmes in every subject in collaboration with university staff colleges and other research centres.
(b) The department must develop the skill matrix for each of the subjects, compare and analyse the skill gap of the faculty and develop orientation programs accordingly.
(c) Every lecturer must be compulsorily made to attend one faculty improvement program every three years.
(d) A system of certification of these programs should also be put in place.

8, **Teacher Accountability**

Staff of government and aided PU colleges, enjoy job security, pension, periodical revision of pay scales and salaries, which are not linked to their performance. All these factors are responsible for under-performance of teaching faculty, which affects the quality of classroom transaction as also the results in the II PUC examination. Hence there should be a proper procedure for fixing proper teacher accountability. Procedure for measuring teacher accountability is mentioned in Chapter 5.

PART C

FINANCING SECONDARY & PU EDUCATION

IN

KARNATAKA

10. A Review of the States' Grant-in-Aid Policy

11. Financing of Secondary & PU Education in Karnataka

CHAPTER 10

A Review of the States'
GRANT IN AID POLICY

Except for a few reputed institutions, most private institutions treat education as a commercial activity. In Karnataka, nearly 25% of high schools and 16% of pre-university colleges are private institutions getting 100% salary grants from the state government, under the grant-in-aid policy of the state.

These institutions do not significantly contribute to the Universalisation of Secondary Education as most of them are concentrated in urban areas, where government and private unaided institutions also co-exist. However there are several exceptions to this statement.

Background

The demand for English medium schools is an important reason for the unprecedented growth of private educational institutions in the state. Those who can afford generally prefer private institutions irrespective of other considerations. The cost of education in private institutions is relatively high. It is much higher in unaided institutions than in aided and government ones. The menace of 'donations' and 'exorbitant fees' exists in a majority of the private institutions.

The grant-in-aid policy envisages encouraging private participation through provision of grants, when the state is not in a position to satisfy the local needs in opening educational institutions.

According to this policy, grant-in-aid is a discretionary grant of the state government with the state having the discretion to award, refuse or withdraw grants to an institution. Grants cannot be claimed as a matter of right by any institution. Grants are given subject to availability of funds.

Objectives of the Grant-in-Aid Policy

The grant in aid policy has both promotional and regulatory objectives. These objectives have relevance to all stakeholders in the education system – the state government, the managements of private institutions, teachers, students, parents and the community. The grant-in-aid policy has encouraged and also regulated the growth of the private participation in education in the state.

The objectives of the policy are:

1) To encourage private initiatives in management and financing of education,
2) To regulate the activities (recruitment, admissions, etc) of private institutions through prescribed norms,
3) To reduce the cost to the state as otherwise these institutions would have to be run and maintained by the government,
4) To reduce the cost to the private institutions as the salary of teaching and non teaching staff is compensated by the government,
5) To ensure equity through implementation of the roster system, regulation of admissions and other similar measures.
6) To facilitate quality education at affordable and reasonable levels in aided institutions.

Evolution of the state's grant-in-aid policy

As early as 1860, in the princely state of Mysore, the government under Bowring evolved a plan "consisting of not only establishing government schools but also encouraging private initiatives through the grant in aid scheme". According to this scheme, individuals or a group of individuals were encouraged to set up schools and run them for a few years successfully, after which the government would provide them with financial assistance.

In the beginning, the government met one half of the net authorised expenditure incurred by private schools in the form of maintenance grant for many years. Subsequently, this policy was liberalized and the grant was enhanced to three fourths of the net authorised expenditure from 1947.

At the time of the reorganization of the state, there were different rules of grant-in-aid in different regions of the state. In princely Mysore, the government used to meet 75% of the net expenditure. To bring about uniformity in all regions, the state passed an order in 1962 fixing 80% of the net authorised expenditure for schools in urban areas and 85% for schools in rural areas as eligible for government grants.

A Uniform grant-in-aide Code was made applicable to all secondary schools in 1961 – 62. Apart from salary grants, High schools were also eligible for recurring grants which were given for contingency, rent and maintenance charges as per rules. Non recurring grants for school buildings, play grounds and equipment were also admissible.

The grant-in-aid policy was revised in 1967 and the grant was increased to 100% of salaries of teaching and non teaching staff and the same came to be credited directly to the individual bank accounts of teachers through the cheque system. This policy helped in curbing harassment of aided school teachers by their managements. In addition to this 100% salary grant, the schools were also eligible for 5% of the total grant towards contingency.

The grant-in-aid policy was again revised in 1987. According to this policy, private schools which were started after 1 – 06 - 1987 were declared as permanently unaided schools and hence declared ineligible for grants. At the time of application for permission to start a private school, the management had to file an affidavit on stamp paper that it would run the school as a permanently unaided institution.

The state also brought out relevant rules reiterating this policy in 1998, (Rules under the Karnataka Education Act 1983). These rules as well as the cut off date were upheld both by the High Court of Karnataka and the Supreme Court in several cases.

Bowing to the pressure from private institutions, the state relaxed this policy in its order dated 13 September 2002, and extended salary grants in the case of SC/ST institutions (primary and high schools only) established during the period from 1st June 1987 to 31st March 1992 with certain conditions.

After this relaxation, successive governments started bringing in more and more institutions under grant-in-aid. As in 2011, all schools and PU colleges started prior to 31.3.1995 are eligible for grants under the policy. However, these schools will have to fulfil a number of conditions to become eligible for grant-in-aid.

Scale of Salary Grants

1. **Secondary school:**
   (a) For a secondary school with 3 classes (Classes 8, 9, 10), one Head teacher, 4 graduate assistants, one Kannada teacher, one physical education teacher, one craft teacher and one Hindi teacher are allowed 100% salary grants.
   (b) For a secondary school with more than 5 sections, the scale allowed is 1 ½ teachers per section, along with the post of the head teacher.
   (c) Two posts of one clerk and one peon are also eligible for grant-in-aid as non-teaching staff in these schools.

2. **Pre University College:**

1. For a pre university college, the scale of grants depends on the number of sections and combinations. For a college with one combination and one section each in I PUC and II PUC, the college becomes eligible for salary grants to 6 lecturers. However, the college needs to have a strength of minimum 40 students in each section. For teaching a particular language a minimum of 10 students is necessary. However, this is subject to Karnataka Pre-University Education (Academic, Registration, Administration, Grant-in Aid, etc.) Rules 2006.

Growth of Grant-in-Aid Institutions in Karnataka

Even though the share of private aided institutions is declining during the past two decades in secondary and PU sectors in Karnataka, there is a steady growth in the number of institutions which are being brought under grant-in-aid.

Successive governments have continued to bring in more and more institutions under grant-in-aid, in spite of the fact that the grant-in-aid is proving to be a heavy financial burden on the state. The following table gives a birds' eye view of the growth of grant-in-aided institutions in the state during the past two decades:

Table 10.1
Growth of Grant-in-Aid Institutions

Year	High Schools	%*	PU Colleges	%*
1990	2,045	48.8%	531	34.6%
1995	2,105	33.9%	531	27.7%
1999	2,649	32.2%	531	25.5%
2006	2,682	28.3%	531	18.2%
2010	3,367	25.2%	638	16.6%

**percentage as share of grant-in-aid institutions to total number of institutions in that year.*

During the ten year period between 1999-2000 and 2010-11, 718 secondary schools and 107 PU colleges have been brought under grant-in-aid, which is a substantial number.

Financial Implications of Grant-in-Aid

As stated above, the grant in aid policy of the state has evolved over a period of time. In the beginning, the state was liberal in extending aid to private institutions. But as the number of private institutions increased, the grants started proving to be a heavy burden on the finances of the state and hence the state began to impose conditions and restrictions in granting aid.

The extension of grant-in-aid to private institutions depends broadly on the following factors –

a) The willingness to extend or modify the policy on the part of the government (or the party in power) at any particular point of time

b) The capacity of the government to pay, as any commitment would have a long time impact on the finances of the state.

Since the state is providing 100% salary grants to teachers of aided institutions, every revision of pay scales and grant of additional DA every six months, increases the states' expenditure on grant-in-aid institutions proportionately.

Approximately 37.80% of the states' secondary and PU education outlay is spent on grant-in-aid. But these grant-in-aid institutions account for only 23.30% of secondary and PU institutions in the state. (Please see Chapter 11 Table 11.12).

As in 2010-11, the total expenditure on grants to secondary institutions was Rs. 1,169 crore out of a secondary education outlay of Rs. 3,093 crore. This is a huge drag on the state government's scarce financial resources.

Issue of Unviable Grant-in Aid Institutions

There are a large number of aided unviable high schools and junior colleges, with less than minimum prescribed student strength.

Table 10.2
Unviable Aided Institutions

Student Strength	Aided High Schools	Aided Junior Colleges
Less than 50	93	52
51-75	44	81
76-100	216	99
Total	**353**	**232**

These 353 aided secondary schools and 232 aided PU colleges have to be dealt with on a case by case basis by the government only after due institution mapping. Some of these institutions might have to be still retained if no other secondary school or PU college exists to cater to the needs of the children of the locality/habitation within a radius of 5km/8km. Institutions situated in hilly region or difficult terrain, etc. might have to be retained even if they are unviable, to provide adequate access. There should be regular screening of unviable GIA institutions (on an annual basis).

Performance of Grant-in-Aid Secondary Schools in the SSLC Public Examination

One important feature of the 2011 results is that 61.78% of all secondary schools in the state have secured more than 80% results. Of them, 21% are private aided schools. Alternatively, 55.21% of aided schools have secured above 80% results.

But we also see 4 aided schools getting zero percent results and 87 aided schools getting less than 40% results. The relevant table is extracted below:

Table 10.3
Performance of Aided Secondary Schools
in 2011 SSLC Public Examination

Pass Percentage	Aided Schools
0	4
0 - 40	87
41 - 60	289
61 - 80	903
Above 80	1,582
Total	**2,865**

Extracted from Table 4.12 (Chapter 4)

Performance of Private Aided PU Colleges

In the 2011 PUC public examination, 12% of private aided colleges have secured above 80% results. Among the remaining private aided colleges, 53% of colleges (compared to 45% government colleges) have done reasonably well by securing above 50% results.

However, 9% of private aided PU colleges have shown poor performance by securing less than 30% results. Again among them, 4 colleges have secured less than 10% results. 121 aided PU colleges have secured less than 40% results in the PUC public examination.

Table 10.4
Performance of Aided PU Colleges
in 2011, II PUC Examination

Pass Percentage	Aided PU Colleges
0	**--**
0-10	4
10.01-20	22
20.01-30	34
30.01-40	61
40.01-50	103
50.01-60	123
60.01-70	111
70.01-80	102
80.01-90	48
91-100	28
Total	**636**

Extracted from Table 9.9 (Chapter 9)

This requires strong measures on the part of the government. Hence the study recommends linking aid with the performance of the institution.

Demerits in the Grant-in-Aid Policy

1. In spite of getting 100% salary grants from the government, the cost of education in these institutions is relatively high when compared to the government institutions as students have to pay double the fee fixed by the government in Government PU Colleges.

2. These institutions are also known for discriminatory practices, harassment of staff, disregard to government rules and regulations, etc. A large number of schools and PU colleges in urban areas do not satisfy infrastructure requirements. But they continue to get grant-in-aid from the government.
3. The current teacher based grant in aid system does not provide incentives for schools to expand capacities or enrol additional students.
4. In these institutions, since the teachers are paid salaries directly by the government under provisions of the grant-in-aid codes, the role of managements is extremely limited.
5. Most of the private managements provide very little for improvement of infrastructure and other facilities in these aided institutions.
6. In many of these private aided institutions, there is very little accountability. There is no performance assessment. Since salaries of aided school teachers are directly paid by government, teachers do not feel accountable to the school or the parents.
7. The rapid growth of private unaided schools and colleges in the state, reveals the willingness and capacity of the parents to pay for their children's secondary education.

8. Issues in Recruitment of Teachers in Private Aided Institutions

Rules under the Karnataka Education Act 1983, economy measures imposed by the government from time to time, reservation policy and the departmental circulars in force regulate the appointment of teachers in private aided institutions.

Government and aided teachers get identical salaries. While the government teachers are recruited through a 'Central Entrance Test' and on merit-based roster system, private school teachers are recruited by managements locally (based on roster) and sometimes on considerations other than merit. This has led to an evil system of collection of donations by managements from prospective candidates and poor quality of teachers being appointed in aided institutions.

9. Private aided institutions (in the school education sector) have a history of declining student strength. The government was forced to pay salaries to hundreds of teachers for a number of years both in elementary and secondary education sectors, even when the schools did not have the optimum student strength. After the High Court passed strictures, the government formulated rules to redeploy excess teachers to other aided institutions.

10. Even this system did not work well as many schools were not in a position to take teachers appointed by other schools due to various reasons. In such cases, government withdrew such posts from grant-in-aid. However, these rules could not be applied to minority aided schools as well.

11. Except in the case of a few reputed institutions, most of the private institutions treat education as a commercial activity. It is common for private managements to charge heavy donations in the name of development fees, provide poor infrastructure and disregard government rules and regulations.

12. Even some of the managements of aided institutions collect a regular amount from teachers illegally, (as royalty). None of the teachers are however willing to provide proof for fear of harassment by the managements.

13. The state has not been able to curb some of these unethical practices of private institutions at the school level – costly uniforms and additional books (to be bought only from the school) apart from text books, heavy fees, collection of additional funds in the form of building fund, school excursions, school day, etc.

14. The 2001 sub sector study report comments: "Managements of private schools feel that unrealistic policies of the government with respect to –
    (a) fee structure,
    (b) staff recruitment,
    (c) medium of instruction,
    (d) grants-in-aid
    – are the root causes of the so called malpractices in private sector schools".

15. The government has been opening government high schools on a regular basis. The number of government high schools has risen from 1,302 in 1990-91 to 4,726 in 2010-11. In spite of this, successive governments have been extending grants to more and more private institutions. This is proving a heavy burden on the finances of the state.

16. The Edu-vision 2002 document had commented on the state's grant-in-aid policy as follows: *'... aid to schools should be performance linked and be more in the form of block development grants based on the developmental vision and commitment of the school rather than on a routine recurring basis with no accountability…'*

Need for Reforms in the Grant-in-Aid System

The grant-in-aid system in its present format needs to be streamlined, in order to make it more transparent and accountable. Every aided institution should not be able to claim grants from the government as a matter of right.

The heavy strain on government finances, is reason enough to bring reformation in the existing grant-in-aid policy so that the same amount of grants may be efficiently used to attain a host of objectives –

1. Deliver higher quality education at the same or a lower cost,
2. Provide incentives to children of disadvantaged groups to come to school,
3. Explore various PPP models to bring a certain amount of accountability in the system,

The Karnataka sub-sector study on elementary education (2001) suggested that grant-in-aid should not be sanctioned on the basis of number of classes (as is the case), but should be based on students' achievement and per pupil cost. This has the advantage of allowing selectivity in funding to reduce education gaps.

Grants may be made conditional on achievement of specific outputs – minimum levels of student and teacher attendance, student retention rates, public examination pass rates, etc. The schools will have to submit annual audited statements as a condition of government grants.

Possible Solutions to Certain Issues faced by Private Institutions

Private institutions also face a good many problems, which can be solved by the government through taking certain proactive decisions.

1. Permission should be given to private aided institutions to initiate recruitment process six months prior to retirement of staff, in order to prevent disruption of the academic work of the institutions.
2. The issue of bringing those recruited as per 1 above under grant-in-aid is a separate issue, which can be taken up as and when government releases vacancies.
3. The department should prescribe reasonable time limits for all approvals by departmental officers to prevent harassment of the institutions by these officers.
4. There should be provision for sanction of unaided posts in aided institutions (just like colleges), which will help these institutions to take up expansion plans, depending on the increase in demand from students.
5. At the same time the government should implement the 'minimum wage' policy for teachers, to prevent managements of unaided schools from exploiting teachers by paying meagre salaries.

Alternative Models of Grant-in-Aid

Apart from payment of 100% salary grants to private institutions, there are several alternative models available. The World Bank Report calls them PPP models – containing varying degrees of risk and responsibilities for the private sector. In all these models, government retains regulatory, financing and quality assurance roles.

The schools also get a choice. They can spend the funds they receive on what they consider their priorities. Such grants also will have positive effects. They make schools work towards attracting more children. In such a system, rural schools and smaller schools can be given higher subsidies.

All these models can carry a rider that the government will suspend partnership, if the school/college does not perform to agreed standards – quality of inputs, retention rates, examination pass rates, etc. There can be an external and independent monitoring agency to verify the quality of education provided in these institutions.

Schools may be divided into various categories depending on their size and location and per capita cost can be worked out for each category and this will be the basis for funding of schools under various models.

1. ***Model 1:*** As an alternative to the grant in aid system, a carefully designed funding formula that links grants to schools to the number of students (belonging to disadvantaged groups and BPL families) and the nature of learning needs could be thought out.

2. ***Model 2:*** The private management provides all services, including buildings and teaching staff. The government financing can be limited to a certain percentage of the total expenditure of the school.

3. ***Model 3:*** The government can take the responsibility in financing a certain number of seats in a private school at an agreed per student cost. Currently some schools like Sainik school, Bijapur and Kittur Rani Chennama School for girls, Kittur, Belgaum dt. get grants in this way.

4. ***Model 4: Voucher System:*** Funding follows students. Here, parents get a choice in admitting their children to schools of their choice and government funds their education costs. Vouchers are subject to renewal every year, until the student passes out of the secondary school. Here the schools may belong to any category – Govt., aided or even unaided. This has been tried out as a pilot project in Delhi. Voucher system is also successfully tried out in many other countries (US, Chile, Colombia, etc.).

   The objective of the voucher system is to foster competition and efficiency among education providers, to increase parental choice in selection of schools, and to enable students from disadvantaged and BPL families to attend private schools. This will also force inefficient schools to improve their performance or risk losing students and government grants.

5. ***Model 5: Cross Subsidies:*** In order to ensure equity, there is need to develop a policy that allows the admission of poor children from disadvantaged groups in private unaided schools through the introduction of cross subsidies. The concept of differential fee in private unaided schools can help such schools in meeting their social obligations. While allowing for free/subsidised education for the merited and needy students, the unaided institutions may be allowed to charge higher fee to general category students.

6. Instead of directly financing an institution through grant-in-aid, a system of incentives, with lower financial implications for the government can be thought of:

   a) Provide land to 'Local Resident's Associations' at subsidized rates, to start schools in their locality. This would reduce capital investment by government to a large extent,
   b) If the school is willing to run second shift for children of the weaker sections of the surrounding localities, government can subsidize fee of such students to the concerned institutions.

Proposal for a Review of the Present Grant-in-Aid Policy

1. The Supreme Court in TMA Pai case has held that the authority giving aid can prescribe by rules and regulations, the conditions on the basis of which admission will be granted to different aided institutions by virtue of merit coupled with the reservation policy of the state. Hence there is need to bring in amendment to Section 47 of the Karnataka Education Act as follows:

   'Provided that aided educational institutions including aided minority institutions are subject to rules of admission laid down by the government'.

2. The Supreme Court has further held that a rational fee structure should be developed by the managements which would not be entitled to charge any capitation fee. The fee structure should be such as to enable educational institutions not only to break even but also to generate some surplus for future development/expansion and to provide for free seats.

3. It is necessary that the educational institutions publish the fee structure as well as audited statement of accounts in order to ensure transparency and prevent misuse of institution funds by the managements.

4. It is essential that the statements of accounts should not be limited to only what the institution receives in the form of state grants but also to all monies received by the institution

5. Due to the tremendous increase of grant-in-aid institutions in the state since the drafting of the Act, it would not be possible for the education department officers to audit all institutions every year. Hence the department may accept the audited statements and only when there are doubts about such accounts in respect of any institution, the competent authorities can take up audit of that institution.

6. The state should take up the responsibility of regulating pre-primary education sector at the earliest to prevent the private sector from fleecing the public in the name of quality education. It is also necessary to prescribe curricula, etc as the private institutions have been enforcing discipline and forcing the children in to formal education at a tender age.

Issues Faced by Private Aided Institutions

In an interaction session with the Study Team, the managements of private aided institutions listed a number of issues, they faced while dealing with the state government in matters of grant-in-aid.

One such example is given below:

Issues Raised by a Reputed Aided Management

Karnataka Education Board, Dharwar, (established in 1919) a reputed management, is running 4 composite high schools and 3 primary schools in Dharwar. Together, the schools are having 42 sections in high school and 53 sections in primary schools. As per official staffing pattern, the school is eligible for 70 teachers in secondary sections and 62 teachers in primary sections, besides non-teaching staff. However, the government has approved only 62 posts in high schools and 48 posts of teachers in primary schools for grant-in-aid. Thus the management is forced to bear the salaries of 23 teachers, as classes cannot be run without teachers.

Further, government has stopped approvals of teachers appointed in posts falling vacant since December 2008. Since this is a century old institution, 8-10 teachers retire every year and these vacancies cannot be kept pending in the academic interest of the institutions.

The management stated that as in January 2012, it is paying salaries on its own to 54 teachers appointed on temporary basis. Since grant-in-aid institutions cannot charge any fee under the Karnataka Education Act, the management is finding it difficult to manage the situation.

The management further stated that government brings in new regulations like making physical education an examination subject, but does not sanction or approve posts of physical education teachers to meet the requirements.
Government has covered the aided school employees under its pension scheme, and has asked managements to bear the employer's contribution to the scheme. The managements state that they are not able to bear this burden as they cannot legally collect any additional fee from the students. The aided school employees are also being brought under the 'Employees' State Insurance' scheme.
This shows that reputed schools which strictly follow the regulations are also put to a lot of inconvenience and government should find solutions to several issues raised here.

Development Fees Chargeable by Private Institutions

Under the 'Educational Institutions (Classification, Regulation and Prescription of Curricula, etc.) Rules 1995, the private institutions are allowed to charge a 'Special Development Fee'. This fee was fixed in the above Rules in 1995. Under these rules, aided institutions are allowed to charge Rs. 500/- and unaided institutions Rs. 600/-. Even after 17 years, the scale of development fee has not been revised causing inconvenience to law abiding managements. It is essential that this fee is periodically revised so that it will help managements to meet their overhead expenses of running the institutions.

Recommendations

Discussion of Issues Faced by Private Aided Institutions

The study team had interaction with managements and heads of private aided institutions at various places throughout the state. There are several serious issues faced by private aided institutions. The most important one is not filling up of the vacant aided posts for several years, which seriously affects the academic work in these institutions.
The departmental officers concerned cited economy measures as the reason for not giving permission to fill up the vacant posts. Should the private institutions suffer? is the question posed by these managements.
There are two alternate solutions for this issue. One is to convert these vacant posts as unaided posts and permit the private managements to fill up these posts and allow them to charge proportionate additional fee from the students.
The second is to permit the managements to open unaided sections in these aided institutions (as in the case of degree and professional colleges) and allow the managements to charge a reasonable fee from the students studying in unaided sections.
The Government can also think of a policy of giving 'permission of voluntary withdrawal of grant-in-aid' to well established institutions which can generate their own resources.

The Study Team feels that the state government should respond positively to the several demands of private institutions, especially in cases where financial commitments of the state are not involved.

After an in depth study of the policy and the issues related to the grant-in-aid institutions in the state, this Study makes the following recommendations:

1. The grant-in-aid policy of the state needs a comprehensive review.

2. Grants have to be linked to performance based accountability.

3. If in any academic year, the public examination result of any institution is less than the state average, then grants to such an institution should be withheld automatically.

4. All aided institutions whose public examination results are below the state average should be penalised for unsatisfactory results.

5. Courts in several cases have held that grants from government cannot be claimed as a matter of right. Hence government can always impose strict conditions which the institutions must fulfil in order to become eligible for grants.

6. Since successive governments are bringing more and more private institutions under grant-in-aid, the grant-in-aid policy itself should be reworked and a different grant-in-aid model should be adopted, to reduce undue financial burden on the state government.

CHAPTER 11

FINANCING OF SECONDARY & PU EDUCATION

IN KARNATAKA

Financing of education is a multi-dimensional issue. Education accounts for a significant proportion of public and private sector spending in the state and the country. The extent of employment that the sector generates is also substantial. Investment in education is also viewed as investment in 'human capital', as it benefits both the individual and the society. Since education plays a significant role in human development, it is essential that the state finances a major part of the expenditure on education.

Justification for State Financing of Education

Education is in the concurrent list and secondary education has largely been in the domain of the state governments. Financing of universal secondary education, must be a collective responsibility of the centre, state and the Community (Society)

The primary justification for investment in secondary education lies in its contribution to economic growth and poverty reduction. Most of the economic and employment growth in the past decade has taken place in skilled services for which secondary (and to a larger extent pre-university) education happens to be the minimum qualification.

Besides economic and employment growth, the positive impact of secondary education (on other human development indicators (like health, gender equality, standard of living, etc.), and consequent accrual of social benefits to people are even more stronger than primary education.

> *The Secondary Education Study conducted by the World Bank in 2009, noted that nationally, the gap in enrolment rates between students of the highest and lowest expenditure groups was as high as 40%, the gap in urban and rural enrolment rates was 20% and the gap in boys and girls enrolment rates was 10%.*
>
> *Similarly the enrolment of SCs/STs/Muslims was well below their share in population. It also noted that poorer households undervalue benefits of secondary education. Hence correction of these gaps justifies states' financing of education.*

Estimates of CABE Committee

The CABE committee in its June 2005 recommendations noted: 'Financial requirements covering the cost of universal elementary and secondary education will form approximately 5.1% of GDP. Hence the immediate allocation of 6% of GDP for education and progressive increase in this proportion will be necessary to move towards universalisation of secondary education'.

MHRD's financial projections for Universalising Secondary Education (including the cost of quality), is around 2.33 per cent of GDP. The requirement for Universal elementary education is 3.0 % of GDP. Together, 5.13 % of GDP per year, would be adequate for Universal Elementary and Secondary Education. Hence both the Centre and states should allocate the promised 6% of GDP/GSDP towards the education sector.

Pattern of Expenditure on Education

At present, in India, government spending on education is on an average 3.7% of its GDP. As a share of public expenditure, education expenditure was around 12.8% (2003-04). However, bulk of this public expenditure on education comes from the state governments. In 2006 the states accounted for 75% of total public expenditure on education. 95% of this expenditure is again spent on salaries of teachers working in government, aided and local body institutions.

Out of the total public expenditure on education in the country, only 25% is the contribution of the Centre. Even here, the major portion of this expenditure goes to centrally run schools (like Kendriya Vidyalayas, Navodaya Vidyalayas), NIOS, and other national institutions.

Besides, the World Bank Report (2009) on Secondary Education estimates that in India, households supplement the public expenditure on education, by nearly 30% of nation's total expenditure on education.

Pattern of Govt. Spending on Different Sectors of Education (All India Level)

In our country previously, there was no CSS in secondary education equivalent to SSA in elementary education. The expansion of secondary education has been so far the responsibility of the state governments. At an All India level, the share of spending at each level of education has more or less remained constant:

Table 11.1
Expenditure on Different Sectors

Stage	Percentage
Elementary Education (Classes 1 – 8)	52%
Secondary education (Classes 9-12)	30%
Higher & Other Education	18%
Total	100%

Source: All India Reports

In absolute terms the total spending on secondary education amounted to about 1.11% of GDP (2004-05). As a share of total expenditure, elementary education has increased steadily since 2000, while secondary education has declined slightly. In 2006 combining plan and non-plan expenditure, elementary education accounted for just over half of total government expenditure, secondary education accounted for about 30% and higher education 12% and technical education 4%.

Over the past decade, almost all states have increased their spending on secondary education, both in real terms as well as a percentage of GSDP, but most states still spend less than one percent of their GSDP on secondary education. The major portion of expansion of secondary education in the states has been absorbed by the private unaided sector.

Raising Resources – Education Cess

The tremendous increase in allocation for elementary education was possible on account of additional allocation from the receipts of the 2% 'Education Cess' imposed by GOI on all major central taxes (income tax, excise and custom duties and service tax) from 2004-05. The funds flowed into a dedicated non lapsable fund called "Prarambhik Shiksha Kosh" (or National Elementary Education Fund) that could be used exclusively for elementary education projects like the SSA and the midday meal scheme.

The cess helped to increase central funding under SSA. The cess helped enhance the implementation of various education schemes apart from keeping the cost of education in India low. An additional one percent Cess is now levied in order to create additional resources for expanding and strengthening of secondary education.

Private Sector Expenditure on Education

The increase in the share of public expenditure on education to total public expenditure has also been mirrored in the growth in private expenditure on education. In the last two decades, the share of private expenditure on education to the total private consumption expenditure has increased. This is reflected in the growing pace of private educational institutions across the country.

> *The World Bank Report "Karnataka: Financing Education 2002" estimated that private sector expenditure amounted to 28% of all education expenditure in Karnataka. Some of these private institutions have contributed to bridging the gap between the demand and supply of quality education in the country.*
> *However, there are a number of sub-standard private institutions which offer poor quality education in spite of charging exorbitant fees/donations.*

Since a majority of elementary schools in the private sector cater to middle and above class clientele in urban and semi urban areas (more recently even in bigger villages), they do not significantly contribute to the goals of UEE.

For example in a state like Karnataka, private institutions enrol more than two thirds of the students in secondary and higher education sectors. Even here, the salary component in private aided institutions is met by the government while capital and maintenance expenditure is met by private managements. Since 90% of their expenditure constitutes salaries, in operational terms there is very little difference between financing of government run and government aided institutions.

As far as unaided and self-financing institutions are concerned, the entire cost of establishing and running these institutions is met by the management. The financing is done through capitation, higher fees and public contributions. Most of the payments are unaccounted for and never openly admitted.

> *In Karnataka, 40% of secondary schools are private unaided schools. However they contribute only 25% towards secondary school enrolment. A majority of students in elite and well established private unaided schools are from upper middle and rich class families who constitute the creamy layer of the society and who are prepared to pay the hefty fee and donations charged by these private schools.*

Although the number of private unaided schools and percentage of students in such schools is increasing, they would not be able to cater to the needs of a vast majority of children from economically weaker sections of the society.
Hence the current growth pattern of private participation does not indicate any significant relief to much needed financial commitment of the government in respect of secondary education.

Expenditure by States on Government and Aided Schools
However, at the All India level, the allocation of funds to government and aided schools is not proportional to their respective shares of enrolment in secondary education. The government secondary schools received 35% of allocation but accounted for 42% of enrolments. Whereas, private aided schools accounted for 50% of allocation, and accounted for only 34% of total enrolments.

Over the years, a majority of states have reduced spending on grants-in aid, in an effort to control expenditures. In most states, the share of development expenditure is quite small (less than 19%) and is used in developing government schools. Due to uneven access in secondary education, the subsidies on education is distributed inequitably.

Sources of Public Spending on Education
The revenue for education comes from multiple sources –

a) The state government's tax and non tax revenues,
b) Statutory transfers from the Central Government,
c) Block grant for the State Plan,
d) Centrally Sponsored Schemes – some of them involve matching contributions from the state government in a ratio prescribed by the respective schemes

States' Expenditure on Education
The state is not only a major provider of education but also is its major financier. The education sector accounts for the highest share of the state government's revenue and capital expenditure (around 16%).

At present the state is spending about 6% of the state's GSDP on the entire social services sector put together. Since social services sector encompass several sub-sectors (like health, education, rural development, social welfare, women and child development, etc.), the actual share of each sub-sector is quiet low. The expenditure on general education is only about 3% of state's GSDP.

Estimates of HDR 2005
The HDR 2005 had estimated that the state will have to spend another 2% of GSDP on social priority sectors in order to achieve the human development targets set for the X Plan. It further estimated that UEE alone required that the expenditure on elementary education as a proportion of GSDP would have to be increased from the then 1.6% to 2.5%. HDR 2005 also reported that, even though the state had increased its public spending on education in real terms, in relation to the state income, its educational expenditure had fallen over the decade.

According to Karnataka HDR 2005, in Karnataka 'the non salary component is low and the expenditure on infrastructure, teaching aids, curriculum development, instructional material, laboratories, libraries, in service teacher training – in short all things that contribute to the quality of education are totally inadequate.'

States' Expenditure on Education

The sector-wise allocation of funds for the year 2011-12 is given in Table 11.2. Out of the state's education budget, 52% is spent on primary education and 32% is spent on secondary education.

Table 11.2
Budget Allocation of Funds in Each Sector (2011-12)
Figures in Crores

	Sector	Plan	Non-Plan	Total	%
1.	Primary Education	1194.93	4725.59	5920.52	52.16
2.	**Secondary Education**	**762.59**	**2834.45**	**3597.04**	**31.69**
3.	University & Higher Education	302.63	1137.59	1439.82	12.69
4.	Adult Education	8.40	3.04	11.44	0.11
5.	Language Development	14.70	15.88	30.58	0.27
6.	Other General Education	348.18	2.11	350.30	3.08
	Total	2631.44	8718.28	11,349.73	100.00

Source: Performance Budget 2011-12

States' Expenditure on Secondary Education

Even though in absolute terms the expenditure on secondary education has grown on a year on year basis, as a percentage of expenditure on education, it has more or less remained constant over the years. It is oscillating between 27.50% and 31.69% of state's expenditure on general education. (Please see Table 11.3)

Table 11.3
State's Expenditure on Secondary Education
Figures in Crores

Year	Plan	Non-Plan	Total	As % of Education Budget
1999-00	78.96	838.87	917.84	31.60%
2000-01	96.41	892.37	988.78	28.03%
2002-03	70.81	1003.56	1074.38	29.06%
2003-04	58.72	1026.77	1085.49	28.53%
2004-05	88.65	1097.29	1185.95	27.50%
2005-06	91.82	1218.99	1310.82	28.62%
2006-07	190.03	1350.64	1540.67	30.19%
2007-08	242.70	1715.48	1958.18	29.94%
2009-10	453.80	2215.03	2668.84	32.27%
2010-11	565.70	2528.04	3093.75	31.53%
2011-12	762.59	2834.45	3597.04	31.69%

Source: Annual Reports of Education Department

Secondary education currently accounts for approximately a third of the state's public spending on education. In absolute terms, the expenditure on secondary education has risen from 917.84 crore in 1999-2000 to 3597.04 crore in 2011-12, which is more than a threefold increase in ten years.

Since high schools are managed by the Zilla and Taluk Panchayats, 75% of the budget expenditure is done by these bodies. The remaining expenditure is incurred by the state on PU Colleges.

Government schools in Karnataka, contribute 43% and private aided schools contribute 32% of secondary enrolment. That means government funds the education of 75% of the student population at the secondary stage.

Salary component as a percentage of total outlay on secondary education is around 90% every year. This implies that very little of budgeted outlay is left for other developmental programs. In 2009-10 only Rs. 48.75 crore (less than 2% of secondary education budget) was spent on improvement of infrastructure facilities in secondary education sector.

Financing of Incentive Schemes

A substantial portion of state's primary and secondary education budget is also spent on providing various incentives to children, so that they will continue their education and not drop out of the system. The various incentive schemes have been discussed in Chapter 14 in the Sub-study on 'Incentive Schemes'.

Here the financial implications of some major incentive schemes are discussed.

Table 11.4
Financing Major Incentive Schemes
**In Crores*

	Major Incentive Schemes	State Outlay*	Beneficiaries **
1.	Free Uniforms	77.16	64.31 lakh children
2.	Free Textbooks	57.70	65.38 lakh children
3.	School Bags & Notebooks	20.00	
4.	Midday Meal Scheme	431.52	65.64 lakh children
5.	Reimbursement of Fee (All Girls),& SC/ST boys(non-govt.)	4.86	15.94 lakh children
6.	Reimbursement of Exam. Fee (All Girls, & SC/ST boys)	6.50	4.78 lakh children
6.	Free Bicycles for Class 8 students**	127.24	5.32 lakh children from govt. & aided schools
7.	Reimbursement of Fee to Girls in Govt. PU Colleges	4.60	1.28 lakh girl students in Govt. PU Colleges
	Total	729.58	

Source: Performance Budget of Education Department (2010-11)
*** Annual Report 2009-10*

The state spends approximately 8.79% of the total primary and secondary education budget for financing of the above incentive schemes.

FUNDING UNDER SSA

Since, Class 8 is deemed to be a part of elementary education cycle, funding under SSA is discussed here briefly. SSA is used for channelizing all central government initiatives in school education through a single agency in order to achieve convergence at the field level. It was funded first on an 85:15 sharing basis between the centre and the states (during the IX Plan), then on a 75:25 basis till the end of the X Plan, and on a 50:50 basis thereafter. This was subsequently modified for XI Plan period as follows:

Table 11.5
Funding Pattern under SSA

Year	Centre's Share	State's Share
2007-08 2008-09	65	35
2009-10	60	40
2010-11	55	45
2011-12 & Subsequent years	50	50

Source: Performance Budget 2010-11

Originally, under SSA, 33% of the expenditure was earmarked for civil works and the programme management cost was fixed at 6%. During 2010-11, the state government has earmarked Rs.130 crore as state's contribution to SSA funds.

For several years, the state did not contribute its share of matching grants fully, resulting in inadequate release of funds, delays in completion of school buildings and delays in release of teachers' salaries. The state was also not able to spend the approved outlays on several occasions.

Per-district Expenditure under SSA

The expenditure across districts also showed that there was very wide variation in per-district SSA expenditure by states. An ASER 2008 study showed that the average per district expenditure in Karnataka during 2005-07 was only 45.4 crore, where as several states like Andhra Pradesh (65.0), Chhattisgarh (85.9), Madhya Pradesh (62.3), Maharashtra (62.2), Rajasthan (69.0), Uttar Pradesh (90.3) and West Bengal (113.6), could spend better than Karnataka. This also showed that the state faced low absorption capacity of central funding.

Per-child Expenditure under SSA

The SSA per child expenditure also presented a similar picture. While in Karnataka, the SSA per child expenditure was only Rs. 623, several states like Madhya Pradesh (Rs. 1071), Rajasthan (Rs. 918), Jharkhand (Rs. 883), Assam (Rs. 730), Chhattisgarh (Rs.1594), Orissa (Rs. 1030), J & K (Rs. 1211), Uttaranchal (Rs. 1209), Arunachal Pradesh (Rs.3379), and Himachal Pradesh (Rs. 1137), could perform better than Karnataka.

Expenditure under SSA

The quantum of expenditure of the State under SSA is a matter of concern, as it has not been able to spend the entire budgeted outlay fully for the past 3 years. In fact during the existence of the program for the past 10 years, only once in 2007-08, the state has been able to spend 100% of the budgeted outlay. In 2010-11, the state could spend only 55.48% of its outlay.

Table 11.6
Expenditure under SSA

Year	% of Expenditure Against approved Outlay	% of Expenditure against available funds	Shortfall/ Excess in State Share*
2001-02	2.20	15.93	-00.24
2002-03	49.53	59.97	+14.53
2003-04	51.00	102.54	+16.92
2004-05	72.50	80.61	-37.98
2005-06	82.98	76.60	-68.50
2006-07	70.51	71.47	-17.28
2007-08	106.59	100.72	-94.94
2008-09	90.39	87.22	-154.56
2009-10	86.39	82.51	-115.04
2010-11	55.48	70.88	-43.62

*Source: As per Audit Reports of SSA (*in Crore)*

As seen from the above table, the state has not been able to provide the requisite share/matching grant in 8 out of 10 years of the existence of the program. In the years 2008-09 and 2009-10, the state could not provide (as the state share) which was in excess of 100 crore each year.

Expenditure under RMSA

RMSA is a recent program in existence from 2008-09. The following table gives a picture of outlay and expenditure under RMSA.

Table 11.7
Expenditure under RMSA
Figures in Crores

Year	AWP Outlay	Approved by MHRD	Releases	Expenditure
2008-09	--	--	--	--
2009-10	8.05	3.79	0.95	0.25
2010-11	9.57	4.56	0.33	0.40

Source: RMSA

Such meagre funds do not help the implementation of USE in the state in any way.

Funds released under RMSA form a miniscule percentage of the state's secondary education budget. In 2010-11 it formed just 0.35%. The Director, RMSA stated that Rs. 25 crore has been released till January in 2011-12, which forms only 0.60% of state's secondary education budget.

For getting such meagre funds from the Centre, should the state adhere to all the conditions laid down by the centre including changing the State pattern of education to National Pattern?

Residential Schools

Formerly, residential schools had been set up by various social sector departments, to provide quality education to the talented and bright children from economically weaker sections and children from rural areas of the state. Later the government set up the 'Karnataka Residential Educational Institutions' Society' in 1999 and transferred all the residential schools run by various departments to the society. The society is running 547 residential schools and colleges across the state. (See Chapter 17).

Should Education Department Duplicate Other Departments' work?

There are already on an average of 3 residential schools in each block run by Karnataka Residential Education Institutions' Society under the Social Welfare Department. All these residential schools also have classes from 6 to 10.

However, it is surprising to note that organisations like SSA and RMSA, under the Primary & Secondary Education Department are again setting up residential schools and hostels, under various programs.

Should Education Department duplicate work already done by other Social Sector departments?

SSA has set up 64 'Kasturba Gandhi Balika Vidyalayas' in *58 educationally backward blocks* between 2005 -2007. Recently RMSA has set up 74 Model Schools (budget – Non recurring: 83.80 crore – 2010-11) in *74 educationally backward blocks.* RMSA also has set up 62 girl's hostels (budget – Non-recurring Rs. 10.56 crore, 2010-11) in *62 educationally backward blocks.* All these seem duplication of the functions of other social sector departments.

This also shows lack of convergence by these organisations. It would therefore be prudent that these newly started residential institutions be transferred to the society, while retaining the funding and monitoring components with the respective organisations.

FINANCING OF PU EDUCATION

Financing of pre university education by the government is done as a part of its spending under secondary education budget. In 2001 the PU education sector outlay formed 21.75% of secondary education budget and 6.16% of the total budget under general education. 95% of the money allocated under PU education was spent on salaries.

Table 11.8
State's Expenditure on P U Education
Figures in Crores

Year	Plan	Non-Plan	Total	Secondary Education Budget	As % of Sec. Edn. Budget
1999-00	12.35	193.10	205.45	917.84	22.38
2000-01	13.10	202.00	215.10	988.78	21.75
2002-03	6.75	253.06	259.81	1074.38	24.18
2003-04	7.30	263.30	270.60	1085.49	24.92
2004-05	12.16	278.22	290.38	1185.95	24.48
2005-06	14.26	264.26	278.52	1310.82	21.24
2006-07	36.07	327.83	363.90	1540.67	23.61
2007-08	67.86	395.49	463.35	1958.18	23.66
2009-10	165.46	502.82	638.29	2668.84	23.91
2010-11	201.10	560.62	761.72	2768.04	27.51
2011-12	227.55	685.23	912.78	3597.04	25.37

Source: Annual Reports

The situation changed very little during the past decade. The expenditure on PU education was hovering between 21 % and 23 % of the state's secondary education outlay. Only during the years between 2002-03 and 2004-05, the PU sector received a higher allocation (around 24%) of the state's secondary education outlay. However, only in 2010-11, the PU budget received 27.51% of the secondary education outlay. In 2011-12, it again came down to 25.37% of the secondary education outlay.

As discussed in Chapter 10, the category wise composition of PU colleges in the state is – 31% government, 16% private aided and 49% private unaided colleges (and 4% others). Even though private colleges form 64% of all PU colleges, government is the largest financier as it finances 31% of government colleges and provides 100% salary grants to 16% of private PU colleges. Hence it finances 47% of all PU colleges.

Therefore, even this outlay for the PU sector appears insufficient as the government is financing a total of 47% institutions in the sector including GIA institutions. The table below gives a break-up of outlay on each component of expenditure in PU education sector.

Table 11.9
Composition of PU Outlay
Figures In Crores

	2006-07	2007-08	2009-10	2010-11	2011-12
Administration	4.15	4.94	5.92	6.99	8.40
PU Examinations	10.03	12.58	23.06	26.57	28.53
Govt. PU Colleges	162.05	212.28	301.05	377.27	469.84
Infrastructure	2.10	6.69	2.00	3.50	4.00
Grant-in-Aid	143.81	200.75	247.24	262.78	287.91
Reimbursement of fees for girls	2.80	3.70	4.00	4.60	2.00
Construction of PU Buildings	12.00	22.38	55.00	80.00	112.09
Total PU Outlay	363.90	463.35	638.29	761.72	912.78

Source: Annual Reports & Performance Budgets

The above table shows that previously (for ex. In 2006-07 and 2007-08) around 90% of the outlay was spent on salaries of both govt and aided PU colleges. However, the situation improved a little during 2009-10 to 2011-12, when the salary component of the total outlay came down to around 84%.

In 2006-07 and 2007-08, less than 5 percent of PU outlay was spent on college infrastructure and other facilities. The situation has improved in subsequent years. In 2009-10 the infrastructure component received 8.61 % of the total PU outlay. It further improved to 10.50% of the total PU outlay in 2010-11.

Table 11.10
Distribution of PU Outlay 2010-11

	Adm.	**Exams.**	**Govt. PU Colleges**	**Infra-structure**	**Grant-in-Aid**	**Fee Reimbur--sement**	**Construction Of PU Buildings**
Amount	6.99	26.57	377.27	3.50	262.78	4.60	80.00
%	**0.91**	**3.49**	**49.52**	**0.45**	**34.49**	**0.60**	**10.50**

Table 11.10 reveals that salaries of government and aided PU colleges constitute 49.52 + 34.59 = 84.01 % of the total PU outlay in 2010-11. It is desirable that non-salary expenditure has to be raised to 20% of the outlay in order to improve infrastructure and other facilities in government PU colleges.

Exemption of Fee for Girl Students

In order to encourage girl students continue PU education and to discourage from dropping out, the state government has exempted from payment of fee for girl students studying in Government PU Colleges. This fees is reimbursed by the government to the respective colleges. In 2010-11, it formed 0.60 % of the total PU outlay amounting to Rs. 4.60 crore. In 2009-10, it reimbursed fee for 1.28 lakh girl students amounting to Rs. 2.68 crore.
This decision of the state government, has brought more girls to government PU colleges in the state.

FINANCING OF GRANT-IN-AID (GIA) INSTITUTIONS

Distribution of GIA institutions in Various Sectors

During 2010 – 11, there were a total number of 6,692 grant-in-aid institutions in the elementary and secondary (including PU) education sectors in the state. They form about 8.69% of the total number of 76,613 institutions in the two education sectors put together. The percentage of grant-in-aid institutions in the elementary education sector is quite small – which is less than 5% of the total number of institutions in the elementary education sector.

But the percentage of Grant-in Aid institutions in the secondary and PU sectors is quite substantial. 25.21% of all secondary schools and 16.64% of all PU colleges are GIA institutions. The breakup of GIA institutions in each sector is given below:

Table 11.11
Distribution of Grant-in-Aid institutions 2010- 11

Institutions in Elementary & Secondary Sectors	GIA Institutions	Total Institutions	Percentage of GIA Institutions
Lower Primary Schools	239	26,302	0.91 %
Higher Primary Schools	2,418	33,126	7.30 %
Secondary Schools	3,367	13,352	25.21 %
P U Colleges	638	3,833	16.64 %
Total Institutions	6,662	76,613	8.69 %

Source: Annual Reports

Expenditure on Grant-in-aid institutions

During the past two decades, government is continuously bringing in more and more institutions under the grant-in-aid policy. Consequently, there has been a significant increase in the number of aided secondary teachers from 20,137 in 1990-91 to 32,450 in 2010-11. This increase (about 61%) in the number of teachers, is a strain on the state's finances. Another reason is the rise in teachers' salaries and periodical revision of pay scales of teachers.

The percentage of GIA institutions may appear small (less than 9%) when compared to the total number of institutions in the entire primary and secondary (including PU) sectors.

But their financial impact in both secondary and PU sectors, is substantial. Out of the total budgetary provisioning for secondary education, a sizeable 45% was once spent as Grant-in Aid to private institutions (See Table 11.13) previously, The financial commitment on GIA institutions has come down to 37.80% of the total secondary education budget in 2010-11. But still the expenditure on GIA constitutes more than One thousand One hundred crore rupees in 2010-11.

Table 11.12
Proportion of Grant In Aid to Private Institutions 2011

	Number	Percentage to Total Institutions	Total Grant in Aid *In Crores*	Total Exp. On Sec Education	Percentage Of GIA To Total Sec. Outlay
High Schools	3,367	25%	906.39	2,332.03	38.86 %
PU Colleges	638	17%	262.78	761.72	34.49 %
Total Aided Institutions	**4,005**	**23.30 %**	**1,169.17**	**3093.75**	**37.80 %**

Source: Annual Report 2010-11

In order to make a larger provisioning for future expansion of secondary education and give a larger share for developmental expenditure, it is necessary for the state to curtail, spending on private grant-in aid institutions as they do not make much of an impact on Universalisation of Secondary Education because of their presence only in urban and semi-urban areas where other government and private unaided institutions also exist.

The table below gives a bird's eye view of the amounts spent on GIA institutions during the past several years.

Table 11.13
Percentage of Expenditure on Grant-in-Aid
In Crores

	2005-06	**2006-07**	**2007-08**	**2009-10**	**2010-11**
GIA SE Outlay	460.03	523.12	626.70	810.87	906.39
GIA PU Outlay	131.98	143.81	200.75	247.24	262.78
Total GIA Outlay	592.01	666.93	827.45	1,058.11	1,169.17
Total Sec. Edn. Budget	1310.82	1540.67	1958.18	2668.84	3093.75
Percentage to Total Sec. Edn. Outlay	**45.19 %**	**43.28 %**	**42.25 %**	**39.65 %**	**37.80 %**

Source: Annual Reports

This table also gives the percentage of GIA outlay to total secondary education outlay which has slowly come down from 45.19% in 2005-06 to 37.80 % in 2010-11.

Funding of PU Education by Households

Households also invest in education because of the benefits that accrue through higher earnings. The World Bank in its report estimated that in Karnataka, the share of house hold financing in total spending on education was one quarter at the elementary level and one third at the secondary and higher education levels respectively.

Since 64% of PU institutions are private institutions (16% aided and 49% un-aided), the households will continue to finance a higher proportion of expenditure on PU education as the private institutions continue to charge higher fee (and also donations) for providing the so called 'Quality PU Education'.

Fee Structure

The Department of PU education has prescribed the following fee structure for collecting fee from students.

Table 11.14
Prescribed Fee in PUC

Item of Fee	**I PUC**	**II PUC**
Tuition fee (Govt. Colleges)	420	420
Tuition fee (Pvt. Colleges)	840	840
Lab Fee (For science students)	280	280
Computer Science (Commerce) /Home science (Arts) students	95	95
Application Form fee	21	---
Registration fee	21	---
Admission fee	30	---
Late Admission Penal Fee	420	---
Special Late Admission Penal Fee	1,400	---
Sports fee	70	70
Sports Fund	28	28
Co-curricular Activities fee	56	56
Reading room fees	100	100
Teachers Benefit Fund	21	21
Students Welfare Fund	21	21
College Tests & Examination fee	140	140

II PU Examination fee	---	252
Marks Card Fee (For SC/ST students)	---	30
Practical Examination fee/ Subject (For Science Students only)	42	70
Practical Examination Fee Computer Science (Commerce) /Home science (Arts) students	42	70
Maintenance Fee for toilets Electricity & Water Charges	20 20	20 20
Teacher's Day Flags	15	15

Source: GO: ED 16 TPU 2010, Dated 21-05-2010

Due to fee concession for girls as well as students from SC/ST, in government institutions, the burden of reimbursement of more than 50% of fee falls on the government only. Hence, there is a case for gradual increase in this fee structure to finance a small part of government's expenditure on secondary education.

However, the private colleges continue to collect heavy donations at the time of admission and also collect additional fee for various purposes.

RECOMMENDATIONS

Increasing Financing of Secondary (& PU) Education

Since a larger number of children are completing elementary education, there is an urgent need to expand enrolment capacity in both government and private secondary education institutions. Secondary Education sector will continue to grow for the next ten years.

The three most important points to be considered by the government in USE are –

1. The government must ensure that no child is deprived of secondary educational facility because of financial incapacity,
2. No student is financially exploited by private unaided institutions,
3. Schooling is not used for commercial purposes as pronounced by various judgments of the Apex Court.

Views of HDR 2005 on USE

The HDR 2005 had noted that the demand for secondary education was likely to peak within a few years of the inception of the XI Plan period. It further noted that *'the education sector will have to address the challenges of Universal Secondary Education, by ensuring budgetary support for putting in place the infrastructure required to meet the needs of most of the under developed districts of the state so that quality does not become a casualty as the system expands its outreach'.*

This will involve provision of additional classrooms, teachers, laboratory and library facilities, etc. Improvement in Access must also result in improvement in quality. This means periodic curriculum revision and textbook development, enhanced capacity building of teachers, integrating education technology in classroom teaching, providing ICT skills for children, student assessment, examination reforms, etc. All this calls for substantial additional investment on secondary and PU education by the government.

The financial allocations may be phased out. To begin with the state should ensure availability of classrooms and teachers in every school. This should be followed by library, laboratory, sports and games facilities, etc. The Target should be to move towards the norm of secondary schooling over the next ten years.

Households which can afford to pay must bear the costs of secondary education of their children. Even in government and aided institutions, fee should be collected from children belonging to 'Above Poverty Line' (APL) families.

There are several options for increasing allocation to secondary education:

1. **Increasing the overall allocation to education sector including secondary education:**
   In 2007, the GOI committed to increasing the overall expenditure on education from 3.6% of GDP to 6.0% of GDP. For this purpose, the GOI introduced a 2% cess on major taxes for elementary education (2004) and a 1% cess for secondary and higher education (2007). The total central allocation for XI Plan on education was estimated at 2.70 lakh crore, 20% of which was earmarked for secondary education. The state government may take up a similar exercise to augment additional resources for education sector as a whole.

2. **Shift resources from other levels within the education sector:**
   The pattern of expenditure within the education sector is well established – around 52% for elementary education, 30% for secondary education and 18% for higher and other education. It will be difficult to shift resources from other levels to secondary education as most of the government spending is in the form of salaries. However, since class 8 is deemed as a part of elementary cycle, certain components of secondary education can be met out of Primary Education as well as SSA Budget – Printing of Text books, In-service teacher training, Supply of science equipment and library books to schools, etc.

3. **Reduce Unit Costs and Improve Efficiency**
   There is considerable potential as unit costs depend on efficient use of available resources, pupil teacher ratio, class size, better teacher utilisation, limiting non-salary expenditure, increasing school size, running schools in double shifts to make efficient use of school resources, reducing drop outs and repetition, effective school management, reducing teacher absenteeism, introducing alternative models of financing private aided institutions rather than 100% salary grants, etc.

4. **Cost Recovery**
   Secondary Education need not be free to all categories of people. Besides, it is not a constitutional obligation like the elementary education. Hence those who can afford to pay may be charged, which will help the government in subsidising secondary education to the disadvantaged groups. This can be done on a graded scale in both government and grant-in-aid schools. However, implementation of this policy has political implications.

However, schools may be allowed to collect and retain this type of fee at their level. This will be one method of generating revenue for the school for its activities rather than expecting everything to be provided from the government.

In 1950s, the state governments used to recover about 20% of their spending on secondary education through student fees. Collecting school fees from those who can pay is a viable policy option for generating revenues for expansion and improving quality. This is also justified from the social point of view that families benefit because of the higher rates of return that accrues to them by sending their children to secondary education institutions.

Assuming that those families who can afford to pay higher fee, send their children to private unaided schools, the World Bank report estimates that the limit of private unaided schooling in India is between 35 and 40% of secondary enrolment. The Report has also estimated that the minimum unit cost for a private secondary school is approximately Rs. 2,600/year or Rs. 260/month.

In Karnataka, at present unaided secondary schools' enrolment is 25% (2011) of total secondary enrolment. Hence unaided schools can absorb another 10% of enrolment increase. The remaining increase in enrolment will have to be absorbed by government and aided schools.

5. **Mobilise External Assistance**

External financing of some part of secondary education is an option that can be explored by the state government for specific programs and projects like providing computers to schools, training of secondary teachers, providing teaching learning materials, providing additional infrastructure, etc. Already programs like 'School Nurturing (Adaption) Programs' exist, but these aim to get assistance from local communities and are mostly unorganised in nature, with little encouragement from the state government.

External assistance from corporates or others can be explored for taking up –

1. Pilot projects for quality improvement,
2. Technical assistance in assessment and examination reforms,

The state can also effectively mobilize external financing and explore PPP models for bringing innovations in education. The services of self financing large NGOs and willing corporate, may be used effectively in areas like teacher training, innovative activities, provision of computers, ICT training, equipping school labs and libraries, organising of science fairs, student exhibitions, etc.

6. **Increasing Resources for Non-Salary Components:**

The concern for the immediate future is to target increased resources on improving quantitative as well as qualitative aspects of educational facilities. Plan funds must be deployed increasingly to building educational capacity and infrastructure. The State needs to spend greater amounts on important activities like teacher training programmes, training of community leaders, research, evaluation, supervision, monitoring and innovative activities.

7. **Proposal to hand over Residential Schools to the Concerned Society**

Newly started residential institutions by SSA and RMSA should be transferred to the Karnataka Residential Education Institutions Society', (to avoid duplication of work)

while retaining the funding and monitoring components with SSA and RMSA respectively.

8. Opening of Government Institutions – Issue of Equities

The goal of secondary education (and more specifically RMSA) that good quality education being made available, accessible and affordable, will ensure that government will have to provide access to secondary education to disadvantaged groups and weaker sections of society, even where private unaided institutions exist as they will not be affordable to these groups.

There is a voluntary movement of upper and upper middle classes to private unaided schools and colleges. Hence any subsidies and incentive schemes implemented in government and aided secondary institutions will favour the disadvantaged groups and weaker sections of society. Therefore, Government institutions have to be opened on need basis only in both in secondary and PU sectors.

9. **Grants in Aid**

In order to bring efficiency in use of limited government resources, the Grant-in- Aid system needs to be reformed. The issue has been discussed in detail in chapter 10.

a) Grants may be made conditional on achieving certain performance standards. Every Grant in Aid institution has to perform above the state average (in X std/ PUC Examinations) for getting 100% salary grants.

b) Institutions performing below state average may be penalised by cutting grants on a proportional basis.

c) Alternatively, there should be a gradual shift from financing of teachers' salaries to financing on per student basis

d) There should be reforms in management of government funded schools through formation of parent-teacher committees to manage schools to enhance better transparency, accountability and increased community participation.

10. Voucher System

In Urban and semi urban areas, areas where there are established private unaided institutions, which the poor people cannot afford, the government can think of introducing 'Voucher System' which will enable poor children to get the benefits of secondary education in private schools. The World Bank report speaks of conditional cash transfers and other forms of incentives to improve enrolment, retention and completion of children from economically weaker sections of society.

11. **Introduction of Double Shifts in Larger Schools**

In order to reduce unit costs and improve efficiency, the state can also think of introducing double shifts in large urban schools in order to utilise existing resources more efficiently and to cater to increased demand for secondary education. The double shift system is being efficiently used in several countries and it is not the shift system that is being practiced today in the state. The double shift system works for the full duration of the school and works on full complement of teachers separately for the two shifts.

12. **Enhance Community Participation,** through programmes like 'School Nurturing (Adaption) Programmes', 'Samudayadatta Shale', regular meeting of Parent-teacher

Associations, etc., along with improving efficiency of SDMCs and College Management Committees.

13. **Deployment of Teaching Faculty:** There should be a policy to annually deploy excess teachers in govt and aided schools and colleges, to rural and under-served institutions. Non salary incentives may be offered to teachers working in rural areas.

14 Open Schooling

Open schooling has traditionally been a cheaper option in education. Because of the capacity for large enrolment, open learning system can achieve economy of scale. Hence open schooling should receive the full state support to ensure quality education and non-exploitation of students.

National Open School system has not been effectively used in Karnataka. The state should establish a separate directorate for distance learning and open distance learning centres wherever opening of secondary schools is not viable.

15. **Unviable Govt. and Aided Secondary Schools & PU Colleges**

As discussed in Chapters 2 and 7, there are very small secondary schools and PU colleges with students' strength of less than 100. In effect, if we take the regular attendance of students into consideration, the number of students is much less. Some of these schools and colleges have seen a historical decline in student enrolment because of the opening of new schools in their area. Some schools were started when actually there was no need for a school as there were secondary schools within the vicinity.

More than a thousand institutions in each of the secondary and PU sectors, are having an effective student strength of less than 100. These schools and colleges are unviable and a heavy financial burden on the government.

The government should cause special teams to visit these schools, examine each case and take a decision to either merge or merge some of these schools and colleges.

17. SSA was preceded by a decade of experimentation in elementary education through programs like DPEP. RMSA has no such precedence. The rigid norms of central schemes in secondary education will be counterproductive, as even within the state, there are large regional variations. Unlike elementary education, in secondary education private sector is the dominant player and all our schemes have to take this into account, while formulating strategies for USE.

18. Both the approved budget and releases so far under RMSA do not inspire much confidence as this miniscule funding will not make any significant contribution to USE. The RMSA budget should cover at least 20% of the state's secondary education budget and should be able to take care of all non-salary developmental expenditure of the secondary education sector.

19. Incentive Schemes

At the elementary level, it may be OK if incentives are extended to all children in view of the constitutional obligation on the part of the government. But at the secondary level, special attention has to be given to children of all disadvantaged groups to bring them under Universalisation of Secondary Education, and hence all the incentive schemes have to be limited to these children only. If possible, the creamy layer, in the weaker sections of the people may also be excluded.

PART D

SUB-STUDIES

12. Linkages between Various Sub-sectors of Education

13. Secondary Teacher Education in Karnataka

14. Minority Education in Karnataka

15. Incentive Schemes

16. Curriculum & Textbooks

17. A Brief Review of Residential Schools in Karnataka

CHAPTER 12

Sub-Study – 1

Linkages between Various Sub-sectors of Education

Introduction

A good education system needs to have three important considerations – providing quality education, ensuring equity and catering to the aspirations of different sections of society. For this to happen, there is need for strong linkages between the various education sub-sectors.

Each of the education sub-sectors (pre-school, elementary, secondary, PU and higher education) have to have sequentially strong linkages, which we naturally take into consideration, when we have to take up the study of any one sub-sector.

The tremendous emphasis given to elementary education and its subsequent rapid expansion during the past decade has created a significant demand for secondary education. Further, both Secondary as well as PU education sub sectors act as bridges between elementary and higher education sub sectors. There cannot be any major expansion of higher education, without first improving and expanding the secondary and pre university sectors.

Continuity in Education Sub-Sectors

Karnataka as well as India have not reached a stage where all children entering Class 1 (at the elementary stage) complete all levels of education. Even though the proportion of children entering various levels of education has definitely increased substantially, yet it is also a fact that a very large number of children drop out at different levels of education due to various reasons. This has been discussed in detail in chapters 1, 2 and 7. Table 1.6 (from Chapter 1 – Introduction) is being extracted here to discuss a few other points:

Table 12.1
Continuity at Different Levels of Education

Stages	2000-01*	2010-11**
Enter Class 1	100	100
Reach Class 4	89	93
Reach Class 5	85	91
Reach Class 7	65	81
Reach Class 8	43	77
Reach Class 10	33	64
Pass Class 10	25	50
Enter PUC	16	43
Pass PUC	12	23
Enter Higher Education.	10	16

** As per Edu-vision Document (2001), ** Estimated in this Critical Study (2011)*

The most notable point to be observed in the above table is that, even though the number of children continuing education at various levels has increased during the past decade, still a sizeable number of children drop out at every stage. More than 36% of children dropout by

the time they reach Class 10, more than 77% of children do not continue beyond PUC and hardly 16% enter higher education.

The contributing factors for this scenario appear to be –

1. Lack of strong linkages between various sub-sectors of education.
2. The substantial gap in quality levels between various levels of education.
3. The curriculum is not geared to meet the challenges of drop-outs at various levels.
4. The present day education system is more tilted towards competition and elimination of those who do not reach the desired quality levels.

Hence the education system should also take into consideration, the children who drop out at various levels, as these are the children who contribute to the country's large workforce and the country also expects them to become responsible citizens.
In this context, the concept of Vocational Education and Training (VET) thought of in USE becomes more relevant. However, the several attempts made so far in introducing a strong vocational stream have not yielded good results. In this context, it is to be seen how VET will be implemented.

Curriculum

The 10+2+3 pattern of education introduced in the country envisages a broad based general education for children during the first 10 years of school education. For academic purposes and planning of syllabus for each subject, the following internal groupings of classes are followed in the state:

1. Lower Primary Stage – Classes 1 to 4, Even though Class 5 was later added to this stage, it still follows the subject based pattern of the upper primary stage.
2. Upper Primary Stage – Classes 5, 6 and 7
3. Secondary Stage – Classes 8, 9 and 10.
4. Pre University Stage – PUC I and II (Classes 11 and 12).

The curriculum is designed in a concentric approach with an ever expanding knowledge base. In order to understand the linkage between the above stages, the following example regarding Social Science is given below:

1. At the Lower primary stage, the study of Social Science (as a part of Environmental Studies – EVS) aims at developing an understanding of the physical environment around the child in terms of time and space, apart from appreciating the cultural heritage of India and the world as a whole.
2. At the Upper primary stage, through study of contemporary issues and problems, the child learns Social Science, through its individual components of History, Civics, and Geography,
3. At the secondary stage, the student acquires a fair amount of knowledge of India and the world through the study of History, Geography, Economics and Political Science and learns to understand the contribution of these disciplines in the progress of mankind.
4. At the PU stage, the student chooses one of the three combinations in Arts, Science and Commerce, which will help him/her to either continue education or enter a profession. If he/she chooses Arts, he/she will build on the concepts learnt at the secondary stage in Social Science in studying various individual disciplines like History, Political Science, Sociology, Economics, etc.
5. If the student, enters the world of work or chooses either Science or Commerce combination, the knowledge he/she has gained in studying Social Science, will help in moulding his/her character to become a good citizen of the country.

Growth of Private Sector in Various Education Sub-sectors

There has been an impressive growth in private sector participation in education as the state's middle class continues to spend a large part of its income on funding the education for their children. Whereas in elementary education sector, only 22% of schools are in private sector, this percentage significantly increases as we move higher from elementary education to secondary education (65%), and to PU education (69%) sectors.

For private managements, secondary education is the base. Once they get established in secondary education sector, then they usually branch into higher and technical education sectors. That is the reason why they account for an overwhelming share (85%) both in number of institutions and enrolment in the higher education sector, The desire of many social groups to gain access to higher education is the main reason for the growth of private institutions at higher levels.

In spite of the impressive growth of private institutions (especially unaided schools) is still largely an urban and semi urban phenomenon. However, in order to prevent closure of existing institutions due to dwindling student strength, the government should permit opening of new private institutions on a need basis and only where existing institutions are not able enrol all the students.

1. Linkage with Pre-School Education

Preschool education is considered as a feeder stage to elementary education. Preschool education not only has a positive influence on participation of children in primary education, but also significantly impacts their cognitive and emotional development.

Exposure to early childhood education constitutes the first critical step in the total learning process of the child and contributes significantly to the successful completion of elementary education. In fact the first goal of EFA is 'expanding and improving comprehensive early childhood care and education, especially for the most vulnerable and disadvantaged children'.

Though the NPE 1986, gave a good deal of importance to preschool education, the responsibility of preschool education stayed with the ICDS program. In spite of its perceived inadequacies, the ICDS program has been universally accepted as a program which turns out children who are more sociable and show more school readiness than those children who go directly to the primary school without attending any preschool program.

Successive studies have called for the following reforms in the Preschool education system:

1. Integrate preschool education more closely with the primary school by forging stronger links within the health and education components.
2. Create continuity in curriculum, combining multi-grade classrooms and teaching methods which respond to varying abilities and interests of the students,
3. Involve talented parents and community members in preschool activities,
4. Take up training of pre-primary and primary teachers together, to assure professional continuity between the two levels.

Pre Primary Education Imparted by Private Schools

During the past two decades, pre-primary education has become an important rung in the education ladder. However, 'Pre primary education' is not considered as a part of the

'education system' administered by the state government. Apart from registration of these institutions government has no role to play under the 'Karnataka Education Act'.

Private institutions have taken advantage of this lacuna and have mushroomed in urban and semi urban areas of the state. They work like mini primary schools, enforce heavy discipline among children, who barely belong to the 3+ age group. They charge anywhere between Rs 25,000 to one lakh as admission fee.

There is no uniformity in syllabus or content. Teaching is not based on joyful or activity based learning. The children are exposed to three languages in most of the institutions. There is a need to develop a well thought out curriculum and bring in uniformity in all these private pre primary schools.

Pre primary component should be an essential part of the elementary teacher education curriculum, which will equip the teacher trainees to develop the necessary skills to handle younger age group children along with regular children in primary classes.

A majority of private institutions in the state, admit students at pre-primary level only, through collection of donations/capitation fee. No admissions are entertained at primary and secondary levels in a majority of the 'private reputed' institutions in the state. Hence, there is need for proper regulation of the pre-primary education sector in the state.

2. Linkage with Elementary Education

Elementary education is a critical stage in the education of the child. It also acts as a feeder stage to the secondary education stage. Access and enrolment are no longer issues at the elementary stage. But retention and quality are still important issues at this stage. On an average 70-80% of enrolled children are only found present in schools on any given day. Even though average attendance is an important education indicator, state wide data is not available.
Government happens to be the biggest provider of education in the elementary sector with the share of the government schools being 78.23%.

Table 12.2
Distribution of Elementary Schools in Karnataka 2011

Stages	Govt.	Aided	Unaided	Total
Lower Primary	23,293	239	2,761	26,293
Higher Primary	23,107	2,418	7,491	33,016
Total	46,400	2,657	10,252	59,309
Percentages	**78.23%**	**4.47%**	**17.28%**	**100%**

Source: CPI

On an average, there is one high school for every 2.5 higher primary schools in the state (2011). However, the attraction of English medium has fuelled the growth of private schools in the state in recent years. They now form nearly 22% (including aided and unaided schools) of all elementary schools in the state.

School Enrolment and Out of School Children at Elementary Level
ASER 2010 gives a complete picture of student enrolment and the percentage out of school children in rural areas in Karnataka. About 78% of children at lower primary stage and 75%

of children at upper primary stage go to government schools. Around 19% of children at both the stages attend private schools.

Table 12.3
Distribution of Children in Lower Primary Classes (7-10 years)
Figures in Percentages

	Govt.	Private	Others*	Not in School
Boys	75.9	22.3	0.7	1.2
Girls	80.6	17.1	0.5	1.8
All	78.2	19.7	0.6	1.5

Source: ASER 2010
**Others includes children studying in Madrasas and EGS centres*

At the lower primary stage, around 1.5% of children (7-10 years) in rural areas are still out of school. However, at the upper primary stage, the percentage of out of school children (11-14 years) increases to a significant 4.9%. More girls are out of school than boys at both the stages. If we consider 6-14 age group as a whole, then at the elementary level, around 3.1% of children are still out of school.

Among the districts, Bellary (9.5%), Gulbarga (9.2%), Raichur (11.0%), have the highest percentage of out of school children in the 6-14 age group.

Table 12.4
Distribution of Children in Upper Primary Classes (11-14 years)
Figures in Percentages

	Govt.	Private	Others*	Not in School
Boys	74.3	21.4	0.3	4.0
Girls	76.8	17.1	0.3	5.9
All	75.5	19.3	0.3	4.9

Source: ASER 2010
**Others includes children studying in Madrasas and EGS centres*

Both the above tables, show that more parents prefer to send their girl children to government schools and boys to private schools. This is because parents in rural areas consider boys as an asset and girls as a liability.

Although the state average of children studying in private schools is around 19.3%, the following districts of Bangalore (Urban 55.3%), Bidar (26.7%), Dakshina Kannada (39.6%), Kodagu (32.5%), Mandya (28.6%), and Udupi (42.7%), have a higher percentage of children in private schools.

Impact of Giving Indiscriminate Permission to Open New Private Schools
The indiscriminate permission (given for opening of private schools) by the government has created an adverse impact on the working of government and aided primary schools in the state. In 2009 government closed down as many as 886 primary schools because of dwindling student strength.

If well established schools are closed down in this manner, it is a tremendous waste of public resources, as school buildings and other infrastructure facilities will not be used for the

purpose for which they are created. There is urgent need for the government to stop giving permission to private schools without asserting the requirement and need.

Participation of Children in Elementary Education

The state has been able to achieve near 100% access in both lower primary and upper primary levels at the elementary stage. But in a majority of schools average daily attendance of students ranges from 70% to 80%.

ASER 2010 has reported a similar scenario when its teams visited the schools. Average daily attendance was 81.7% in lower primary schools and 70.9% in higher primary schools. Moreover, there were substantial number of schools which reported less than 50% average attendance – Lower primary schools 5.5% and higher primary schools 19.3%. At higher primary level only 52.4% of schools had more than 75% average student attendance.

Table 12.5
Student Attendance in Schools
Figures in Percentages

	LPS (Classes 1 -5)	HPS (Classes 1 7/8)
Average children enrolled present	81.7%	70.9%
Schools with less than 50% of enrolled children present	5.5%	19.3%
Schools with 75% or more enrolled children present	67.3%	52.4%

This also means that a substantial number of children are not regularly participating in elementary education, which further impacts their achievement levels. These are also the children who drop out in later stages.

Shortage of Teachers at All Stages of Education

The shortage of teachers in government schools is a major problem at all levels of education. In an interaction session with Block Education officers of Bellary district at Bellary, the BEO, Sirguppa told the study team that there is a severe shortage of teachers at both elementary and secondary levels of education in his block. Incidentally Sirguppa is an educationally backward block in Bellary district. Vacancies have not been filled up for the past 2 years.

Table 12.6
Shortage of Teachers in Government Schools in Sirguppa block, Bellary District

Teachers	Sanctioned	Working	Vacancies	Percentage of Vacancies
Primary Teachers	965	756	207	22%

Source: BEO Sirguppa

Similarly, 26 secondary teachers' posts are vacant in Sirguppa block. Along with this shortage, combined with the number of teachers who go on leave/training every day, the actual number of teachers present on any given day in any school is even less.

In Government Model Primary School, Tekkalakot, out of 7 teachers, 2 were on maternity leave, one was deputed to another school, 1 was on leave, and only 3 teachers were present. There was no teaching taking place as the three teachers were busy in maintaining discipline. This type of shortage severely affects the academic work of schools.

Promotion of Primary School Teachers as Secondary Teachers

As per the provision in the Karnataka Cadre and Recruitment Rules for education department, 50% of secondary school teachers' posts in government schools are reserved for promotion from the cadre of primary school teachers. Those primary teachers who complete their graduation and B Ed training are eligible for promotion as secondary school teachers in government schools on merit cum roster basis.

Since a majority of the primary teachers do their graduation through distance education taking Arts subjects, they become eligible for promotion as Arts teachers in secondary schools. The district DDPI is the competent authority for issuing promotion orders under this quota. However, science vacancies remain unfilled under this quota. Science teachers posts in secondary schools are filled mostly by direct recruitment.

Teacher Absenteeism

It is a major factor effecting quality of classroom transaction in primary/secondary schools. The World Bank in its 2004 survey estimated that in Karnataka on an average 21.70% of teachers are found absent on any given day. Even when teachers are present in school, 44% of time is spent on non-teaching activity.

An independent study by Price Water House Coopers in 2006, estimated that teachers spend only 68% of their time in academic work while the remaining 32% of time is spent on non-academic activities. If we take teacher's absence into consideration, the academic time will further reduce to 53% (Approximately 117 days out of 224 working days of the school).

However, ASER reported that in 2010, its teams visited one primary school in each of the 769 villages. On the day of visit of its teams, 88.9% of teachers were present and in 51.8% of schools all teachers were present. This is definitely a significant improvement.

The reasons for teacher absenteeism are many. Teachers are entitled to many kinds of leave (casual leave, earned leave, medical leave, maternity/paternity leave, etc.) Besides, there is also the perennial problem of unauthorised absence of teachers. Deputation of teachers to open new schools/ vacant posts is also an important reason. Teacher absenteeism is a serious issue which needs to be tackled by the government through various strategies and at different levels.

Quality Concerns in Elementary Education

However there are issues of lack of delivery of quality education and universal learning and achievement at all levels in elementary education. There have been several assessment surveys of learning achievement in the past few years. The NCERT survey conducted in 2007 showed that performance of most of the children was well below mastery levels indicating a serious gap in understanding levels of children. In Karnataka, the average percentage of achievement of class 5 children in language was 59 and in maths 46.

ASER surveys aim at finding out whether all children attend school regularly, whether they continue to stay in school and whether they are learning well. ASER 2008 study found that only 37% of Class 3 children in Karnataka could read the Class 1 and Class 2 texts. At the All India level, even in class 5 there were 1.9% of children who could not read at all and only 56.2% could complete the class 2 test. Even at class 8 level, 14% could not tell time and 5.2% could not do currency tasks. ASER 2010 survey gives a vivid picture of children's reading abilities in various classes at the elementary stage in Karnataka.

Table 12.6
Class-wise % of Children by Reading Level

Class	Nothing	Letter	Word	Level 1 (Class 1 text)	Level 2 (Class 2 Text)
1	21.6	52.4	21.2	3.5	1.4
2	7.3	28.1	43.1	14.5	7.1
3	3.6	16.4	36.7	24.7	18.6
4	2.5	12.2	25.4	30.9	29.0
5	2.8	7.4	15.9	28.9	45.0
6	2.1	5.0	12.2	26.7	54.0
7	1.6	3.4	8.0	21.5	65.7
8	***1.4***	***2.0***	***6.2***	***17.4***	***72.9***
Total	5.2	15.5	21.1	21.4	36.7

Source: ASER 2010

The above table shows that a majority of children entering secondary stage have serious learning difficulties. At class 8 level, 1.4% could read nothing, 2% could recognise only letters, 6.2% could read only words. Only 17.4% of children could read a Class 1 text and 72.9% could read a class 2 text.

Similarly, in Maths, among class 8 children, only 20.2% could count up to 99, only 31.3% could subtract and only 45.6% could do division sums.

'No Detention Policy' followed by the state up to class 8 (as per RTE Act), is probably one of the reasons for the children's low achievement levels in elementary education. Even remedial classes and bridge courses supposed to be conducted at the beginning of the year, do not seem to have remedied the situation. These have serious implications on quality of education at the secondary stage.

Multi-grade teaching

One of the most important factors that affect quality at elementary level is the presence of multi-grade system in our elementary schools. ASER 2010 reported that 85.9% of schools at lower primary level and 73.55 % of schools at higher primary level are multi grade schools.

The teachers in these schools face the following problems:

1. They have to adapt different roles when teaching different classes simultaneously,
2. A majority of the primary teachers are ill equipped and not sufficiently trained to handle multi-grade situations,
3. When one of the teachers goes on leave (or transfer), work comes to a standstill as the teacher will have to look after 3 classes or more simultaneously,
4. Even when the student strength in each class increases beyond a particular level, the teacher can only maintain discipline rather than teach,
5. Teachers lack adequate academic support to handle multi-grade situations,

There have been some attempts to empower the teacher to handle such situations through programs like 'Nali-Kali' and Chaitanya. Now Nali-Kali has been extended to class 3 in all government schools of the state. But without proper academic support, it will be difficult for teachers to cope with the Nali-Kali methodology.

Learning of English

A sound knowledge of English is necessary as it will help the student to progress steadily at all levels of education. Especially at the PU level a student can opt only for either English or Kannada medium. Hence it helps students of other media (Tamil, Telugu, Hindi, Marathi and Urdu), if they attain a good mastery over English.

Students begin learning English formally from Class 5, even though they start learning some form of spoken English from Class 1. A survey conducted by Akshara in Bangalore in 2009-10, showed that the students in Classes 5 and 6 were extremely poor in English. Students averaged a score of 41% in a pre-test conducted by Akshara as a part of the 'English Teaching Program'.

After the English Teaching Program, the post test results showed that students gained an average of 25 percentage points over the pre test scores. An analysis of the results by mother tongue showed that the children speaking Urdu at home were the largest beneficiaries, gaining 32 percentage points in the post test.

The reasons for the poor performance of students in English are many:

1. Children come from various socio-economic backgrounds, where they would not have encountered English as a language in their daily life even though they might have known some general English words like bus, train, time, school, etc.

2. In Lower primary schools, only a general teacher often with poor knowledge of English teaches the subject. That too he has to teach English along with other subjects in a multi-grade situation.

3. In Upper primary classes a teacher is designated as an English teacher, if he has taken English methods in the D Ed course. This alone is not sufficient to teach English to students as these teachers had studied English only as a language up to PUC level.

4. Regional Institute of English and other training institutions often conduct short duration 'English Teaching Courses' for primary teachers. There is no follow up on these programs and not all teachers have been covered under these programs.

Children's learning in Private Schools

Even in elite private schools, students seemed to be learning mechanically. A study (Students learning in metros 2006) pointed out that in these top private schools, students were not learning with understanding. Their performance, on questions testing understanding and application was far below what was considered expected levels.

A comparative analysis of the five metros showed that Kolkata, New Delhi and Mumbai clearly outperformed Bengaluru and Chennai. Schools affiliated to ICSE outperformed CBSE schools which in turn performed better than state Board schools. Boys outperformed girls by a statistically significant margin in Maths in all classes and in Science in Class 8.

This has also serious implications for secondary education as majority of children entering secondary schools today are not properly equipped with the requisite knowledge, skills and abilities.

Towards Improvement of Quality in Elementary Education

Some of the strategies suggested to improve quality at elementary level are –

1. Improvement of multi-grade teaching techniques and regular training of elementary teachers in these techniques.
2. Restructuring of in-service teacher training programs on a need basis and assessing the impact of these programs on the quality of classroom processes.
3. These courses also need to be certified by an external agency which will help to maintain quality in these courses.
4. Posting of graduate teachers to upper primary schools to teach English, Science and Maths.
5. Restructuring of the Continuous and Comprehensive Evaluation in elementary schools, to ensure objective assessment of children's learning levels.
6. Remedial teaching of weaker children,
7. Measures should be taken to check teacher absenteeism in schools.
8. Research and Development of all academic activities need to be strengthened.
9. All these require third party audit especially of classroom processes.

3. Linkage between Secondary Education & PU Education

Secondary Education in Karnataka currently consists of 3 years of schooling from classes 8 to 10. Higher Secondary Education has been considered as a separate stage (called Pre-university stage) in Karnataka, where as in most states of the country, secondary and higher secondary stages are together considered as a single stage. The normal age group of children is 14-16 years at secondary stage and 16-18 at higher secondary (PU) stage.

Secondary and PU sectors have very close linkages in the state education system. Some of the institutions in both the government and private sectors are composite in nature – having both high school and junior college components – at times administered by a principal. Some times for lack of space, both institutions work in shifts in the same building which affects the academic work of both the institutions.

Secondary education acts as a feeder stage to the Pre University stage. Most of the jobs which required class 10, as the minimum qualification, have now raised the minimum qualification level to the PU stage. Previously, the minimum qualification for a primary teacher was Class 10 and TCH (Teacher's Certificate Higher). This was later raised in 1987 to PUC and TCH (now known as the D.Ed course).

Both the secondary and PU stages – act as terminal stages for many students wishing to pursue job opportunities. Hence, both stages are critical stages for thousands of children, and therefore there is need to develop appropriate strategies to cater to both an expanded and more diversified student demand and provide the requisite knowledge, skills and attitudes that are demanded by the changing economy and the labour market.

Integration of the Secondary & PU Stages

This has been to some extent discussed in Chapter 7 on 'Status of PU Education in Karnataka'. However, the state government could not take any decision on integration of the two stages due to following practical difficulties:

1. The concept so far created that Pre University is a separate stage,
2. The PU sector in the state has literally stagnated over the years,
3. There are practical difficulties in carrying out integration in both government and private institutions,
4. There is intense opposition from teacher bodies.
5. Even in composite colleges there is lack of goodwill among secondary and PU staff.

In line with reforms in other sectors, the PU sector also needs reforms as it has not structurally changed from the beginning.

Joint Strategies for Secondary & PU stages

Since secondary and PU stages are considered a single stage both nationally and globally, there is need for implementing common strategies to tackle similar issues in both the stages.

Some of the strategies suggested are –

1. Ensure that all children who enter secondary education also complete PU education. That means, ensuring a minimum of 12 years of education for all children of the state.
2. Similarly, ensure that there are no drop outs at both the stages,
3. Ensure that those children who complete 12 years of education acquire the specified knowledge and skills which will help them continue education or take up employment. This means that the curriculum at both the stages should seamlessly merge into one single curriculum.
4. Quality of students at the PU level depends on the quality of students at the secondary level. Hence joint strategies have to be planned to meet quality standards at both the levels. This includes planning joint academic activities including in-service teacher training programs.
5. The state should develop a comprehensive ICT policy for both the stages so that all children coming out of the two stages should be ICT enabled in order to meet the challenges of the global economy.
6. Ensure continuous interactions with teachers at both the stages to tackle common issues at the institution level.
7. Introduce distance education programs at both the stages, to ensure 100% coverage of all children in the age group of 14 to 18 years.

Technical Courses

More and more students are joining technical courses like Industrial Technical Institutes (ITIs) after SSLC. This is because of the job opportunities that are available to skilled labour in the manufacturing industry in the state and the country. However, there are problems at this level. Most of the 1,400 ITIs in the state are facing acute staff shortage. There is an urgent need for the state government to pool money from all concerned departments for training programs of the teaching faculty in these institutions.

4. Linkage with Higher Education

Higher education is crucial for economic and social development of the country. Higher education is generally regarded as the passport to upward mobility on the social as well as the economic ladder. The level of participation in higher education is an indicator of the level of economic prosperity in the country.

PU education is the basic requirement for continuation to higher education. Conversely, it is higher education, which provides qualified teaching faculty to secondary and pre-university sectors. Hence quality at higher education level directly impacts quality in secondary and PU sectors.
Higher education in Karnataka consists of general (collegiate), technical, medical and agriculture education. If the higher education is viewed in a comprehensive manner as consisting of all post PU education, then we feel that the overall growth of the sector is enormous. However, there is unevenness in growth within the different components of the higher education system.

There are several challenges facing the higher education sector today – Lack of adequate infrastructure, Shortage of qualified faculty, Overcrowded classrooms, Unscientific methods of teaching, Lack of quality in research, Reduced interests of students in learning, Politicisation of education, Lack of adequate funding at the higher education level, Lack of proper regulation over private institutions, Excessive expectations from parents, Lack of quality in assessment and evaluation, Lack of assured employment opportunities, etc.
All these issues have a bearing on the quality of education at the higher education level. Many of the students who pass out of these higher education institutions become teachers at the secondary and pre university levels. Hence the challenges faced by the higher education sector have an indirect bearing on these sectors as well.

Enrolment in Higher Education
Student performance in the II PUC examination determines the progress of students through the system. A very high percentage (approximately 85%) of those who pass the II PUC examination continue in higher education.

However, when compared to elementary and secondary education sectors, the enrolment rate in higher education sector is comparatively small (11% of the age group of 18 - 24 years at the All India level – 2009 World Bank Report). This proportion is too small compared to developed and other countries which have as many as 40% of the age group in higher education sector. The XI Plan document of GOI envisages increasing the GER at higher education level to 15% by end of the XI Plan and reaching 21% by the end of XII Plan.

In some cases, the government colleges (in which a lot of investment has been made) have been closed down due to declining enrolments (Ex: Government College, Yermarus). This indicates poor planning by the state and wastage of government resources. Permission to start new colleges must be based on proper planning and institutional mapping. Consolidation of colleges needs to be done to avoid duplication of facilities and reducing total social cost.

Teacher Education
Improvement of quality at secondary education level depends on the quality of trained graduate teachers coming out of the higher education system.

The B Ed curriculum across all the state universities is not common, even though secondary education curriculum is common throughout the state. The B Ed curriculum followed by the universities is quite old, highly theoretical and not based on realities in the field. Efforts to introduce a common curriculum for the B Ed course throughout the state, have not really succeeded. The universities merely conduct examinations and award certificates.

These teacher training institutions are yet to adapt to modern technological methods in classroom transaction. The large proliferation of private unaided teacher training colleges from 2003 has created a host of other problems. Neither the NCTE nor the state government have been able to ensure quality in these institutions.

The 2007 Perspective Plan document has pointed out that due to lack of experienced and qualified teacher educators required to staff these new private teacher education colleges, most of these colleges are offering sub standard education. Consequently, teachers who are coming out of these institutions are neither properly trained nor equipped to handle the present secondary school curriculum.

The state should direct all government and aided teacher education colleges to subject themselves to NAAC accreditation and review NAAC assessment reports periodically and order taking remedial measures. Teacher education sector requires a complete overhaul if it has to deliver quality.

Issue of Declining Enrolment in Engineering Courses

The number of students (who after PUC) joining engineering courses, is seeing a continuous decline in the state. Every year several thousand seats in engineering colleges went unfilled due to lack of demand. However, in 2011, out of 83,000 engineering seats, more than 20,000 seats remained unfilled.

In order to attract more students to engineering courses, the eligibility criteria have been further reduced (45% for general and 40% for SC/ST) by AICTE. In spite of this, the engineering colleges are unable to draw sufficient number of candidates.

The main reason appears to be the indiscriminate sanctioning of engineering colleges by the state, without taking into consideration the number of students (from the science stream) who pass in the II PUC examination every year. If this trend continues, there is every possibility that a number of engineering colleges will have to be closed down for lack of demand.

Issue of Declining Enrolment in Science Courses in Degree Colleges

A large number of students passing the II PUC in science stream opt for professional courses in engineering and medicine, leading to a steep decline in enrolment to science courses at the degree level. The 2001 sub sector report on higher education pointed out that there was a decline in share of admission to B Sc from 15.79% in 1996-97 to 10.73% in 1999-2000

Coupled with the decrease in enrolment in science streams at the degree level, there is a decline in demand for postgraduate courses in basic sciences. This has impacted the availability of quality man power for basic science programs, science laboratories, research institutions and ultimately supply of science and maths teachers to secondary and PU sectors. The secondary and PU sectors are already facing shortage of quality science teachers in the state.

Funding in Higher Education

As a part of economic reforms, the GOI has reduced funding in higher education sector since 1990. Now this reduction in funding has exceeded by 25% when compared to the 1990 levels. This has clearly affected the quality of education in grant-in-aid institutions as development comes to a standstill and aided posts get converted to unaided posts.

Distance Learning in Higher Education

Karnataka State Open University, IGNOU, and several other universities within the state and outside, have been providing distance education facilities in higher education. This has enhanced access to higher education especially for those who are working and like to continue education and improve their qualification.

A number of primary school teachers every year take up graduation courses and thus become eligible to be promoted as high school teachers. A number of high school teachers have similarly become PU lecturers by completing their postgraduate degrees through distance education.

Challenges in the Higher Education Sector

1. In the coming years, higher education sector will have to cater to larger number of students as more and more students will complete secondary and PU education cycles.
2. However, caution is required in expanding higher education facilities uniformly, as any indiscriminate expansion will create imbalances which will result in large number of unfilled seats going waste every year (as is the case in technical education). There is need for a clear need based mapping and scientific projection of future requirements while expanding higher education facilities.
3. There is need for some amount of enrolment management in order to attract students to science and maths streams, which is critical for economic and technological progress of the state. Provision of some incentives may also be thought of to attract bright students to these streams.
4. There is need for ensuring equity in order to avoid widening the social and economic divide in the society.
5. Importance has to be given to developing communication skills, integration of IT, use of reference material in libraries and the internet among students and teachers.
6. There is urgent need for maintaining quality and standards in specific areas like curriculum, methods of instruction, evaluation, etc. These norms and standards have to be made uniform among all the state universities.
7. There is need for a state level coordination body to have uniformity as well as continuity in curriculum at all levels of learning as quality at each level ensures quality at the next level of education.

CHAPTER 13

Sub-Study – 2

SECONDARY TEACHER EDUCATION

'Studies suggest that in a single year, an average student with a good teacher can progress more than a full grade faster than an average student with a poor teacher'.

'Teacher Education' consisting of pre-service and in-service components of both elementary and secondary education sub-sectors is considered a separate sub-sector in itself. This sub-study on 'Secondary Teacher Education' examines only certain important issues in secondary pre-service education, while at the same time it concentrates more on secondary in-service education.

Introduction

Teachers and their skill and competence in the classroom, constitute the single most important component in supporting quality education. Any effort at introducing new pedagogies or changing of curricula, is crucially dependent on the teachers themselves.

The teaching profession has all along attracted persons of average ability, because of the low pay that was being paid to the teachers at every level. Even when the situation improved with better pay scales, the situation did not improve. Now with the 21st Century, IT boom, any job is considered a low pay job compared to the pay offered in IT and BT fields.

Karnataka is in an advantageous position as all its teachers working in government and aided secondary schools are trained teachers. However, there is a small percentage of untrained teachers in private unaided schools in the state.

Due to recent emphasis given to 'Universalisation of Secondary Education', the focus has shifted to the secondary teacher education sector also. In addition to improving quality of existing teachers through in-service programs, quality of future teachers requires to be ensured through improvement in quality of training provided in (pre-service) secondary teacher education colleges.

The raising expectations of parents to get good quality English education for their children, has made the task of the teacher more demanding. If teacher education has to meet these challenges, the nature and structure of both pre-service and in-service education need to be transformed.

Profile of Children entering Secondary Schools

Over the years, the profile of children entering secondary school system has changed radically. Due to increased efforts at UEE, the secondary schools (especially the government schools) are getting children who are first generation learners, children of economically weaker section, and children of urban slums, who had no access to education previously. The average secondary school teacher is not equipped to handle such children, because the training methods have by and large remained the same.

Need for Use of Technology in Classroom Teaching

Apart from the profile of students entering secondary schools, the knowledge base (in almost all areas of learning) is constantly changing and expanding tremendously over the years. This calls for additional skills in use of technology and mass media aids by teachers. However, a majority of secondary teachers are still unable to use OHP, Computers, LCD projectors, internet and other multimedia aids in classroom teaching.

Teacher Effectiveness

Teacher effectiveness is a major contributor to quality. The NCF 2005 visualises a major shift in the conceptualisation of learning and accordingly that of teaching. It defines teaching as a process that enables learners construct knowledge. Teacher is considered as a fecilitator who encourages learners to reflect, analyse and interpret in the process of knowledge construction.

This shift in the conceptualisation of the role of the teacher has crucial implications for the aims, content and methodology of teacher education. The teacher education curriculum should emphasise integration between theory and practice as well as integration between content and pedagogy.

SECONDARY PRE-SERVICE TEACHER EDUCATION

Teacher Education courses (D Ed, B Ed, BP Ed, CP Ed, etc) are professional courses but not treated as such due to various reasons. The Bachelor of education (B Ed) degree, Is an omnibus degree, required not only for a secondary school teacher, but also for a primary teacher educator and officers of the education department.

The quality of education in the pre-service teacher training institutions may be gauzed from the fact that there are virtually no failures and there are a large number of first classes and distinctions.

Key Concerns in Pre Service Secondary Teacher Education Sector

The GOI XI Plan document on Teacher Education lists the following points as key concerns in secondary pre-service teacher education sector in the country:

1. Poor quality of teacher education due to backdated curricula, poor professional preparation of teachers and teacher educators, and isolation of the teacher education institutions from the school system and institutions of higher learning and universities.
2. Substandard private B Ed colleges continue to operate in spite of existing NCTE regulations,
3. NCTE lacks manpower, resources and capacity to monitor and regulate standards,
4. NCTE norms focus on inputs rather than outcomes and quality standards,
5. Existing graduates, even from central universities are poorly prepared for teaching jobs,
6. Teacher educators are isolated from the national and international community of researchers and educators,
7. Transaction of training in teacher education institutions are based largely on traditional lecture methods which are inappropriate for a new generation of students with access and skills to handle ICT.

Proliferation of Secondary Teacher Education Institutions in Karnataka

A large number of unaided teacher education colleges have been opened in recent years in the state. The standards in these colleges remain poor. There are many reports that confirm that substandard B Ed programs are being offered by a majority of unaided colleges in the state.

This situation has arisen due to the fact that these colleges are affiliated to universities and the state government has little or no role to play in maintaining quality and standards in these institutions. Universities feel that their work is only conduct of examinations and declaration of results.

The monitoring system is completely inadequate. Even though NCTE sets norms and standards, there is no effective monitoring of these institutions either by the NCTE or by the state government. NCTE due to lack of adequate staff has failed in its mandate to maintain standards in these institutions. This has a direct bearing on the quality of teachers coming out of these training colleges.

Pre-service Teacher Education Curriculum

Teacher Education is a multi-disciplinary area in which it draws basic theories from other disciplines such as Psychology, sociology, philosophy, and similar such disciplines. This has helped teacher education in giving it a more inclusive and comprehensive character. But teacher education has not kept pace with enormous changes taking place in these disciplines and still adheres to the older theories which have been already replaced by newer theories in these disciplines.

The sub-sector study on Teacher education listed the following as missing but much needed skills in the Teacher Education Curriculum:

1. Content Skills – (Capacity to collect, analyse, organise and apply information),
2. Communication Skills – (speaking, listening, communicating effectively),
3. Adaptability Skills – (Problem solving, innovation and creativity),
4. Developmental Skills – (Managing personal and professional growth),
5. Interpersonal skills and Teamwork,
6. Leadership skills,
7. Evaluation skills

Traditional theories of acquisition of knowledge and skills have been replaced by constructivist theories which are yet to be introduced in the B Ed curricula. The goals, strategies, and instruments envisaged in NCF 2005 need to be found reflected in the B Ed curricula. Otherwise there will be an enormous disconnect between the outlook of future teachers entering our classroom and the school curriculum. Strong linkages need to be established between pre service and in service teacher education programs.

Need for a Common Teacher Education Curriculum and Calendar

Even though the state schools have a common secondary school curriculum, it is surprising to note that there is no common secondary teacher education curriculum for all the colleges in the state and each university has a different B Ed curriculum.

The number of papers, additional papers and internal assessment marks vary from University to University. Some universities conduct the B Ed course in annual pattern, while others conduct the course in the semester pattern.

Each university declares the results of the B Ed degree examination at its convenience, as a result of which, a majority of trained graduates coming out of the training colleges have to wait till June next year, in order to get jobs, as the schools' academic year starts from June every year.

Practice Teaching of Student Teachers

There is poor integration of education theory and supervised teaching practice. The student teachers undergo a limited number of practice teaching lessons in almost a laboratory kind of atmosphere. This will not help them to get requisite teaching skills for regular classroom teaching, when they take up regular teaching jobs in schools.

They are also unable to use technology based teaching aids and enhance teaching skills as a majority of teacher training institutions lack computers and other multimedia aids.

Need for Orientation Programs for Teacher Educators

Teacher educators, especially those working in private teacher training colleges are not aware of the changes taking place in the secondary education sector. Once the teacher educators enter service, there are no in-service programs for them. They are not aware of the department's programs or the field level situations.

There is very limited scope for these teacher educators to keep themselves abreast of developments in education sector at all levels. Hence they concentrate on teaching theory rather than giving prominence to field experiences and realities. Moreover the M Ed curriculum, is heavily weighted with theory.

There is urgent need to orient all teacher educators teaching in government, aided and unaided colleges in the state, and make them aware of changes taking place in secondary education field, especially in the area of curricula, textbooks, preparation of internet based lesson plans, etc.

Issues Related to Teacher Training Colleges

There are 428 teacher training colleges imparting the B Ed course in 2010-11. Out of them, 6 are government, 44 aided and 375 are unaided colleges. The maximum intake in these colleges is 42,800 candidates every year. That means the states' teacher training colleges are producing almost 40,000 trained graduates every year.

Do they all get teachers' jobs? Is the moot question?

The government quota seats are allotted by the Centralised Admission Cell attached to CPI's office. In 2010 only 19,000 candidates had applied for the 22,950 government quota seats. Even management quota seats were not fully filled up due to paucity of candidates. The indiscriminate sanction of these colleges by the government is also responsible for poor academic standards of candidates coming out of these institutions.

The cadre strength of the secondary teachers in government, aided and unaided schools in the state is as follows:

Table 13.1
Cadre Strength of Teachers

Category	Cadre Strength	5%*	Actual vacancies (July 2011)
Government	46,306	2,315	5,600
Private Aided	32,450	1,622	4,100
Private Unaided	53,197	2,659	1,500
Total	1,31,953	6,596	10,200

*Expected number of vacancies every year.

As in September 2011, there were approximately 11,200 vacancies in the state's secondary schools. This was because recruitment of secondary teachers has not taken place for several years. Even assuming that all these vacancies are going to be filled up, the state does not require more than 10,000 trained graduates every year.

Recommendations

In order to improve the quality of teacher education, a number of entities have to take concentrated action – the Central government, NCTE, the State Government, DSERT, and all the State Universities

1. There is an urgent need for the state government/NCTE to take immediate action to closedown substandard teacher education institutions.
2. There is a need for a common teacher education curriculum for the B Ed degree, applicable to all the universities in the state.
3. All the universities should follow a set of common guidelines with respect to evaluation, examination pattern, and assessment standards.
4. The Curriculum needs to be revised periodically at least once in five years.
5. The state should complete the admission process to the B Ed colleges before June of every year so that the secondary schools will be available during the first term itself for practice teaching.
6. All the Universities should complete all academic aspects of the B Ed course as per a common academic calendar and announce the examination results before May every year to help the students get suitable employment opportunities in secondary schools.
7. In order to improve the quality of teacher educators entering elementary teacher training institutions, the universities should offer courses in B Ed (Elementary Education) and M Ed (Elementary Education).
8. There is lack of teachers to teach geography in schools. Graduates who have not studied geography at the degree level usually teach geography as a part of social science. The department should develop a content enrichment course in geography for social science teachers.
9. Every B Ed college should have its own attached practice teaching school. In cities like Bangalore, there are instances of private secondary schools demanding heavy amounts from private B Ed colleges, to allow B Ed students for practice teaching in their schools.
10. The government should take immediate action to –
    i. Survey every college and close down colleges with poor infrastructure and in-adequate or unqualified staff.
    ii. Limit the intake of other colleges to 60

The GOI XI Plan Document has made significant recommendations for improvement and reformation of teacher education sector in the country. It has called for substantial changes in the pre-service teacher education programmes of the country:

1. Evolving mechanisms to stop proliferation of poor quality private teacher training institutions.
2. A rethink on the duration of the pre-service programme
3. Long duration internship that provides enough time and opportunity for self-study, reflection and involved engagement with children, the school, etc.
4. A Major revamping in the evaluation system of the teacher education program.
5. Need for multiplicity of players and Alternate Models of Teacher Education,
6. Need to establish meaningful links between pre-service and in-service teacher education programs.
7. Teachers and teacher educators should be enabled to use ICT as a tool to enhance their knowledge, skills and methodology,
8. Restructuring DIETs, CTEs, SCERTs, and establishing a separate cadre of teacher educators in these institutions,

The XI Plan document has called for an enriched B Ed program followed by 5-6 months of internship. It has also recommended for a four year integrated Bachelor's teacher education program. It has also called for strengthening the linkages between the pre-service and in service programs. It is to be seen whether these recommendations are implemented by the Centre and the States.

SECONDARY IN-SERVICE TEACHER EDUCATION

Providing continuous support for professional development of teachers after they join service, Is crucial to maintaining and improvement of quality in education in schools. Based upon the guidelines provided in the NPE 1986, teacher education was sought to be institutionalised and DIETS and CTEs were established in the country as a part of the CSS in Teacher Education. The aim was to provide continuous and quality professional support to both elementary and secondary teachers.

Unfortunately these institutions failed to perform effectively, the activities set forth in their guidelines. These institutions have been providing only 'content' and 'pedagogy' thematic courses these past several decades. The current in-service programs are generic in nature and are centrally designed. The programs are offered in places which are far away from schools.

Unfortunately in-service training of teachers is equated with mere attendance in teacher training programs. This perception among teachers needs to change. If in-service teacher education has to be truly meaningful it has to be need based, voluntary and contextualised.

Colleges of Teacher Education (CTEs)

Ten Colleges of Teacher Education (6 Govt. and 4 Private) were established under the Centrally Sponsored Scheme of Teacher Education. They were established primarily as pace setting and innovative training institutions in the secondary teacher education sector. Their major task is to offer superior quality in-service and pre-service programs for secondary school teachers and programs for personnel of AE and NFE.

They are expected to perform the following broad functions;

1. Imparting quality pre-service and in-service education to secondary school teachers
2. Conducting of subject oriented in-service teacher training programs,
3. Preparing personnel for the faculties of elementary teacher education institutions and their continuing education
4. Providing general resource support to secondary schools and elementary teacher education institutions
5. Taking up research, innovation and extension work in the field of secondary education and elementary teacher education.

RV Institute of Advanced Studies in Education, Bangalore used to conduct training programs for teacher educators and faculty of other TTIs. Teacher educators as well as staff of training institutions (including those of DIETs and CTEs) were being trained in concepts like lab area, micro teaching, action research, education technology, quality management, evaluation, etc. These programs have been discontinued of late for a variety of reasons.

Vacancies in DIETs & CTEs

Even though DIETS and CTEs are funded by the Central government, these institutions are continuously plagued by shortage of staff. The vacancies existing in these institutions are given below:

Table 13.2
Vacancies in DIETs and CTEs

Institution	Sanctioned Posts	Working	Vacancies
DIETS	1,283	964	319
CTEs	242	178	64
Total	1,525	1,142	383

Source: Performance Budget 201-11

It is to be noted that all the faculty belongs to Group A/B cadres of service. The reasons for these vacancies are many:

a) The government is yet to form a separate cadre for DSERT/DIET/CTE faculty, even though a separate Cadre & Recruitment Rules were notified long ago,
b) Opposition from officers' association for forming of separate cadre for these institutions.
c) The non-willingness of officers working in field posts to come to DIET/CTEs.

ICT and Teacher Education

ICT has powerful implications for the preparation of teachers. The position paper on Education Technology, 2005 of NCERT emphasises that modern education technology has its potential in schools, in the teaching of subjects, in examinations, in research, in the systemic reforms and above all in teacher education.

Teachers can be trained in use of ICT and also use ICT in enhancing the teacher's professional competence. It can also be used as a forum for regular interaction and sharing of best practices and to create a body of knowledge that can motivate teachers to use ICT, internet and the web and help teachers use them for obtaining source material and thereby enhance the quality of classroom transaction.

The three academies of Microsoft situated in Bangalore, Dharwar and Gulbarga have been training secondary teachers in the use of ICT for the past six years. The state government has to set up one such training centre in every district to cover all secondary teachers in the state.

Orientation of Educational Planners & Administrators

Periodic training of Educational administrators and planners is indeed necessary for the success of USE. The orientation program should necessarily include development of leadership capabilities among them. This necessarily includes development of – Educational leadership, Organisational leadership and Personal leadership qualities.

The heads of institutions are also to be trained in development of interpersonal skills required to develop and maintain quality relationships with a diverse range of people. They also need to be trained to develop clever thinking, reasoned judgment and wise decision making.

Secondary Teacher Training

Facilities for periodic professional training of secondary teachers are still inadequate. Though training of secondary teachers is being conducted through CTEs, the coverage is extremely limited as only 5000 teachers can be trained by CTEs every year. This is totally inadequate compared to the cadre strength of 1.33 lakh teachers in government, aided and unaided secondary schools in the state.

Because of financial constraints, state government does not allocate any additional funding for improvement of facilities in these colleges. Most of these colleges are handicapped by non-filling of existing vacancies and lack of professional and qualified teacher educators.

The Post Graduate Department of Karnataka University, Dharwar conducted an evaluation study of the functioning of DIETs, CTEs and IASEs in Karnataka in 2005-06. It found many deficiencies in the functioning of CTEs.

Perceived Deficiencies in the In-service Programs

Several studies have pointed out the following deficiencies in the in-service programs under taken by CTEs:

1. Programs are for a short duration and hence not many areas can be covered,
2. Areas chosen for the programs are not need based,
3. Programs are more generic in nature,
4. Content based programs do not have practical components,
5. Programs are not based self learning packages,
6. Not much use of computer, internet, technology aids are made use of in these programs,

.

Findings of the evaluation study on CTEs/IASEs:

1. The government is yet to make appointments to the DIETs/CTEs as per the new cadre and recruitment rules.
2. The CTEs and IASEs are required to make conscious and vigorous efforts to break the isolation between teacher education institutions and school systems.
3. These institutions are yet to make strong efforts to establish mutually beneficial academic and research collaborative linkages with various external organisations as the existing linkages are found to be inadequate and weak.
4. Few CTEs and the IASE in Karnataka have undergone the NAAC accreditation and secured grades.

5. Though the CTEs/ IASEs have made a positive impact on the quality of functioning of schools, a lot of scope still remains to produce constructive and definitive results.
6. The performance of the CTEs and IASE have not been impressive.

The X Plan Midterm Review Report on Education (GOI) identified the following gaps in the teacher education sector in the country:

1. Absence of specialised cadre of teacher educators in teacher education institutions.
2. Appointment of teacher educators with academic qualification in violation of NCTE norms,
3. Low academic profile and academic capacity of DIET/CTE faculty,
4. Lack of coordination between multiple authorities – SCERTs, DIETs, CTEs, NIEPA, NCERT, NCTE, etc.
5. The vision of DIETs, CTEs and IASEs as was articulated in MHRD Scheme so far has been realised on a limited extent due to various reasons.

The GOI XI Plan document on Teacher Education lists the following points as key concerns in secondary pre-service teacher education sector in the country:

1. Need assessments are not undertaken before organising in-service programmes,
2. Lack of professional development of working teachers and educational administrators,
3. Need to enhance content knowledge of in-service teachers,
4. The contents and pedagogy are taught separately,
5. The in-service programmes given to teachers have little impact on the teaching-learning of the schools. Hence there is a need to evaluate the impact of in service programmes on students' learning achievement.

In Karnataka, even though Cadre & Recruitment Rules have been framed for a separate cadre of teacher educators in DIETS/CTEs, it has not been implemented so far. The posts of lecturers and BEOs are interchangeable and very often the vacancies in these colleges are utilised to accommodate officers not wanted in the field. These colleges are supposed to provide in-service professional training to nearly one lakh secondary teachers in the state. There are also serious issues regarding coverage, content and quality of programmes offered by these CTEs.

The Mid-term Review identified series of interventions that are required to be undertaken:

1. Establishing a separate cadre of teacher educators with university based designations in SCERT, CTEs and DIETs.
2. Modifying policy guidelines to enable direct recruitment of teacher educators,
3. Giving top priority to filling up of vacant posts in these institutions,
4. Restructuring SCERTs, IASEs, CTEs and DIETs, so that they could perform their perceived roles and functions,
5. Instituting professional development mechanisms for teacher educators,

NCERT conducted an appraisal of these institutions in 2004. Some of the findings of the study highlight the following issues:

1. Many of these CTEs do not have qualified faculty
2. In most of the CTEs, only two functions – pre service and in service education of teachers take place. Research, Development, experimentation and innovative activities are not taken up.

3. Very few institutions have the required number of faculty members. Vacancies remain unfulfilled for fairly long periods of time,
4. Many of the CTEs have not set up 'Program Advisory Committee' as per norms,
5. Data base of teachers who have undergone in service education is rarely maintained. Consequently while some teachers get more than one opportunity to attend in service programs, others may not get any chance at all.
6. There is a need for a better coordination between the Block Education Officers with concerned CTEs.
7. In most of the CTEs, library facilities as envisaged by the CTE guidelines are not available.

Deficiencies in In-service Teacher Training Programs

The in-service programs suffer from the following deficiencies –

1. The monitoring agencies do not take up impact assessment of the teacher training programs.
2. No computerized database is maintained by the training agencies as a result of which some teachers may be called for several programs in a year and several teachers may not be called for any training program at all.
3. The programs are not (subject-wise) need based. They are designed either at the state or the district level without reference to ground realities.
4. The teachers do not have any choice in selecting the program according to their needs.
5. The cascade mode of training followed in most of the training programs results in transmission loss and, ultimately, the teachers do not get the same quality of training program envisaged at the time of planning of the program.
6. There is no follow up, monitoring and evaluation of the in-service training programs
7. The academic linkage between DSERT – DIET, DIET – BRC, BRC-CRC is, at best, tentative and not very effective.
8. The officers posted to the DSERT, DIETs, CTEs, BRCs are all drawn from administrative line as there is no separate academic cadre for these institutions. Hence, the work turned out by these institutions is not of high academic quality. These institutions have also become rehabilitation centres.
9. There is no educational research carried out in these institutions as the personnel working in them lack research experience.
10. The faculties who are posted to the DIETs have no experience of teaching in primary schools. Not being professionally equipped to give adequate guidance and support to the teachers during their visit to primary schools, they confine themselves to arranging training programs and such other activities. This is one of the reasons for poor quality of training modules, curriculum design and evaluation packages.
11. The in-service training has become largely ritualistic. At the secondary level, in-service training is totally inadequate both in terms of coverage and content.
12. In all the in-service teacher training programs, invariably, teachers of unaided institutions (who form a large percentage) are left out, leading to gaps in quality and teaching standards in unaided institutions.
13. The institutional linkage between the PG education departments of the universities and the field department with respect to in-service education is totally non-existent except for some rare individual initiatives.

Teacher Training – The Andhra Pradesh Model

During an interaction session, with BEOs, they reported that in Andhra Pradesh, teachers report to schools 2 weeks before the opening of schools. The department gives orientation programs to all teachers during these days only. This does not in any way effect the academic work of schools, once the schools start the academic year. This model can be adapted in Karnataka too, with local modifications. This will also help schools to function regularly during the academic year.

Important Issues in In-service Teacher Education

The following issues were noticed in this Sub-Study:

1. *Grants for teacher training are released only in the third quarter of the financial year. The CTEs and DIETs are forced to complete the training programs from December to February, which seriously affects the academic work in schools.*
2. *In respect of High schools, in previous years, there are instances of providing English language training to Kannada teachers, Mathematics training to Biology teachers, Biology training to Maths teachers, etc. This shows that teachers are selected routinely for training even without ascertaining their subjects as well as need.*
3. *In several cases same teachers get deputed for several training programs in a year.*
4. *Some teachers have not received even one in-service training program in their entire service.*
5. *There is no impact study of the in-service programs at any level.*

Hence there is need for maintaining a master list of teachers, subject wise at the CTE/DIET level, so that teachers are called for training systematically.

RECOMMENDATIONS

1. The 6 government CTEs clearly, are unable to cater to the in-service training needs of nearly 1,30,000 secondary teachers working in 13,000 secondary schools of the state. A secondary education wing has to be established in each DIET, which will take care of the in-service training needs of all the secondary teachers of the district. This can be done by easily reorganising the existing faculty in the DIET, and bringing the academic activities of the wing under the supervision of the jurisdictional CTE.

2. There is a further need for opening a separate Block Resource Centre (BRC) for secondary education in each education block as there are now 65 secondary schools (with nearly 500 secondary teachers) on an average in each block.

3. A huge gap exists in secondary in-service teacher education sub-sector, as it has become largely ritualistic and mechanical in nature. Several of these programs could be outsourced and conducted through accredited agencies working in education field. (Ex. Regional Institute of English, Regional Institute of Education, Central Institute of Indian Languages, Indian Institute of Science, etc.). This will also enhance the quality of these programs.

4. A proper and independent evaluation system should be put in place for these programs as otherwise teachers tend to go back to their old methods of teaching even after attending such training programs.
5. Open learning systems may be devised so that teachers tend to get a choice of programs and also attend such programs at their convenience.
6. Maintenance of data base of teachers at the block level will help to ensure that the right teachers attend the right program. Some teachers get themselves repeatedly deputed to training programs, while some others avoid these programs.
7. DSERT/CTEs should evolve minimum teacher knowledge and competency standards and develop new in service teacher education programs in order to update the knowledge and skills of subject teachers.
8. Newly recruited teachers should be given a foundation course of 60 days in their respective subjects, to be conducted by reputed institutions.
9. Every teacher should be allowed study leave of minimum of 2 years to take up career advancement courses from reputed institutions/Universities, which will also help him/her to become a better teacher.
10. The state government has to set up one ICT training centre in every district to train all secondary teachers in the use of ICT.

CHAPTER 14

Sub-Study – 3

MINORITY EDUCATION

Karnataka is known for its rich diversity in language, religion and culture. Muslims and Christians constitute the two principal religious minority groups in the state. The Muslim minority group is the largest minority group in Karnataka, comprising 12% of the population of the state. People belonging to Tamil, Telugu, Hindi, Marathi, and Konkani, form other linguistic minority groups in the state.

A number of institutions run by minority communities are found at all levels of education both in aided and unaided sectors. Many schools run by Christian missionaries known as Convent Schools are popular in urban areas and there is a very good demand for them. There are also a very small percentage of Sikhs, Buddhists and Jains running educational institutions in the state. For the purpose of this sub-study, data on primary schools (along with secondary schools) is considered for analysis.

Constitutional Provisions

The constitutional provisions are designed to safeguard the interests of the minorities. The Indian Constitution has made the following provisions for education of children of minority communities:

Article 30(1) *enjoins that all minorities, whether based on religion or language, shall have the right to establish and administer educational institutions of their choice.*

Article 30(2) *lays down that the state shall not, in granting aid to educational institutions, discriminate against any on grounds of their being managed by a religious or linguistic minority.*

Article 350A *lays down that, it shall be the endeavour of every state and local authority within the state to provide adequate facilities for children of linguistic minority groups to receive instruction in the mother tongue at the primary stage of education to children belonging to linguistic minority groups; and the President may issue such directions to any state as he considers necessary or proper for securing the provision of such facilities.*

Article 45 of the Constitution ensures free and compulsory education to all children in the 6-14 year age group and the 'Right to Education Act (2009)' has further given a fillip to education of all children including children from minority communities.

The Hague Recommendations on the Educational Rights of National Minorities and the UNESCO Education Position Paper – 'Education in a Multilingual World' (2003) state that:

'.... the longer indigenous and minority children in a low-status position have their own language as the main medium of teaching, the better they also become in the dominant language, provided, of course, that they have good teaching in it, preferably given by bilingual teachers…'.

Prime Minister's 15 Point program for the welfare of Minorities inter-alia provides:
'Improving access to school education under SSA, KGBV and other similar schemes, it will be ensured that a certain percentage of all such schools are located in villages/localities having a substantial population of minority communities'.

One of the recommendations of the Sachar Committee relating to secondary education was as follows: *'In pursuance of the goal of universalizing secondary education, priority will be given to opening of secondary/senior secondary schools in areas of Muslim concentration, wherever there is need for such schools'.*

The government policy also promotes growth of institutions in providing educational opportunities to the minority groups. The state has given adequate importance to minority education by establishing a separate Directorate for minority language institutions. But unfortunately, the state does not provide sufficient funds to promote them. Even most of the posts in this directorate are filled up on adhoc basis.

Directorate of Urdu & Other Minority Language Institutions
The Directorate was established in 1987, to protect and safeguard the constitutional rights of minority language institutions and to improve the standard of education in these institutions in the state.

The directorate looks after 86 Hindi Vidyalayas (out of these, 80 Vidyalayas are getting partial grants), 323 Arabic Madrasas (schools) and 9 Arabic Colleges in the state. 103 Arabic schools and 3 Arabic colleges are receiving aid from the state through the Directorate. The state has formed separate Grant-in-Aid Rules in 1979, for giving grants to Arabic Madrasas and Colleges'. The directorate also implements several schemes of both the state and central governments for improvement of minority education in the state.

Minority Managed Institutions in Karnataka
The education department data shows that among the minority language primary schools, Urdu Medium schools make up the highest number (77%) of schools, the others being Marathi, Tamil, Telugu, and Hindi schools. The following table gives an overview of the number of institutions run by various minority groups in the state:

Table 14. 1
Schools run by Minority Groups

Minority Group	Primary Schools	Secondary Schools
Christians	1,081	474
Muslims	893	340
Sikhs	11	5
Buddhists	15	1
Jains	104	63
Tamils	40	10
Telugu	53	21
Tulu	08	02
Hindi	16	7
Marathi	55	80
Konkani	30	20
Others	100	116

Source: Directorate of Urdu & Minorities

But a majority of schools run by these communities happen to be English Medium schools, even though some of them are providing education in minority media. A majority of these institutions collect heavy donations and fee, which would not be affordable to poor and lower middleclass households. In our FGD at Gulbarga, Muslim minority community leaders told the Study Team that minimum fee charged by these minority private institutions in Gulbarga was between 30 and 40 thousand rupees (per annum), which was normally beyond the reach of most Muslim households.

Status of Minority Education in Karnataka

Government happens to be the dominant player in providing education to minority communities in the state. Out of a total of 6,836 minority schools, 90% of the elementary schools and 37% of secondary schools are government schools. The Urdu medium institutions are spread throughout the state. The Marathi institutions are spread over the border districts of Uttara Kannada, Belgaum, Gulbarga and Bidar. Telugu and Tamil institutions are very few and concentrated in the border districts of Bellary, Raichur, Kolar and Chamarajanagar apart from Bangalore City.

Table 14.2
Minority Language Schools in Karnataka 2010-11

Schools	Urdu	Tamil	Telugu	Marathi	Hindi	Total
Lower Primary	2,333	27	27	370	8	2,765
Upper Primary	2,341	81	50	707	31	3,210
Secondary	485	5	20	266	85	861
Total	5,159	113	97	1,343	124	6,836

Source: Education in Karnataka 2010-11

However, there is substantial variation in figures given in the annual reports of the department. Hence in this sub-study the figures given in the published book 'Education in Karnataka 2011' are only considered.

Distribution of Schools by Medium of Instruction

The distribution of schools by medium of instruction shows that minority medium schools form only 9% of all schools in the state. Only Urdu and Marathi medium schools have a significant presence in the state.

Table 14.3
Percentage Distribution of Schools by Medium of Instruction
Figures in Percentage

Medium	Lower Primary	Upper Primary	Secondary	Total
Kannada	88.15	77.02	65.53	78.56
English	1.45	13.97	28.85	12.62
Urdu	8.78	6.58	3.16	6.66
Tamil	0.10	0.23	0.03	0.15
Telugu	0.10	0.14	0.13	0.13
Marathi	1.39	1.99	1.75	1.73
Hindi	0.03	0.07	0.55	0.15
Total	100.00	100.00	100.00	100.00

Source: Education in Karnataka 2010-11

Enrolment in Minority Language Medium Institutions

Minority children studying in minority medium schools, form less than 9% of the total enrolment in state schools. A significant feature of the minority education (especially Urdu schools) in the state is that the enrolment of girls (at 57%) at elementary stage is higher than that of boys in government, aided and unaided institutions.

Table 14. 4
Enrolment in Minority Medium Schools in Karnataka 2010-11
Figures in Lakhs

Schools	Urdu	Tamil	Telugu	Marathi	Hindi
Lower Primary	3.22	0.034	0.051	0.99	0.005
Upper Primary	1.21	0.055	0.029	0.21	0.056
Secondary	0.92	0.003	0.029	0.52	0.054
Total	5.35	0.092	0.109	1.72	0.115

Source: Education in Karnataka 2010-11

Another significant feature of minority education in the state is that more and more parents of minority communities are opting for English and Kannada medium schools and hence we are seeing a gradual decline in enrolment in minority medium schools.

Comparison of Enrolment of Minority Children to Total Enrolment

When compared to total enrolment in classes 1 to 10, Muslim (Urdu) children form 14.43 % of total enrolment. All other minority children form only 2.03 % of total enrolment.

Table 14.5
Percentage of Enrolment among Minority Communities

	Boys	Girls	Total
Minority (Muslims)	13.92	14.97	14.43
Other Minority	2.02	2.02	2.03

Source: Education in Karnataka 2010-11

Enrolment by Gender in Minority Medium Institutions

An analysis of gender-wise enrolment in classes 1 to 10 reveals that among Muslims, girls' enrolment is higher than that of boys. Whereas in other minority communities, enrolment of boys is slightly higher than that of girls.

Table 14.6
Gender-wise Enrolment of Minority Communities
Enrolment Figures in Lakhs

	Boys	Girls	Total
Minority (Muslims)	7.22	7.24	14.46
Other Minority	1.05	0.98	2.04

Source: Education in Karnataka 2010-11

PERFORMANCE OF CHILDREN OF MINORITY GROUPS

KSQAO Learning Assessment Studies

KSQAO has been conducting assessment of learning achievement of children of different classes, in both government and aided schools, every year from 2005-06. The performance of children of different minority language groups can be seen from these assessments. This can also be compared with the performance of Kannada Medium students.

Table 14.7
Medium wise Assessment Results

Year	Classes	Medium	Results	
2005-06	2, 5 & 7	Kannada	50.00 %	
2006-07	3, 5 & 7	Kannada	63.80 %	
		Urdu	66.90 %	
		Marathi	69.70 %	
2007-08	5 & 7	Kannada	71.20 %	
		Urdu	73.46 %	
		Marathi	78.21 %	
		Tamil	67.21 %	
		Telugu	67.17 %	
2008-09	5, 7 & 8		**Class 7**	**Class 8**
		Kannada	73.58%	51.24%
		Urdu	77.55%	64.37%
		Marathi	76.61%	55.63%
		Tamil	75.11%	56.43%
		Telugu	71.68%	61.57%

Source: KSQAO

The performance of these children was around 50% in 2005-06, but jumped to more than 60% in 2006-07 as probably, the students and teachers became familiar with the assessment methods of KSQAO. However, all other language students performed better than Kannada medium students in 2008-09. Another significant point to note was that the performance of students of all media was considerably lower in class 8 when compared to performance of students in class 7 during 2008-09.

KSQAO Baseline Study of Class 9 Students (2009-10)

In order to understand the performance of students prior to implementation of RMSA, KSQAO conducted a base line study of the learning achievement of students of Class 9 in 2009-10. However, this study was restricted to assessing the performance of students in government and aided secondary schools in the state. 2176 secondary schools were selected as the sample for the study. The following table gives the results of the study:

Table 14.8
Medium wise Learning Achievement
In Percentage

Medium	Achievement in Class 9		
	Boys	Girls	Total
Kannada	48.06	51.09	50.03
English	48.33	52.62	50.43
Urdu	54.08	57.41	61.60
Marathi	57.16	62.30	56.60
Tamil	44.27	46.29	44.57
Telugu	62.44	59.96	61.48
Total	**48.44**	**51.83**	**50.14**

Source: KSQAO Study Reports

Compared to Kannada medium students, students of Urdu, Marathi, and Telugu media performed better in this assessment. Only the performance of Tamil medium students was lower than that of Kannada medium students. However, in all categories, the performance of girls was better than that of boys by statistically significant margins.

Performance of Children belonging to Minority Groups in SSLC Examination 2011

Most of the children studying in minority language primary schools are forced to shift to either English or Kannada medium, when they join secondary schools, as there are very few minority medium secondary schools in the state. Thus children of minority groups get spread over among English/Kannada medium also. Hence it is difficult to segregate the performance of children of different minority groups in the SSLC Public Examination.

The performance of children belonging to various minority groups according to only the 'Medium of Instruction' in the SSLC Public examination 2011 is given in Table 14.9. Except, Urdu and Marathi students, there is a noticeable drop in number of students appearing other language media.

Table 14.9
Performance of Minority Medium Children in SSLC Examination 2011

SlNo	Medium	Appeared	Passed	Pass Percentage
1	HINDI	345	228	66.09
2	TELUGU	648	402	62.04
3	MARATHI	17,331	12,242	70.64
4	TAMIL	268	119	44.40
5	URDU	25,016	16,401	65.56
	Total	**43,608**	**29,392**	**67.40**

Source: KSEEB

Except for Tamil medium students, the performance of all other media students appear to be satisfactory. In respect of Muslims, we can also assess the performance of students who have taken Urdu as the first language.

Table 14.10
Performance of Urdu First Language Children 2011

SlNo	First Language	Appeared	Passed	Percentage
1	Urdu	30,994	20,749	66.95

Source: KSEEB

MUSLIM MINORITY EDUCATION

Status of Muslim Minorities in India

The 55th round of NSSO reports that 40% of Muslims belong to the absolute poor category in urban areas, only 30% of urban Muslim households have a working member with a regular salaried job, 16% of urban Muslims fall under the casual labour category and nearly 30% of urban Muslims are illiterate.

The Sachar Committee reported that a large proportion of Muslim households in urban areas are in less than Rs.500 per month expenditure bracket. About 25% of Muslim children between the age group of 6-14 years have never attended school or dropped out of school. The Committee found that the literacy rate among Muslims (in 2001) was much lower than the national average and that the literacy gap between Muslims and non-Muslims was greater in urban areas.

25% of children in the 6-14 year age group have either never attended school or have dropped out. Another major finding of Sachar Committee is that Muslim parents are not averse to mainstream education or sending their children to affordable government schools.

Status of Muslim Minority Community in Karnataka

Akshara Foundation in its 2011 study of 7350 Muslim households in Bangalore showed that –

1. 45% of households lived in asbestos houses and 36% lived in kutcha structures, and only 14% lived in concrete structures,
2. 70% of households had an average size of 4-6 members per family and 12% had more than 7-8 members,
3. According to 2001 census figures, 59% of urban Indian Muslims were literate,
4. 44% of Urdu speaking households reported casual labour as their occupation, 10% were garment factory workers, only one percent reported to be government servants and 6% were employed in the private sectors,
5. 28% of households did not have a Public Distribution Card or a Ration Card,
6. Of the remaining 72% of households, 41% owned yellow cards which indicated their economic status.
7. Parental education qualifications were as follows: 16% were illiterate, 42% had studied up to primary level, 25% up to Class 8, 5% up to SSLC, 2% up to PUC and only 1% were graduates.

Provision of Access to Muslim Minority Community

The norms under 'Universalisation of Elementary Education' are to open one primary school in every habitation with 100 population apart from the norm of having a lower primary school within one km radius and a higher primary school within 3km radius of the residence of a child. These standards apply to Muslim minority population as well.

With regard to Secondary Education, RMSA is responsible for improving Access and quality of schooling. RMSA states that special attention needs to be paid to districts with a concentration of SC/ST/OBC/Minority groups. Karnataka has 9% Urdu medium lower primary schools, 7% Urdu Medium Higher Primary Schools and only 3.63% Urdu Medium secondary schools.

Table 14.11
Urdu Medium Schools in Karnataka

Type of School	All Media Schools	Urdu Medium Schools*	Percentage
Lower Primary School	26,302	2,333	8.78
Upper Primary School	33,126	2,341	6.58
Secondary Schools	13,352	485	3.16
Total	72,788	5,159	6.16

**Apart from these schools, Urdu Children study in Madrasas also*
Source: Education in Karnataka 2010-11

The fall in percentage of Urdu Medium schools as we move up the education ladder, indicates that the Urdu medium students have to inevitably opt for other media (either Kannada or English), due to lack of facilities to study in their own medium at the secondary level.

The low availability of secondary schools having Urdu Medium in the state is also one of the reasons for Muslim children studying in Urdu Medium, to drop out after the elementary stage. Even where Urdu Minority high Schools exist, they are suffering from declining student strength, as parents tend to admit their children in Kannada/English medium schools. Some of the government Urdu High Schools with low student strength are mentioned below:

Table 14.12
Urdu High Schools with Low Student Strength

School	Strength			Total
	Class 8	Class 9	Class 10	
GHS (Urdu) Nalwar, Chitapur	6	40	0	46
GHS (Urdu), Sonth, Gulbarga	10	12	13	35
GHS (Urdu), Chadchan, Bijapur	7	20	22	49

Source: CPI, Bengaluru

Status of Govt. Urdu High School, Chadchan, Bijapur Dt.

Our Study Team visited the Government Urdu High School, at Chadchan. A High school is supposed to have 8 posts including the Head Teacher. In this school the posts of English and Urdu teachers posts are yet to be sanctioned. The primary teachers who have been deputed to this school do not know Urdu. Both PCM and CBZ teachers posts are vacant. Only 2 teachers were present on the day of the visit. The attendance was Class 8 – 12, Class 9 – 11 and Class 10 -13. Total 36.

SCHEMES FOR MUSLIM MINORITY EDUCATION

Concessions & Incentives for Minority Children

Muslims come under the OBC (Other Backward Classes) category that qualifies them for consideration under the reservation quota for admission to educational institutions and employment in government sector. This quota is also available to some categories of converted Christians.

The Karnataka Minority Development Corporation is maintaining free hostels for minority children. It also gives a grant-in-aid limiting to Rs one lakh for voluntary agencies for construction of hostel buildings.

The Directorate for Urdu and Minorities started Morarji Desai Residential Schools for Muslim minority children at Srirangapattana, Bijapur, Gulbarga, Ramanagara and Mangalore to provide education facilities to minority children from Class 6 to Class 10. These were later handed over to Karnataka Residential Education Institutions Society, which is running these schools.

Modernisation of Madrasas

The GOI has introduced this scheme to encourage traditional institutions like Madrasas to modernise their curriculum. Under the scheme, subjects like Science, Maths and English are taught to the children studying in the Madrasas. Teachers are appointed on a consolidated salary. Further grants are given to each Madrasa to purchase science equipment. In 2009-10, 119 Madrasas were covered under the scheme. The GOI has sanctioned Rs. 302.25 lakhs in 2009-10 and Rs. 187.92 lakhs in 2010-11 under the scheme.

Area Intensive Program

Under the CSS Area Intensive Program for educationally backward minorities, funds have been provided for construction of 278 classrooms in the following ten education blocks in the state – Bidar and Humnabad, in Bidar district; Gulbarga and Chittapur in Gulbarga district; Savanoor and Shiggaon in Haveri district; Belthangady and Bantwal in Dakshina Kannada district; Raichur in Raichur district; and Bhatkal in Uttara Kannada district. An amount of Rs. 450.17 lakhs has been released so far under this program. This program has been discontinued.

Infrastructure Development of Minority Institutions

This is a Centrally Sponsored Scheme for private aided and unaided primary, secondary and higher secondary schools run by minority managements. The infrastructure development of these institutions is funded to an extent of 75% of the proposed estimate subject to a maximum limit of Rs. 50 lakhs.

For eligibility –

a) The minority institutions located in District, Block and Town municipal areas should be having a minority population of 20% and above,
b) They should have been recognised either by the State or Central government, and
c) They should be in existence for a minimum period of 3 years.

The central government has so for approved 15 proposals and sanction for 23 proposals is awaited as in 2010-11.

SPECIAL FOCUS ON MUSLIM MINORITY SCHOOLS IN BANGALORE

Muslim Minority Schools in Bangalore

The study report by Akshara Foundation points out that 'while there are sufficient number of government Urdu Medium schools in Bangalore till the primary and Upper primary level, there are only four Urdu Medium High Schools in Bangalore'

The report further indicates that these among the primary government Urdu medium schools in Bangalore catering to Muslim/Urdu speaking community, many of these schools are in dilapidated condition and do not have even basic facilities such as toilets and separate staff rooms.

The study also found that these schools had an adequate number of teachers, but in most cases, teaching activity was reduced to minimum in terms of time and effort. The study also found that there were more number of small-size Urdu medium schools in Bengaluru than are listed in official records.

Enrolment in Urdu Schools

Even though, Muslims constitute 12% of the state's population, the enrolment in Urdu Medium at the lower primary level in state schools is only 7.33% of the total lower primary enrolment of the state. Even this percentage declines as we move up the education ladder and at secondary stage only 3.53% of Muslim children are studying in Urdu Medium.

There seems to be four categories of Muslim households. The first represents the educated middle and upper middle class, which sends their children to English medium schools affiliated to state and central Boards. The second group sends their children to Madrasas only, as they believe that religious education is more important than formal education. The third

category sends their children to government schools. The last group is those people whose children are never enrolled in schools.

Table 14.13
Enrolment in Urdu Medium Schools in Karnataka

Type of School	All Media*	Urdu Medium*	Percentage
Lower Primary Enrolment	43.91	3.22	7.33
Upper Primary Enrolment	30.33	1.21	3.98
Secondary School Enrolment	26.04	0.92	3.53
Total	100.28	5.35	5.33

Figures in Lakhs
Source: Education in Karnataka 2010-11

The study by Akshara Foundation points out that among the enrolled Muslim children in Bangalore, 64% are enrolled in government Urdu medium schools and 36% children are enrolled in government Kannada Medium schools. Muslim Parents could be sending their children to Kannada Medium schools probably for better job prospects. Approximately 20% of children in 5-14 age group (in Bangalore) are not enrolled in any form of school at all. 11% of schools had a student strength of 25 and below.

About 17% of eligible Urdu speaking children are enrolled in Urdu Medium Schools as per DISE data. According to KLP data base, 36% of children with Urdu as their mother tongue are studying in Kannada Medium schools. An unknown percentage of children are probably studying in Madrasas which are both residential and non-residential in nature. There has to be a survey to asses the number of Madrasas in the state.

Pupil Teacher Ratio in Government Urdu Medium Schools
Taking into consideration, the 'Pupil-Teacher-Ratio' (PTR), Akshara Foundation study points out that overall, the PTR for Urdu primary schools in Bangalore is 1:24. But 60% of Urdu primary schools had a PTR below 25, 34% of schools had a PTR between 25 and 40 and 6% had a PTR above 40. However, on the day of the team's visit, the study found that 80% of Lower Primary Urdu schools had a PTR below 20 and 63% of Higher Primary schools had a PTR below 25.

In case of Model Urdu schools, the team found that there were more number of teachers working in these schools, than the sanctioned strength. These could be the teachers posted in rural areas, and who have got deputed to city schools.

Another significant factor is that 92% of 982 teachers working in government primary schools are women. This is an important aspect as it encourages conservative parents to send their daughters to these schools staffed by women teachers.

Participation of Muslim Children in Schools
Regular attendance is a far more reliable indicator of effective schooling. Data showed that there was a gap of 27% between children's enrolment and attendance on the day of the Akshara team's visit to schools. In about 45% of schools more than 30% of children were absent. There was also a discrepancy between enrolment and regular attendance as reported by the teacher and the actual attendance on the day of the visit.

Quality of Learning in Urdu Primary Schools

Multi-grade teaching is a common practice in all the schools. Different teachers conduct multiple classes in a single room due to space constraints. There are also other factors that impact the quality of learning in these schools.

The Akshara study reports that on the day of visit, in one school with a strength of 15 children and 2 teachers, only 4 children and one teacher were present. This school was paying a monthly rent of Rs. 3,500 for space. Of the four students, three were siblings. A Class 4 child could not read a Class 2 Urdu textbook. Such instances raise the question of whether it is economically feasible to retain such schools. An alternative is to move the children to a nearby larger school and provide free transportation for these children to reach the school.

Another important aspect noted by Akshara Foundation study was that, at the time of visit, among teachers who were present in schools, only about half of them were engaged in teaching. Teaching activity was reduced to a minimum in terms of both time and effort. In many cases, it was just a question of minding children in a room rather than engaging them in the teaching-learning process.

Status of Urdu High Schools in Bangalore

The Study Team visited Government Urdu High School, Tank Garden, Jayanagar I Stage – one of the four Urdu High Schools in Bangalore City. There are six other high schools and one PU college, within one km radius of this Urdu High School. Even though the school was started in 1996, the school is running in a rented building. The school does not have a science laboratory, computer lab, reading room, independent library or any kind of sports facilities. Even though there are 11 computers, there are no internet facilities.

The school has 9 teachers of which 6 are women teachers, including a drawing teacher. The school does not have a physical education teacher. The Head Mistress felt that no training programs are arranged for Urdu school teachers and this in turn hampers their professional growth. Since most of the Urdu schools are situated next to mosques, there are no sports or cultural activities due to lack of playgrounds and such other facilities. Students come from as far as 12-15 km from the school.

Quality of Learning in Urdu Secondary Schools

We are basing this analysis on KSQAO learning achievement studies conducted during various years, in order to understand the quality of learning in Urdu medium primary and secondary Schools.

Table 14.14
Learning Achievement in Urdu Schools

Year	Classes Assessed	Percentage of Achievement
2005-06*	2, 5 and 7	---*
2006-07	3, 5 and 7	66.90
2007-08	5 and 7	73.46
2008-09	5, 7 and 8	77.55 (Class 7) 64.37 (Class 8)

**In 2005-06, only Kannada Medium Schools were assessed*

Let us now analyze the results of the 'Learning Achievement Baseline Study of Class 9 students' conducted by KSQAO in 2009-10. The details of the study are as follows:

Table 14.15
Class 9 Base Line Study 2009-10 – Urdu Schools

Urdu Schools Participated In the study	Students Enrolled	Students Participated	State Level Results For Urdu Students
82	6,967	6,310	61.60*

**Including Part B, Source: KSQAO*

Girls had performed better than boys by a statistically significant margin. Irrespective of the medium of instruction, the general trend was that the results of students were found to be poor in the three core subjects of social science, Science and Mathematics. Similarly, students who had taken English as the second language had also secured low marks in the study.

For Urdu Medium Students, subject wise results showed that they were in conformity with the general trend that the students had not performed well in Second Language (English) and also the core subjects. The most difficult subject for the students was of course, Mathematics.

Table 14.16
Subject-wise Learning Achievement
of Urdu Medium Students

Subject	Performance In Percentage
First Language (Urdu)	76.49
Second Language	54.33
Third Language	62.16
Mathematics	49.53
Social Science	59.23
Science	57.79
Part B	71.68
Total	61.60*

Excluding Part B, the results are 59.92%
Source :KSQAO

In this study, among Urdu medium schools, Sirsi (80.16%), Gadag (78.87%), Koppal (76.28%) and Belgaum (75.12%) districts (all belonging to North Karnataka) occupied the first four positions by securing a learning achievement of above 75%, while the districts of Davanagere (38.14%), Kolar (33.81%), Mandya (33.47%) and Mysore (26.42%) (significantly all belonging to South Karnataka) were in the last four positions with a learning achievement of less than 40%. The gap between the top performing districts and the low performing districts was statistically very significant. It was as large as 35%.

School Infrastructure

Infrastructure in most of the Urdu schools is in a abysmal state. Many of the schools are situated in slum areas with unhygienic surroundings. Of the 171 Urdu medium schools in Bangalore, 51% of schools have their own building and the rest function in rented buildings or rent free buildings provided by religious and non-religious organizations. 20% of schools do not have proper or pucca structures.

58% of schools have toilets for teachers, 45% of schools have separate toilet for girls and 40% of schools have separate toilet for boys. However across all categories 20% of toilets were not in usable condition. Generally functional toilets were reserved for teachers and children were not allowed to use the facility.

In a bigger school with 150 students, the Akshara team reported: 'All children from classes 1-7 were seated in this small, unkempt room in different groups. The children were having trouble concentrating on their work due to cramped conditions…. Teachers were unable to control the students and chaos reigned…'. In another school, the education coordinator said there was Rs. 20,000 grant for school maintenance and Rs. 12,000 allocated for repair work annually. Parents and SDMC members told the team that they had no clue about the availability of these funds. Such is the sad state of affairs of minority schools in Bangalore, the capital of the state.

Perceptions about Urdu Medium Schools

Head teachers and teachers feel that the parents are not concerned about their children's education, because they are illiterate. The staff feel that of late, government schools are becoming institutions for slum children, which was not the case in the past. In most of the schools, children sit on the bare floor, and these floors are often dirty and damaged. SDMCs in a majority of these schools, were not active and do not function effectively. Due to lack of access to Urdu Medium High Schools, children after class 7 move to Kannada or English medium high schools.

COMMUNITY PARTICIPATION

There are hundreds of instances of active community participation in building school infrastructure and providing all amenities in schools throughout the state. The Study Team here has given one noted example of community participation in a backward area and that too by the minority community.

Community Participation – A Role Model

The Government Urdu Higher Primary School, Shahbazaar, Gulbarga, was running in a dilapidated rent free building for decades. In 1992 it was shifted to Ittehad – a rehabilitation colony in Gulbarga. When SSA sanctioned 7 rooms to this school, there was no land to build the school. Mr. Md. Wahed Ali Fatekhani donated a site in the cause of minority education.

The SDMC with the active support of the local community has constructed a beautiful school building, which can be a model to any school in the state. The school has a bore well, a good gated compound wall , drinking water facility and separate toilets for boys and girls. All seven rooms are painted with ACE paint to avoid frequent maintenance. Polished Shahbad stone is used for flooring. Inside the classrooms all the walls are decorated with local history, paintings of freedom fighters, national and political heroes, Kannada and Urdu poets and scientists. The school has standard wall boards, and BALA activities were also seen.

The school has a dedicated team of 6 teachers. The Study Team found the students to be cheerful and ready to answer questions posed by the team members.

After the construction of the building, the strength of the school has gone up from 50 to 203 (103 boys and 100 girls). The head mistress stated that the school is now attracting students from neighbouring private schools also.

ISSUES IN MINORITY EDUCATION

1. The students who study primary education in their respective medium, later are forced to switch over to either Kannada or English medium either at the secondary stage or at the PU stage. This naturally affects the academic progress of children as they are not proficient in Kannada/English. This results in a large number of failures.

2. The most important issue the state is facing in education of minorities is a serious shortage of Urdu medium teachers in Science and Mathematics. At the graduate level, the teachers study these subjects in English/Kannada medium. The state amended the recruitment rules to provide for teachers who have studied Urdu as a First/Second language to be eligible for recruitment as Science and Mathematics teachers in Urdu High Schools. Still the shortage persists.

3. The study by Akshara Foundation showed that there are more number of small size Urdu Medium schools in Bangalore, compared to official records. In Urban areas like Bangalore, many Urdu and other minority language primary schools have low student strength and even lower daily attendance.

4. It may be feasible to restructure the schools based on student strength and merge smaller schools with nearby larger schools and make transport arrangements for these children. Merging schools may be a cost effective exercise, as regardless of strength, each primary school has a minimum of two teachers including a Kannada teacher.

5. In our FGD at various levels, there were repeated demands for increased reservations in proportion to the population of the community, especially in educational institutions.

RECOMMENDATIONS

1. There is a definite case for increasing reservation to Muslim minority community in education institutions, in proportion to the population of the community.
2. Encourage residential Madrasas, to adapt modern system of education, by providing computers and computer teachers.
3. Provide proper infrastructure facilities to all minority institutions (including aided and unaided institutions), through provision of laboratories, libraries, computers, furniture, etc.
4. Extend all incentive schemes to minority aided and unaided educational institutions also, so that minority community children can continue education in whatever type of educational institutions they are studying.
5. When syllabus or textbooks are revised, first only Kannada handbooks and other materials are prepared by the department, which causes a lot of inconvenience to minority teachers as they are unable to understand the Kannada material properly. Hence all material should be prepared in minority languages also and minority teachers should be simultaneously trained.
6. Teacher training should be extended to teachers of all schools including private aided and unaided schools also.

7. Urdu Nursery schools are handicapped by the fact that the department has not prepared syllabus and material for nursery schools and Anganwadi Centres in the Urdu language. This should be rectified and syllabus and 'Teaching-Learning Material' should be made available in the Urdu language also.
8. There is need to upgrade minority higher primary schools located in central locations in urban areas as minority secondary schools, so that minority children continue education, without dropping out.
9. The department must post more women teachers in minority secondary schools having co-education, in order to ensure continuing education of girls,
10. Take up regular enrolment drives in order to bring back children, who drop out due to various reasons. This can be done in collaboration with minority community leaders to put pressure on parents and to ensure regular attendance of children.
11. Conduct special camps and bridge courses for those children who are brought back to school. Special coaching/remedial classes may be arranged for low performance children.
12. Cooperation of Residential Madrasas should be elicited to bring formal education to children studying in Madrasas.
13. In order to promote, minority education, it is necessary to adopt a flexible system of education, which responds to local needs and makes minority children comfortable in schools, NCF 2005 has suggested contextualisation of pedagogic processes, and creation of ethos, which enables all children to succeed irrespective of their social backgrounds.
14. The interventions for children belonging to Educationally Backward Minorities will have to be based on intensive micro-planning. Special interventions need to be designed to address learning needs of children from these communities and relating education to their life. Under USE, the state governments are expected to design specific interventions and campaign programs to bring them in the 'Educational Process'.
15. DSERT has to take up development of minority specific supplementary materials for bridging the gap in understanding due to cultural differences.
16. Teachers' handbooks, Students' workbooks, teaching learning materials should be simultaneously brought out in Urdu medium also.

17. A policy decision may be taken to make Urdu schools bi-lingual. Science and Maths may be taught in English and all other subjects may be taught in Urdu.

18. There is an urgent need to extend distance learning and open schooling facilities in areas having concentration of minority communities, which will benefit out of school minority children continue education at their convenience.
19. Even though, the post of a Kannada teacher is sanctioned to all minority primary schools, there are many minority primary schools without Kannada teachers. These posts should be filled up on priority basis.
20. The government should lift the ban on approvals of appointments of teachers in aided minority institutions as most of the minority institutions are not capable of making alternative arrangements when vacancies occur.
21. There is a need for mapping all minority schools in order to strengthen them and reduce drop out of minority students at various levels.

CHAPTER 15
Sub-Study – 4
INCENTIVE SCHEMES

Background

Even in the princely Mysore state, there were several incentive schemes. Merit scholarships were given to talented children from poor families, backward children, SC/ST students, girls, Muslim children, and children coming from Malnad areas to continue education. There were scholarships for children who wished to pursue higher education.

There were different types of scholarships administered by the then government of the Princely state of Mysore – Deprived class scholarships, Girls scholarships, Scholarships for Muslims, General Merit Scholarships, Sanskrit Scholarships, Military Scholarships, Malnad Scholarships, Palegar Scholarships, Foreign Scholarships to the poor and the needy.

Purpose of this Sub-study

This sub-study discusses the various concessions, incentives and other similar programs which cater to the needs of children of school going age. Some of these incentives are common to both primary and secondary school children, and hence this sub study deals with both primary and secondary sub-sectors.

Objectives of the Incentive Schemes

The aim of these educational concessions and incentive schemes is to –

1. Promote education among depressed classes, minorities and economically weaker sections of the people.
2. To arrest the dropouts in various classes and promote retention among students,
3. To reduce the cost of children's education to parents of depressed classes and economically weaker sections of the society,

Objectives of the Cooked Midday Meal Scheme

Several independent studies have highlighted the impact of the midday meal scheme. It is perceived as an independent component of the food security initiatives, for children's health and their right to nutrition. In Karnataka, the midday meal scheme aims at improving enrolment, retention, attendance, and learning levels of children, especially those belonging to disadvantaged sections, while simultaneously improving their nutritional status. It motivates parents not only to enrol their children in school but have them attend regularly as well. Thus it enhances community participation in schools.

Since malnutrition is detrimental to concentration and learning, the scheme tries to provide nutritious food and alleviates short-term hunger in malnourished or even otherwise well nourished children. It also addresses the problem of specific micro-nutrient deficiencies among the age group.

Educational Concessions

At present, elementary and secondary education (in government and aided institutions) in the state is completely free. In respect of other sectors, students belonging to SC/ST and Category I are exempted from payment of tuition fees. Students belonging to economically weaker sections are awarded fee concessions and scholarships. The non government fee payable by these students is also reimbursed to the institutions by the state.

Under the Special Component Plan (SCP) and Tribal Sub Plan (TSP), SC/ST students studying in I year degree and diploma in technical education are provided free drawing materials. Under the Special Book Bank scheme, they are also supplied free text books.

Educational Concessions for Girls

All girls studying in government institutions are exempt from paying tuition fee up to II PUC. The prescribed tuition/non-government fee is reimbursed by the government to the institutions. In 2010-11, government spent Rs. Rs.4.86 crore for reimbursement of fee to girl students studying in classes 6 to 10 and Rs. 4.60 Crore for reimbursement of fee to girl students studying in PUC.

Girl students coming under disadvantaged sections (SCs, STs, Backward communities and economically weaker sections) are given certain fee concessions in government and private aided colleges. To provide opportunities for girls to pursue higher education, apart from reservation in government seats, the state has established several exclusive girls' high schools and women's colleges while in D. Ed. admissions, 50% of the seats are reserved for women. In technical education, 12 women's polytechnics have been established by the state.

The Women and Child Welfare Department also has a number of schemes to improve enrolment and retention of girls – Balika Samvridhi Yojana, Girls' Hostels, the ICDS program, etc.

Schemes for Disadvantaged Social Groups

The government has formulated several schemes targeting disadvantaged social groups – free uniforms and text books under Vidya Vikas scheme, scholarships, hostels for girls and SC/ST children and hot cooked midday meal scheme under Akshara Dasoha.

There have been several schemes funded and implemented by other social sector departments to cater to the needs of the weaker sections and disadvantaged groups – establishment of Ashram Schools, free hostels for boys and girls, free uniforms for hostel inmates, Navodaya and Morarji Desai Residential Schools for merited SC/ST/BC children, residential schools for minorities and SC/ST girls, scholarships, Anganawadi Centres (AWCs) for women and children, special bridge course schools for rehabilitation of child labourers, sports schools for backward and minority children, grant-in-aid for pre - metric hostels run by private agencies, etc, These incentive schemes for students studying in schools at different levels are spread over different departments of the government.

INCENTIVE SCHEMES OF THE EDUCATION DEPARTMENT

1. **Vidya Vikas Scheme**

   a) **Free Uniforms:**
   Under the Vidya Vikas scheme, the Government provides one set of uniform cloth free of cost to all children studying in government primary and high schools (From classes from 1 to 10). During 2009-10, 62.63 lakh primary school students and 10.79 Lakh high school students were benefited under the program. Approximate Expenditure was Rs. 71.75 Crore.

b) **School Bags & Note Books**

SC/ST students studying in government primary and secondary schools in classes 1 to 10 are given free note books (19.30 lakh beneficiaries). SC/ST students studying in Classes 1 to 5 are given one school bag free of cost. In 2010-11, 12.5 lakh children were benefited under the program. Approximate Expenditure was Rs. 40.50 Crore for both the programs. SC/ST students in classes 8 to 10 were also given a geometry box and 6 king-size note books each at a cost of Rs. 4.45 Crore.

c) **Free Text Books**

A set of textbooks is given free of cost to all children studying in government primary and high schools. In 2010-11, 74.29 lakh students were benefited under the program. Approximate cost was around Rs. 60 Crore.

2. Midday Meal Scheme (Akshara Dasoha)

The Scheme provides hot cooked mid day meals to all students studying in government and private aided, primary and high schools of the state.

Table 15.1
Schools Under the Mid-day Meal Scheme

	Primary schools	High Schools	Total
Government	45,476	4,063	49,539
Private Aided	2,499	2,805	5,304
Total	47,925	6,868	54,843

Source: Annual Report 2009-10

In 2009-10, a total number of 66.15 lakh children were beneficiaries under the hot cooked midday meal program.

Table 15.2
Annual Budget for the Scheme
Figures in Crores

	State	Central	Total	Expenditure
2008-09	171.14	207.76	303.29	303.29
2009-10	222.98	234.25	457.24	274.05

Source: Annual Reports

Distribution of Additional Nutritional Tablets

As a part of the program, Vitamin A (2 tablets/year), Iron and Folic Acid (3 per week up to 36 weeks) and de-worming tablets (2 each/twice a year) were distributed to the students studying in classes 1 to 7 of government and aided schools. The Karnataka State Drugs & Logistic Society, Bangalore procures and supplies these tablets to the department at the taluk level.

Participation of NGOs in the Midday Meal Scheme

This is one government scheme, where the highest number of NGOs (107) are participating in providing hot cooked meals to children across the state. These NGOs are providing midday meals to 10.98 lakh children in 5618 schools mostly located in urban areas. The details related to major NGOs is given below:

Table 15.3
Participation of Major NGOs in Midday Meals Scheme

Major NGOs	Schools	Beneficiaries*
1. Akshaya Patra Foundation, Bangalore & Hubli	1,911	3.67
2. Adamya Chetana, Bangalore	396	0.84
3. Mohiseen Shariff, Bangalore	185	0.35
3. Kasturi Kala sangha, Bangalore	224	0.33

**In Lakhs, Source: Annual Report 2009-10*

Evaluation Studies of the Midday Meal Scheme:
Evaluation of the scheme has been done by several independent as well as government agencies. Several studies have pointed out the following achievements of the scheme:

a. Effective addressing of Classroom hunger,
b. Significant improvement in enrolment especially of girls,
c. Improvement in the daily attendance of children from poorer sections and of girls,
d. Improvement in retention, learning ability and achievement,
e. Reduction in teacher absenteeism,
f. Narrowing of social distances because children of all communities sit together to eat,
g. Establishment of parent's (and the community) participation in school governance.

The NCERT Learning Achievement Survey inferred that children covered under the midday meal scheme had higher achievement levels, than those who were not covered under it. It further stated that the scheme was better managed than many other schemes being implemented by the states.

3. **Suvarna Arogya Chaitanya Program**
   Under this program (introduced from 2006-07), all school going children studying in classes 1 to 10, in government, aided and unaided schools are given a health check up. During 2009-10, 85.28 lakh children were examined and 1,415 children with serious health problems were sent for treatment in Yeshaswini Netwrok of hospitals, in collaboration with Health & Family Welfare Department.

4. **Reimbursement of fee to Anglo-Indian Students**
   Anglo-Indian students studying in Classes 1 to 10 in private schools and students of D. Ed course are reimbursed fee by the department. In 2010-11, an amount of Rs. 7 lakhs was released for this purpose.

5. **Educational Concession for Girls**
   In order to promote, Universalisation of girl's education, the government reimburses all non-government fee and examination fee for girls studying in Classes 6 to 12.

6. **Mobile Schools**
   In order to provide formal education to migratory children and children from slums, who are deprived of formal education, mobile schools are run by the education department in Bangalore. Here a bus is converted into a classroom. The children are picked up daily from the slums and dropped back after school. These schools work between 8.30 AM and 2.30 PM. There are 8 mobile schools in Bangalore and 2 in Mysore.

7. Free Bicycles for Class 8 Students

The government first implemented the program of providing free bicycles to girls coming from BPL families and studying in Class 8, to help them provide better access to schools in the form of better transport. This also helped the girls to get self – esteem. This scheme was extended to boys also in later years. During 2009-10 nearly 5.32 lakh students studying in government and aided schools were benefited under the program. This program also helps them to get easy access to secondary education. Expenditure under this program in 2009-10 was 127.24 Crore.

8. National Program on Education of Girls at Elementary Level (NPEGEL)

This national program is being implemented under the SSA so as to provide additional facilities for girls at the elementary level. The program is being implemented in 921 clusters of 61 educationally backward blocks and 4 urban slums in 18 districts of the state.

A model school selected under each cluster, functions as the cluster resource centre. The activities conducted under the NPEGEL program are:

a) Vocational Skill Development,
b) Field Study & Experience Sharing,
c) Counselling Centre for Girls,
d) Coaching for Navodaya Vidyalaya examination,
e) Empowerment of Girls,
f) Meena Activities (related to empowerment),
g) Co-curricular Activities,
h) Community Mobilisation Activities,

Adolescent camps for girls are also conducted to enhance their self-esteem and self confidence and to familiarise them with issues relating to women.

9. Kasturba Gandhi Balika Vidyalayas (KGBVs)

Residential schools known as Kasturba Gandhi Balika Vidyalayas are opened in educationally backward districts at the elementary level and cater to children belonging to SCs/STs, BCs and Minorities. As in 2009-10, 64 schools have been opened in 64 educationally backward blocks of 18 districts, of which 29 schools are managed by Mahila Samakhya, while the rest are being managed by SSA itself. Each KGBV school enrols 100 girls, who are out of school and who are in the age group of 6 – 14 years. All facilities are given free of cost.

10. Scholarships under the National Talent Search Examination

The state level NTS examination is conducted by the DSERT. This examination is conducted to identify talented students at the end of class 8 and to give them financial assistance till they complete their education in the form of monthly scholarship.

Students who have passed the state level examination get Rs. 200/- per month for a period of 2 years by the Karnataka State Students' Welfare Fund. Students who pass the National level examination get Rs. 500/- per month as scholarship from MHRD, till they complete their education.

11. National Means-cum-Merit Scholarships (NMMS)

The aim of the scheme is to financially support children from economically weaker sections and to help them continue education and to prevent drop outs among them. Eligibility test on the lines of NTSE under the NMMS Scheme is conducted for class

8 students studying in Government, aided and local body high schools. The parental income of the children, is to be below Rs. 1.50 lakhs/Annum. Karnataka has been allotted 5534 scholarships. These children will get Rs 500/- per month for a duration of 4 years.

12. Cash Awards for Meritorious SC/ST Students

Meritorious SC/ST students are given cash awards for securing 60% and above marks in the SSLC examination.

13. Scholarship for Disabled Students

The state government sanctions scholarships for disabled students at Rs. 600/- year per student. The scholarship is disbursed through the Directorate of Urdu and Minority Languages.

14. STUDENTS WELFARE FUND (SWF)

The State Government set up the Karnataka State Teachers' Benefit Fund (TBF) and Karnataka State Student's Welfare Fund (SWF) in the year 1963 to provide assistance to both students and teachers in the state. These Funds have a number of schemes to assist students:

a) Providing **merit scholarships** to merited children of teachers who secure highest marks in SSLC, PUC, Degree/PG – under this scheme scholarships amounting to Rs.1.38 lakhs was sanctioned to 193 students during 2010-11.
b) Providing **National Talent Scholarship** to students who pass the state level NTS examination – Rs. 2,000/- per annum for a period of 2 years is sanctioned under the scheme. During 2010-11, Rs.6.16 lakhs was spent for giving scholarships to 308 students.
c) Payment of **Tuition Fee/Examination Fee** to students from economically backward students and incentives to merit students. 50% of contributions collected in High schools and 60% of funds collected in PU Colleges and degree colleges are retained in the respective institutions for this purpose.
d) Institutions which secure 100% results in SSLC and PUC examinations are honoured with **cash prizes** (of Rs. 10,000/-) **and mementos**. During the year 2010-11, Rs.36.00 lakhs was spent under the scheme.
e) **Bravery Awards:** Students who show exemplary courage in saving lives and public properties are given bravery awards. 2 students were given bravery awards (Rs.1000/-each) during 2010-11.
f) **Sports Awards:** Students who secure the first three places at the state level sports competitions conducted by the department are awarded cash prizes of Rs.1000/-, Rs.2000/- and Rs.3000/- respectively. Rs. 10.14 lakhs was spent on cash prizes to 720 students during 2010-11.
g) **Medical Assistance:** Financial assistance up to a maximum of Rs.20,000/- is sanctioned to students towards medical treatment. During 2010-11, 1035 students were benefited under the scheme and the expenditure was Rs. 19.91 lakhs.
h) **Safety Insurance scheme:** With a view to provide compensation to the families of students, who become victims of accidents, this scheme is introduced from 2001-02. This scheme is applicable to all students studying in government, aided and unaided schools in classes from 1 to 10. The annual

premium at the rate of Rs.1/- per student was paid by the fund to the insurance company.

This scheme was later discontinued and the Fund itself started providing compensation under the scheme. The Compensation amounts are Rs. 30,000/- for death, Rs.25,000/- for complete disability, Rs.15,000/- for partial disability and up to Rs.5,000/- for fracture. This scheme is applicable to all government, aided and unaided institutions.

During the year 2010-11, an amount of Rs.1.20 crore was sanctioned to 603 teachers and Rs. 7.92 lakhs to 46 teachers under the scheme as compensation.

i) Award for Students who score Highest Marks in the Districts: Students who score highest marks in the district in SSLC and PUC examinations are given awards by the Fund. SSLC – 10 cash awards per district at Rs.2000/- each, PUC – 5 cash awards per district at Rs. 2,000/- each. During the year 2010-11, 513 students received cash awards amounting to Rs. 6.76 lakhs.

Students Welfare Fund (SWF)

1. *The Students Welfare Fund is not to be deemed as a savings fund rather a welfare fund devoted to the welfare of students of the State. The habit of savings under the fund needs to be discontinued. The fund is already having a corpus of over 110 crore.*
2. *For the year 2010-11, the total income was Rs. 6.55 crore (by way of collections and interest). But only Rs. 2.54 crore was spent on Student Welfare Programmes there by affecting a savings of Rs. 4.01 crore. This could have been spent usefully by increasing the award amounts under various schemes of the SWF.*
3. *A committee should determine increasing the award amounts suitably, as these amounts were fixed a long time ago.*
4. *A policy decision to be made that 90% of annual collections and interest on deposits should be spent during that year itself in the interest of student's welfare.*

PUBLIC ENDOWMENTS

Public Charitable Trusts and even individual citizens used to place money with Government, as endowments and government used to administer these endowments as per the wishes of the persons who placed the Endowments in the custody of the government. The oldest endowment was made as far back as 1892 by RBANMS Educational and Charitable Trust for an amount of Rs.1,28,200/-

This procedure is prevalent even to this day. The interests received on the original amounts of the endowments are disbursed every six months by the Director of Secondary Education, Bangalore.

The amounts pertaining to 32 original endowments vary from Rs. 250 to Rs.2.14 lakhs. The total value of endowments in 2011 was Rs.18.74 lakhs and an annual interest of Rs. 2.25 lakhs realised was disbursed. The beneficiaries of these endowments are students but selected on the basis of the criteria stipulated by the respective endowments.

INCENTIVE SCHEMES OF OTHER SOCIAL SECTOR DEPARTMENTS

1. SC Hostel Facilities

Scheduled Castes constitute 16.20% of the population of the state. Social Welfare Department is providing residential hostel facilities to SC students studying in educational institutions of the state. There are totally 2,114 such facilities in the state.

Table 15.4
SC Hostel Facilities

Types of Hostels	Boys	Girls	Total	Expenditure Per Student
Govt. Pre-Metric	963	309	1,272	Rs. 600/- per month
Govt. Post Metric	264	149	413	Rs. 650/- to Rs 740/- per month
Aided Pre-Metric	224	25	249	Rs. 450/- per month
Aided Post Metric	87	03	90	Rs. 500/- per month
Residential Schools	--	--	90	Rs. 350/- per month
Total	1,538	486	2,114	

Source: Annual Report of SW Department 2010-11

Pre metric hostels accommodate SC students studying in classes 5 to 10. Post metric hostels accommodate students studying in professional, technical and university courses. 1.93 lakh children stay and study in these hostels. The enrolment of girls in all the categories of hostels is far less in number.

Table 15.5 - SC Hostel Enrolment

Types of Hostels	Boys	Girls	Total
Govt. Pre-Metric	74,426	24,100	98,526
Govt. Post Metric	42,758	19,410	62,168
Aided Pre-Metric	12,988	1,468	14,456
Aided Post Metric	7,360	150	7,510
Residential Schools*			11,250
Total	1,37,532	45,128	1,93,910

Source: Annual Report of SW Department 2010-11

*The department is running these residential schools for SC children studying in Classes 1 to 5

2. ST Hostel Facilities

Scheduled Tribes constitute 6.55% of the population of the state. There are 412 hostels in the state, catering to students belonging to Scheduled Tribes.

Table 15.6
ST Hostel Facilities

Types of Hostels	Boys	Girls	Total	Monthly Expenditure Per Student
Govt. Pre-Metric	96	40	136	Rs. 1,340/-
Govt. Post Metric	32	18	50	Rs.750/-
Aided Pre-Metric	28	2	30	Rs. 500/-
Aided Post Metric	5	0	5	Rs. 600/-
Ashrama Schools*	--	--	122	Rs. 500/- **
Morarji Desai Schools*	--	--	33	Rs. 750/- **
Kittur Rani Chennamma Residential Schools	--	32	32	Rs. 750/- **
Ekalavya Model Schools	--	--	4	Rs. 750/- **
Total	161	92	412	

Source: Annual Report of SW Department 2010-11

**Co-education, ** Students also get free uniforms, study materials etc.*

36,696 ST children are studying in these hostels. Both in pre-metric and post-metric hostels, we see that participation of girls is far less in number.

Table 15.7
Enrolment in ST hostels

Types of Hostels	Boys	Girls	Total
Govt. Pre-Metric	5,385	2,260	7,645
Govt. Post Metric	2,869	1,347	4,216
Aided Pre-Metric	1,431	65	1,496
Aided Post Metric	250	0	250
Ashrama Schools*	--	--	15,075
Morarji Desai Schools*	--	--	8,250
Kittur Rani Chennamma Residential Schools	--	8,000	8,000
Ekalavya Model Schools*	--	--	1,260
Total	9,945	11,672	36,696

Source: Annual Report of SW Department 2010-11

Backward Classes Hostel Facilities

Backward classes constitute 77.23 % of the population of the state. The state is financing 2,149 hostels for students of backward classes in the state.

Table 15.8
Backward Classes Hostels

Types of Hostels	Boys	Girls	Total	Monthly Expenditure Per Student
Govt. Pre-Metric	1,073	288	1,361	Rs. 650/- **
Govt. Post Metric	169	230	399	Rs. 750/- **
Aided Pre-Metric	221	19	240	Rs. 500/-
Aided Post Metric	16	2	18	Rs. 600/-
Ashrama Schools*	--	--	74	Rs. 500/- **
Anathalayas	56	1	57	Rs. 350/-
Total	1,535	540	2,149	

Source: Annual Report of SW Department 2010-11
**Co-education, ** Students also get free uniforms, study materials etc.*

There is good enrolment in these hostels. Only in post metric hostels, girls outnumber boys. In hostels of all other categories, representation of girls compared to that of boys is not at satisfactory levels.

Table 15.9
Enrolment in Backward Class Hostels

Types of Hostels	Boys	Girls	Total
Govt. Pre-Metric	60,278	16,270	76,548
Govt. Post Metric	21,051	24,926	45,977
Aided Pre-Metric	11,979	919	12,898
Aided Post Metric	545	109	654
Ashrama Schools*	--	--	2,990
Anathalayas	7,852	68	7,920
Total	1,01,705	42,292	1,46,987

Source: Annual Report of SW Department 2010-11
**Co-education*

Minority Welfare

The Karnataka Minority Development Corporation is maintaining free hostels for minority children. It also gives a grant-in-aid limiting to Rs one lakh for voluntary agencies for construction of hostel buildings.

SCHOLARSHIPS

There are various types of scholarships for different social groups to encourage children to continue their studies and to meet part of their education expenditure.

1. In order to prevent SC & ST children from dropping out, those children studying in classes 1 to 7 receive Rs. 75/- per head scholarship annually.
2. SC & ST children studying in classes 8 to 10 receive Rs. 100/- per head scholarship annually.
3. In order to prevent SC Girls from dropping out, SC girls studying in classes 6 and 7 get Rs.250/- per head and SC girls studying in classes 8, 9 and 10 receive Rs. 500/- per head as incentive, in addition to what they get under 1 and 2.
4. In order to promote merit and competition among SC children studying in all schools, SC & ST children securing more than 60% marks in the annual examinations receive scholarship as follows: middle school students Rs. 75/- per head and high school students Rs.100/- per head.
5. Those SC/ST children who secure first class in the first attempt in the SSLC examination, receive Rs.500/- as incentive.
6. SC/ST children studying in high schools are also eligible for reimbursement of fee paid by them.
7. Children of Backward Classes studying in the following classes, whose income is less than Rs. 44,500/- per annum are eligible for scholarship at the following rates:
    a. Classes 1 to 5 - Rs 25/- per month,
    b. Classes 6 to 8 – Rs. 40/- per month,
    c. Classes 9 & 10 – Rs. 50/- per month,

   The Centre and the States share the expenditure under this scheme in 50:50 ratio

8. Post metric, the Centre has categorised the courses undertaken by students of Backward Classes in to the following categories and the scholarship rates are as follows:
    a. Course Category A – Rs 190/- per month,
    b. Course Category B – Rs 190/- per month,
    c. Course Category C – Rs.190/- per moth,
    d. Course Category D – Rs. 120/- per month,
    e. Course Category E – Rs. 90/- per month,

   The Central Government finances 100% funds under this scheme.

9. For students of Backward Classes, who undertake studies in foreign countries, each student is sanctioned an interest free loan subject to a maximum of Rs. 3.5 lakhs per year and subject to a maximum of Rs. 10 lakhs for the entire duration of the course under the scheme.

Issues in Distribution of Incentives & Scholarships

Even though all these incentive schemes are framed with good intentions, there are practical difficulties in their implementation. Several BEOs voiced their concerns during interaction sessions with the Study Team. In order to receive these incentive cheques, the teachers have to travel from their schools to the far off taluk headquarters, every time they are called at their own expense. This also affects the academic work in schools as the head teacher is more or less away from schools for quite a number of days to collect these incentives at various times during the academic year. Probably an alternative system like online transfer of funds needs to be put in place to avoid harassment of teachers.

Do Scholarships reach students?
An example of Mundargi Taluk, Gadag District

Mundargi taluk in Gadag District is the most backward taluk in Belgaum division. A majority of the people of the taluk are agriculturists and belong to economically weaker sections of the society.

Many of the scholarships do not reach the students. In the study, it was found that both the parents and children were not aware of the scholarships that they were entitled to receive. Even when they were aware, they were unwilling to spend time and money for securing caste certificates.

In Bellary district, it was noticed that the list of eligible students is sent from head teacher to BEO and then to Tahsildar, who certifies the list. This prevents harassment of parents in securing caste certificates.

A similar system needs to be put in place throughout the state. Even the method of distribution of scholarships needs to be streamlined.

THE RESERVATION POLICY

The Indian Constitution provides for promotion of education and economic interests of the weaker sections of the people and, in particular people, belonging to SC/ST. On the basis of this constitutional provision, there is a reservation of a certain percentage of seats for these sections both in admission to educational institutions and employment in government and aided institutions.

Caste based reservation has a long history in Karnataka (from as early as 1919). The reservation policy has also been influenced by socio economic considerations. D. Devaraj Urs, the former Chief Minister of the state, was the architect of the current reservation policy and the roster system implemented in 1978, and which was later adapted by several other states too.

Access to education, especially higher education, has been seen as the principal instrument for redressing economic inequalities between castes and social groups. Reservation currently accounts for half the seats in publicly financed educational institutions and in public sector jobs. Quotas in education and in jobs have also been given at various times for students from rural backgrounds and /or those who have studied in Kannada medium.

Quantum of Reservation

The reservation of seats in admissions is scrupulously followed in all higher education professional courses and post graduate courses in government and aided institutions through centralized admissions under the state rules and regulations. Such rules prescribe the number of seats to be filled under the merit and as well as under the reserved categories.

The socially backward people in the state are classified into various categories in Government Order No: DPAR 08 SEHIMA 95 dated 20/06/1995. This order applies to admissions and also recruitment of personnel in all government/local bodies/ grant-in-aid institutions and companies/corporations/boards controlled by government.

RECOMMENDATIONS

The scholarships and hostel facilities are limited to children of SC/ST and backward classes. There is an argument for extending such welfare measures based on economic status rather than on caste grounds alone, which is currently the case. Exclusion of the creamy layer from the system of incentives is another point which is much debated.

A World Bank study has pointed out that even though SC/ST and other backward classes constitute the poorest of the population, only 3% of the beneficiaries were from financially weak households and a mere 2% received the incentives on a merit plus income criterion.

1. Hence we recommend, adaptation of the provision of all incentives based on economic criteria, which will help exclude the creamy layer and thus save substantial funds to the government. The funds thus saved may be ploughed back for new programs or building better infrastructure facilities for these economically backward classes.
2. The rates prescribed for various types of scholarships were prescribed long ago, and hence need revision, periodically at least once every three years.
3. A majority of incentive schemes under the Students Welfare Fund of the Education Department are not well known and hence many students are unable to utilise the benefits of these schemes. Hence wide publicity has to be given every year in order to make the public, parents and students aware of such schemes.
4. Periodical impact assessment studies (at least once in 2 years) should be taken up by the concerned departments and conducted by external agencies to ascertain the impact of each incentive scheme and ascertain the need for modifying, merging or abolishing any of the schemes.

CHAPTER 16
Sub-Study - 5

CURRICULUM & TEXTBOOKS

The scope of this sub-study is limited to discussing curriculum-related issues pertaining to secondary and PU education sectors.

Karnataka Education Act 1983 explains the term "Curriculum" as a set of curricular and co curricular activities arranged for a course of study. Further, the act entitles the government to prescribe the curriculum and review the same periodically through evaluation and assessment of societal needs. The state prescribes the curricula for all levels of education except at the university level where the respective universities are responsible.

The quality of the curriculum plays a vital role in contributing to the quality of education at all levels. One important factor affecting low student achievement at secondary and PU level is the weak curricula and low quality textbooks. Basically, the secondary education curricula is meant to address the twin objectives of helping youth develop knowledge (along with life skills) and also specific skills needed for the job market, while simultaneously preparing those students who are entering higher education.

For this reason, the curricula at the elementary, secondary and pre university levels need to be interlinked with continuity in each discipline. This will help the smooth transition of the students from one level to the other.

This has not been the case in Karnataka, as the curricula for elementary and secondary levels are prepared by the DSERT and curricula for the PU level is prepared by the department of PU Education. There is apparently little connection between the two departments.

The EFA Declaration and Curriculum

The ultimate goal affirmed by the World Declaration on EFA (1990) is to meet the basic learning needs of all children, youth and adults. These needs were further specified as consisting of:

1. Essential learning tools such as literacy, oral expression, numeracy and problem solving
2. The basic learning content such as knowledge, skills, values and attitudes.

Towards fulfilment of these learning needs, the Declaration of EFA took a broad vision of basic education as consisting of formal schooling, NFE programs as well as open learning systems which together attempt to provide basic education for all children as well as adults.

National Curriculum Framework (NCF) 2005

The NCF 2005 provides a set of guidelines for elementary and secondary (including PU) education across the country, while leaving the individual states to determine their curricula and examination content within its broad direction and parameters. The NCF 2005 aims to lighten the overload in curriculum and shift the emphasis from rote memorisation to conceptual understanding, synthesis and application through an integrated and thematic approach.

The main features of NCF 2005 are strengthening a National System of Education with special focus on –

- Values Enshrined in the Constitution of India,
- Reduction of Curriculum load,
- Ensuring Quality 'Education For All' (EFA),
- Systemic Changes
- Common School System.

The NCF 2005 has recommended 5 guiding principles for curricular development:

1. Connecting knowledge to life outside school
2. Ensuring that learning shifts away from rote methods
3. Enriching the curriculum so that it goes beyond text books
4. Making examinations more flexible and integrating them with classroom life
5. Nurturing an overriding identity informed by caring concerns within the democratic polity of the country.

Apart from these 5 guiding principles, NCF emphasises on learning without burden and concepts containing construction of knowledge. The fact that the knowledge is constructed by the child implies that curricula, syllabi and text books should enable the teacher in organising classroom experiences in consonance with the child's nature and environment, and thus providing opportunities for all children.

Some of the important concepts emphasized by NCF are:

- Correspondence between learner development and learning is intrinsic to curricular practices.
- Knowledge is different from information.
- Organising learning experiences for construction of knowledge and creativity is crucial.
- Connecting knowledge across disciplinary boundaries is necessary for insightful construction of knowledge.
- Learning experiences for developing critical perspectives on social issues are to be provided.
- Plurality of text books and other material incorporating local knowledge are to be mediated through constitutional values and principles.

It has also recommended significant changes in all 4 areas of language, mathematics, science and social sciences with a view to making education more relevant to the present and future needs. It has advocated softening of subject boundaries to enable children get a taste of integrated knowledge and the joy of understanding.

The NCF advocates a more constructive approach towards the teaching-learning process. It stresses on the use of pupil assessment as a means to reflect on the efficiency of the teacher, school and the system. It rejects text book-based assessment which is primarily conducted in pencil-paper mode and calls for a more holistic approach that takes into account the child's abilities, development and progress. Thus, it promotes a continuous and comprehensive evaluation system which can play a more meaningful role in assessing the child's participation in the process of teaching and learning.

Accordingly, assessment should aim at understanding not only the child's cognitive development, but also its attitude to learning, interest, social skills and ability to learn independently. This should be done through continuous and qualitative assessment.

The NCF 2005 further emphasises the role of assessment in promoting an inclusive school culture that is devoid of competition and overemphasis on discipline. It points out that if the pupil assessment system is developed in a more constructive and meaningful way, it can promote a school ethos that is based on cooperation, nurturance and sharing, and also enable the teacher to conduct the teaching-learning activity more efficiently.

SECONDARY EDUCATION

Curriculum at the Secondary Stage

Secondary stage is a period of intense physical change and formation of identity for the adolescent child. The ability for abstract reasoning and logical thinking emerges allowing the child to have a deeper understanding of the subjects.

The curriculum at the secondary stage aims at creating an awareness of various disciplines through providing a deeper knowledge and understanding of the concerned subject areas. Through their study, the students discover their own interests and aptitudes and begin to form ideas on what course of study or work they might like to pursue in their career. For a large number of children (because of socio economic circumstances), this is also a terminal stage, as they leave school and begin to take up vocations of their choice.

However, the curriculum at the secondary stage has no options for the child. It has to compulsorily study three languages (one of them is English and another Kannada), along with the core subjects consisting of Maths, Science and Social Science, which are all typical examination subjects. The state should consider introducing a range of vocational subjects as optional subjects to help the child to learn work related knowledge and skills.

Language Combinations in Curriculum

The state is following a three language formula. Kannada has been given primacy under the formula. A student will have to learn Kannada compulsorily either as a first, second or third language under the formula. Since a number of linguistic groups live in Karnataka, the state allows the students to take up the study of any of the following languages under the three language formula.

Table 16.1
Choice of Studying Languages

Language	Choices
First Language (Classes 1 – 7)	Kannada, English, Hindi, Urdu, Tamil, Telugu, Marathi,
First Language (Classes 8 – 10)	Kannada, English, Hindi, Urdu, Tamil, Telugu, Marathi, Sanskrit***,
Second Language*	Kannada, English
Third Language (Classes 6 – 10)**	Kannada, English, Hindi, Urdu, Tulu, Konkani (in Kannada script), Konkani (in Devanagari script), Arabic, Persian, Sanskrit

*Source: DSERT*Second Language is introduced from Class 5. However, English is introduced from 2007-08 from Class 1, ** III Language is introduced from Class 6. *** Sanskrit can be taken as a first language from Class 8*

Media of Instruction

Students can choose to study in any one of the following seven media of instruction up to Class 10 – Kannada, English, Hindi, Marathi, Tamil, Telugu or Urdu. But at PU stage the student has to choose to study either in Kannada or English medium only. Hence it becomes imperative for the students studying in other media, to master one of the two languages Kannada/English by the time they pass out of the secondary level. Inability to master these languages, is also one of the reasons for poor performance of students (who shift from other media to English/Kannada) at the PU stage.

Learning of Languages

Several studies show that any child with average intelligence can master any language, provided it is taught effectively. Experiments across the globe have proved that children can master a minimum of six languages between the age of five and fifteen when their language acquisition ability is most active. However, the state presents a bleak scenario as far as attainment of students in languages is concerned. The ASER 2010 study supports this view:

Table 16.2
Class wise Percentage of Children by Reading Level

Class	Nothing	Letter	Word	Level 1 (Class 1 Text)	Level 2 (Class 2 Text)
1	21.6	52.4	21.2	3.5	1.4
2	7.3	28.1	43.1	14.5	7.1
3	3.6	16.4	36.7	24.7	18.6
4	2.5	12.2	25.4	30.9	29.0
5	2.8	7.4	15.9	28.9	45.0
6	2.1	5.0	12.2	26.7	54.0
7	1.6	3.4	8.0	21.5	65.7
8	1.4	2.0	6.2	17.4	72.9
Total	5.2	15.5	21.1	21.4	36.7

Source: ASER 2010

The above table shows that even at class 8 level, 1.4% of children could not even read letters, 2.0% could read only letters and no more, 6.2% of children could read words and no more. Only 17.4% of class 8 children could read class 1 text. That means, nearly 27% of children in class 8, had not even reached the class 1 level.

There are a number of factors responsible for this dismal state of affairs – Lack of teacher interest, Multi-grade teaching, a weak curriculum and no detention policy at the elementary level, are some of the important factors.

Learning of English at the Secondary Stage

English is usually learnt as a second language at the secondary stage. The aim of learning English is twofold: attainment of a basic proficiency and acquisition of knowledge through it. NCF 2005 has called for an across-the-curriculum approach which will help the child acquire language skills as well as ability to acquire knowledge through English.

There is also a need to bridge the gap between 'English as a subject' and 'English as a Medium'. The government has to recognise the reality of the large scale migration of students from government and other language medium schools to English Medium private schools at various stages of education.

All teachers who teach English should have a basic proficiency in English and the much needed training and basic pedagogic skills to teach the language. But this is not always the case. Teaching of English has to be strengthened at both pre-service and in-service teacher training levels.

Unfortunately, the standard of competence of teachers of English at all levels is far from satisfactory. At the elementary level, since there are no specific subject teachers, a general teacher who has poor knowledge of English teaches English. According to ASER 2010 report, in rural areas, at class 5 level, only 28.9% of children could read class 1 text in their I language (See Table S 5 – 2). We can only imagine the number of children who could read and understand the English text in that class.

Hence it is necessary to take up the following steps to improve the learning of English at the secondary stage:

1. A diagnostic test should be given to every student on entering class 8. Remedial programs in English have to be designed keeping In mind the attainments of each student in the language.
2. The remedial program should extend to least 6 weeks, (as already provided) during which every student attains minimum basic proficiency in English.
3. Teaching of class 8 English textbook should start only after completion of the remedial programs.
4. A good number of story books in English, should be provided to the students, which will help them to improve their reading and understanding abilities.

Learning of Science

Science education empowers students by developing in them capabilities to understand, question and think critically. Science makes use of observation, intuition, hypothesizing, experimentation and verification. It helps students to observe the world around them, understand the scientific reasons for the various natural phenomena and develop a rational and objective outlook.

NCF 2005 lists six criteria of validity of science curriculum, which in essence characterises a framework for developing a good science curriculum: Cognitive validity, Content Validity, Process Validity, Historical Validity, Environmental Validity and Ethical Validity.

The following basic aims of science education will have to be kept in view while framing the curriculum:

1. Knowledge about the facts and principles of science and its applications, consistent with the stage of cognitive development,
2. Acquire the skills and understand the methods and processes that lead to generation and validation of scientific knowledge,
3. Develop a historical and developmental perspective of science and to enable one to view science as a social enterprise,
4. Acquire the requisite theoretical knowledge and practical technological skills to enter the world of work,
5. Cultivate scientific temper – objectivity, critical thinking and freedom from prejudice.

The aim at the secondary stage is to encourage learning of science as a discipline and bring an integrated approach among various branches of science. The curriculum should enable the

children to understand environmental and health issues. Suitable opportunities should be created to link content with immediate environment of the child. Avoid unnecessary content overloading.

The Karnataka Curricular Framework has commented in respect of the present science curriculum as follows: 'The present science curriculum reflects many positive features as some of the focuses mentioned in the NCF, but there is enough scope for a paradigm shift to make it more child centred, experimental, relevant, meaningful and making of a less of a mental burden on the child.

Learning of Mathematics

At the secondary stage, students begin to perceive the structure of Maths as a discipline. They become familiar with the characteristics of Mathematical communication through – concepts, symbols, formulae, propositions and proofs (as in geometry). They acquire problem solving ability.

However, there are issues with respect to teaching of Maths in schools:

1. A majority of students have a sense of fear and failure regarding Maths. Hence they give up early on, and drop out of serious Maths learning, This Maths phobia could be addressed through non-standard techniques like jokes, puzzles, riddles, etc.
2. The curriculum is not only disappointing not only to this majority, but also to the talented minority by offering them no challenges,
3. Problems, exercises, and methods of evaluation are mechanical and repetitive, with too much emphasis on computation.
4. Areas of Maths such as spatial thinking are not developed completely,
5. Maths teachers lack confidence, preparation and support.

In order to overcome some of the above issues, curriculum and textbooks should take to positive approaches to make learning Maths more interesting. Some of the recommendations to improve Maths learning in schools at secondary level are –

1. Provide opportunities and challenges to promote abstract thinking in the context of problem solving,
2. Usage of computers should be optional (based on availability). Usage of other aids, especially low cost and innovative ones must be encouraged.
3. Maths laboratory must be made mandatory in secondary schools to ensure that the learner experiences mathematics. This will also reduce anxiety and Maths phobia among students,
4. Students must be made to be aware of the relevance of Maths in relation to other disciplines and professions.

Learning of Social Science

Social Science curriculum at the secondary stage comprises components of History, Geography, Political Science, Sociology, Economics and Commerce. The tendency with syllabus framers has been to load the syllabus with history and geography and give minor importance to other disciplines. This needs to be avoided. Because all these disciplines help the students to understand the society in which they live in. They also help the students, in becoming responsible citizens of the society.

NCF 2005 lists the following as the basic objectives of Social Science education:

1. To understand the society in which the learner lives,

2. To appreciate the social values like liberty, social equality, justice, etc.
3. To develop scientific outlook in analysing the problems faced by the society and the Nation and to face the challenges of time.
4. To develop skills for social interaction in human relationships,
5. To grow up as responsible members of society.

A social science curriculum, which contains socially sensitive subjects like gender sensitivity, social hierarchies, inequalities among people, will make the learner think positively.

Learning without Burden

The present syllabus and textbooks in various subjects are loaded with much of unnecessary and irrelevant information. For example, in history, students are made to memorise a large number of dates relating to occurrence of historical events. Similarly science books contain dates of birth of scientists and dates of discoveries, which can be avoided. Syllabus framers and textbook writers should take particular care to weed out unnecessary information from textbooks.

Textbooks

For a vast majority of school going children, as also teachers, Textbooks have become the only accessible and affordable source of knowledge, information and resource in any particular subject. It is very rare for the teachers to go beyond the textbooks, while conducting classroom teaching. The present day textbooks are mostly information oriented.

Curriculum and syllabus for each subject, guides the textbook writers in terms of content, scope, objectives and also the variety of learning experiences. A good textbook should reflect the totality of experiences provided to the learners. It motivates the teacher to structure his/her classroom lesson. Text books need to be learner friendly and should be based on sound psychological principles.

The textbooks preparation committees should consist of a healthy mix of subject experts, good and experienced classroom teachers. The classroom teachers can give vital inputs such as difficulty level that can be taught in a particular class, method to be used for explaining a certain concept, etc. The textbook writers should be aware of the aims of curriculum and the objectives of teaching a concerned subject. Hence textbook writers need to be given orientation on curriculum, textbook revision and principles of textbook writing.

There should be widespread field trials of textbooks with the involvement of teachers at all stages. Testing, research inputs and feedback mechanisms must be institutionalised as part of textbook development.

Establishment of the Karnataka Text Book Society

With a view to bringing all the activities of preparation, printing, publishing and distribution of text books from classes 1 to 10 under one umbrella, the state government took a policy decision to convert the Directorate of Text Books into a registered society (on the pattern existing in several states) from 2006 – 07.

Every year, the Society brings out 372 titles of text books from classes 1 to 10 in eleven languages – Kannada, English, Marathi, Telugu, Tamil, Hindi, Urdu, Sanskrit, Konkani, Persian and Arabic. The Society also brings out text books in core subjects in 7 media (English, Kannada, Tamil, Telugu, Marathi, Hindi and Urdu).

Development of Karnataka State Curriculum

The 10 + 2 + 3 pattern of education introduced in the country envisaged a broad based general education for children during the first 10 years of education. Based on the guidelines of NPE 1986, the National Curriculum for Elementary and Secondary Education (1988) was framed to enable all learners up to the end of secondary stage to acquire basic skills. It may be noted that the curriculum at this stage is largely undifferentiated and no attempt has been made so far to introduce diversified courses.

The fact that knowledge is constructed by the child implies that curricula, syllabi and text books should enable the teacher to organize classroom experiences relating to the child's nature and environment. The quality dimension needs to be examined with respect to the experiences designed for the child to acquire the necessary knowledge and skills. Quality in education must include a concern for quality of life in all its dimensions including concern for peace, protection of the environment and a predisposition towards social change.

Revision of Curriculum

Based on the National Policy of Education (1986), the curriculum and text books have been revised in the state as follows:

1. I Round – Between 1989- 1994
2. II Round – Between 2000 – 2005
3. III Round – Based on NCF 2005, (even though rather late by almost 7 years) the state curriculum has been revised and introduction of textbooks based on the revised curriculum are under preparation. The department is introducing the new textbooks for classes 5 and 8 in 2012-13 and for the remaining classes in subsequent years.

The State Curricular Framework

On receiving the NCF 2005 document, a committee comprising academicians, subject experts and classroom teachers was set up to review the NCF 2005 and draft a state policy framework which would form the basis for revision of curriculum and text books. This committee also considered the NCF 2005 in the state specific context and came out with a Curricular Policy Framework and guidelines which would help various subject expert groups in curriculum and text book revision.

Some of the important recommendations of this committee are –

1. Provision of appropriate linkages and continuity between lower primary, upper primary and secondary stages, which will enable the student to transit smoothly from one stage to another stage,
2. Need for maintaining an integrated approach and interdisciplinary and thematic linkages between topics and disciplines in any particular class,

Revision of Curriculum and Textbooks as per NCF 2005

Based upon NCF 2005 and the guidelines contained in the State Curriculum Frame work, DSERT has revised the curriculum for classes 1 to 10. But it is yet to be implemented. Government in ED 11 LCE 2009, dated 10 – 11 – 2011, has approved the revised curriculum and has asked the department to take further action in this regard.

Based on the revised curriculum, the Karnataka Textbook Society is revising the textbooks and is proposing to introduce these revised textbooks in a phased manner from classes 1 to 10. However, this entire process will take anywhere between 5 to 6 years.

When the Study Team visited DSERT and the Textbook Society, the team saw only syllabi prepared for each individual subject rather than an integrated curriculum developed in a graded manner for each class from classes 1 to 10. This appears to be an anomaly which needs to be set right before introducing the revised textbooks in the state.

However, the state government appointed another committee of subject experts to verify whether the guidelines contained in NCF 2005 has been followed in the preparation of textbooks for various classes. This committee has given its report. In this report, a majority of textbooks prepared so far has come in for praise. The Committee has also pointed out several mistakes in some of these textbooks. It also recommended for wholesale revision of some textbooks as they did not adhere to norms prescribed by NCF 2005 (For. Ex. Second Language English for Class 5, Social Science for Class 5, Second Language English for Class 8, Maths for Class 8, etc.). The MD, Text Book Society said that mistakes pointed out have been rectified.

Field Testing of Major Titles

Previously DSERT used to field test the major titles by introducing them in all the schools in one education block in each of the 4 revenue divisions of the state. This would give qualitative feedback by the classroom teachers, which was incorporated and then the textbooks were introduced in the respective classes throughout the state.

This type of field testing has not been done during this round of revision. The textbooks have been vetted only at the level of DIETs, which may not have been comprehensive in nature. The lessons in these textbooks have to be taught in actual classroom situations for the teachers to give comprehensive feedback.

RECOMMENDATIONS

1. DSERT and the Karnataka Textbook Society should take up comparative assessment of different curricula as well as textbooks (of CBSE as well as those of neighbouring states) in order to bring qualitative improvement in the state curriculum and textbooks.

2. Every year there have been problems in distribution of textbooks, even after the formation of the society and it is advisable to initiate the printing and distribution of textbooks well in advance so that students are not put to inconvenience due to lack of textbooks.

3. The report of the Textbook Society should be a part of the department's Annual Report.

4. All the major textbook titles before introduction, have to be field tested in selected education blocks (one block in each division), one year in advance. Feedback obtained by the classroom teachers have to be incorporated, before introducing them in the entire state. This has to evaluated by a professional external agency.

5. **Introduction of Computer and I T Curriculum in Secondary Schools**
   The importance of computer & information technology cannot be ignored in the present day context. Several countries around the world have implemented the 'Computer & I T Curricula' in schools. Because of the state's premier position in computer and I T services industry, it is imperative that the state introduces the computer and I T curriculum compulsorily in all secondary schools.

Providing computer access and connectivity for all children in secondary schools is a tremendous technological and economic challenge which the state has to meet on a priority basis.

6. **Introducing Computer Science as an examination subject in the SSLC Public Examination:** The next logical step is to introduce the subject of computers, as an examination subject in the SSLC Public Examination conducted by KSEEB.

7. Whenever textbooks are revised, the department has to bring out teachers' handbooks and arrange for orientation of teachers (in all media) to help them use the revised textbooks effectively.

8. The teachers are to be oriented in realising the objectives of the respective subjects through proper training.

9. The language teachers are to be oriented to enhance language and communication skills among students through effective classroom transaction.

CHAPTER 17
Sub-Study – 6
A Brief Review of
RESIDENTIAL INSTITUTIONS IN KARNATAKA

Introduction

Morarji Desai Residential schools were first setup by the state education department in 1995-96 on the lines of 'Navodaya Schools'. The aim was to give quality education to the talented and bright children from the depressed classes from rural areas of the state. In course of time, other social sector departments also started setting up such type of residential schools.

As in 2010-11, there were 395 Morarji Desai Residential Schools and 114 Kittur Rani Chennamma Girls' Residential Schools offering education to children of depressed classes and economically weaker sections of the community. The details of the residential schools supervised by the 'Karnataka Residential Educational Institutions Society' are given below:

Table 17.1
Details of Residential Schools

Categories of Residential Schools	State Govt.	Central Govt.	Total
1. Morarji Desai Residential Schools			
a. Scheduled Castes	152	--	152
b. Scheduled Tribe	33	--	33
c. Backward Classes	130	--	130
d. Minorities	53	--	53
e. Education Dept (General)	27	--	27
f. Ekalavya Model Schools	--	4	4
g. Education Complexes	--	5	5
Total	395	9	404
2. Kittur Rani Chennamma Residential Schools (Classes 6-12)			
a. Scheduled Castes	82	--	82
b. Scheduled Tribes	32	--	32
Total	114	--	114
3. Pre-University Colleges			
a. Scheduled Castes	12	--	12
b. Scheduled Tribes	02	--	02
c. Backward Classes	12	--	12
d. Minorities	03	--	03
Total	29	--	29
Grand Total	**539**	**9**	**548**

Source: Annual Report of SW Department 2010-11

Kittur Rani Chennamma Residential schools were set up in 114 backward blocks (identified in Dr. Nanjundappa's Committee Report) to encourage the education of girl students belonging to SC/ST and Backward Classes in English medium from 2009-10. In order to bring uniformity in all these residential schools run by various departments and to bring them under one umbrella for effective administration, the state government set up the 'Karnataka Residential Educational Institutions Society' in 1999. The Minister for Social Welfare is the ex-officio chairman of the Society.

As in 2010-11, the society is supervising 548 residential schools/PU colleges in the state. Besides, Government has sanctioned an additional 14 Morarji Desai Residential Schools in Gulbarga division during 2010-11. There are on an average of 18.70 institutions in each of the 30 revenue districts of the state.

Admissions to Residential Schools

Admission in these schools is made to class 6 through merit cum roster through a district level common entrance test. However, this admission test is conducted on a single day throughout the state. Admission in each school is for 50 seats in Class 6. 50% of seats are reserved for girls and 80% for rural students. The schools have classes from 6 to 10 and the intake in each class is 50. Students are admitted on the basis of merit, student preference, and reservation to various categories. Since these schools have been started with different objectives their admission patterns vary according to their categories. The admission pattern in these institutions is as follows:

Table 17.2
Distribution of Seats in Residential Schools

Sl. No	Details of Schools	Number Of Schools	Seats In each school	Percentage of Reservation
1.	Residential Schools (SC)	152	50	75 % SCs 25% STs & BCs
2.	Residential Schools (ST)	33	50	75% STs 25 % SCs & BCs
3.	Ekalavya Model Schools**	4	60	75 % SCs 25 % STs & BCs
4.	Residential Schools (BCs)	130	50	75 % BCs 25 % SCs & STs
5.	Residential Schools (Minorities)	48	50	75 % Minorities 25 % BCs, SCs, STs
6.	Morarji Desai Schools (General)	32	50	50 % General 25 % SCs/STs 25 % BCs
7.	Muslim Residential Schools (Co-education)	48	50	100 % Muslims
9.	Kittur Rani Chennamma Residenital Schools for Girls ** (SCs)	82	50	60 % SCs 15 % STs 25 % BCs
10	Kittur Rani Chennamma Residenital Schools for Girls ** (STs)	32	50	60 % STs 15 % SCs 25 % BCs

**Classes 8, 9 and 10, **Classes 6 to 12*
Source: Karnataka Residential Educations Society

Within the backward classes, there is reservation for students belonging to different categories: Category I, 2A, 2B, 3A, and 3B. There is also a 3% reservation for children in physically handicapped category and 3% reservation for children belonging to special depressed classes.

The common admission test is conducted for interested Class 5 students every year in the month of March (Last Sunday of the month). Examination is conducted in all the education block centres. The question paper for the admission test is in Kannada or English medium and in Urdu medium for admission to Muslim Residential schools. The students are tested in five subjects (Kannada, English, Social Science, General Science and Mathematics – each subject carrying 20 marks) in a single question paper of 100 marks.

Eligible students are allotted institutions through counselling. In Kittur Rani Chennamma residential schools, 50% of seats are reserved for girls hailing from the same taluk in which the institution is situated. The admission process in each district is supervised by a committee headed by the district Deputy Commissioner.

Morarji Desai Residential PU Colleges

In order to provide quality education to students of economically weaker communities, the Society has started Morarji Desai Residential PU Colleges one in each of the 29 districts from 2009-10. The languages offered are Kannada and English. Core subjects are taught in English medium. These colleges offer only the following science combinations:

1. Physics, Chemistry, Mathematics & Biology
2. Physics, Chemistry, Mathematics & Computer Science

Admission to each combination is limited to 40. Boys and Girls are admitted in the ratio 50:50. Students who have studied in Morarji Desai Residential Schools are given preference in admissions. The distribution of seats in various types of PU Colleges are as follows:

Table 17.3
Distribution of seats in Residential Colleges

Sl. No	Details of Colleges	No. of Colleges	Seats	Percentage of Reservation
1.	Residential Colleges (SC)	12	80	75 % SCs 25% STs & BCs
2.	Residential Colleges (ST)	2	80	75% STs 25 % SCs & BCs
3.	Residential Colleges (BCs)	12	80	75 % BCs 25 % SCs & STs
4.	Residential Colleges (Minorities)	03	80	75 % Minorities 25 % BCs, SCs, STs
	Total	29	320	

Source: Karnataka Residential Educations Society

Enrolment

In these 547 residential schools and colleges, enrolment is as follows:

1. Morarji Desai Residential Schools – 86,700
2. Rani Chennamma Residential Schools - 11,400
3. Pre University Colleges 3,120

Management of Residential Schools

The maintenance of all these residential institutions came first under the control of the Zilla Panchayats from 2005. At the district level, the District Deputy Commissioner headed a supervisory committee, which took care of activities like supervision, conduct of entrance examination, provision of infrastructure and quality improvement of all residential schools of the district. There was also a Taluk Committee headed by the Executive Officer of the Taluk Panchayat to supervise all the residential schools located in the respective Taluk. In order to improve the administration and maintenance of these schools, the government handed over the administration of all the residential schools back to the Society in 2011-12.

However, at the school level, there is a committee headed by the Principal of the school in order to look after the day to day administration of the school.

Separate Cadre & Recruitment Rules for Residential Institutions
Separate Cadre and Recruitment Rules have been framed for all the teaching and non teaching staff working in these residential schools. Based on these rules, 437 temporary staff were absorbed. In 2011-12, after conducting a state level entrance test, 5,325 teaching and non-teaching staff have been recruited.

Infrastructure
These residential institutions are each situated in 10 to 15 acres of land and provide an ideal environment for children to participate in curricular and co-curricular activities. *The Study Team visited some very good residential schools and also some which are in very poor condition.* The Residential School at Kuppalu in Kadur, Chikkamagalore District is one of the best residential institutions in the state.

Out of 550 residential institutions, only 136 institutions (that is only 24%) are functioning in own buildings. Remaining 414 institutions are functioning in rented accommodations like community halls, marriage halls, etc. Some of these accommodations are not fit to run educational institutions. Basic facilities like toilets, bath rooms, lighted classrooms etc. are not adequate and also not maintained up to the standards. Students and teachers are generally put to a lot of hardship when they have to work in such unsuitable environments. Many of these institutions are yet to get suitable land from the government.

The society has started construction of buildings for 118 residential institutions and the construction is progressing at a slow pace from 2007-08. Availability of sufficient funds also seems to be a major constraint in providing adequate infrastructure to these institutions.

The staff reported that some of the newly constructed buildings as of low quality, and virtually no grants are available for annual maintenance and repairs of these buildings. Schools which are situated in Malnad areas experience 8 months of rain and low quality buildings pose a threat to safety of students and staff.

Student Performance in the SSLC Examination
These schools have been consistently giving good results in the SSLC Public examination. In the 2010 SSLC examination, 58.27% of students secured more than 60% marks. In 2011, 120 residential schools secured 100% results and more than 5,000 students secured I classes. Pass percentage in 2011 was around 95% when the state average result was only 79%.

In that way we can comfortably say that the schools have been able to meet the objectives with which they were started – providing quality education to children of weaker sections of society.

The Table 17.4 gives the SSLC Examination results for the past several years.

Table 17.4
Student Performance in SSLC Examination

	2007-08	2008-09	2009-10	2010-11
Students Appeared	4,358	4,578	6,266	9,565
Students Passed	3,859	4,253	5,610	9,036
Distinction (>80%	251	355	263	682
First Class	2,519	2,704	3,006	5,169
Second Class	802	829	1,298	1,778
Third Class	287	365	1,043	1,407
Percentage of Passes*	88.55 %	92.90 %	89.53 %	94.47 %
State Average	66.37 %	73.78 %	68.77 %	78.82

Source: Annual Report of SW Department 2010-11
*of students from residential schools

Well Managed Residential Schools

There are some well managed residential schools, which are having good infrastructure and other facilities. These schools have been consistently giving good results as all the students are merit students. One such school is profiled below:

A Visit to a good Residential School

The Study Team visited the Morarji Desai Residential School, Kuppalu in Kadur taluk of Chikkamagalore District on 1/02/2012. The school was started in 1998-99 and has grown into a prestigious institution in the district. In fact for the year2010-11, it has secured the 'Best School Award' given by KRIES, Bangalore. For the past 3 years, the school has also secured the cash awards given by SWF.

The Study Team was at once taken in by the ambience around the school. The School is situated in 10 acres of lush greenery amid 2,000 trees. The 50,000 sq. feet of building complex is well maintained and looks like the campus of a big institution. The school is having spacious rooms and is having all facilities. The school is producing consistently good results and has secured 100% results for the past several years.

The Team was also witness to a cultural (dance) display by the students of the school in the 'Tarala balu hunnime' function, in the presence of Sri. Tarala balu Swamiji and other dignitaries.

The Team was told that there is unprecedented rush for admissions to this school every year and it is with great difficulty, students are allotted to other institutions as the first choice of every parent is only this school.

The only problem appeared to be shortage of water due to insufficient and intermittent power supply. The Principal and staff need to be complemented for running the institution well.

Morarji Desai Residential School, Alkod, Deodurg Taluk, Raichur Dt.

This school is having classes from classes 6 to 10 and is having a total student strength of 166, even though for 5 classes the prescribed student strength is 250. The school is running in 2 houses which are in dilapidated condition. Some portions of the roofs have collapsed and these portions are being used by the girls as bathrooms and urinals. There is no door to the only girls' toilet.

Boys take bath near the bore well in the open street. Two rooms serve simultaneously various purposes – classrooms, sleeping rooms and dining rooms. The school does not have any facilities like laboratory, library, computers or teaching-learning materials. Cooking is done in one corner of the veranda. The sit-out is converted into the office. Five (out-sourced) teachers are working in this school. No person takes responsibility for anything in the school.

Morarji Desai Residential School, Mulgund, Gadag Taluk

This school has a strength of 190 and is running in APMC sheds for the past several years. The school has no laboratory, no library, no sports or any other facility. The boys and girls are living in miserable conditions. The boys do not have any toilet facilities at all. There is no hot water even in severe winter. The school building is standing incomplete for the past several years.

Issues in Minority Residential Schools

Minority Residential Schools face a still different set of problems. Most of the schools are running in rented buildings. They do not have any kind of facilities like – laboratories, libraries, computers or facilities for sports and curricular activities. Most of the Minority students are not amenable to discipline and run away when they are subjected to discipline. Two examples of conditions in Minority Residential Schools are given below:

Minority Morarji Desai Residential School, Kadur, Chikkamagalore District

The school has three classes (6, 7 and 8) and is having a student strength of 107 (even though the prescribed strength for 3 classes is 150). Some of the students are school drop outs, who have a tendency to run away when disciplined. Parents prefer to put these children to work rather than send them again to school.

The school is running in a small rented building (a farm house) and the monthly rent is Rs. 35,000/- per month. Since the school is paying such heavy rent, the school does not have any money for its regular expenditure. The school does not have any laboratory, library, computers or other teaching-learning materials.

Girls sleep on the uneven wooden plank ceiling by climbing a steep ladder like steel staircase. Boys sleep in the cow shed. Two more cow sheds have been converted into classrooms. Bathrooms and toilets are at some distance away from the main building.

The Peculiar Case of Minority Residential School, Gulbarga

On its visit to Gulbarga, the Study Team had a detailed interaction with the HM of the Urdu Minority Residential School at Gulbarga. This school was first taken over by the Education Department from a private society. It was later transferred to the Karnataka Residential Educational Institutions Society and then further transferred to Minority Development Corporation. Then it was later handed back to the Residential Educational Institutions Society.

The Head Mistress stated that the Residential School does not have its own building even after 15 years of its existence. There are several problems in the management of the institution. 19 staff members who were appointed before the takeover of the institution, are neither considered government nor aided employees. As a result, all of them are deprived of all financial benefits like Time bound increments, etc.

Since the school is now managed by the Society, it is its responsibility to solve the issue on a priority basis without further procrastination.

Important Issues in Residential Institutions

There are several important issues which the schools are facing in their administration and working. Some of these issues are highlighted below:

1. Parents prefer sending their children to only residential schools which are having complete infrastructure facilities. If the residential institutions are having incomplete facilities, then parents hesitate to send their children to such schools. In such institutions, students' strength and daily attendance is also low. There is pressure on schools to admit students who have not come on merit.

2. Free textbooks were being given to students of residential schools previously by the Education Department. This was stopped some years ago. Now the schools are forced to purchase the textbooks from the Education Department. This becomes a burden on the respective residential schools.

3. The food provided appears to be not of uniform quality in all schools. There are several issues in supply of provisions to these schools through the tender process.

4. Most of the residential schools are situated away from towns and cities. Each school accommodates about 125 boys and 125 girls. It is difficult for the warden to transport the children to hospitals in case of emergencies especially during night times. There is need for providing some sort of transport facilities to each school.

5. Some institutions reported public interference (and by anti-social elements) in the running of these institutions.

6. There seems to be considerable delay in obtaining approvals at various stages of administration. Many of the schools do not have laboratories, libraries and teaching-learning materials.

7. Some institutions reported that the scale sanctioned at Rs. 850/- child per month as insufficient. The children need to be given one more set of uniform as especially in Malnad areas, clothes do not dry easily. Children also require track suits or such material for participating in sports' competitions.

Issues related to Residential Schools which are running in Rented Buildings

1. Most of the schools running in rented buildings use the same rooms for running classes, for dining and for sleeping of students at night.
2. Usually they have very limited toilet and bath room facilities leading to considerable inconvenience to students and staff. Several schools have no such facilities at all.
3. Some schools reported contamination of water leading to skin diseases among students.

RECOMMENDATIONS

1. The government seems to be sanctioning these residential institutions indiscriminately, without providing adequate funds and infrastructure. If all the components of a residential institution (school building, boys and girls hostels, kitchen and dining hall, Teachers' quarters, Group D Quarters, etc.) are to be complete, it usually takes at least five to ten years. During this period, staff and students are put to a lot of hardship, which is avoidable. *Already, Residential Schools without infrastructure and other basic facilities are attracting lesser number of students.*

2. ***The government should stop sanctioning any more residential institutions and complete the infrastructure projects for the existing institutions on a war footing by providing adequate funds.***

3. ***All institutions should be immediately equipped with laboratory, library computers, teaching learning materials and equipment and facilities for sports and games.***

4. The government needs to strengthen the existing residential schools on par with Kendriya Vidyalayas. The monitoring mechanism needs to be strengthened as the teams which visited these institutions as a part of the Study received a lot of complaints from students regarding provision of basic facilities, quality of food, overall maintenance, etc.

5. Teachers appointed in residential schools are from outsourcing agencies and have no idea about the classroom procedures. Every student admitted to the residential school should be first tested for ascertaining his standard at the entry level. Bridge courses should be designed on need basis and implemented and when all the students have reached a particular level, regular lessons of the class should be started. There should be a district level academic team to supervise the academic work of the schools.

6. Education Department should treat schools run by other government departments on par with their own schools, (as these schools are having a majority of students

belonging to weaker sections of the society) for all purposes – for providing incentives, teacher training, etc.

7. On the same terms, RMSA should extend all its programs to these residential schools also as these schools are meeting the basic objectives of RMSA also.

8. Several Principals requested extending the 'Karnataka Darshana Program' of the Education Department to these institutions as well.

9. Limited amounts are made available for medical expenses and the principals and staff have to meet any additional expenses in emergency cases out of their pockets. This system can be replaced by a reimbursement mechanism where medical bills of students are reimbursed.

10. All residential schools in rural areas get intermittent and insufficient power and thus face water problem, (even though plenty of water is available in some schools) as the water pumps are unable to lift water due to poor quality of power. Some institutions reported that they get power for only 3 ½ hours every day. It is extremely necessary that each school is given a good quality generator which can run a 5 HP pump, without difficulty.

11. In an interaction session with the study team, at Kadur, the parents requested for supply of 'mosquito nets' to every student as mosquito menace is a universal problem. It is recommended that the Society maintains a division-wise team of qualified personnel to visit schools and take action to solve individual problems of schools which will enable student and staff to pursue academic activities without any sort of inconvenience.

CHAPTER 18

PUBLIC PRIVATE PARTNERSHIP (PPP) IN EDUCATION

The XI Plan had aimed to increase public spending in the health sector (by at least 2% of GDP) and in education sector from 3.6% to about 6% of GDP. However the mid-term appraisal found that the investment achieved was much less than targeted. The GOI felt that the required augmentation in investment and service providers cannot come from the public sector alone.

In this context, public private partnership becomes an important tool for improving the quality of certain aspects and facilities, which contribute to the overall quality of education provided by schools and PU colleges. A partnership model can be used to enhance the basic infrastructure available in institutions for science, arts, sports, libraries, ICT and also Audio Visual Education (AVE), etc.

The GOI felt that it was necessary to engage non-governmental entities in order to enhance the flow of investment, reduce the cost of service provision and improve quality of service with focus on economically weaker sections (EWS) of the people. Hence it evolved a scheme for providing financial support to 'PPPs' in the social sector. It supposed that while government fund the bulk of financial resources, the non-government entities can provide services in a more efficient manner and at a comparatively lesser cost.

The scheme envisages to –

1. Ensure rapid expansion of social sector infrastructure and services with special focus on low income families in terms of their coverage and participation,
2. Mobilise the major part of the capital investment and recurring expenditure from the private sector,
3. Improve functional efficiencies in the delivery of quality services,
4. Transfer the risk of project completion and delivery of agreed outputs to the private sector,
5. Improve quality of Infrastructure.

However, it is too early to say how far the scheme will succeed. But an effort has been made in that direction.

PPP in School Education

PPP in the school education sector is a strategy which enables government, to deliver quality education services by using private sector expertise. Here the private party performs part of the service delivery functions of the government with associated risks. PPP in school education can provide three types of services – infrastructure, support, and education. Various PPP models exist around the world. There are PPP models working efficiently with in the country also.

1. **Infrastructure Model:**
   Model 1A: The private partner builds, owns and operates the infrastructure, and the government uses these facilities for running the school through a long term agreement. The land on which the school is built belongs to the government/local body. The ownership is transferred to the private partner during the contract period and the government pays a user fee to the private partner.

The arrangement of finance and maintenance of facilities is the responsibility of the private partner. He is paid a fee (on a quarterly basis) subject to satisfactory performance, under a long term contract of 20 -30 years. The ownership is transferred to the government generally at the end of the contract period.
Examples: 1. Building schools for the Future in U K

Model 1B: Another variation of the model is that both land and building belongs to the private partner, who makes available the facilities for a fee (like rent) and at the end of the contract period, both the land and the building, is returned to the private partner.

2. Support Services Model

Model 2A: Apart from infrastructure, the private partner provides certain support services like school meals, IT facilities, laboratory, gym, transport services, etc. – payment is made by the government on a pro-rata basis.

Model 2B: The private partner provides certain support services only like school meals, IT facilities, laboratory, gym, transport services, etc. – payment is made by the government on a pro-rata basis.

In such a scenario, the school can avail expert services from reputed professionals from various fields – catering, IT services, transport, etc. Ex: IT services are provided to schools by private IT partners. (like in several states like Andhra Pradesh, Tamil Nadu, Karnataka). The contract is over a 3-5 year period and extendable as per mutual agreement. Mahiti Sindhu Program is an example for this PPP model.

3. Infrastructure, Support & Educational Services

Model 3A: In this model, Infrastructure, support services and educational services is set up by the private partner. The full control of the management of the school lies with the private partner. The government may provide assistance in two ways –

1. Provide for salaries of staff (grant-in-aid)

Ex. All government grants-in-aid schools in several states in India come under this category. Here the school fee is generally regulated by the government.

2. The school is paid scholarship to a fixed number of students who are admitted as government quota candidates – criteria for selection are fixed by the government. A system of incentives is built in, so that the schools can provide good performance continuously.

   Ex. School Voucher Programme in Chile
   Ex. II type of assistance in scholarship to a fixed number of students is prevalent in Certain High profile Schools of Karnataka (Sainik Schools, Kittur Rani Chennamma Institution, Kittur, Belagaum dt.).

Model 3B: Management Services: Under this model, the government entrusts the management of a government school to a private partner who will take over and run the school. Here there are two types:

Type A. The private partner runs the school using government staff.
Type B: The private partner uses his own staff to run the government school.

PPP in Secondary education Sector

The role of government in secondary education is not as clear, as it is in elementary education. With more than 65% of secondary schools and pre university colleges, in the private sector in the state, the role of the government in 'Universalisation of Secondary Education' gets limited to some extent.

But it still poses a challenge for providing quality secondary education to children of economically weaker sections of the society. Probably, the government may have to make some quantum of reservation to children of EWS in private schools and reimburse the fee to such students. Universal Access can better be achieved through better linkages with the private sector and public private partnerships (PPPs). This will help reduce the financial burden on the state government to a considerable extent.

The state government has for the past several years mobilised considerable resources in its 'School Adaption Program' (later renamed as 'School Nurturing Program') from the public and NGOs. In secondary education sector, distance education facilities can be set up in partnership with various NGOs and other private parties interested in working in secondary education sector. Partnership with Private sector can be developed in developing infrastructure, providing in-service training and in several quality improvement initiatives. Leading private schools can adopt a rural government school and share facilities like laboratory, library, etc.

Collaboration with Reputed Private Institutions

Reputed private institutions can be encouraged to adopt government institutions for improvement of infrastructure, and resources like library, laboratories, ICT, sports facilities, drinking water and toilet facilities. This can be done through focused organised planning in specific areas. However, care must be taken to ensure that existing government facilities are not misused/misutilised by these private institutions.

Role of NGO's and PPP

In the education sector, many prominent NGOs have involved themselves voluntarily and made meaningful contributions. Some of the areas where these NGOs have involved themselves are –

a) Mainstreaming out of School Children,
b) Developing effective teacher training programs,
c) Community mobilisation and awareness campaigns,
d) Creating gender and social awareness,
e) Work on Children with Special needs,
f) Hot cooked Midday meal Programs,
g) Pedagogy, Content Development, Preparation of Textbooks & Workbooks, etc.

RMSA Framework proposes to explore long term partnerships with NGOs, with a well defined arrangement for continuity. The main areas of activity proposed by the RMSA Framework are –

a) Partnership in the areas of Capacity Building and in-service training of teachers, both in schools and in research institutions.

b) Useful role in Advocacy and Accountability, and
c) Community Mobilisation.

RMSA has also permitted to incur cost for such partnership out of 6% Management, Monitoring, Research & Evaluation Cost. The research, evaluation and monitoring activities are proposed to be done in partnership with institutions/NGOs. This would improve transparency of program interventions, and would also encourage a more open assessment of achievements.

Outsourcing

Several functions of the government schools can be outsourced through private sector involvement. Computer Education, Teacher Training, Evaluation Studies of Various programs, Providing Mid-day meals, etc.

PARTICIPATION OF NGO'S IN EDUCATION

From the later-half of the 20th Century, we see the emergence of non-profit Non-Government Organisations (NGOs) as key players in social development in the country by supplementing public/government efforts. Many times they have involved themselves as important stakeholders in various social development programs.

Participation of NGOs in Education Sector

In Karnataka, NGOs such as Azim Premji Foundation, Akshara Foundation, Akshaya Patra foundation and several other NGOs have played a prominent part in supporting governmental efforts in the field of education.

Though most of these NGOs are confined to the elementary education sector, some are working in secondary education sector as well. There is tremendous potential to solicit the participation of NGOs in secondary education sector also.

PPP in Mid-day Meal Program

Under the 'National Program of Nutritional Support to Primary Education (NP-NSPE)', the Government of India supplies free food grains and reimburses some amount of cooking cost to the state governments. This is one program which has created a wide ranging social impact among the children of poor and marginalised communities who attend government schools in India.

A number of NGOs have also been participating in the mid-day meal program under PPP and contributing their mite to relieving the school children from hunger. In Karnataka the mid-day meal program is popularly known as 'Akshara Dasoha'.

Akshaya Patra – A Successful PPP Model

With the dedicated purpose of liberating poor children from the vicious cycle of hunger and illiteracy, the 'Akshaya Patra Foundation' came into being in Bengaluru in 2000. Now the Foundation runs the world's largest midday meal program in a public private partnership with the state governments.

The Foundation is currently supplying hot cooked midday meals to 1.3 million children in government and aided schools in eight states across India – Karnataka, Orissa, Rajasthan, Chattisgarh, Uttar Pradesh, Andhra Pradesh, Gujarat and Assam.

In Karnataka, nearly 5.44 lakh children studying in all primary and secondary – government and aided schools – are covered under the program. The breakup is – Bangalore: 1,94,746, Hubli-Dharwar: 1,76, 344, Bellary: 1,33, 384, Mysore: 16,334, Mangalore: 25, 487.

Six of the central Kitchens of Akshaya Patra have cleared the quality standard inspection and have received the food safety management system certification ISO 2200-2005. Akshaya Patra has been awarded the 'Sat Paul Mitta Award' in 2010 for its 'Outstanding services to Humanity' and ICAI award.

The Study Team has enumerated below the work of several NGOs working in the field of education in Hoskote taluk in Bangalore Rural District.

Participation of NGOs in Education in Hoskote Taluk, Bangalore District

Several NGOs in Hoskote Taluk are supporting governmental efforts in education by providing Teaching-Learning Materials (TLM), Content and skill oriented Training to teachers, providing technical support to bring computer education to schools etc.

1. Akshara Foundation - has taken up two important projects for primary school children of the entire Hoskote Block.

A] Basic spoken English program: children of classes 1 to 3 are covered. Teachers are given 5+2 days training in spoken English. Teacher's guide, pictorial chart containing 20 lessons, Flash cards and a story chart are given to schools. Every child gets a workbook. The children have started learning English through this program.
B] Mathematics Support Program: The program caters to the needs of the children in classes 4 and 5 in line with their text books. Various teaching-learning aids in the form of a Maths Kit and lesson plans have been designed in consultation with class room teachers to teach maths as per the guidelines in N.C.F.2005. The Bridge Course is also taken care of. The maths kit worth Rs.2500/-is given free of cost along with teacher's guides, lesson plans and supplementary worksheets. The teaching activity is based on constructivist approach. The cost of the project is Rs.25.00 lakhs per year and fully funded by Akshara.

2] **Shikshana Foundation:** The Foundation has adopted 104 primary schools in the block. These schools are given contingent amount, diaries, sports materials etc. Out of these 104 schools, 50 schools have been given Laptops. 80 teachers were trained in using computers. The Block Education Officer, 6 teachers and 41 children were taken to Delhi on an educational tour. The cost of the project was Rs.7.30 lakhs/year.

3] Swamy Vivekananda youth movement: The organization has adopted 08 high schools to improve S.S.L.C examination results. The services of 08 additional teachers is provided to these schools for giving remedial coaching to weaker children. They have also provided e-library to these schools. DVD lessons have been prepared for difficult topics in all subjects and supplied to all the schools in the block. The total expenditure on this project is Rs.1.5 lakhs.

4] CISCO: The organization has adopted 5 Govt. Higher primary schools. It has provided an Antenna, a projector, a big screen, a camera and furniture to each of these schools. The institution is imparting education through video conference for children of classes 1 to 8. The children can interact with teachers in the studio. The institute has adjusted its program to the Time Table of the schools. CISCO is spending Rs.13.80 lakhs on each school. [Rs.69.00lakhs for 5 schools]

5] Manipal Foundation: The Foundation supplies sanitary napkins for Girls from classes 8 to 10 in the entire block. 2000 girls have been covered under the program. The cost of the project is Rs.14.40 lakhs per year.

6] America-India Foundation: The Foundation has provided computers to 04 high schools and 08 higher primary schools with a computer teacher for each school to handle computer classes. They have also arranged for supply of Midday Meals to these schools through Akshaya Patra, Bengaluru.

7] Hindustan Aeronautics Ltd., Bengaluru: The organization has come forward to encourage sports and games among High school children in Hosakote Block. They are conducting tournaments for High school children in sports and games. The cost of the project is Rs.4.00 lakhs per year.

8] Nanda Deepa: Hosakote: This organization has been supplying govt. sponsored cooked midday meal to 29 schools in the block. The special feature of the organization is that it supplies packed drinking water to these schools free of cost.

9]Sri Ramakrishna Ashram, Halsuru, Bengaluru: The Ashram authorities are giving Notebooks, pens, Geometry box etc to 600 primary school children this year.

The state government should involve NGOS in all the education blocks of the state, and recognise their services in the cause of education.

CHAPTER 19

A Brief Review of
DEPARTMENT OF STATE EDUCATIONAL RESEARCH & TRAINING (DSERT)

DSERT is in charge of quality improvement initiatives in school education and operates in three sub sectors of education – primary education, secondary education and Teacher Education. It is also the apex academic body in school education in the state.

Units of DSERT

DSERT comprises the following units:

1) State Institute of Science,
2) Education Technology Cell
3) State Education Evaluation Unit,
4) Teacher Education Unit,
5) SSA Training Unit.

DSERT has a full fledged audio and video studio and hub, in order to develop and telecast video lessons for the 'EDUSAT' project. DSERT has its own teleconferencing facilities and is connected to all the DIETS and CTEs.

DSERT has also a full fledged attached hostel, which helps all those who are attending DSERT programs to stay in the premises itself. The Directorate of Text Books was formerly part of DSERT. It was converted into an independent society called 'Karnataka Textbook Society' in 2006.

Important Activities of DSERT

Some of the Important activities of DSERT are –

1. It implements a number of quality improvement programs in all teaching subjects at the school level.
2. It undertakes curriculum development and revision periodically not only for classes 1 to 10, but also courses like Diploma in Education, and special courses like Music, Dance, Drama, Commerce, etc.
3. It administers both government and private aided (elementary and secondary) teacher training institutions in the state.
4. It designs in-service training programs in content and pedagogy and prepares teacher training modules catering to the needs of various categories of teachers.
5. It encourages innovative programs and action research projects.
6. It administers all computer education programs implemented in state schools.
7. It is in charge of distance education projects like EDUSAT, Radio Programs (like Keli-Kali), etc.
8. It procures books and science equipment for schools under various central schemes.

Management of Teacher Education

DSERT deals with management of teacher training institutions in the state. Until 2003 there were 134 primary teacher training institutions and 70 Secondary teacher education colleges in the state, catering to the pre-service teacher training needs in the state. In 2003-04, the state government lifted the ban on opening of new teacher training institutions. As in 2009 – 10, there are 1,002, elementary training institutions (offering the D Ed course) and 411 secondary

teacher training colleges offering the B Ed degree course. This huge increase in numbers, has become unmanageable resulting in deterioration of quality in the newly opened teacher training institutions.

Table 19.1
Teacher Training Institutions in Karnataka

Institutions	Govt.	Aided	Unaided	Total
Elementary Training Institutions	30 DIETs 14 TTIs	40	884	968
Secondary Training Institutions	6 CTEs 1. Govt B Ed College* 2 University**	44	375	419

**Govt. B Ed College, Chikkaballapur,*
*** University Colleges at Dharwar and Bijapur (women)*
Source: Annual Report 2009-10

The administration of 30 DIETs and 6 Government Colleges of Teacher Education, and 1 Government B Ed College, Chikkaballapur is done by DSERT. Besides DSERT disburses grants to 40 private aided D Ed colleges and 44 private aided B Ed Colleges in the state.
DIETs control and monitor the academic work of all D Ed colleges in the state. The examination for the 2 year D Ed course is conducted by KSEEB. Universities are responsible for monitoring the academic work and conduct of examinations of all B Ed colleges in the state.

Secondary Teacher Training
The Teacher education unit also looks after secondary teacher training in the state. In 2009-10, nearly 2,600 high school teachers were trained through CTEs in subjects like Kannada, English, Hindi, Maths, and Social Science. 900 teachers were also trained in Yoga and Value Education.

Management of Primary In-Service Teacher Education Programs
SSA Unit in DSERT looks after the primary teacher in-service training program. Release of SSA funds, Preparation, printing and distribution of training packages and training of Master Resource Persons is looked after by the SSA unit of DSERT. During 2009-10, 68,000 primary school teachers were trained through the DIETs. SSA unit also prepares resource books in various subjects for primary teachers.
In order to solve multi-grade situations in primary schools, Nali-Kali, the joyful learning methodology is introduced in Classes 1 and 2 in all Government Kannada medium lower and higher primary schools of the state. About 67,000 primary teachers were trained in Nali-Kali in 2009-10. It was extended to class 3 in 2010-11.

Management of Computer Education
DSERT manages several computer education and ICT projects in the state:

1. The Mahiti Sindhu Program: Under the program 3 lakh students are given computer education and computer based education in 1,009 secondary schools in the state. This program ended in March 2010 and all these schools were included in ICT Phase III Project. The working computers in these schools stand transferred to nearby higher primary schools.
2. CDs pertaining to hard-spots in various subjects were distributed to schools to enable children to understand difficult concepts.

3. In collaboration with America India Foundation, 'Digital Equaliser Program' is implemented in 216 government high schools.
4. ICT Projects-
    a) Under ICT Phase I Project (a CSS), 480 government high schools are covered. 1.68 lakh children are taught computer and computer based education through this project.
    b) Under ICT Phase II Project (a CSS) 1,571 government high schools are covered, The unit cost per school is fixed at Rs. 6.70 lakhs, out of which the Centre gives Rs. 5 lakhs and the state gives the balance of Rs. 1.70 lakhs. 4.03 lakh children are covered under this project.
    c) Under ICT Phase III Project (a CSS), 1,763 government high schools and 2,633 private aided high schools are covered under the project. This program is being implemented from 2011-12.
5. Secondary school teachers are trained in computer applications every year through the three Micro-soft Centres set up at Bangalore, Dharwar and Gulbarga.

Other Important Programs of DSERT

1. **EDUSAT –** The EDUSAT programs are telecast through a well equipped studio and hub located in DSERT (by ISRO) to higher primary schools in Chamarajanagar, Gulbarga, Bangalore Rural and Ramanagar districts.

2. **Teleconferencing –** These are satellite based training programs. Receiving stations are located in all the DIETS and 202 Education Blocks. The state level functionaries can directly interact with field level functionaries. This facility is utilised in training of Master Resource Persons for various training programs.

3. **Radio Programs –** Radio lessons are broadcast from 13 stations of All India Radio to all the schools in the state. In 2010-11, 406 radio programs were broadcast to students of classes 1 to 8. This is quite a popular program among children. The expenditure is met out of SSA funds.

4. **Evaluation –** DSERT coordinates with various national agencies like NCERT/NUEPA in the conduct of various evaluation studies. In 2010-11, it collaborated with NCERT for conducting 'Terminal Assessment Survey' (TAS) for Class 5 students in 259 schools spread across 11 selected districts. It also participated in preparatory activities for the conduct of TAS to class 3 and 8 students. DSERT has also brought out teacher's hand book for student Evaluation.

5. **National Talent Search Examination (NTSE):** The state level NTS examination is conducted by DSERT. In 2010-11, 48,000 students wrote the state level NTSE examination in 198 centres in November 2010. The Karnataka quota is fixed at 242. These 242 students qualify (on the basis of roster cum merit) in the state level examination.
6. The selected 242 students write the National level NTS Examination conducted every year in May by NCERT. This scheme has been designed to provide financial assistance to talented young students studying in Class 8. (Formerly it was Class 10).

Details of scholarship, the students receive is given in Chapter 15 (Incentive Schemes). The following table gives the data on NTSE for the past 6 years:

Table 19. 2

Year	No. of Candidates	Students qualified at the state level	Students qualified at the National Level
2005-06	43,200	295	134
2006-07	62,597	530	173
2007-08	53,447	520	158
2008-09	20,010	231	104
2009-10	41,891	234	80
2010-11	48,000	242	NA

Source: DSERT

7. **National Means-cum-Merit Scholarship Examination (NMMS)**
   Details of NMMS are available in Chapter 15. DSERT conducts the state level examination for this scholarship. Details of students qualified in the examination are given in the table below:

Table 19.3

Year	No. of Candidates	Students qualified for NMMS from Karnataka
2008-09*	12,029	1,639
2008-09**	11,492	1,347
2009-10**	33,689	2,444
2010-11**	60,000	3,387

*Class 9, ** Class 8,
Source: DSERT

8. **Revision of Curriculum for Classes 1 to 10**
   The state curriculum for classes 1 to 10 has been revised in the light of NCF 2005 and approved by government. The textbooks are under preparation and will be introduced in a phased manner.

9. **Revision of D Ed Curriculum**
   DSERT has taken up revision of the 2 year D Ed Curriculum through a committee.

10. **Science Centres:**
    The state has set up 224 science centres, in government high schools, one in each assembly constituency. They have been supplied with special science equipment and 2 teachers from each centre have been trained in running of these centres. But there has been no proper monitoring of their activities for the past 10 years.

11. **Promotion of Science Education**
    In collaboration with various state level and national level institutions, DSERT conducts various activities for promotion of science in schools – Science Seminars, Science Quiz programs, Science Clubs in schools, Drama Competitions in Science

and Science exhibitions at various levels from block level to state level. Students selected at state level participate at the national level Science Exhibitions.

12. **Curriculum & Text books for Various Other Courses**
    DSERT also has the responsibility of preparing curriculum (and text books, now by the Textbook society) for the following courses:
    a) Commercial Examinations,
    b) Music, Dance, Talavadya,
    c) Drama
    d) Diploma in Education,
    e) Drawing and Painting,
    f) Sanskrit Courses
    g) Pre-Primary Course,
13. DSERT has also a number of publications to its credit, apart from textbooks, teacher handbooks, teacher training modules, and resource books.

12. **Establishment of Curriculum Development Centre in DSERT**
    The World Bank Secondary Education Report 2009 calls for establishing a 'Curriculum Development Centre' in each state. This is a good suggestion. Currently one officer in DSERT who has no apparent knowledge of curriculum or training in curriculum design and development is handling matters related to state curriculum.

RECOMMENDATIONS

1. Autonomy for DSERT

DSERT is now functioning as a government department. It is entrusted with several administrative activities, which makes it to neglect its academic side of the activities. DSERT is supposed to provide academic leadership to elementary, secondary and teacher education sectors in the state on the lines of NCERT at Delhi. This has not happened so far due to several administrative constraints under which DSERT is made to work.

There was a proposal to make DSERT an autonomous institution. A majority of SCERTs in the country are autonomous bodies. It will help to study the working of these bodies in other states, so that an informed decision can be taken on the autonomy of the institution.

2. The 224 science centres were set up almost 12 years ago. Some of the equipment have become old and unfit for use. A survey of these science centres should be taken up and equipment should be supplied to them as per individual requirements and revised science textbooks. The teachers also need training, as the teachers trained in the handling of science equipment, have been either transferred or retired.

3. All the faculty positions are filled up by serving departmental officers, who are not qualified or experienced to execute and monitor several academic activities: academic research, survey, statistical analysis, policy formulation and monitoring, Curriculum Revision, etc. These positions require qualified professional people.

4. What happened to Cadre & Recruitment Rules for DSERT/DIETS/CTEs?

Cadre and Recruitment Rules for DSERT/CTEs/DIETs were framed and published more than 10 years ago. Unfortunately these rules have not been implemented even after ten years and these institutions have become rehabilitation centres.
These rules should be implemented immediately so that staff working in Universities and academic research organisations can also be taken on tenure, which will help DSERT to grow in stature, as a premier academic research institution like the NCERT.

4. **Proposal for a 'Curriculum Development Centre'**
   Most classroom teachers (despite their professional training) understand the term 'curriculum' as an expanded version of the term 'syllabus' and the text book as its embodiment. A major reason for this anomaly is that the curriculum design and development does not take place at the institutional level. Another reason is that these teachers are not properly trained, whenever there is a change in curriculum.

   Whenever, the state feels that the curriculum needs to be revised, it appoints a committee headed by a chairman, defeating the very purpose of curriculum revision. The chairman and members are not selected on the basis of any criteria or experience in school education.

   In order to bring out a good curriculum and syllabus it is also necessary that those who design the curriculum and syllabus need to be trained and made aware of the best practices in the field. They should be able to compare and benchmark the state curriculum with national and international curricula. This will give a new perspective on the content of each subject. It will also help in capacity building.

   It is therefore suggested that the state establish a permanent 'Curriculum Development Centre' in DSERT, to take care of the needs of periodic curriculum revision, dissemination of the curriculum to all teaching and supervising faculty, preparation of teacher hand books, training of CTE/DIET faculty in curriculum design, etc.

5. This Study Team has also made a proposal for establishing the **'Curriculum Development Authority'** to oversee curriculum development at primary, secondary and PU stages of education.

6. **NTS Examination:** The number of students qualifying at the national level from the state in the NTSE has been declining over the past several years (from a high of 173 in 2006-07 to a low of 80 in 2009-10). Similarly the state quota has declined from a all time high of 530 in 2006-07, to a low of 242 in 2009-10. This trend needs to be arrested. Special programs have to be taken up to coach those students who qualify in the state level examination.

ANNEXURE

CRITICAL STUDY OF SECONDARY & PRE-UNIVERSITY SECTORS IN KARNATAKA

THE STUDY TEAM

A. The State Level Core Committee

1. D Jagannatha Rao, Retired Director, DSERT, Chairman
2. C S Swamy, Retired Director, Secondary Education, Vice-Chairman
3. G Chandrasekhar, Retired Director, Primary Education,
4. L Nagaraja Murthy, Retired Director, Vocational Education,
5. Abdul Aleem, Retired Joint Director, School Education,
6. Viswanath, Retired Joint Director, PU Education,
7. Raja Ram, Retired Joint Director, SSA,
8. Muniswamappa, Retired Joint Director,
9. Dr. G. Nagendra Prasad, Azim Premji Foundation,

B. The District Coordinators for the Primary Study

1. Chamarajanagar district – A S Ramappa, Retired Joint Director, Mysore
2. Bangalore Rural District – G Chandrasekhar, Retired Director, & Venkataram, Retired Joint Director, Bangalore,
3. Hassan District – Satyanarayana Reddy, Retired Director, DSERT, & S N Range gowda, Retired Joint Director,
4. Bijapur District – G K Math, Subject Inspector, O/O of the DDPI, Bijapur,
5. Gulbarga District – Mahadevappa, Retired Block Education Officer, Gulbarga, & Sadat Hussain, Subject Inspector, o/o of Additional CPI, Gulbarga
6. Raichur District – Ramanna Havale, Retired Head Master, Raichur,
7. Koppal District – S H Hiremath, Retired Head Master, Kustagi,
8. Bellary District – K Prahalladachar, Retired Joint Director, Bellary, & B K Rudramuni, BEO, Siraguppa, Bellary district.
9. Yadgir District – A Chandrasekhar< Retired Head Master, Yadgir,
10. Gadag District - A N Nagarahalli, Retired Deputy Director, Gadag
11. Bidar District –Revanappa Sangulgi, Retired Head Master, Bidar

C. Co-ordinators for Sub- Studies

1. Linkages between various sub-sectors of Education – D Jagannatha Rao,
2. In-Service Teacher Education – Katagi, Retired Lecturer, DIET, Chikkamagalur,
3. Minority Education – Abdul Aleem and Abdul Wajid, Retired Joint Directors,
4. Incentive Schemes – , A N Nagaralli, Retired DDPI, Gadag,
5. Curriculum & Textbooks – C S Swamy, Retired Director, Secondary Education,
6. Residential Schools – Gangappa Gowda, Retired Director, Primary Education, & Ningappa, Retired DDPI, Kadur, Chikkamagalore Dt.
7. Public Private Partnerships – Sri C V Tirumala Rao, Retired Joint Director,

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    (v) Teacher Education (Ed. Prof. T K Jaylakshmi)
    (vi) Collegiate Education (Ed. Dr. M R Narayana)
    (vii) Education & Equity (Ed. Dr. Ramesh Kanbargi)
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