

Evaluation of Secondary and Pre University Education Sectors in Karnataka

Department of Primary and Secondary Education

Executive Summary

A sound education policy forms the bed rock of all fields of national development. Enhancement of education levels of individuals has certainly a bearing on productivity, incomes, employment and adaption of science and technology, which will in turn enhance the quality of their life.

Karnataka has been a pioneer in implementing several well thought out initiatives in the education field and has several notable achievements to its credit. The state at present has one of the most widespread networks of elementary as well as secondary schools in the country. Even then, the state continues to remain a median level state in education and other development attainments when compared to the rest of the country. Karnataka at present occupies the seventh place in human development and the fifth place in the education indices as per the Karnataka HDR 2005. Hence quality education as a critical factor in human development demands greater focus and attention by the state.

Status of Secondary (& PU) Education in Karnataka

The expansion of elementary education in Karnataka has created a significant demand for secondary and PU education. The benefits of secondary education are increasingly becoming apparent to families even in rural and remote habitations. Over the years, household incomes have increased, with a decrease in average family size, and hence secondary education has become more affordable.

A significant feature of the state's secondary education scenario is the presence of a large private sector. At the secondary stage, government schools constitute only 35%, where as private schools constitute 65%. At the PU stage, government PU colleges constitute 31%, where as private PU colleges constitute 69%. However, taking aided institutions also into consideration, government finances 60% of all secondary schools and 47% of all PU colleges

in the state. The unaided institutions have continued to grow over the past decade at an impressive level and now constitute 40% of all secondary schools and 49% of all PU colleges in the state.

The spread of secondary schools and PU colleges is quite uneven across the state. The distribution is not in proportion to the area, size of the population or socio economic requirements of the student population. However, secondary schools in rural and urban areas are in the proportion of 7:5, with 82% of government schools located in rural areas. But at PU stage the scenario gets reversed and the proportion of PU colleges is 4:6 in favour of urban areas. A smaller district like Hassan has 89 government PU colleges where as a larger district like Gulbarga has only 45 government PU colleges. Availability of PU colleges in rural areas of the educationally backward districts is limited.

Key constraints to expansion of Secondary Education

There are various constraints to qualitative expansion of secondary and PU education in the state. Slow improvement in education completion rates, uneven institutional and financial capacity, less than satisfactory quality of achievement in both elementary and secondary education levels, a dominant private sector, issues related to grant-in-aid, are all factors which act as constraints in the rapid expansion of secondary and PU education in the state.

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/college and hence incur further costs.

The Secondary Education Pattern in Karnataka

Nationally the secondary stage consists of classes from 9 to 12. But 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 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 stage in Karnataka (and not as a part of the secondary stage) due to historical reasons. 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. Moreover 65% of secondary schools are in the private sector. Hence it is necessary that class 8 is treated as a part of the secondary stage itself.

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. In order to bring meaningful integration the state should constitute a 'Professional Apex Body' to supervise the various aspects of integration.

Need for a Clear State Policy

The state does not have a clearly defined policy on secondary and pre university education sectors. The state policy should help in setting up goals and targets, as well as devising strategies and programs to achieve these goals in every sub sector. The state should also recognise several field level realities:

- a) Sanction of institutions is still being done indiscriminately which has resulted in a large number of unviable institutions. There are more than a thousand such government and aided unviable institutions in each of the sectors. Some of these institutions have even less than 25 student strength. These are a definite drain on the state's resources and call for immediate remedial action.
- b) The attraction of English medium education has resulted in migration of children from several government and aided schools to private English medium schools and consequent declining student strength in these government and aided institutions. Some of the government institutions are facing closure due to dwindling student strength every year.
- c) Even though norms exist on paper about the minimum infrastructure and

other facilities that should be made available in newly opened institutions, norms are observed more in their breach.

- d) Even after several decades, a large percentage of government High Schools and PU Colleges are still being run in shift system severely impacting the academic work of both the institutions. Even here, some of the districts are disadvantageously placed. For example, in Belgaum district 55 out of 60 government PU colleges are running in shift system. These colleges work only for 4 hours a day thus seriously affecting the quality of academic work as well as extra-curricular activities in these institutions.
- (a) The state policy should give more stress on development of infrastructure, professional management of human resources and skill development among students.
- (b) Delay in recruitment of teaching faculty is a common phenomenon every year. At any given point of time there are a large number of vacancies of both teaching faculty and heads of institutions in government institutions. Teacher recruitment needs to be an annual affair in the interest of maintaining quality in these institutions.
- (c) There is need for maintaining accountability among both teachers and administrators.
- (d) Karnataka has a pride of place in Information Communication Technology, Bio technology and other allied fields. The state has to use these strengths while formulating the state's education policy.

Issues in States' Grant-in Aid Policy

25% of all secondary schools and 16% of all PU colleges are grant-in-aid institutions. Successive governments are continuously bringing in more and more institutions under grant-in-aid. The financial commitment on GIA institutions is now a substantial portion of states' secondary education outlay (37.80%), and amounts to more than 1,100 crore rupees as in 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 aided institutions, as they do not make much of an impact on USE, because of their presence in urban and semi-urban areas where other government and private unaided institutions also exist. In order to bring efficiency in use of limited government resources, the Grant-in-Aid system needs to be reformed. There is also a need to make grants conditional on achieving certain performance standards as well as to bring in transparency, accountability and increased community participation in management of grant-in-aid institutions.

Financing of Secondary & PU Education

MHRD's financial projection for USE is around 2.33% of GDP. Considering that UEE requires another 3%, the total requirement of primary and secondary education sectors alone is around 6%, which is yet to be reached by the Centre or any of the states. At present the state is spending around 6% of GSDP on the entire social sectors put together, of which around 3.4% is spent on General Education.

The state spends around 32% of its general education budget on secondary education. However, a major portion of this outlay is spent on salaries. A majority of the government secondary schools and PU colleges continue to languish without minimum basic infrastructure and other facilities. There is need to increase allocations to secondary education sector, curtail grants to private institutions, and allocate at least 20% for developing infrastructure and provide for other non-salary expenditure. There is also an urgent need to take a policy decision to close down or merge unviable institutions.

Retention & Drop-outs

For the first time, in 2000-01, the 'Edu-vision' document estimated the proportion of children attaining different classes and of children who dropped out of the system at different stages of education. In 2001, out of a hundred children entering Class 1, only 43 reached class 8. This scenario has considerably improved in 2011 as estimated by this critical study. Out of a

hundred children entering class 1, now 77 children reach class 8 and 64 reach class 10.

Around 50 pass out of Class 10. Out of them 43 enter PUC, 23 pass out of PUC and 16 enter higher education. (Please see Chapter 1 – Table 1.6). Even though there is a significant improvement in retention and drop outs, the state will have to further design strategies to retain the remaining children in the secondary system, under USE.

Student Absenteeism

Daily absenteeism of students in schools and colleges is a common feature in rural parts of the state. The Study found that student absenteeism was more in North Karnataka than in South Karnataka. This is due to a host of factors like lack of basic infrastructure facilities and toilets, absence of laboratory, library and other facilities, inadequate teaching faculty, total apathy of heads of institutions and supervisory staff, etc. In some colleges like Government PU College, Deodurg, only 3 lecturers are working against 11 sanctioned posts. Private schools and colleges are slightly better off at controlling student absenteeism, as they take disciplinary action against students who habitually absent themselves.

Need for Providing Access – Issue of Equities

The goal of secondary education 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 other private unaided institutions exist, as these schools are not affordable to these sections.

There is a voluntary movement of upper and upper middle classes to private unaided schools. Hence any subsidies and incentive schemes implemented in government institutions will favour the disadvantaged groups and weaker sections of society. Hence Government institutions will have to be opened and maintained on a need basis both in secondary and PU sectors even when Private Unaided institutions exist in an area.

Maintenance of Quality in Secondary Schools & PU Colleges

As it is, the achievement levels in our educational institutions remain poor as indicated by ASER and other similar studies. In order to make secondary schools and PU colleges, maintain certain standards of quality, there is a need for establishing an independent mechanism (like NAAC) to certify the quality of these institutions. The government should set quality parameters for assessing the quality of institutions so as to grade them.

Government also needs to 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, judicious use of modern technology, and efficient systems to test quality in schools. In-service teacher training courses need to be skill and competency based certified courses based on skill map analysis.

Infrastructure

As per DISE figures, around 32% of government schools do not have girls' toilets. The situation is still worse in government PU colleges. Since 2005-06, funds are being released under RIDF for improvement of infrastructure in schools and colleges. This also appears to be inadequate. There have also been instances of sanction of RIDF funds to non-existent schools too. There is need for streamlining the data on infrastructure so that needy institutions are given priority. Except for a few reputed institutions, infrastructure facilities in most of the private institutions are far from satisfactory.

Funds under Central Schemes

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. The Central guidelines are sometimes too rigid to adapt to the state specific conditions and (sometimes district/local specific) requirements. This further impacts efficiency in implementation. Some flexibility in guidelines is needed to make the schemes more effective.

Curriculum

There is need for the formation of '**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 proposed 'Curriculum Development Centre' in DSERT should come under this Authority.

Vocational Education & Training (VET)

VET was visualised as a program of national significance. But even after 5 years of conceptualisation, it is yet to take off. There appears to be no convergence of views on VET at the GOI level itself. Under the circumstances, 4 trades – Retail management, Automobile, IT and Security Services – have been selected for introduction in the state. The private sector and premier research institutions should have been involved in the program from the drawing board stage itself, as past experience in vocational education has not been a happy one for the state.

Teachers' Benefit and Students' Welfare Funds (TBF & SWF)

These funds maintained by the Department of Public Instruction, have become departmental 'Savings Funds' as instead of spending money on welfare schemes for

students and teachers in a big way (as there are more than one crore students and five lakh teachers in Karnataka), meagre money is spent on welfare schemes and the balance of money is being saved regularly and the corpus has now crossed one hundred and ten crore and has in fact attracted the attention of the Income Tax Department. It is important that more money is spent on welfare schemes of both students and teachers and the scale of assistance in respect of each scheme is revised periodically.

SECONDARY EDUCATION

Need for Distance Learning Facilities in Secondary Education

Around 42% 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 attending, taking the average daily attendance of children in secondary schools into consideration (which is less than 80% in most schools), more than 20% of children are not attending schools regularly.

Since it is not possible to universalise secondary education on the lines of elementary education, and since all the youth in the age group of 14-18 years will not be able to enter the formal system due to various reasons, it is necessary for the State to focus on distance learning facilities in collaboration with the National Open School.

Coverage under RMSA

The coverage of RMSA is a matter of concern, as RMSA covers only classes 9 and 10 in government schools. The state has not been able to integrate class 8 into elementary cycle, in spite of its best efforts for the past ten years. 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 at the

secondary stage, results in formulating policies which are far from reality. There is heavy transition loss in enrolment between classes 7 and 8, which neither SSA nor RMSA are able to address.

Funds released under RMSA form a miniscule percentage (less than 0.6%) of the states' secondary education budget, and hence is doubtful whether the program will make any credible impact on the state's secondary education sector. The pattern of releases of funds (as late as November in 2011) also raises serious doubts as to whether RMSA is facing a funds crunch.

Issues in SSLC Examinations

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. The baseline survey gives an average of 50% results (2009-10) whereas the SSLC examination 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.

One of the reasons for high performance of students in SSLC examination is the gracing system followed by the Board. This present gracing system came into existence several decades ago, when the SSLC results were on an average hovering around 50%. *This gracing system needs to be discontinued immediately, before the SSLC examination itself loses its credibility completely.* The Examination Board also needs to be streamlined as many components of the examination process are yet to be made on line.

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 (10.36%) did not send their students for the examination. It is important that the department identifies these schools and withdraws permission and recognition to defunct schools. Otherwise there is every possibility of misuse of the permission and recognition granted to such schools. Some schools may still be drawing grants, other schools may be getting various incentives, and scholarships from various sources in the name of imaginary students.

Computer Education

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. The Vision of the policy should be to develop infrastructure capacities so as to go in for an online type of examination system at a future date. 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. Computer education needs to be made a compulsory subject in the SSLC public examination.

Incentive Schemes

The study recommends 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 in schools having children predominantly belonging to the economically weaker sections of the society. There is need for streamlining the process of distribution of scholarships as different districts follow different procedures and many a time the scholarships do not reach the beneficiaries at all.

PRE UNIVERSITY SECTOR

As already discussed, out of every 100 children entering class 1, only 43 are entering PUC. The proportion of children entering PUC is expected to rise further with the proposed implementation of USE in the coming years. As in 2012, government PU colleges contribute 33% and private aided colleges contribute 23% towards PU enrolment in the state. Even though private unaided colleges constitute 49%, they contribute only 31% towards PU enrolment.

Enrolment in almost all government PU colleges in towns and cities is good. Many of these colleges attract a larger number of girls than boys as education is free for girls in government PU colleges. However, most of these colleges are facing shortage of both teaching and non-teaching staff and poor infrastructure facilities. Adequate space, furniture, drinking water and toilet facilities are almost a rarity in most of the government institutions. Except for a few reputed institutions, the situation in other private PU colleges seems to be no better.

Students Opting for Different Streams

The trend as in 2011 is that 45% of students opt for Arts stream, 25% of students opt for science stream, and 30% of students opt for commerce stream. Even though there are fewer career opportunities in Arts subjects, students prefer Arts combinations. In rural areas, there are no takers for science combinations. In some of the rural colleges there are just one or two candidates in the science section. These colleges also do not have adequate laboratory facilities, or adequate staff to teach science.

Performance of Students in II PUC Public Examination

In 2011, private un-aided colleges performed better than private aided colleges, who in turn performed better than government colleges. 12% government, 12% aided and 13% of unaided colleges secured above 80% results, where as 9%

government, 9% aided and 20% unaided colleges secured less than 30% results. There were also 4 government and 36 unaided colleges securing zero percent results.

English medium students performed better than Kannada medium students by a significant 13% margin. Girls performed better than boys by a 14% margin. Commerce students performed better (57%) than Science students (53%) who in turn performed better than Arts students (42%). Traditionally more than 50% of students appearing for the examination fail, and for most of them, it is the end of their academic careers.

Need for Academic & Examination Reforms in the PU Sector

There is need for comprehensive academic and examination reforms in the PU sector. There is a considerable wastage and stagnation within the 2 year Pre University Course. Every year,

more than a lakh of students leave the PU course, mid-way, before completion, due to various reasons. Another 50% fail in the II PU examination. This trend needs to be arrested through suitable remedial measures and introduction of new course combinations. The first year of the PU course is a district level examination and hence is taken lightly both by teachers and students. There is need for introducing new subjects like 'Geography' in Arts and 'Business Maths' in Commerce combinations.

Curriculum & Textbooks

The National Science Curriculum is being introduced from the next academic year. Laboratories in all colleges need up-gradation and Science lecturers need to be oriented towards the new curriculum, conduct of practicals as per the new curriculum, as well as conduct of the bridge courses for students. NCERT textbooks are being adapted by the state in respect of Science Curriculum.

There is need for up-grading the existing curriculum in Arts and Commerce combinations also. The Department should bring out textbooks in these subject combinations, as it will help in bring in uniformity in content, quality and cost.

Recommendations in PU Sector

The Study has put forward a host of recommendations to improve the working of the PU education sector – grading of PU colleges on the lines of NAAC, re-introduction of direct recruitment to principal's posts, periodic orientation training in management for these principals, introduction of eligibility test for promotion to the cadre of both lecturers and principals, periodic orientation of lecturers, introduction of Guidance and Counselling Centres in all PU colleges, bringing in teacher accountability, etc. There is also need for increasing allocations to the PU sector as a whole.

SUB STUDIES

As a part of this Critical Study, the following sub-studies were also conducted – Linkages between various sub-sectors of education, In-service Teacher education, Minority Education, Incentive schemes, Curriculum & Textbooks, and Residential Schools.

This Critical Study has also covered some other issues like PPP models and role of NGOs in education and a brief review of DSERT as an apex academic body in the state.

Summary of Important Recommendations

1. Educationally Backward districts need more attention and resources, to bring them on par with the rest of the state. Starting of new schools should be limited to only these districts.
2. Indiscriminate Permission to open new institutions should be completely stopped as government institutions are getting closed down due to migration of children from government institutions to private institutions as a result of attraction of 'English Medium Education'.
3. The issue of (thousands of) unviable government and aided institutions has to be effectively tackled at all levels, so as to curtail unnecessary drain on state's resources. A separate task force needs to be created to take decisions on a case by case basis.
4. Karnataka Education Act, 1983, which is more than 30 years old, needs urgent revision in the light of various Supreme Court Judgements, implementation of 'Right to Education Act' as well as Universal Secondary Education Program.
5. Open liberally Distance Education Facilities in the state. Secondary education cannot be universalised on the lines of elementary education and a number of parents from economically weaker sections of society prefer to send their children (in 15-18 age group) to work, it is necessary to make distance education facilities available in rural areas of Karnataka. A separate directorate of Distance education may be established to cater to the needs of these children.
6. There is need for creating additional education blocks in urban areas to improve efficiency in management of both elementary and secondary education sectors. 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.

7. 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.
8. 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 for compulsory retirement of incompetent teachers.
9. There is need for constitution of State Curriculum Development Authority (SADA), as a professional body to help and upgrade standards on a continuous basis at all levels of Primary, Secondary and PU stages of education.
10. Grant-in-Aid Policy of the State needs a thorough review. Grants in future should be linked to performance and accountability, as a number of institutions with 0% and less than 20% results in public examinations have continued to draw 100% salary grants from the state.
11. The per-district and per-child expenditure of the state under various central programs like SSA/RMSA are the lowest when compared to several states. This indicates low absorption capacity of central funds by the state. In fact, during a decadal existence of SSA programs, the state has been able to spend 100% of the budgeted outlay only once (in 2007-08). The State should devise ways and means to optimize expenditure of central funds and increase per-child and per-district expenditure to match other states in this regard.

12.The state is facing severe shortage of science graduates (and science teachers) in all fields. In order to attract bright students to science streams, there is need for introduction of incentives to those opting for science streams at graduate level.

Recommendations Relating to Secondary education

13.It is estimated that there are more than a thousand private secondary schools which are not sending students to the SSLC Examination. It is important that the state takes up an exercise on priority to identify these schools and take appropriate action to close down defunct schools as otherwise they are likely to stake claim, when they become eligible for grants, by building up false records.

14.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-out at the secondary stage.

15.Examination Reforms at the secondary stage are long overdue. The system of grading in SSLC examination has become totally outdated and needs to be abolished.

16.A statistically significant transition loss (of 4.30%) in enrolment between classes 7 and 8 due to various factors including Access is matter of concern. The State should develop programs to ensure that all children leaving higher primary schools get enrolled in secondary schools.

17. 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.
18. 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 in order to ensure the success of USE.
19. There is need 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.

Recommendations Relating to Pre-University Education

20. To bring the system of education in Karnataka on line with the national pattern, there is a very strong case for integrating the secondary and PU stages in Karnataka. Such integration will bring lot of benefits to the state in the long run.
21. 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.
22. Evaluation & Grading of Colleges is needed for prescribing standards of quality and creating mechanisms for effective evaluation of educational institutions. Grading them on a five point scale provides a picture on relative merits of the institutions. Those, falling under the last two grades can then be targeted for remedial measures.

23. 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 minimum competencies required to become PU Principals/lecturers.
24. IGNOU may be requested to design suitable courses for PU lecturers which will help them to enhance knowledge and skills levels in their respective teaching subjects.
25. Nearly 30% of government PU colleges are running in shift system, which seriously affects the academic work, quality and efficiency of these colleges. There should be a comprehensive and time bound plan to provide adequate infrastructure to these colleges.
26. It is important that every PU College must compulsorily function for at least 6 $\frac{1}{2}$ hours every day (including lunch time). This will help improve quality and also contribute to the all-round development of 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.
27. Guidance and Counselling by trained professionals must be compulsorily made available in every PU College, to enable students to make informed choices about future career.