Themes and questions for Policy Consultation on School Education

List of themes for consultation on School Education

1. Ensuring learning outcomes in Elementary Education.

2. Extending outreach of Secondary and Senior Secondary Education.

3. Strengthening of Vocational Education.

4. Reforming School Examination systems.

5. Re-vamping Teacher Education for Quality Teachers.

6. Accelerating rural literacy with special emphasis on Women, SCs, STs& Minorities through Adult Education and National Open Schooling Systems.

7. Promotion of Information and Communication Technology Systems in School and Adult Education.

8. New knowledge, pedagogies and approaches for teaching of Science, Maths and Technology in School Education to improve learning outcomes of students.

9. School standards, School assessment and School Management systems.

10. Enabling Inclusive Education – education of SCs, STs, Girls, Minorities and children with special needs.

11. Promotion of Languages.

12. Comprehensive Education – Ethics, Physical Education, Arts & Crafts, Life Skills.

13. Focus on Child Health

I. Ensuring Learning Outcomes in Elementary Education

In elementary education, despite improvements in access and retention, the learning outcomes for a majority of children continue to be an area of serious concern. Studies are showing that children are not learning the basic skills during their schooling. Many children who reach grade V cannot read simple texts and cannot do simple arithmetic calculations. The examination results of the children are poor. Concerted efforts are required to ensure that a minimum set of cognitive skills are acquired by all children during eight years of elementary education.

The States are implementing reforms such as early grade reading, writing, comprehension and maths programs in conjunction with defining and measuring learning outcomes. The NCERT has completed 3 rounds of National Level Achievements Survey for Classes –III, V, & VII/VIII. States have been given funds to conduct State level achievement surveys and the States are conducting State level learning achievement surveys which are at different stages of conducting one or more rounds of SLAS.

However, even with all these reforms, there is a need to explore the various approaches to improve teaching–learning at the elementary stage. There is a need to understand the reasons of low learning achievement levels in elementary schooling, assess the system of Continuous and Comprehensive Evaluation and suggest ways and methods of improving the learning outcomes of school children which would result in enhancing the quality of elementary education. The quality issues and determinants thereof such as ensuring availability of trained teachers, good curriculum and innovative pedagogy that impact upon learning outcomes of the children need to be addressed on priority basis.

- What in your view are the reasons for the poor performance of your children in the schools?
- How do we ensure that children learn the basic language and numeracy skills in the schools?
- How do we use technology to ensure real time availability of teachers?
- Should there be dedicated teachers for classes 1 & 2.
- What needs to be introduced in teacher training for improving teaching learning process at foundation level of schools?
- Should there be any special measures for primary schools to make them attractive for students, parents, teachers like colourful furniture, rugs play way toys, charts, pictures etc.
- Do you think games, art and confidence building measures should be introduced from primary level itself?
- What should be the student assessment systems?
- How many languages should be available for children to learn at elementary level?
- How do we factor in pre primary/ play school industry in our country that seems to be mushrooming?
- States to highlight in which areas do they seek international partnerships?

II. Extending outreach of Secondary and Senior Secondary Education

With Universal Elementary Education(UEE) becoming a reality, near universalization of secondary education is a logical next step. Further, universalisation of quality secondary education implies creating secondary schooling provisions of a defined standard irrespective of the location and management of the institution to accommodate all those eligible grade VIII and grade X students who are willing to participate in secondary and higher secondary education. It is expected that initiatives such as RTE of eight years of schooling would not only be increasing participation levels in elementary education but also substantially improve the internal efficiency of elementary education in the coming years and ensure higher levels of transition to secondary schooling. Further, with the improvements in retention and transition rates particularly amongst the more disadvantaged groups, there is an increasing pressure on the secondary schools to admit more students.

A wide range of centrally sponsored schemes are being run by different secondary school institutions and bodies so as to ensure greater geographical coverage, social and gender inclusion and use of ICT for quality enhancement. RMSA is now envisaged as a single comprehensive scheme to address issues of coverage and quality in secondary education in a holistic manner.

- To what extent we have made quality education available, accessible and affordable to the target population in the age group of 14–18 years. What is negative impact on society and economy of not doing this?
- How can we increase access to post elementary education across the country in a manner so as to ensure no child is denied the opportunity of completing his/her school education?

- How can we address the geographical and social disparities in secondary education?

- What needs to be done to improve student participation in Science and Mathematics subjects?

- What can be done to overcome shortages in qualified teachers for Science and Mathematics? How can we engage with DST engage to address the needs of science & Maths teachers for both primary/ secondary education?

- To what extend can ICT be used in secondary/ senior secondary schools to enhance teaching-learning process?

- What kinds of pupil assessment systems are desirable at secondary level to ensure problem solving and critical training amongst children?

- Is there a need to improve secondary/senior secondary text books?

- What is needed to improve teacher performance?

- How many languages should be taught at secondary/senior secondary level?

- Is a PPP model to expand schooling at these levels, feasible?

- How can ICT based interventions enhance use of hands on education, field visits, etc?

III. Strengthening of Vocational Education

A knowledgeable and skilled workforce is seen as the most important human capital required for the development of a country. Both vocational education and skill development are known to increase productivity of individuals, profitability of employers and national growth. Vocational education aims to develop skilled manpower through diversified courses to meet the requirement primarily the unorganized sector and to inculcate self employment skills in children through a large number of diversified vocational courses. Given that only 7 to 10 per cent of population is engaged in formal sector of economy, development of vocational education will provide skilled labour force in the informal sector which would further enhance the productivity. Several Committees also emphasize the need to improve access and participation to vocational education and recommends the flexibility of Vocational education within the main-stream education system.

In India, the general education and vocational education have been operating as two different verticals with very little interaction between the two. This had lead to hesitation in students opting vocational courses as there is a general apprehension that one cannot pursue higher degrees or qualification. The vocationalisation of secondary education scheme was revised in 2014 to address the issue of weak synergy with industry in planning and execution, lack of vertical and horizontal mobility, redundant courses and curricula as well as paucity of trained vocational educational teachers. The National Skills Qualification Framework NSQF) has been notified in Dec 2013, to provide and overall framework to set up vocational education programme. There is a greater emphasis on integrating skills in education and a renewed focus on vocational education in secondary education. It also demands of a revamp of our education system to make skill development an integral part of the curriculum at all stages.

- Would skill based education help, students to be employable?

- What difficulties are experienced in implementing VE in the schools

- What are the issues regarding availability and training of vocational teachers.

- Some States have been effectively integrating vocational education in mainstream education. How can these be adopted or adapted across other States?

- Should VE subjects be the best of five or six subjects for class XII or class X scores?

- What needs to be done to make VE popular amongst students?

- School services-sector courses, be introduced in schools rather than manufacturing based courses?

- Schools blend professional courses, which utilize the school students learning of science, maths, accounting, computers, history, geography be developed for VE, to help the students employability and knowledge base?

- Should there be a counselling level factored in at school level which helps child identify the craft/ industry/service he/she inclined towards and skill sets they need to develop and do a skill roadmap per child at school? If yes, then at which grade level should it be done.

IV. Reforming School Examination Systems

Examination reforms that focus on problem-solving, critical thinking and reasoning skills are critical to improving quality at the elementary and secondary levels. Such reforms will change the teaching–learning processes and improve learning outcomes. In recent years, CBSE has introduced wide-ranging examination reforms in schools affiliated to it, such as Class X Board Examination has been made optional, a system of grading in place of marks has been introduced.

Continuous and Comprehensive Evaluation (CCE) has been strengthened so that the students are assessed on an ongoing basis for their holistic development. For implementing CCE several activities are expected in the classroom such as Preparation of child profile and cumulative record , Various activities for evaluating cognitive and co-cognitive levels, Use of various methods to evaluate children such as observation , questioning in class room , Utilizing information gathered for improvement in teaching learning/ remedial inputs for children built into the process . CCE also involves sharing of children's learning progress with parents through parent teacher meetings

State Boards have also made efforts to update curriculum and impose examination systems. However, problems still beset the examination system. The existing systems need to be examined threadbare.

- What are the experiences of government schools in implementing CCE
- Has CCE helped student's academic performance?
- What is the general feedback of students, teachers and parents regarding the no detention policy and CCE?
- Has the abolition of class X board reduced learning level of our students?
- What other reforms can be suggested which would help better assessment of students.

- Is our examination system only assessing note learning?
- Can the examination system shift towards questions that assess the students application of concept, problems solving abilities and critical thinking?
- How can assessment systems become more nuanced and reward children for thinking and innovation.

V. Revamping Teacher Education for Quality Teachers

Quality of teachers has been a major cause of worry in the country and one of the basic pre requisites to improve quality. Competence of teachers and their motivation is crucial for improving the quality. Several initiatives are being taken for addressing teacher shortages, shortages of secondary school teachers in mathematics, science and languages, improving the quality of pre-service teachers and in-service teachers professional development, enhancing the status of teaching as a profession, improving teachers' motivation and their accountability for ensuring learning outcomes, and improving the quality of teacher education institutions and also teacher educators. Inspite of several efforts by the Central and State governments issues of large number of vacancies in both elementary and secondary levels, problems of untrained teachers, lack of professionalism in teacher training institutions, mismatch in training and actual classroom practices, teacher absenteeism and teacher accountability and involvement of teachers in non-teaching activities all need to be addressed. With the aim to recruit quality teachers, CBSE introduced the Central Teacher Eligibility Test (CTET) State Governments have introduced the TETs.

- What are the specific steps needed to fill in the existing teacher vacancies in elementary schools?
- Why have the existing teacher training programmes failed to bring about improvements in the quality of teaching learning?
- What are the workable solutions to address the gamut of issues in teacher education in the school sector?
- Are teachers performance assessments needed to build a culture of accountability amongst teachers? Should promotion of teaching faculty be in conjunction with their performance?

- Should an automatic computerized system be made for all teaching/transfer posts so that there is rationalization?
- What methods can be devised for making it mandatory for all teachers to undergo yearly in service training?

VI. Accelerating rural literacy with special emphasis on Women, SCs, STs & Minorities through Adult Education and National Open Schooling Systems

Literacy is an integral and indispensable element of educational development. Literacy can pave way for reduction in population growth, child mortality and poverty, and facilitate in attaining gender parity, sustainable and holistic growth. It provides for nurturance of democratic values and peace among people. Literacy is all the more important to those sections of population, who have been historically neglected. Achieving universal adult literacy is a fundamental goal of adult and continuing education programmes that have been envisaged from time to time

The 2011 Census have revealed that despite an impressive decadal increase of 9.2 percent points in literacy, national literacy levels have risen to no more than 74.1 percent (from 64.8 percent in 2001). The 2011 Census has shown that female literacy has increased much more than male literacy. While male literacy rate increased by 6.86 percent points from 75.26 percent in 2001 to 82.14 in 2011, the female literacy increased by 11.79 percent points from 53.67 to 65.46 percent during the same period. The gender gap which was 21.6 percent points in 2001 has receded to 16.7. Yet the gender gap still remains much above the targeted 10 percent points. Thus, even today the Plan Targets have not been achieved: overall literacy rate being short by five percent points, gender gap yet to be reduced by another 6.7 percent points and social and regional disparities still persisting.

Adult education is indispensable as it supplements the efforts to enhance and sustain literacy levels through formal education. 'Saakshar Bharat' has been devised as the new variant of National Literacy Mission. The scheme seeks to further promote and strengthen Adult Education, specially of women, by extending educational opportunities to those adults who lack access to formal education and have crossed the standard age for receiving such education, now feel a need for

learning of any type, including, literacy, basic education (equivalency to formal education), vocational education (skill development), physical and emotional development, practical arts, applied science, sports, and recreation. The scheme has been formulated with the objective of achieving 80% literacy level by 2012 at national level, by focusing on adult women literacy seeking – to reduce the gap between male and female literacy to not more than 10 percentage points.

Though there have been significant gains in literacy rates, large gender, social and regional disparities in literacy levels persist. The gains in literacy levels are due to success of the adult education programmes and improvements in primary schooling. However, there is a further need to enhance the literacy levels of the socially marginalized groups and those living in rural areas through interventions of adult education programmes and open schooling systems. What are the impediments in implementing literacy programmes at village, block and district levels

- Is it more difficult to implement adult literacy programmes in urban dwellings such as slums?
- What are the reasons why the literacy programmes are unable to reach the socially deprived sections as much as desired?
- What other strategies can be employed to achieve faster progress in reducing the existing disparities in literacy levels.
- Should the Open School Systems reach out in a larger way, to adult illiteracy?
- Can school students be harnessed to spread the literacy programme?
- How can we integrate specific skills component in the adult literacy programme plus engage with national livelihood programmes?
- What are the impediments in implementing literacy programmes at village, block and district levels?

VII. Promotion of Information and Communication Technology systems in school and adult education

ICT can potentially make significant difference in improving the quality of education. Most of the secondary schools have limited availability of computer facilities. This constrains the students from acquiring ICT-related skills essential in the knowledge economy and limits teachers' ability to upgrade their subject-matter knowledge and students' ability to access essential learning materials.

The National Policy of ICT in School Education envisions and provides for the development of a holistic framework of ICT support in the school system. Mission Mode Project (MMP) on School Education would enable comprehensive technology enablement of the school education sector. This would cover Developing ICT skills of all heads of schools, teachers, non-teaching staff and students; Creating a repository of quality-assured digital contents in English, Hindi and regional languages in all subjects especially in science and mathematics; Training and encouraging teachers to develop and use e-content; Creating provisions for ICT in classrooms or portable facilities and a projector with rechargeable battery, and implement ICT-integrated education; Enabling provision of ICT-integrated examination and e-governance at the institutional and systemic level including setting up of education portals. While there have several ways in which ICT in schools are being implemented, we need to optimally use and leverage technology to achieve quality and efficiency in all of the interventions.

- What are the usual problems faced by schools while implementing ICT integration?
- Are they viable solutions in dealing with general issues?
- What are the different experiences of States in this regard?
- What are the ways in which technology can be leveraged for both school and adult education and share best practices, if any.

- How can we genuinely ascertain that ICT components are functional in schools, particularly in States with challenges i.e. infrastructure especially electricity?

VIII. **New Knowledge, pedagogies and approaches for teaching of Science, Maths and Technology in School Education to improve learning outcomes of Students.**

One of the most important measures taken up for improving the quality in secondary education is to improve the Pupil-Teacher ratios by appointing additional teachers in order to improve the classroom transaction process and environment. Further, special attention is paid on teaching of Science, Mathematics and English. Poor science and maths education (and English) accounts for 80 per cent of total students who fail in Tenth Board Examination. The low enrolment in science stream at higher secondary level and poor-quality education is a constraint in development of scientific manpower in the country. Science and Maths education would need special attention. Some of the initiatives under consideration include:

- Promoting innovations by encouraging talent spotting of innovators in schools through Innovation Scholarships

- Launch a massive science outreach programme aimed at students and their parents – Introduce Mobile labs and establish science centers

Quality in education is inherently dependent on curriculum and learning objectives, learning materials, pedagogic processes, classroom assessment frameworks, teacher support in the classrooms, and school leadership and management development. A new framework for curriculum is needed at regular intervals in order to take cognizance of the developing issues in society and how to address them. A variety of learning packages needs to be developed at State and district levels, with adequate provision for cluster- and school-level modifications to aid the teacher and provide increased choice. Learning enhancement programme (LEP) under the SSA is continued in the Twelfth Plan. Every year, States need to articulate the learning goals that are being targeted

and the strategies (methods, materials, models and measurement) that will be used to reach those goals. Institutional assessment/ accreditation of the elementary schools is envisaged.

- What are the workable strategies for strengthening the quality of teaching–learning processes for better outcomes;
- What are the various approaches regarding curricula renewal, new pedagogies and use of technology to improve the learning levels.
- In the event that parents do not know what outcomes to expect from which level, can these processes truly fructify without engaging with parents? How can this aspect be addressed?

IX. Schools standards, School assessment and School Management systems.

There is a need to put in place a School Quality Assessment and Accreditation System to cover all aspects of school functioning, including scholastic and co-scholastic domains, physical infrastructure, faculty management, school leadership, learning outcomes and satisfaction of pupils and their parents/ guardians.

Better governance structures in schools striking a balance between mandating and persuading, training of district and block-level education officers as well as head teachers for better management practices, on using data to better monitor and support school performance, and to mobilise community resources and efforts to improve school performance. The local community and panchayats are not very often actively involved in school management. While Village education Committees /School Management Committees are formed in most villages, many of them do not function effectively. It is generally believed that the village schools will function effectively only when the local community is active and participates in the functioning of the schools.

- What are the ways to improve community participation in school management?
- What should be the role of the Panchayat in the management of the schools?
- How can we implement a assessment and accreditation system in schools ?
- What are performance indicators for grading schools?
- What are the current experiences and how can they be bettered to achieve tangible results.
- Is there a case for revamping the role of education officers in districts, blocks etc., to become in charge of school development and improvement in school?

X.   Enabling Inclusive Education – education of Girls, SCs, STs, Minorities and children with special needs.

The issue of social access and equity are far too complex. While the gaps in average enrolments between disadvantaged groups like SC, ST, Muslims, girls and Children with special needs and the general population have decreased, there is still a considerably large gap in learning levels with historically disadvantaged and economically weaker children having significantly lower learning outcomes. Large and growing learning gaps threaten the equity gains achieved on the enrolment front because children with lower levels of learning are more likely to drop out. In order to increase the participation of girls and other special category children, specific interventions are being made. There is a need to examine current interventions in bridging the gender and social gaps and identify focused strategies for effective inclusion.

With the adoption of Right to Education and enormous expansion of the system, access to school education has become near universal. However, children from certain sections of the population remain unable to benefit fully from the education system despite several special measures.

Many girl children are not sent to schools and even those you complete primary levels are not sent to pursue their studies at the secondary levels and colleges.

- How do we ensure full participation of the marginalized groups in schooling, particularly for children belonging to SC, ST and minority groups?
- What measures should be taken to make our educational institutions truly inclusive facilitating the participation of differently abled children   with special needs?

- In your view to what extent has RTE helped to ensure participation of children, especially from disadvantaged families, in schools?
- Why do parents not send their girls to school?
- What measures should be adopted by the Government to bring girls to schools?
- How could we mobilise community support to bring all girl children to schools?
- By excluding minority establishment from RTE what are the pitfalls?
- Are there any traditional skill sets which need to be encouraged in tribal areas?
- What special skill sets and financial and legal literacy components can be imbibed in girl/ woman's education?
- How can Language challenges be identified and what solutions are possible?

XI. Promotion of Languages.

A multi-lingual society recognises the importance of education in languages. While there are some interventions for appointment of language teachers and promotion of classical languages, there is no comprehensive scheme or language policy and we need to have inputs on this dimension. India follows, in principle, a three language formula. Learning through mother tongue at least in the early stages of schooling is also advocated. There is also a general perception that children learning through English medium have advantage over others while entering the world of work.

The current status of Multi- lingual Education indicates that systematically planned programs are being implemented by States of Andhra Pradesh and Odisha, covering 8-10 tribal languages. Assam, Chhattisgarh, Bihar and Jharkhand have developed material for eg. dictionaries; reading cards for bridging children from home language to medium of instruction. States gradually expanding number of schools covered, adding new languages and also transitioning to bi-lingual or multi-lingual classrooms

Impact of Mother tongue based education has shown increased attendance and retention of tribal students , children are more engaged in the teaching and learning process, use of Lively, interactive using pictures and artifacts from tribal culture.

NCERT's Evaluation study found that Mother tongue based education had a positive impact on students' achievement in language and mathematics. Significant achievement found in the oral, written tests in language and Math by children in these schools when compared to non-intervention schools.

- Which are the languages you would you like your children to learn in the schools?
- What should be the place of English, Hindi and local languages in school education?

- Which language you would prefer to be the medium of instruction in schools?
- Should we encourage education in mother-tongue and multi-lingual education in schools? What are difficulties in implementing it?
- Should three language formula be debated?
- In a highly competitive world at which level and how can foreign languages be prescribed as an additional tool?

XII.   Comprehensive Education – Ethics, Physical Education, Arts & Crafts, Life Skills.

Education is concerned with all-round development of the child (physical, socio-emotional along with cognitive), all aspects need to be assessed rather than only academic achievement. As part of the Twelfth Plan initiatives, now there is a system-wide focus on holistic development of children by improving learning outcomes and other non-scholastic areas. Our students need to have a holistic development which cannot be achieved only through information and instruction. Physical education, games and sports should be made an integral part of the curriculum and daily routine in schools for the holistic development of children.

The Schedule to the RTE Act mandates that all schools shall be provided play material, games and sports equipment. Since many urban schools have inadequate facilities of sports on their own, other neighbourhood schools with such facilities in the public and private sectors and also municipal parks and public play fields should be opened up for children of such schools during school hours on nominal maintenance costs. Building on innovative approaches already undertaken , teachers must also be trained to lead quality and inclusive physical education sessions as part of both their pre-service and in-service training.

Visual and performing arts are a critical part of school education and also provide space for children with different abilities. Arts are a powerful tool in the teaching learning process. It enables children to express ideas, emotions and thoughts freely, to comprehend and build perspectives. Children experience joy, sense of freedom in the process of learning when they have the opportunity to explore, to imagine, visualise, observe through their senses, to participate and communicate. It enhances interest as children connect arts with all subjects and with their daily lives. Art also has a cognitive component; it makes us think, reflect, hypothesise, perceive, comprehend and create. Renowned art Institutions and Central academies can

contribute significantly to the inclusion of arts in the school curriculum and its implementation.

Knowledge needs sensitization to values, ethics, appreciating arts, physical education, sports and life skills.

- What are the suggestions for concrete methods and tools for integration of sports, physical education, arts and crafts, functional skills for livelihood and value education in school curriculum.
- What are the experiences so far and how can we build on these in a constructive way.
- How can we explore the way forward so that Ethical education can become mandatory?
- What is the Role of NCC in promoting comprehensive education?

XIII. Focus on Child Health

There is a need to improve access to child health services. The Ministry of Health is focusing on promoting child health through appropriate interventions.

Presently, the Department of School Education and Literacy, MHRD addresses the nutritional needs of school going children in the age group of 6-14 years are being taken care of by the Mid- Day Meal (MDM) Scheme. With a view to enhancing enrolment, retention and attendance and simultaneously improving nutritional levels among primary school children, the National Programme of Nutritional Support to Primary Education was launched in August 1995. During 2008-09, the Scheme was extended to cover children in upper primary classes and the Scheme was renamed as 'National Programme of Mid-Day Meal in Schools'. The programme aims at (i) improving the nutritional status of children in Classes I-VIII, (ii) encouraging poor children belonging to disadvantaged sections to attend schools more regularly and help them concentrate on classroom activities, and (iii) providing nutritional support to children at elementary stage of education in drought-affected areas during summer vacation. The National Programme of Mid-Day Meal in Schools is now covering all children studying in Classes I-VIII in Government, Government-aided and Local Body schools. Yet malnutrition, hunger and poor health remain core problems, which comprehensively affect attendance and performance in classes.

The principal public initiative for ECCE is the Integrated Child Development Services (ICDS) of M/o Women and Child Development which aims at responding to the challenge of providing pre-school education, on one hand, and breaking the vicious cycle of malnutrition, morbidity, reduced learning capacity and mortality, on the other. The ICDS seeks to improve the nutritional and health status of children in the age-group 0-5+ years; lay the foundation for proper psychological, physical and social development of the child; reduce the incidence of mortality, morbidity, malnutrition and school dropout; achieve effective co-ordination of policy and

implementation amongst the various departments to promote child development; and to enhance the capability of the mother to look after the normal health and nutritional needs of the child through proper nutrition and health education.

There is, however, a need to synergize the multi-sectoral interventions taken by the relevant GOI Ministries.

- What are the results of the schemes aimed at child health by the M/o Health, WCD & SEL?

- Are the existing schemes under the different well- coordinated and synergized for optimum and holistic outcomes? If not , how can this be resolved.

- What other steps can be taken to have greater focus on child health? Any State experiences that can be replicated and upscaled at the national level.

- How can individual child health be tracked in the SE system and real time information be available to State and Centre?