

CHAPTER – V

SUMMARY AND RECOMMENDATIONS

5.0 INTRODUCTION

The launching of RMSA in March, 2009 with the main aim of achieving quality secondary education along with universalizing secondary education puts quality in Government Schools in focus. Improving quality of education becomes more crucial in the context of increasingly important role of secondary education and in the background of a large number of young people joining the secondary school system and transitioning into the world of work and higher education. Quality secondary education is indispensable in creating a bright future for individuals and for nation building alike. Thus, strengthening the secondary and higher secondary stage by improving quality in a significant way, would enable young people to prepare themselves successfully for education and jobs in the competitive world.

In the recent years, we have seen that though the number of students enrolled in schools has been growing tremendously, exiting elementary school and transiting to secondary school, however, the quality of learning and the achievement of learning levels of these numbers is a concern. Despite the large numbers of educated youth graduating from the higher secondary schools and colleges in the employment market, industry and industry organizations have been maintaining that a majority of this youth is unemployable. The youth graduating from schools and colleges do not have the skills and are not job ready and thus companies and industry have to spend a considerable amount of time and resources to train this youth to make them ready for work. Some agencies, like ASER have been carrying out assessments every year on the achievement levels of children in school and the results have not been encouraging. The NAS conducted by the NCERT at Class V, Class VIII and now Class X levels also show results that depict a not so healthy situation in our schools' classrooms with regard to student learning levels. Therefore, it is crucial that the programmes the government is implementing to address the issues of schooling and

ensuring quality education in the public school system are implemented right and are targeting appropriate interventions in the correct manner at the right time.

In this context, RMSA programme is an opportune programme having all the ingredients for enabling appropriate interventions for both universalizing secondary education and also for ensuring quality. However, it depends largely on the states and how they are leveraging the resources and opportunities under the programme, how they are designing interventions to turn government schools into places where young people are prepared for a higher academic journey as well as made ready for the life of work and career.

The RMSA scheme is currently under evaluation by a third party for which the terms and conditions are specified and a speedy report would help in timely interventions to tweak provisions of the programme for course correction in the direction of the goals of the programme. However, even without the diagnosis of an evaluation, there are signs that the deliverables of the programme fall short. While there are evidences of a tremendous increase in enrolment in the secondary school, the quality of secondary education in the government school system is seemingly not all right. The recent Class X NAS reports published by the NCERT have shown that performance of government schools fall below the government aided and private schools. The NAS Survey also revealed that a majority of the States/UTs are performing below the overall average score in all subject areas, which indicates that there is need for significant improvement in learning levels.

RMSA's key objectives are: (a) To achieve near-universal enrolment in secondary education (Classes IX and X) with the Gross Enrolment Ratio (GER) exceeding 90 per cent by 2017; (b) To improve the quality of education imparted by making schools conform to prescribed norms; (c) To reduce gender, social and regional gaps in secondary education; (d) To achieve universal retention by 2020. It has been nine years since the RMSA was launched. Some of the objectives of the RMSA such as, to achieve a GER of 75 in classes IX and X by providing secondary school facilities seem to have been attained. The UDISE data shows an all India GER of 80.01 (UDISE 2015-16).

However, with regard to the other objective of improving the quality of education imparted at secondary level by making all secondary schools conform to prescribed norms, it is still a big question as to whether this goal is achievable with the current implementation strategies and whether it can be attained if the implementation strategies continue in the present way.

In Chapter IV, we see a study of contrast between the macro picture at the state level and the picture and situation at the school or micro level. Apart from the comparably lower pass percentages at both the Class X and Class XII levels, Haryana seems to be making better progress in secondary education than most states in the country from the interpretation of the macro level educational indicators. Thus when one assesses the RMSA implementation in the state, one tends to get influenced by these factors and easily led into believing that RMSA intervention in the state has been very effective.

The researcher had attempted to look for an answer to the research question - What has been the effect of RMSA quality interventions at the school level? How is it evident from an assessment of school infrastructure, school leadership, classroom transaction, teachers' professional development, student achievement and community support?

This study is a summary assessment in the 10 government schools in Gurugram in the context of quality interventions under RMSA as gleaned from documents and interview. Though no quantitative methods were used, the qualitative study gives an idea of how little or how much of the RMSA effect we see in these schools and whether there is any room for improvement in the way the implementation activities are carried out so as to actualize the objectives of these activities in the government schools. This study examined the extent to which RMSA quality interventions are felt and quality improvement resulting from them, if any, seen in the school level through a study of the 10 government schools in Gurugram, Haryana.

This Chapter presents a summary of the major findings and recommendations drawn from observations made during the visit to the 10 schools in Gurugram in the context of the RMSA framework.

5.1 SUMMARY OF THE MAJOR FINDINGS

This section presents the summary of the findings under the heads School Infrastructure and other Resources, School Leadership, Teachers' Professional Development and Teacher Training, Curriculum and Classroom transaction, Student Achievement and Community Involvement.

5.1.1 *School Infrastructure and other resources* - The overall picture in terms of provision of infrastructure facilities is quite a mixed one, with the difference between the urban and the rural schools quite stark. Though the basic facilities in terms of classroom, furniture, electricity and drinking water seem to be available in all schools, rural schools lack the infrastructure and teacher facilities that are available in urban schools. This is despite the UDISE data and the school report cards presenting a very good picture.

Rural-Urban Divide - A big urban-rural divide is very apparent in terms of infrastructure, teacher provisions and other resources. There is still a big infrastructure gap in the rural government schools. Provision of separate science labs and computer labs, which assumes significance for better conceptual understanding of secondary classes concepts are not available or not equipped and where available, the use of these resources are minimal. Most of these facilities like computers and internet, sports/playground and equipment are not available in the rural schools. While almost all schools have a Headmaster's room, the teachers do not have a staff room and thus mostly use the library or other classrooms to sit out during the break and tend to rush home the moment they finish their classes. The library facilities are being used mostly by teachers and students rarely get access to the books or the use of the library. Sports kits and Math and Science kits are not used by the students and despite the school having sufficient number of classrooms according to the school report card, incidences are seen where the classrooms are still held in the open.

Slow Pace of Construction and lopsided fund allocation - The progress of the construction of the civil works, with in the 2897 schools approved for strengthening is too slow, with approximately 31% of works sanctioned in 2010-11 still to be taken up and 47% of all the sanctioned works yet to be started. Despite the increasing allocation to secondary schools and RMSA, a study conducted by the Centre for Policy Research⁵⁷ shows that Haryana allocates less than 1% of core RMSA funds to infrastructure. Thus there needs to be a re-examination of the distribution of financial resources even within the programme.

Neglect of available assets and lack of maintenance -Inattention to the support infrastructure for computer labs and other labs, such as electricity, staff, software & hardware, etc, render these labs unusable and ineffective despite the physical existence Most of the computers in the computer labs are defective, with no clear policy for repairs and maintenance. Both hardware and software are outdated and need upgradation. The schools had also not received any recurring fund for the maintenance of the computers or IT Instructor.

While the urban schools are better provisioned, the state of maintenance of these facilities in the schools too is jeopardised by the lack of adequate financial powers and resources in the hands of the Principal. The policy is not clear for maintenance and repair of computer and lab equipment in all schools, urban and rural.

Faulty Teacher Deployment - Teachers posts remain vacant for a long time and students in the terminal class either take up tuitions, if they can afford it, or give a half-hearted attempt at the examinations. Though the number of teachers at secondary school level in Haryana is very much within the recommended PTR as per RMSA provision, the optimal deployment of teachers across all schools, rural and urban, needs urgent attention.

School Grant Discrepancy - The full amount of school grant is not received in the schools. In addition, the restrictive conditions for spending sometimes results in the fund not being used at all in the schools.

57 Budget Brief 2018-19: Rashtriya Madhyamik Shiksha Abhiyan (RMSA), Accountability Initiative, Centre for Policy Research, Feb 2018, <http://www.cprindia.org/research/reports/budget-brief-2018-19-rashtriya-madhyamik-shiksha-abhiyan-rmsa>

Data Discrepancy - There is a mismatch or discrepancy of the data reported and actual ground level with regard to infrastructure. This needs to be looked into to see whether it is a result of mis-interpretation or clerical errors.

5.1.2 School Leadership:

Lack of resources and discretion - It is important for the headmaster to understand the strength and weakness of the school and develop a vision for the school with strategy and plan to monitor curriculum, lesson plans, conduct competency based assessments, track and analyse learner's performance, attendance and retention rates. As a school leader, the headmaster has to instill motivation among teachers and staff towards punctuality and attendance and as an effective manager, the school leader has to ensure availability of resources in the school and ensure effective delegation. Principals lack the critical resources such as staff and teachers for routine and basic functions in the school. Principals do not have the discretion to hire substitute teachers to fill vacant posts temporarily nor the resources and authority for carrying out maintenance or upgradation of assets such as computers, etc.

Lack of innovation - Most of the Principals depend on extra-classes for improvement of the school student performance. The lack of teachers and on-site academic support makes it more difficult for the Principals of the rural schools in this endeavor. There is a need to build a more enabling environment in the administration and management system which gives more space and resources for the principals to use resources available with him/her more innovatively. The very restrictive conditions tied to the funds devolved to the school level often results in the funds not being used and returned in the same amount to the department .There needs to be more flexibility in utilizing funds at the school level, which would empower the School head and SMDC to use these funds more effectively in school improvement.

Limited role of Principal in RMSA - The Principal's role and involvement needs to be enlarged and more effective in the RMSA scheme. This could begin by involving the School Head and SMDC more closely in the planning process in order to ensure more effective and targeted utilization of resources and also in monitoring and follow-up. Actualizing the devolution of funds and discretion at the SMDC level would also

be in keeping with the RMSA provisions. This would increase the ownership of the Principals and the SMDC in the performance of the school.

5.1.3 Teacher's Professional Development:

Lack of sustained and continuous professional development of the teachers - The RMSA trainings at present does not figure in continuous in-service teacher education in but rather a separate individual response to the quality needs and to raise the capacity of the teachers as a one-time exercise. It is also seen that other than RMSA training, there is no other regular training, though from time to time opportunities come up for attending seminars and conferences. Designing the teacher trainings as part of a larger institutionalized teacher professional development programme, where by the RMSA resources can be used to address present issues to meet the objectives of the programme, would ensure sustained benefits from the programme.

Dependence on a single Teacher Training Institute - At present, the state RMSA Implementation Society depends entirely on the SCERT for teacher training activities under the programme, despite the existence of other training institutions in the State. Slow pace of developing teacher training modules add to the problem which has affected the pace of implementation of teachers' training programmes. Only 2/3rd of existing teachers have undergone the RMSA teachers' trainings after eight years of programme implementation. Though there is a dearth of teacher training institutions with the capacity to train secondary school teachers in the state .There is a need to rope in CTEs and IASEs to support teachers' professional development. This will not only expand existing teacher training capacity but also help develop sustained support to teachers' professional development. A close engagement between the Department, Teacher education institutions and in-service training will build a vibrant ecosystem of teacher education at both pre and in-service and will help effective training or quality and sustained and continuous professional development. Timely fund release will also help improve the pace of implementation.

Aligning Teacher training to needs - Teacher needs assessment is summary and mostly directed at subject knowledge gaps where-as other aspects of pedagogical skills are not addressed much. The focus for the training of the newly appointed teachers in the induction trainings is also enhancement of subject knowledge and not

to orient new teachers with the roles and responsibilities, the government school context, the curricular expectations, the profile of the students, etc. There is no assessment of students' needs in the present scheme of teacher training development. Guidance and counselling issues, use of ICT tools for various teaching related activities and training for inclusive education, including handling of children with disabilities, adolescent issues do not feature either in Induction or in the In service trainings. The disconnect between what is served at the present teachers' trainings and what is needed can be gauged by the fact that Very less of what the teachers learn and do in the teacher trainings is applied in the classroom. Though there is some evidence of new KSA (knowledge, skills and abilities) learnings but very limited transfer to class (use of Dictionary making as an exercise, development of lesson plans and its effective use in English class, ease of explanation in concepts-economics; use of models, charts and cut and paste methods and demonstrations of alternate solutions in Math). Teachers do not change their classroom practice or teaching methods after RMSA trainings.

Monitoring and Evaluation - Monitoring of RMSA training implementation at present is focussed on the numbers of teachers in the trainings, logistics, finance, etc. No evaluation or assessment of teacher trainings has been carried out. There is thus a need of critically evaluating the impact of the teachers' training interventions to diagnose the gaps and shortcomings in order to make it more effective.

At present, there is no evaluation of how much the teacher has gained from the training, there is no way of measuring how much of the training is applied or applicable in class. It would be helpful to also have an explicit frame of skills, techniques and capacities that are being given or shared in the training which would enable to measure teachers take away from the training and how much of it to be applied in the classrooms. This can also feed into the different skill sets the teachers need to develop, refresh and upgrade while planning their professional development.

5.1.4 Curriculum and Classroom Transaction:

Conflicting strategies - There is a problem with the current strategy of devising macro level prescription to the problem of ensuring timely coverage of the curriculum

with addressing learning gaps. The state governments' directive of having a uniform calendar for monthly assessment tests puts the pressure of completing the syllabus on the teacher without much room for making adjustment for the learning pace of individual schools, classrooms or students. Thus the teachers' priority at present is to finish the syllabus within time for the monthly tests. Another priority is to ensure majority of the students' pass the tests. The two priorities which, coupled with weak basics of the varied learning levels of students' entering class IX, present a major problem since it does not allow the teachers to adjust the teaching pace to ensure adequate learning for good examination performance. There is also no clarity when the remedial classes are to be held since this intervention is supposed to close the learning gaps of the students entering class IX.

Use of teaching-learning materials and tools - Other than blackboard and textbooks, no other Teaching-Learning resources are used in the classroom for curriculum transaction. Teachers do not use ICTs for teaching or for their own evaluation or monitoring work. Computer labs are used for Computer related subjects only and not integrated in the teaching of other subjects.

Traditional and uniform pedagogical practice - Classes are arranged with the desks and benches of the students facing the teachers' desk and blackboard at the front of the class teachers instructing from a fixed position at the front of the class still continues.

Lack of knowledge of assessment techniques -A number of teachers are not aware of the difference between formative forms of assessments and summative forms of assessments (though they routinely give homework and tests), nor of how to test higher order thinking skills. Most use a student's one-time ability or inability to read a paragraph, answer some questions or ability or inability to calculate or do certain math problems to determine a student's level. However, no different strategy of teaching-learning from the rest of the class is applied even after a student is determined to be slow or weak learner.

5.1.5. Student Achievement:

Single remedy of extra classes -While the state average pass percentages are comparatively lower when compared to the national average, the examination average pass percentages in the schools visited were even lower at below 40%, with the disaggregated data showing pass percentages of students in some schools to be below 15%. However, there has been no analysis at the school level of the reasons for the poor pass percentage, where-as the same remedy of extra classes is applied as a strategy to improve student achievement. Though a majority of students come from poor working backgrounds or farming backgrounds with not much academic environment at home, yet one glaring deficiency in these schools is also lack of subject specialist teachers, with substitutes from other subjects and other grades filling in at the behest of principals. An examination to find out the reasons for such low performance would help in deciding the appropriate response and remedy.

Minimum learning levels - Most teachers seem to lack the knowledge of what the minimum learning levels a student must attain in that subject for the grade. Most teachers also lack deeper engagement with the student and thus unaware of the potential and capacity of each student to learn in what pace.

Lack of career guidance and counselling - Some students have a sense of what they will pursue after school while some students are unsure and are resigned to take whatever comes their way. Though career guidance camps have been approved for girl students, it does not appear to have been implemented in the rural schools.

5.1.6 Community Support:

Limited role of the SMDCs - Though SMDCs have been formed in a majority of schools but some schools still do not have them. SMDCs, where-ever they are formed have a very limited role and function. Mostly very limited agenda of examination results, students' attendance and in some schools, civil works are presented in the SMDCs meetings .Meeting minutes are not maintained in all schools and some SMDC members are not aware of the minutes

Very few schools look at SMDCs as partners in school management and school improvement. There is a sense that the Schools and the implementers have not leveraged the SMDC resource much in the endeavour to improve school quality.

Training has not been held yet for the SMDCs in Gurugram.

5.2 IMPLICATIONS FOR POLICY AND IMPLEMENTATION STRATEGY

On School infrastructure and other resources - The slow pace of construction and completion of the civil works hamper the school development and affect the availability of facilities and thus the learning environment in the school. It is well known that the longer the delay, the more difficult it becomes to complete long pending works with the amount allocated due to inflation and other factors. In normal circumstances completion of civil works of a new school may take a longer period, (maybe two years or more from the date of release of first instalment payments to the agencies), however the construction of one or two additional rooms or labs should not take too long .

Shortage of subject teachers is a predictor of poor exam performance. Passing of the grade X board exam is determined by the composite score from all subjects a student takes. Thus, any student attending a school without a full complement of specialist teachers will be at a distinct disadvantage in the examination. Without a specialist teacher it is predictable that students would not meet their potential in this subject and therefore under achieve in the State board exam. This problem likely is to be one of the more significant reasons contributing to high levels of exam failure / under performance particularly of the most disadvantaged sections of the population who cannot afford tuitions. The lack of relevant subject teachers is a worrying problem, especially when the vacancies are not filled up quickly. In a school visited, there had been no Math and Chemistry teachers in place for as long as eight months. This is despite the adequate numbers of teachers at the State level. In many instances this may be further exacerbated by sub-optimal teacher deployment. Deployment of teachers is an activity that needs more attention.

On School Leadership - Effective School leadership is one of the critical factors for providing quality education in schools. The Head of the school is the prime mover of leading changes and initiating transformation in schools. Effective school leadership goes beyond administrative and managerial duties to include pro-active practices to transform school, which includes having a vision for the school and aligning planning to improve the performance of learners in the school. It also includes maintaining a harmonious relationship with all stakeholders while ensuring their participation in ownership of relevant activities as per their role.

Principals of government schools, are however, constrained by the lack of flexibility and financial resources. Despite being responsible and accountable for students' academic performance, they cannot even hire substitute teachers for post vacant for long at their own level but have to wait for them to be deployed from the department. Similarly, even for carrying out repairs and maintenance work for which approvals and funds come from the department. Though changing these policies is not within the ambit of RMSA, yet within RMSA planning, more participation and partnership of the Principals and the School Management needs to be ensured.

On Professional Development of teachers - Teacher is the most important component in school education and that it is necessary to continuously upgrade the quality of teachers through in-service education programmes. The teaching-learning indicator is an important determinant of learner attainment. The quality of teachers and teaching-learning processes in schools influence learning majorly at this stage since students have yet to reach the stage of self-learning. Effective teaching-learning results in appropriate teaching learning strategies and methods that would enhance learning and from the creation of an optimal learning environment. However, there needs to be an enabling environment for the teachers which does not recognize only subject or pedagogical knowledge and its application, but also teachers' understanding of learners and their skills of adjusting and adapting to different learners accordingly, teacher's ability to assess learners, their utilization of teaching-learning materials and other resources like laboratories, etc and their classroom management skills.

The duration of both Induction and the In-Service training is 10 days which may not be enough for all aspects to be covered. There is a need of a continuous

system of teachers' professional development for which more teacher training institutions such as CTEs and IASEs may be brought in to work along with the SCERT.

On Teaching and Curriculum transaction - With the tremendous pace of expansion in secondary enrolment and students come from diverse backgrounds , one question that comes up is how do teachers handle the learning needs of students from different backgrounds. The subject knowledge approach adopted in the RMSA training may not be enough to help teachers assist the students to understand and learn the lessons as per the curriculum to an extent where they achieve the minimum levels of learning levels expected from them in a given curricular time and frame. How prepared are the teachers to change their teaching methods according to the curricular needs of the students in the context of their background, profile and earlier learning levels? Are they equipped and willing to adapt and change their class room practices and teaching-learning methods accordingly especially in the pressure to finish teaching the syllabus within the timelines set? The extent that the teacher training inputs under RMSA help improve student learning and consequently student's achievement is negligible since very less of what the teachers learn and do in the teacher trainings is applied in the classroom. The needs assessment before the trainings and the follow up is extremely limited.

Assessment of students' learning is also an integral aspect of teaching-learning and an important indicator of students' learning attainment. The findings of the NAS X suggest immediate remedial action linking teachers' ability to match their teaching to the actual learning levels of their students. The teacher's understanding of the specific context of the learners and their learning needs is vital for the learning process.

Teachers' understanding of their students, their learning levels, their socio-economic and cultural backgrounds and their learning needs help them reflect on their teaching learning methods and resources and accordingly adjust classroom methods and practices according to the need of the class and the students. Ability to understand the class gives the teacher flexibility to manage a class in a way that students are more engaged in the learning rather than being passive learners.

On Student achievement - A holistic development of the learner is the primary objective of a good education. Apart from scholastic, a school should also encourage students to participate in all curricular areas and promote their personal and social well-being. Thus, a student's regular attendance in schools, his/her participation and engagement in all activities in the school, his/her progress against scholastic and non-scholastic activities, his /her personal and social development and the student's attainment in curricular areas – all these areas should be monitored and evaluated for holistic student development and achievement. However, as seen from the field study, at present, evaluating student achievement and efforts to improve student achievement is concentrated on improving examination results.

Low student achievement largely is an outcome of the lack of conceptual clarity and understanding in the subjects/themes tested. A further probing is required to identify the content area and skills requiring attention and to develop appropriate strategies to enable students to understand the concepts. Accordingly, teachers training (pre-service and in-service) programmes might be designed on the basis of NAS findings to improve pedagogical aspects in relation to different subjects.⁵⁸

On Community Involvement - An active participation of the community and an active engagement of the school with the community ensure optimal resources for the school development holistic development of the learners and better management of the school. The SMDC can play a major role in resource mobilization and monitoring as also in enrolment, retention, regular attendance of students and learning outcomes. It was observed that this aspect of intervention has not really taken off in the way that it was intended under the scheme. Though SMDC meetings do take place under the leadership of the principal, yet there is very little evidence of any contribution from this to overall functioning of the school. Parents Teachers meetings take place mostly as a platform for communicating to the parents about the child's academic performance or attendance and other discipline issues. It was observed that none of the schools visited have thought of PTA or SMDC as a resource to be leveraged for improving quality and school performance.

⁵⁸ *What students know and can do : A summary of National Achievement Survey*, NAS X, 2015; Educational Survey Division, NCERT, <http://www.ncert.nic.in/departments/nie/esd/pdf/NASSummary.pdf>

5.3 RECOMMENDATIONS

The findings from the study of implementation RMSA quality interventions, though on the whole present a picture that the state has put in a tremendous amount of effort to achieve the objectives of the programme, and to some extent has been able to bring in a positive change which is reflected in the indicators at the macro level. Attention, however, needs to be given to the strategies for ensuring that quality in at the school level. Some of the actions that need to be taken are discussed below:

- Completion of the construction civil works quickly and ensuring all schools have the full complement of required infrastructure as per the RMSA provisions needs urgent attention.
- The maintenance and repair of school buildings and school assets is also very important and it would perhaps bode well to give the Principals, teachers and SMDCs more ownership in taking care of these. AMC and repair for computers and other equipment may perhaps be better handled at the school level rather than at the Department level.
- The rural-urban divide with regard to school infrastructure and other resources need correction urgently. It is not very rare nowadays to find families shifting to urban areas or students staying on rent in the town area just so they can attend a better school than the less provisioned one in the village.
- Haryana may perhaps look at teacher deployment in a way to correct the imbalance and ensure subject teachers are available immediately to fill the vacant posts or perhaps give enough flexibility to the principals to hire substitute teachers till the time a regular teacher is posted.
- Most principals depend on extra classes for improving students' examination performance. It will be fruitful to evolve other strategies including community and other support to improve student learning and performance.
- The integration of lab use and science and maths kits procured in the teaching of maths and science may be immediately actualized for all students rather than just for science and math clubs.
- The use of good quality audio-visual content available free of cost (eg, Amrita Vishwa Vidyapeeth, etc.) in ICT labs in science and other subject teaching may be given a push.

- An analysis of the distribution of specialist subject teachers across schools can bring better convergence of policy and practice.
- Integration and streamlining of data in the teacher HRMIS, including data on teachers trained can improve information on subject wise teacher distribution leading to quicker and evidence based decisions.
- Advance planning of teacher training activities so that they can be carried out in the first quarter of the Financial Year and smooth release of fund from RMSA for training will help in achieving the target numbers for the year.
- Improving the process of the selection, preparation, performance and retention of the KRPs and master trainers needs to be given high priority.
- The CTEs and IASEs should be involved to support their professional development. A close engagement between teacher education institutions and in-service training providers will ensure effective delivery for quality professional development.
- The feed-back from trainees and the class room observations on them should be used also to assess the quality of work of Master Trainers s and Key Resource Persons
- Training should be needs based; this needs assessment needs to look at a range of data including disaggregated performance on examinations and learning assessments but also observations of classroom practice and curriculum revision
- The findings of the NAS X suggest immediate remedial action linking teachers' ability to match their teaching to the actual learning levels of their students. The teacher's understanding of the specific context of the learners and their learning needs is vital for the learning process.
- Establishment of the threshold levels of learning by students will also be relevant for purposes of training of teachers. The NAS X defined learning levels may help in developing a learning framework of indicators for various grades and subjects which would help the teachers in student's assessments greatly and also to adjust to the students' learning needs.
- A more comprehensive system of assessment of teachers' needs as well as the students' needs that would bring out the existing gaps and accordingly inform

teacher training content development and design would go a long way to address the quality issue in schools.

- A continuous on site school academic support model, requiring regular academic support and visits to schools maybe explored on the lines of the Kerala model and the Madhya Pradesh model which are having a leave reserve of teachers handling research, development and training posted at the SCERT, DIET or the Teachers' resource centre, who handle on site academic support as well as fill in temporarily in event of teachers' short duration vacancy.
- The use of Learning Management Platforms and systems with appropriate training packages would also help mitigate the problem of catering to many numbers at the same time.
- A Teacher Forum, on the lines of the Karnataka Online Teachers Forum, which uses an online platform for Teacher meetings and sharing of best practices, resources and also as a place to look for solutions to problems and hard spots faced by the teachers. A Knowledge Management System or Learning Management System to promote and support teacher professional development and teacher mentorship programmes through RMSA for a greater professional peer interaction and mentoring amongst teachers will generate dynamic learning communities and support School Leadership programmes, School Exchange/Partnership programmes, etc.
- Finally, a study to evaluate the impact of teacher training programmes on teachers' knowledge, skills and dispositions and classroom processes would be fruitful in the long run.

5.4 CONCLUSION

The school education system in India is witnessing speedy expansion coupled with increasing diversity of student population. The complexity of diversified context (rural, urban and tribal), composition of schools (large and small) and conditions (provisioning) are major challenges to achieve equitable quality education for all children in India. The critical role of schools in the changing education context in terms of its effectiveness and improvement is gaining key importance for providing quality education for all children. There is a greater realization that in view of the

huge investments in terms of human and other resources in school education sector, the school needs to perform and deliver at its optimum level. The quality initiatives in school education sector, thus, necessitate focusing on the school, its performance and improvement.

The success of the Rashtriya Madhyamik Shiksha Mission also depends on the availability of necessary infrastructure, facilities and more effective teachers' training and more co-ordination and resource sharing. Greater use of learning outcome assessments (TET, ASER, NAS etc) should be considered to inform appropriate remediation in teacher training programmes, instructional materials etc, in-service teacher training arrangements and strategies, nature of on-site academic support structures, availability of required number of teachers and classrooms, progress in teacher recruitment production and distribution of free textbooks, release and utilization of school grant. Teacher recruitment and management including teacher training and professional development of teachers/ headmasters- state level policy for teacher recruitment and management (teacher eligibility requirements, recruitment process, deployment, promotion, transfer, pay scales and grades, retirement), continuing teacher training, availability of subject teachers, grievance redressal mechanisms for teachers. All the above need to be looked into for a holistic intervention, though some of these are beyond the RMSA remit.

If India is to ramp up the quality of secondary education, its teachers will need to be trained to teach for the 21st century. Teaching methods will need to be upgraded and embedded within the system, and multimedia aids to learning be used to supplement classroom instruction. Board examinations and school assessments will need to move in tandem and assess students on their problem-solving skills, going far beyond today's emphasis on testing their knowledge of the curriculum. All schools will need to be staffed with an adequate number of teachers. Today, less than one in five secondary schools have teachers who can teach the core subjects of languages, mathematics, science and social science. Building a nation's human resources takes time, because unlike infrastructure which can come up quickly, human development calls for a lifetime of investments in health, nutrition and education. There is no time to lose as an educated, skilled, and talented population can be a country's strongest asset in a rapidly changing world.