RAKSHAK FOUNDATION

Roadmap for Effective Implementation of Model schools in Uttar Pradesh

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Preface

Rakshak Foundation is a non-profit organisation that was founded in 2005 and is headquartered in California,USA. The purpose of the organisation is to create an aware citizenry and involve the youth in brain storming on pertinent public policy issues. The lecture series arranged during the internship add value in a way no other source can provide. The internship is intensive in interaction with stalwarts from the government and civil society. This interaction helps interns develop a better insight into policy formulation and all the various issues encountered with effective governance. Rakshak Foundation has been submitting well researched opinions on various bills being considered for presentation to the Indian Parliament. The Foundation has also been invited by the Parliamentary Committees of the Rajya Sabha three times in the past two years to depose before them and present their views on proposed Bills.

One of the major advantages of the nature of this internship is that each of the interns gets to work directly under an IAS/ IPS officer or other distinguished personalities from academia. Hence, any feasible suggestion made by interns comes directly under the notice of persons capable of effecting change. It is this very fact that acts to drive interns' research and motivates them to present substantive work.

The intern is a first year Master's student at the Delhi School of Economics whose area of specialization is Economics. She has a keen interest in the area of development Economics and her project topic pertains to Education in Uttar Pradesh. The project concerns policy decisions in the pipeline and any take-away from this report would be directly implementable.

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Executive Summary

The Ministry of Human Resource and Development came up with a scheme to set up 6000 model schools in the country with 3500 schools to be set up in educationally backward areas and 2500 schools to be set up in non- educationally backward areas under the Public-Private Partnership mode. These schools are supposed to be a benchmark of excellence for other schools to emulate and follow. The aim of this project is to chalk out a roadmap for the effective implementation of the same in Uttar Pradesh. The central government has currently sanctioned 193 schools in educationally backward areas in Uttar Pradesh.

The educationally backward blocks are currently defined on the basis of twin criteria of female literacy rate and difference between male and female literacy rates. This definition is to target areas where females are disadvantaged, while this meets the intention of directing policy to reduce gender disparity, the criteria can be made more holistic to target areas in most need of better educational infrastructure. This could be by including average income of the area into consideration or by gauging quality of existing infrastructure by assessing learning outcomes of primary schooling in the area of question.

This paper attempts to understand the suitable medium of instruction and board of education to be instituted in the model schools. Given that these schools intend to carry out innovative pedagogy and try out a new curriculum they should try to bring in the CBSE board which has better recognition nationally as well as globally. Moreover the CBSE board is said to be easier than the UP board although, such a judgment is subjective rather than objective. More so, national competitive exams are usually carried out by the CBSE board and other exams such as the IIT-JEE are also based on the CBSE board. Hence, on these grounds it makes sense to introduce the CBSE board instead of the UP state board. Also the medium of instruction should be Hindi and English, there could be one section with English medium of instruction and one class with Hindi medium of instruction. A more in depth discussion has been covered in the relevant sections in the project.

Further, increasing usage of IT to disseminate information and manage administration is crucial to the modernization of school management. Regular documentation of results and all school activities and any other statistic of interest should be done in a timely and sophisticated manner. This makes framing better policies easier while also simplifying the process of measuring any progress made by schools.

There are important and pertinent challenges that might be faced in the implementation process particularly in terms of ensuring appropriate targeting to needy but deserving students, phasing in an education in English Language in the

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educationally backward blocks, recruiting well qualified and trained teachers and ensuring their retention and commitment in the schools etc. These along with a couple of other challenges have been elaborated upon since understanding what roadblocks may be faced is crucial to any efficient planning process. Further, an important issue that remains to be addressed is the low enrolment of girls into secondary schools. It is first imperative to understand the causes before an appropriate policy can be designed to tackle the problem. Towards that end the causes that are listed are gender role stereotypes, onset of menstruation and adolescence, early marriage, distance from schools, low benefit associating with schooling and socio economic backgrounds. Once it is identified what exactly is acting as the deterrent specific measures can be taken to eliminate the same.

Finally, the report goes on to make specific recommendations to address the various concerns and issues raised, towards ensuring the effective implementation and set up of Model Schools in Uttar Pradesh. These recommendations broadly include rethinking the identification strategy for educationally backward blocks, creation of an online blog for Uttar Pradesh Model schools, better information management at a disaggregated level, research informed policy making, increasing parental involvement in child's learning process, recruitment policy for teachers among a couple of others.

This report concludes on a note acknowledging the ex-ante nature of the analysis carried out and reiterating the need to take regular stock of progress in actual outcomes observed on ground.

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1. Introduction

1.1 Background Information

The topic of the project primarily pertains to the model schools to be set up in Uttar Pradesh, the planning for which is still in the pipeline. In 2007, the Prime Minister Dr. Manmohan Singh announced plans to set up 6000 model schools in the country, 3500 of which are to be set up in educationally backward areas in the country and the remaining 2500 schools are to be set up in other areas under the Public-Private Partnership mode. The objective is to set up one school in every block as a benchmark of excellence. Secondary education was not a thrust area during the Tenth Plan period. While there were a few small schemes in place that focused on quality, the scope and coverage was neither large nor comprehensive. The CABE Committee report on universalization of secondary education projects achievement of universal enrolment by 2015 and by 2020 the target should be universal enrolment, full retention and mastery learning by atleast 60% of the learners.

The main idea behind the model schools is to have a pace setting role by constructing these schools on the lines of the Kendriya Vidyalayas which are nationally recognized for their quality standards. The Indian government is very close to attaining its goal of universal elementary education with enrollment into primary schools being close to 96% (ASER report 2013). Hence, it's about time to shift focus to increasing access to quality secondary education. A sound high school education guarantees a better quality of life and increases a person's employability to a large extent. As was noted in the Central Advisory Board of Education Report – "Elementary education of eight years is no more adequate – it neither equips a child with the necessary knowledge and skills to face the world of work nor does it empower her to deal with the challenges of a globalizing economy. What career avenues – professional or otherwise – are open to a child after merely 8 years of elementary education? The eligibility criteria of even low level certificate or diploma courses (para-medical, technical, or teacher education) all require a minimum of Class XII certificate."

Essentially the mandate of primary schools involves teaching fundamental skills such as literacy and numeracy in a way that prepares their students for the more demanding curriculum offered by secondary schools. These schools prepare the students less for immediate employment. In contrast, mandate of secondary and post-secondary education is to provide students the skills that they will need to become productive workers. By not creating conditions or enabling a child to complete a minimum of 12 years of education, the children are denied opportunities for any career options or meaningful links with the contemporary 'world of work'. With this background in place the responsibility of ensuring effective implementation of model schools in the country is immense as they can potentially guarantee an opportunity to a wholesome education to as many as 36 lakh students (assuming that each school admits 600 children). It is essential that learning emerges from the child's social ethos and her productive experience, and at the same time ensures that the child will have access to global knowledge.

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What should be the guiding principles to a sound policy on education that involves universalization and equal access? –

- Ensuring access to underprivileged and backward sections of the society. The model school scheme intends to meet this principle by setting up 3500 of the total number of schools in educationally backward areas. These areas are identified on the twin basis of female literacy rates in the block and difference in the gender gap in literacy. Areas where both of these indicators fall below the national average are identified as educationally backward. By setting up quality schools in these areas the intention is to target areas in dire need of education infrastructure so that impediments to attainment of education in the form of distance and travel can be overcome. This especially holds true for girl students where typically the social norms in place suggest that value associated to educating the girl child is lesser than that associated with a boy child. Hence, in poorer households the girl child is sent to government schools where as the boy child is sent to better quality private schools. Such systems in place can be challenged by providing the chance to educate children in high standard quality model schools charging affordable fees.
- Equality and social justice – Other than ensuring access to secondary education there is a need to reinforce the importance of gender and social equality through the curriculum and pedagogy. One of the objectives of the Model schools is to try out innovative and new curriculum so an important part of this must be to instill social values of equality and justice in all levels of education. It is during these formative years that children inculcate values and it indeed must be one the prime prerogatives of schooling and education to facilitate the process.
- Improve learning outcomes on ground – This principle can be met by upgrading school infrastructure and improving teacher attendance and teaching quality. Towards this end it is important to have regular assessments of learning outcomes and ensuring that they are in line with international standards and there should be goals set out that school management and teachers must try to meet at the end of every academic term outside of simple completion of prescribed syllabus.
- Relevance and Development – the CABE committee report discusses the importance and relevance of education and the role it plays in development on the lines of : (a) building up citizenship for a country that is striving to become a democratic, egalitarian and secular society; (b) interdisciplinary approach to knowledge, concept formation (not just piling up information) and its application in daily life and attributes such as critical thought and creativity; (c) evolving values in a plural society that is, at the same time, stratified and hierarchical; (d) generic competencies that cut across various domains of knowledge as well as skills; and (e) skill formation in the context of rapidly changing technology which

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demands formation of multiple skills, transfer of learning and ability to continue to unlearn and learn. A substantial proportion of parents send their children to schools with the expectation that education will enable their children to face the 'world of work' with confidence and carve out a meaningfullivelihood.[1]

- **Current extent of the problem**:

The state of educational outcomes in Uttar Pradesh on various parameters is as follows:

Educational Outcome Indicator	**Figure based on DISE 2012-13**
No. of schools imparting secondary education in UP	21591
GER at secondary level	55.97
Percentage of professionally qualified teachers	68.94
Ratio of girls to boys pursuing secondary education	0.86
Avg pupil to teacher ratio	54(secondary),71(higher secondary)
Percentage of schools with computer facilities	26.73
Percentage of girl enrolment in secondary schools	46.89
Number of institutions imparting teacher training	DIETs(73), CTEs(3), IASEs(3), SCERT(1)
Total number of teachers imparting secondary education in UP	261392

source : DISE data for 2012-13

A brief perusal of the table given above will serve to shed light on the extent of the problem with secondary education especially in the state of Uttar Pradesh. While there has been improvement with the years, the pace of this improvement has not been satisfactory. Enrolment of girls into secondary schools is quite low given that that the enrolment into primary schools is becoming close to universal. This implies that the dropout rates for girls after primary schooling is unusually high and this is an important challenge that must be addressed. Moreover, the statistics for school infrastructure remain quite unimpressive given that such few schools have computer facilities and the pupil to teacher ratio is much higher than what it should be to ensure adequate teacher attention for any student in class. Overall, a GER of close to 55 percent is much lower than the envisioned targets that should

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have been achieved by this time period. These indicators only highlight the need to ramp up education reforms in the state and allocate funds in the right direction on policies that address key pertinent issues and incentivize secondary schooling. The question for parents that must be addressed is not just the how to educate but it is also the why to educate. Clearly, as the table shows the numbers of schools are plenty but what they have to offer beyond just the boundary walls marking a building as a school is the crucial problem here.

1.2 Basic Format of the Model Schools

The total outlay on model schools across the country is set at 12,750 crores out of which the state share is 9,935 crores. Outlay for the year 2013-14 was proposed at Rs 1000 crores. The Rashtriya Madhyamik Shiksha Yojana will focus on education of students from class VI to XII while the 'model School', as it has been termed will focus on holistic education and set a benchmark of excellence for other schools to follow.

In essence the Model Schools are to be based on the format of the Kendriya Vidyalayas, which are central government schools operating under the aegis of the Ministry of Human Resource Development. These schools admit children of central government employees and army officers and follow a common curriculum. There are currently 1093 in number and each school follows the CBSE curriculum.

Following are the norms given by the CABE (Central Advisory Board of Education) for a sample secondary school in terms of infrastructure and logistics:

- **Land -** 2 to 4 acres
- **Constructed area** not more than 50% of the land area
- **Teachers -** One for every 30 students to be steadily moved to 1:20; at least one for every subject area; qualified teachers for sports, games and physical education , music and art.
- **Facilities**
    - One classroom for every 30 students
    - One integrated Junior Science Lab for students from classes 6th to 8th
    - One Science lab each for physics, chemistry,
    - biology, English Language, Geography,
    - Mathematics for 9th to 12th grades
    - Disabled friendly facilities like ramp, special toilets
    - Braille and sign language-related equipment/computer software
    - SIT to receive EDUSAT programs
    - OHPs, LCD projector
    - Musical instruments, Gym equipment, sports and games material
    - Junior computer lab with 30 computers for 6th to 8th graders with internet connectivity
    - Senior Computer lab. with 30 computers for 9th to 12th graders with internet connectivity

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

While this may sound like an ambitious target these facilities are already in place in many of the Kendriya Vidyalayas and in numerous other private schools. Given that this standard has been achieved in other contemporary institutions there is no reason why the Model Schools must not try to accomplish the same level of quality grade.

As per the guidelines set by the Ministry of Human Resource of Development the funding pattern was a sharing basis of 75-25 till the 11th Five Year Plan and the sharing pattern is supposed to be 50-50 for the 12th Five Year Plan. However the model schools are still operating on 75-25 sharing basis.
The estimated cost per school is set at 3.02 for non- recurring expenses and 0.75 crore as recurring expense. This is for each school with classes from VI-XII with two sections each.

The management of the schools is to be done by State Government Societies similar to the KVS.

The medium of instruction and board of education is to be decided by state governments.

- **Educationally Backward Blocks**

In the current scheme educationally backward blocks are identified on the basis of the following two conditions holding simultaneously:

- Female literacy rate lower than national average of 46.13 %
- Gender gap in literacy being above the national average of 21.59 %

With the emphasis on female literacy rather than over all literacy as criterion for identifying educationally backward blocks the government is essentially trying to

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target areas with low education levels of women. This serves the purpose of addressing the issue of equality given the barriers women face to accessing education. It, hence, becomes imperative to make calculated policy decisions to facilitate access to quality education for girls. Model schools also make provision of hostels for girls' accommodation. One of the prime deterrents for girls from attending schools is the distance from homes and the opportunity cost of time they face. By giving these girls a chance to study at quality schools located close enough to their homes parents might in fact attach a higher return to educating their daughters, as part of the cost borne due to travelling distances is cut down. As more and more parents believe the future return to education is greater than the current cost of sending their child to school in terms of actual costs as well as opportunity cost of time, a higher female enrolment could be observed in the modelschools.

What remains open to scrutiny is if the targeting of the educationally backward areas is holistic. There is a case to believe that gender gap in an area may persist because of low female literacy rates and if that is indeed the case then including the two as separate criterion may be redundant in the identification strategy. An econometric study can be carried out to understand the relationship between female literacy rates and gender gap in literacy and if a significant relationship can be established then it makes sense to drop gender gap as a criterion along with female literacy. Gender gap and female literacy rates may be determined by the same set of factors in which case they will vary also together. Instead, targeting can be broadened by including average income levels or some other proxy for block infrastructure and using this methodology to identify target areas most in need of better school infrastructure. In the Indian context the challenge to education is multi-pronged. It is not just the number of schools but the quality of existing schools that is in shambles therefore for identifying areas in dire need of good schools the existing infrastructure needs to be taken into account. Another factor that can be looked into for identifying educationally backward blocks is to take stock of quality of learning at primary levels. This can assessed using the methodology described in the ASER (Annual Status of Education Report) report of 2013 of detecting math and language skills. ASER is an annual household survey to assess children's schooling status and basic learning levels in reading and arithmetic conducted by Pratham, which happen to be the largest NGO in the country working in the field of education. A study of learning outcomes in a place along with existing female literacy rates can be yet another way of identifying educationally backward blocks. This way we can quantify the gap in achieving good education outcomes on grounds of number of people attending schools along with the quality of learning in the existing schools. It may be that certain blocks boast of higher literacy rates but quality delivered is inadequate and does nothing to increase the employability of the child in question then such a block is just as needy of government attention as a block with low literacy levels to begin with.

The Ministry of Human Resource Development has currently identified 3479 blocks as educationally backward in the country on the basis of the criteria published by the ministry.

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1.3 Model Schools in Uttar Pradesh

Currently 193 schools have been approved in 193 of the 680 identified educationally backward blocks. And the total disbursement of non-recurring funds from the center to state government is 392.38 crores from 2010 to 2013. In 159 of the 193 blocks the construction is currently under way. Uttar Pradesh has the second highest number of educationally backward blocks after Andhra Pradesh in the country. This highlights the importance of effectively managing the schools in the state given the grim scenario of development indicators.

The total numbers of secondary schools in Uttar Pradesh by type of management are as follows:

School Type	Number of schools
Government	1611
Sambadh Primary	549
Private Aided	4077
Private Unaided	15,770

(source – www.uprmsa.com)

The questions that remain to be answered are medium of instruction and choice of board of education. The state of Andhra Pradesh has opened 326 schools that will be admitting students this year. They have chosen to go for Andhra Pradesh State board after initially zeroing on the CBSE curriculum. This change was decided after the state board guaranteed to upgrade the syllabus to match the CBSE standards so that there would be no compromise on competitiveness.

Typically in Uttar Pradesh there is an inherent preference for the State board of education and Hindi medium of instruction it is this norm that needs to be changed and allow other possibilities to be explored.

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1.4 Objective of the Model Schools

To create confident, competent and committed citizens out of the students who are ready to deliver and operate in the harsh job market circumstances that this country presents.

The emphasis of the model schools will essentially be on four P's, those are:

1. **Plant** – this basically refers to the infrastructure and physical amenities that will be provided for the benefit of the students. Good sturdy school structures with disaster resistant buildings are one the most important parts of setting up schools. There is already a list of facilities that these schools will strive to provide and funds have been earmarked for the same.
2. **People** – These involve all the various stakeholders that would be affected those being the students, teachers, the principal, school admin and parents. On the job training and recruitment of the most talented professionals will ultimately determine how well these schools are run. At the end of the day, buildings cannot by themselves contribute to the growth and development of students; it is essentially the teachers who are the ultimate driving force. Hence, second area of focus of the schools is going to be on people
3. **Process** – This refers to the entire process of educating the child. These schools will set an example in how to most effectively govern and run schools. There will be a special emphasis on the teaching of mathematics, science and English as these are mandatory subjects that need attention for jobs and skill development. Focus will be on concept formation and developing analytical skills.
4. **Product** – finally the product is the quality of education and learning attained by the students at the end of the schooling period. The idea of education is to make students employable and train them to avail further education in the best institutes of higher learning.

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1.5 Comparison of the CBSE and the UP BOARD of Education

Central Board of Secondary Education (CBSE) is an Autonomous Organization under the Union Ministry of Human Resource Development, Government of India. It is one of the best and most recognized boards of school education in India. It seeks to provide a uniform curriculum across the country and alongside focuses on developing key analytical, reasoning and logical skills via the grueling syllabus it designs. In order to keep pace with the technological advancements, CBSE has launched an online educational system to sort out students difficulties. CBSE online provides study material for students. It is a powerful resource offering a stress free learning environment. It provides conceptual learning supported by multimedia resources such as audio, visuals and animation. These are also supported with relevant power point presentations, graphics and illustrations that are easy to understand, grasp, and remember. The CBSE has already introduced an international syllabus to give it a global appeal.

The CBSE curriculum is routinely updated to ensure relevance with current global scenario and present challenges. Most competitive exams for entry into the top professional colleges in the country are based on the CBSE curriculum. Hence more often than not CBSE background students are seen to have an advantage in cracking these examinations as compared to the state board students. The other advantages of the CBSE board education are that:

- The approach is more scientific in its nature and is focused. The entire syllabus is broken into smaller units.
- The CBSE board has an easier curriculum for English, Social Sciences and Sciences and is based on objective knowledge and faster learning.
- The CBSE curriculum includes physical extracurricular activities like indoor and outdoor games and sports that have a wide network both in the state level and in the national level.
- CBSE with the introduction of its new concept of Grading System has really helped the children who are not able to get qualifying marks in the Board Examination.
- Language of Instruction for CBSE curriculum is available both in English as well as Hindi.

Speaking of the UP board, it is known as the Uttar Pradesh Madhyamik Shikhsha Parishad it is headquartered at Allahabad and governs more than 20,000 schools in UP. The Board is holding the examinations and currently preparing the results of nearly 7 million students. It is the largest examining body in the country.

The general consensus is that the Uttar Pradesh Board is the toughest in the country with the hardest syllabus to cope with. However the curriculum is designed to be more relevant to the state scenario and local events and circumstances. The advantage would be in terms of finding teachers who are well

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familiar with the UP board since it is the most prevalent board in Uttar Pradesh However the CBSE board has better recognition even internationally for admission into world class institutions. Hence while deciding between these two boards all the pros and cons with the caveats need to be well considered.

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2. Methodology

2.1 Literature Search

The literature search basically involved starting with the study of the existing government plan in place for setting up of the model schools and a review of the funds allocated and disbursed for the same from the central government to various states. This helped me develop an overall sense of purpose and motive of the model schools and the expectation of outcomes from the same. Then I moved on to do a secondary research on the format of the Kendriya Vidyalayas by studying the website of the Kendriya Vidyalaya Sangathan to get an idea of the cost of education per child, fee structure in place, achievements of the group of schools and infrastructure.

Then, I read the Central Advisory Board on Education Report on Universalization of secondary education in the country to understand the way forward for the government to take given the set of objectives it has chalked out for itself. The idea of Model Schools is largely based on the recommendations of the report and the study of the report was crucial for building insight for writing this project report.

Further two crucial outcomes that were expected from the report were suggestions for the board of education in the schools as well as medium of instruction. Towards that end, I read papers by foreign authors that spoke of the factors to look into while deciding on the medium of instruction to be instituted in schools. As far as board of education goes I read newspaper reports and articles off the internet where people have posted their personal views on the matter. This helped me gauge the general perception of the level of difficulty that students and parents associate with different boards of education. This is more of a subjective matter than an objective one therefore people's perceptions rather than a black and white analysis is warranted.

2.2 Field Visits

Due to physical and time constraints it was not possible to take up field visits in Uttar Pradesh, nonetheless I visited Kendriya Vidyalaya schools in Delhi itself to get an idea of the existing state of quality and the various facilities that the schools provide to the children and if there were other possible additions that could be made for further appeasement of students and faculty. During these school visits I interacted with students to understand if they faced any problems and in particular asked them questions regarding the medium of instruction they would be comfortable in. While, this analysis cannot be extrapolated to Uttar Pradesh without incorporating the obvious differences in the social and economic settings, these interactions still gave a rough idea of how students might feel and was helpful in gauging relevant facts pertinent to the project such as their overall comfort with English medium, the existing quality of teaching and teacher attendance, take on

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CBSE syllabus etc.

The principal was hesitant to speak with the intern until a permission letter from the KV headquarters was produced. However, intern went on to speak with students anyway. About 20 students in each school were interviewed during their school break. As far as understanding possible improvements in the provisions of school facilities was concerned students were happy with the existing provisions those being - school library, playground, science laboratories, classrooms etc. The complaints were regarding toilet facilities. This is an area of improvement that should be actively looked into. Ensuring cleanliness and hygiene in the toilets becomes an important indicator of quality. However, an important caveat to consider is that the KV at JNU is one of the better Kendriya Vidyalayas and quality is definitely not uniform across all KV schools. So while students at one KV may be content with school provisions other schools may not have such a sound report card to boast of. As far as medium of instruction was concerned, students had a general consensus that English medium should be maintained as it helps give them the much needed competitive edge in this day and age. Most students said they did not have a problem coping with English with odd exceptions of one or two. The ones who did say they would have understood their subjects better had they been taught in Hindi admitted that in spite of this fact an education in English is important as it is better valued on grounds of employability. However, again a general argument cannot be drawn for Uttar Pradesh since these students at KVs typically have more solid foundations in English language that are developed at the primary education stage itself therefore a majority of these students already have the necessary base. This will not be the case in the educationally backward blocks of Uttar Pradesh where quality of primary education itself is in shambles. Phasing in an education solely in English will be a much more daunting task in such an environment.

The students were not in a position to comment on curriculum as they were never exposed to any curriculum other than that prescribed by CBSE. Their overall comfort level with the CBSE curriculum was high and a number of kids found it fairly easy to cope with. Given the nature of the sample further comments on board of education could not be drawn on the basis of this field visit.

Overall, the experience in the school was a pleasant one. The premises were well kept and the infrastructure standards were fairly high. The school building was aesthetically pleasing. If the model schools manage to accomplish such a standard with each unit that is setup the implementation would indeed be deemed effective.

2.3 Meetings and Interviews

Date	Name	Designation	Institution	Topic of Discussion

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11/06/2014	Ms. Radha Chauhan	Joint Secretary, MHRD	Ministry of Human Resource Development	Exact outcomes expected from the project – how to carry out comparison between different boards of education.
26/06/2014	Mr Ashok Ganguly	Former Chairman, CBSE	Current Consultant for Model Schools for Uttar Pradesh	Objectives of setting up Model school and plan of action imagined.
3/07/2014	Ms Madhumita Bandhopadhyay	Professor, NUEPA	National University of Educational Planning and Administration	Various factors to look into while planning of schools and possible challenges you could face in the process
2/07/2014	Mr SMI Zaidi	Professor, NUEPA	National University of Educational Planning and Administration	To discuss the RMSA and the importance and role of teacher training

Please refer Appendix A for details*

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3. Current Government Efforts

There are several schemes launched by the government to achieve better education outcomes and these schemes have played a crucial role in ensuring a decadal growth in literacy in India from 2001 to 2011 by 9.2 %.

The landmark schemes are as follows:

- **Sarva Shiksha Abhiyan**: Launched in 2001 Sarva Shiksha Abhiyan(SSA) is one of India's major flagship programs for universalization of elementary education. Its overall goals include universal access and retention, bridging of gender and social category gaps in elementary education, and achieving significant enhancement in learning levels of children. SSA is being implemented in partnership with the State Governments and reaches out to 192 million children in 1.1 million habitations across the country. SSA Goals are to enroll all children in school, education guarantee centers or Alternative schools. It also seeks to achieve retention of all children till the upper primary stage while bridging gender and social category gaps. Provisions of Right to Education Act are being implemented through SSA. Accordingly, norms have been revised / modified to align them with the requirement of RTE Act, 2009. Central Government has approved an outlay of 2,31,233 crore for implementation of the combined RTE-SSA program for the five year period of 2010-11 to 2014-15. The annual requirement of funds for the combined RTE-SSA program will be approximately in the range of 40,000 to 49,000 crore both for the Central and State Governments. Under this scheme the government has managed to achieve close to universal enrolment at primary school levels and the number children out of school has been reduced to 3 to 4 percent only.
- **Kasturba Gandhi Balika Vidyalaya :** KGBVs are residential upper primary schools for girls from SC, ST, OBC and Muslim communities. They are set up in scattered areas where schools are located at far off distances which serves to be a compelling impediment from girls continuing to pursue education. This problem is hence addressed by KGBVs by setting up residential schools in the block itself. These schools reach out to adolescent girls who are unable to go to regular schools, out of school girls in the ten plus age group and younger girls from migratory populations.

- **National Program for Education of Girls' at Elementary Level :** This program is also targeted towards girls and expected to work in tandem with the KGBVs. It addresses needs of girls who are in school and out of school while also looking after problems and aspirations of girls who are enrolled in schools but do not attend them regularly.
- **Mid-Day Meal Scheme :** The National Program of Nutritional Support to

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Primary Education was launched as a centrally sponsored scheme in 1995.The idea was that by providing meals the state could achieve twin objectives of improving nutritional outcomes of children from impoverished families while also achieving higher enrollment and school attendance as a fulfilling meal would provide a great incentive for parents to send their children to school. This scheme is implemented by states and union territories and managed locally by school management bodies, Panchayati raj groups, or self- help groups. The coverage of children in the States of Bihar (43 per cent), UP (57 per cent) and Jharkhand (58 per cent) is below the national average of 72 per cent, whereas it is well above the national average in Chhattisgarh (83 per cent) and Odisha (82 per cent).

- **Rashtriya Madhyamik Shiksha Abhiyan** : It is a centrally sponsored scheme with a sharing pattern of 75:25 between the center and the state and the prime focus of this scheme is on universalizing secondary education and improving the quality of the same. It was launched in 2009-10. Its main purpose is to expand existing primary schools to secondary schools and tend to infrastructural needs of other secondary schools. It also includes provisions for teacher training.
- **Scheme for Vocalization of education at +2 Level**: This scheme seeks to provide an alternate form of education to improve employability at individual level and enhance skill sets of students for skilled jobs while aspiring to bridge the gap between demand and supply. This scheme was launched in 1988 as a centrally sponsored scheme.
- **Scheme of ICT at school**: This is an endeavor of the central government to familiarize students with technology and its various uses by introducing ICT at school level. In this day and age developing basic computer skills becomes highly crucial to unlocking your full potential. Acknowledging the importance of the same the central government also strives to develop smart schools at the kendriya vidyalayas and the navodyalas to act as 'Technology demonstrators' and propagate use of information technology for neighboring schools to follow.
- **Quality Improvement at Schools**: This was introduced as a centrally sponsored scheme to extend the scope and quality of schools on grounds of environment friendliness, enhancement of science education, introduction of yoga in schools and introduction of international Science Olympiad.
- **Strengthening of Teacher training institutes:** Under the RTE one of the greatest challenges faced to ensuring its full effectiveness is the paucity of quality teachers in the country. One, there are massive vacancies and two even out of the existing pool sufficient number of teachers are untrained. Towards this end the government has set up institutes such as District Institutes of Teacher Education (DIETs), Colleges of Teacher Education (CTEs) and Institutes of Advanced Study in Education (IASEs).

Other than the schemes listed above there are a couple of other government schemes in functioning each with their own distinctive purpose to reach out to different groups and communities in the country.

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4. Results and Discussions

4.1 Findings from the literature

One of the key learnings from the literature review highlighted the poor performance of Uttar Pradesh on the development front.

Given this backdrop the responsibility on the Uttar Pradesh Government is massive for establishing good quality schools to improve its performance on the education front.

The literature review also gave an insight into the exact intention behind setting up model schools, takeaways from which I have elucidated in the introduction.

All in all, what really can be drawn as a conclusion from the literature review is the role of the state in improving education. The CABE committee report recommends spending 6% of total GDP in the country to achieve higher literacy rates and currently the Indian government spends a much lesser 4.17% of GDP(2011-12) . If sufficient funds are earmarked and there is appropriate transfer from the center to the state without leakage then any good planning done on paper can make reality. Quite often there is a delay in funds disbursement from the center to the state, in such a scenario states have to operate with a paucity of funds and that acts as an impediment in ensuring good management and governing of schools. Hence, appropriate mechanisms should be set up for timely disbursement of funds to state governing bodies so that no hurdles are met on the finance front. This transfer of funds should happen at the beginning of school sessions. Typically most of the recurring costs to be borne by schools are for teachers' salaries. It hence, becomes paramount to pay their salaries on time otherwise hiring permanent quality staff becomes a problem. It is teaching quality that to a large extent determines learning outcomes in schools therefore complete effort must be taken to maintain standards.

There are a couple of other learnings I had from the literature review that pertaining to the language policy in schools. The arguments for the mother tongue as a medium of instruction are linked to the child and its needs, the local context, factors such as ease of concept formation, creating a cultural identity, closer relation between schools and home and practical use after primary school. Whereas, the arguments for the English language as medium of instruction are considered more from a macro perspective, for example , the ease of language planning, its functionality beyond national borders, less divisive tendencies between different ethnic groups and educational training on a national rather than regional basis. In today's world of jobs being able to converse fluently in the English language presents a natural advantage to the candidate therefore while it is crucial to be rooted in one's culture and command fluency in your regional language, learning of the English language goes a long way to enhance the employability of a person. However, there is evidence from the Indian context where local languages being used as medium of instruction have resulted in successful outcomes in terms of pupils' performances. Also many a time students' level of proficiency in English is not high enough to meet the requirements of the grade they study in.

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Consequently, the learners are not always able to understand instructions and as a result are not able to perform as well as they would be able to given their mother tongue. Students' ability to learn is one side of the coin, the other being teachers' level of comfort to educate in the English language. Often finding teachers with a good command over the English language becomes difficult, it has been observed in many English medium schools in the country where despite the prescribed medium actual instruction happens in other languages that make discussion more conducive. According to certain investigations, it is ideal for children to start their early school years in their own language, particularly when the basic skills of reading, writing and concept formation are under development.

Therefore, choice of medium of instruction has to be a well thought out decision taking into account feasibility as well as social and economic relevance of preferring one language over another.

4.2 What challenges might be encountered in the implementation process?

1. Delay in setting up of the schools: After funds have been released, the process of acquiring land and narrowing down on exact locations for setting up the schools may be a delayed process. This could happen due to inherent inefficiencies in the government machinery. Different states are at different stages of the construction process as can be gathered from the data put up on the MHRD website. Hence, effort must be taken to expedite any process and to not allow projects to get stalled due to over regulation and mismanagement.

2. Recruitment of teachers: For any school to become a pacesetter in education the most important aspect becomes the teaching faculty. Finally, it is the teachers who bridge the gap between knowledge and true learning. It is for this reason alone that special care needs to be taken to hire and retain top notch quality. The model schools as opposed to the Kendriya Vidyalayas are going to be located not in district headquarters but in remote educationally backward blocks. These areas are most naturally also going to lag in infrastructure and other development indicators. Thus, sourcing talent locally may become a problem at least in the short run, during which time teachers would have to be brought in from bigger cities and towns who have already taught at good quality schools and are trained to deliver better learning outcomes. For such teachers living and surviving in poorer and more rural areas will have to be incentivized so that these teachers do not find teaching at these schools a precarious activity away from the comfort of urban lives. Therefore, provisions for living and transport for school faculty should be made and a portion of the total funds should exclusively be earmarked for this purpose alone. As long as teachers find jobs and livelihoods secure they will choose to continue to be a part of the model schools and contribute to their growth and enhancement. Further, an admission policy allowing for children of faculty students to be admitted directly into the schools could also be incorporated this could serve as further incentive for talented teachers to apply and stay with the institution. At the end of the day the sure method for hiring talented professionals is by allowing for fair competition and teachers will compete for the positions in larger numbers only if they see sufficient perks being provided with the job, otherwise hiring and retaining talent in educationally backward blocks could become a significant challenge.

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3. Teacher Training – While on one hand it is important to recruit the best of teachers with sound qualifications it also necessary to constantly train them on the job to ensure that they are following the best practices in education and teaching while constantly trying to innovate and experiment with new pedagogical techniques. However, there are no institutes in the country leave alone in Uttar Pradesh that provide in service training for teachers. Therefore this could be another roadblock that could be faced. There needs to be a way to augment teacher capability continuously and for this reason help can be taken from an external agency or private educators to provide on the job training. Further, insights from child psychology can be used to supplement teaching techniques. Having a child psychologist on board could help school authorities to better gauge the needs and understanding of children. Such consultation facility is often provided in schools abroad. This additional knowledge can help teachers set a class room environment where the talents and skills of children can be better honed and shaped.

4. Question of Access – The intention of setting up model schools in the educationally backward blocks is to extend an opportunity to students in rural, less developed parts of the country to study in good quality schools at a minimal fee. However, given that there will only be one model school opened in every block it is highly likely that students from private unaided schools try to get admitted into these schools. The admission into model schools is merit basis therefore it is not unreasonable to believe that relatively better off students might benefit from the subsidization at the cost of more needy children. This is bound to happen since as of yet the provision is only to set up a single model school. In a populous state like Uttar Pradesh the objective of reaching out to the poorest will definitely be hard to achieve given the number of students that will compete for the limited seats in each of the model schools.

5. Promulgation and teaching of the English Language: The emphasis on developing English language skills is one of the cornerstones of the model schools but it needs to be understood how difficult it may to achieve it if not planned in a calibrated manner. A good number of students may not have good English skills therefore to suddenly force these students to give examinations and adapt to a full English education may be detrimental to their own growth and progress. Moreover, since the model schools will only admit 6th grade onwards, the students are not going to be in their formative years when new languages can be easily grasped. At least 20 percent of the class will have had no previous experience with English. Therefore to suddenly expose them to a foreign language and judge their capabilities on it may not be the wisest thing to do. There may hence be a case for providing English language tutoring for students after school hours to further supplement the learning process for children. This may be provided to 6th and 7th grade students for which special English tutors will have to be recruited or existing English Department faculty in the school to carry out these additional classes. This additional help could go a long way in ensuring that students are not a disadvantage due to their socio economic circumstances and are adequately trained to compete with relatively better off classmates.

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6. Maintaining Quality- While it has been decided to ensure that the model schools are at least as good as the existing KV schools, it must be realized that quality and standards vary from KV to KV. KVs in the bigger cities are usually better than the ones in smaller towns and hence there are existing disparities in these KVs as well. This might happen across the model schools as well. A uniform standard should hence be maintained in the model schools to ensure that there is no misallocation and that a set of facilities are provided in every school across the states irrespective of location and local circumstances. Some model schools may be up gradation of existing schools while others may be entirely new schools that are set up. In case existing schools are upgraded what happens of students who are currently in enrolled into the school? Will new students be admitted or will the existing set of students benefit from the developed infrastructure and government money. In case the latter holds then how can any fairness will be ensured since there would have then not been any admission test for these students and or any other pre-determined criteria for selecting them to be beneficiaries of the government funds. A policy to address this issue will have to be thought out.

4.3 Possible reasons for high dropout rates of girls post primary schooling

The enrolment of girls in primary schools is fairly high but the same for secondary schools is much lower at 46.89 this clearly highlights a high dropout rate after primary schooling. This is an important trend that must be challenged and reversed to achieve universalization of secondary education as had been envisioned. Until a thorough understanding is developed of the reasons why girls drop out no policy can be effectively designed to tackle the said problem.

Inequality in educational attainment of girls and boys is a function of many factors including the geographical region they come from, whether it is urban or rural, and the social backgrounds and local contexts involved. Fewer girls attend school (gender parity 0.93 in favor of boys) and even fewer girls continue education at general secondary level (83% girls compared with 87% boys) (UNESCO, 2008b)Some of the relevant factors are as follows :

1. Gender role stereotypes: In spite of the endeavors of various government schemes across states of India, fighting pre-existing ideas of gender roles becomes increasingly problematic. These social ideas are so deeply ingrained in the minds of the parents that they are convinced that educating the girl is low priority and they instead direct their family resources to their sons. Patriarchal societies believe that the girl only needs to be trained in looking after the household and her attention only needs to be restricted to child rearing activities and care-taking responsibilities such as cooking etc.

2. Onset of Adolescence and Menstruation: Many a times schools are not equipped with separate toilets for girls and when they are they are usually in very bad and unhygienic states. This puts menstruating girls at a lot of physical in convenience and hence these girls decide to stay at homes and avoid going to schools. Apart from the inconveniences they face there is also a cultural stigma associated with menstruating women which further acts as detriment for these girls to continue to pursue education. Cultural practices and ethics dictate that these girls be restricted to their houses during their periods and there are many limitations placed on what they can and cannot do, against

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such a background their school attendance suffers to a major extent.

3. Early Marriage: This is a prevalent practice in the rural parts of India,
where girls are married off at an early age and they become mothers even before they turn 18. All the more, the general trend is to find a more educated groom than the girl and the more educated the groom is, the more dowry they tend to demand. So the idea is that the more parents educate their daughters the more money they will have to spend to have her married off. This social idea has been extensively studied by Dreze and Sen(1995). Hence, it is not only early marriage but the idea that the sole objective for a girl is to find a suitable groom for herself which is highly conservative and chauvinistic, that results in lower importance and resources being given to the process of education of the girl.

4. Low benefit associated with schooling: The final decision of educating the child is based on a cost benefit analysis, if the perceived future discounted return to schooling is greater than the current cost of sending the child to the school then parents will take a decision in favor of schools. However due to the existing quality of schools in rural as well as urban India, parents associate a low return on investment as learning outcomes of children in schools are unimpressive. All the more, job market opportunities may be such that they unfairly favor males over females. In such scenarios the return on investment of educating the girl child is lessened even further because parents feel that this education will not augment her earning abilities and hence they'd much rather restrain from sending her to schools in the first place. Therefore, part of the existing discrimination against girls may be due to the inequality in opportunities for employment for the different genders. The lower the perceived sense of advantage higher years of schooling presents the lower will be the incentive to continue schooling for the masses.

5. Distance from schools: The distance travelled to and from school adds to the cost associated with schooling especially in terms of opportunity cost of time. This would especially be a problem in the rural parts of India where considerable amount of time is spent due to walking as no other means of commute is available. Secondary schools are sparsely located and village girls have to tread long routes, this serves as yet another deterrent since girls find it much simpler to just stay at home and help with house chores than to undertake this routine physical exertion.

6. Socio-economic backgrounds: Even amongst girls there are some from more disadvantaged classes such as scheduled castes, scheduled tribes and Muslim communities where cultural hurdles are much stronger and they face tougher circumstances that prevent them from attending quality schools and having an easier process of educational attainment. As Dreze and Sen have pointed out upper caste persons believe that education is not for lower castes to acquire and they play a role in denying these opportunities to them through their political pressuring and clout in decision making matters at the community level. There are right wing conservative political parties that re- emphasize traditional gender roles and propagate discriminatory ideas. This has a natural bearing against girls, especially from backward and historically disadvantaged social classes.

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7. School Atmosphere: The quality of a large number of schools is unsatisfactory and qualified and pedagogically sensitive teachers, let alone female teachers are not available in such schools. Moreover, curricula and content taught plays a major role in building values and unless students are actively taught to question social norms and stereotypes through the values preached in schools they will never rise against injustices thrown at them and their peers. Often school curriculum fails to inculcate modern ideas and thoughts in the pupils and this decelerates the process of achieving gender equality in access to education.

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4.1 What board of education to go for?

Any decision on the board of education has to be weighed on several parameters. One way to establish superiority of one education board over another would be to collect school level information on the number of students from the various schools that crack national level entrance examinations to enter into the best professional colleges in the country. While this is not an absolute parameter to compare employability it serves as a crucial proxy, given that students from the best institutions typically enter into better paying jobs which guarantee higher standards of living.

A good schooling must essentially translate into higher job readiness. Training imparted in schools must be transformational and ease the process of entering into higher institutions of learning. As the CABE report expounds a high secondary graduate hardly assures upward mobility in society, a college education is crucial in today's day and age to survive in the 'world of work'.

To carry out such a study it is important to locate a sample set of schools with subsets of equal number of CBSE schools and UP state board schools then compare number of students sent to premier higher learning institutes. For such a study to be validated the CBSE and State Board schools must be similar in all other respects such as infrastructure, location, number of students admitted so on so forth.

Another factor to consider while choosing a board is to understand the ease with which students can successfully complete their schooling and for this purpose it is imperative to compare passing rates of the different boards. The general consensus is typically that the UP board is the toughest education board in the country so much so that for admissions into colleges in Delhi University, students from the UP board get a leeway given that their overall scoring is typically lesser than the average CBSE students.

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4.2 Gap analysis

Uttar Pradesh has not yet completed construction of a single model school as opposed to other big states like Andhra Pradesh, Rajasthan Tamil Nadu and others. This delay in completing construction could be a reflection of lethargy that is often known to plague the UP government. It is hence necessary to take stock of progress and why delays in construction are being observed. This may happen due to policy paralysis which could result in delays in acquiring land, finding suitable contractors and further tracking progress over time. The longer the government takes to open schools for admission the further away it pushes the dream of creating model schools of excellence for schools in adjoining areas to emulate.

Moreover there is a need to have an effective Secondary Education Management Information System in place that provides comprehensive information about schools at the disaggregated level. This should contain data pertaining to enrollment into classes, dropout rate for each standard, results of learning assessments, and any other information that may be useful in shaping education policy. All the more schools should strive to collect information on the students that graduate and what becomes of them there on because tabulating such information can serve as an implicit report card of the schools performance. How much did the school training help in assuring its students a higher standard of living? Most schools do not keep tab of such information. The model schools should have an alumni portal in place so that school authorities can easily get in touch with past students. This relationship can also be used by school authorities to find interested donors, as students who go on to become successful actually want to give back to their alma mater.

4.5.1 Teacher Training and Institutions in place

One of the most important facets of running a school is to ensure you have well trained teachers. This training needs to go beyond simply acquiring a certain amount of knowledge on paper. There is a need for behavioristic training and other positivist approaches that must be considered. An efficient teacher needs to be evaluated on more than just information based paper and pencil tests. A pre-service training must in effect also focus on developing certain attitudes, habits, dispositions along with some kind of training in child psychology so that she learns to connect with her pupils on more than one level and truly helps make schooling a transformational process. Educational discourse during the past few decades has renewed focus on the concept of teaching. Teaching is no longer merely about a transfer of knowledge and information instead it is a process of facilitating learning by enabling the child to construct or generate knowledge on the basis of his or her own observations, experiences,

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experimentation, analysis and reflection. The recent National Commission for the Protection of Child Rights study indicates that teachers tend to use corporal punishment as a corrective measure in schools and often let biases and prejudices determine day to day behavior towards children and their learning, especially children of marginalized communities. These are practices that actively need to be challenged and changed with the kind of training these teachers are provided with.

Currently 90 percent of pre-service teacher training institutions are in the private sector. A market demand for a large number of teachers has led to the proliferation of substandard teacher education institutions. Teachers are trained in a system where it is assumed that education is a mere transfer of information and they are prepared to deliver a certain number of lessons with the help of standardized textbooks in a pre-specified period of time. This does not address the needs of contemporary school children or the demands of job market requirements.

Besides pre-service training, in-service training is also quite important as it encompasses continuous learning and evolution to help teachers prepare for newer challenges they might face with the course of time.

The report Vision of Teacher Education in India Quality and Regulatory Perspective constituted by the Supreme Court of India notes that "Recognizing that pre-service and in- service education of teachers are two sides of the same coin, and the continuity and complementarity between teacher's initial preparation and continuing professional development, the National Policy of Education made a decisive intervention for the creation of a strong institutional network for imparting in- service education to teachers at all levels." The NPE 1986 recommended the setting up of a DIET in every district and upgradation of 250 colleges as Colleges of Teacher Education (CTE's), and strengthening 50 of them as Institutes of Advanced Studies in Education. The DIET has been conceptualized as a resource support system for elementary education in the district. The most important function of the DIET is to provide in-service education of three weeks' duration to 600 teachers in a year. In order to receive this target a DIET was required to organize training of 50 teachers every month. Reviews, however have shown that majority of the DIETs could not achieve this given targets. The performance of the CTEs and IASEs has been even less satisfactory on the grounds of achieving physical targets as the planned number of CTEs and IASEs could not be established and many of the sanctioned institutions could not be operationalized.

There are some concerns of in service training in India as is also noted in the report by a High Powered Commission on Teacher Education Constituted by the Hon'ble Supreme Court of India, those being that there is no holistic policy framework on in-service teacher education – its nature, content, duration, periodicity, modality, incentives for participation etc has not been developed. The institutions for teacher training have not been adequately equipped in several states in terms of physical infrastructure and resources. Selection of resource persons has been by and large arbitrary ad without a pre-defined set

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of criteria as may be desirable to ensure uniformity across trainers and the subsequent training they provide. Problems also exist with the formulation of the curricula which have a top down approach rather than a need based one. Moreover the short duration of teacher training puts a serious question on the degree of its usefulness as well as effectiveness.

Given the status of teacher education implemented by the state, for the Model Schools a possibility would be to consider the route of private trainers and institutions with more expertise and international experience. While this may entail higher investment and allocation of funds it may be a viable option to consider at least for the first couple of years until a benchmark can be set. Moreover, training can also be collaborative process that could happen across the model schools where in teachers could get meet for a week or two once every year and discuss amongst themselves the experiences they've had in their classrooms and how they faced and dealt with various challenges. This sharing of knowledge through some sort of annual teacher conference for teachers of the model schools may in itself turn out to be a meaningful learning experience as discussion and sharing of perspectives can bring a lot of new ideas to the table that mere pedantic classroom training may not succeed in providing.

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5. Recommendations, Scope and Strategy for Implementation

Recommendation & Scope

The Model schools are meant to serve as examples of excellence in school governance and management. The idea is to admit the most talented students through an admission test keeping the existing reservation in policy.

Couple of recommendations that I would like to make at this stage of my report are as follows and are in response to the challenges that have been explicated in the earlier section–

1. Rethink identification strategy for educationally backward blocks – it could be female literacy rate in the region along with a criterion for qualitative assessment of schools on the lines of learning outcomes in primary schools which will serve to highlight the existing state of schooling. Another approach could be to assess average income or any other suitable proxy for poverty which will help target areas most in need of state attention. This will allow for a holistic targeting with no criteria that is redundant or meaningless.

2. To make a Wikipedia page for Uttar Pradesh Model schools. To have a Wikipedia page containing information about the schools makes it useful for anybody seeking to know all that they need to know about the schools easier. This will also help the schools recruit better staff if they can create a semblance of professionalism associated with the school and the management.

3. Better management of school level information and setting up a body to manage the information at disaggregated level of the performance of the schools. If information is regularly accumulated then any further policy or administrative change to make will be easier to institute. Availability of data makes measuring progress a simpler process, hence school authorities must take all the necessary steps to document all school activities and update their databases regularly. Like for example the UP board website lists passing rates for the year 2001 only, clearly effort has not been made to make information regarding school performance for later years available on public domain.

4. There should be a blog set up for the Uttar Pradesh Model schools containing information of all latest updates and a provision for answering FAQs just like there is one in place for the Andhra Pradesh Model Schools. Any decision made pertaining to the schools should be made available on the blog along with reasoning for the same. This makes the process more transparent and anybody who is willing to comment on the same and give further suggestions or recommendations can do so on the blog. Starting a blog also gives out a signal of being technology-oriented and instils a sense of modernization.

5. For recruiting good teachers there is a need to incentivize teaching and stay in the educationally backward blocks since it would typically be

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difficult to hire such teachers locally. Towards this end, funds need to be kept aside for providing safe living quarters and transport provisions for these teachers in the blocks that these schools are set up in. Additionally, there must be an admission policy allowing wards of faculty to be admitted into these schools as an additional incentive for these teachers to stay and teach at the model schools.

6. Medium of Instruction: As mentioned earlier in the report there are theoretical arguments for and against choosing English as medium of instruction in the model schools. However one of the objectives of the model schools as laid out by the central government is to instill English language skills therefore, a case can be made to have different sections of Hindi and English medium within the same school or at least have equal number of schools with English and Hindi model schools. As was mentioned as part of the challenges that may be encountered given that students will be from educationally backward blocks, to bring them all on a level playing field in terms on familiarity and comfort with English, additional tutoring may have to be provided and phasing of teaching in English will have to follow a nuanced approach. Therefore, there should be tutoring arranged after school hours to help students cope with shift in language. This would ensure that adequate assistance and time is provided to students who are completely outside of their comfort zone in an English medium classroom. Also, another factor that should be taken into account is that admission into the model schools is based on a merit exam. Therefore, by selective admission the model schools are expected to take in the smarter kids of the lot hence these kids can be trained to grasp and learn in the English language more easily. Also, Hindi can serve as the second language as is already provided for the CBSE curriculum. There, are different permutations and combinations with language policy that can be carried out, the final decision depends on the number of teachers who can be recruited who would be comfortable instructing in a given language. That would serve as the constraining factor.

7. Board of education – While a decision pertaining on this is largely subject to the prerogative of the department of school education in Uttar Pradesh, the final call should be taken on the basis of parameters outlined in the earlier discussions those being – ease of admission into premier professional colleges and improved employability. Typically it has been observed in the past that students who clear IIT-JEE come from CBSE schools. While on one hand it is because the number of students who study in CBSE schools in India are higher but it is also the fact that these exams are based on syllabus prescribed by the CBSE.

8. Accreditation – The Model schools should strive to earn the accreditation of from a nationally recognized body such as the National Accreditation Board for Education and Training. Such an accreditation will prove to be a stamp of quality and deliverance.

9. Very often, in India most policy decisions and planning is done without fully understanding or carrying out an ex ante evaluation of the kind of impact the scheme in question will have and if the actual worth of the money that is put into it is being realized. In the absence of such an exercise many times funds are misallocated and the expected outcomes do not show. To avoid making bad decisions it is important to invest in research and impact evaluation and test what intervention brings what end result and to what extent.

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This will help decide the best use of the limited money the government has and how highest utility can be extracted from every rupee spent out of the exchequer. A case in point is the study carried out by economist Jim Berry, MIT in India which has shown evidence that educational improvement happens lesser with infrastructural changes and is more likely to occur by other interventions such as using the help of a volunteer to provide additional tutoring to pupils, providing new materials, teaching by trained teachers. There is hence a need for evidence based policy making, often effective interventions are not scaled up for political reasons.

10. Increasing parental involvement in child's learning process: There is sufficient international research that has been documented for the various advantages that increasing parents' involvement in the learning activities of children helps. These include benefits for children in terms of added motivation, better alignment of learning environment and culture experienced in the schools and at homes, higher self-esteem and self- disciplining, lower probability of dropping out of education etc. Benefits for parents would be in the form of increased responsiveness and respect from their children and better capacity to take as well as enforce right decisions. Given the numerous paybacks, parental involvement could be increased by carrying out routine meetings and alongside instituting a feedback and accountability mechanism for parents as well. Home or holiday assignments given to students can assign specific tasks that should be carried out with the help of parents to enforce participation from their side as well. Further, along with report cards that teachers give for students a report card that parents can fill out for teachers and the overall schooling experience that their children have enjoyed, should be designed. This will serve as an additional review for schools and teachers to consider and parents can help voice concerns that the child faces that often a teacher in school mind tend to overlook.

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6. Future work to be carried out

This report is essentially an ex-ante analysis of the challenges and roadblocks that might be encountered in the process of school planning and how to prepare for the various contingencies that may arise. Since the model schools haven't been operationalized this report cannot take stock of outcomes truly delivered on ground. That analysis can only be carried out after the schools have been functional for a certain period of time. This assessment is important to carry out to understand how successful this endeavor has been and if the objectives set out from the beginning have been achieved. Evaluating performance on the grounds of improved learning outcomes and employability, diversity ratio and specifically gender ratio should be carried out. It is necessary to constantly carry out quality checks so it is ensured that any plan on paper truly translates into reality.

Moreover, due to the timing of the study and paucity of resources a deeper conclusive analysis could not be drawn regarding the different boards of education. However, it would be a truly illuminating study about the kind of role that school curriculum and subject syllabus can play in improving quality of life, with a suitable indicator serving as a proxy.

Further, this report tries to touch upon various aspects and intricacies involved in the process of school planning, however this analysis is neither exhaustive nor complete as a comprehensive and a more specific study can be carried out for every sub topic that this report elucidates on.

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7. Conclusion

In conclusion, after 2 months of research on the subject I have understood the intention and purpose of setting up Model Schools. It is different from any other scheme implemented by the Indian Government in the Education sector in the sense that more than increasing number of schools the focus is on raising quality standards. These schools will set an example for neighboring schools to follow and emulate, so that there are positive externalities from the setting up of these schools. So far access to affordable quality schools such as the Kendriya Vidyalayas was limited to children of government employees or those of army officials. Now, this opportunity shall be extended to all talented school children in rural areas with special targeting to educationally backward blocks.

For effective implementation of the Model Schools, the school administrative policies and processes should be transparent and towards this end the information technology must be greatly put to use. This should be done so that any information pertaining to the same should be put up on public forum for scrutiny of the same.

Further decisions regarding medium of instruction and board of education play a crucial role in determining how well the student is prepared for employment in the skilled sector. A well thought out comparison should be carried out to reach a decision pertaining to the same, one that is not colored by political prejudice.

Given that the schools are yet to be operationalized the challenges that have been expounded in the report should be well recognized so that specific steps can be thought of well in advance to avoid encountering these problems on ground. Any problem that is well anticipated in advance can be worked around and specific solutions can be tailored to address the same. The high dropout rates for girls' after primary schooling is a very pertinent issue at hand which must be especially tackled by incentivizing secondary school enrolment and assuring improved employability. The more accessible and higher the quality of educational opportunities provided the better the chances of ensuring retention and continuation of schooling.

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9. Appendix A

Meetings and Interviews

Date: May 23rd – July 16th , 2014

Email communication with mentor Shri Manoj Kumar Singh

Discussion:

1. Mentor asked to focus on medium of instruction and board of education to institute
2. Mentor set up a meeting with Joint Secretary in MHRD
3. Mentor connected me with Mr. Vivek Nautiyal who is currently overseeing the development of model schools in Uttar Pradesh.
4. Telephonic conversation arranged with Mr Ashok Ganguly, Former Chairman, CBSE
5. Review given on mid-term report along with corrections and additions to be made in final report

Action Items before next discussion, please include timeline:

1. Spend time on field and make visits to schools [3 to 4 days]
2. Procuring school level data from Uttar Pradesh [1-2 days]. Outlining exact methodology for selecting schools to sample for study [1 day]

Date : June 11th, 2014

Meeting with Joint Secretary, Ministry of Human Resource Development

Discussion:

1. Discussed exact outcomes expected from the project and how to go about analyzing advantages of one education board over another. Provided with details of possible sources of data for carrying out such an analysis that being the Council of Boards of Secondary Education.

Date : July 2nd, 2014

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Meeting with Prof. Smi Zaidi, National University of Planning and Administration

Discussion:

1. The RMSA mandates compulsory teacher training for secondary school faculty. However the required institutional arrangements to achieve the same objectives are limited. The SCERTs (State Council for Educational Research and Training),DIETs (District Institute for Educational Training), and Institutes of Advanced Training are responsible for carrying out the training activities however they cannot possibly provide training to all since they are much fewer in number as compared to the number of teachers actually in need of training. Hence, only few teachers get direct training from these institutes and they go on to become master trainers who further impart their acquired knowledge to smaller groups of teachers at disaggregated levels. Model school teachers will need in service training to deliver best of outcomes and forget Uttar Pradesh there aren't specialized institutes for this anywhere in the country. Hence, clarity remains to be achieved on the issue of what existing arrangement will be used for providing quality training.
2. Another factor that we need to look into is who are the children the government is ultimately subsidizing? The admission test into the schools is going to be merit basis and typically it will be students from private unaided schools who have a higher probability of clearing these exams as they typically have better primary education and are better trained. Hence, in spite of having these schools located in educationally backward districts the beneficiaries from the same may still not be the worst off from the lot. For this the reservation policy should be looked into, how can targeting be improved to include the most needy and worthy?
3. Another caveat is the recruitment of teachers how and where are these teachers to be recruited from? If the UP board is instituted in all the model schools then plucking teachers from the Kendriya Vidyalayas directly will be lesser of an option since they will not be adequately trained or equipped to deliver under a new board. Moreover to incentivize working in the educationally backward blocks the state will have to take the effort to make transport and living in these blocks viable for these teachers and for that they might have to set up teachers' living quarters and they may even have to have a policy of admitting employees' children into the model schools as additional incentive. Costs for the same should be accounted for and budgeted as this additional expenditure will become mandatory to achieve the envisioned goals.

Date : 3rd July, 2014

Meeting with Prof Madhumita Bandhopadhyay, National University of Educational Planning and Administration

Discussion:

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1. When planning schools factors that need to be explicitly looked into involve infrastructure, provisions, monitoring systems, curriculum, teacher training, School- development management committees. For ensuring effective implementation a check list should be prepared, items on which must be delivered on ground and not just paper.
2. Another factor that needs to be looked into is the high dropout rates out of primary schools. For different educational blocks the reasons for the same could be accordingly varying and local authorities must take the same into account. In some areas it girls might have higher dropout rates due to cultural regions in such blocks special incentives should be given to ensure higher girls' attendance. This could be by constructing girls' hostels or giving other suitable incentives.
3. Will the model schools be looking into skill development and vocational training? Are they willing to have provisions for the same? How will schools recruit quality teachers and guarantee commitment from them? Most KVs are located in district headquarters, it will be a challenge to get hold of quality teachers and convince them to settle in the educationally backward rural areas. This may turn out to be the most pertinent challenge that the model schools might face. Also, phasing in of English education will have to be planned and executed with the help of well trained teachers since a lot of the students in these educationally backward blocks may barely be well versed in Hindi, developing proficiency in English would be a far-fetched goal. Introducing a new language at secondary level will have to follow a nuanced approach with sufficient supplementary help provided in the mother tongue.

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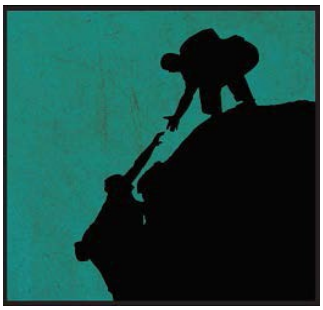
"The highest measure of democracy is neither the 'extent of freedom' nor the 'extent of equality' but rather the highest measure of participation."

- A.D. Benoist

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