An Independent Evaluation of Project Mala Schools

Including a Comparative Analysis with Government, Private/Public and other NGO Schools for Similar Aged Children

Undertaken by John Moore Education Consultant January/February 2017

Summary of Key Findings and Recommendations

This evaluation focuses on the quality of education currently provided within the southern arc (or belt) of the traditional carpet making area south of Varanasi (Benares). It is a 'qualitative' study based on the evidence of observation. It takes account of previous reviews of progress within the Project Mala schools conducted by Professor Bupinder Zutshi and Professor Mondira Dutta of J N University, New Delhi (see main text).

Although commissioned by Project Mala, the evaluation is independent of that organisation. Unlike earlier evaluation reports it offers a comparative analysis of three different types of school within the Project Mala area, Non-Government Organisation (non-fee paying charities), Private/Public (fee paying) and Government. The non-Project Mala schools were chosen at random from a list of 103 schools within a relatively short distance of the Project Mala schools. The sample represents a balance in age groups and type of school. It was important to the 'independence' of the study that the schools were not selected by Project Mala staff.

A key assumption of the evaluation is that however good Project Mala might have been at fulfilling its original aims in the past, those aims now need to be adjusted or reaffirmed in the light of broader evidence from a range of schools within the area.

Evidence was collected from 17 schools. Six Project Mala, two Care and Fair (NGO), three Private/Public, and six Government. The main activity within the visits was the close observation of 68 full lessons, alongside other observations of classrooms, activities and buildings whilst 'touring' the school. Appendix One details the schools visited, with subjects and year groups seen.

A further key assumption is that it would be unfair to compare schools purely by output, it is also necessary to consider the constraints they experience in relation to funding, access to quality teachers, curriculum development, and the pupils' abilities and levels of attainment on entrance.

Key Findings

Based on the criterion adopted and developed for this evaluation, Project Mala schools outperform other schools within their area. All schools, however, including Project Mala, have the capacity to improve in the key areas of the Curriculum, Teaching and Learning, Teacher Development, Leadership and Management, and Community Involvement.

The reasons for Project Mala's success in these areas stems from important development differences between the Project and other schools. These differences are outlined in detail in the main text but can be summarised (though not in priority order) as:

- Good, flexible, financial management and the level of funding achieved as a charity
- High levels of Leadership and Management skills deployed within the Project
- Quality of buildings and learning environment through appropriate allocation of funding
- Class sizes achieved through appropriate allocation of funding
- Effective teacher recruitment, training and retention
- Continuous monitoring and development of the curriculum to meet learning needs, particularly in English Language but also in the introduction of Mathematics and Science schemes
- The introduction and development of exceptionally high quality pre-school provision
- High levels of excellent and very good lessons, based on the criteria developed for this study.
- Very low levels of absenteeism and reduced lateness using fingerprint recognition
- Effective community involvement through Community Workers

- Classroom management and high quality teaching and learning, assisted by appropriate use of furniture, individual and group learning, and appropriate materials.
- Finally, but most importantly, the consistent and long term use of Education Advisers to introduce and sustain the above developments

As detailed in the main body of the report, all schools demonstrated some of the above but were heavily constrained by their physical and organisational environment: large classes, teaching in a room where another class or classes were being taught, insufficient space to organise pupils into 'interactive – problem solving' activities, lack of appropriate furniture, few, if any, supporting practical materials, or a written curriculum that lacked breadth and progression.

There are, however, important development challenges ahead for Project Mala, and indeed for other schools. Some can be resolved within the current structure, others will require a significant adjustment or increase in finance. These are set out in detail in the main body of the text but are summarised below.

Recommendations (see main text for full version)

- 1. All schools need to consider the introduction of 'qualitative' reporting of children's achievements, rather than relying on end of phase examination results.
- 2. Consideration should be given by Project Mala to extending the successful pre-school facility to encompass nursery age children.
- 3. All schools, including Project Mala, need to monitor individual lessons to eradicate poor quality teaching and learning in line with the criteria outlined in this evaluation.
- 4. It is important that Project Mala share its expertise, particularly with those schools who will receive children who do not pass the examination for the next stage of schooling. Other schools also have expertise that could benefit Project Mala.
- 5. It will be necessary for the Trustees of Project Mala to consider the future in relation to 'integration' of its schools into the mainstream
- 6. and decide on the relative merits of different forms of affiliation.
- 7. All schools need to review their approach to 'creative composition' in English
- 8. To further the quality of Education in Project Mala, Trustees will need to decide how the current good work in training teachers can be formalised into a continuous professional development (CPD) programme.
- 9. All schools in the area, including Project Mala, need to reconsider how they view children's special educational needs and disabilities (SEND), and how best to ensure that individual difference, can be articulated to provide a high-quality education for all.
- 10. All schools looking at the introduction of technology should consider how best it might be used to support rather than replace the children's interaction with the subject.
- 11. Cooking, gardening, music, dance and games, all have the potential to provide therapy, work skills, social interaction skills, development of latent talents and nurture creativity. It is important that managers and trustees recognise this and develop schools accordingly.
- 12. The Management Team and Trustees of Project Mala need to consider whether 'specific' vocational courses such as 'agriculture' can be integrated into the current structure or need the development of a dedicated Vocational School.
- 13. All schools need to consider how best to improve the teaching of Art.
- 14. All schools, including Project Mala, would benefit from greater involvement with parents at the level of policy formulation and decision-making, and should consider ways to develop this. The simplest being a parent/teacher consultation group.

School	Lessons Observed	Points range	Average Grade	Excellent	Very Good	Good	Poor
Project Mala Turkahan	5	4-15	11	3	1	0	1
Project Mala Mujehra	6	10-13	11	1	5	0	0
Project Mala Hasra	2	10-13	11	1	1	0	0
Project Mala Amoi	3	7-13	10	1	0	2	0
Project Mala Guria	13	4-11	9	0	9	2	2
Project Mala Patehra	5	4-13	9	1	3	0	1
Care and Fair XL & Haji Saheb Ali	3	6-8	7	0	0	3	0
Kakrad Govt Primary/middle 5	6	5-9	7	0	1	5	0
Ramchandrapur Govt Primary 2	4	4-6	6	0	0	2	2
Bihra Pahi Private Middle 1	5	1-6	5	0	0	4	1
Turkahan Govt Primary/middle 4	3	2-7	5	0	0	1	2
Mujehra Govt Primary 6	4	4-8	5	0	0	1	3
Vindigam Private/Public School 3	6	3-5	4	0	0	1	5
LDCS Private 2	3	1-2	2	0	0	0	3
Govt Primary 1	0						
Dhanaval Govt Primary/middle 3	0						
Total	68			7	20	21	20

Quality of lesson by school in average grade order

Schools Visited with Year Groups and Lessons Observed

School	Year Groups and subjects Seen in order of Observation
PM Guria	Y6 English, Y7 Science, Y9, Social Science, Y11 English, Y3/4 Social Science revision,
	Y11 Science, Y7 Art, Y11 IT (commerce, Y11 Maths, Y7 Vocational (girls' needlework),
	Y8 Vocational (girls' cooking), Y1 and 2 Dance, Y9 Commerce
PM Turkahan	Y8 Social, Y7 English Grammar revision, Y5Maths, Y4 Maths, Y2 Phonics and Muzzy
Care and Fare XL Primary	Y6 Maths, Y6 English, Y2English,
Care and Fare Haji Saheb Ali	Time in each class
Government Primary 1	Talked to teachers
Ramchandrapur Govt Primary 2	Y5 English, Y4 Maths, Y3 Maths, Y1 English
Bihra Pahi Private Middle	Y9 Maths, Y10 English, Y8 Maths, Y7 English and Hindi Grammar, Y6 Fruits
PM Patehra	Y1and 2 Phonics, Y8, Science (butterfly), Y7 English, Y3 and 4 Art, Y1 to 4 Yoga
Dhanaval Gov t Primary 3	No classes seen as general activity day following Unit Exam previous day
Turkaham Govt Primary/	Years 3,4 and 5 combined Social history, Y6,7 and 8 combined English, Y 1and 2 Singing
Middle 4	
Kakrad Govt Primary/middle 5	Y 4 and 5 Maths, Y 1 and 2 Hindi, Nursery, Y6 Maths, Y 7 English, Y8, Algebra (Maths)
LDCS Private Nursery to Year 8	Y1 English, Upper Kindergarten English, Y7 English
PM Mujerha	Pre-school (ages 6 and 7 Theme of marriage with group activities), Y5 gardening boys, Y5 girls
	Games, Y 3 and 4 Social (govt admin), Y5, Social (Geography), Y4 Sanskrit.
Mujehra Govt Primary 6	Y5 English, Y4 English, Y1 and 2 English, Y3 Maths,
Vindigam Public/private	Y 1 and Y3 in one room English, Y3 Maths, Y4 Science, Y2, English, Y1 Reading, Y2 English,
PM Hasra	Pre-school Groups – theme Hindu Festival, Y3 and 4 Social (History)
PM Amoi	Years 3 and 4 Science, Y5 Maths, Y 3and 4 Gardening and cooking

Index and Appendices

- 1. Summary of Key Findings and Recommendations (page 2)
- 2. Main report Introduction and overview (page 6)
- 3. The Schools by designation (page 7)
- 4. The Visits by school name (Page 9)
- 5. The Curriculum (page 15)
- 6. Teaching and Learning (Page 18)
- 7. Recruitment, Training and Retention of Teachers (Page 27)
- 8. Leadership, Management and Community Involvement (page 30)
- 9. Development Issues:
 - a. Reporting Pupil Progress (page 32)
 - b. Pre-school Development (page 33)
 - c. Sharing Expertise (page 33)
 - d. Mainstreaming and Affiliation (page 33)
 - e. Free composition in English (page 34)
 - f. Teaching as a Vocation (page 34)
 - g. Disabled Children (page 35)
 - h. Technology (page 35)
 - i. Under-developed Subjects (page 36)
 - j. The Role of Parents (page 36)
 - k. Noise Pollution (page 37)
 - l. Coaching (page 37)
- 10. Conclusions and Recommendations (page 37)
- 11. Acknowledgments (page 41)

Main Report - Introduction and Overview

Although commissioned by Project Mala, this evaluation is independent of that organisation. Unlike earlier evaluation reports it offers a comparative analysis of three different types of school within the Project Mala area, Non-Government Organisation (non-fee paying charities), Private/Public (fee paying) and Government. The non-Project Mala schools were chosen at random from a list of 103 schools within a relatively short distance from the Project Mala schools (500 metres to 6 km) that are situated in Guria, Turkahan, Patehra, Mujehra, Hasra and Amoi. All of which were visited. The sample represents a balance in age groups and type of school. A small number of additional schools were added at the start of the visits. It was important to the 'independence' of the study that the schools were not selected by Project Mala staff.

This evaluation focuses on the quality of education currently provided within the southern arc (or belt) of the traditional carpet making area south of Varanasi (Benares). It is a 'qualitative' study based on the evidence of observation. Education in India is developing rapidly alongside the economy and the Trustees of Project Mala thought it appropriate to evaluate where their schools stand in relationship to this change. Such an evaluation could inform the direction of the Project.

A key assumption of the evaluation is that however good Project Mala might have been at fulfilling its original aims in the past, those aims now need to be adjusted or reaffirmed in the light of broader evidence from a range of schools within the area.

This evaluation takes account of previous reviews of progress within the Project Mala schools conducted by Professor Bupinder Zutshi and Professor Mondira Dutta of J N University, New Delhi. The former visiting Turkahan, Hasra, Amoi, Paterha and Mujehra schools in 2016, recording generally favourable impressions and talking with parents and teachers about their observations. The latter, undertaken in 2005, providing an in-depth study with quality of education judged on the percentage of pupils successfully moving on to the next stage of education and a discussion on the effectiveness of 'mainstreaming' children. The aims of the study centred around the prospects of those who had passed through the schools, including those who fail to progress to the next phase or 'drop out'. Prospects in relation to further education, skill development and employment opportunities.

A third study by Professor Mondira Dutta details individual case studies of those who have passed through the schools, looking at what those students thought project Mala had done for them. This last study was particularly useful in focusing attention on the longer-term prospects and responses of expupils.

Evidence was collected from 17 schools. Six Project Mala, two Care and Fair (NGO), three Private/Public, and six Government. The main activity within the visits was the close observation of 68 full lessons, alongside other observations of classrooms, activities and buildings whilst 'touring' the school. Timetables were provided in advance for all the Project Mala schools so that a representative sample of lessons could be observed. Appendix One details the schools visited, with subjects and year groups seen. Photographs were taken in all the schools and classrooms, some of which appear in this study as well as video which helped with later analysis.

In addition to the visits, and where available, documents were examined and discussions carried out with teachers and management. A full spreadsheet of financial income and spending was provided by Project Mala, covering the Financial year 2015-16.

The two Project Mala Education Advisers were interviewed in England prior to the study, with follow up discussion with one of the advisers present at Guria school during the time of the visit. Discussion

with pupils proved difficult in the classroom situation, but every effort was made to talk to pupils whilst in the school or walking in the villages close to Guria. This not only provided an insight into their learning and enjoyment of school but also enabled interaction with a family, broadening understanding of the communities from which pupils came.

The Schools by Designation

It would be unfair to compare schools purely by output, whether by organisation, pupil success rates or quality of education provided (see sections on the curriculum and the quality of teaching and learning below). It is also necessary to consider the cultural differences that exist between different types of schools and the constraints they experience in relation to funding, access to quality teachers, curriculum development, and the pupils' abilities and levels of attainment on entrance.

Non-Government Organisations (NGO) as represented here by **Project Mala** and **Care and Fair** have a commonality in that their origin began with a concern to ensure appropriate schooling for the children of families within the carpet industry. In the case of Project Mala this began 30 years ago, focusing on children from poor areas. Children who might otherwise have found themselves working in the industry, albeit at a very local level within their village. They were provided with the wherewithal to attend school, which meant compensating the families for financial loss, providing clothes (school uniform), ensuring that the children were well-nourished (daily meals) and that they could access a Project Mala school from wherever they lived. This remains the case today, although the project has widened its sphere, not only in increased numbers of schools but in the range of educational opportunities provided. These now include pre-school activities aimed at supporting girls into education and developing a facility for Higher Secondary Education. The project also provides Community Workers, who in addition to seeking out children who are not at school, help families to understand the need for education and support them within the community if there are health, financial or other issues.

Care and Fair, as the name implies, is also concerned to remove children from a position of labour but places the emphasis on the health care of children and families employed in the industry and more directly providing a 'Fair wage' through 'Fair pricing' of carpets exported. Care and Fair schools have been in existence for some 20 years. Project Mala, on the other hand, has moved away from teaching children skills in carpet making, as part of their curriculum. It now ensures that those who are intellectually able (within poorer communities) have the chance to progress from the early stages of education on through the phases of education, to reach their potential, moving on to higher education where possible.

These Non-Government Organisation schools are different from the other schools in that they are Charities and are funded entirely without cost to parents or to the local government. Sponsorship of individual children in the UK and USA is a major source of income, in addition to funding from larger organisations. Both face challenges for the future in relation to the focus they should now take and which of their current objectives should be modified.

Estimates of the percentage or proportion of schools in India that are fee-paying (**Private and Public**) vary depending on year and size of sample. They also vary from state to state and between urban and rural areas. That there are many private and public schools in the cities is witnessed by the growing number of hoardings advertising entrance at every level from pre-school to college, including residential. Comparing the number of schools through ratios may also be misleading as many fee-paying schools are by necessity going to have more pupils than local government schools or even NGO schools. In Patehra, for example, where one of the Project Mala schools is situated, there are 23

other schools. There are 8 private schools and 15 government schools. This would suggest a ratio of government to private of approximately 2:1, or as a percentage, private schools make up 35% of the schools. This is consistent with estimates made elsewhere for non-urban areas. However, if the number of pupils registered is compared, then private schools have 62% as against government schools which have 38%. Thus, private schools within the area of Patehra are receiving fees from families for 62% of the children registered at school. To confound the statistics further, however, the private school visited in this area was listed to contribute some 275 pupils to the above calculation. The visit revealed 650 children on roll, 200 of whom were of kindergarten age. One other school visited 9-12 years, had very large classes with 1400 children in two shifts.

In keeping with the aims of this study, higher fee paying public schools for the rising middle classes of India have not been included. The private schools visited were chosen because the range of children available to them is the same as those for other types of school. Therefore, the fees they charge are, in comparison, low. The range of fee across the three schools visited was 150 to 350 INR per month, depending on age. Whereas sponsorship of a child within an NGO school might be nearer 650 INRI (£8). This has important repercussions for what those schools can do. The need to increase income leads to very large classes and poorly trained teachers. And in some, but not all, instances observed, very poor buildings, with little furniture or teaching equipment, other than a blackboard. Inevitably, such conditions will impact on the delivery of the curriculum and on the quality of teaching and learning. A third school, however, despite housing 1200 children in very large classes, did have well-kept buildings with appropriate furniture.

The **Government Schools** visited varied more than any other type of school in the condition of buildings, organisation and quality of lessons observed. Some had been established a long time and in one school, a pre-school class had been in existence for 30 years. This is very unusual, in that preprimary education is not a fundamental right in India. However, Article 45 of the Indian Constitution does state that "The State shall endeavour to provide early childhood care and education for all children until they complete the age of 16".

It was not always easy to obtain attendance figures, but these also varied. Over the last ten years there has been a considerable increase in the numbers of primary children attending school across India, even within rural areas. This is partly due to the *Right of Children to Free and Compulsory Education Act 2009*. This covers children 6 - 14 years. In January 2016 Kerala had achieved 93-95% over a period three years. At the time of writing, the enrolment for Utter Pradesh was not known.

Much of the government's efforts in implementing this legislation has been directed, in addition to providing basic but generally well-constructed buildings, to ensuring training and certification of teachers (National Council for Teacher Education) and introducing a high level of pay that is not easily matched by NGO or Private schools. The assumption, however, that this will lead to high quality teaching and learning, with resultant improved examination grades, is not borne out by this study. The variation in quality was considerable amongst the six schools visited, but the fact that one large school could produce lessons that were all judged good, and in one instance very good, suggests there is potential for improvement.

Problems hindering the development of quality range from a lack of furniture and equipment to classes having to come together through teacher absence, or as witnessed in one school, a teacher teaching two separate classes simultaneously, moving from one class to the other. In some instances, the high level of pupil absenteeism made it difficult to achieve continuity of learning. One very important element of the schools visited, however, was the School Management Committee, which in the best instances included parents. Where these committees were active, there was evidence of furniture being purchased and exploration of establishing education beyond the national entitlement limit of 14 years.

The Visits by School Name

Without exception, all the schools visited were welcoming and open to inspection. A few schools began by choosing children to 'perform' pieces such as reciting numbers from one to a hundred, but on asking to sit at the back of the class to observe the lesson in progress, every effort was made to provide a comfortable seat, which often was transported from class to class. Some schools had gone to the trouble of arranging a welcome ceremony, which included petals falling from an unfurled flag, garlands, lighting candles at the pictures of prominent Indian leaders such a Nehru and Gandhi, and in one instance a well-rehearsed dance and song routine, very appropriate to the aspirations of the children and beautifully enacted, culminating in large letters spelling WELCOME.

The descriptions below are necessarily brief but important in establishing a context for the more detailed analysis which follows. Also, the number of schools visited, 17 in all, places a limit on the amount of information imparted.

Guria PMS Years 1-11 (with boarding for top secondary, opened in February 2016). This will be extended into a Y12 group to cover the UP Board 2-year curriculum.

At the time of the visit a new guest block was being built above the Senior School teaching area. The current girls' residence is situated below the guest accommodation and had 19 girls in a very cramped bunk bed system for 20. The current guest accommodation above will be remodelled to provide more space and more accommodation for girls. The boys' accommodation has more space. At the time of visiting, the boys were doing their homework and reading (Maths in Hindi) on their beds. All children were pleased at the visit, and had tidied up their dormitories in expectation of it. They were polite and cheerful. Both the boys and the girls dormitories had one younger child (by one year) who was here because of the difficulty of travel. Most of those in residence live some distance away and would not find attendance easy.

Many modifications are being made to the building. Some because of registration with the UP Board for years 11 and 12. At the time of residence the old gate wall was being demolished to enable slightly larger gates as required in the registration regulations. The tailor's area, he has two assistants (all school uniforms for all Project Mala schools are made here) was being refitted, as was the kitchen, which currently is very basic, with Gas fires beneath clay pot holders and large aluminium pots. Development will enable more hygienic cooking conditions as well as providing a suitable place for children to eat (currently pupils walk through this area). The Classrooms are similar to those experienced in Kerala, i.e., fixed bench seats for two, offering little opportunity for group work unless the pupils turn to face each other, in twos or fours, which was a common form of interactive learning observed throughout the school. The classes for younger children had benches without desks that can be configured for group work. All face a large blackboard. One class has a whiteboard but none are electronic.

Overall, there was an atmosphere of diligent learning, with a very good degree of pupil self-discipline and engagement. In addition to the development of a Year 11 and 12 syllabus, with subjects such as IT and Commerce, other beneficial activities were observed which are not strictly part of the general examination curriculum. These included, cooking, gardening, dance and needlecraft. All involving good levels of participation. The kitchen garden in this school is well established but largely looked after by adults. *Turkahan PMS* Years 1-8 with the addition of a pre-school in the morning. The school currently operates a shift system AM and PM.

This relatively new building is situated on the top of a plateau, with several miles of unmade road leading to it. Children must walk some distance to the school. An attempt has been made to enhance the grounds with vegetation. Unlike other Project Mala schools, however, this presents a challenge as the plateau is drained of water through a water table some depth from the surface, with the water running out through waterfalls lower down. Nevertheless, an effort is being made to provide a kitchen garden and boundary foliage. Irrigation is the main problem.

The morning shift accommodates years 6-8 with a year 5 'remedial' group. The afternoon shift is for years 1-5 plus a 'middle' class and a 'one to one' support group. The teachers are predominantly male with a lady running the pre-school group. As in other Project Mala schools the children say a prayer before lunch, which is acceptable to all faiths. It is reported as important to the project that schooling does not interfere with the local culture.

Again, as with other Project Mala Schools, electronic finger print recognition is used to record attendance. This both enables a quick analysis of absence and saves teaching time by removing the need for teachers to record attendance in the classroom. In many Project Mala schools, such as Guria, where attendance is very high, the system encourages pupils to arrive on time, as the time of arrival is also recorded.

A specific note was made of the seating arrangements, which even for older children formed a 'horseshoe' facing the teacher, allowing both good vision of demonstration materials and ease of access to group work. Turkahan PM school recorded the highest proportion of 'excellent' lessons of any school (see the section on quality of teaching a learning below).

Care and Fair XL 350 pupils

Care and Fair operate some 8 schools within the Bhadohi/Mirzapur area. In 2015/16, this involved registering 2,658 pupils. In addition, they operate 7 Women Empowerment Programmes for around 270 young women (see below). Buildings are well kept and relatively spacious. The class sizes seen were comparable to those in the Project Mala schools, with similar high quality uniforms. There was a good ratio of women to men teachers. The furniture within classrooms is of a good quality. The ratio of boys to girls was like other schools. Discipline and the attention of pupils was good. No group work was seen, however, and the lessons tended towards 'rote' learning, with all tables and chairs facing the front. The rate of absenteeism was relatively high at around 20%. The school had, as did Haji Saheb Ali, a Women Empowerment Centre, which took in young women from the locality not yet married, offering them a yearlong course in aspects of textile work, such as using a sowing machine, knitting and embroidery, increasing their chances of employment. All three lessons in this school were rated as good (see section on teaching and learning).

Care and Fair Haji Saheb Ali 338 pupils

Full lessons were not seen. A tour of the whole school was accompanied by the Director and lesson observations were not recorded as the time spent in each classroom was too short.

Unlike other schools and the sister school of KL, the ratio of girls to boys was inexplicably high. In all other respects, the comments set out for XL above also apply to this school. In addition, observation was made of the 'care element' through the monthly visit of the doctor to check on the health of the

children. A referral is made to the local hospital if necessary. This is part of the Student Health Care Programme that operates in all Care and Fair schools. Observation was also made of a well-equipped and spacious computer room. The visit took in the whole school, but as explained above, did not provide enough time in each lesson to accurately record the quality of teaching and learning. Although, lessons were conducted in much the same manner as in XL.

Govt Primary 1 – (no lessons observed)

Unlike the other school visits this was not pre-arranged. The school is next door to the Haji Saheb Ali school. The young and articulate male teachers were keen to relate their concern for lack of facilities, particularly desks and chairs. The five classes, years 1 - 5 were being managed by four teachers. As with many other schools visited, the children were seated in rows on the floor, on matting, using a UP Board text. The level of absenteeism here was very evident in the small classes seen. The teachers when questioned, put this down to the weather.

Although the children were cheerful and responsive, they were less disciplined than in other schools, some of them wondering around whilst others were completing exercises from the text book. As with other government schools visited, the children found it difficult to find a comfortable method by which to write in their exercise books seated on the floor. Again, as in other government schools, the teachers are well paid, having completed a certificated course. But the teachers here were very forthcoming in explaining their difficulties in relation to lack of equipment, for example in science, and in maintaining continuity with children who are frequently absent. They talked about a High Court judgement in Mizapur regarding the right to desks and other essential furniture, although it was not clear what the ruling was.

It was not difficult to sympathise with these young teachers, particularly as their children, as in other government schools, are those that have not gained entrance to NGO schools through entrance examination or assessment and come from families who either cannot afford to pay private school fees or are not sufficiently aware of their child's need for education.

Ramchandrapur Govt Primary 2

Despite the age of the building the property was well-kept and attractively presented. Class sizes varied between 11 and 26. Again, children were sitting on the floor in lines on matting. A 14-year-old boy with obvious learning difficulties was seen in a Y3 class. There was a warm welcome from the head teacher and the head of the village. Unlike the government school outlined above, most of the children were smartly dressed in khaki uniform, similar to that seen in other government schools. There were two young lady teachers in this school. There is a pre-school class in the morning but this was not observed. There were examples of good lessons seen here, despite the lack of materials and problem-solving approaches, where there was crisp interaction between the teacher and the children. The teacher having a clear voice. The mathematics observed was of an advanced level for the age group, but the learning for the most part, passive and 'rote' based.

Bihra Pahi Private Middle 1 (9-12 years)

In comparison to the NGO and Government schools seen, the buildings were very poorly constructed, resembling a farm. Although benches and tables did exist for older children, these were in poor condition and the first four years sat on the floor. Many children attending this school did not pass the entrance test for a PM school. The children did not wear uniform. Despite the very large classes (60 - 70), and in one instance the difficulty of seeing the blackboard from the back of the class, attention among the pupils was good and four out of the five lessons observed were rated good (see section on

quality of teaching and learning). The school was started by the head teacher's brother, who has now moved on to a government school. The teachers are drawn from the locality. Discipline was good.

Patehra PMS Primary Years 1-8

The immediate impression is of an attractive setting with bougainvillea flowering around the perimeter fence and shrubs neatly laid out in well-marked beds. Stone seats and avenues of plants add to the general atmosphere of calm. There are the beginnings of a kitchen garden, with potato, brindle, leeks etc. Some very good interactive work was observed here, although the lessons varied from excellent to poor. The phonic work demonstrated all the qualities of an excellent lesson, one of only 7 out of 68 lessons observed across all the schools. The introduction of Yoga once a week, and observed on this visit, was clearly a success. Unfortunately, this could not be said of the art lesson, which like the only other art lesson to be observed during the study, needed a great deal of re-thinking. This issue is taken up later.

Dhanaval Govt Primary/middle 3 (no lessons observed)

Unfortunately, no lessons were observed in this school as formal classes had been cancelled for three days following a Unit Examination for UP Board. Instead, the head teacher, in scout master uniform, brought all the school together to form a welcoming party and perform corporate exercises. The school had some connection with Lord Baden Powell, the founder of the scout movement. The visit was useful, however, in that the leader of the village had convened the School Management Committee. It was interesting to note that they were currently considering options for those children who have to leave at 14. The current age at which Indian legislation providing education entitlement ceases.

There are 172 children in the primary sector, with an equal balance of boys to girls. In the middle school this is reduced to 117 overall, with the proportion of girls standing at 38%. Without detailed statistics of pupil numbers over time, it is difficult to interpret this reduction. On the one hand, it may signal a 'drop out' rate for girls from primary to middle, on the other it could be interpreted as an improvement in the number of girls coming forward for primary education. Class sizes are reported to be around 30, with most children sitting on the floor, as in other government schools observed.

The curriculum at this school adds music to the other UP Board subjects. It was also reported by the teachers, some of whom travel in from Patehra, that the school's growing reputation has led to children travelling some 3km, whereas previously the pupil population would have drawn from a 1km radius. The teachers spoke well of the ongoing training they receive. The numbers of pupils present on the day of the visit would signify a reasonable rate of attendance.

Turkahan Govt Primary/middle 4

This school is reported as having 80 primary and 50 middle school pupils, with 2 teachers for each sector. This leads to combined classes. On the day of the visit, three classes were seen which contained combined year groups. In one instance the groups (Y3, 4 and 5) were taught in the same classroom by two lady teachers, but each of the year groups had their text books open on a different page. Space was very confined, with no furniture. The combined class for Y6, 7 and 8, contained an older boy with visual impairment. Four children were pointed out who had not passed at Project Mala for the next stage of education at the end of Year 5.

It was refreshing to witness a singing lesson delivered by a teacher with an excellent voice and enthusiastically participated in by the pupils.

Kakrad Govt Primary/middle 5

Although on one site, the school has two head teachers, one for the primary and one for the middle. At the time of the visit the government ODF team (educating the local populous on the use of government funded toilets) were visiting the area and had taken over one room. This meant that one class was taught on the veranda. Again, children were pointed out (in this case four girls) who had not passed at Project Mala for the next stage of education at the end of Year 5. Six full lesson observations were made in this school, including a pre-school class (see section on teaching and learning), and unusually all were rated good. As with some of the other government schools, attendance rates were difficult to determine, although the small size of the classes (10 - 23 and 40 for the combined year classes) would suggest a moderate level of absence.

It was reported that there has been a nursery in the school for some 30 years. At the time of the visit, there were 16 children (mix of boys and girls) ages 3-5. The children were sitting in a circle and the activities observed involved them and held their attention. The classroom shelves showed a variety of appropriate pre-school equipment. Two lady teachers were involved, one of whom explained the UP-Government text book for pre-school, but went on to say how she modified this to meet the children's needs.

Again, the level of mathematics taught in this school was of a high level for the age of children involved.

The buildings and grounds were well-kept. There is an active School Management Team that includes parents. One class observed had bench seats and tables made from tubular steel, which looked relatively new.

LDCS Private 2

There are 650 children enrolled at this school. The owner who was present on the day of the visit explained the origin of the school. His father was an illiterate 'freedom fighter' in a hill station area. When he returned home he wanted to enable children to learn to read and write in a way that he had never had the chance, so he set up a school. The current buildings were recognised as inadequate for the numbers of pupils involved and a plan had been drawn up for a new external building. The building was in poor condition overall with very few teaching resources. The school is mostly Hindi medium but a small number of pupils "who are able and want to" can progress in English medium in English, Maths and Science. The school uses the CBC Board for English Medium and the UP Board for Hindi. Although opened in 1998, the school has been registered since 2006. The children come from a very wide area and the school has five vehicles. Teachers are selected by interview and written test.

Classes are based on grade and not age. One older child was observed with a younger group. He had completed class 5 in government school but his parents had asked the school to take him. He was not judged to be up to the grade so was currently in a class for Y1. Unfortunately, because of the inadequate space and very large classes, it was difficult for the teachers to deliver lessons that were anything other than poor. In the most extreme case of overcrowding 100 kindergarten children were facing a teacher in one direction and in the same space a further 100 faced in the opposite direction with another teacher.

Mujehra PMS

A substantial period was spent with the pre-school group (25 present and 3 absent). Within Project Mala, pre-school has a defined meaning. It refers to girls of 6 -7 years of age, who are provided with

the opportunity to have equal access to Project Mala schooling (affirmative action) by enhancing their progress into the education structure. The activities provided are based on a current topic and consist of working in small groups, rotating through different activities that are well supported by materials. This allows the teachers time to work in a small group with individuals on curriculum areas such as reading. The whole is very interactive and 'hands on', which the children thoroughly enjoyed (see section on teaching and learning). This was one of a very small number of instances during the study where learning through play and group communication was actively encouraged.

The question remains, however, whether this pre-school could start earlier in the girls' life as in the preschool observed in Kakrad. The focus currently, however, is to provide 'stimulation' for girls who are found not to be able to do even the 'basic' things required on entry to school. It also provides them with a degree of social awareness. It is viewed by the Education Adviser responsible to be better for the girls to be stimulated and taken forward in this way than to be 'bottom of the class', which traditionally in India means sitting at the back, as it once was in the United Kingdom. For further discussion of the pre-school curriculum and approaches, see the section on the curriculum.

In addition to the pre-school class, some very good lessons were observed in this school which involved practical experiences of voting (Government administration), problem-solving group tasks in comparing Sanskrit with Hindi, gardening for boys and a games session for girls (see section on the Curriculum). The games observed were the traditional Indian games of Kabbadi and Kho Kho.

There are specific challenges faced by schools in this area. It is said to be an area where men are given to alcohol and drugs and women struggle to keep the home together. Clearly education in that context has a high value. It is gratifying, therefore, to see that all lessons observed in this school (6 in all) fell within the very-good to excellent category.

Mujehra Govt Primary 6 (Kamasin)

There are two primary schools in this village, this one is small and was originally for girls only. Currently, it does not have enough space for the 153 children registered. Space was tight, even on the day of the visit when 30% of the pupils were absent. The head teacher of this school has been used to train Project Mala teachers in the teaching of Mathematics, and is thought well of by Project Mala staff. The need for materials was evident, however, in the maths lesson observed. Whilst the teacher had a ruler and the text book showed one, the children did not, which meant they could not adequately appreciate the subject of the lesson – a number line.

Concentration for all classes was extremely difficult. A horrendous level of noise was emanating from speakers overlooking the school. Occasionally the head teacher went to tell them to turn it down. This lasted for about five minutes before it started up again. Similar disturbances were observed in other schools close to temples but not at the level experienced here. The head and teachers presented as enthusiastic. Most teachers were fluent in English. There was a good pace within lessons and the children were attentive. The lessons suffered, however, from being over didactic. The proportion of lessons judged as 'good' was less than in other government schools visited.

Vindigam Private/Public School 3

The greeting here was as described in the opening paragraph of this section, with older children lining the way and younger children singing and dancing, with one of the lines song, "give me a chance to try". The owner, his son and the Principal were there as part of the welcoming party. The education adviser to Project Mala, Anne Bates, was also present, observing lessons. She gave feedback at a meeting of teachers at the end of the day. The teachers, who had requested the meeting, were grateful

for this. There are 1200 children registered at the school of which 170 are English Medium. The school has been open for 15 years, with English Medium classes introduced 4 years ago. Many children arrive at the school via bicycle. The owner is an ex volleyball player, who teaches volleyball and badminton. Although class sizes were lower than those experienced in other private/public schools visited, teachers were finding it difficult to teach classes in the same room, due to a general lack of space. The building, however, was well-kept with benches and chairs in good condition. Despite having the highest number of 'poor' lessons observed in this study, there was both physical room and ability within the teachers to improve on this situation quite quickly. The absentee rate was around 10% in all the classes observed.

Hasra PMS

Despite difficulties with the electricity supply, this is a well-kept building with a large play area. An attractive environment is enriched by a well-planted perimeter and floral avenues. The kitchen garden is yet to be developed but this should offer further opportunity for pupil involvement. There was only time to observe two lessons fully, one of which was a preschool group for girls only. Class sizes varied between 25 for the pre-school and 35 for other groups. The attendance rate was very high. As with the other outlying Project Mala schools visited, the quality of teaching and learning here was very good to excellent, with a good arrangement of furniture and interactive approaches using practical materials.

Amoi PMS

The layout of the school is like that described for Hasra above. The kitchen garden is now developing to a point where children can actively engage in its development and upkeep. During PHSE lessons the roles observed in Guria school were reversed with girls gardening and boys cooking. Class sizes averaged 40, with roughly equal numbers of boys to girls. Absenteeism was very low. A previous report drew attention to rain leakage. There were signs of cracks in the ceiling.

The visit presented an opportunity to meet and talk at length with one of the two community workers employed by Project Mala. He works six days a week in term time, commuting to the villages by bicycle or motorbike. The community workers follow up on absence. They also support members of the community by dealing with health, financial or other issues that may affect their livelihood. One of their main roles is to seek out children who are ready to take the Project Mala entrance exam and support the parents in making an application.

An exceptional science lesson was observed here. As with other Project Mala schools, Butterfly materials were used (see section on the curriculum). In addition to the good pace and progress observed, the teacher was seen to be reinforcing difficult concepts around 'solids, liquids and gases' by using different activities to achieve the same end. A great deal of 'problem-solving' and 'thinking' was required of the pupils to complete blackboard exercises, and engage with practical demonstrations.

The Curriculum

Much of the curriculum across all types of school is dictated to a lesser or greater degree by the Uttar Pradesh Board curriculum and examinations, and the use of UP text books. There is, however, considerable variation in timetables and balance of subjects. For Y11 and 12, Private schools use the Central Board of Secondary Education (CBSE), and other schools, including Project Mala are 'affiliated' to the National Institute of Open Schooling (NIOS). In Guria School (Project Mala), however, the curriculum in Y11 and 12 is affiliated to the UP Board. This raises some issues for Project Mala schools, which are discussed at the end of this report.

In the schools visited, all Government schools used the UP Board text books, as did the NGO schools and Private schools, although to a lesser extent. Sometimes other published material was used. Most notably, within the Project Mala schools, both the pre-school curriculum and the English curriculum for years 1 - 8 (Primary and Middle) had been successfully modified and developed by the two Education Advisers from England. They spend two months of the year in the Project Mala Schools, supporting the training and development of teachers as well as writing and shaping the curriculum into a more interactive and 'problem-solving' form.

Where timetables were available, there was adherence to the State curriculum in relation to the subjects taught at the national age groups of 1-5 (Primary), 6-8 (Middles), 9-10 (Secondary) and Y11 and 12, generally known as the 10 + 2 curriculum, with the latter two years sometimes known as 'Junior College'. In Years 1 and 2, the emphasis is on English, Hindi and Maths. In Years 3 and 4 this widens to include Sanskrit and Science. Therefore, for example, the Care and Fair schools and Project Mala schools both have timetables in Y1 and Y2 where English, Maths and Hindi, each take up a quarter of the lessons, leaving a quarter of the timetable for other subjects such as games in Care and Fair, and Yoga, Art, PHES, Story, Poem, Games and reasoning in Project Mala Schools.

The PM Schools have a wider range of activities that are rotated during the same lesson period. This principle is carried forward into Years 3-5 but Sanskrit, Hindi, English, Maths and Science remain at the heart of the timetable. Because Project Mala operates an 'accelerated' curriculum, by combining Years 1 and 2, and Years 3 and 4, i.e., the five years of primary education are condensed into three years, the timetable has a larger proportion of lessons for English and Maths, which it achieves through rotating lesson periods through these and other subjects.

At the end of Year 5, all pupils take an examination to enter middle school. It is generally recognised across all schools that the primary years are less rigid in what can be taught and how, but that the Middle school curriculum is constricted by the subjects that cascade down from secondary examination classes, such as Applied Sciences.

In all the Middle schools, aspects of Social Science, such as History and Geography were observed. Very few schools, however, offered vocational studies, although the Care and Fair schools both had strong Environmental Science and Computer courses. Within Project Mala, time was made available for Gardening and Cookery up to Y5, which translated into Agriculture and Domestic Science in the years above this. Both boys and girls were observed in Project Mala schools cooking and working in the kitchen gardens, although the latter is an area yet to be more fully developed.

In the Secondary and Junior College years at Project Mala, vocational subjects such as Commerce and IT had been successfully introduced. Discussion with the two Education Advisers, confirmed the lesson observations (see Teaching and Learning) that there is greater flexibility in the primary and middle school years for 'interactive' learning. However, the introduction of the Butterfly Scheme in Project Mala for Science and Mathematics has made a significant impact on the quality of lessons. Teachers have been trained in both subjects by 'external' bodies. The schemes are strongly supported by materials, which both help the teacher to demonstrate concepts, as in the case of Science lessons observed, and provide pupils with materials to manipulate, as in the case of mathematics. This allows a tactile and visual element to the learning which is more in keeping with current learning theory. In the schools where the classes were large and/or lacked furniture and materials, it was not possible to differentiate the learning for children who learn primarily through visual, tactile or auditory senses.

English Grammar has been significantly re-worked within the Project Mala schools. Thus, the effect on pupils' use of English in later years (those who have experienced the methods and materials written by one of the Education Advisers from England) stands in stark contrast to some of the 'rote'

responses encountered in other schools or in the neighbourhood. One example of this was observed whilst walking in the locality. A young man in Y11 in Guria School (who had not experienced the whole of the revised curriculum in English) attempted to make himself understood but struggled, although he was not using rote phrases heard elsewhere. His younger brother, currently in Y7 helped him understand and develop the conversation. Clearly the younger boy had benefitted from the Grammar, Reading and Writing, and Vocal/Discussion modules that had been produced by the Adviser.

It should be emphasised that some good levels of English were observed amongst both Government School and Private School teachers but that the syllabus, lack of appropriate training and a reliance on UP Board text books mitigated against children learning English effectively.

The Project Mala scheme uses worksheets as against text books. These are accompanied by class readers and a vocabulary sheet, and teachers have a copy in Hindi. What is significantly different about these exercises from those seen in schools using the UP Board text, is that they are aimed at comprehension rather than a rote response. The stories used relate to India, for example in Y7 the stories are from Panchatantra. Understanding is left to the teacher to check and there is no strict time line for this. Reading and Grammar can go on at a different pace. Some tests are built into the syllabus, but teachers are trained and encouraged to use the materials in a way that supports the development of English for the individual child.

In contrast to this, one of the lessons observed in a Private School, involved a well-illustrated text where a conversation about going into the garden was taking place. The teacher asked children in turn to say one word, which the whole class repeated, before another child was asked to read another word, again the whole class repeated this. Unusually, feedback was requested on the observation. This simply consisted in pointing out that it would be better for the child to read the whole of the phrase and not one word, i.e., "I am going into the garden", since comprehension comes from the combination of these words in a way that it does not when the phrase is broken into individual words.

By way of an example, set out below are the notes taken of a 'very good' English Grammar lesson given by a young male teacher of short experience. The notes signify both effective training and availability of a good curriculum scheme.

Year 6 English

42 Children. 28 boys and 14 girls. No absence.

Looking at verbs – a speaking lesson. Teacher gives example and asks for answers. Lesson given in English. Some repetition, e.g., all respond. I want to 'jump', 'run', 'sleep' etc. Good clear and efficient use of blackboard. Not too much information on the board at any one time. Somewhat 'rote' but 'interactive' in response. Pace of lesson quite rapid but children able to add own element in their responses, showing understanding – teacher "I want to" child "go to school". They stand up in pairs and ask each other questions, e.g., what do you want to do?

English Grammar. Prepositional phrase – "what does he want to do?"

Good interaction between teacher and pupils. Progressed to children asking questions of the teacher with good interactive responses. Good sense of humour. Children keen to take part, exhibiting a good relationship between them. As with the assembly – a child goes to the front to act as the teacher.

Similar observations were made in the classes using Butterfly Mathematics and Science, except these lessons used apparatus as described above (see teaching and learning).

The pre-school curriculum in Project Mala Schools has been introduced by one of the Education Advisers who has taken overall responsibility for the pre-school and primary phases of education. Whilst a very good pre-school session for 3-5 year olds was observed in a Government School (the only one seen outside of Project Mala), the two longer sessions observed at Project Mala schools were rated as excellent.

Although the syllabus and activities have been designed specifically to support girls into education at 6 and 7 years of age, much of the material could be used with younger children. The day has a variety of features that include; show and tell, whole class activities around a song, poem or story, and theme based groups using practical apparatus such as Lego and paints. Hindi phonics and maths teaching occurs on two days of the week respectively, and health and hygiene includes the use of a toothbrush. The methods used to carry out these activities very much support the list of quality criteria outlined in the section on Teaching and Learning.

Teaching and Learning

The quality of teaching and learning lies at the heart of good education. Unfortunately, many countries now judge their schools on examination results (outputs), ignoring the processes by which those results are achieved. Thus, individual pupils are judged on examination grade success. This has led to an increase in 'rote' learning that does not in the longer-term support understanding. There is currently a debate within India regarding the balance of 'rote' learning against 'problem solving' learning, and the desirability of increasing learning activity that helps children and young people to 'think' about what they are learning and how they can put that learning to good use. Not all rote learning is bad. It is quite appropriate, for example, to know immediately that 7 multiplied by 7 is 49, as this may aid the problem-solving activity of working out the optimum space for a new play area in the school. But it could also be argued that a high degree of rote learning alongside pressure to pass examinations at the right grade, encourages cheating. The way to change the learning behaviour of pupils for the better is to fundamentally change the way teachers teach.

The degree to which teachers can change the way they teach not only depends on their understanding of how children and young people learn, but on the constraints of the physical and organisational environment in which they find themselves. A good many lessons observed for this evaluation, in all types of school, demonstrated that teachers had the potential to improve their pupils learning but were heavily constrained by: large classes, teaching in a room where another class or classes were being taught, insufficient space to organise pupils into 'interactive – problem solving' activities, lack of appropriate furniture, few, if any, supporting practical materials, or a written curriculum that lacked breadth and progression.

Most of the schools visited demonstrated the potential for development.

68 lessons were observed during this evaluation, across a variety of schools. Only those lessons where a substantial amount of the observer's time was spent in the classroom (3/4 to a full lesson) are recorded. Most lessons were of 40-minute duration. Appendix One provides an overview of the year

groups and subjects observed. Where possible, a timetable was analysed beforehand to ensure a representative spread of year groups, subjects and teachers.

It was not thought appropriate to import indicators of quality of teaching and learning from another country. The 15-point rating scale (see below) was arrived at after completing and analysing all the lessons observed. These criteria are further expanded below. Not all the items on the rating scale apply to each lesson. For this reason, the scale is divided into four sections as follows:

- Excellent 13-15
- Very good 9-12
- Good 5-8
- Poor 0-4
- •

Using this method for each school, it is possible to set out the range of lesson grades and the average. The range is important because in some instances, despite a low average score, a teacher within an individual school may demonstrate qualities that can be used by that school to improve teaching and learning overall.

Before proceeding further, however, some explanation is required of the borderline between Good and Poor. As can be seen below in Table One, some 20 lessons were rated Poor and a further 21 rated Good. The borderline between the two is the rating 4 and 5 above. Analysis shows that some 55% of lessons rated poor reached four of the positive criteria and some 38% of those rated good five of the criteria. Which means that 28% of lessons overall were poor/good borderline. This would suggest that despite a high level of poor lessons, some schools can improve lessons where they are rated as borderline. In addition to the information provided below, therefore, each school can obtain, on request, individual lesson data giving a full breakdown of all the criteria observed in each lesson.

Criteria derived from observations for lesson quality

Each lesson rated against this criterion

- 1. Ambience suited for learning both within the classroom and the school.
- 2. Seating arrangements and use of available space
- 3. Active rather than rote
- 4. Children encouraged to use own ideas
- 5. Attention span throughout lesson
- 6. Pace of lesson in relation to group
- 7. Progression and where appropriate reinforcement
- 8. Group and individual work in addition to whole class
- 9. Variety within the task (s)
- 10. Use of materials to explain, demonstrate and explore
- 11. Use of blackboard for effective communication
- 12. Easy, relaxed relationship between teacher and pupils with humour
- 13. Practical demonstration with appropriate apparatus/objects
- 14. Enthusiasm and engagement level of pupils
- 15. Other (as observed in a very small number of lessons).
 - a. During the lesson the teacher checks on the learning of individual pupils.
 - b. The objectives of the lesson are shared with the pupils at the beginning of the lesson

Set out below is the 'general' position for each school. It was not thought appropriate to include a full analysis for each school *but these are available on request*. Average figures are rounded up, i.e., 11.6 becomes 12.

School	Lessons	Points	Average	Excellent	Very	Good	Poor
	Observed	range	Grade		Good		
Guria PMS	13	4-11	9	0	9	2	2
Turkahan PMS	5	4-15	11	3	1	0	1
Care and Fair XL & Haji Saheb Ali	3	6-8	7	0	0	3	0
Govt Primary 1 (no lessons	0						
observed)							
Ramchandrapur Govt Primary 2	4	4-6	6	0	0	2	2
Bihra Pahi Private Middle 1	5	1-6	5	0	0	4	1
Patehra PMS	5	4-13	9	1	3	0	1
Dhanaval Govt Primary/middle 3							
(no lessons observed)							
Turkahan Govt Primary/middle 4	3	2-7	5	0	0	1	2
Kakrad Govt Primary/middle 5	6	5-9	7	0	1	5	0
LDCS Private 2	3	1-2	2	0	0	0	3
Mujehra PMS	6	10-13	11	1	5	0	0
Mujehra Govt Primary 6	4	4-8	5	0	0	1	3
Vindigam Private/Public School 3	6	3-5	4	0	0	1	5
Hasra PMS	2	10-13	11	1	1	0	0
Amoi PMS	3	7-13	10	1	0	2	0
Total	68			7	20	21	20

Quality of lesson by school TABLE ONE

It should be stressed that although the number of classes observed in some schools was small, the general pattern of these lessons was repeated in other lessons where a shorter period was spent, but these observations are not included in the analysis.

In the following comparative analysis, percentages have been rounded up or down to the nearest whole figure.

TABLE TWO

Comparative analysis between School Type (17 schools in all)	Lessons Observed	Points range	Excellent (Number and percentage)	Very Good (Number and percentage)	Good (Number and percentage)	Poor (Number and percentage)
Project Mala Schools 6	34	4-15	7 (20%)	19 (56%)	4 (12%)	4 (12%)
NGO Other 2	3	6-8	0	0	3 (100%)	0
Private/Public 3	14	1-6	0	0	5 (36%)	9 (64%)
Government 6	17	2-9	0	1 (6%)	9 (53%)	7 (41%)
TOTALS	68		(10%)	(29.5%)	(31%)	(29.5%)

To better understand why Project Mala score so highly in the excellent and very good categories (as well as the 12% poor), it is necessary to examine more closely the criteria demonstrated by each school and therefore 'type' of school. It is also necessary to look more closely at the criteria to understand why schools find it difficult to demonstrate these. See following page.

TABLE THREE:

Lesson analysis sheet by criteria for each school type Comparative analysis between School Type (17 schools in all) and number of times criteria (outlined above) observed (number and percentage)

School	Lessons Observed	1 Ambience Classroom and school	2 Seating and use of space	3 Active not rote	4 Child's own ideas
Guria PMS	13	13	6	10	4
Turkahan PMS	5	4	5	4	3
Patehra PMS	5	5	5	5	1
Mujehra PMS	6	6	6	6	2
Hasra PMS	2	2	2	2	1
Amoi PMS	3	3	3	3	1
Project Mala Total	34	33 (97%)	27 (79%)	30 (88%)	12 (35%)
Care and Fair XL and	3	3	0	0	0
Haji Saheb Ali					
Care and Fair Total	3	3 (100%)	0	0	0
Ramchandrapur Govt Primary 2	4	4	1	1	0
Turkahan Govt Primary/middle 4	3	2	0	1	0
Kakrad Govt Primary/middle 5	6	6	2	1	0
Mujehra Govt Primary 6	4	0	1	1	0
Government Schools Total	17	12 (70%)	4 (24%)	4 (24%)	0
Bihra Pahi Private Middle 1	5	0	0	1	0
LDCS Private 2	3	0	0	0	0
Vindigam Private/Public School 3	6	6	0	0	0
Private/Public Schools Total	14	6 (43%)	0	1 (7%)	0
	14	U (4 <i>J 70)</i>	V	1 (7 /0)	V
Total lessons in which apparent	68	54	31	35	12
Rank order – most to least observed		3	8	7	14

TABLE THREE continued:

Lesson analysis sheet by criteria for each school type

Comparative analysis between School Type (17 schools in all) and number of times criteria (outlined above) observed (number and percentage)

School	Lessons Observed	5 Attention span	6 Pace	7 Progression	8 Group and individual work
Guria PMS	13	13	11	11	3
Turkahan PMS	5	4	5	4	3
Patehra PMS	5	5	4	4	2
Mujehra PMS	6	6	6	6	5
Hasra PMS	2	2	2	2	1
Amoi PMS	3	3	2	3	0
Project Mala Total	34	33 (97%)	30 (88%)	30 (88%)	14 (41%)
Care and Fair XL and Haji Saheb Ali	3	2	3	2	0
Care and Fair Total	3	2 (66%)	3 (100%)	2 (66%)	0
Ramchandrapur Govt Primary 2	4	3	2	1	0
Turkahan Govt Primary/middle 4	3	2	1	0	0
Kakrad Govt Primary/middle 5	6	6	6	6	0
Mujehra Govt Primary 6	4	4	4	1	0
Government Schools Total	17	15 (88%)	13 (76%)	8 (47%)	0
Bihra Pahi Private Middle 1	5	5	4	4	0
LDCS Private 2	3	2	0	0	0
Vindigam Private/Public School 3	6	6	3	0	0
Private/Public Schools Total	14	13 (93%)	7 (50%)	4 (29%)	0
Total lessons in which apparent	68	63	53	44	14
Rank order – most to least observed		1 Most	4	5	13

TABLE THREE continued:

Lesson analysis sheet by criteria for each school type

Comparative analysis between School Type (17 schools in all) and number of times criteria (outlined above) observed (number and percentage)

School	Lessons Observed	9 Variety within task	10 Use of materials	11 Blackboard
Guria PMS	13	7	5	6
Turkahan PMS	5	4	4	5
Patehra PMS	5	1	2	1
Mujehra PMS	6	5	4	2
Hasra PMS	2	2	1	1
Amoi PMS	3	1	1	2
Project Mala Total	34	20 (59%)	17 (50%)	17 (50%)
Care and Fair XL and Haji Saheb Ali	3	0	0	3
Care and Fair Total	3	0	0	3 (100%)
Ramchandrapur Govt Primary 2	4	0	0	4
Turkahan Govt Primary/middle 4	3	0	0	2
Kakrad Govt Primary/middle 5	6	1	0	4
Mujehra Govt Primary 6	4	0	1	3
Government Schools Total	17	1 (6%)	1 (6%)	13 (76%)
Bihra Pahi Private Middle 1	5	0	0	4
LDCS Private 2	3	0	0	0
Vindigam Private/Public School 3	6	0	2	4
Private/Public Schools Total	14	0	2 (14%)	8 (57%)
Total lessons in which apparent	68	21	20	41
Rank order – most to least observed		10	11	6

TABLE THREE continued:

Lesson analysis sheet by criteria for each school type

Comparative analysis between School Type (17 schools in all) and number of times criteria (outlined above) observed (number and percentage)

School	Lessons Observed	12 Relationship	13 Practical demonstration	14 Enthusiasm and engagement	15 Other
Guria PMS	13	12	6	5	2
Turkahan PMS	5	5	3	4	1
Patehra PMS	5	4	1	2	2
Mujehra PMS	6	6	1	6	0
Hasra PMS	2	2	1	2	0
Amoi PMS	3	3	2	1	0
Project Mala Total	34	32 (94%)	14 (41%)	20 (59%)	5
Care and Fair XL and Haji Saheb Ali	3	3	0	2	1
Care and Fair Total	3	3 (100%)	0	2 (66%)	1 (33%)
Ramchandrapur Govt Primary 2	4	4	0	2	0
Turkahan Govt Primary/middle 4	3	3	1	1	0
Kakrad Govt Primary/middle 5	6	5	0	2	2
Mujehra Govt Primary 6	4	3	0	1	0
Government Schools Total	17	15 (88%)	1 (6%)	6 (35%)	2 (12%)
Bihra Pahi Private Middle 1	5	4	0	0	0
LDCS Private 2	3	2	0	0	0
Vindigam Private/Public School 3	6	2	0	0	0
Private/Public Schools Total	14	8 (57%)	0	0	0
Total lessons in which apparent	68	58	15	28	8
Rank order – most to least observed		2	12	9	15 Least

TABLE FOUR: Criteria derived from observations in rank order of number of times observed and overall percentage

Original Number	Criteria <u>in rank order</u> of times observed	Total and percentage	Project M Rank ord and percenta	ler R a	Rani Ind	<u>) Other</u> k order entage	Ran and	v <u>ernment</u> nk order l centage	Ran ana	v <u>ate/Public</u> 1k order ! centage
5	1. Attention span throughout the lesson	63 (93%)	J1 97	% J	2	66%	J1	88%	1	93%
12	2. Easy, relaxed relationship between teacher and pupils with humour	58 (85%)	2 94	% J	1	100%	J1	88%	J2	57%
1	3. Ambience suited for learning both within the classroom and the school	54 (79%)	J1 97	% J	1	100%	3	70%	4	43%
6	4. Pace of lesson in relation to group	53 (78%)	J3 88	% J	1	100%	J2	76%	3	50%
7	5. Progression and where appropriate reinforcement	44 (65%)	J3 88			66%	4	47%	5	29%
11	6. Use of blackboard for effective communication	41 (60%)	6 50			100%	J2	76%	J2	57%
3	7. Active rather than rote	35 (51%)	J3 88				J6	24%	7	7%
2	8. Seating arrangements and use of available space	31 (46%)	4 79				J6	24%	N	
14	9. Enthusiasm and engagement level of pupils	28 (41%)	J5 59			66%	5	35%	N	
9	10. Variety within the task (s)	21 (31%)	J5 59	% N	1		J8	6%	Ν	
10	11. Use of materials to explain, demonstrate and explore	20 (29%)	6 50	% N	1		J8	6%	6	14%
13	12. Practical demonstration with appropriate apparatus/objects	15 (22%)	J7 41	% N	1		J8	6%	N	
8	13. Group and individual work in addition to whole class	14 (21%)	J7 41	% N	1		N		N	
4	14. Children encouraged to use own ideas	12 (18%)		5% N			Ν		N	
15	 15. Other (as observed in a very small number of lessons) e.g., The objectives of the lesson are shared with the pupils at the beginning of the lesson Note: J = Joint ranking N = Not observed 	8 (12%)	9 59	6 3	3	33%	7	12%		

Although the results for Care and Fair are included here, it needs to be borne in mind that (for reasons explained earlier) only three lessons were observed. Whereas, the results for Government Schools, Project Mala Schools and Private/Public schools are more reliable with 17, 34 and 14 full lessons observed, respectively.

The most frequent criteria observed for all types of school are the attention span of children and the good relationship that exists between teacher and pupils, a good starting point for any education system. This might surprise teachers in Europe, where attention is not always a given. India is different. Attention, however, is not the same as enthusiasm and engagement. Although a good level of active enthusiasm was exhibited in both Project Mala and Care and Fair (over 50% of lessons) there is a marked decrease for government schools (35% of lessons), but this is still well above the private/public sector, where little enthusiasm was displayed, despite high levels of attention. This is not surprising, as the enthusiasm with which children participate in lessons, is precisely that, borne of participation. Except for Care and Fair, this criterion correlates well with active rather than rote learning, and the seating arrangements and use of available space. Both being difficult to achieve in very large classes.

The next most frequent criterion observed in all types of school were the ambience suited for learning, both within the classroom and the school, the pace of the lesson and to some lesser degree the progression observed within the lesson (moving forward within the subject). As with all the criteria, however, a closer look at individual schools shows that there are considerable variations within the same type of school. Whilst they are generally consistent for Project Mala schools, all the ambience figures for Private schools are encountered in only one of the three schools, which is reversed with the Government schools, with three out of the four scores exhibiting this. Similarly, only one Private school demonstrated pace and progression but this was recorded in all four of the Governments Schools. One government school contributed significantly to the figures on progression within the lessons observed.

A further criterion that came high on the list of all schools (though much less so in Project Mala), was the use of the blackboard for effective communication. This is not surprising, if few materials are used other than text books. The blackboard work also accounted for some of the attention children demonstrated in the lessons. Where this was good, the chalk was of a high quality (some soft chalk had been observed to make indistinct marks), and the teacher wrote clearly, with words and sentences wellspaced and large enough to be seen at the back of the class. More importantly, what was written on the board was central to what was being taught and was timed, in exposure and erosion, to the pace and progress of the lesson. A few very poor examples were seen of teachers inadvertently rubbing off words with their sleeve or not gauging the layout before the start, which in one instance lead to very small words and figures at the bottom of the board which could not be deciphered, even from the front row.

The use of the blackboard has been elaborated on here, not only because it was for many teachers their main teaching tool but also because within the rank order of criterion observed, Project Mala came last at 50%. There is very good reason for this, putting aside a small amount of poor blackboard usage, and that is that there is a high correlation between the use made of the blackboard and other forms of teaching aid. With a few notable exceptions (see individual school analyses) there was very little recorded use of materials to explain, demonstrate or explore in Government and Private Schools, and likewise very little observed about the variety of, and within, tasks. Whereas in Project Mala schools, these were evident in a half or more of lessons. Further, only in Project Mala schools was there evidence of group and individual work in addition to whole class and only in these schools (some 35% of lessons) were pupils encouraged to use their own ideas, which is an important part of the transition

from 'rote' to 'problem-solving' learning. There were examples, however, both within the Care and Fair school and one government school, of 'other' (criterion 15) aspects of good practice. These were moving around, marking individual pupils work during the lesson, or moving around during the lesson commenting on pupil's work.

More explanation is given in the section on curriculum on the impact on the quality of teaching and learning of materials such as Butterfly Mathematics and Science, Jolly Phonics, the English Grammar syllabus and lessons written by one of the Education Advisers from Project Mala, and the teaching methods introduced over time in Project Mala schools by both its Education Advisers. All of which have a profound impact on how lessons are organised and delivered. Aspects of Jolly Phonics, preschool work and English lessons can be seen on very good YouTube footage posted by Project Mala and linked to their on-line Mala News.

Recruitment, Training and Retention of Teachers

This is of vital concern for all the schools involved in this study. Key factors are the ability of the schools or NGO to train non-certificated teachers to the quality required and then to retain their services in the light of greater remuneration elsewhere.

Although Government schools have teachers who are certified and well paid, the abilities of those teachers may be frustrated by lack of infrastructure in the school or poor management. In addition, 'certification' of itself does not guarantee well-trained teachers and in the better Government schools in this study, teachers were grateful for in-service training.

The high levels of absenteeism amongst teachers in Government schools is recorded nationally. This varies from State to State but is around 25% at any one time. In 2014 the World Bank estimated that the cost in salaries alone paid to teachers who have never attended work was US \$2 billion per year. They also reported that around 50% of teachers were missing when unannounced visits were made. Other studies have reported that very few head teachers have dismissed a teacher for repeated absence. In a case publicised by the BBC relating to the World Bank survey of 2014, one female teacher had been absent for 23 years. Sangeeta Kashyap was recruited as a biology teacher in the central state of Madhya Pradesh in 1990. School authorities say they do not know when she was last paid a salary, but she is still listed as an employee. BBC correspondents report that absenteeism is a pervasive problem in government-run schools in India.

Absentee rates were difficult to establish in the Government Schools visited for this study, but the fact that classes were combined and/or taught in different classrooms by the same teacher moving from one to the other, would suggest the problem exists. In the Government Primary School visited that displayed attendance of pupils and teachers, it could be expected that at a national pupil teacher ratio of 35:1, there would be 4 teachers employed. Despite the high absence of pupils (30%), there were in fact 4 teachers in that school, all of whom were working very hard.

One of the concerns for management within the Project Mala schools is the ability to retain good teachers who are trained within the Project schools. The financial management for the Project is well documented on very detailed spreadsheets, month by month. Salaries account for about a third of expenditure, which must cover a wide range of items: transport, uniforms, books, boarding house, nutrition and health care etc., some 22 items in all. Discussions with the management and educational advisers would suggest that unless more money can be found, it will be difficult to retain teachers who can obtain a higher salary elsewhere. Nationally, there are two problems here. Firstly, primary teachers are not paid as well as secondary teachers and secondly, women teachers are paid less. This is

not the case in Project Mala schools, but nevertheless, retention is difficult at the current salary level paid by the Project.

One reason why teachers might want to stay at Project Mala, however, is the quality of the training and development they receive. Although there are no personal professional development programmes as such, something that the Project might consider, the opportunities to improve their teaching and to learn to use schemes and materials is considerable. Both of the Education Advisers from England spend one month, twice a year, at their own expense in the schools. The focus of the development is discussed and agreed with the person who has overall management responsibility for all the Project Mala schools. For example, in October 2016 the focus was the programme for teaching English Grammar up to Year 5.

Teacher absenteeism is not a problem in the Project as it is elsewhere. Teachers are not always qualified as in Government schools, but they are chosen for their ethical stance and their attitude to hard work, and as such are amenable to being taught and to improvement. There is a system of observing teachers and those who prove poor, leave after a while. Where necessary, external trainers are bought in, as with Butterfly Science. The head teacher of one of the Government Primary schools visited also gave training in teaching mathematics. More importantly, the advisers mentor teachers who are competent and confident enough to train their colleagues, for example in Phonics.

Usually teachers' salaries in private schools vary per the size and reputation of the school or organisation. Generally, it is reported that a would-be teacher must provide a CV outlining his or her career, relying mainly on academic credentials. This includes everything, starting from admission in BEd courses to obtaining a chance to teach in a school. The subsequent salaries will be influenced by acquired certification or degrees. Training in private/public schools tends to be 'on the spot' and through experience. For example, one Year 11 boy in Project Mala Guria School has an Uncle who runs a private school nearby (not visited). His ambition is to enter this school as a teacher when he graduates from Project Mala at Year 12. On visiting his house, it was found that his father earned money driving a minibus for his brother's school and that the main room in the house had a blackboard where this boy practiced teaching a boy from the private school.

The following is an illustration of the breadth of salary range for teachers in non-government schools. They are taken from Naukrihub.com. The tables also illustrate the 'lower' standing of primary school teachers and the differential between salaries for men and women.

TABLE FOUR

Primary School Teacher	Less than a year	INR 59,516 – INR 232,699		
20 years and more	INR 180,000 – INR 268,584			
High School Teacher	Less than a year	INR 66,000 - INR 368,671		
20 years and more	INR 174,445 – INR 760,256			

Primary School Teacher	Bachelor's degree	INR 69,996 – INR 289,617
	Bilingual education	INR 108,000 – INR 192,000
	Teacher Certification	INR 71,353 – INR 300,607
	Middle Teacher Certification (Grade 5-9)	INR 103,846 – INR 174,000
	Elementary Teacher Certification (Grade 1-5)	INR 72,877 – INR 301,362
	Secondary Teacher Certification (Grade 9-12)	INR 78,000- INR 232,258
High School Teacher	Master of Arts, Economics	INR 117,916 – INR 308,368
	Bachelor of Education, Bed	INR 86,555 – INR 1,616,179
	Master of Science, Mathematics	INR 98,959 – INR 317,418
	Bachelor's Degree	INR 94,020 – INR 596,993
	Bachelor of Education or Bed, English	INR 93,000 – INR 330,000
	Master of Arts or MA, English	INR 60,820 – INR 363,650
	Bilingual education	INR 68,008 – INR 930,797
	Teacher Certification	INR 71,952 – INR 471,049
	Middle Teacher Certification (Grade 5-9)	INR 93,653 – INR 294,408
	Elementary Teacher Certification (Grade 1-5)	INR 48,656 – INR 295,898
	Secondary Teacher Certification (Grade 9-12)	INR 93,483 – INR 473,976
	MRT or Master Reading Teacher Certification	INR 73,533 – INR 447,399

TABLE FIVE: Variation of Salaries of Teachers based on Degrees or Certification

TABLE SIX: The gender based salaries of primary school teachers vary as follows:

Primary School Teacher	Female	INR 61,723 – INR 263,816
	Male	INR 144,643 – INR 181,514
High School Teacher	Female	INR 95,168 – INR 386,671
	Male	INR 74,696 – INR 528,506

Statistics for government appointed teachers are difficult to obtain. However, the 'Glassdoor' website which details all government salaries for potential earners, suggests that the average monthly salary is 40,777 INR or 489,000 a year. The monthly salary to which this average is applied, however, varies from 19,000 to 90,000 INR, so the highest yearly salary could be as high as 1,080,000 INR, some £9,000 per year at current exchange rates, which is almost twice that suggested above for a male teacher in a Non-Government High School.

Leadership, Management and Community Involvement

As can be seen from the previous sections, strong interrelations exist between the curriculum, teaching and learning, and teacher training. The quality of education provided by any organisation or individual school will depend heavily on how these three aspects are managed and developed. There is therefore, a strong correlation between the quality of leadership within an organisation or school and the quality of education children and young people experience. Further, no school or organisation can successfully meet its aims unless it communicates effectively with the community it serves. Within this study, these aspects vary considerably across both the type of schools visited and the individual schools themselves.

Necessarily, the leadership and management structure for Non-Government Organisations, because of their size and complexity, will differ from Private schools. Government schools have 'notional' layers of leadership and management emanating from National, State and Local government in the form of teacher education, curriculum requirements and regulations affecting a variety of functions. In this study, however, it was clear that the quality of leadership exhibited at the school level was vital to the quality of education experienced by the pupils, whatever the organisation and type of school.

This relationship had been clearly understood in the leadership and management organisation at Project Mala, where the management structure has three tiers. There is a senior manager within Guria school who looks after all the Project Mala schools. Two middle tier managers, one an educationalist and one not, oversee the effective functioning of the schools. One for Guria and Majehra and one for Hasar, Turkahan, Paterha and Amoi. Their job is to apply policy. The role of the head teacher (more properly referred to as the teacher-in-charge) is to provide a daily timetable, oversee maintenance and look after the welFair of the children.

It was clear from discussion with the senior manager, however, that one of his priorities is to develop this role to provide leadership in the classroom in relation to the quality of teaching and learning. Where this has already happened, as is the case for Turkahan school (see below), then there is evidence from this study that this has been an effective strategy. Other priorities within the senior management at Project Mala would also affect the quality of education provided. These are: improving the quality of teachers; improving buildings; introducing more classroom technology, such as 'smartboards'; and developing on-line 'advanced' courses.

It is no coincidence that where the quality of teaching and learning was rated more highly within the type or group of schools observed, leadership was a key factor in bringing this about. The following examples illustrate this. A general overview of the three schools can be found in the section on School Visits.

Project Mala – Turkahan

Turkahan School had the highest recorded number of excellent lessons of all the schools visited (3 out of 5), the remaining two were rated 'very good' and 'poor'. The poor lesson was an exception within this school and the teacher concerned was known to the management of Project Mala. The teacher-in-

charge here, was actively involved in producing quality lessons and encouraging others to do likewise. The introduction of Jolly Phonics, the Muzzy Programme and Butterfly Maths (see Curriculum), have made a substantial impact on these lessons, as has the desk arrangements into a horseshoe (as described in the school visits section). It should be acknowledged, that these contributory elements were introduced by the two Education Advisers from England but what made them particularly successful in this school was their effective use through the example provided by the Teacher-in-Charge (head teacher).

Private school – Bihra Pahi Middle

As outlined in the section on Schools Visited, the buildings and size of classes mitigate against high quality teaching and learning. However, pupils were well-disciplined and the teachers effective in their communication. Of the three private schools visited, this one produced the highest number of 'good' lessons, 4 out of 5, with one lesson rated poor. It was not possible to explore fully the reasons for this but it must be assumed that the leadership and teacher training, provided by the person who set up the school, the then head teacher, had made some impact. All the teachers seen in this school were from the locality. The head teacher has since moved to take up a position in a Government school. It was not clear whether he is the current owner, along with his brother, and therefore still exercises some oversight.

Government – Kakrad – Primary/Middle

The leadership within the primary school here was more apparent. Both through the energy and commitment of the head teacher, but also through the School Management Committee, which appeared active in considering issues such as furniture and Post 14 Education (see School Visits). The buildings were in a much better condition than those observed in the private school above. Although no excellent lessons were observed here, of the six lessons seen, one was rated very good (pre-school) and five good. An unusually high number for a Government School and despite combined year classes. One of the lessons was taken by an 'assistant' teacher, who effectively taught a lesson on algebra. Compared with other government schools, there was good pace and progression in all the lessons seen and blackboard work was clear and effective. Two out of the eight lessons across all schools with quality criteria judged 'other' appeared in this school. One teacher was seen to be marking individual pupil books as they finished an exercise, giving feedback, and another teacher was observed walking around the class, discussing and commenting on individual pupil work.

Role of the Project Mala Education Advisers

It would be difficult not to conclude that the higher proportion of quality lessons seen in Project Mala Schools is due to the work of the two English ladies who have been acting as Education Advisers to Project Mala for some years. This has already been referred to in other sections of this study but the point to be made here is that they offer a degree of leadership in the way they carry out their work. This level of leadership within the development of 'quality' education, is difficult to find in other schools, but it is one that could be emulated by both the Government and Private Schools who have taken part in this study. The skills which the two advisers demonstrate would be difficult to replicate, but some attempt to source such skills, even to a much lesser degree, would prove beneficial.

Community Involvement

There are at least two aspects of working within the community served by the schools. One is the involvement of parents and the other is being part of the community from which children come. Two of the Government schools visited demonstrated the effective involvement of parents in the School

Management Committee, where decisions about the schools current functioning and future needs were discussed. Although the distance travelled by some pupils to NGO and Private Schools may work against effective involvement of parents, treating parents as equals in the education of their children is a fundamental principle of education practice worldwide, though not always upheld. The relative poverty and/or lack of education of parents, in both urban and rural areas should not deprive them of this involvement.

Although Project Mala does not actively involve parents in the decision-making processes about its operation and future, it does very effectively work within local communities by employing two Community Workers, whose key role is to ensure children who might otherwise miss out on education are identified and prepared for school entrance. To work effectively with the families, however, the Community Workers may need to support them in a variety of ways, including dealing with issues of health and finance. They also follow up on absence, travelling to the villages by bicycle or motorbike. They gather data useful to the Project. They have insight into the local conditions as they come from the communities they cover.

Development Issues

This section brings together the issues raised within this report and particularly focuses on the future development of Project Mala Schools. Where an issue has common ground with other types of school, then this is indicated.

Reporting pupil progress

One of the recommendations of the 2005 report compiled by Professor Bupinder Zutshi, outlined in the Introduction to this study, was that:

Project Mala should follow-up and monitor the progress of the students after completing education from Project Mala schools vigorously. Follow-up action programmes of mainstreaming all the children into formal schools should be in place.

It was not part of the brief for this study to examine whether such a recommendation had been carried out, although the concepts of 'mainstreaming' and 'formal' education are discussed below. The issue which arises from this study that bears some relationship to the above recommendation is one of 'qualitative' reporting of children's achievements. This is a difficult topic because it involves teacher time and a balance needs to be struck between planning, delivering and reflecting on lessons as far as recording is concerned. It could be argued, for instance, that far too great a burden is placed upon teachers in England about the amount of paperwork they are required to complete. One which arguably has led to a negative impact on classroom activity. However, it could also be argued that end of education phase examination results of themselves provide insufficient information for the next phase of a child's education, if they are leaving one type of school for another. Particularly, if they would like to return to, for example, a Project Mala School in the future, having failed the examination at the end of Class 5 or Class 8.

On several occasions in this study, children, particularly girls, were seen in Government schools who had not passed the Project Mala examination for Year 6. Four girls in Turkahan Government School and another four girls in Kakrad Government School were identified. The girls in Kakrad were in Class 8 and doing well, although it was all too easy to see their humiliation at being pointed out. There was some ambivalence as to whether they would wish to take the entrance examination for class 9 at Guria School.

There are two important points here. The first is that the pupils, their parents and the receiving school need 'qualitative' information about their learning that goes beyond examination results. Secondly, it is educationally desirable that schools should learn from their pupils' success and failures. There is little point in praising schools for high pass results or indeed condemning them for low pass results unless they understand what it is that has produced these results. School Inspection systems in many parts of the world would acknowledge that the failure of pupils to gain qualifications or to move to the next phase of education, cannot always be blamed on the pupil or their level of intellectual ability. The responsibility for outcomes should be shared between schools, families and children.

The Development of Pre-school in Project Mala

Earlier sections of this report clearly indicate the excellent quality of pre-school education that has been introduced into Project Mala Primary Schools, and the degree to which this reduces the disadvantage experienced by girls' accessing education through entrance tests. One other pre-school facility was observed in a government Primary School (Kakrad) and although not of the same calibre as those seen at Project Mala, it was of a high quality. The main structural difference between Project Mala and this Government Nursery, however, was the age-group, which makes comparison between the two more difficult. The age of the children at Kakrad was 3-5 years, with a mixed group of boys and girls. The age of the Project Mala pre-school girls was 6-7 years. Clearly any development will have financial implications but consideration should be given in the future to extending this successful facility to encompass nursery age children. These would be from the poorest areas served by Project Mala, enabling more rapid integration into primary schooling.

Sharing Expertise

One of the most important issues to arise from the above section, relevant also to older children, is the ability of Project Mala to share its experience and expertise, particularly with those schools who will receive children who do not pass the examination for the next stage of Project Mala schooling. Experience from this study would suggest that this might be more difficult with Private Schools. Government Schools, however, have no alternative but to accept children who fail to gain a place in other schools or accept children whose parents are either too poor to pay for private education or lack an appreciation of the importance of education.

One school visited that had already developed a relationship with Project Mala was Mujehra Government Primary School in Kamasin. The head teacher of this school has already helped to train Project Mala school teachers in mathematics (a subject found to be taught at quite a high level in other Government schools). The teachers in this school had a good command of English.

Again, such a development would have financial implications, but since Project Mala cannot hope to increase the number of places available in its schools sufficiently to accommodate all of the poorer children in its 'catchment' area, it is likely to have to become more stringent over time in its acceptance of those that are more intellectually able, leaving other children who might do well in relation to their abilities, such as the four girls witnessed at Kakrad, to government or private schools. The view that Project Mala is already, if gradually, moving away from the poorest to the intellectually more able, was a view expressed by some employees of Project Mala.

Affiliation and 'mainstreaming'

There is within the wider management team at Project Mala a debate about both these concepts. Part of the aim (number 3) of Project Mala is to 'mainstream' children into formal education but it is reported that since the introduction of the rights to education legislation in 2009, the term 'formal' is no longer used. Further, given the movement outlined above towards selecting more able children and

concentrating on academic outputs, it could be argued that aims 1 and 4 may also need review, i.e., facilitating personal growth through education and rehabilitation training, and educating the poorest and physically disabled. This is not to suggest that these aims are obsolete, but that a decision is required as to how much they can be fulfilled within the developments that have taken place in education in the Project Mala area over the past 10 years.

The concept of affiliation is strongly related to that of 'integration', the degree to which Project Mala, and Private schools for that matter, lie within or outside the state system of education. Currently, Project Mala is affiliated to two Boards. Y1 - 8 with the National Institute of Open Schooling (NIOS) and Y - 12 with the UP Board i.e., only the senior school at Guria. There is concern that tuition fees for NIOS are increasing and will be a financial drain on Project Mala's charitable resources. However, since the Project operates an accelerated programme at Primary (covering 3 years rather than 5) this may affect the ability to affiliate with UP Board at this level, even though it would work well and cost less. It is reported that the UP Board would offer a wider range of activities such as sports.

Given the comments made in the sections above about the changes that are taking place in schooling in the area covered by Project Mala, it may now be necessary for the Trustees to consider the future in relation to 'integration' of its schools into the mainstream. There would be cost implications to extending the primary school years, particularly if early years were also extended downwards. One key factor, however, that should be considered is the obvious lead Project Mala has in the quality of its education provision over and above other types of school, and how this can best now be articulated for the good of the community it serves.

Free composition in the teaching of English

As the section on the curriculum makes clear, there is a very well thought out scheme, with developed materials, for the teaching of English Grammar. Years 6 - 9, feature sentence diagramming along with the Jolly Grammar materials. This is well in advance of the English lessons seen in both Government Schools and Private Schools. A review of all the lessons observed, however, gave very little by way of 'creative composition', where children are encouraged to use what English they have learnt to re-tell stories in their own words or write about their own experiences.

This is not entirely unexpected as the English, even in English Medium classes, will be based on English as it is used, i.e., a second or third language. In many parts of India, for example in some parts of Kerala, English is one of three or four languages learnt simultaneously, i.e., for the Keralan Muslim Community, Malayalam, English, Hindi and Arabic. However, much of the day to day conversation will be in the State language. In the report produced by Professor Mondira Dutta in 2016 she writes that some teachers complained of children talking in Bhojpuri or their local dialect "at the slightest opportunity". Since this is the language of their community, it might be expected.

The Grammar exercises seen at Project Mala, particularly those that provide for participation of the pupils through sentence diagramming are much preferable to the 'rote' response activities witnessed in several schools. Some 'creative' personal usage, however, in addition to the stories and poems provided in the Project Mala curriculum, might help in the eventual day to day usage of English in the wider community, particularly for work prospects.

Teaching as a Vocation or Job mentality

As the section on Teacher Training, Recruitment and Retention makes clear, teachers in Project Mala are in part recruited and then fostered based on an underlying desire to want to teach, and to learn a 'profession' that is intrinsically rewarding. This level of commitment was also observed in a small

number of Government and Private schools, but by no means the majority. Whilst the salary structure is important and Project Mala may have to look more closely at what it can afford to pay its teachers to retain them, the fundamental notion that this is a vocation with important outcomes for children and the community must continue to be enforced. Many of the elements relating to quality education least evident in both Government and Private schools originate in this lack of commitment. A commitment which stems from a well-thought through programme of personal professional development. All schools within the Project Mala area need to address this issue. To further the quality of Education in Project Mala schools the Trustees might need to think about how the good work in training teachers already evident can be formalised into a continuous professional development (CPD) programme.

Where are the Disabled Children?

Aim four of Project Mala states that the poorest and physically disabled are given priority. The only 'disabled' pupils seen in this study were in government and private schools. The aim is specific about 'physical' disability, but given the progress made internationally in Special Educational Need and Disability (SEND) or Additional Educational Needs (AEN), this should be re-thought. The term disability covers a very wide range of needs in addition to those more obviously encountered as 'physical' or 'sensory'. Many children and young people are now being supported, across the world, who have 'hidden' disabilities, which when addressed allow them to perform at a high 'intellectual' or 'creative' level. Some will have abilities in specific fields such as mathematics, computing or graphics that will be obscured by communication difficulties due to 'different' ways of thinking or processing information.

No attempt here is made to apply labels, as such children and young people are individually different, but their difference should not bar them from receiving a high-quality education. All schools in the area, including Project Mala, need to reconsider the way they view children's needs and how best to ensure that individual difference, even within a local culture, can be articulated to provide a high-quality education for all.

Technology

It is one of the Senior Manager's priorities within Project Mala to replace blackboards with 'smart' or 'interactive' whiteboards. Such a change would undoubtedly make a difference providing the change is accompanied by teacher training. As can be seen from the lesson analysis, all schools, other than Project Mala, have blackboard use high on their list of most effectively used criteria for teaching and learning. In Project Mala, this comes further down simply because the blackboard has been appropriately replaced by curriculum materials that do not rely solely on the use of a blackboard, such as Butterfly Mathematics and Science and Jolly Phonics.

However, as pointed out earlier, to cover all the learning preferences of pupils, visual, tactile and auditory, there is a need for a variety of approaches. The introduction of 'interactive' whiteboards will go some way to supporting this, as would the introduction of video/film and other auditory stimuli. Some of the best lessons seen, used a combination of stimuli, but learning was taking place most effectively where children were in groups discussing and adding their own observations, alongside using materials that exemplified the point being taught. The introduction of technology will only be successful if it supports rather than replaces the children's interaction with the subject.

In addition, the financial outlay required to support technological advance, needs to be weighed against other pressing priorities, which at Project Mala (in addition to those outlined above) include replacing school transport and developing on-line activity for 'advanced' courses.

Under-developed subjects

Aim One of Project Mala is: Facilitating personal growth through education and rehabilitation training. As the Education System in general within India has become more academically oriented, it will have been difficult for all schools, including Project Mala not to succumb to a timetable that is driven by National and State curriculum objectives. Such a direction can obscure personal growth. The best education systems worldwide do not have a 'one size fits all' mentality. Curricula are differentiated to meet not only the economic and other outstanding needs of the country but the current needs of pupils and communities. Such differentiation recognises 'difference' and sets out to understand the needs of individuals and groups of pupils. It is not difficult to appreciate that a 'rounded' personal growth requires a 'rounded' approach to education. That requires some flexibility and the ability to modify the curriculum accordingly. A view clearly stated by the teacher responsible for the nursery in the government primary school. She showed the Government text book for Nursery Classes and then proceeded to say how she modified it.

As can be seen from the range of lessons observed in this study, there are many good examples of activities that strengthen body, spirit and mind that are not overtly 'academic'. Some of these activities are not only 'vocational' in their orientation, strengthening skills for work, but are also 'therapeutic' in their ability to stabilise individual pupils who may be going through a difficult time. Most of these non-academic subjects can be multi-functional in this respect. Some very good lessons were seen involving cooking, gardening, music, dance and games (see section on curriculum). All have the potential to provide therapy, work skills, social interaction skills, development of latent talents, nurture creativity etc. It is important that teachers, managers and trustees recognise this and develop the schools accordingly.

Only one 'non-academic' subject was seen to have little potential in its current form, and that was Art. This is surprising, given the range of activities it includes and the possibilities it presents for future work in design, communication strategies, media, advertising, film and television, as well as 'art for art's sake'. This may be because of the preparation time it takes, the materials required, or potential mess it creates. None of these obstacles, however, deterred pre-school teachers within Project Mala from providing a full range of expressive art activity which the girls full participated in and enjoyed. Some demonstrating the gift of a creative imagination.

Other Art lessons observed, however, were pencil drawings requiring little imagination, with no attempt made by the teacher to develop emerging skills. Given India's reputation for vivid art work, this is surprising. This is very much an area for development.

Finally, some discussion was had regarding the development of specific vocational courses, in addition to those seen in Year 11 of Commerce and Computing. Suggestions made were, for example, the training of laboratory assistants and care workers, both growth areas within the work place. Others centred around developing the current practical work undertaken in gardening and cooking into Agriculture and Catering, since this would provide work skills suitable for the local economy. Whether such courses could be integrated into the current structure or need the development of a dedicated Vocational School, is something that the Management Team and Trustees may need to consider in the future.

The Role of Parents

It has been remarked in the section on Leadership, Management and Community Involvement, that parental involvement is evident in some Government School Management Committees, and that Community Workers within Project Mala work with parents to enable their child to go to school. That

section points out the importance of parents sharing in the vision and working of the school(s) that their children attend. That education is a partnership. Both Private Schools within this study and Project Mala would, it is believed, benefit from greater involvement with parents at the level of policy formulation and decision-making at a local level. There are many ways that this could be developed, the simplest being a parent/teacher consultation group.

Noise Pollution

It is part of the Project Mala philosophy not to interfere with local culture. Its children are selected purely on their entrance test results. No consideration is given to gender, race, religion, tribe or caste. In several schools visited, however, it was evident that the proximity of a temple owning a large amplifier, impinged on the ability of the children to concentrate. This was at its worst at the Government Primary School in Kamasin. The huge horn-like speakers are positioned across the road and aimed at the school entrance. During the visit, the head teacher or other member of staff went across the road three times. Each time the sound was lowered or ceased only to be turned on again at an unacceptable volume.

This may seem an odd reference to make in this study but in recent years' amplifiers have become more powerful and it is incumbent upon those using them, including marriage festivities that last deep into the night, to exercise some thought about the impact on others. Particularly children attempting to learn. Clearly this is a matter for all schools but it may be necessary for Project Mala to monitor the levels of sound within their schools and negotiate a reduction in volume if necessary.

Coaching and its effect on teacher recruitment

This is an issue that has not been raised in the section on teacher training but it is one that all schools in this study, and Project Mala, need to be aware of. Such is the importance of tests and examinations now within the Indian education system, that even quite highly paid teachers within Government Schools can make more money by offering coaching in out of school time. The size of the industry is not known to this study but the potential for disruption of teacher supply and retention is considerable. The above section on Teaching as a Vocation offers some remedy for this but all that schools and organisations can do at this stage is to be aware of the extent of it within their locality and monitor its effects before considering ways of preventing the best teachers from being seduced into this activity.

Conclusions and Recommendations

Main Findings

Based on the criterion adopted and developed for this evaluation, Project Mala schools outperform other schools within their area. All schools, however, including Project Mala, have the capacity to improve in the key educational areas of the Curriculum, Teaching and Learning, Teacher Development, Leadership and Management, and Community Involvement.

The reasons for Project Mala's success in these areas stems from important development differences between the Project and other schools. These differences are outlined in detail in the main text but can be summarised (not in order of priority) as:

- Good, flexible, financial management and the level of funding achieved as a charity
- High levels of Leadership and Management skills deployed within the Project
- Quality of buildings and learning environment achieved through appropriate allocation of funding
- Class sizes achieved through appropriate allocation of funding

- Effective teacher recruitment, training and retention
- Continuous monitoring and development of the curriculum to meet learning needs, particularly in English Language lessons but also in the introduction of Mathematics and Science schemes
- The introduction and development of exceptional high quality pre-school provision
- High levels of excellent and very good lessons, based on the criteria developed for this study.
- Very low levels of absenteeism and reduced lateness using fingerprint recognition
- Effective community involvement through Community Workers
- Classroom management and high quality teaching and learning, assisted by appropriate use of furniture, individual and group learning, assisted by appropriate materials and demonstration.
- Finally, but most importantly, the consistent and long term use of Education Advisers to introduce and sustain the above developments

As detailed in the main body of the report, all schools demonstrated some of the above but were heavily constrained by the physical and organisational environment in which they find themselves: large classes, teaching in a room where another class or classes were being taught, insufficient space to organise pupils into 'interactive – problem solving' activities, lack of appropriate furniture, few, if any, supporting practical materials, or a written curriculum that lacked breadth and progression.

There are, however, important development challenges ahead for Project Mala, and indeed for other schools. Some can be resolved within the current structure, others will require a significant adjustment or increase in finance. These are set out in detail in the main body of the text and summarised below.

Recommendations

- 1. All schools need to consider the introduction of 'qualitative' reporting of children's achievements, rather than relying on end of phase examination results. Pupils, their parents and the receiving school need information about their learning that goes beyond examination results. It is educationally desirable that schools should learn from their pupils' success and failures. The failure of pupils to gain qualifications or to move to the next phase of education, cannot always be blamed on the pupil or their level of intellectual ability.
- 2. Where seen, the quality of pre-school education was excellent or very good. It reduced the disadvantage experienced by girls' accessing education through entrance tests. The main structural difference between Project Mala and the Government Nursery seen was the age-group, girls 6-7 years and a mixed group of boys and girls 3-5 years, respectively. Consideration should be given by Project Mala to extending this successful pre-school facility to encompass nursery age children. Children in the poorest areas would experience a more rapid integration into primary schooling. This would also be true of many other schools
- **3.** All schools, including Project Mala, need to monitor individual lessons to eradicate poor quality teaching and learning. The levels in some schools are very high. They need to consider the criteria for excellent practice set out in the main body of the report (all of which derive from good practice in the schools visited) and decide how best to introduce or enhance those items not prevalent.
- **4.** Since Project Mala cannot hope to increase the number of places available in its schools sufficiently to accommodate all the poorer children in its 'catchment' area, it is likely to move

over time away from an emphasis on poor children to those intellectually more able. **It is important that Project Mala share its expertise, particularly with those schools who will receive children who do not pass the examination for the next stage of schooling.** This sharing of expertise need not be one way, as other schools also have expertise that could benefit Project Mala. A Government Primary School has already successfully helped to train Project Mala school teachers in mathematics.

- 5. One of the aims of Project Mala is to 'mainstream' children into formal education but since the introduction of the rights to education legislation in 2009, the term 'formal' is no longer used. A decision is required as to how current aims can be fulfilled within the developments that have taken place in education in the Project Mala area over the past 10 years. It will be necessary for the Trustees to consider the future in relation to 'integration' of its schools into the mainstream. One key factor, however, that should be considered is the obvious lead Project Mala has in the quality of its education provision over and above other types of school, and how this can best now be articulated for the good of the community it serves.
- 6. The concept of affiliation is strongly related to that of 'integration', the degree to which Non-Government Schools, lie within or outside the state system of education. Currently, Project Mala is affiliated to two Boards. The National Institute of Open Schooling (NIOS) and the Utter Pradesh Board. There is concern that tuition fees for NIOS are increasing and will be a financial drain on Project Mala's charitable resources. However, since the Project operates an accelerated programme at Primary (covering 3 years rather than 5) this may affect the ability to affiliate with UP Board at this level, even though it might work well and cost less. Trustees of Project Mala need to decide on the relative merits of affiliation and decide what change is needed.
- 7. There is a well thought out scheme, with developed materials, for the teaching of English Grammar at Project Mala. This is well in advance of the English lessons seen in other schools. All schools, however, need to review their approach to 'creative composition' in English, where children are encouraged to use what English they have learnt to re-tell stories in their own words or write about their own experiences.
- 8. Teachers in Project Mala are in part recruited and then fostered based on an underlying desire to want to teach, and to learn a 'profession' that is intrinsically rewarding. This level of commitment also exists in a small number of Government and Private schools. Whilst the salary structure is important and Project Mala may have to look more closely at what it can afford to pay its teachers to retain them, the fundamental notion that this is a vocation with important outcomes for children and the community must continue to be enforced. All schools within the Project Mala area need to address this issue. To further the quality of Education in Project Mala Trustees will need to decide how the current good work in training teachers can be formalised into a continuous professional development (CPD) programme.
- **9.** One of the aims of Project Mala is that the poorest and physically disabled are given priority. Given the progress made internationally in Special Educational Need and Disability (SEND), this should be re-thought. The term disability covers a very wide range of needs in addition to those more obviously encountered as 'physical' or 'sensory'. All schools in the area, including Project Mala, need to reconsider the way they view children's needs and how

best to ensure that individual difference, even within a local culture, can be articulated to provide a high-quality education for all.

- 10. It is one of the Senior Manager's priorities within Project Mala to replace blackboards with 'smart' or 'interactive' whiteboards. Such a change would undoubtedly make a difference providing the change is accompanied by teacher training. It would in part address the learning preferences of pupils, visual, tactile and auditory. Some of the best lessons seen, used a combination of stimuli, but learning was taking place most effectively where children were in groups discussing and adding their own observations, alongside using materials that exemplified the point being taught. All schools looking at the introduction of technology should consider how best it might be used to support rather than replace the children's interaction with the subject.
- 11. A prime aim of Project Mala is to facilitate personal growth through education and rehabilitation training. As the Education System within India has become more academically oriented, so the timetable is driven by National and State curriculum objectives. The best education systems worldwide do not have a 'one size fits all' mentality. Curricula are differentiated to meet not only the economic and other outstanding needs of the country but the current needs of pupils and communities. That requires some flexibility and the ability to modify the curriculum accordingly. Some activities, however, are not only 'vocational', strengthening skills for work, but are also 'therapeutic' in their ability to stabilise individual pupils. Most of these non-academic subjects can be multi-functional in this respect. Cooking, gardening, music, dance and games, all have the potential to provide therapy, work skills, social interaction skills, development of latent talents and nurture creativity. It is important that teachers, managers and trustees recognise this and develop the schools accordingly.
- 12. Specific vocational courses, in addition to those seen in Year 11 of Commerce and Computing. The training of laboratory assistants and care workers, for example, are both growth areas within the work place. Others centre around developing the current practical work undertaken in gardening and cooking into Agriculture and Catering, since this would provide work skills suitable for the local economy. The Management Team and Trustees of Project Mala need to consider whether 'specific' vocational courses such as 'agriculture' can be integrated into the current structure or need the development of a dedicated Vocational School.
- 13. Except for pre-school classes, Art is a subject little developed in all schools. This is surprising, given the range of activities it includes and the possibilities it presents for future work in design, communication strategies, media, advertising, film and television, as well as 'art for art's sake'. This is very much an area for development. All schools need to consider how best to improve the teaching of Art.
- 14. Parental involvement is evident in some Government School Management Committees, and within Project Mala in the role of Community Workers. It is important that parents share in the vision and working of the school their child attends. All schools, including Project Mala, would benefit from greater involvement with parents at the level of policy formulation and decision-making. All schools should consider the ways that this could be developed, the simplest being a parent/teacher consultation group.

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John Moore