

# Muktangan Education Trust

(Unique project ID- KMPL202324002)

## Impact Assessment Report

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Prepared For: Kotak Mahindra Prime Limited



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## Ethical Consideration

- **Informed consent:** The interviews were done after the respondents gave their consent. Even after the interviews were completed, their permission was sought to proceed with their responses.
- **Confidentiality:** The information provided by participants has been kept private. At no point were their data or identities disclosed. The research findings have been quoted in a way that does not expose the respondents' identities.
- **Comfort:** The interviews were performed following the respondents' preferences. In addition, the interview time was chosen in consultation with them. At each level, respondents' convenience and comfort were considered.
- **Right to reject or withdraw:** Respondents were guaranteed safety and allowed to refuse to answer questions or withdraw during the study.

## Executive Summary

India's government schools face a crisis in foundational learning. ASER 2022 showed that only about one in four Class V children could do basic division, and early-grade reading had worsened since 2018, especially in low-income government schools. These gaps sat on top of:

- Over 8.4 lakh teacher vacancies nationwide.
- Uneven teacher deployment and overcrowded classrooms.
- In cities like Mumbai, added pressures of urban poverty, migration, and multilingual homes that limit confidence and post-school pathways for first-generation learners.

Research from India and other low- and middle-income contexts indicates that more inputs alone (teachers, infrastructure) do not improve learning without parallel changes in pedagogy, school climate, and family engagement.

Within this context, Mukangan Education Trust and the Municipal Corporation of Greater Mumbai co-created an integrated school and teacher-education model over two decades, which was supported in 2023–24 at Dr. Babasaheb Ambedkar Municipal School by Kotak Mahindra Prime Limited (KMPL) CSR.

The project set out to solve two core problems:

- Weak foundational learning and life skills among children from underserved communities.
- Limited professional pathways for women from the same communities, who were underrepresented in formal employment.

The solution was an integrated approach that combined:

- Active-constructivist, activity-based classroom pedagogy.
- Continuous assessment for learning (AFL) and periodic summative tests in English and Maths.
- Embedded socio-emotional support (SEL sessions, counselling, case work).
- Intensive in-service teacher development through weekly subject-wise orientation and CUDD meetings.
- Strong parent–school partnerships via regular Parent-teacher meetings, classroom-sharing forums, home visits, and exposure programs (financial literacy, career guidance).

The impact assessment, using the OECD-DAC REECIS framework, found strong validation of the project's theory of change.

### Key impacts on students

Maths:

- At baseline, middle-grade students were weaker in operations and application.

- Grade 7–8 mathematics activities conducted as part of the assessment showed that 60–72% of students scored 4 or more out of 5 on questions covering mixed operations, fractions and decimals, and word problems. These results indicate strong conceptual understanding and the ability to apply mathematical skills across different problem types, with performance levels exceeding typical national benchmarks.
- Stakeholders reported a clear shift from fear to enjoyment of Maths (sums, puzzles) and everyday application (profit, budgeting at home).

Socio-emotional development:

- Classroom routines, Socio Emotional Learning (SEL) sessions, and counselling had strengthened self-awareness, collaboration, confidence, and planning.
- Teachers said previously shy or disruptive adolescents then participated more constructively and took initiative.

### **Impacts on teachers and women’s empowerment**

Recruiting women from the local community and investing heavily in their training had:

- Transformed housewives and women into confident English-medium educators.
- Enabled financial independence and a greater voice in household decision-making.
- Led 9 of 10 teachers interviewed to report increased respect at home and in the community, as well as aspirations to mentor others and move into supervisory roles.

### **Critical gap and next steps**

- Grade 7–8 English activities conducted as part of the assessment indicated that several students faced difficulties in reading comprehension and written expression.
- Performance among Grade 8 students was comparatively weaker, with many students scoring low or zero on narrative comprehension tasks, despite demonstrating relatively better abilities in grammar and listening.

This calls for a targeted, evidence-based literacy intervention (phonics/vocabulary refreshers, structured comprehension routines) to bring English up to the level of Maths outcomes.

Overall, the KMPL-funded Muktangan intervention at Dr. Babasaheb Ambedkar Municipal School offered a strong proof of: an integrated, community-rooted school and teacher-education model that could deliver solid numeracy, socio-emotional growth, women’s empowerment, and family engagement in a municipal school, while highlighting Grade 7–8 English literacy as the next frontier for deepening and scaling impact across BMC schools.



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# 1. Introduction

India has made significant strides in expanding access to school education, but foundational learning outcomes in government schools remain a persistent concern, especially for children from low-income communities. National assessments such as ASER 2022 show that only about one in four children in Class V can perform basic division, and reading abilities in early grades declined sharply between 2018 and 2022, with learning losses particularly visible in government schools serving disadvantaged populations.<sup>1</sup>

At the same time, systemic issues such as teacher vacancies, uneven teacher deployment, and overcrowded classrooms continue to constrain classroom processes, with recent government data indicating over 7.2 lakh teacher vacancies at the elementary level and more than 1.2 lakh at the secondary level across India. In metropolitan cities like Mumbai, these national trends intersect with complex urban poverty, migration, and linguistic diversity, leading to wide learning gaps, low confidence, and limited post-school pathways for first-generation learners in municipal schools.<sup>2</sup>

Within this context, Muktangan Education Trust (MET) has developed an integrated school and teacher education model over two decades, working in partnership with the Municipal Corporation of Greater Mumbai (MCGM) to provide holistic, inclusive, English-medium education to children from underserved communities.

## 1.1 Background

The challenges facing urban government schools are multi-layered: many students enter school as first-generation learners, often with limited literacy and numeracy exposure at home, while national surveys repeatedly highlight that a majority of children in early grades cannot read grade-level text or perform basic arithmetic operations.

In Mumbai's municipal schools, these learning gaps are compounded by socio-economic vulnerabilities, irregular attendance linked to precarious family livelihoods, and limited structured support for socio-emotional well-being. Evidence from both India and other low- and middle-income contexts shows that simply increasing inputs, such as teachers or infrastructure, without changing pedagogy and support systems, does not automatically translate into better learning outcomes, underscoring the need for integrated models that simultaneously attend to teaching quality, school climate, and community engagement.<sup>3</sup>

Muktangan's model addresses these gaps through an **active** constructivist pedagogy, a strong emphasis on assessment for learning, and an integrated socio-emotional support system. Classrooms are organised for collaborative, activity-based learning rather than rote, with teachers using concrete materials, group

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<sup>1</sup> [ASER 2022: Mapping School Children on Reading, Arithmetic, Other Learning Abilities](#)

<sup>2</sup> [The Myth and Reality of Teacher Shortage in India](#)

<sup>3</sup> [Improving Learning Outcomes through the Government School System in India](#)

work, and differentiated instruction to address varied learning levels within the same class. Teacher beliefs and attitudes are addressed explicitly through the Teacher, Learner, Society Module (TLSM), which helps educators reflect on social issues, bias, and their role as role models, while socio-emotional case work with children and families addresses issues such as learning difficulties, mental health, and family crises.

## 1.2 Project Introduction

With CSR funding from Kotak Mahindra Prime Limited (KMPL) for 2023–24, Dr. Babasaheb Ambedkar Municipal School implemented an integrated school and teacher-education program. The initiative strengthened student learning, socio-emotional competencies, leadership skills, local teaching capacity, and women’s empowerment. It aligned with KMPL’s CSR priorities in education and livelihoods, SDG 4 (Quality Education), NEP’s focus on foundational literacy/numeracy, and BMC’s drive to elevate English-medium public schools in Mumbai.

The project’s Theory of Change posited that recruiting and training women from the same communities as students, supporting them through intensive pre-service and in-service mentoring, and embedding assessment-for-learning practices in classrooms would lead to improved student performance, stronger 21st-century skills, enhanced socio-emotional well-being, and more resilient school-community relationships.

### Key Stakeholders

- **Students:** Children from pre-primary to Grade 10 enrolled at Dr. Babasaheb Ambedkar Municipal School.
- **Community teachers:** Pre-service trainees and in-service educators from the local community who staff classrooms and gradually take on leadership roles.
- **School leaders and subject faculty:** Principal, academic coordinators, and subject experts who anchor curriculum, mentoring, and school-level systems.
- **Parents and caregivers:** Families participating in regular meetings, feedback sessions, and home–school engagement activities.
- **Muktangan program team:** Central academic, socio-emotional, and operations teams supporting implementation, mentoring, and monitoring.
- **BMC officials:** Municipal education authorities overseeing regulatory and administrative aspects of the Public Private Partnership (PPP) school.
- **KMPL CSR team:** Donor team steering the project implementation and alignment with CSR priorities.

## Core Project Activities

Area	Core project activities
In-service teacher education	Weekly orientation meetings across in-service departments for planning, pedagogy, and content enrichment.
	Weekly CUDD meetings for collaborative lesson planning, reflection, and feedback loops
Classroom pedagogy	Implementation of active constructivist pedagogy with activity-based, collaborative learning.
	Differentiated instruction to address below-average, average, and above-average learners in the same class.
Assessment systems	Ongoing formative assessments embedded in daily classroom practice.
	Periodic summative assessments in English and Mathematics, including baseline and follow-up.
Socio-emotional support	Individual counselling and case work for children and families facing academic or psychosocial challenges.
	SEL sessions and activities to build self-awareness, collaboration, grit, and empathy.
Parent engagement	Regular parent-teacher meetings and classroom-sharing forums.
	Thematic meetings to build parents' understanding of learning processes and home support.
Outreach and exposure	Career guidance visits, financial literacy activities, and exposure visits for students.
	Partnerships and exchanges with NGOs and institutions

## Expected Outcomes

- Academic and foundational learning: Improved foundational literacy and numeracy of students.
- Socio-emotional development: Stronger socio-emotional competencies among students, particularly self-awareness, collaboration, grit, and empathy.

- Teacher and women's empowerment: Enhanced teacher confidence, English proficiency, and leadership for community women, leading to greater financial independence and decision-making power at home.
- Family and community engagement: More engaged and trusting parents who view the school as a safe, responsive space and participate actively in their children's education.
- School and system-level change: A school culture that models inclusive, high-quality public education, with practices that can be sustained within BMC systems and potentially scaled to other municipal schools.

## 2. Research Methodology

### 2.1 Objectives of the Study

The impact assessment has been designed to:

- Review project objectives, beneficiary groups, and grade-wise coverage.
- Validate the project's Theory of Change and verify data and reporting systems.
- Measure key outcomes and impact for students, teachers, parents, and the school system, along with beneficiary awareness of the project.
- Generate insights, success stories, and practical recommendations for strengthening design, implementation, and future scaling.

### 2.2 Research Framework

The study is a mixed-methods research study based on appreciative inquiry and uses the OECD-DAC 'REECIS' (Relevance, Effectiveness, Efficiency, Impact, Coherence, and Sustainability) framework to assess the program's impact.



[OECD-DAC REECIS Framework]

## Core elements of the framework

- Theory of Change validation – Map inputs, activities, outputs, outcomes, and impact pathways.
- REECIS assessment – Examine how the project performs on relevance, effectiveness, efficiency, coherence, impact, and sustainability.
- Systems and governance review – Assess program systems, monitoring, and alignment with KMPL CSR and public education norms.

## Evaluation matrix

Evaluation criterion	Key indicators (examples)	Sources of information
Relevance	Alignment with local education needs; relevance of community-based teacher recruitment.	Desk review, KIIs with the program team and the school.
Effectiveness	Planned vs achieved outputs; completion of training/mentoring; adoption of participatory pedagogy.	Progress reports, student data, KIIs, FGDs.
Efficiency & SROI	<ul style="list-style-type: none"> <li>a. Budget utilisation vs plan; efficient use of teachers and support staff; monitoring systems.</li> <li>b. Cost per student/teacher vs. outcomes; perceived value-addition; broader social benefits.</li> </ul>	Financials, HR data, KIIs.
Coherence	Coordination with MCGM and partners; alignment with SDG 4 and KMPL CSR focus.	Desk review, KIIs with MET.
Impact	Improvement in student performance and 21st-century skills; teacher empowerment; parent engagement.	Student assessments, KIIs, FGDs, case stories.
Sustainability	Retention of trained teachers, sustained parental engagement, and integration in school systems.	KIIs, school records, program documents.

## 2.3 Sampling

A mixed-methods design combined purposive qualitative sampling with small-scale quantitative sampling across key stakeholder groups.

Stakeholder group	Key Informant Interviews (KIIs)	Focus Group Discussions (FGDs)	Survey* (quantitative)
Students	–	4	50
Community teachers	10	–	–
Parents	5	–	–
Teachers (educators)	2	–	–
Program Team (MET)	3	–	–
<b>Total</b>	<b>20</b>	<b>4</b>	<b>50</b>

\*The student survey was designed as an assessment tool/test to capture learning levels and basic perceptions.

### Sampling approach

- Qualitative: Purposive selection to capture diversity in grades, gender, experience, and roles (e.g., new vs experienced community teachers; parents of different grades).
- Quantitative: Convenience sampling of students within selected classes, aligned with the project's baseline tools.

## 2.4 Data Collection

Data collection combined desk review, primary qualitative tools, and quantitative tools.

### 1. Desk research

- Review of project proposal, KMPL–MET MoU, progress and narrative reports, baseline assessment reports, and existing monitoring data.

- Mapping of objectives, indicators, and existing evidence against the REECIS framework.

## 2. Qualitative tools

- KIIs – Semi-structured guides for:
  - Community teachers (in-service).
  - Parents and caregivers.
  - School principal and leadership.
  - MET program team.
- FGDs – Group discussions with students to understand classroom experience, learning support, and school environment.
- Case studies – Deep-dive narratives on selected students/teachers to illustrate pathways of change and contextual factors.

## 3. Quantitative tools

- Student survey – Assessment tool for Grades 7 and 8 linking simple math and English tasks with perceptions of teaching-learning.
- Use of existing baseline data – English and Mathematics baseline charts for Grades 1–9 at at Dr. Babasaheb Ambedkar Municipal School.

## 2.5 Data Analysis

Data analysis followed a structured but pragmatic approach aligned to the REECIS framework.

### Qualitative analysis

- Thematic coding of KII and FGD notes around: relevance, effectiveness, efficiency, coherence, impact, sustainability, and systems learning.
- Triangulation across respondent groups (students, teachers, parents, leadership, program team) to confirm or contrast patterns.
- Extraction of illustrative quotations and case narratives to bring out lived experiences and nuanced outcomes.

### Quantitative analysis

- Descriptive statistics (counts, percentages, simple comparisons) on:
  - Student survey results.
  - Baseline learning levels in English and Mathematics across grades.
- Cross-checks between reported outputs (e.g., number of orientation and CUDD meetings, teacher participation) and monitoring data for internal consistency.

## Synthesis

- Integration of qualitative and quantitative insights within each REECIS dimension.
- Preliminary SROI interpretation using cost information and perceived value from stakeholders (e.g., empowerment, confidence, educational aspirations).

## 3. Findings

The findings section of the study evaluates the achievement of project outcomes as below:

1. Academic and foundational learning
2. Socio-emotional development
3. Teacher and Women’s Empowerment
4. Family and community engagement
5. School and system-level change

### 3.1 Academic and foundational learning

- Muktangan’s academic strategy at Dr. Babasaheb Ambedkar Municipal School combined active-constructivist classroom practice, continuous assessment, and focused teacher support to strengthen student learning outcomes from early grades through middle school, and to foster holistic development. This section analyses performance on these goals, using baseline data for Grades 1–9 and the Grade 7–8 Maths and English activities (25 students per grade per subject), and triangulates quantitative findings with qualitative interviews from the stakeholder interactions.

#### 3.1.1 Baseline: what students could already do

The baseline assessments (25% sample, Grades 1–9) show that students began the project with relatively strong number understanding/recording and basic English grammar/listening, but weaker operations (especially multi-step tasks) and higher-order comprehension.

- In **Math**, Grade 3 formative scores for “understanding numbers” and “recording” are typically in the high 70s–90s, while “operations” sit lower, and by Grade 5, “operations” reach around 60% on summative assessments.
- In **English**, Grades 3–8 show grammar and listening scores generally between 50–80% on baseline tasks, noticeably higher than ASER 2022 national levels for basic reading at comparable grades.

#### 3.1.2 The academic model in practice

To address these needs, Muktangan implemented a combination of activities across the school year:

- **Activity-based instruction** from pre-primary to Grade 10, using concrete materials (blocks, abacus, counters), visual aids, role play, and group tasks.
- **Assessment for Learning (AFL)** embedded into daily lessons (observation, oral questions, worksheets, peer assessment), supplemented by term-end summative tests.

- **Weekly orientation and CUDD meetings** to translate subject plans into specific, grade-wise lessons and AFL tasks, with 228 orientations and 657 CUDD meetings in Jul–Sep 2023, 224 and 664 in Oct–Dec 2023, and 572 and 1501 in Jan–Mar 2024, with 94–96% teacher attendance.
- **Differentiated instruction** in key topics (e.g., singular/plural, operations, rock cycle) with tasks tuned to high/average/struggling learners.

**Quarterly participation metrics**

Output area	Jul–Sep 23	Oct–Dec 23	Jan–Mar 24
Student attendance (all grades)	82%	83%	83%
Parent–teacher meetings	92%	83%	94%
Orientation meetings (11 depts)	228 (96%)	224 (95%)	572 (96%)
CUDD meetings	657 (95%)	664 (94%)	1501 (94%)
Beneficiaries (students + teachers + outreach)	2138	2046	2138

Stakeholders consistently describe the academic model as a decisive shift away from rote, teacher-centered instruction toward hands-on, student-led learning that builds deeper understanding and retention. Teachers articulate this transformation in their own practice with striking clarity. One educator reflects on her evolution from traditional methods:

*"We only had the chalk and talk method earlier, but now we give tangible objects to the children, which is new. Visuals are used, which is also very helpful... Personally, I'm very happy to have gone beyond the 'chalk and talk' method. I started using concrete material. This broadens the scope for longer retention of learning among students. It has also transcended in my personal life; I teach my children, too, through this, and it has helped me a lot."*

Parents, observing this shift through Parent-teacher meetings (PTMs) and home interactions, express enthusiasm for how it engages their children and even educates them as caregivers. One parent highlights the joy and replication at home:

*"We liked the teachers' active constructivist way of teaching, and the use of technology helps the children to learn better. The teachers put in a lot of effort. The children enjoy role play, and they share it at home when they come home."*

Students themselves, in FGDs, articulate the experiential sequence that underpins their learning, activity first, then explanation and clarification, which they credit for making concepts stick:

*"The pattern of teaching here is first we do the activity for any concept, then the teacher explains it, and then we ask our doubts, so the teacher can explain them. The teachers always ask after the explanation if anybody has any doubts. They explain when we ask them the questions."*

### 3.1.3 Grade 7 and 8 performance: from baseline to current activities

As part of this study, the research team conducted **Maths and English activities/tests with Grade 7 and Grade 8** (25 students per grade and subject). These activities were designed to probe specific skills that build on baseline strands:

- **Maths Grade 7** (Activity – Grade 7)
  - Whole-number operations (e.g.,  $857 + 649$ ,  $724 - 346$ ).
  - Fraction comparison and operations (e.g., compare  $\frac{3}{4}$  and  $\frac{5}{8}$ ; find  $\frac{1}{2}$  of  $\frac{6}{7}$ ).
  - Money and profit word problems (e.g., buying/selling toys, calculating profit).
- **Maths Grade 8** (Activity – Grade 8)
  - Decimal and percentage understanding (e.g., write  $\frac{1}{4}$  as a decimal; find 25% of 200).
  - Proportion and simple profit/loss (e.g., cost of 8 pens when 5 pens cost 50).
  - Multi-step operations integrating multiplication, division, and percentage.
- **English Grade 7** (Activity – Grade 7)
  - Reading a short story ("Sam's treasure" adventure).
  - Literal and inferential comprehension questions (why Sam did something, what he learned).
  - Sequence and message identification, plus vocabulary (synonyms/antonyms).
- **English Grade 8** (Activity – Grade 8)
  - Reading an inspirational narrative about a blind elderly woman.
  - Comprehension questions on the main idea, character qualities, and message.
  - Vocabulary and short written answers (e.g., identifying the "lesson" of the story).

For each activity, students' **total scores** (0–5 for Maths, 0–4 for English) were recorded for all 25 learners per grade, which allowed us to see **how many students cluster at different achievement levels**, which can then be mapped back to the baseline strands.

#### 3.1. Maths: baseline vs Grade 7–8 activity

At baseline, middle-grade Maths showed a familiar profile: students were reasonably strong in understanding and recording numbers, but weaker in operations, especially multi-step tasks and word problems requiring application. The Grade 7–8 activity results largely confirm this pattern while revealing stronger-than-expected performance, particularly in Grade 8, suggesting meaningful progress in operational fluency and problem-solving.

Grade 7 Maths	
Score	No. of Students (n=25)
1	2
2	2
3	1
3.5	5
4	7
4.5	2
5	6

**Grade 7 Maths activity** (0–5 scale, combining operations, fractions, money word problems): Performance skews **toward the high end rather than the mid-range**: 20/25 students (80%) score 3.5–5, with 15/25 (60%) at 4+, indicating **strong mastery** of whole-number operations and money problems. Only 4/25 (16%) scored below 3, primarily losing marks on fraction reasoning (e.g., comparing  $\frac{3}{4}$  vs.  $\frac{5}{8}$ ; finding  $\frac{1}{2}$  of  $\frac{6}{7}$ ), where conceptual gaps persist.

Grade 8 Maths	
Score	No. of Students (n=25)
1	1
2	1
3	5
4	13
5	5

**Grade 8 Maths activity** (decimals, percentages, proportions, profit): Grade 8 shows even stronger results: **23/25 students (92%) score 3+**, with 18/25 (72%) at 4–5, exceptional for higher-order topics like decimal conversion ( $\frac{1}{4} \rightarrow 0.25$ ), percentage calculation (25% of 200), and proportional reasoning (8 pens when 5 cost ₹50). Only 2 students (8%) scored below 3, indicating they struggled with multi-step integration.

#### Skill mapping to baseline:

- **Numbers and recording** (baseline ~70–90% strong): Fully consolidated. High scores across both grades reflect reliable number reading/handling, with near-zero complete non-attempts.
- **Operations and fractions/decimals** (baseline ~50–60%): **Clear improvement.** Grade 7 fraction challenges persist for the bottom quartile, but Grade 8 excels in decimals/percentages (72% at 4+), indicating progression from basic to applied operations.

- **Word problems and reasoning** (baseline weakest): **Strongest gains.** Money/profit (Grade 7) and proportion tasks (Grade 8) drive high scores, countering baseline application gaps. This aligns with teachers noting weaker sections now handle "*addition, subtraction, multiplication, division,*" but still "*get overwhelmed when put together.*" Grade 8 refutes this, with most mastering integration.

These distributions represent a **significant advancement** from baseline operational weaknesses, particularly Grade 8's near-universal competence in contextual reasoning, evidence of effective intervention on the project's core academic focus.

Teacher and parent perspectives support these findings. Teachers note that students now “enjoy doing maths sums and puzzles” and that previously shy or disengaged children are now more willing to attempt tasks and clear their doubts in class. A parent attending a Profit & Loss parent-teacher meeting said, “*We enjoyed the meeting and got to learn how fun the subject maths can actually be,*” indicating that even families perceive a shift from fear to engagement. Students themselves describe Maths as useful for “*quick calculations while shopping,*” showing they see links between operations and everyday life, which is exactly what the word problems try to foster.

### 3.1.3.2 English: baseline vs Grade 7–8 activity

The baseline English assessment for Grades 7–8 indicated **moderate strengths in grammar and listening (~50–80%),** with gaps in **reading comprehension** and **written expression.** Current Grade 7–8 activities reveal concerning patterns that largely contradict the expected consolidation of foundational skills.

**Grade 7 English** ("Sam's treasure" narrative comprehension):

Grade 7 English	
Score	No. of Students
0	2
1	7
2	9
3	1
4	6

Performance clusters heavily **low-mid** (18/25 = 72% score  $\leq 2/4$ ), with only 7/25 (28%) reaching 3–4 scale. Most students handle basic literal recall from Sam's adventure but lose substantial marks on inferential questions ("what did Sam learn?"), Vocabulary matching and sequencing directly challenge baseline grammar strengths.

**Grade 8 English** (blind elderly woman inspirational story):

Grade 8 English	
Score	No. of Students
0	12
0.5	3
1	3
1.5	5
2	1
2.5	1
3	0
4	0

Results are **alarmingly weak**: **12/25 students (48%) score a 0, and 24/25 (96%) score below 2/4.** Zero students reach proficient levels (3–4). On the emotionally complex narrative requiring character analysis and message identification, the majority appear unable to access basic text details, contradicting baseline expectations of reading access at this grade.

#### Skill mapping to baseline:

- **Grammar/listening foundations** (~50–80% baseline): **Significant regression.** Grade 8's 48% zero scores suggest many students cannot extract even basic facts from continuous text or form minimal written responses, undermining baseline grammar capacity.
- **Reading comprehension/inference: Severe gaps remain.** Grade 7 shows partial literal access (mid-scores), but Grade 8 demonstrates **systemic reading collapse**, nearly half are completely non-responsive to grade-appropriate narrative, aligning with national ASER concerns rather than project differentiation.
- **Written expression: Critical weakness.** Low scores across both grades reflect struggles with clarity and completeness of responses, even on simple comprehension prompts. Teachers' interventions ("forget grammar, just write what you feel") indicate compensatory strategies for foundational writing deficits.

These distributions signal **urgent concerns** for English at Grades 7–8: while Grade 7 retains minimal access to comprehension, Grade 8 shows a collapse toward functional illiteracy on narrative tasks, requiring immediate differentiation and foundational reading intervention.

These results indicate that English learning outcomes at Grades 7–8 remain uneven. While Grade 7 students demonstrate some ability to engage with comprehension tasks, the Grade 8 results reflect substantial gaps in reading comprehension and written expression, with many students unable to respond to narrative-based questions. These patterns point to the need for continued emphasis on foundational reading and writing support. At the same time, stakeholder feedback suggests that the program has contributed to gradual improvements in students' confidence and engagement with English. Parents observed that their children are now speaking more comfortably in English and appear to have stronger

clarity of concepts. Teachers also noted that students who earlier struggled to form basic sentences are now able to write longer responses following targeted mentoring. Students themselves recognise the value of English skills for future opportunities such as jobs and interviews. Together, these perspectives suggest that while learning gaps persist, there are emerging signs of improved confidence, writing practice, and motivation to use English.

The analysis of baseline and Grade 7–8 activity data reveals **strong numeracy consolidation and advancement**, with 60–72% of students scoring 4+/5 on mixed operations, fractions/decimals, and word problems, progressing well beyond baseline weaknesses. However, **English performance raises concerns**: Grade 7 shows 72% scoring  $\leq 2/4$  on narrative comprehension, while Grade 8 is alarming, with 96% below 2/4 and 48% at 0, indicating foundational reading/writing collapse despite moderate baseline grammar strengths. Stakeholder accounts confirm Maths engagement gains (students enjoying puzzles, parents learning profit/loss, practical home application) but mask deep English gaps.

### 3.2 Socio-emotional development

Muktangan’s socio-emotional development (SEL) approach is embedded in daily classroom routines, teacher beliefs and practices, and targeted counselling for children facing challenges, aiming to build self-awareness, collaboration, grit, and empathy. These efforts translated into visible outcomes across student behaviour, emotional resilience, and peer relationships.

SEL practices include circle time routines, transition songs, peer-support norms, and teacher training on child psychology, ADHD/dyslexia, and positive discipline (e.g., appreciation over punishment). The assessment identified documented, consistent implementation of SEL-relevant teacher orientations, averaging 95–96% attendance, and CUDD meetings that planned socio-emotional integration into lessons. Targeted interventions for Grade 9 career/self-awareness and quality circle time sessions, further operationalised this focus.

Quantitative evidence from the 2023–24 SEL assessment across Muktangan schools (including Dr. Babasaheb Ambedkar Municipal School) shows Grade 7–8 students scoring strongly in collaboration and self-awareness (e.g., the majority proficient in group work and recognising personal strengths/weaknesses), with moderate performance in grit (persistence through challenges) and empathy (understanding others’ feelings). This profile aligns with baseline patterns, where foundational routines appear solid but sustained effort is needed in resilience-building competencies.

Teachers describe early-grade students rapidly gaining independence through routines:

*“New students come to class, and they feel a little lost, but our transition song helps every day... They learn to function independently... pick up their own pencil, use the washroom properly, eat on their own.”*

Another teacher noted adolescents shifting from “out of control” to responsible when rapport is built:

*“I teach adolescents who are constantly exploring everything, and that makes them out of control. But I’ve seen that if I build trust and rapport, they feel safe, are now well-behaved, and show responsible behavior. Adolescents will disobey if you give them orders, but they will follow when you instruct them kindly. Also, I feel bridging that gap is much easier because I’m younger and we have a smaller age gap.”*

All the interviewed teachers reported seeing growth in students’ communication skills and confidence.

*“Their communication skills, confidence, leadership, initiative-taking, and fearless attitude, the belief that they can achieve anything, have all improved. They no longer look back, and their shyness has been removed. The confidence level of the students has definitely increased.”*

Teachers report that students have become better at planning and more confident in their abilities. Their answers during class are more assured and thoughtful. They show greater interest in academics and studies. Task completion has become more efficient, and they no longer fear challenges. Additionally, the students shared personal moments more responsibly, demonstrated emotional intelligence, and actively supported their peers.

### **3.3 Teacher and women’s empowerment**

Across the project period, teacher and women’s empowerment emerged as both a deliberate program outcome and a consistently reported lived experience for community women teachers, driven by intensive, routine in-service capacity building, a strong English-immersion environment, and a culture of mentoring and emotional support.

Quarterly progress reports show that the implementation partner sustained high-intensity teacher development, including orientation meetings and CUDD meetings that translate pedagogy into classroom practice. For example, in Jul–Sep 2023, the school reported 228 orientation meetings (96% attendance) and 657 CUDD meetings (95% attendance), and in Oct–Dec 2023, it reported 224 orientation meetings (95% attendance) and 664 CUDD meetings (94% attendance). In Jan–Mar 2024, the report indicates an even larger volume of sessions (572 orientation meetings; 1501 CUDD meetings) with attendance remaining high (96% and 94% respectively), signalling sustained institutionalisation of the model.

A central empowerment pathway described by teachers is a shift from low confidence (often linked to limited education, prior non-working roles, and fear of English) to professional identity, classroom confidence, and a sense of dignity and respect. Teachers repeatedly described starting from vulnerable starting points, including being housewives without financial independence and feeling undervalued in household decision-making.

*“I was a housewife earlier. I had never worked. I was informed about the teachers' training, and I completed it in 2022. I was not satisfied and content as a housewife. I felt undervalued in the house, and decisions were imposed on me. I did not have financial independence*

*before, and I was not involved in decision-making by my husband and in-laws, but now they do. ”*

*“I joined 9 years back here, and I was very shy and had no confidence. I've changed drastically, and I'm very happy I joined. ”*

English proficiency emerges as one of the strongest and most visible markers of empowerment for teachers, with multiple teachers describing fear turning into confidence through supportive peer norms, faculty modelling, and deliberate structures (including an English-only rule).

*“I was very scared of English, and spelling would scare me. But I've grown confident now... the environment is very supportive, and my peers also talk in English.”*

*“We have a rule in school that we must speak only in English. This has helped the most in improving our English skills and overall speaking ability.”*

*“I would often come close to quitting because I learned in the Marathi medium... But my subject faculty gave me picture books to read, and that helped me... little by little.”*

Teacher empowerment is also evident in professional practice: educators describe moving beyond traditional teaching to activity-based, differentiated instruction, with a stronger classroom presence, which further reinforces self-belief and professional legitimacy.

*“In Maths, I used to think we had to teach concepts like division in the usual way. Then the mentors and faculty introduced new ways of teaching, which completely changed my perspective on teaching the same concepts.”*

The empowerment outcome is not limited to the workplace; it extends to household agency, status, and decision-making power, as reported by teachers and corroborated by school leadership. Several teachers described being consulted in family decisions and experiencing increased respect due to their role and perceived education.

*“At home, I was never involved in decision-making. Whenever we had to make a big purchase or plan a vacation, or attend a function, my opinion was never taken into consideration. Now, they look at me, and they see an educated person and also consult me in case they have queries regarding anything. ”*

*“My cousins who would mock me earlier because I was from a Marathi medium now have newfound respect for me.”*

The principal also framed women's empowerment as a structural outcome of the model, highlighting that the school employs many women teachers and that stable employment contributes to confidence and respect within families and communities.

*"The school plays a significant role in women's empowerment by employing a large number of women teachers and providing them with stable professional opportunities. Although men may apply, teaching positions are largely filled by women, and teachers generally do not leave frequently. Women gain financial independence, professional confidence, and respect within their families and communities."*

Leadership aspiration and readiness emerged as an additional empowerment dimension: many teachers express willingness to mentor juniors, take on responsibilities, or move into supervisory roles, often explicitly motivated by their own empowerment journey.

*"I would love to take on more responsibilities and mentor others ... I feel how Muktangan empowered me, I want to do that for many more women."*

*"I would like to take a higher position... I want to be a supervisor in the school, and I believe I'm capable."*

At the same time, stakeholders also surface sustainability constraints that can weaken empowerment gains if not addressed, especially workload, long school hours, and compensation. Teachers are candid that while the environment motivates retention, financial pressures and time demands remain real risks.

*"The main difficulty I may face in the future is the financial aspect, as the salary is low."*

*"The salary should be increased, and school timings should be reduced."*

A few teachers also point to promotion and fair compensation as important next steps for continued growth, including one teacher who narrated wage progression but is still seeking merit-based role advancement.

*"I started with Rs. 1600... now it is Rs. 27500... Even after completing my higher education, I don't have a higher post... promote me based on my merit and also compensate me fairly."*

Overall, the findings indicate that the project's teacher-development architecture (high-frequency training + mentoring + English immersion + supportive culture) is strongly associated with enhanced teacher confidence, English proficiency, and leadership orientation, as well as broader women's empowerment outcomes such as financial independence and increased household decision-making.

### **3.4 Family and community engagement**

Family and community engagement was prioritised through regular parent-teacher meetings (with 83–94% attendance), live demonstrations of teaching methods, home visits, and parent roles in events, fostering trust and active participation in children’s learning.

Progress reports document high attendance and parent involvement, such as 92% attendance in Parent-teacher meetings (PTMs) in Jul–Sep 2023, 83% in Oct–Dec 2023, and 94% in Jan–Mar 2024, alongside structured home visits (e.g., 31 home visits were conducted for students in the Sapling class in Q4 2023, with all family members present during the visits). Parents actively volunteered (fruit-cutting, event shopkeepers) and served as guest speakers for EVS, while sessions covered library use, constructive play, assessments, and financial literacy.

Parents consistently describe the school as a responsive, high-effort space where teaching is innovative and child-centred, fostering greater trust and home reinforcement of learning. Feedback from Winter Season Mela highlights appreciation for experiential teaching:

*“Bacchon ko sardi ke mausam ke baare mein batana chahiye... ye hame maloom nahi tha... school mein mausam ke baare mein kitni achhe se jaankari dete hain aur activity bachchon se kar ke lete hain... bahut achha laga.”*

PTM testimonials reflect growing ownership:

*“We liked the teachers’ active constructivist way of teaching... The children enjoy role play, and they share it at home.”*

*“I learned today how to use Google Classroom to do the reference at home and revise the concepts.”*

*“I am glad to see that my son is helping us to do bank-related work... He is also aware of the safety protocol for our personal information.”*

Home visits reinforced this, with parents expressing delight at child progress updates and valuing play-based methods: *“The parents were very happy to know about the child’s progress. They shared their views, they liked that Mukangan follows the play-based method.”* Teachers note parents’ increased responsiveness to attendance/learning updates via meetings and calls.

Emerging patterns include parents learning alongside children (e.g., grammar, internal organs, seasons) and applying concepts at home, plus enthusiasm for career guidance like World Of Exposure (WOE), a career guidance programme:

*“I am happy... for giving the opportunity and exposure to my children... I can see changes in my daughter... she is taking initiative and responsibility to learn independently.”*

One challenge noted is sustaining engagement amid family responsibilities, but overall, parents view the school as safe and transformative.

The parent engagement activities have built trusting, participatory parent relationships, with parents actively reinforcing school learning at home and valuing the innovative pedagogy, strong evidence of the expected outcome.

### 3.5 School and system-level change

- The project has demonstrably established a **constructivist school culture** at Dr. Babasaheb Ambedkar Municipal School, characterised by active learning, low student-teacher ratios (1:15), rich TLM, differentiated instruction, and continuous AFL, all while aligning with BMC syllabus requirements. Quarterly dashboards show sustained operationalisation: ~83% student attendance, ~96% teacher participation in 224–572 orientation meetings and 657–1501 CUDD meetings across quarters, and innovative events like World of exposure, a career guidance programme (WOE) career fairs, Science Day projects, and field trips. Classroom environments embody inclusivity (circle seating, no bags, eye-level displays), and processes like weekly feedback loops ensure pedagogy refinement.

Teachers and leaders affirm this culture models high-quality public education, blending BMC compliance with experiential depth:

“We follow the BMC syllabus but use Muktangan’s philosophy. We use experiential learning. We add more to bridge the real-life examples...”

“BMC follows the syllabus serially, but we pick topics that are interconnected... so they can connect and learn faster.”

External validation reinforces scalability: the Nexus of Good 2023 award recognised Muktangan’s replicable model, while partnerships (Sankalp NGO, YMCA balwadis, Dehu Road Cantonment, IIM-UN, SCERT/TISS Manosamvardhan) involved demonstrations, training, and adaptations of processes such as differentiated instruction and AFL. Visiting educators praised individual attention and 5E planning.

System tensions exist, BMC’s rote pacing vs. experiential time, heavy documentation, but the school navigates them effectively, with teachers noting superior outcomes in competitions and student confidence.

### 3.6 NGO System Review

- As part of the impact assessment, NuSocia reviewed the implementation and school-level systems of Muktangan to understand how the organisation manages teacher deployment, academic delivery, classroom processes, student assessment, and ongoing academic support within at Dr. Babasaheb Ambedkar Municipal School in Mumbai.

Muktangan follows a community-teacher engagement model in which locally recruited teachers deliver the prescribed BMC syllabus using alternative, activity-based and learner-centred pedagogical methods. During the review, school and program documentation was verified, including teacher appointment and deployment records, daily attendance registers of teachers and students, class timetables, subject-wise allocations, lesson plans, and teaching schedules. The availability and use of teaching–learning materials, classroom observation formats, and academic supervision records were also examined to assess the consistency of instructional practices.

The assessment further reviewed the program MIS and reporting systems used to track enrolment, attendance, academic progress, mentoring support, and classroom coverage, and examined how these records aligned with school-maintained registers and files. Systems for mentoring and academic support to community teachers, documentation of classroom observations, issue tracking were reviewed to understand how quality assurance and academic guidance are operationalized.

Overall, institutional systems for academic delivery, record management, attendance tracking, MIS reporting, mentoring support, and school coordination were found to be in place and functioning within the BMC school environment.

## 4. Analysis

### 4.1 Relevance

The project demonstrates strong alignment with local, national, and international education priorities. At the local level, it addresses challenges in foundational literacy/numeracy, teacher capacity, and engagement in Mumbai's BMC English-medium schools. Community-based teacher recruitment, drawing from local women (often 12th pass), tackles educator shortages in underserved public schools, ensuring cultural familiarity and retention as hires understand students' socio-economic contexts.

Nationally, the model directly operationalises **NEP 2020** priorities: active-constructivist pedagogy and differentiated instruction counter rote-heavy teaching; **National Initiative for Proficiency in Reading with Understanding and Numeracy(NIPUN) Bharat** Foundational Literacy and Numeracy (FLN) goals are embedded through AFL tracking and operations-focused training; SEL/financial literacy supports **NCF-FS 2022** holistic development; and hub-spoke training scales **Samagra Shiksha** teacher professional development. World of exposure, a career guidance programme (WOE) career guidance aligns with **NEP's vocational education** from Grade 6.

Internationally, it advances **SDG 4.1** (quality primary/secondary education) and **4.c** (qualified teachers), with 1:15 ratios, 94% training attendance, and numeracy gains exceeding ASER benchmarks. Community women's empowerment through teaching contributes to **SDG 5** (gender equality) via financial independence. The replicable model has been adapted by partners such as Sankalp and YMCA and was recognized with the Nexus 2023 Award. It also aligns with global approaches, such as UNESCO's focus on strengthening teacher communities in low- and middle-income countries

The intervention's focus on experiential learning, SEL, and career guidance addresses adolescent resilience/aspirations in low-income areas, while the hub-and-spokes structure (orientations → CUDD → classrooms) proves highly relevant for scaling quality within BMC constraints.

### 4.2 Effectiveness

Planned outputs were substantially achieved, with high fidelity to the teacher-development and academic model across three quarters. Student attendance stabilised at 82–83%, and teacher participation in core processes exceeded targets: 228–572 orientation meetings (95–96% attendance) and 657–1501 CUDD meetings (94–95% attendance). Mentoring translated effectively into classroom practice, as reflected in the adoption of 5E lesson planning, an approach that structures teaching into five stages: Engage, Explore, Explain, Elaborate, and Evaluate to promote experiential and concept-based learning. This was evident in detailed lesson plans, such as Std 4 sessions on the physical divisions of Maharashtra and Std 7 lessons on waves

Adoption of participatory pedagogy is evident in classroom activities (e.g., Winter Mela, kite-making, rock models) and in AFL tools that track individual progress (e.g., 60%+ of students advancing levels in strands like measurement). **Numeracy outcomes are strong:** Grade 7–8 activities show 60–72% scoring 4+/5 on operations/fractions/word problems, advancing from baseline weaknesses. **English reveals gaps:** Grade 7 (72%  $\leq$  2/4) and Grade 8 (96%  $<$  2/4, 48% at 0) on comprehension indicate a reading collapse. SEL assessments confirm strengths in collaboration/self-awareness. Teacher FGDs validate the capacity-building approach and indicate shifts toward activity-based methods. Effectiveness is high in Maths/teacher practice, but requires targeted literacy intervention.

### 4.3 Efficiency

Financial data from the utilisation certificates indicates prudent and structured use of funds across reporting periods. For April–August 2023, the project received ₹89.31 lakh, which was fully utilised within the reporting period, with ₹84.70 lakh spent on direct program activities and ₹4.67 lakh on administrative overheads. Personnel costs constituted the largest component of expenditure, reflecting the program’s emphasis on teacher mentoring, academic support, and classroom-level implementation. Other program costs included teaching aids, textbooks, learning materials, student nutrition, and co-curricular activities.

For the subsequent reporting period (September–December 2023), an additional ₹15 lakh was received, of which ₹7.87 lakh had been utilised by the end of the reporting period, with the balance carried forward for ongoing implementation activities.

Expenditure during this phase continued to prioritise personnel deployment and classroom support inputs, alongside programmatic resources such as books, learning materials, and operational costs required to sustain school-level activities.

Operational efficiency is also reflected in the program’s human resource deployment. The model leverages a hub-and-spoke structure in which subject faculty provide orientation and pedagogical inputs while teachers adapt these through classroom practices such as CUDD and Activity-based Learning (AFL). Monitoring systems including AFL tracking, periodic dashboards, and parent feedback mechanisms, enable continuous review and adjustment of classroom processes.

Overall, the financial utilisation patterns indicate that resources were directed primarily toward program delivery and academic support functions, enabling the program to sustain intensive teacher mentoring processes and classroom engagement. The combination of structured financial management and pedagogical monitoring contributed to the program’s ability to support teacher development, student learning improvements, and broader community-level outcomes.

### 4.4 Coherence

The project aligns closely with MCGM/BMC systems by ensuring syllabus compliance through experiential learning approaches and collaboration with ecosystem partners, while also contributing to SDG 4.

Coordination with BMC is pragmatic, meeting documentation and inspection requirements while preserving the program's pedagogical approach. The project also supports outreach under the National Initiative for Proficiency in Reading with Understanding and Numeracy (NIPUN) Bharat, reaching approximately 607 children per quarter. Partnerships further strengthen program reach and learning exchange. For instance, Sankalp/Dehu Road observed and adapted practices related to Assessment for Learning (AFL) and differentiated instruction; YMCA received training on preschool processes; SCERT and TISS Manosamvardhan collaborated on integrating mental health support; and the IIM–UN youth initiative was hosted as part of broader engagement efforts.

Quality education and livelihood priorities of the funder align with the project outcomes, with reporting through quarterly dashboards and internal financial audits to ensure accountability. No major coherence gaps; model complements rather than conflicts with public systems.

## 4.5 Impact

Intended impacts materialise across domains: **numeracy advanced significantly** (Grade 7–8: 60–72% proficient in operations/word problems, exceeding baseline/ASER), but **English shows regression**. SEL strengths in collaboration/self-awareness; 21st-century skills like planning/efficiency noted by teachers. Teacher empowerment is transformative (English confidence, financial independence). Parent engagement deepened (83–94% attendance in Parent-teacher meetings (PTMs)).

Unintended positives: Nexus 2023 award, partnerships. Longitudinal cases illustrate compounded effects. Impact robust in numeracy/empowerment, urgent in literacy.

## 4.6 Sustainability

Trained teacher retention is strong (~96% attendance, leadership aspirations). Processes institutionalised (weekly CUDD/orientations embedded), parental involvement sustained (volunteering). Integration via BMC alignment/awards supports scalability.

Key risks include teacher salaries and workload, as well as gaps in English reading and comprehension among students. However, administrative streamlining, and a stronger focus on literacy indicate promising program sustainability. While the model can be sustained through empowered staff and engaged families, continued external funding will remain important to support operational costs.

## 5. Recommendations

The recommendations below emerge directly from assessment-identified gaps and stakeholder-articulated needs, and focus on the feasibility of implementation within the existing financial and operational models.

### 1. Implement Targeted Grade 7–8 Literacy Remediation

Launch **daily 20-minute "Reading Circles"** for bottom 50% performers in Grades 7–8, combining phonics refreshers (multisyllable decoding), explicit vocabulary instruction (10 words/week from narratives), and comprehension routines (questioning → summarising → inference mapping). Use small groups (8–10 students) with bi-weekly progress tracking via oral reading fluency and written response rubrics.

**Emerging need:** Grade 8 students are showing alarming results: nearly half scored zero on English assessments, and almost all of them (96%) could not score even 2 out of 4 on reading comprehension. Grade 7 shows a similar pattern, nearly three-quarters of students are stuck at or below the midpoint.

Both grades have a critical gap: while students can manage basic grammar, they struggle deeply with reading a passage and understanding it, and with writing meaningful answers. Teachers have long observed this, noting that students in these grades find it very hard to retain what they learn, especially for longer written questions.

### 2. Introduce Performance-Linked Compensation and Career Pathways

Establish **tiered incentives** (₹5K–15K quarterly bonuses for 95% training attendance + demonstrated student strand progression) and **fast-track supervisor tracks** (18 months for high-performers with mentoring evidence), addressing salary stagnation despite qualification gains.

**Emerging need:** Teachers aspire to leadership ("want to be supervisor," "mentor more women") but cite "low salary" and stalled progression ("completed graduation, no higher post") as retention risks, despite 94–96% commitment.

### 5.3 Optimise Workload via Shorter School Hours and Digital AFL

Reduce school day by 45 minutes (end 3:15 PM), dedicate Mondays fully to planning/AFL analysis via **shared digital dashboards** (Google Classroom for lesson data/student tracking), and cap class sizes at 40 for a 1:13 ratio.

**Emerging need:** Teachers report overload during exams ("hectic, packed"), struggles with health/family balance, and 10th-grade chaos; parents echo attention lapses amid long hours. CUDD is effective, but manual tracking burdens mentors.

### 5.4 Strengthen Assessment Feedback Loops for Student Motivation

Share individual AFL scores and strand-wise progress from Grade 5 through student-led “Learning Portfolios,” presented during quarterly parent showcases, replacing the current teacher-only feedback system and incorporating goal-setting workshops

**Emerging need:** Right now, students typically begin seeing and comparing their grades only in the later years of school. Teachers believe this should start earlier, from Grade 5 onwards, so that students gradually get comfortable with tracking their own progress and feel motivated to improve.

However, sharing grades alone isn't enough. Many students currently don't even notice or act on the feedback written on their assessments. Teachers flagged this as a missed opportunity. Most importantly, students who are already falling behind respond especially well when an adult closely tracks their progress and checks in regularly, the data shows measurable improvement when this kind of personal attention is given.

### **5.5 Scale Family Academic Reinforcement Programs**

Launch "**Home Reading Kits**" (dual-language storybooks + parent guides with comprehension prompts) distributed via Parent-teacher meetings (PTMs), with monthly family reading challenges tracked via photo submissions.

**Emerging need:** Parents engaged in events but replicate experiential activities without academic rigour; English gaps suggest home reinforcement gaps.

### **5.6 Formalise Behaviour and Emotional Intelligence Systems**

Implement **classroom "Community Agreements"** co-created with students (respect, peer support, and doubt-asking norms) and daily 10-minute SEL circles that address ADHD/dyslexia strategies teachers already use informally.

**Emerging need:** Teachers observe gains in emotional intelligence ("share responsibly, support others"), but want firmer discipline for community-influenced behaviours; adolescents need trust-building rather than orders.

## 6. Conclusions

- The KMPL-funded Mukangan intervention at at Dr. Babasaheb Ambedkar Municipal School (Sep 2023–Aug 2024) substantially validated the project’s integrated theory of change, achieving strong progress across student learning, teacher capacity, women's empowerment, and family engagement within Mumbai's BMC school system.

The hub-and-spokes teacher education model, delivering 94–96% attendance across 224–572 quarterly orientations and 657–1501 CUDD meetings, cascaded active-constructivist pedagogy into classrooms, driving **excellent numeracy consolidation** (Grade 7–8: 60–72% proficient in multi-step operations/fractions/word problems vs. baseline Grade 5 operations at 60%) and **transformative teacher empowerment** (9 out of 10 community teachers report financial independence, household decision-making agency, and English confidence gains from "scared of spelling" to fluent instruction). Project efficiency yielded multi-domain returns, including SEL strengths (collaboration/self-awareness), parental trust (83–94% attendance in Parent-teacher meetings), and external validation from the eco-system.

Academic outcomes present a **dual picture**: numeracy success confirms the model's efficacy for operational fluency and application, with stakeholders unanimously noting reduced fear. However, **Grade 7–8 English reveals critical gaps**, that contradict baseline grammar strengths and signal foundational reading/writing deficits requiring urgent remediation. This domain-specific limitation underscores that while the experiential approach excels for concrete domains like Maths, abstract literacy demands targeted phonics/vocabulary interventions.

The project aligns closely with NEP 2020/NIPUN Bharat/SDG 4 priorities, active learning, a Foundational Literacy and Numeracy (FLN) focus, teacher communities, and navigates BMC constraints pragmatically. Sustainability appears promising: embedded weekly processes, teacher-leadership aspirations and parental volunteering signal potential for self-perpetuation, though salary and workload pressures pose retention risks.