

Evidence in Education by Central Square Foundation



UP Report



MP Report

1 Evaluation of Foundational Learning Programme in Uttar Pradesh and Madhya Pradesh (Demonstration Evaluations)



Study Objective and Design

The study was conducted to understand the impact of the implementation of FLN programmes across different models of intervention and implementation varied on the ground in Uttar Pradesh and Madhya Pradesh. The study focused on comparing implementation across three models in UP—State NIPUN Programme (SNP), District Implementation Support—High Intensity (DIS-HI), and District Implementation Support—Low Intensity (DIS-LI) — and two models in MP—State NIPUN Programme (SNP), District Implementation Support (DIS). The evaluation adopted a quasi-experimental mixed-method design, with CEM matching at district and schools level. ~100 schools were covered in each arm for SLOs, and 90 classrooms, 45 teacher interviews, joint visits with ARPs, and interviews with district and block officials were conducted for the qualitative insights.



Key Findings

- Student performance improved from baseline to endline across all models in all literacy and numeracy tasks, with the strongest gains observed in the DIS models
- Analysis shows average effect sizes of 0.47 SD in literacy and 0.33 SD in numeracy for the DIS-HI model, and 0.44 SD in literacy and 0.30 SD in numeracy for the DIS-LI

model in UP. Similar massive gains were seen for the DIS model in MP as well.

- Across both states, teachers and officials demonstrated greater clarity on learning goals, lesson sequencing, and the intent of structured pedagogy. However, depth of understanding varied, with stronger comprehension observed in DIS districts compared to SNP districts.
- Most teachers in SNP model attempted to follow Teacher Guides, fidelity of implementation remained uneven. In many classrooms, teachers adopted surface-level compliance—covering activities without fully internalising pedagogical intent.
- In DIS models, particularly DIS-LI (UP), teachers showed better alignment with lesson objectives and classroom processes, suggesting that moderate but sustained support enabled stronger internalisation of practices.
- The evaluation found that Frequency of school visits increased in DIS models, Feedback to teachers became more structured and academically oriented and ARPs increasingly acted as instructional mentors rather than administrative monitors.
- Heavy workloads, competing administrative demands, and lack of advanced pedagogical training limited their ability to provide deep academic coaching.
- The study also found that joint visits and structured observation tools improved the quality of mentoring.

- Multi-grade classrooms, high student absenteeism, and time constraints affected lesson execution.
- Teachers often struggled to balance syllabus completion with differentiated instruction for students at varying learning levels.
- Teachers and officials collected data regularly but often lacked the skills or time to interpret it meaningfully for instructional planning, indicating the need for simplified tools and clearer guidance on using data to inform teaching.

2 Evaluation of District-level FLN System in Uttar Pradesh DPMUs (Baseline)



Study Objective and Design

Study was undertaken to understand how system-level interventions under the NIPUN Bharat Mission translate into improved student learning outcomes, with a specific focus on the role of Central Square Foundation's District Project Management Units (DPMUs). Study was anchored in a realist evaluation framework adopting qualitative, mixed-method design, enabling triangulation across system actors. In total, 123 stakeholders were engaged. Student learning outcomes (SLOs) and classroom practices were observed in Grade 2 classrooms. A cluster randomised sampling was used for SLOs while a maxim variation sampling was deployed for the qualitative findings.



Key Findings

- Literacy shows relatively better performance than numeracy.
- Student performance for higher order skills shows mixed results for Grade 2 and 3 for both literacy and numeracy subjects.
- Governance effectiveness showed some gaps at the block level, where meetings often lacked focus, analytical depth, and follow-through.
- Inconsistent or inflated reporting, technical glitches in data platforms, and low trust in monitoring tools weakened accountability and decision-making.
- ARPs visits improved teacher motivation, classroom discipline, and use of teaching-learning materials. However, Feedback was often motivational rather than pedagogically deep.
- Administrative workloads limited the time ARPs could spend on academic mentoring.
- Resistance from senior teachers and lack of structured follow-up
- While data collection was extensive, its use for instructional improvement remained weak.
- Teachers who consistently followed lesson plans and used activity-based methods reported better student participation and learning outcomes among students. However, implementation was constrained by student absenteeism, delayed TLM supply, multi-grade teaching responsibilities, and limited instructional time.
- PTMs were irregularly attended, with many parents prioritizing wage work or attending only for financial entitlements.

3

Improving Teacher Uptake of Effective Foundational Literacy and Numeracy (FLN) Instruction



Study Objective and Design

A mixed method study was undertaken to examine how behaviourally designed interventions—specifically a WhatsApp-based chatbot and micro-practice videos (MPVs)—influenced teacher adoption of foundational literacy and numeracy (FLN) pedagogies under the NIPUN Bharat Mission. An RCT was employed to measure the impact of the interventions on teacher practices, while a positive deviance-informed qualitative design. Fieldwork was conducted in Sitapur and Hardoi districts, covering 18 teachers and 6 headmasters, selected across performance bands ranging from high performers to low adopters.



Key Findings

- Teacher-led adaptations and contextualised pedagogy were most visible in schools where teachers exercised autonomy, received peer support, and perceived value in the intervention tools.
- Teachers reported that tools such as the Teacher Guide and chatbot were often too rigid and insufficiently adapted to varied learning levels.
- Resistance to change emerged as a recurring theme.
- Infrastructure limitations affected intervention uptake, particularly in Hardoi.
- Many teachers experienced cognitive overload, balancing teaching, administrative duties, and new intervention requirements.
- Leadership capacity also emerged as a bottleneck.
- Parents prioritised livelihood concerns over education, reducing attendance and continuity in learning.
- Teachers responded positively where they received recognition, peer support, or visible impact on student outcomes.

4

LiftEd EdTech Accelerator: Impact of Acceleration Study 2024



Study Objective and Design

The IoA Study was a mixed methods, multi-stakeholder evaluation designed to assess the effectiveness of the LiftEd EdTech Accelerator's support model across eight partner organisations. Experimental/quasi-experimental components were used to establish the impact of the interventions on SLOs, while the qualitative component examined five core support components—onboarding, thought partnership, financial support, mentorship and capacity building. Data was collected through structured, staggered check-ins with partner programme teams, grant managers and domain mentors, enabling triangulation of perspectives on organisational, operational and strategic outcomes. The overall study aimed to identify what worked, where impact varied by partner stage or cohort, and how the Accelerator model could be strengthened for EdTech solutions serving low-income communities.



Key Findings

- Structured onboarding and goal-setting strengthened partners' strategic clarity and alignment with defined impact metrics.
- Dedicated grant managers functioned as active thought partners, improving accountability, data use and adaptive decision-making.
- Financial grants were critical in enabling product refinement, personnel expansion and proof-of-concept validation, particularly for B2G scale pathways.
- Mentorship and capacity-building support enhanced organisational maturity, strategic direction and internal monitoring systems.
- Cross-partner learning and ecosystem connections accelerated innovation and practical problem-solving.
- Impact varied by organisational stage, with stronger outcomes where support closely aligned with anchor challenges.
- Partners highlighted the need for deeper pedagogical inputs and longer iteration cycles for sustainable product development.

5 LiftEd EdTech Accelerator: User Experience Study 2024



Study Objective and Design

Study was a qualitative inquiry examining user journeys across six EdTech solutions in low-income contexts, focusing on the stages of acquisition, onboarding and engagement. Using a structured analytical framework, the study conducted in-depth interviews and focus group discussions with 31 parents, 24 children, teachers, field workers and SMC members across multiple states. It explored key levers such as smartphone access, influencer roles, onboarding processes, content design and engagement mechanisms. The study sought to identify shared and model-specific drivers of uptake and engagement, contextual barriers in low-income households and actionable insights for improving EdTech adoption and effectiveness.



Key Findings

- Smartphone access — particularly mothers' ownership — was the strongest determinant of consistent user engagement.
- Internet affordability and device-sharing constraints significantly limited daily interaction time in low-income households.
- School endorsement and teacher involvement increased credibility, trust and parental participation in most models.
- Simplified onboarding processes (e.g., WhatsApp-based delivery and assisted registration) reduced entry barriers and improved uptake.
- Visual, activity-based and vernacular content improved child engagement and parental facilitation.
- Mothers emerged as primary learning agents, with their literacy levels directly influencing engagement quality.
- Retention dynamics remain underexplored due to absence of data from disengaged or drop-off users.

6

Building Strong Foundations: Examining Early Childhood Education in India



Study Objective and Design

This study presents a comprehensive national examination of Early Childhood Education (ECE) in India, combining policy analysis, budget review, curriculum analysis and primary research. The research design included:

- analysis of national policies governing ECE (National ECCE Policy 2013 and NEP 2020);
- review of enrolment trends, funding allocations and structural provisions across Anganwadis and Balvatikas;
- curriculum analysis to assess alignment with play-based, developmentally appropriate pedagogy; and
- field-based primary research including classroom observations, stakeholder interviews, and review of monitoring mechanisms across multiple states.

The objective was to identify systemic gaps between policy intent and on-ground implementation and to generate evidence-based recommendations for strengthening ECE delivery.



Key Findings

- Early learning outcomes in India remain below expected school-readiness benchmarks.
- Large-scale assessments show that a majority of 5-year-olds struggle with foundational pre-literacy, pre-numeracy and cognitive tasks, indicating weak preschool preparation.
- There exists fragmentation in ECE delivery due to dual governance by the Ministry of Women and Child Development and the Ministry of Education, leading to overlap, unclear accountability and uneven quality.
- A disproportionate emphasis on nutrition and health within Anganwadi systems has resulted in de-prioritisation of structured preschool education.
- Classroom observations reveal limited time spent on ECE activities, predominantly teacher-led instruction, low child engagement and minimal hands-on or play-based learning.
- Teacher preparedness and clarity on curriculum progression are inconsistent, with low fidelity to lesson plans and limited formative assessment practices.
- Budget allocations for ECE remain a small proportion of overall education expenditure, with low per-child spending and variability across states.
- Monitoring systems largely track infrastructure and enrolment rather than learning processes and outcomes
- Large proportion of children enter Grade 1 below the mandated age of six, prematurely skipping structured preschool years and compromising school readiness.
- Parental interest in children's learning is high, but awareness of developmentally appropriate ECE practices and effective home support strategies remains limited.

Ongoing studies

7 Mixed Methods Evaluation of District-wide DPMU Intervention in Basti, Uttar Pradesh



Study Objective and Design

The evaluation aims to assess the impact of the intervention on student learning outcomes in foundational literacy and numeracy and examine contribution of the implementation to the intermediate and final outcomes, as hypothesized in the Theory of Change. A mixed-methods evaluation design has been adopted, combining a repeated cross sectional impact evaluation of student learning outcomes with a longitudinal process evaluation conducted at multiple intervals, aligned with baseline, midline and endline rounds. Control schools were pooled across Maharajganj, Ambedkar Nagar and Kushinagar through a two-stage matching technique. Within intervention and control districts (selected using minimum variation), schools were selected using propensity score matching to ensure comparability. The baseline assessment (Nov–Dec 2025) covered 97 schools in each arm. Student coverage included Grade 2 and 3.



Plan for Analysis and Learning

Student learning outcomes will be analysed by comparing trends between Basti and the pooled control districts while accounting for key student and school characteristics. Process findings will be synthesised with learning data to test the Theory of Change, explain variation in outcomes, and generate actionable lessons for strengthening FLN implementation and informing future scale-up.

- Qualitative interviews with teachers and head masters to capture changes in perceptions, behaviours, and constraints.

9 TARANG Accelerator Mixed-methods Evaluation (Site: Jawahar Navodaya Vidyalaya)



Study Objective and Design

The evaluation aims to assess the effectiveness, implementation fidelity, and scalability of the Accelerator Program for nurturing high-potential students in Jawahar Navodaya Vidyalayas (JNVs), with a focus on STEM learning and life skills development. It seeks to measure student gains in knowledge, higher-order thinking, and dispositions; identify high-impact design features; and determine which models are ready for scale within public systems.

The study adopts a mixed-methods design anchored in a quasi-experimental Difference-in-Differences (DiD) framework, comparing baseline–endline gains between six intervention JNVs and matched comparison schools selected through nearest-neighbor matching using standardized Euclidean distance across key indicators (PTR, socio-economic composition, and infrastructure).

Quantitative analysis is complemented by a robust monitoring framework, classroom observations, stakeholder interviews, user feedback tools, and process evaluation methods to examine implementation fidelity, contextual enablers, cost-feasibility, and scalability conditions. This integrated approach enables both causal impact estimation and actionable implementation insights to inform scale-up across the JNV ecosystem.

8 Quality Implementation Programme (QIP): Randomized Control Trial Study



Study Objective and Design

Study aims to see whether high-fidelity implementation of the NIPUN UP FLN programme led to higher student learning outcomes in Grades 1–2 and improved teacher practices compared to business-as-usual implementation. This study is a mixed methods study with a Randomized Control Trial (RCT) conducted over 15 months in Bulandshahr and Amroha districts of Uttar Pradesh. From a universe of approximately 2,700 eligible primary schools, 240 schools are randomly selected and equally assigned to treatment and control groups.

- **Treatment group** (120 schools): Teachers receive intensive mentoring support through structured classroom observations, targeted coaching, and feedback focused on improving student learning outcomes in addition to business-as-usual NIPUN mission implementation.
- **Control group** (120 schools): Schools continue with business-as-usual mission NIPUN implementation.

The evaluation uses a mixed-methods approach, including:

- Randomised Control Trial to measure literacy and numeracy gains in treatment and control groups
- Classroom observations to assess implementation fidelity and instructional practices.

10 Systems Study of Jawahar Navodaya Vidyalaya (JNV)



Study Objective and Design

This study seeks to understand how the functioning of Jawahar Navodaya Vidyalayas (JNVs) is experienced and interpreted by two key stakeholder groups: Headmasters/Principals (HMs) and alumni.

Using qualitative design, the study aims to explore perceptions related to:

- Factors shaping academic performance and learning outcomes
- Influence of the JNV experience on alumni socio-economic mobility and career advancement
- Fairness, effectiveness, and implementation of key systemic interventions (e.g., migration scheme, coaching programs, selection processes)
- Role of leadership, pace-setting responsibilities, and welfare systems in the overall functioning of JNVs

A qualitative, interview-based approach is appropriate because the study focuses on interpretive, experiential, and systemic insights that cannot be captured through quantitative measures.

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