STEM
Building Brains.....Beyond Books.....

STEM LEARNING · IMPACT DIGEST
Issue - September 2026

Science, in their hands.

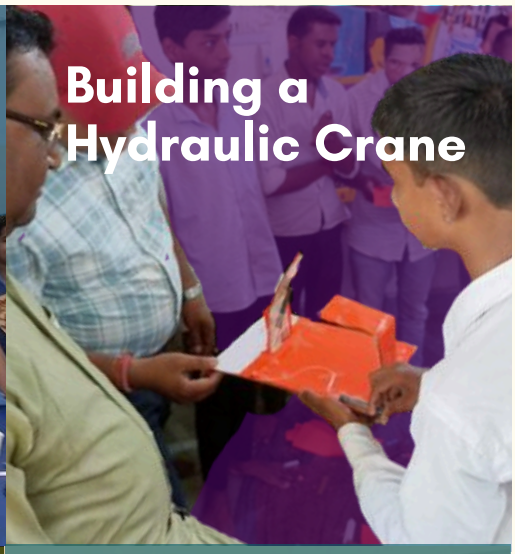
Learning beyond the textbook

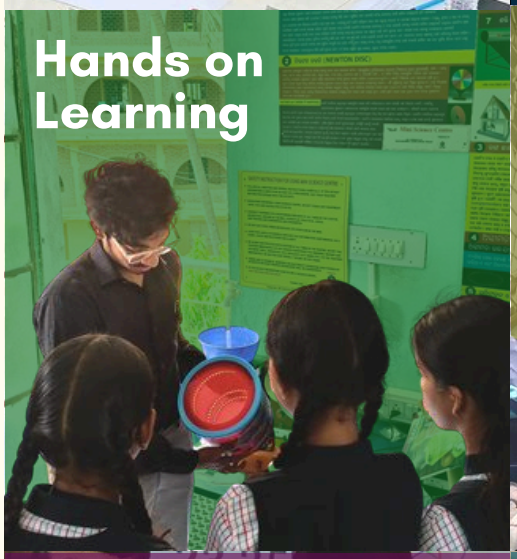
STORIES FROM SCHOOLS ACROSS INDIA




Teacher Training


DIY Activites


Building a Hydraulic Crane


Hands on Learning


DIY Anemometer


Competing with Confidence


Leading with Confidence


Tinkering Competition
BSES


Student-led Demonstration


Opening doors to a Mini Science Centre

The real story starts after the ***Ribbon is cut***.

At **Dnyan Vikas Vidyalaya in Koparkhairane**, the ribbon-cutting for the **Mini Science Centre** was just the opener, what followed was students walking guests through all the models themselves, explaining the science behind each one with confidence. The day carried an unexpected touch too: every guest was gifted a Tulsi sapling on Ashadhi Ekadashi, a small gesture that tied the science centre to something deeply rooted.

In Kolkata, **Tollygunge Girls' High School** welcomed its **Mini Science Centre** with a room full of curiosity, students exploring the models, teachers already discussing how to weave them into next week's lessons. And in Kharar, Punjab, CEO of **HARTEK Foundation**, Mr. Harkirat Kaur graced the inauguration in person, and spoke to exactly why hands-on learning matters:

> *"Practical learning is the key to nurturing innovation and scientific thinking, and we are confident that this Mini Science Centre will make a meaningful difference in students' learning journey."*
>
> — HARKIRAT KAUR, CEO, HARTEK FOUNDATION

> *A science centre finds its purpose the moment a child starts asking "why."*



Empowering The Teachers Who Empower the **Nation**

In **Vabhasandra, Karnataka**, a training session gave teachers something more lasting than familiarity with 80 models, it gave them the confidence to make those models their own, finding new ways to bring physics, chemistry, biology and math to life in their classrooms.



> A refresher training program left teachers better able to connect the models to the curriculum and to real life, with hand-holding support to keep them confident using the lab.



> This teacher training session didn't just remind teachers how the models work, it made them feel like tools they'd reach for without a second thought.

STEM resources provide the foundation. Training helps teachers turn them into effective learning experiences.



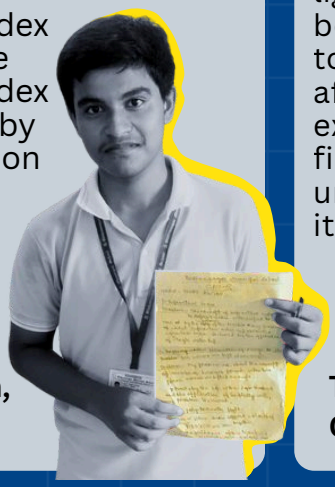
We asked ***students*** what changed. Here's what they actually said...





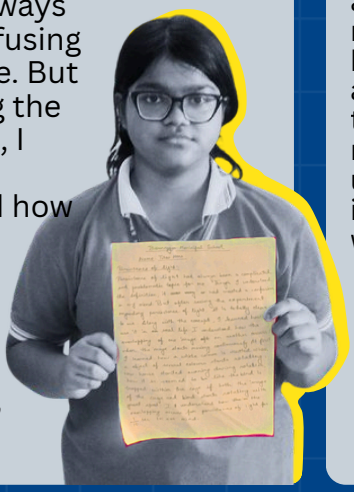
At **Bidhannagar** Municipal School, **40 students** sat down after a **Mini Science Centre** session and wrote, in their own words, what shifted for them:

My problem about refractive index and absolute refractive index was cleared by the application of the Magic Water Tap."



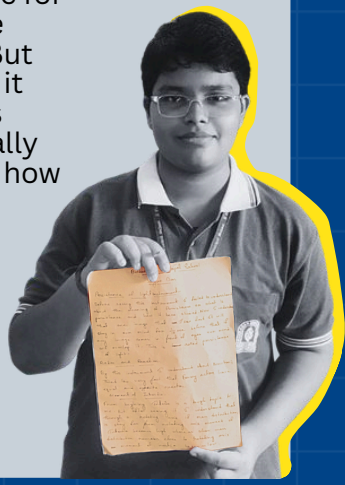
Tanay Agiyan, Class X

Persistence of light had always been a confusing topic for me. But after seeing the experiment, I finally understood how it works.



Titas Hore, Class X

Inertia had been a tough topic for me from the beginning. But after seeing it through this model, I finally understood how it actually works.



Sayan Das, Class X

In **Nadbai, Rajasthan**, students left the session with a stronger understanding of the concepts—and a desire for more hands-on learning. **In Waidhan, Madhya Pradesh**, students found that learning through practical activities made the concepts easier to understand.

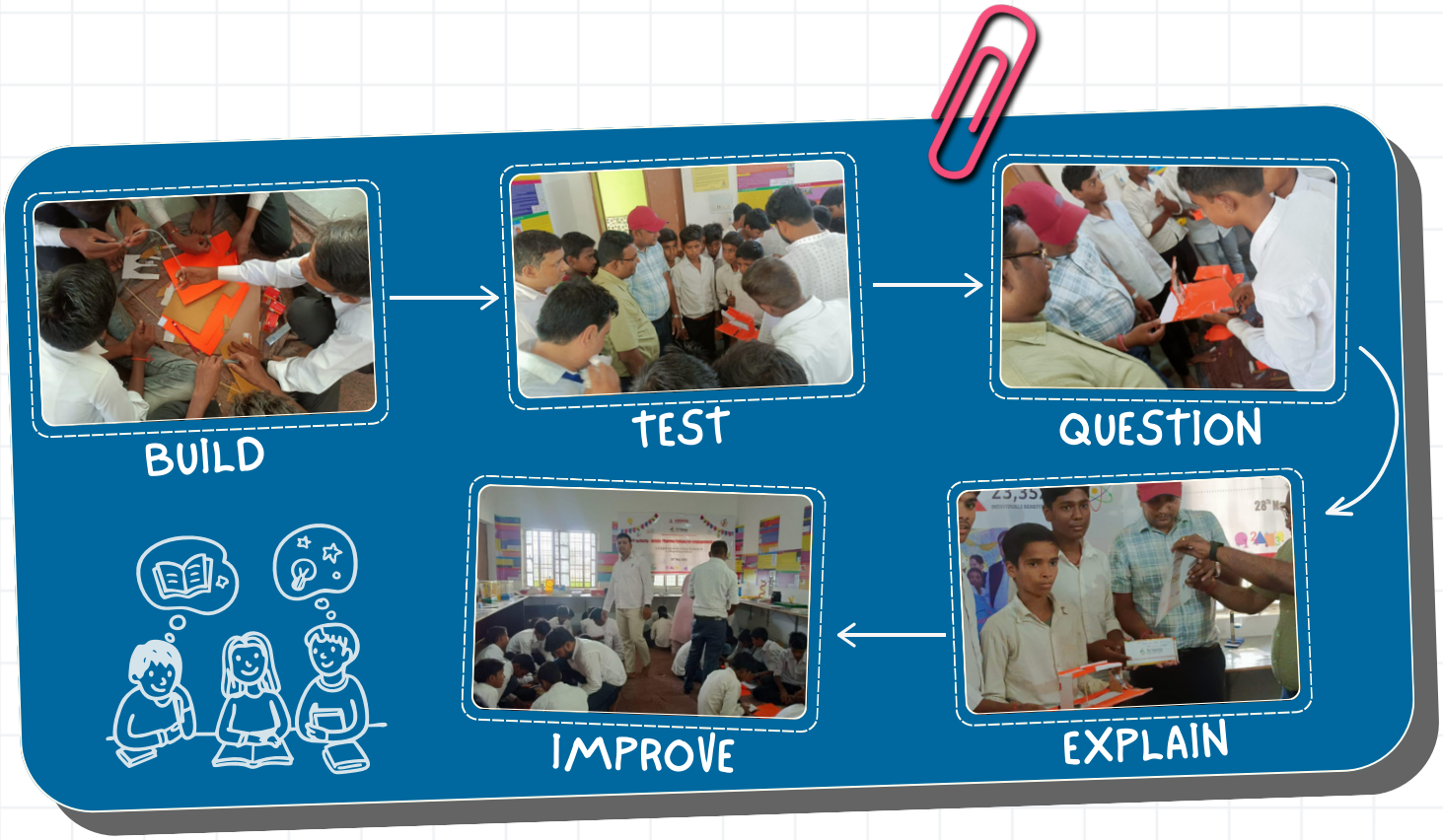
OBSERVING | TESTING | QUESTIONING | DISCUSSING | REFLECTING

When the same sentence shows up in two different states, in students' own handwriting — that's a pattern worth trusting.

From "**I know**" to "**I can build.**"

At **High School Okari**, students were given an engineering challenge: **build a machine that could lift something without electricity**. Using cardboard, ice-cream sticks, plastic tubes and water-filled syringes, four students built a working hydraulic crane — pressing one syringe transmitted force through the liquid and moved the arm, lifting a paper cup. They then connected what they'd built to real machines: brakes, excavators, forklifts.

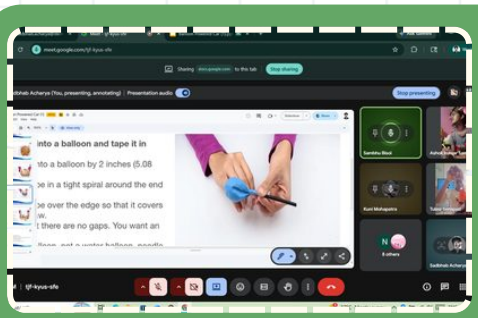
The most important part happened before the final demonstration — they tested the design and improved it before presenting it at the science fair.





SHASTRI PARK, DELHI

A student chose to build beyond the simplest design, to create a working mini metal detector. What began as a school-level competition took him through the cluster rounds of the BSES Tinkering Competition, where he emerged as a **winner**—and shared the moment with the teacher who believed in giving his idea a chance.



KHANDAGIRI, ODISHA

Students built balloon-powered cars, bringing pressure and kinetic energy into a hands-on setting in our online DIY Session.

A model is not the achievement — the thinking that happens while building it is.

Finding **Science** in **Everyday** Things



In **Palam Village, Delhi**, 31 students turned turmeric into a chemistry lesson — painting it onto paper, watching detergent turn it red, then watching a half-cut lemon make the colour vanish again.

> ***"This is the first time I understood a scientific concept practically."***
> — *STUDENT, SKV NO. 2, PALAM VILLAGE*



DWARKA, DELHI

Students built their own anemometers and, for the first time, could actually measure the wind instead of just reading about it.



JARAUDHA, CHHATTISGARH

Cardboard, paper and colour pens became Newton's Disc, showing how spinning colours can blend to recreate white light.

> *"When we **create**, we discover what we are **capable** of."*

Revisiting. Reinforcing. Reapplying.

A Refresher Training Session for Teachers



NABAGRAM HIRALAL PAUL GIRLS SCHOOL, WEST BENGAL

Five teachers refreshed their hands-on learning approaches, revisiting Mini Science Centre models and exploring how to bring them into everyday lessons.

MDRS HULIKATTE, KARNATAKA

The refresher training focused on strengthening teachers' familiarity with the models and building confidence in using them to explain classroom concepts.





GRAM VIKAS HIGH SCHOOL, KANKIA, ODISHA

Six teachers and students revisited all 80 Mini Science Centre models through hands-on explanations, questions and discussion, followed by a fun science quiz that put their shared learning to the test.

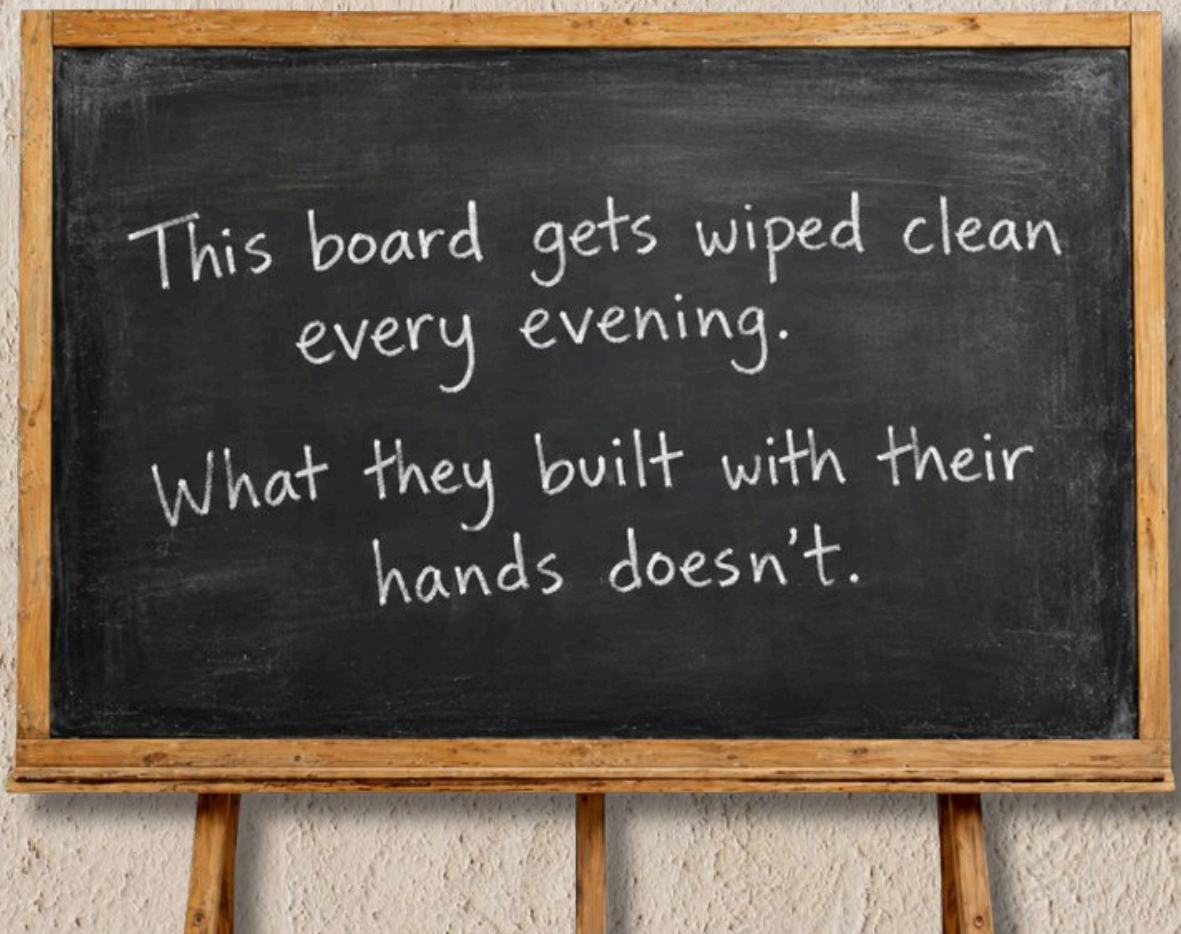
When a lab finds its way into everyday lessons, learning becomes something students can see and explore.

Finding New Pathways ***Forward...***

At **Government Girls Senior Secondary School, Manesar**, 200 students took part in a **Session on ITI pathways and vocational education** supported by Maruti Suzuki.

They listened closely, engaged actively in the discussion, and raised thoughtful questions about admissions, courses and future career prospects. Their participation turned the session from a presentation into a meaningful conversation about the pathways ahead.

A NEW IDEA → **A QUESTION** → **AN OPTION** → **A POSSIBILITY**



Making these Moments ***Possible***.

Every classroom moment, every experiment, every question and every new possibility begins with people who choose to invest in better learning.

The stories in this edition come from schools across the country. They reflect the curiosity of students, the commitment of teachers and the efforts of our teams on the ground. But they are **made possible through the organisations that support this work** and help us bring hands-on learning to more schools.

We are grateful to our CSR partners for standing with us in this journey.

Your support helps turn resources into experiences, experiences into curiosity, and **curiosity into possibilities.**

Let's create the next story together.

STEM
Building Brains.....Beyond Books.....

Get in touch:

info@stemlearning.in | www.stemlearning.in
+91 96532 64805