> *“Creativity is a step beyond imagination: it is putting your imagination to work.”*
>
> — Mitchel Resnick, Lifelong Kindergarten (MIT Media Lab)

OUR PHILOSOPHY

We have one ambition: to build **creative, capable thinkers** in the years when it matters most.

The instinct to ask what if? The patience to sit with a problem. The willingness to try, fail, and try again. The skill of breaking something hard into something doable. These are not lessons. They are habits of mind.

Between the ages of five and fourteen, children set the fundamental framework for these essential habits of mind.

LEGO based learning happens to be a remarkably good medium for this. Patient, forgiving, and just complex enough to teach a child something new every time they sit down with them. But the blocks are not the curriculum. The thinking is. We have spent years designing what happens around the blocks — the build sequences, the open-ended challenges, the question a teacher asks at the right moment, the moments of peer collaboration, the reasoning exercises that sharpen the same mind in a different shape.

WHAT WE DEVELOP

Six skills. One brain.

We organise the work around six capacities a child develops across their time with us. Some are cognitive. Some are physical. All of them compound.

01 **Focus** The capacity for deep, sustained attention. *Sitting with a hard problem for ninety minutes — and not reaching for distraction.*	02 **Spatial Reasoning** The ability to mentally rotate, manipulate, and reason about structures. *Turning a half-built model in their hands and seeing what's missing.*	03 **Problem Solving** The habit of breaking the difficult into the doable. *Ten small builds where there was one big intimidating one.*
04 **Fine Motor** Refined hand control — the bridge between imagination and creation. *Hands that execute what the mind designs.*	05 **Engineering Thinking** Cause-and-effect reasoning. Iterative design. Diagnostic intuition. *Knowing why the bridge fell — before it falls a second time.*	06 **Confidence** Self-efficacy earned through real accomplishment, not external praise. *The look on a child's face when their machine works.*

HOW WE TEACH

The creative learning spiral.

Our pedagogy is inspired by the work of Mitchel Resnick at the MIT Media Lab — the creator of Scratch and a thirty-year collaborator with LEGO Education. Every Logic Blocks session moves children through the same five-step spiral that drives professional creators, engineers, and inventors.

Imagine	Create	Play	Share	Reflect
A child wonders what if?	They turn the idea into something real.	They tinker, test, and push limits.	They explain it. Others build on it.	What worked? What didn't? Why?

The spiral repeats. With each cycle, a child grows more confident, more capable, more original. This is how creative thinking is actually built — not taught.

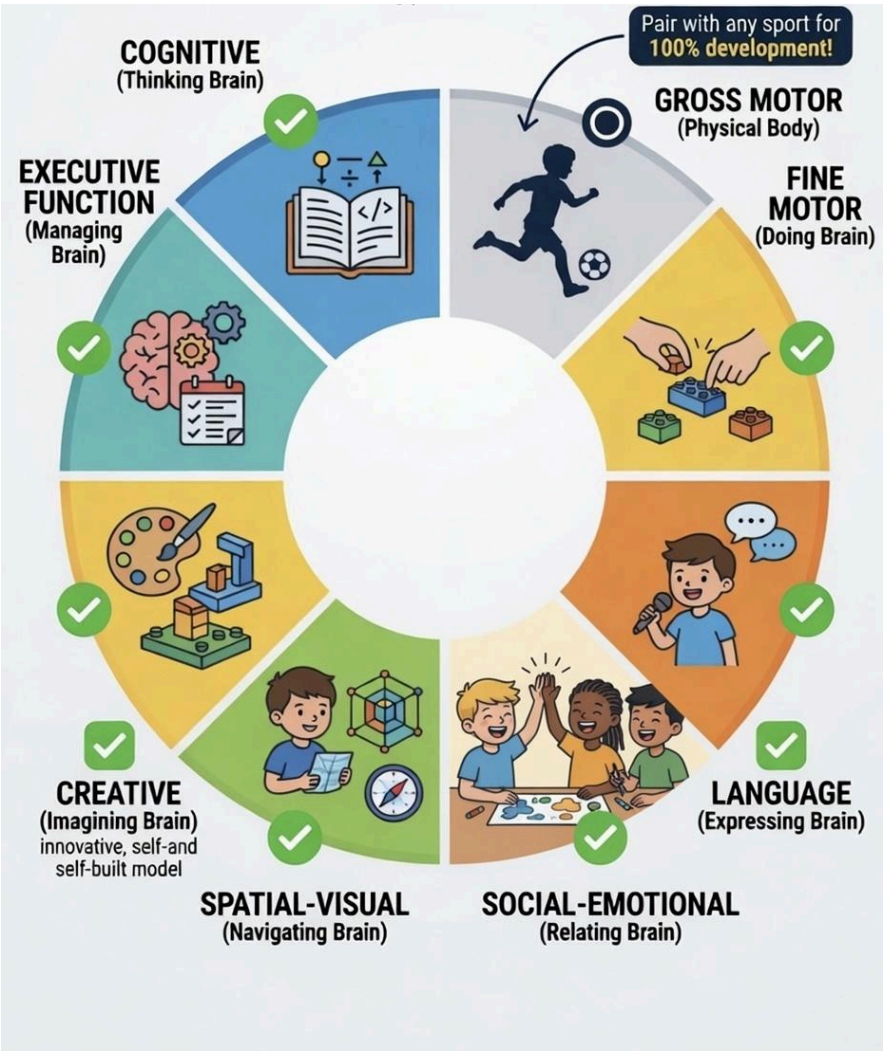
BENEATH THE SIX SKILLS

What lights up when a child builds.

The six skills are the headline. Beneath them, deeper developmental work is happening — eight distinct brain domains lighting up at once, and ten kinds of professional thinking taking shape over years. These are two ways of looking at the same children, doing the same work.

THE DEVELOPMENTAL VIEW

Eight brain domains. One session.

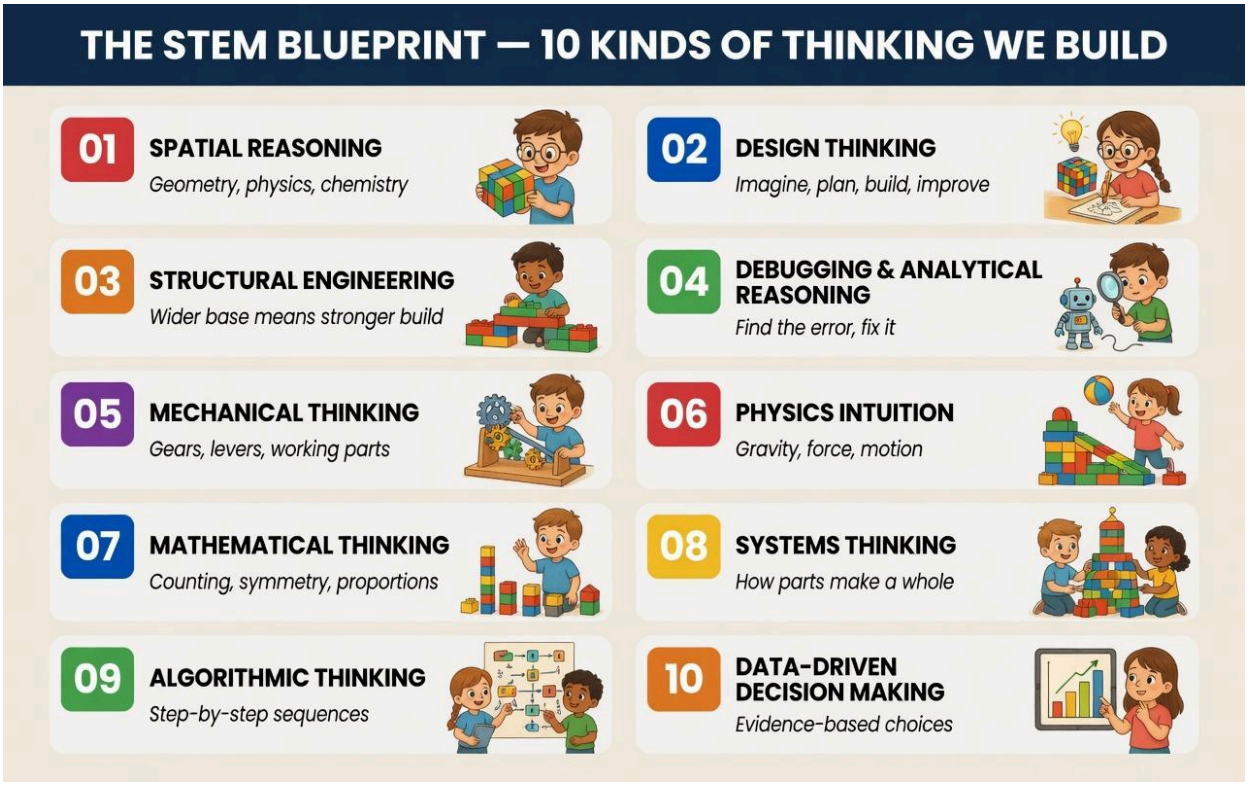


Most learning activities exercise one part of the brain at a time. A LEGO session lights up cognitive, motor, language, spatial, social, and executive function simultaneously — seven of eight developmental domains, in one ninety-minute build.

THE ENGINEERING VIEW

Ten kinds of thinking we build.

Across the four stages, the curriculum systematically develops ten kinds of professional thinking — the same modes of reasoning used by engineers, scientists, designers, and problem-solvers throughout their working lives.



Spatial Reasoning. Design Thinking. Structural Engineering. Debugging. Mechanical and Physics Intuition. Mathematical and Systems Thinking. Algorithmic Thinking. Data-Driven Decision Making. These aren't separate subjects — they emerge naturally through hands-on practice with the right challenges, taught at the right time.

THE WEEKLY RHYTHM

Three sessions. Every week.

Children attend Logic Blocks three times a week, ninety minutes each — four and a half focused hours of practice every week. Two engineering sessions and one Reasoning Lab. Enough volume that progress becomes visible within a month.

SESSION ONE

Discovery Day

Children start a new build. They imagine, design, and prototype — exploring how a system might work before they know if it will. The creative spark of the week.

SESSION TWO

Mastery Day

They iterate, debug, and complete the build. Mastery comes from doing it twice, not once. Most sessions end with children sharing what they built with their peers.

SESSION THREE

The Reasoning Lab

Math puzzles, visual reasoning, verbal logic, and unplugged algorithmic thinking. The same mind, working in a different shape.

A BUILDER'S JOURNEY

The four stages.

We meet children where they are and walk them from first instincts to real engineering. Each stage builds on the last, with tools, challenges, and concepts that match a growing mind.

AGES 5–6

Little Builders

First instincts of an engineer.

Children learn to look at the world as something that can be built. They explore structure, symmetry, balance, and motion through LEGO Classic, Architecture, BriQ Motion, and the early SPIKE Essential kits. By the end of this stage, a child can describe why a tower falls — and rebuild it taller.

*You'll know it's working when **they bring you a build at home and tell you what they would change if they did it again.***

AGES 7–9

Makers Lab

From pieces to systems.

Children move from building objects to building systems — things that respond, transmit force, change state. LEGO Power Functions, simple machines, basic SPIKE Prime, and their first encounters with circuits and the micro:bit controller. Coding enters the curriculum through play. The Reasoning Lab introduces algorithmic thinking unplugged.

*You'll know it's working when **they program something to behave the way they planned it to.***

AGES 10–12

Young Creators

Building things that think.

The stage where students cross into real engineering. Advanced SPIKE Prime, Arduino, micro:bit with camera modules, and their first AI-aware builds — object recognition, gesture control, smart sorting. Coding deepens into Python. The Reasoning Lab now does work that mirrors what schools call Computational Thinking — only with hands and tools instead of worksheets.

You'll know it's working when ***they build a machine that recognises the world around it.***

AGES 12–14

Tech Innovators

Real engineering. Real problems.

Students take on competition-grade hardware: VEX, REV Robotics, Raspberry Pi. They learn Python deeply, with a path to formal certification, and design IoT and Computer Vision projects integrating sensors, microcontrollers, and on-device AI inference. Capstones can be entered into national and international competitions — or developed as portfolio work for high school and college applications.

You'll know it's working when ***they build something that solves a problem outside the classroom.***

WHERE THE WORK GOES

Global competitions.

Across the globe, engineering, programming, and inventive problem-solving are highly valued skills. Beginning at the Makers Lab level, Logic Blocks students prepare for three of the most renowned robotics contests on earth — global events that attract teams from over sixty different nations.

FIRST LEGO League

The flagship LEGO-based engineering and coding competition for children aged 6–16. Teams design autonomous robots to solve themed real-world challenges. Hundreds of thousands of participants worldwide.

World Robot Olympiad

An international robotics tournament with a famously rigorous format — judges introduce a surprise rule on competition day, and children must adapt their code without help. Held annually in a different host country.

VEX Robotics Championship

The world's largest robotics competition, recognised by Guinness World Records. Two age tracks — VEX IQ for younger children, VEX V5 for older — with World Championships drawing tens of thousands of teams.

OUR FIRST-YEAR COMMITMENT

If a Logic Blocks team qualifies for the **Nationals** of FLL, WRO, or VEX in our first year, **we cover the full cost of taking the team there.** Travel, accommodation, registration, kit shipping — we handle it.

WHAT IT ADDS UP TO

Where this leads.

A child who completes the full Logic Blocks journey comes with capabilities most adults would not predict. They can decompose a complex problem, write working Python, design and debug a physical build, train a small AI model, collaborate within a team, and explain what they made to someone who didn't watch them make it.

These are the capacities CBSE has just built into its new Computational Thinking and AI curriculum for every Indian student from Class 3 onward. Logic Blocks children arrive at school already practising — with their hands — what the syllabus describes on paper.

A NOTE FROM US

We started Logic Blocks with one belief: every child has the instinct to create. What they need is a place to practise it.

Creative thinking is a skill — and like every skill, it grows with the right environment, the right materials, and the right encouragement. Logic Blocks is one such place. A room where children come to imagine, to try, to refine, and to discover what they are capable of building.

Rather than reading about Logic Blocks, we invite you to experience it firsthand by visiting a free session with your child. The students' projects communicate our value far more effectively than words ever could.

Come build with us the next generation of innovators.