WHY THIS WORKS

We don't teach 7 steps. We teach a way of thinking the kid keeps for life.

The steps are the *what*. The Builder's Brain is the *how* — a small, repeatable way of thinking that runs inside every step. A child should leave SPARK able to walk up to a problem they've **never seen before** and know exactly what to do first.

WHAT WE'RE FIXING

Answer the questions → a result appears. The thinking is invisible, and the finish line comes **too fast** to build a real skill.

THE UPGRADE

Every step runs a **thinking loop**. The result is **earned** — and the kid walks out with a **toolkit they reuse anywhere**.

THE METHOD — A LOOP OF 7, EACH STEP CARRIES ONE NAMED MOVE

1	2	3	4	5	6	7
Identify	**Research**	**Connect**	**Brainstorm**	**Build**	**Ship**	**Improve** ↻
Notice on Purpose	Listen First	Find the Gap	Lots Before Best	Smallest That Works	Real Beats Perfect	Better Than Yesterday
"Who's having a hard time?"	*"Ask, then listen."*	*"Where's the empty spot?"*	*"Many, then pick."*	*"Start tiny."*	*"Done & used."*	*"Use it, fix it, again."*

↻ Step 7 loops back to 5 & 6 — a builder never just "finishes." They ship, learn from real use, and improve.

💡 **The one-sentence version for a principal:** SPARK doesn't just get a kid to make one app. It installs a **problem-solving operating system** — notice → understand → plan → build → share → improve — and points it **outward at helping people**. That is the AI-proof skill: the thinking *and* the empathy, not the typing.

BEFORE STEP 1 · THE PROBLEM-FINDING PROCESS

The Four Pillars — where you look to find a problem worth solving.

A builder can't fix the right problem until they *find* it. So a kid sweeps four places, in order — start close, then look wider. Every SPARK build begins here. Get this right and the rest of the method has something real to work on.

👊 CLOSEST TO YOU ———————————— WIDEN OUT → 🌍 THE WHOLE COMMUNITY

PILLAR 1

👊 Yourself

"What's hard for me — and who else feels it?"

- Practice is boring
- I forget my homework
- I can't find my stuff

PILLAR 2

🏠 Your Home

"What's hard for my family?"

- Whose turn for chores?
- Grandma can't read small text
- We forget groceries

PILLAR 3

🏫 Your School

"What's hard for kids & teachers here?"

- Nobody knows what clubs exist
- New kids eat lunch alone
- We lose track of reading minutes

PILLAR 4

🌍 Your Community

"What's hard for people around me?"

- People miss the bus times
- Seniors on the block feel lonely
- No one knows about the food pantry

How to run it — one pillar per lesson

1 · Sweep
One pillar per lesson. List every problem you notice — no judging, no fixing yet.

2 · Widen
For each, ask: "who else has this?" The more people it hurts, the bigger the build.

3 · Pick
After all four lessons, circle the ONE that helps the most people. That's your build.

WATCH IT WORK — HOW EMEKA (AGE 7) RAN THE FOUR PILLARS

👊 SWEEP · YOURSELF
"iReady practice is **boring** — every single time."

WIDEN · WHO ELSE?
"My **whole class** hates it too." → now it's a school problem.

PICK
Build practice that's **fun** and shows **real progress** — for everyone.

⭐ THE BUILD
Star Math — live, and it measures real growth.

A problem she felt *herself* widened into one that helps her whole class — that's the Four Pillars doing their job. Find the **right problem** and the build almost designs itself. That's why the Pillars come first.

WHAT ACTUALLY BUILDS THE THINKING

Two engines turn a worksheet into a workout.

Engine 1 — The Builder's Loop (runs inside every one of the 7 steps)

A kid never just *answers* a step. They run a tiny loop — the same loop a real builder, scientist, or coach runs. **First try is never the final answer.** This is the muscle.

Think it	Try it	Check it	Change it
What do I know? What am I trying to do?	One small step — a guess, a draft, a question.	Did it work? What does the evidence say?	Adjust from what you learned. Loop again.

🗣️ **Say Why.** After any decision the kid says: "I picked ___ because ___." Choosing *with a reason* is the habit that transfers to a math problem, a book report, or a disagreement.

🎯 **Name your people.** Alongside the loop the kid keeps asking: "Who does this help?" A build isn't done because it works — it's done when it **helps someone real.**

Engine 2 — The Improve Step (what makes the result earned, not instant)

Shipping isn't the finish line — it's the **first draft of the answer.** The kid puts v1 in front of the people it's meant to help, watches them use it, fixes what breaks, and ships again. **The learning lives in the gap between v1 and v2** — and so does the proof it actually helped.

Old — a straight line. Build → Ship → done. Nothing was tested against reality.

New — a loop. Build → Ship → watch it get used → fix → ship again. The kid earns v2 by reading reality and responding.

The most important skill we were missing: "When I'm Stuck."

Because stuck is a step, not a wall. Every other sheet assumes a kid produces an answer — but problem-solving is what you do when you *don't have one yet.*

1	2	3	4	5
Say it "I'm stuck on ___." Name it small.	**Know it** "What do I already know?"	**Shrink it** "Smallest piece I CAN do?"	**Ask it** "Who or what could help?"	**Try it** Do it → check → go again.

It turns **"I can't"** into **"what's my next small move?"**

THE 7 MOVES A KID COLLECTS — AND USES EVERYWHERE

The Thinking Toolkit.

Each week the kid earns one move and adds it to their toolkit. By the end they hold all seven — a real, named set of thinking moves that work **far beyond building.** The "use it anywhere" column is the proof it transfers.

Step	The move	One-word cue	Use it anywhere — not just to build
1 · Identify	Notice on Purpose	*"Who's having a hard time?"*	Lunchroom: notice the kid sitting alone — and do something about it.
2 · Research	Listen First	*"Ask, then listen."*	A fight with a friend: ask what's wrong and really listen before fixing.
3 · Connect	Find the Gap	*"Where's the empty spot?"*	A group project: find the job nobody is doing yet — and take it.
4 · Brainstorm	Lots Before Best	*"Many, then pick."*	Choosing a topic: write 5 fast, then pick — don't marry the first idea.
5 · Build	Smallest That Works	*"Start tiny."*	A huge assignment: do the first small piece tonight, not the whole thing.
6 · Ship	Real Beats Perfect	*"Done & used."*	A drawing or essay: finish a rough one — don't freeze waiting for perfect.
7 · Improve ↻	Better Than Yesterday	*"Use it, fix it, again."*	Free throws, reading speed: do it, see what missed, adjust, repeat.

🏫 **How it lives in the room (zero extra lift):** each session names last week's move out loud, the new move goes on the wall, and coaches catch the move in the wild — "that was *Lots Before Best*, nice" — so the language becomes how the class talks. The move is the curriculum; the app is just where they practice it.

The same Builder's Brain — solo or on a team.

SPARK trains an individual thinker — but real problems get solved together, so each class also works in small build teams of 3–4. Every team runs the **same 7-step loop** and the **same moves**; the only question is whether each student ships their own tool with the team's support, or the team ships one tool together. Both are real SPARK builds.

🔎 Researcher
Listen First
Runs interviews; brings back real quotes.

✏️ Designer
Lots Before Best
Sketches what the tool looks like first.

⚙️ Builder
Smallest That Works
Directs the AI; assembles the first version.

🧪 Tester
Better Than Yesterday
Puts it in front of real users; drives v2.

Each role owns one Builder Move, and roles **rotate** so every student practices all four. Working together never dilutes the AI-proof core: the problem must still come from a student's real attention — no model can notice the team's problem for them.