

RAISE CURIOUS · A SPECIAL REPORT

Preparing Children for a Future *We Can Navigate*

No parent can be certain what the world of work will ask of their child in twenty years. But the shape of the change is already visible — in the data, in the classroom, and in what employers are asking for right now. You can't fully prepare a child for a future you can't see. You can be fully informed about it. This report is where that begins.

01

The Shift

What is actually changing in work and learning — and what is quietly staying the same.

02

The Skills That Last

The durable, human capabilities employers now want nearly four times more than any tool.

03

What Parents Can Do

Practical, evidence-based moves for the years you actually have at home.

OUR PERSPECTIVE · THE CASE FOR BEING INFORMED

The Ground Is Moving Under Every Career. *That Is Not a Reason to Panic.*

The instinct to future-proof a child is understandable, and mostly futile. The specific jobs, tools, and companies of 2045 are unknowable. What is knowable — and increasingly well-documented — is the direction of travel and the kind of person who will move well within it.

A NOTE FROM EDREAL · FOR INTENTIONAL PARENTS

Every generation of parents has believed its children were being raised for a world it could not quite see. This time the belief happens to be measurable. The World Economic Forum's most recent global survey of employers found that nearly two in five of the core skills a job requires are expected to change by 2030, and that roughly six in ten workers will need meaningful retraining within the same window.

Read quickly, those numbers sound like an alarm. Read carefully, they are something more useful: a map. Because underneath the churn, the survey and the labor-market data behind it point in a consistent direction — away from narrow, memorized, easily-automated tasks, and toward the flexible, human capabilities that let a person keep learning after the facts have changed.

This is the quiet good news for parents. You do not need to predict which tools your child will use, guess the right college major a decade early, or turn the living room into a coding bootcamp. The evidence suggests the highest-leverage things you can do are also the most human: protect their curiosity,

give them real problems to wrestle with, and let them build the habit of figuring things out.

You can't prepare a child for every future. You can raise one who is hard to knock off balance.

That is a deliberately unglamorous conclusion. It will not be automated away, it does not expire when a new model ships, and it is available to any family — not only those who can afford the newest device or the most expensive tutor. It also happens to be what the research on how children learn has been saying for years.

The pages that follow lay out what is changing and what is not, the specific skills the data keeps surfacing, what the evidence says about how children actually build them, and a short, honest list of what is worth doing at home. We have tried to keep the tone of a briefing rather than a sales pitch: sourced, specific, and free of the panic that usually surrounds this subject.

Being fully prepared was never on offer. Being fully informed is. It turns out to be the better foundation anyway.

WHAT THE DATA SAYS

Five numbers behind this report

39% of workers' core skills are expected to change by 2030

59% of workers will need reskilling or upskilling this decade

61% of U.S. job postings request at least one durable, human skill

4× how much more employers ask for durable skills than top technical ones

+78M net new jobs expected worldwide by 2030 as roles are remade

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By the Numbers

The global picture of work in one spread.

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What's Changing

Four shifts, and what each means for your child.

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The Skills & the Evidence

What lasts, and how children build it.

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What Parents Can Do

Practical moves, by age, plus sources.

THE LANDSCAPE · 2025-2030

A Labor Market Being *Remade*, Not Simply Shrunk

The dominant story about the future of work is loss. The fuller story, in the data employers themselves report, is turnover: enormous numbers of roles created and destroyed at once, and a workforce racing to keep its skills current.

170M

New roles created by 2030

Even as automation and AI displace an estimated 92 million jobs, employers expect 170 million entirely new roles to appear — a churn touching roughly 22% of all jobs.

+78M

Net job growth, worldwide

Creation is expected to outpace destruction. The future of work is less about fewer jobs than about different ones, demanding different skills.

39%

Of core skills will change

Down from 44% two years earlier — still meaning nearly two in five of the skills any given job requires are on track to shift by 2030.

59%

Of workers need retraining

Roughly six in ten workers will require reskilling or upskilling this decade. Of every hundred, eleven are unlikely to receive the training they need.

63%

Of employers name skills gaps as the single biggest barrier to transforming their business

More than technology cost, regulation, or capital, the constraint employers cite most is people who can adapt. That is the gap this generation of children will grow up into — and the reason the durable, transferable skills in this report matter more than any specific tool they might learn to use.

What's Actually Changing — *and What Isn't*

Four shifts show up again and again across the research. For each, what is happening in the world of work, and what it plausibly means for a child growing up inside it. None is a forecast of a specific job; each is a change in the terrain.

SHIFT 01 • AUTOMATION

AI is rewriting the task, not erasing the person

WHAT'S HAPPENING

Generative AI is absorbing discrete tasks — drafting, summarizing, first-pass code, routine analysis — rather than whole professions. Roles heavy in repeatable, rules-based work (data entry, basic administrative and some design tasks) are contracting, while the same tools raise the ceiling for people who can direct, question, and check them.

WHAT IT MEANS FOR YOUR CHILD

The valuable skill is shifting from **doing the task** to **judging the output**: knowing what to ask, spotting when an answer is confidently wrong, and combining machine speed with human sense. A child who learns to interrogate an answer is better positioned than one who only learns to produce one.

SHIFT 02 • HALF-LIFE

The shelf-life of any specific skill keeps shrinking

WHAT'S HAPPENING

With nearly 40% of core skills expected to change by 2030, a single technical skill learned today ages faster than it used to. Employers increasingly hire and promote for the ability to learn, unlearn, and re-learn — and rank curiosity and lifelong learning among the fastest-growing skills they need.

WHAT IT MEANS FOR YOUR CHILD

Betting a childhood on one "hot" skill or narrow track is riskier than it looks. The safer investment is the **meta-skill of learning itself** — the confidence and stamina to pick up something new. That is built by finishing hard things, not by memorizing facts that a search can return in seconds.

SHIFT 03 • THE HUMAN PREMIUM

Value is moving toward the distinctly human

WHAT'S HAPPENING

As machines handle more of the routine, the market is paying more for what they can't do well: analytical and creative thinking, resilience, collaboration, communication, and leadership. In a study of 82 million U.S. job postings, employers requested durable human skills nearly four times more often than the top technical ones.

WHAT IT MEANS FOR YOUR CHILD

The capabilities that feel "soft" are, on the evidence, the hard currency. They are also the ones most shaped at home and in unhurried, hands-on experience — **not** the ones a screen delivers on its own. This is where ordinary family life has a genuine, lasting edge.

SHIFT 04 • CREDENTIALS

The credential is unbundling; the skill is the currency

WHAT'S HAPPENING

A growing share of employers now hire for demonstrated skills rather than degree pedigree alone, adopting skills-based assessments, portfolios, and project evidence. The four-year path still matters, but it is no longer the only credible signal that a person can do the work.

WHAT IT MEANS FOR YOUR CHILD

Evidence of capability — things made, problems solved, projects seen through — is becoming as persuasive as a transcript. A childhood that accumulates **real work a child can point to** compounds into an advantage that a last-minute résumé cannot manufacture.

What *Isn't* Changing

*The churn is real, but it is only half the picture — and the anxious half. The same World Economic Forum data flags a set of capabilities employers expect to remain **stable**: neither disrupted nor made obsolete this decade. They matter enormously here, because they are exactly the foundations an ordinary family is best placed to build — and none of them require predicting a single thing about the future.*

The fundamentals hold

Reading, writing, and mathematical reasoning are rated as stable, foundational skills — not casualties of automation. They are the platform every newer capability is built on. Time spent making them second nature is never wasted, whatever the specific tools of 2040 turn out to be.

Character still counts

Dependability, attention to quality, and self-management sit among the enduring workplace skills. No model ships these; they are formed by habit and expectation, long before any career, in the small daily standards a household quietly keeps.

People still matter

Empathy, collaboration, and working well with others grow *more* valuable as work becomes more automated, not less. Connection is nowhere near the frontier of what machines do well — and it is the most human thing a family already teaches.

THE REASSURANCE WORTH HOLDING ON TO

Notice what the "stable" list is made of: literacy, numeracy, reliability, care, and the ability to get along with people. None of it is exotic, expensive, or high-tech. It is the ordinary substance of a thoughtful upbringing — which means the single most future-relevant thing most parents can do is also the most familiar. If you are reading a report like this one, you are almost certainly already doing much of it.

The task ahead is not to chase every new thing. It is to build the stable core deeply — and to raise a child confident enough to add the new things as they come.

The Skills That Will *Matter Most*

Drawn from the World Economic Forum's fastest-growing and most-valued skills and the durable-skills demand seen in millions of job postings. For each: what it actually is, and one unglamorous way it grows at home.

The Durable Core

HUMAN · TRANSFERABLE · SLOW TO AGE

Analytical & critical thinking

TOP CORE SKILL · 70% OF EMPLOYERS

Breaking a messy problem into parts, weighing evidence, and reaching a defensible conclusion. Ranked the **single most-valued core skill** by employers — and the counterweight to an age of confident, sometimes-wrong machine answers.

At home: ask "how do you know?" and "what would change your mind?" more often than "what's the answer?"

Creative thinking

TOP-4 FASTEST-GROWING SKILL

Generating original ideas and unexpected combinations — the work least easily automated because it starts from a blank page rather than a pattern. Employers rank it among the skills rising fastest in importance.

At home: protect open-ended, unstructured making time; resist optimizing every hour into a lesson.

Resilience, flexibility & agility

2ND MOST-VALUED · 67% OF EMPLOYERS

Staying functional and adaptable when plans break and conditions change. In a decade defined by turnover, this is the trait that lets a person keep moving when a specific skill or role disappears.

At home: let them attempt hard things and struggle productively; rescue less, encourage the retry more.

Communication & collaboration

AMONG TOP DURABLE SKILLS IN DEMAND

Explaining an idea clearly and working well alongside people who think differently. As work grows more automated and more team-based at once, the ability to move ideas **between** people rises in value.

At home: real conversations, shared projects, and having to explain their reasoning out loud.

Curiosity & lifelong learning

TOP-6 FASTEST-GROWING SKILL

The drive and the habit of teaching yourself something new. When skills expire faster, the ability to keep acquiring them becomes the durable asset — the one employers now name explicitly.

At home: follow their questions down the rabbit hole; model being a learner yourself.

82M

U.S. job postings analyzed for skill demand

7 of 10

most-requested skills are durable skills like these

~4×

more in demand than the top technical skills

The second cluster is about technology — and it is less about mastering any single tool than about keeping judgment as the tools keep changing.

Technological Fluency

NOT CODING FOR ITS OWN SAKE — JUDGMENT WITH TOOLS

AI literacy

FASTEST-GROWING SKILL,
GLOBALLY

Understanding what AI can and cannot do, how to work with it, and how to check it. It is becoming a baseline literacy for nearly every field — closer to reading than to a specialty. The goal is not fear or blind trust, but **informed use and healthy skepticism**.

At home: use these tools together and out loud — praise the good question and catch the wrong answer as a team.

Technological literacy

TOP-3 FASTEST-GROWING SKILL

Comfort with how systems and devices actually work — enough to adapt to the next tool rather than fear it. Employers rank it just behind AI and cybersecurity among the skills rising fastest in importance.

At home: let them take things apart, build, tinker, and fix — the physical intuition transfers.

Data & quantitative sense

FOUNDATIONAL · STABLE AND
RISING

Reading a chart honestly, sensing when a number is off, and reasoning about probability and scale. As decisions everywhere become data-driven, this quiet literacy underpins good judgment in almost any role.

At home: talk about numbers in the wild — prices, scores, measurements, odds — as puzzles, not chores.

Digital safety & security

NETWORKS & CYBERSECURITY ·
2ND FASTEST-GROWING

A working sense of privacy, security, and safe conduct online — guarding information, recognizing manipulation, and behaving well in shared digital spaces. As life and work move online, employers rank **networks and cybersecurity** among the very fastest-growing skill needs of the decade.

At home: talk openly about passwords, scams, privacy, and what's real online — the judgment travels everywhere.

THE PATTERN WORTH NOTICING

Almost none of these are taught by a worksheet

Look down both lists and a pattern emerges. Analytical thinking, creativity, resilience, collaboration, curiosity, and even AI literacy are not facts to be transferred — they are **capacities that grow through doing**. You cannot lecture a child into resilience or hand them creativity on a slide. They are built by wrestling with real problems, making real things, hitting real obstacles, and trying again. Which raises the obvious question for any parent: what kind of experience actually builds them? On that, the research is refreshingly clear.

How Children Actually *Build* These Skills

If the capabilities that matter are built by doing, the natural question is whether hands-on, project-based learning genuinely outperforms passive instruction. It is one of the more studied questions in education — and the answer is consistent.

THE EVIDENCE IN BRIEF

Across dozens of controlled studies, *learning by making* beats learning by listening — most of all on the higher-order thinking this report is about.

66 studies

A consistent, not one-off, finding

A 2023 meta-analysis pooled 66 experimental and quasi-experimental studies (190 measured effects) and found project-based learning significantly improved academic achievement, attitudes toward learning, and higher-order thinking skills.

9–18 weeks

Sustained beats one-off

The benefits were strongest when projects ran across a sustained stretch — roughly a semester — rather than a single afternoon. Depth and time, not novelty, drove the gains.

4–5 per team

Small groups, real collaboration

Effects were largest for small teams of four to five learners — big enough for genuine collaboration, small enough that every child does real work rather than watching.

Hands-on

Making outperforms theory

Laboratory and hands-on formats outperformed lecture-based instruction, and engineering and technology subjects showed some of the strongest results of all.

Why this matters for the skills that last. The same features that make project-based learning effective in a study — a real problem, a sustained effort, a small collaborating group, something built with one's hands, an obstacle met and worked through — are precisely the conditions that grow analytical thinking, creativity, resilience, and collaboration. This is not a coincidence. The durable skills employers now prize are, in effect, the **by-products of doing meaningful, difficult, hands-on work** — which is why how a child spends their afternoons may matter as much as what they are told in any lesson.

What Parents Can Actually *Do*

Not a program to run or a panic to act on — three principles supported by everything above, and a rough guide to where to put your attention at different ages. All of it is doable in an ordinary family, on an ordinary budget.

01

Prize learning-to-learn over knowing-the-answer

When skills expire quickly, the ability to acquire new ones is the real asset. Reward effort, strategy, and the willingness to try again over speed and correctness. Praise the process, not just the result. And let them see you learn something new — and struggle at it — out loud; nothing teaches a child that learning is normal like watching a parent do it.

02

Give them real projects with real constraints

Something to build, with a genuine goal, a deadline, limited materials, and the freedom to fail and revise. This is where analytical thinking, creativity, resilience, and collaboration are actually forged — far more than in any worksheet. The messier and more real the project, the more the learning sticks, and the more your child owns it.

03

Build fluency *and* judgment with technology

Don't ban the tools or hand them over unsupervised — both leave a child unprepared. Use AI and technology **together**, talking through what's useful and what's simply wrong. The goal is a child who directs the tool and checks its work, rather than one who is quietly directed by it. Judgment, not just access, is the skill.

None of this requires a special curriculum, a big budget, or a prediction about the future. It requires showing up, and pointing a child at real things worth figuring out.

A ROUGH GUIDE BY AGE

Ages 8–11

PROTECT THE CURIOSITY

The priority is wonder, not achievement. Say yes to messy, hands-on making. Let questions lead. Keep screens a tool, not a pacifier. Every "why?" answered with "let's find out" is a deposit in the learning habit that everything later depends on.

Ages 12–14

BUILD THE MUSCLE

Introduce real projects that take weeks, not minutes — build, code, design, experiment. Let them own the outcome, including the setbacks. Start using AI tools with them deliberately, modeling how to question and verify what comes back.

Ages 15–18

ACCUMULATE EVIDENCE

Encourage work they can point to: a portfolio, a built thing, a problem solved, a role held. As hiring shifts toward demonstrated skill, real projects become real signals. Connect their interests to how those fields are actually changing.

WHY WE MADE THIS

We Built the Kind of Learning This Report *Describes*

Everything in these pages points in one direction: the capabilities that will matter are built by doing — real projects, sustained over time, in small groups, with your hands, around problems worth solving. That is exactly the experience edREAL was built to put in a box and bring to your table.

edREAL Labs are hands-on, screen-light STEM programs for ages 8–18 — twelve-week semesters of 90-minute weekly sessions designed to run at home, in a co-op, or in a microschool, with no subject-matter

expertise required to lead them. Each Lab tackles a real domain shaping your child's future, and each is built around making something real rather than watching a screen.

We didn't reverse-engineer this from a trend. We started from the same evidence in this report — durable skills, technological fluency, and project-based learning that actually works — and designed backward from it. If this briefing was useful, the Labs are what it looks like put into practice.

THE FOUR EDREAL LABS · AGES 8–18

● **Clean Energy Lab**
Build and test real energy systems

● **Self-Driving Cars Lab**
Sensors, logic, and the ethics of autonomy

● **Smart City Design Lab**
Systems thinking, made tangible

● **AI Literacy Lab**
Informed use and healthy skepticism

Stay informed. Raise curious.

Explore the Labs, or join Raise Curious — our weekly note for intentional parents navigating exactly this.

edreal.org

LABS · RAISE CURIOUS NEWSLETTER

SOURCES & FURTHER READING

World Economic Forum, *Future of Jobs Report 2025* (January 2025) — 170M/92M/78M jobs, 39% skills change, 59% reskilling, 22% disruption, 63% skills-gap barrier, and fastest-growing/most-valued skills. · America Succeeds & Lightcast, *The High Demand for Durable Skills* — analysis of 82M U.S. job postings; 61% request a durable skill; durable skills sought ~4x more than top technical skills. · Zhang & Ma (2023), meta-analysis of project-based learning (66 studies, 190 effects) on achievement, attitudes, and higher-order thinking. · Skills-based hiring trends per WEF and U.S. labor-market reporting, 2024–2026.

This report is provided for general informational purposes by edREAL STEM and reflects publicly available research current as of Fall 2026. Figures are drawn from the sources above; percentages are rounded. It is not individualized educational or career advice.