# Parental Perspectives on AI & EdTech: Navigating Digital Literacy in the Age of Generative AI

Author: Diana Shih

## Introduction

As generative AI becomes embedded in children's daily lives—from homework assistance to social interaction—parents face unprecedented challenges in guiding their children's digital development. How should children learn to distinguish credible information from AI-generated content? What competencies matter most when knowledge itself is instantly accessible? And how can families navigate screen time when digital tools serve as classrooms, social spaces, and entertainment hubs simultaneously?

This research brief presents findings from a 2025 study (April–September) of 81 Taiwanese parents, combining survey data with 8 in-depth interviews. The study explores two interconnected questions: What do parents believe children need to thrive in an AI-augmented world? and What predicts whether families actually invest in educational technology?

The findings offer insights for educators designing digital literacy curricula, EdTech companies seeking to understand parental decision-making, and policymakers developing frameworks for AI in education. Most importantly, they give voice to parents who are navigating these challenges daily—often feeling underprepared but deeply thoughtful about what authentic learning means in an age of instant answers.

## Key Takeaways

Parents define digital literacy as **discernment, critical thinking, and curiosity**—human competencies that become more important, not less, in the AI era.

While 89% of parents support EdTech, **attitudes explain nearly nothing of investment decisions**. Behavioral factors like parental participation (3.6%) and tech identity matter far more.

**Parental involvement predicts investment:** Parents who actively participate in their child's digital learning are more likely to invest financially—regardless of their attitudes.

Parents don't cognitively separate "AI" from "EdTech generally." **AI concerns are embedded in broader technology attitudes.**

# Digital Literacy in the AI Era: What Parents Believe Children Need

Our in-depth interviews revealed that parents conceptualize digital literacy not as technical proficiency with devices or software, but as a set of distinctly human competencies that become more essential—not less—precisely because AI makes information abundant and easily accessible.

Three interconnected competencies emerged consistently across interviews: the ability to discern credible from unreliable information, the discipline to think critically rather than passively accept AI outputs, and the curiosity that transforms AI from a passive answer machine into a genuine learning partner.

## 1. Discernment: Navigating Information Credibility

Parents expressed deep concern that children often lack the evaluative skills to distinguish credible from unreliable information online—a challenge intensified by generative AI's ability to produce convincing but potentially fabricated content.

> *" It's very hard to convince them that computer-generated information might be wrong. They tend to assume that what comes up, especially the first ten results on Google, is automatically correct. As adults, we filter—sometimes it's a fake site or not a credible source—but children skip that process entirely.*
>
> —a mother who works in government cybersecurity

The challenge has escalated with deepfakes and synthetic content. As a father of two daughters (ages 12 and 14) explained: "The difficulty of distinguishing true from false information is getting higher and higher. With deepfakes and generative AI, producing someone's voice or image is no longer difficult. That's why I hope children can develop the ability to tell what information is true and what is false."

For these parents, discernment is not an optional skill but an urgent safeguard against the epistemic risks of generative AI—where fabricated multimodal content is ubiquitous and often indistinguishable from reality.

Parents see digital literacy as synonymous with human capacities—judgment, reflection, curiosity—that technology cannot replace.

## Survey Context

**View on AI's role in education:**

- 33% Supportive
- 51% Cautious
- 16% Neutral

The majority of parents (51%) describe themselves as cautious about AI's role—neither rejecting it nor embracing it uncritically.

## 2. Critical Thinking & Self-Discipline

Parents consistently framed critical thinking as inseparable from self-discipline in the use of AI tools. The concern was not that AI would prevent learning altogether, but that its convenience could tempt children into bypassing the very practices—asking questions, producing original ideas, exercising judgment—that constitute deep learning.

> *" I've seen young people in their twenties who over-rely on [AI]. They lose the ability to ask questions or search for answers themselves. Many just throw my assignments into ChatGPT, tidy it up, and hand it in. If you don't know how to ask good questions, you don't truly learn.*
>
> —a father who supervises young professionals at work

Similarly, a father with a preschool daughter described deliberately asking his daughter to reflect after engaging with digital content: "The point is not what she inputs, but what she outputs—that's what matters to me. It's practice. The main concern is that she learns to express her own ideas, not just absorb passively." He prioritized emotional intelligence as foundational: "Emotional management is a person's core ability. Being able to manage your own emotions and read others' emotions—that's more important than any new knowledge. New knowledge is endless, but emotional intelligence is the foundation for facing anything."

A mother whose son is a self-directed learner with Asperger's described cultivating autonomy gradually: "We don't keep saying 'you can only have half an hour, then I take it away.' That high-pressure management doesn't build self-regulation. Instead, we say: 'From 9 to 12, tell me how you'll use your time.' He makes a plan—first hour this, second hour that. It's not always perfect, but he follows through. Through these agreements, we slowly train autonomy."

## 3. Curiosity: The Foundation for Co-Learning with AI

Parents emphasized that self-control and judgment alone were insufficient without the spark of curiosity to drive engagement. For them, curiosity represented the difference between treating AI as a passive answer machine and approaching it as a partner in exploration.

### 3. Curiosity: The Foundation for Co-Learning with AI

Parents emphasized that self-control and judgment alone were insufficient without the spark of curiosity to drive engagement. For them, curiosity represented the difference between treating AI as a passive answer machine and approaching it as a partner in exploration.

Three interconnected competencies emerged consistently across interviews: the ability to discern credible from unreliable information, the discipline to think critically rather than passively accept AI outputs, and the curiosity that transforms AI from a passive answer machine into a genuine learning partner.

> *" One of the really powerful ways you can use generative solutions is not just asking questions and being told, but more like a mutual exploration. Platforms could probably be made that could develop this kind of sense of curiosity more than they currently do.*
>
> —One father who works in a tech

One parent connected curiosity to motivation and achievement: "If they can use ChatGPT or other AI tools well in school, and it gives them a sense of accomplishment, that's actually good learning—using it to achieve something meaningful. The value is in applying it for real accomplishment, not just getting quick answers." A father with two daughters added that curiosity must be paired with verification skills: "They need to know which tools work in which contexts, and learn to fact-check afterward—not blindly trust or distrust, but develop the habit of verification."

This perspective challenges the common narrative that generative AI undermines critical thinking. Instead, it positions AI as a potential catalyst for active inquiry—if children approach it as a dialogical tool rather than a static answer machine.

#### A Critical Reframing

Parents did not regard generative AI as inherently corrosive to children's cognitive growth, but rather as a force that makes digital literacy synonymous with co-existence—sustaining habits of questioning, reflection, and striving for mastery.

Within this frame, curiosity is not just a personality trait but a **discipline of engagement** that transforms AI from a passive toy into a partner in exploration and accomplishment.

#### The Three Competencies

**1. Discernment**
Distinguishing credible from unreliable information in environments saturated with synthetic content.

**2. Critical Thinking**
Applied practices of questioning, reflection, and judgment anchored by self-discipline.

**3. Curiosity**
The driver that transforms AI from passive answer machine into exploration partner.

## Digital Spaces: Opportunity and Risk

Parents described digital tools as multi-functional spaces occupying multiple roles in children's lives: as classrooms for learning, venues for social connection, and hubs for entertainment. Yet embedded within these same environments were significant risks.

### Learning Integration

For some families, digital tools were firmly integrated into schoolwork. A mother explained: "He is very skilled at using generative AI. Because he is a child growing up in this generation, generative AI has already allowed him to leap ahead of peers his age. Whenever he has a PBL task, he often completes it with the help of generative AI."

### Social Connection—and AI as Companion

Digital platforms have become the default infrastructure of adolescent social life. A working mother with two children noted: "To even reach my child, I have to use Instagram—they don't even check LINE anymore." Gaming created opportunities for peer bonding—Another mother mentioned "He has gaming friends through Mobius (a video game)"—but also exclusion: "When kids gather, everyone is on their own phone. Those without one just watch others' screens".

A striking finding: **some children treat AI as an emotional companion**. A father of two daughters observed: "She's unusual—she chats with ChatGPT. Before ChatGPT existed, she chatted with Siri. She doesn't generate anything; she just has casual conversations, like playing." A mother of two high schoolers described a more profound shift: "She might treat AI as a life mentor. She doesn't listen to her parents anymore—she listens to AI's responses. If AI gives her good guidance, I think that's actually fine."

### Embedded Risks

Parents consistently flagged risks within these same environments. Bullying now takes new forms through digital exclusion: "You can't kick someone out [of the chat]; that's bullying" (A parent who works in cybersecurity). Exposure to malicious strangers was another concern: "She has been exposed to malignant people... people misbehaving on Roblox" (A father with three kids). And privacy concerns persist: "My main worry is personal data... these systems record your questions and infer what you're thinking" (A school counselor with two children).

## Screen Time: A Relational Challenge

Parents described a spectrum of approaches to managing screen time, from restrictive control to resignation. But ultimately, they converged on a recognition that sustainable approaches hinge on cultivating relational trust rather than surveillance or prohibition.

### The Struggle for Control

Some parents described intense conflicts over device use. One father who supervises young professionals explained: "We've had many conflicts... because I still believe that before age fifteen, children should spend more time with the real world. But since laptops and smartphones are so widely used among their peers, this creates demands from our child that clash with our expectations. We've had several fights over this."

Others described concerning patterns. A mother who works in government cybersecurity noticed early addiction signs: "Once he tried it, whenever he had free time, he'd want to borrow the phone—he wouldn't think to pick up a book or go exercise. If we didn't stop him, he'd keep using it until the food arrived. Even then, he'd eat carelessly, rushing to get back to it." A mother whose son is a self-directed learner with Asperger's and ADHD noted that nearly all waking hours outside school and exercise were spent on the computer: "He's so overstimulated by screens that he needs to be coding while watching YouTube simultaneously. Without that level of stimulation, he feels bored."

### From Control to Resignation to Relationship

At the other end of the spectrum, some parents described resignation:

> *" Our attitude now is just resignation. We can't actively stop them... unless something new comes along to distract them.*
>
> —a mother of two high schoolers

Yet the most thoughtful parents ultimately reframed the challenge as relational rather than technological:

> *" I think the only thing we can really change is the relationship with our children—the parent-child relationship itself.*
>
> —a school counselor and mother of two boys

### The Three Competencies

**1. Discernment**
Distinguishing credible from unreliable information in environments saturated with synthetic content.

**2. Critical Thinking**
Applied practices of questioning, reflection, and judgment anchored by self-discipline.

**3. Curiosity**
The driver that transforms AI from passive answer machine into exploration partner.

This insight—that sustainable digital literacy emerges from family relationships rather than rules—has profound implications for how schools and EdTech companies should approach parent support.

**Implications:**

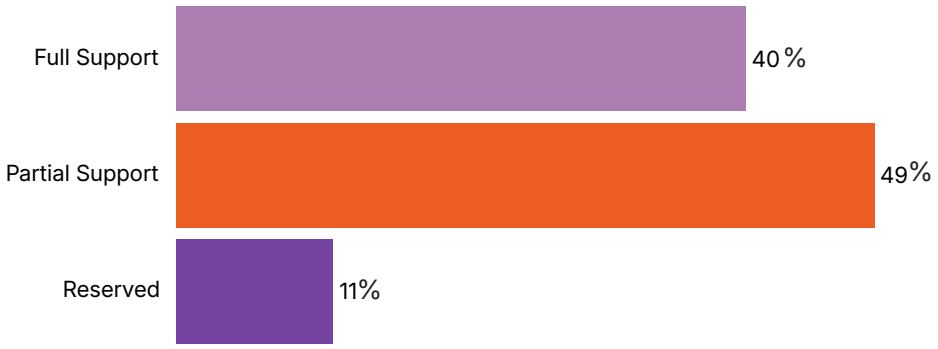
Traditional "parent education" focused on device management may fail not because parents don't need help, but because it misses the relational core of the challenge. Effective support should address parent-child communication about technology, not just technical controls.

Children may increasingly turn to AI for emotional support and life advice—especially when they feel parents "don't understand." This isn't necessarily harmful, but parents and educators should be aware of this shift and consider how to remain relevant sources of guidance.

## The Quantitative Landscape

To complement these qualitative insights, our survey of 81 parents mapped the broader terrain of parental attitudes, perceptions, and behaviors related to educational technology.

### Attitudes Toward EdTech




### Key Measures at a Glance

**Perceived Impact**

*How parents view EdTech's effect on learning*

**Willingness to Invest**

*Monthly spending on EdTech*


*Note. Participants were asked for their Willingness to Invest in New Taiwan Dollar (TWD) as of April 2025, which approximated 15.34 USD*

**Parental Involvement**

*Active participation in child's digital learning*


We tested whether attitudes predict spending—they don't. Knowing a parent's attitude toward EdTech tells us almost nothing about whether they'll actually invest in EdTech.

## Finding 1: The Attitude-Behavior Gap

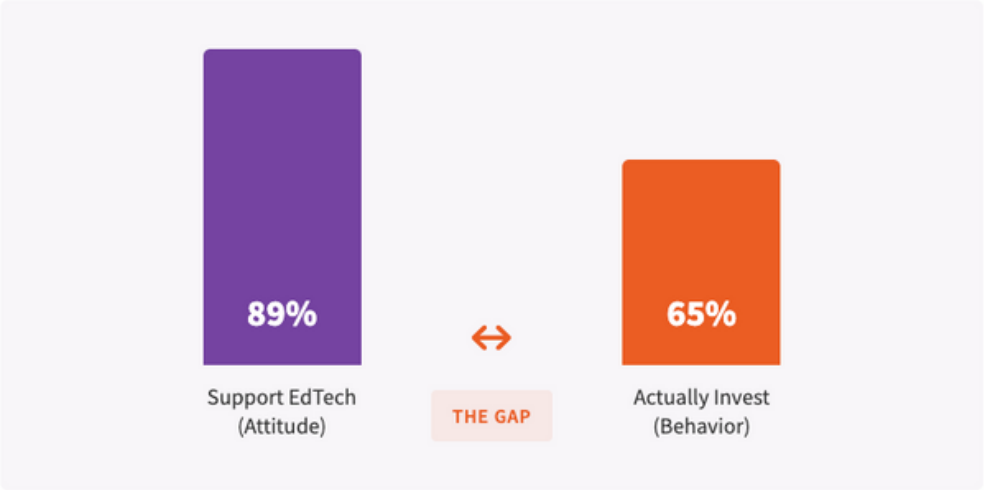
**The paradox:** Parents express overwhelmingly positive attitudes toward EdTech, yet these attitudes fail to predict whether they actually invest in it.

In our survey, 89% of parents expressed at least partial support for EdTech in schools. Attitudes correlated significantly with perceived impact ($\rho = .48$) —parents who supported EdTech also tended to perceive positive learning outcomes. These constructs formed a coherent "belief cluster."

Yet when we tested whether these attitudes predicted actual investment behavior, the entire attitudinal system collapsed as an explanatory framework. A logistic regression model containing three theoretically relevant predictors—attitude toward EdTech, perceived impact, and AI perception—explained essentially 0% of investment variance (McFadden's $R^2 = .02$, with attitude alone contributing 0.00%).

### ABOUT THIS RESEARCH

This exploratory study was conducted independently by Diana Shih from April to September 2025. While 81 survey respondents is a modest sample, combining quantitative data with 8 in-depth interviews (60-90 minutes each) provides complementary insights that neither method alone could offer.




## What Else Might Drive Investment?

If attitudes explain virtually none of investment decisions (0.00% variance), what does? Our analysis points to several factors:

**Economic constraints are the most commonly cited barrier.** When asked about obstacles to EdTech use, **40% of parents identified high cost as their primary challenge**—more than any other barrier. This suggests that budget limitations may override positive attitudes: parents can genuinely support EdTech while recognizing they cannot afford it.

**Tech adoption identity shows the strongest relationship with investment.** How parents see themselves as technology users—measured using Rogers' Diffusion of Innovation categories—had a correlation of .24 with investment, the strongest of any variable we measured. Parents who identify as early adopters of technology invest at higher rates, regardless of their specific attitudes toward EdTech.

**Parental involvement also predicts investment.** We measured how actively parents participate in their children's digital learning (sitting with them, guiding their use, discussing what they're learning). This "participation" variable showed a correlation of .18 with investment and explained 3.6% of variance—modest but notably higher than attitudes (0%). Parents who are more involved tend to invest more, regardless of their beliefs about EdTech.

**Family dynamics play a role.** Our qualitative interviews revealed factors that surveys didn't capture: whether parents feel confident they can implement EdTech effectively at home, whether a particular child's learning style or temperament suits technology-assisted learning, and whether EdTech competes with other family priorities for time and attention. These child-specific and family-specific considerations don't show up in general attitude measures but clearly influence real decisions.

### WHAT'S ROGERS' DIFFUSION?

A classic framework for how people adopt new technology—from "Innovators" (first in line) to "Laggards" (last to change). We asked parents to self-identify where they fall on this spectrum.

**The pattern is clear:**

What actually predicts investment? Not attitudes—but behavior and identity. Parents who are hands-on with their child's digital learning, and who see themselves as early tech adopters, are more likely to invest—regardless of what they believe about EdTech. In our analysis, participation explains 3.6% of variance; attitudes explain 0%.

### Why the Gap? Four Explanations

1. **The "Good Parent" Script**
   Parents say what sounds right—social desirability shapes survey responses more than actual behavior

2. **The Affordability Wall**
   40% cite cost as top barrier—you can support EdTech and still not afford it

3. **"Nice to Have," Not "Must Have"**
   Parents support EdTech in general, but don't see it as essential for *their* child

4. **Theory vs. Reality**
   Abstract support ("I believe in EdTech") ≠ concrete action ("I'll spend $15/month")

## Finding 2: Involvement Predicts Investment

If attitudes toward EdTech don't predict investment, what does? Our analysis revealed an unexpected pattern: **parental involvement in children's digital learning**—measured as how actively parents participate in guiding and supporting their child's technology use (scale 1-5)—was the strongest predictor of financial investment.

Here's what's surprising: **parental involvement and attitudes toward EdTech use are independent.** Skeptical parents sometimes participated heavily—to "supervise" or "guard" their children. Enthusiastic parents were sometimes hands-off. What you believe and what you do don't necessarily align.

### Qualitative Context

Our interviews illuminated a factor absent from quantitative measures: **parental resignation**.

This wasn't accompanied by negative attitudes, but by a sense of helplessness about managing digital life effectively.

### A Missing Mediator?

A parent of two children reframed EdTech as relational: "The only thing we can really change is the relationship with our children."

This suggests **parental self-efficacy**—confidence in one's capacity to implement EdTech effectively—may mediate between attitudes and behavior. Positive outcome expectations alone are insufficient without belief in one's ability to execute.


**What these numbers mean:** The correlation between involvement and investment (.18) indicates a modest relationship—parents who spend more time engaged with their child's digital learning tend to invest more money in it. Meanwhile, the correlation between attitudes and investment (-.01) is essentially zero—knowing a parent's attitude tells us almost nothing about their spending. And the near-zero correlation between involvement and attitude (-.02) confirms these are independent: you can be skeptical and highly involved, or enthusiastic and hands-off.

**In terms of variance explained:** Participation alone accounts for 3.6% of investment decisions—modest but meaningful. Attitudes account for 0%. This stark contrast underscores the central finding: behavior predicts behavior better than beliefs do.

### Implication for EdTech Companies

**A hypothesis worth testing:** If involvement predicts investment, products that encourage parent-child co-engagement might see better conversion than those marketed on benefits alone. But this finding is exploratory—not a proven strategy.

## Finding 3: Tech-Savvy Parents Are Most Polarized

**Background: Rogers' Diffusion of Innovation**

In 1962, sociologist Everett Rogers developed the **Diffusion of Innovation** theory to explain how new ideas and technologies spread through populations. The framework has been widely applied in marketing, public health, and education to understand adoption patterns. Rogers identified five adopter categories based on how quickly people embrace innovations:

### Understanding the Measures

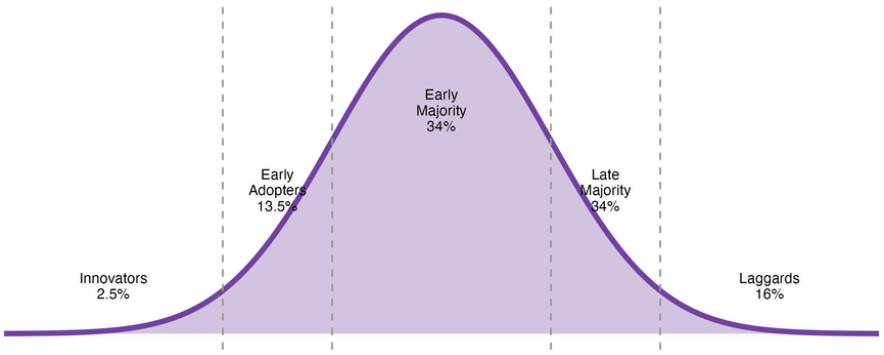
Parental Involvement: "How involved are you in your child's digital learning process?" (1-5 scale)

This captures *behavioral engagement*—sitting with children, guiding their tech use, discussing what they're learning—not just attitudes or beliefs.

**Key insight:** Tech identity (how parents see themselves as technology users) also predicted investment better than EdTech attitudes.

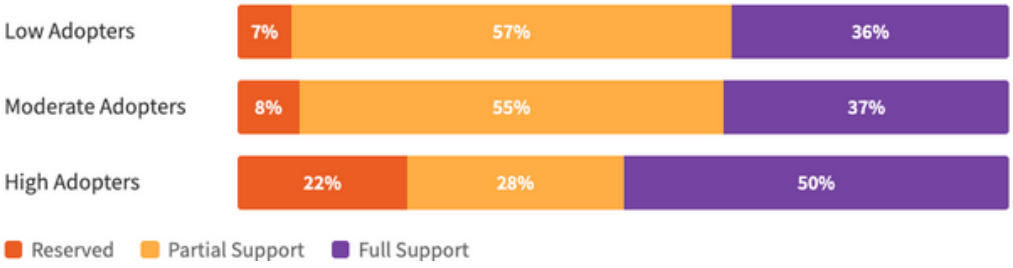
Identity and behavior align; attitudes don't predict either.

**Notably:** High Adopters invest more (78% at moderate-high levels) even though their attitudes are more polarized. This further confirms that identity and behavior, not attitudes, drive investment.




We asked parents to self-identify which category best describes their personal technology adoption style. You might expect tech-savvy parents (Innovators and Early Adopters) to uniformly support EdTech. The data tell a different story.

High Adopters (Innovators + Early Adopters) showed the **widest range** of attitudes—both the highest proportion of full support (50%) AND the highest proportion of reserved attitudes (22%). Low and moderate adopters clustered in the safe middle ground of "partial support."

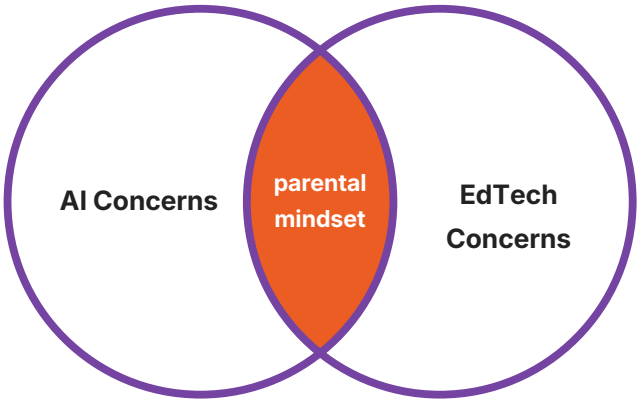



### Sophistication Breeds Nuance, Not Uniform Enthusiasm

Parents with deeper technology experience have encountered both successes and failures. They've seen EdTech work brilliantly and fall flat. This produces polarization rather than uniform enthusiasm—and explains why "tech-savvy" is not synonymous with "EdTech enthusiast."

## Finding 4: AI Is Not Psychologically Distinct

Given the cultural discourse around AI as uniquely transformative or threatening, we tested whether AI-specific attitudes added explanatory value beyond general EdTech attitudes. They did not.




Parents don't separate these—cautious about one means cautious about both. Neither predicts actual investment.

**The "AI" Label Doesn't Change the Outcome:** We tested whether asking parents specifically about "AI" would help us predict their investment better than just asking about "EdTech." The answer was no.

The relationship between "AI Optimism" and investment disappeared completely when we looked at parents who already supported EdTech. This tells us that AI views are just a reflection of broader technology attitudes, not a distinct driver of behavior.

***The only thing we can really change is the relationship with our children—the parent-child relationship itself.***

This raises a question for EdTech companies: if AI attitudes and EdTech attitudes are the same thing, and neither predicts investment, where should marketing focus instead?

### The Central Tension

Parents want children who can thrive in an AI-augmented world while preserving the human capacities—curiosity, judgment, discernment—that make such thriving meaningful.

This isn't a contradiction to resolve. It's a tension to manage thoughtfully.

## Recommendations

### For Parents

**Focus on relationship, not control.** Our interviews consistently revealed that sustainable digital habits emerge from trust and communication—not surveillance or prohibition. As one school counselor put it: "The only thing we can really change is the relationship with our children." Rather than policing screen time, invest in conversations about what your children are learning and experiencing online.

**Learn alongside your child.** Parents who actively participate in their children's digital learning invest more—and likely get more value. You don't need to be an expert; curiosity and engagement matter more than technical skill.

## For Educators & Schools

**Teach discernment, not just tools.** Parents want children who can evaluate information credibility, think critically about AI outputs, and approach technology with curiosity—not just kids who know how to use ChatGPT. Digital literacy curricula should emphasize these human competencies.

**Support parent-child communication.** Parents don't want workshops on device settings. They want help with: "How do I talk to my teenager about screen time without it becoming a fight?" Facilitate parent peer networks and provide resources for navigating technology as a family.

## For EdTech Companies

**Engagement before purchase.** Attitudes don't predict investment—but involvement does. Parents who spend time with a product are more likely to pay for it. Lower the barrier to try, not the barrier to believe.

**Address affordability directly.** 40% of parents cite cost as their primary barrier—even in our educated, tech-engaged sample. Positive attitudes don't override budget constraints.

**Don't assume tech-savvy = enthusiastic.** Our most tech-savvy parents were the most polarized—both highest in full support AND highest in skepticism. Experience breeds nuance, not uniform enthusiasm.

Questions or feedback on this research?
Interested in collaboration or speaking opportunities?
**Contact:** ywshih@proton.me