

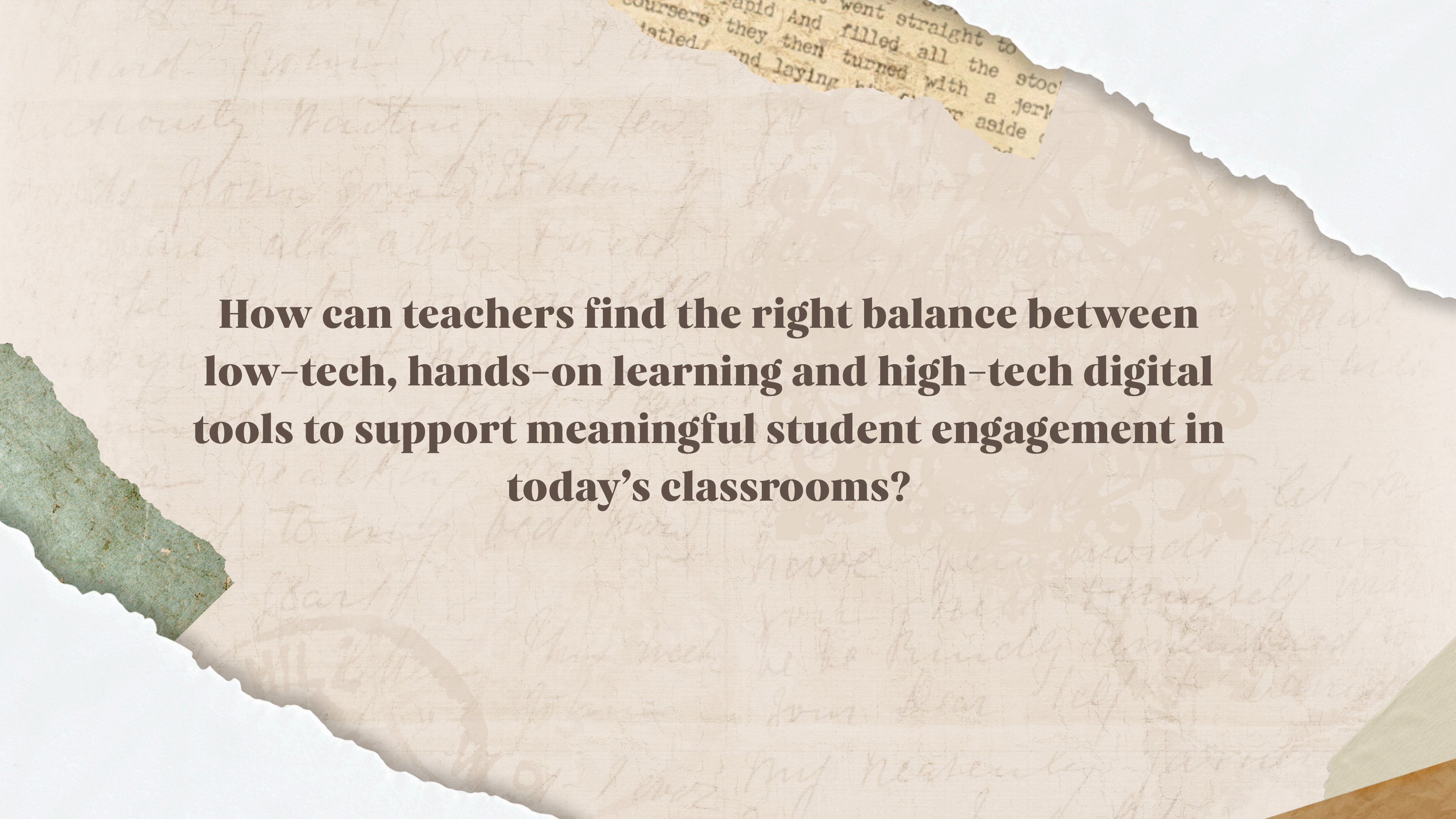


# **Finding the Balance**

*Exploring intentional technology integration  
for meaningful student engagement*

**By Sarah, Danika and Liah**





**How can teachers find the right balance between low-tech, hands-on learning and high-tech digital tools to support meaningful student engagement in today's classrooms?**



# Why This Matters

Technology has a powerful place in education, but not at the expense of communication, creativity, movement, and deep thought.

A balanced approach:

- Strengthens cognitive development
- Builds critical thinkers
- Supports mental health and regulation
- Encourages real-life connection and collaboration
- Preserves foundational skills like handwriting, communication, and reflection



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# Three Inquiry Lenses



## **Danika-Literacy**

Keeping low-tech skills  
alive; preserving  
authentic learning.



## **Liah-Critical Thinking**

Risks of over-reliance on  
tech for thinking and  
collaboration.



## **Sarah- Cognitive**

Over-stimulation and  
cognitive impacts of  
screen use.



# Literacy

Exploring this topic reminded me that progress in education doesn't always mean adding more technology it often means knowing when to slow down. While digital tools are powerful for accessibility and creativity, they can't replace the focus, patience, and personal connection that come from putting pen to paper. As classrooms continue to evolve, teachers have a responsibility to protect these foundational skills that support comprehension and authentic thinking.

Personally, this inquiry reinforced my belief that learning should engage both the mind and the body. Writing, drawing, and moving all anchor understanding in a way typing alone cannot. In my future classroom, I plan to balance digital tools with hands-on practices inviting students to write, create, and reflect before they type. My goal is for technology to serve as a bridge, not a barrier, helping students connect their ideas with real experiences. Finding that balance means preserving the heart of learning while embracing the tools of today.



# Best Practices & Tips for Teachers

Finding balance between handwriting and technology starts with small, intentional choices. Teachers don't need to eliminate devices; instead, they can design lessons that use both hands-on and digital methods to deepen learning. Here are some simple ways to keep low-tech skills alive in the classroom:

- Start with paper before screens. Have students brainstorm, doodle, or journal by hand before moving to a digital version. Writing first slows thinking and supports stronger ideas.
- Teach active note-taking. Encourage students to summarize main points, highlight keywords, or draw simple visuals instead of typing every word.
- Blend indoor and outdoor learning. Let students record observations in a handwritten notebook during nature walks or experiments, then type reflections afterward to connect both experiences.
- Model "slow learning." Show that thinking takes time write on the board, pause for discussion, and demonstrate how you decide what information is important
- Mix formats intentionally. Alternate handwritten and typed assignments to build flexibility and prevent skill loss in either area.



# Critical Thinking

This research made me realize that finding balance isn't just an educational issue; it's a life issue. I want my own kids to be comfortable both on and off a screen. I want my future students to know how to collaborate, communicate, and think critically, not just click quickly.

As a teacher, I plan to:

- Be intentional about when and why I use technology in lessons.
- Include regular low-tech, hands-on learning experiences.
- Teach students to pause, reflect, and question before they search for instant answers.
- Encourage connection and conversation just as much as digital literacy.

Technology has an important place in education, but so do play, discussion, art, and imagination. When we find that middle ground, where technology enhances rather than replaces, we raise students who are not only capable with tools but confident, creative, and connected humans.



# Best Practices & Tips for Teachers

Finding balance between low-tech and high-tech learning starts with being intentional. Teachers don't have to pick one side over the other; it's about finding ways to blend both so students stay creative, connected, and curious. Here are some ideas that can help keep that balance in the classroom:

- Start hands-on. Begin lessons with activities like journaling, building, or having group discussions before introducing any digital tools. Working by hand helps students slow down, reflect, and think more deeply.
- Blend online and offline experiences. Try pairing digital activities with hands-on learning. For instance, students might write or draw in a notebook during a nature walk, then use a device later to research or share what they found.
- Include creativity and movement. Add art, play, and physical activities to keep learning active and engaging. This helps students focus and reminds them that learning doesn't always happen on a screen.
- Teach digital responsibility. Use programs like Kids Code Jeunesse and MediaSmarts to guide students in using technology safely, responsibly, and with purpose.
- Take time to reflect. Ask your students and yourself how technology is supporting or distracting from learning. Adjust when needed to keep lessons meaningful and balanced.



# Cognitive

As an educator in training, this exploration changed how I think about technology's role in developing students' minds. It's not enough to simply use digital tools; we must teach students how to think about their own thinking while using them. I want to design lessons that strengthen metacognition, where students reflect on how technology helps or hinders their concentration, recall, and reasoning.

For example, before starting a digital task, I might ask students to predict what strategies will help them stay focused, and afterward, reflect on what worked. I also plan to balance digital activities with hands-on or outdoor learning to give the brain time to rest and process, supporting the neural consolidation that leads to long-term understanding.

Ultimately, my goal is to use technology to enhance cognitive growth, not compete with it. When used intentionally, digital learning can help students become not only more capable learners but also more self-aware thinkers, able to navigate the digital world with curiosity, balance, and focus.



# Best Practices & Tips for Teachers

## Purposeful Integration of Technology

- Use digital tools when they clearly support the learning objective (e.g., interactive simulations, cognitive games, research via internet) rather than defaulting to screens for convenience.
- For younger learners especially, ensure screen-based tasks are active, scaffolded, and socially mediated (the study points out that digital media may be educational for preschool-age children only when accompanied by parental interaction).
- Design tasks that require higher-order thinking (decision-making, complex reasoning, reflection) not simply passive consumption.



# Relationship to Teaching & Learning

- Technology influences how students learn, think, and interact.
- Hands-on learning builds connection, embodiment, and deeper understanding.
- Balance supports holistic engagement.



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## The Role of Low-Tech

- Encourages real-world problem solving.
- Supports movement, sensory engagement, and interpersonal communication.
- Reduces overstimulation and digital fatigue.

## The Role of High-Tech

- Enhances creativity, accessibility, and collaboration.
- Provides tools for differentiation and diverse expression.
- Expands learning beyond the classroom.



# What Does “Balance” Mean?

- Using technology intentionally, not automatically.
- Choosing low-tech when connection or tactile learning matters.
- Integrating digital tools when they add value.



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# Pros of Technology Integration

- Increased engagement when used purposefully.
- Expanded access to information and resources.
- Supports multimodal learning and student voice.



# Cons & Risks of Tech Integration

- Overstimulation and attention challenges.
- Reduced face-to-face communication.
- Tech dependence for basic tasks.
- Equity issues around access.



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# Risks of Overusing Low-Tech

- Students may miss digital literacy development.
- Limited exposure to modern tools used beyond school.
- Potential barrier to inclusive practices if tech can support certain learners.



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## Intentional Tech Use

- Ask: “Does this tool improve learning?”
- Align tech to purpose, not convenience.
- Avoid using digital tools for tasks better suited to hands-on engagement.

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# Blended Approaches

- Combine offline exploration with digital documentation or reflection.
- Example: hands-on science inquiry + digital lab journals.
- Rotate between low-tech and high-tech stations.

**PHOTO BY PIERRE BAMIN**  
**ON UNSPLASH**



# Managing Cognitive Load

- Reduce rapid switching between apps.
- Build in movement breaks.
- Monitor screen duration during lessons.



# Strategies to consider

## Strengthening Critical Thinking

- Teach students to question and evaluate online information.
- Encourage independent reasoning before using digital supports.
- Use tools that require student input rather than passive consumption.

## Choice & Differentiation

- Offer options: paper-based tasks, digital creation tools, or hybrids.
- Let students select formats that feel meaningful and accessible.
- Adapt tech use to students' needs—not the other way around.

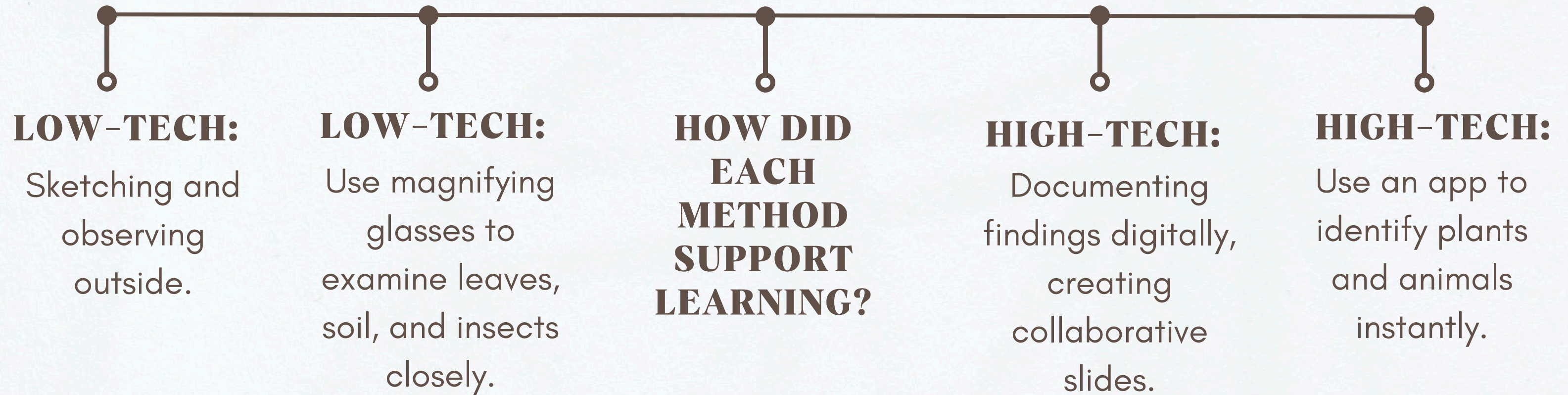
## Teacher Growth & Reflection

- Teachers refine practice through experimentation.
- Reflect on what worked and what didn't.
- Stay responsive to student behaviour, engagement, and feedback.

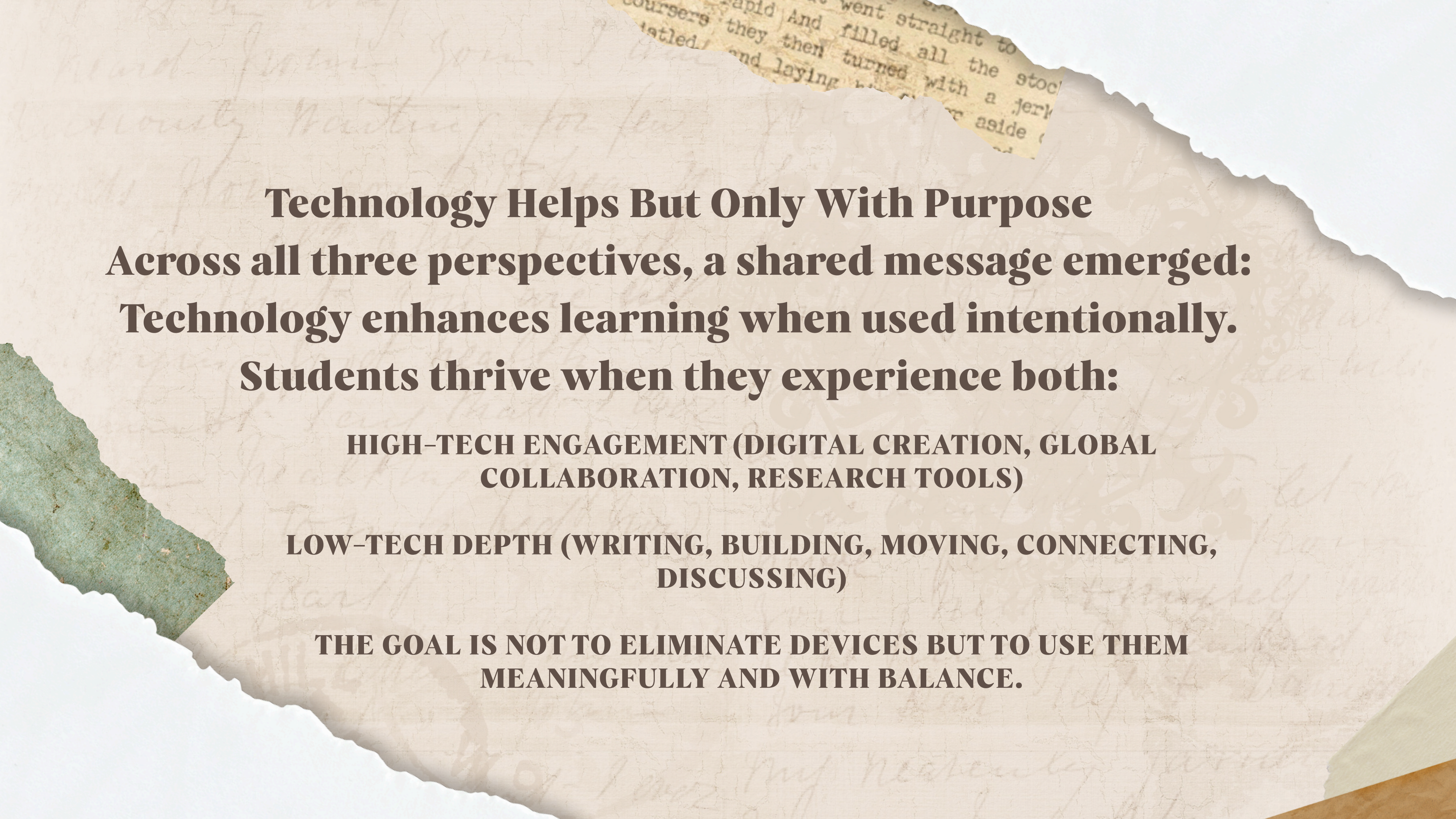


# Classroom Example

## Outdoor Ecosystem Inquiry





The background features a collage of torn paper. A large piece of light beige paper with faint cursive handwriting is the base. A smaller, rectangular piece of yellowed paper with printed text is torn and placed on the top right. A piece of dark green, textured paper is torn and placed on the left side. The overall effect is that of a layered, vintage-style scrapbook or collage.

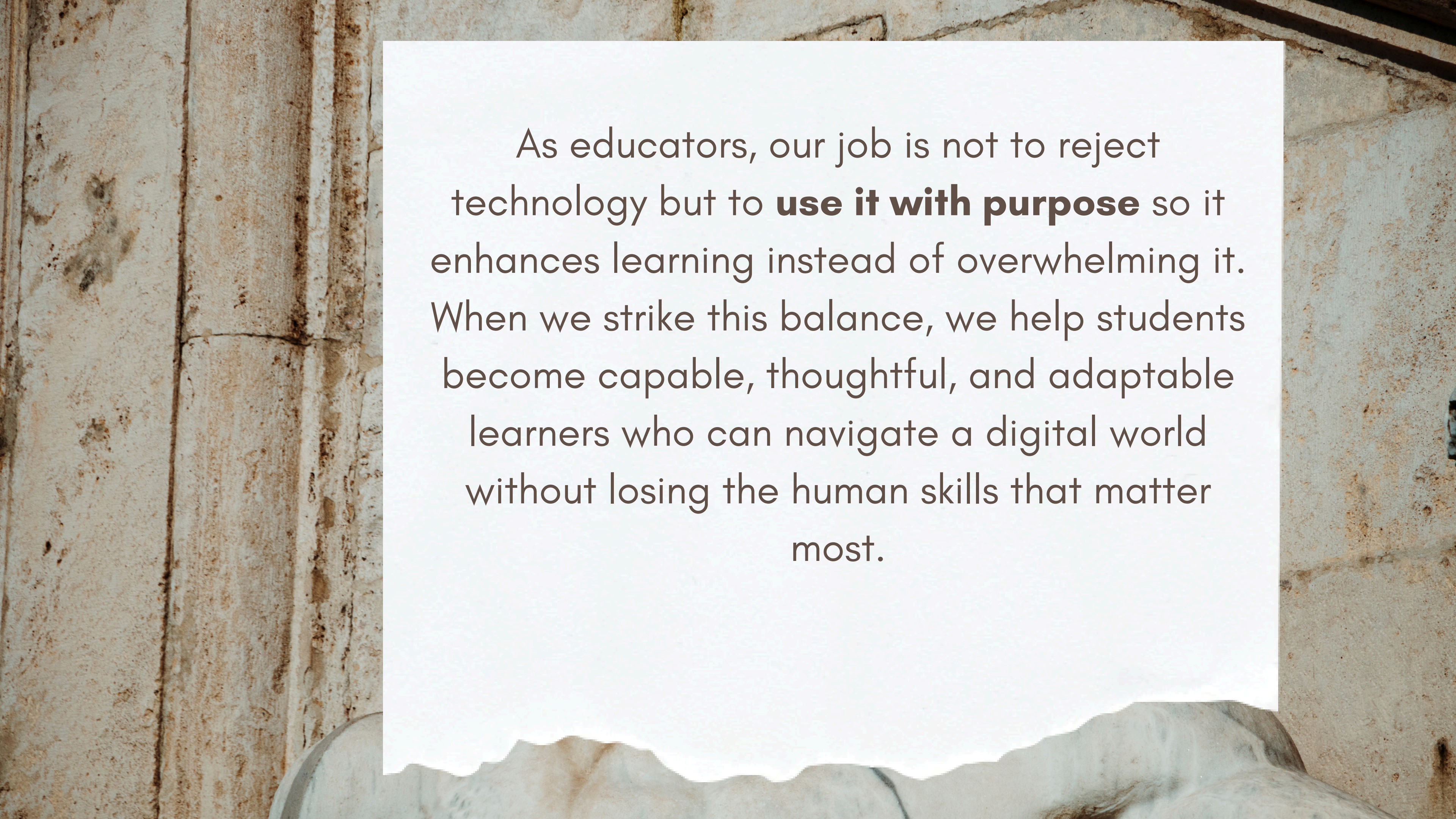
**Technology Helps But Only With Purpose**  
**Across all three perspectives, a shared message emerged:**  
**Technology enhances learning when used intentionally.**  
**Students thrive when they experience both:**

**HIGH-TECH ENGAGEMENT (DIGITAL CREATION, GLOBAL  
COLLABORATION, RESEARCH TOOLS)**

**LOW-TECH DEPTH (WRITING, BUILDING, MOVING, CONNECTING,  
DISCUSSING)**

**THE GOAL IS NOT TO ELIMINATE DEVICES BUT TO USE THEM  
MEANINGFULLY AND WITH BALANCE.**





As educators, our job is not to reject technology but to **use it with purpose** so it enhances learning instead of overwhelming it. When we strike this balance, we help students become capable, thoughtful, and adaptable learners who can navigate a digital world without losing the human skills that matter most.





**Thank  
you**