

Awakening Inquiry, Curiosity, and Deep Learning

Questions are one of the oldest technologies of learning. They open portals. They shift perception. They ignite the part of the human mind designed for wonder, exploration, and self-direction. When we teach children *how* to question, rather than what to think, we return them to their natural state: curious, observant, and intrinsically motivated.

In a world moving faster than ever, the ability to ask powerful questions has become more important than having the “right answers.” Answers change with time. But a well-crafted question? It can expand a life path.

Why Questions Matter in Learning

Neuroscience shows that curiosity activates dopamine pathways, making learning *stickier, more joyful, and more memorable*. When a child wonders, searches, or tests an idea, they are biologically primed for deeper recall and stronger engagement. When young people learn to ask questions (not accept information unquestioningly) they reclaim their autonomy. They learn to discern, explore, and navigate complex worlds with confidence rather than passively consume.

Good questions trigger analysis, evaluation, creativity, pattern-recognition, and perspective-taking. Rather than memorising information, children learn to *construct meaning*, which builds lifelong learning capacity. By considering:

- *What might someone else be thinking?*
- *Why might they believe that?*
- *What influences their perspective?*

students open the door to emotional intelligence, respectful dialogue, and co-creation. When children ask:

- *What if...?*
- *How might we...?*
- *Who benefits?*
- *What could be possible?*

they begin to see themselves as agents of change rather than recipients of information.

Types of Questions: What They Activate

Closed Questions

These have one clear answer.

Purpose:

- Check understanding
- Retrieve facts
- Build foundational knowledge

Examples:

- *What year was this invented?*

- *Who discovered...?*

Benefit: Quick, efficient, and helpful—but not transformative on their own.

Open-Ended Questions

These invite thinking, imagination, research, discussion, and multiple perspectives.

Purpose:

- Deep inquiry
- Creativity
- Critical thinking
- Emotional and ethical reasoning

Examples:

- *What might have caused this?*
- *What are all the possible solutions?*
- *How does this connect to your life?*

Benefit: They open neural pathways and spark exploration far beyond the curriculum.

Reflective Questions

Help students look inward.

Examples:

- *What surprised you?*
- *What challenged you?*
- *How did you grow through this?*

Perspective-Shifting Questions

Build empathy and broader awareness.

Examples:

- *How would this look through the eyes of a scientist? An elder? A child? A future citizen?*

Generative Questions

These lead to new questions which is true inquiry.

Example:

- *What else do we need to understand before making a decision?*

The Lost Art of Research (Real Research)

In the Google era, many young people confuse *searching* with *researching*. Real research involves:

1. Gathering multiple sources

Books, interviews, primary documents, lived experience, fieldwork.

2. Cross-checking and verifying

Looking for patterns, contradictions, authenticity, and bias.

3. Listening as part of research

People hold wisdom through:

- stories
- experiences
- memories

- cultural knowledge
- experiments
- mistakes

Teaching students to **truly listen** with curiosity and no agenda is one of the most powerful research skills of all.

How a Single Question Can Create Deep Learning

Imagine giving students one question:
“How does water shape life on Earth?”

This one question can lead to:

- geography
- biology
- physics
- chemistry
- sustainability
- Indigenous knowledge
- poetry
- art
- policy
- ethics
- community leadership
- engineering
- storytelling
- personal reflection

One question becomes a universe. Students naturally follow pathways that match their interests and strengths so learning becomes self-initiated, meaningful, and interdisciplinary. When students are empowered to follow the thread of a question, learning becomes alive. Their nervous system engages. Their creativity awakens. Their sense of agency grows.

How Questions Affect the Brain and Open Possibility

When you ask a question, the brain:

1. Opens a “mental search loop”

The prefrontal cortex activates and the brain *cannot rest* until it explores possibilities.

Questions function like keys as they unlock neural networks that were previously dormant.

2. Releases dopamine

Curiosity and anticipation spark dopamine, a neurotransmitter linked to motivation, pleasure, memory, and forward momentum.

3. Expands the perceptual field

Questions cause the brain to widen its focus, noticing details, patterns, and connections it previously filtered out.

4. Interrupts rigidity

A question breaks mental autopilot as it disrupts bias, challenges assumptions, and invites new neural pathways to form.

5. Increases psychological flexibility

Research shows that open-ended questions build resilience, adaptability, and comfort with ambiguity.

6. Softens the ego

Instead of protecting identity (“I must be right”), the learner becomes an explorer (“I am curious what else is possible”). Humility is highly correlated with intellectual growth.

The Danger of ‘I already know that’

“I already know that” is a *cognitive closure statement*. It shuts down curiosity and signals to the brain: “**No need to learn. No need to think. Stop searching.**” This attitude:

- blocks growth
- prevents updating outdated beliefs
- reduces creativity
- limits empathy
- disconnects the learner from wonder
- keeps the nervous system rigid and defensive

Often, beneath the statement is:

- fear of being wrong
- fear of being seen as incompetent
- a need to protect identity
- previous negative school experiences
- societal programming that equates “not knowing” with weakness

How to re-open these learners

1. Use “invitation questions”

Instead of challenging them, invite curiosity:

- *I’m curious about what new perspective might appear if we looked at this differently?*
- *What would you discover if you explored this with fresh eyes?*
- *What is one thing you might not know yet?*

2. Honour their existing knowledge

Validation softens resistance.

- *You clearly know a lot about this. I wonder what layers we might uncover together?*

3. Introduce novelty

The brain wakes up when something unexpected appears.

A surprising fact, image, story, or question can reopen the curiosity channel.

4. Use experiential learning

Hands-on exploration bypasses the ego and reconnects them to discovery.

5. Encourage a growth identity

Shift from:

knowing → **exploring**

You can gently offer:

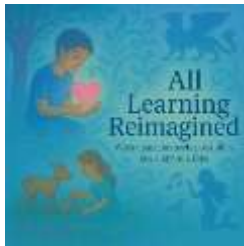
- *The best learners aren't the ones with the most answers—they're the ones with the best questions.*

This is disarming and inspiring.

6. Model curiosity yourself

Show them what it looks like to be a lifelong learner. Curiosity is contagious.

Why not reflect on how you are using questions in your own daily life?



To listen to an interesting podcast on the power of questions with activities to awaken them go to <https://bbsradio/alllearningreimagined>.

Recorded on to the 14th February 2026. See below for ideas to promote questioning in any educational settings. Enjoy!