

Robots or Beavers?

Mike Thomas · Founder & Director | 5 min read · May 2026

When a student completes a task well, it's worth pausing to ask: do they understand why it mattered — or are they simply doing what they think you want to see?

The answer to that question determines almost everything about the quality of learning that's actually taking place.

Two Types of Learner

A **robot** executes instructions efficiently. It completes tasks, follows protocols, and produces the right output — because that's what it was programmed to do. It has no particular understanding of why, no interest in what comes next, and no ability to adapt when the context changes.

A **beaver** is something different. Beavers spend the summer months building dams and storing food — not because they're told to, but because they understand what winter requires. They work with foresight, adapt to conditions, and apply prior experience to future challenges.

In learning environments, we produce one or the other far more often than we realise.

The Problem with Reward-Driven Learning

Ivan Pavlov conditioned his dogs to associate the sound of a bell with food. Over time, the bell alone was enough to produce a response. The dogs weren't thinking — they were reacting.

The same dynamic plays out in classrooms and outdoor programmes when the primary driver of behaviour is approval. Students learn to parrot the right words — teamwork, communication, resilience — because they've figured out that these generate positive responses. They've learned how to get the reward.

When the context changes — when the scenario is unfamiliar, when the facilitator isn't watching — the robotic learner has nothing to draw on. The learning didn't transfer because it was never really learning. It was performance.

What Transfer Actually Looks Like

Deep learning — real learning — is visible in what someone does when you're not there, in a situation they haven't encountered before.

A student who understands teamwork doesn't just use the word in a debrief. They navigate a genuinely ambiguous group situation months later and make a decision that considers everyone affected. The skill transferred because it was internalised, not just repeated.

The test is always: can they use it somewhere else?

How to Create the Conditions for It

Change the context deliberately. If every activity follows the same format, learners get good at the format. Introduce variation — different environments, different group compositions, different constraints.

Resist the formulaic. Programmes that run the same sequences, use the same debrief questions, and reward the same buzzwords are producing the same result — just with a more scenic backdrop.

Move from assigned to open. Structured activities with pre-assigned roles tell learners what to do. Open challenges — where the group decides its own structure and navigates its own conflicts — reveal what they've actually understood.

Make the problem real. The most valuable learning often comes from genuine problems: bad weather, interpersonal friction, unexpected failure. These aren't disruptions to the programme — they are the programme.

A Useful Question to Keep Asking

Are your participants doing things because they understand the value — or because they think that's what you want to see?

There's nothing wrong with starting with the latter. But if it never becomes the former, something hasn't transferred.

The goal isn't learners who perform well when we're watching. It's learners who make better decisions when we're not.

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