

Hugging and Bridging

Transfer rarely happens by accident. Two deliberate move families, from Perkins and Salomon, that make learning travel.

HUG

Hug: make practice resemble the target

Near transfer grows from similarity. Practise the skill in conditions that look and feel like where it will be used.

In class: If they must write under exam conditions, some practice happens timed, on lined paper, in silence.

BRIDGE

Bridge: name the connection

Far transfer needs the link made explicit. Ask where else the idea applies, and have learners generate the examples.

In class: We used ratio in recipes. Where would ratio thinking matter in science? In PE? Two minutes, pairs.

VARY

Vary the practice contexts

One context builds one habit. Several contexts build a principle learners can carry.

In class: Teach percentage change with prices, then populations, then sports data, naming the same structure each time.

NAME

Abstract the principle

Give the underlying idea a name learners can summon in new territory.

In class: This is conservation of energy again, the same rule from last term, wearing different clothes.

The Transfer Planning Checklist

Run over any unit plan. Each tick is a documented transfer move; the unticked rows are your redesign list.

Design for it

- The unit names where this learning should reappear (subject, key stage, life).

- Practice contexts vary across the unit, not just at the end.

- Worked examples precede independent transfer attempts.

- The underlying principle has an explicit, reusable name.

Teach for it

- Learners generate their own where-else examples at least once per topic.

- Strategy instruction is direct: how to approach a new problem gets taught, not assumed.

- Earlier topics resurface inside new ones, with the connection voiced.

- Surface features change while deep structure stays, and learners compare the two.

Assess for it

- At least one assessment item uses an unseen context.

- Marking rewards recognising the principle, not just executing the procedure.

- A delayed check (weeks later) tests whether the learning survived the unit.

Where-Else Cards

Bridging prompts for the end of any explanation. Two minutes of connection-making per lesson compounds.

Across subjects

Send the idea to another department and back.

Say: "Where would this idea show up in science, history or PE? Give one real example."

Across time

Connect backwards to old learning and forwards to future use.

Say: "What did we learn before that works the same way? Where will you need this in two years?"

Into life

Anchor the principle outside school walls.

Say: "Who uses this idea at work? When might it save you money, time or an argument?"

Into a new problem

The hardest bridge: an unseen case, solved with the named principle.

Say: "Here is a problem none of us has seen. Which of our named ideas fits it, and why?"

Why Transfer Fails, and the Fix

The classic failure modes, each with the matching countermove. Diagnose before redesigning.

Learned the surface, not the structure

Learners bound the skill to its example. Fix: vary surface features deliberately while naming the constant.

In class: If area only ever means rectangles of carpet, fields and screens will stump them. Rotate the contexts.

Never practised retrieval in new settings

Recall was always cued by the same chapter heading. Fix: mixed and spaced practice across topics.

In class: Friday quiz pulls from three units, unlabelled. The choosing is the learning.

No strategy for the unfamiliar

Faced with novelty, learners lack a first move. Fix: teach the approach explicitly: classify, recall similar, attempt, check.

In class: Our stuck routine: What kind of problem is this? What does it remind me of? Try it. Check it.

The principle was never named

Implicit ideas do not travel. Fix: abstract and label every big idea, then reuse the label.

In class: A working wall of named principles the class can point to all year.

Transfer of Learning: A 5-Minute Evidence Briefing

What the research supports, and the honest limits every staff room should know.

■ Near transfer is buildable

Similar-context transfer responds reliably to varied practice, worked examples and retrieval. Design for it and you generally get it.

■ Far transfer is rare and earned

Distant transfer is the exception historically, but trials show it is achievable: spatial training has moved mathematics outcomes, and metacognitive strategy training has produced far transfer in self-regulated learning.

■ Strategies must be taught directly

The transferable layer is often the strategy, not the content. Direct instruction in how to approach new problems outperformed indirect approaches for far transfer.

■ The honest caveat

Most claimed transfer effects in education are near transfer measured soon after teaching; far-transfer trials remain few and effects modest. Promise colleagues better connection-making, not miracle generalisation.

Evidence base

Schuster, C. et al. (2022). The effects of direct and indirect training in metacognitive learning strategies on near and far transfer in self-regulated learning. *Learning and Instruction*.

Gilligan, K.A. et al. (2019). First demonstration of effective spatial training for near transfer to spatial performance and far transfer to a range of mathematics skills at 8 years. *Developmental Science*.

Chen, O., Retnowati, E. and Kalyuga, S. (2023). The effect of worked examples on learning solution steps and knowledge transfer. *Educational Psychology*.

Perkins, D.N. and Salomon, G. (1992). Transfer of learning. *International Encyclopedia of Education*.