

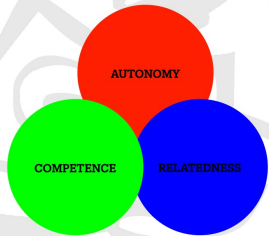
# Self-Determination Theory (SDT)

## ✓ What is it?

SDT is a motivation theory that says learners thrive when 3 psychological needs are met:

- **Autonomy** – feeling in control of their learning
- **Competence** – feeling capable and improving
- **Relatedness** – feeling connected to others

When these needs are supported, learners show **higher motivation, resilience, and learning retention.**



## 👉 Example:

*You're working with a nervous paddler in surf.* Instead of dictating when and how to enter the zone, you give them choices: "You can try today or just watch – we'll support whatever you decide." You praise small wins and encourage others to support them.

## 🧠 Why it matters in kayaking:

- Helps learners **stay motivated and come back**
- Reduces fear and stress in dynamic conditions
- Fosters a **positive group culture**

## 🎯 Coaching Takeaway:

Build sessions that let learners choose, feel progress, and belong.

## 🔍 Reflection Prompt:

"How do I support autonomy, competence, and relatedness in my sessions?"

A coaching approach focused on fostering intrinsic motivation by supporting autonomy, competence, and relatedness to empower learners in their personal development.

# Ecological Dynamics

## ✓ What is it?

Ecological Dynamics is a theory that sees skill as something that **emerges from the interaction between the paddler, the task, and the environment.** It blends ecological psychology (how we perceive the world) with dynamical systems theory (how things change over time).

Instead of thinking "skills are taught," it sees learning as something that **arises from exploring constraints and affordances.**



## 👉 Example:

You want paddlers to improve edging while surfing.

Instead of running a stroke drill, you give them multiple attempts at catching small, angled waves and ask them to figure out what helps them stay upright or carve cleanly. **You let the environment be the teacher.**

## 🧠 Why it matters in kayaking:

- Supports **adaptability** in a constantly changing sea environment
- Moves learning away from rigid "textbook technique"
- Builds **resilient decision-making** in unpredictable conditions

## 🎯 Coaching Takeaway:

Create rich, variable environments where learners explore and adapt, not copy.

## 🔍 Reflection Prompt:

"Am I shaping environments that guide learning – or controlling outcomes?"

A coaching approach focused on understanding skill development as a dynamic interaction between the learner, the environment, and the task, encouraging adaptability and real-time decision-making.

# Constraints-Led Approach (CLA)

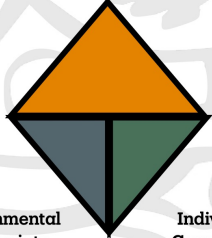
## ✓ What is it?

CLA is a method of coaching that designs learning environments around constraints — boundaries that shape movement and decision-making. These can be:

- **Task constraints** (rules, goals, equipment)
- **Environmental constraints** (wind, tide, swell, space)
- **Individual constraints** (skill level, height, motivation)

Rather than “telling” the paddler what to do, you shape the session so they explore and discover *what works*.

Task Constraints



Environmental Constraints

Individual Constraints

## 👉 Example:

*You want to improve low brace recovery.*  
Rather than give explicit instructions, you set up a small breaking wave zone with a “capsize-safe” briefing and encourage paddlers to explore “How can you stay upright here?”

## 🧠 Why it matters in kayaking:

- It reflects **real environments** (which are constantly changing)
- Supports **decision-making under pressure**
- Helps learners **self-organise movement**

## 🎯 Coaching Takeaway:

Don't always fix errors with answers. Instead, set the task and environment to guide exploration.

## 🔍 Reflection Prompt:

“What constraints can I tweak to support learning *without* giving direct instruction?”

A coaching approach focused on creating environments that naturally develop skills through exploration and discovery

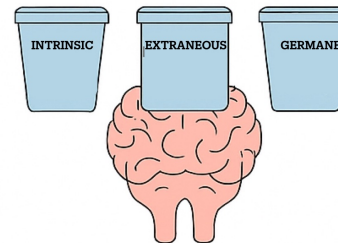
# Cognitive Load Theory (CLT)

## ✓ What is it?

CLT explains how learners process and retain new information. It focuses on mental bandwidth and suggests that too much information at once can overload the learner.

There are 3 types of cognitive load:

- **Intrinsic**: the actual difficulty of the skill
- **Extraneous**: how it's presented (e.g. too many words, poor demos)
- **Germane**: the good effort — linking info to long-term memory



## 👉 Example:

*Teaching dynamic edge control on moving water for the first time?*

Avoid overloading learners with body position, stroke timing, tidal flow analysis and safety protocols all at once. Instead, simplify the task, scaffold the info, and let them focus on **one challenge at a time**.

## 🧠 Why it matters in kayaking:

- Prevents **frustration** and **skill decay**
- Helps new or tired paddlers **retain what they learn**
- Supports effective **session design and progression**

## 🎯 Coaching Takeaway:

Less is often more. Reduce noise, chunk information, and avoid info-dumping.

## 🔍 Reflection Prompt:

“Where in my session might learners experience cognitive overload?”

A coaching approach focused on enhancing learning by engaging the mind in active problem-solving and reflection to strengthen understanding and skill retention.

# Nonlinear Pedagogy

## ✓ What is it?

Nonlinear Pedagogy is a learner-centred approach that embraces the fact that **learning is messy and doesn't follow a straight path**. Improvement might be slow, rapid, plateaued, or even seem to regress at times – and that's all part of the process.

It encourages **variability**, multiple solutions, and discovery over perfect execution.

## 🏊 Example:

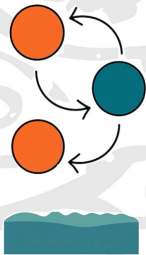
You're coaching turning. Instead of breaking it down into set steps, you give learners different turn challenges – wide arcs, tight pivots, turning while moving backwards – and let them discover what works for each task. Progress looks different for each paddler.

## 🧠 Why it matters in kayaking:

- Accepts that **progress will vary by person and context**
- Builds **creativity and problem-solving** on the water
- Encourages coaches to coach the person, not the perfect stroke

## 🎯 Coaching Takeaway:

Design for exploration. Support messiness – it's where real learning happens.



## 🔍 Reflection Prompt:

"Do my sessions allow for personal learning journeys... or just one 'right' answer?"

A coaching approach focused on promoting skill development through varied, unpredictable learning environments that encourage adaptation, creativity, and exploration.

# Implicit vs Explicit Learning

## ✓ What is it?

These are two different approaches to skill acquisition:

- **Explicit learning** involves conscious thought and instruction ("rotate your hips here").
- **Implicit learning** happens without the learner being fully aware – through discovery, repetition, or metaphor.

In moderate water coaching, both are useful, but **implicit learning tends to hold up better under pressure**.

## 🏊 Example:

You're helping paddlers brace in rebound. Instead of step-by-step feedback, you ask them to "stay tall and loose – imagine you're riding a horse." You're guiding body response without overloading with technical language.

## 🧠 Why it matters in kayaking:

- **Implicit learning is more robust** in unpredictable environments
- Reduces **cognitive overload**, especially for newer or nervous paddlers
- Makes coaching **feel more natural and playful**

## 🎯 Coaching Takeaway:

Use metaphors, movement cues, and practice tasks to teach without over-talking.



LEARN BY	LEARN BY
<b>DOING</b> Learning through practice	<b>KNOWING</b> Learning through instructions
PROS: Unconscious learning	PROS: Structured learning
PROS: Unconscious learning	PROS: Structured learning

## 🔍 Reflection Prompt:

"Am I helping paddlers feel movement... or flooding them with instructions?"

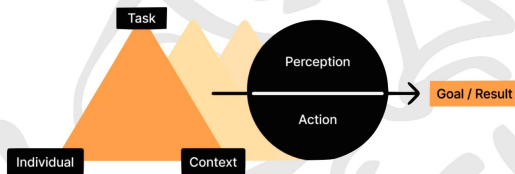
A coaching approach that contrasts skill acquisition through unconscious, automatic learning (implicit) versus conscious, effortful learning (explicit), emphasising the balance between both for effective development.

# Perception-Action Coupling

## ✓ What is it?

Perception-Action Coupling is the idea that **movement and decision-making are linked**. Learners don't act randomly — they respond to what they see, hear, and feel in the environment. Skill = perceiving information and responding effectively.

This theory tells us: good coaching helps learners **recognise and respond** to relevant cues (like swell shape or wind direction) in real time.



## 🏄 Example:

You're coaching in a small tide race. Instead of talking about paddle technique, you ask: "When does it feel easier to cross?" or "Watch the boil - when's the moment to go?" You're training their awareness, not just their stroke.

## 🧠 Why it matters in kayaking:

- Real-world paddling demands **live decisions**
- Conditions constantly change — learners must **adapt in context**
- Helps develop intuitive, confident paddlers in dynamic water

## 🎯 Coaching Takeaway:

Coach perception, not just technique. Practice in real conditions, not isolation.

## 🔍 Reflection Prompt:

"What environmental cues are my learners responding to... or missing?"

A coaching approach focused on aligning sensory information with movement, where the learner's perception of the environment directly informs their actions, enhancing responsiveness and adaptability.

# Motivational Climate

## ✓ What is it?

Motivational climate refers to the **emotional and psychological tone** set by the coach during a session. It significantly shapes how learners feel, behave, and stay engaged.

Two key types:

- **Mastery-oriented** – focuses on effort, learning, and personal growth.
- **Ego-oriented** – focuses on winning, comparison, and outperforming others.

A mastery climate builds **confidence, resilience, and motivation** over time.

## CARING + MASTERY CLIMATE



Valuing/Recognizing personal effort & improvement



Foster cooperation among athletes



All athletes play an important role



Mistakes are part of the learning process



Everyone is treated with respect & kindness

## PERFORMANCE CLIMATE



Valuing/Recognizing athletes for the high ability and performance outcomes



Creating rivalry among teammates



Praise & recognition goes mostly to the "stars"



Mistakes are unacceptable and should be punished

## 🏄 Example:

You're running a surf rescue session. Instead of ranking paddlers on "fastest rescue," you set goals like "show improvement in timing" or "choose the safest line." Feedback highlights progress, not comparison.

## 🧠 Why it matters in kayaking:

- Reduces fear of failure and performance anxiety
- Keeps paddlers engaged even when struggling
- Builds long-term commitment to **learning and group culture**

## 🎯 Coaching Takeaway:

Shape the tone. Reward effort and curiosity, not just performance.

## 🔍 Reflection Prompt:

"What messages am I sending — am I building a mastery climate?"

A coaching approach focused on shaping a positive and supportive environment that fosters motivation, effort, and a growth mindset, encouraging learners to thrive and take on challenges.

# Whole-Part-Whole Practice

## ✓ What is it?

A session design approach where the learner first experiences the skill in its entirety (whole), then isolates and develops specific components (**part**), and finally returns to the full version to apply improvements (**whole** again).

It helps balance context and refinement – especially useful when learners need to feel the flow of a skill, but still need detailed work.

## 👉 Example:

You're working on **assisted rescues**.

First, you let pairs try a full T-rescue with minimal instruction (Whole).

Then, you isolate elements like paddle storage or swimmer communication (Part).

Finally, learners attempt the rescue again with feedback loops (Whole).

## 🧠 Why it matters in kayaking:

- Mirrors **real-world performance**
- Helps learners understand **why each part matters**
- Prevents “drill fatigue” by keeping the big picture in view

## 🎯 Coaching Takeaway:

Use whole-part-whole when learners need to build fluency without losing context.



Whole Part Whole

## 🔍 Reflection Prompt:

“Am I spending too long on parts... or skipping the whole experience entirely?”

A session structure that starts with a full skill attempt, zooms into specific elements for refinement, and returns to the full version for application.

# Reflective Practice Models

## ✓ What is it?

Reflective practice is the process of **thinking about experience to improve future performance**. It's a key tool in long-term coaching development – and it can be used by paddlers too.

Popular models:

- **Gibbs Reflective Cycle** (feelings → evaluation → learning → action)
- **Kolb Learning Cycle** (experience → reflection → theory → application)
- **Brookfield's Four Lenses** (self, student, peer, theory)

## 👉 Example:

After a group rescue session, you ask each learner to reflect using a whiteboard or journal:

- What went well?
- What felt difficult?
- What will I do differently next time?

## 🧠 Why it matters in kayaking:

- Promotes **ownership of learning**
- Helps paddlers **identify patterns and challenges**
- Supports meaningful **progress tracking** across varied environments

## 🎯 Coaching Takeaway:

Use reflection to connect experience with improvement. Model it, guide it, and embed it.



## 🔍 Reflection Prompt:

“How do I support reflective habits in my learners and in myself?”

A coaching approach focused on encouraging learners to regularly reflect on their experiences, fostering deeper self-awareness and continuous improvement through thoughtful analysis and feedback.

## Stages of Learning (Aware → Practice → Acquired)

### ✔ What is it?

A simplified 3-stage model from Paddle UK that describes how learners progress with a skill:

- **Aware** – First contact. Learner is introduced to the skill. High support needed.
- **Practice** – Learner can try the skill with guidance. They're refining and building consistency.
- **Acquired** – Skill is effective, adaptable, and repeatable. Learner needs less support.

### 🚣 Example:

You introduce a **draw stroke** for ferry gliding.

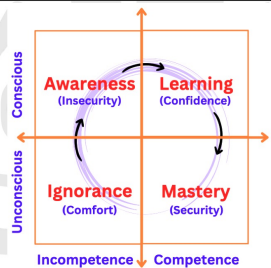
- A paddler in the **aware** stage may need clear demos and physical support.
- In **practice**, they can try it in slow flow with variable success.
- At **acquired**, they're ferrying cleanly without prompts in moving water.

### 🧠 Why it matters in kayaking:

- Helps you **pitch your coaching** appropriately
- Prevents moving on too soon – or getting stuck
- Encourages **individual progression** inside the group

### 🎯 Coaching Takeaway:

Tailor your approach to the learner's stage – not the group average.



### 🔍 Reflection Prompt:

"Where is this learner on the Aware → Acquired path... and what do they need next?"

A progression model that helps coaches tailor support based on whether a paddler is just discovering, developing, or mastering a skill.

## Chaining & Sequencing

### ✔ What is it?

A skill acquisition method where complex actions are broken into **linked, logical steps** – each building on the last. This can be done:

- **Forward chaining:** start at step one and build up
- **Backward chaining:** start with the end skill and work backwards

It's a powerful tool when a skill feels too "big" to grasp all at once.

### 🚣 Example:

You're teaching a self-rescue (e.g. **paddle float re-entry**).

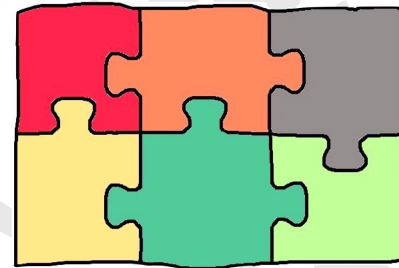
- You begin by practising climbing onto the rear deck (Step 1).
- Then move to setting up the float and stabilising the boat (Step 2).
- Finally, bring it all together in one fluid move (Step 3). Each element is mastered before linking the full chain.

### 🧠 Why it matters in kayaking:

- Builds **confidence through small wins**
- Allows coaches to **personalise progressions**
- Makes complex rescues or rolls more **approachable**

### 🎯 Coaching Takeaway:

Break complex skills into logical pieces – then help learners rebuild the full movement.



### 🔍 Reflection Prompt:

"What's the most efficient sequence for this learner right now?"

A method of teaching complex skills by breaking them into smaller, linked steps that can be practised and rebuilt progressively.

# Structuring Practice

## ✓ What is it?

Different formats for arranging practice to develop skill, depending on your coaching goal:

- **Massed** – lots of reps, little rest (good for fitness/confidence)
- **Blocked** – same task repeated (useful early on)
- **Distributed** – more rest, shorter bursts (reduces fatigue)
- **Varied** – changes in task or context (good for adaptability)
- **Bilateral** – practice on both sides (key in kayak strokes)
- **Mental** – visualisation or rehearsal without physical movement

## 🚣 Example:

You're coaching edge control:

- Start with **blocked** turns around buoys (same side, same task).
- Then move to **varied** – turning both directions, with/without strokes.
- You might also use **mental practice** during a rest break: "Picture your edge angle before your next run."

## 🧠 Why it matters in kayaking:

- Helps paddlers **retain skills long-term**
- Encourages **transfer to unpredictable environments**
- Prevents fatigue, frustration, or boredom in sessions

## 🎯 Coaching Takeaway:

Don't just repeat – design practice that reflects the skill's complexity and context.

## 🔍 Reflection Prompt:

"Does my practice structure match the skill, the learner, and the environment?"

The way a coach organises skill practice (e.g., blocked, varied, massed) to support retention, adaptability, or performance.

# Decision-Making (Classical vs. Naturalistic)

## ✓ What is it?

Two different ways coaches and paddlers make decisions:

- **Classical decision-making:** Slow, logical, step-by-step (e.g., planning a journey using weather, charts, flow rates).
- **Naturalistic decision-making:** Fast, intuitive, based on experience and pattern recognition (e.g., deciding to abort a surf launch mid-move).

Both are valuable, but they suit different situations.



## 🚣 Example:

You're planning a **crossing in moderate water**.

Use a **classical approach** on shore: "Where's the tide going? What's the backup?"  
On the water, a coach sees a paddler drop behind and instinctively adjusts group position – a **naturalistic response** shaped by experience.

## 🧠 Why it matters in kayaking:

- Sea kayaking requires **both fast and slow thinking**
- Coaches need to train learners in **deliberate planning and real-time reaction**
- Builds awareness of **judgement under pressure**

## 🎯 Coaching Takeaway:

Train both types – teach logic, but develop intuition through experience.

## 🔍 Reflection Prompt:

"Do I lean too much on instinct or analysis – and how can I balance the two?"

Classical decisions are slow and logical; naturalistic ones are fast and intuitive, often shaped by experience.

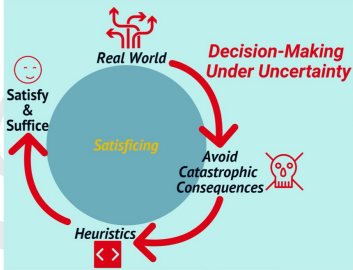
# Heuristics & Satisficing

## ✓ What is it?

**Heuristics** are simple rules of thumb – quick ways to make effective decisions without overthinking.

**Satisficing** is about choosing an option that is “good enough” rather than perfect, especially under pressure.

It's how experienced paddlers make smart choices in complex environments without paralysis by analysis.



## 👉 Example:

You're coaching **group management in swell**. Instead of teaching every positioning theory, you give learners a heuristic:

“Keep at least one kayak’s length between you and the rocks.”

It's simple, effective, and adaptable.

## 🧠 Why it matters in kayaking:

- Encourages **effective decision-making under stress**
- Builds tools that work when detailed analysis isn't possible
- Reinforces **autonomy and trust** in learners

## 🎯 Coaching Takeaway:

Use simple, memorable rules to support decisions in complex environments.

## 🔍 Reflection Prompt:

“What practical rules or shortcuts could help my learners think clearly on the water?”

Simple rules or “good enough” solutions used to make effective decisions under pressure or uncertainty.

# Feedback Models

## ✓ What is it?

Feedback is central to coaching – and the way it's delivered **shapes how people learn**. Paddle UK encourages a range of types:

- **Knowledge of Performance (KP)**: How the skill was done (e.g., “Your edge was steady and well-timed”)
- **Knowledge of Results (KR)**: The outcome (e.g., “You cleared the eddy line”)
- **Intrinsic feedback**: What the paddler feels for themselves
- **Extrinsic feedback**: Comes from coach, peer, or video
- **Sources**: Coach / Peer / Self / Video

## 👉 Example:

You're coaching **rescue drills**.

You let learners **watch each other**, then offer peer feedback: “Did they keep the swimmer calm?”

You also use GoPro footage for them to self-assess with a checklist.

## 🧠 Why it matters in kayaking:

- Improves **self-awareness and ownership**
- Encourages **peer learning and reflection**
- Video/peer/self modes are more **sustainable** in real-world coaching

## 🎯 Coaching Takeaway:

Mix your feedback sources. Help paddlers reflect, not just receive.



## 🔍 Reflection Prompt:

“Am I doing all the talking – or am I giving learners ways to see and feel their own performance?”

Different ways to give, receive, and reflect on performance, including knowledge of results, performance, intrinsic and extrinsic sources.