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Climbing the Dreyfus Ladder of Agile Practices

with Patrick Kua

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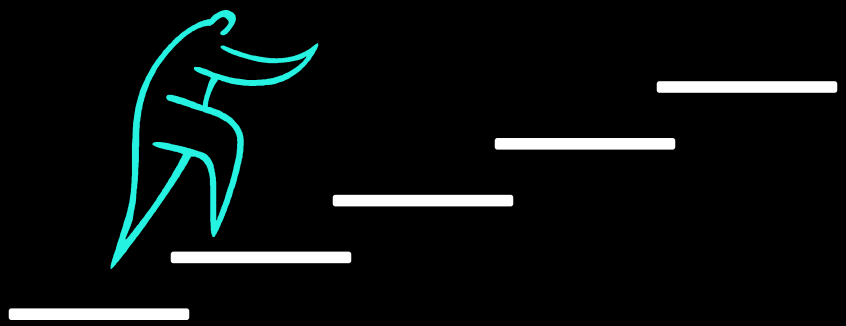
http://www.thekua.com/atwork/presentations-and-papers/xp2009



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Look at what people consider when introducing agile...

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Values**

Principles*

Practices

Coaching these...

In the context of...

Pair Programming

Refactoring

Information Radiators

Limit Work in Progress

Continuous Improvement

Retrospectives

On site Customer

Test Driven Development

Iteration Planning Meeting

Behaviour Driven Development

Stand up Meetings

Showcases

Release Frequently

Etc...

EASIER

HARDER

* see http://agilemanifesto.org/principles.html

** see http://agilemanifesto.org

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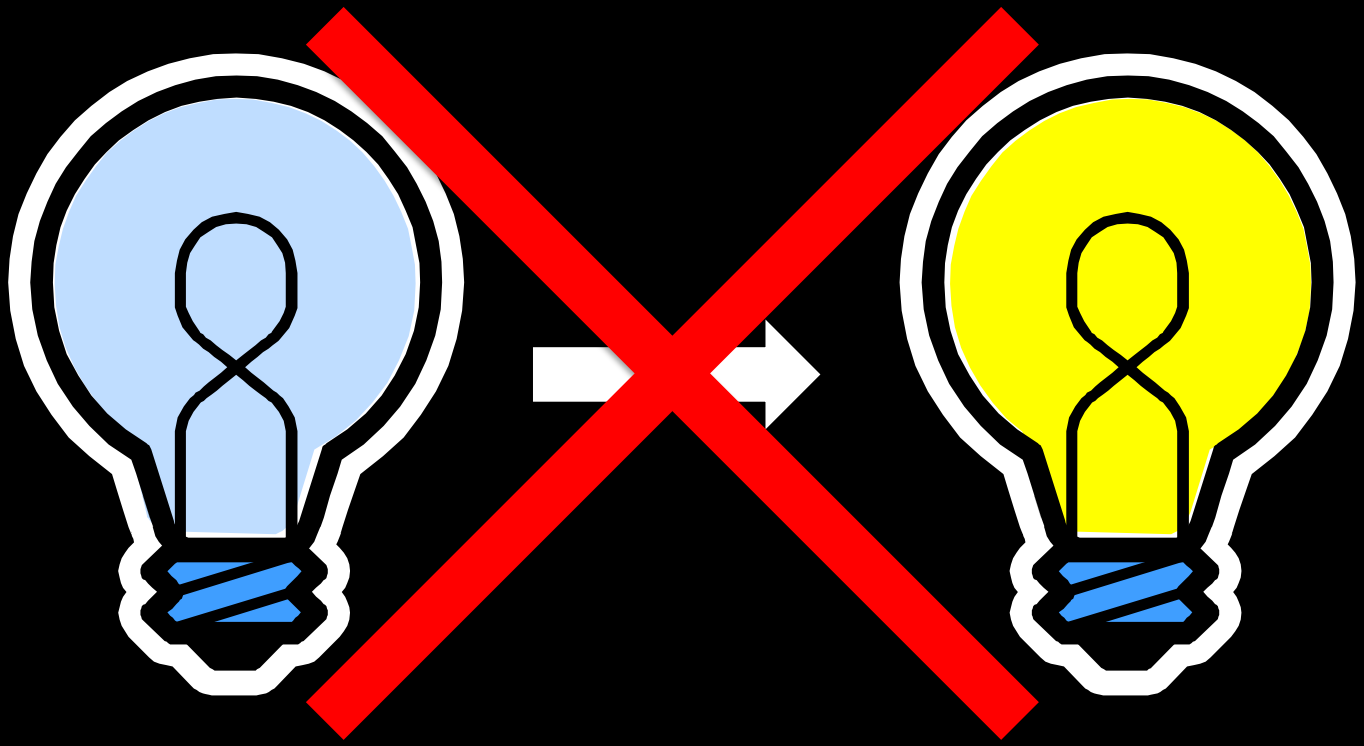
Practice Adoption



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An example using cars

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Driving aptitude?

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Would you put this driver?

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In the seat of this car?

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I sure hope not!

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“Driving”

Formula 1 Drivers

Most people
(You and me)

Learners

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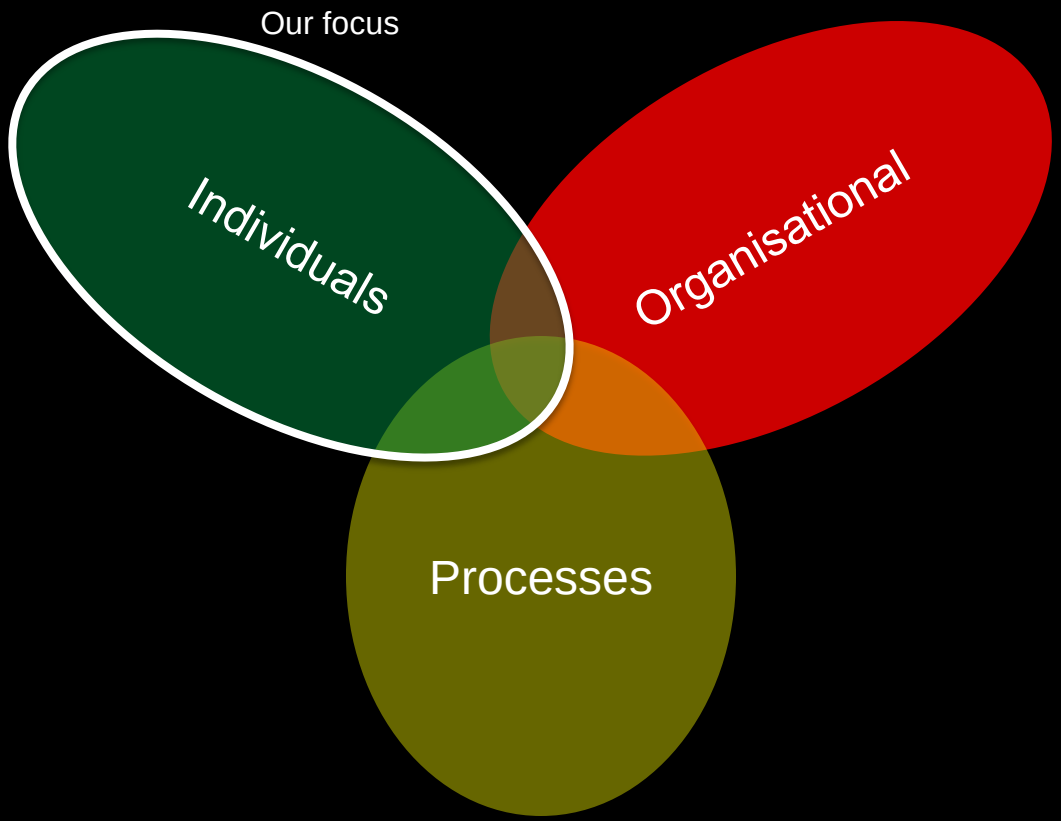
Coaching elements



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Learning preferences | **Teaching approaches** | **Behavioural models**

Our focus

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Different Behavioural Models

Shu Ha Ri

Dreyfus Model

Kolb learning model

Conscious, Unconscious
Competence, Incompetence

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Briefly...

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Shu

“maintain”, “protect”

Ha

“detach”

Ri

“go beyond”, “transcend”

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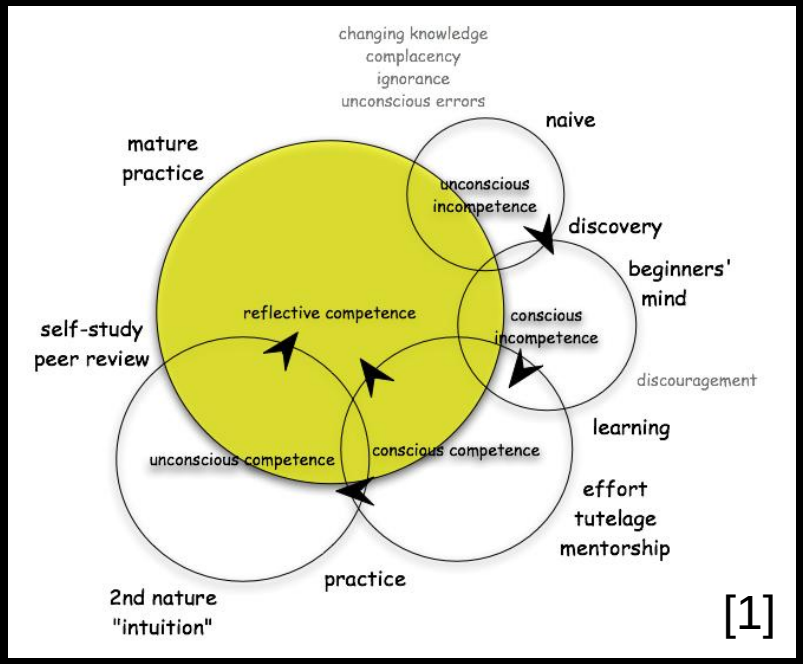
Unconscious — **Competence**

Conscious — **Incompetence**



[1] Will Taylor, Chair, Department of Homeopathic Medicine, National College of Natural Medicine, Portland, Oregon, USA, March 2007

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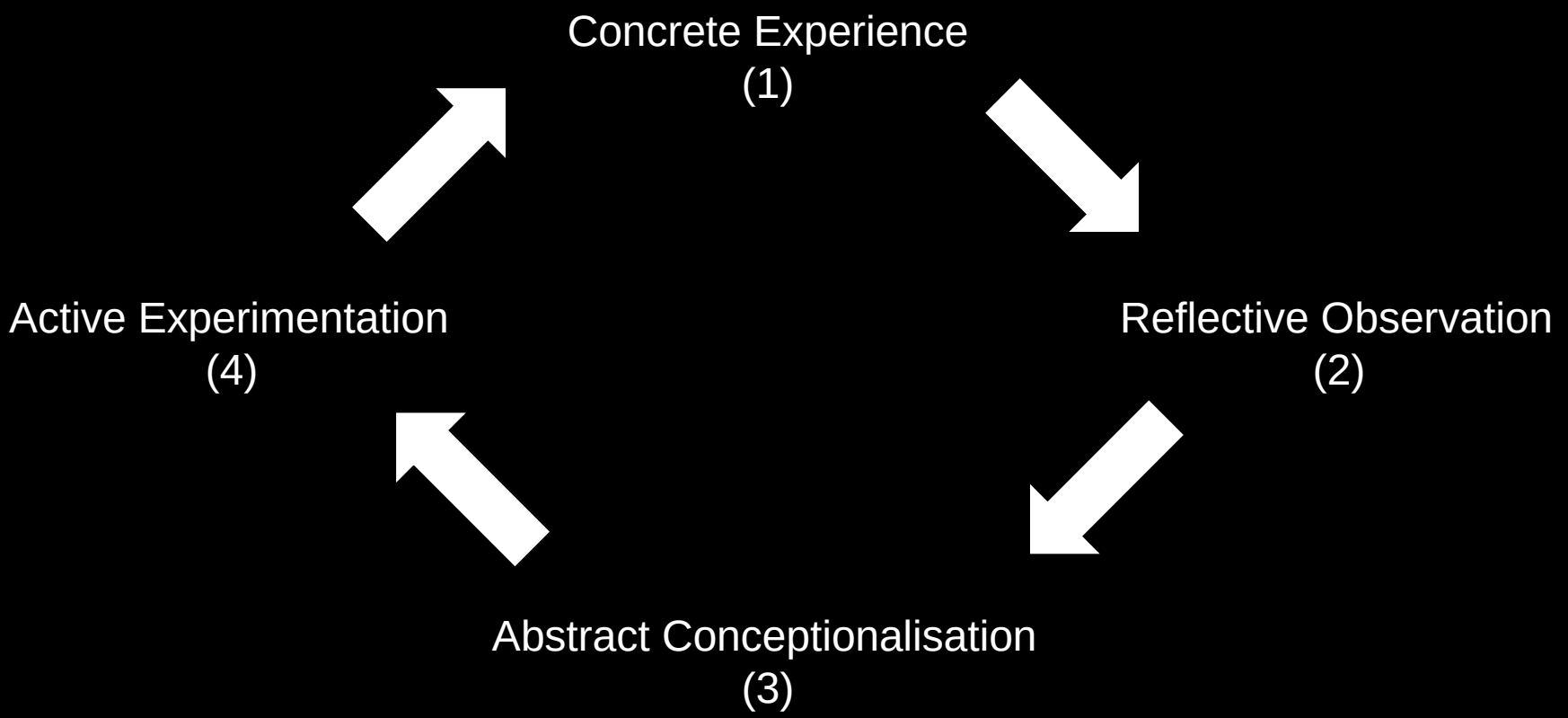
Kolb's Cycle of Experiential Learning



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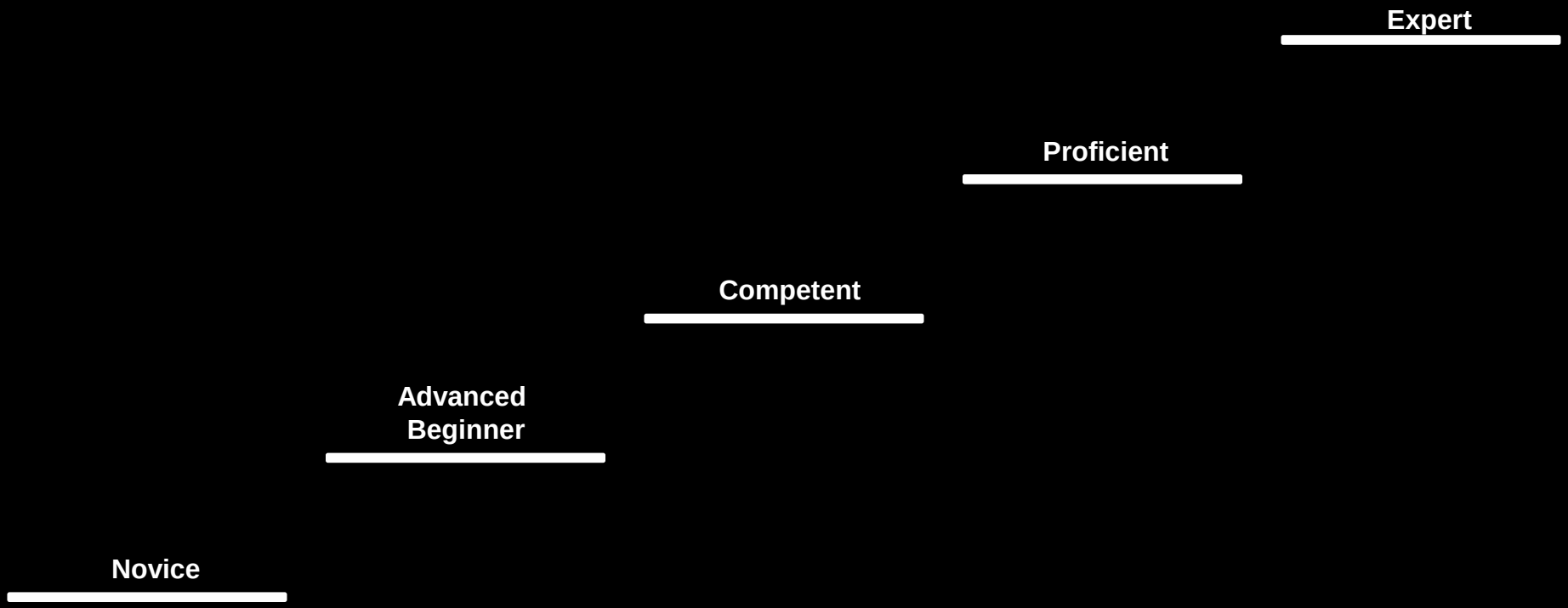
Dreyfus Model of Skills Acquisition



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Notice anything?

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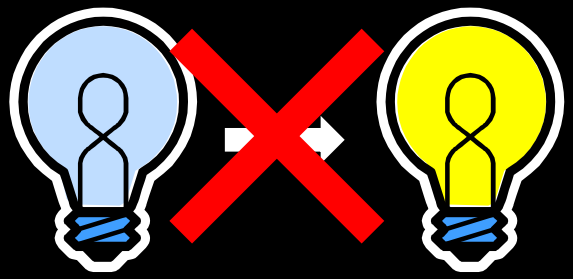
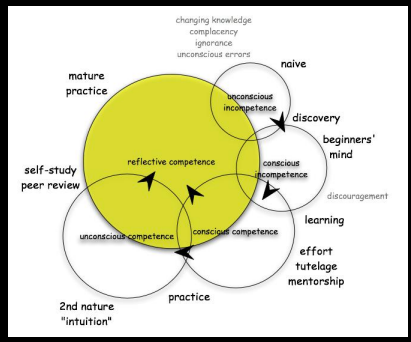
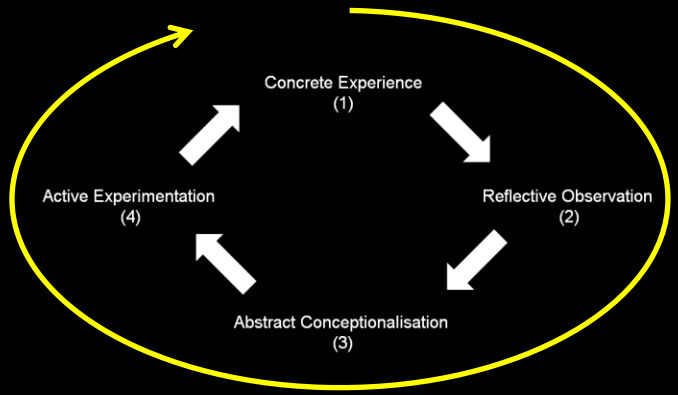
Notice anything?

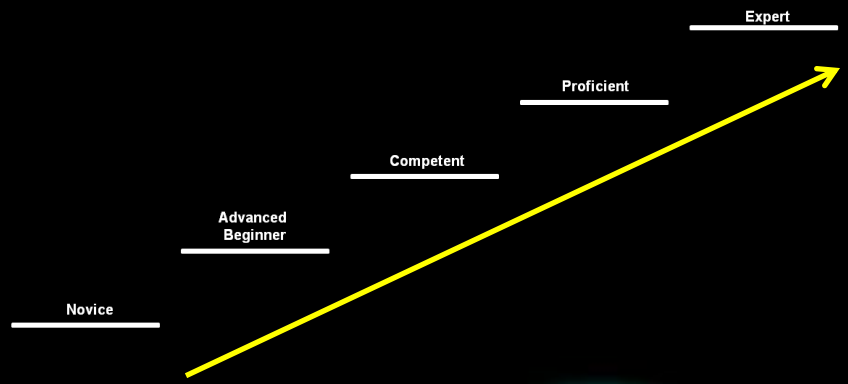


Shu Ha Ri

守 破 離







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Different Behavioural Models

Shu Ha Ri

Dreyfus Model

Our focus for this session

Kolb learning model

Conscious, Unconscious
Competence, Incompetence

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The Dreyfus Model of Skill Acquisition

Skill level(*) →

Mental Function ↕

	Novice	Advanced Beginner	Competent	Proficient	Expert
Recollection	Non-situational	Situational	Situational	Situational	Situational
Recognition	Decomposed	Decomposed	Holisitic	Holistic	Holistic
Decision	Analytical	Analytical	Analytical	Intuitive	Intuitive
Awareness	Monitoring	Monitoring	Monitoring	Monitoring	Absorbed

*The popularised terms for the stages by Benner, P. (1984), Novice to expert: Excellence and power in clinical nursing practice and Hunt, A. (2008), Pragmatic Thinking & Learning: Refactor Your Wetware.

The original terms offered were Novice, Competent, Proficient, Expert, Master in Dreyfus, E. & Dreyfus, H. (1980), A five-stage model of the mental activities involved in directed skill acquisition.

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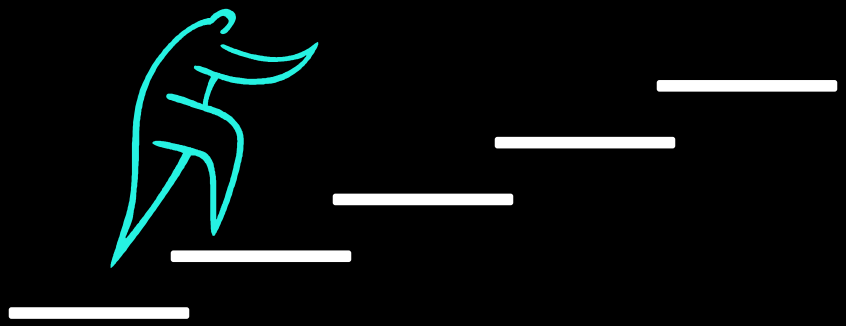
(How to) Climb the Dreyfus Ladder of Agile Practices



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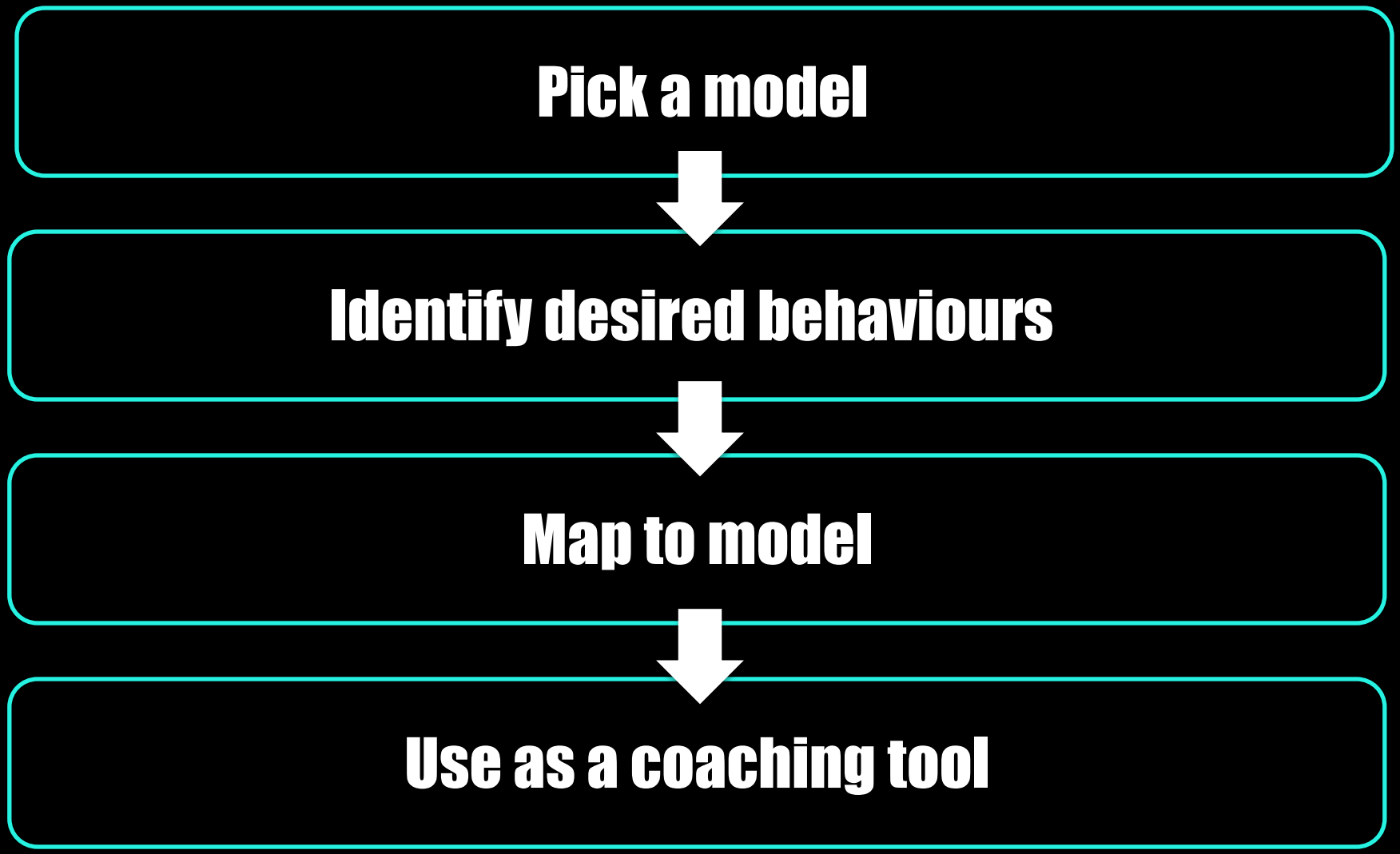

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Iteration 1 (an example)

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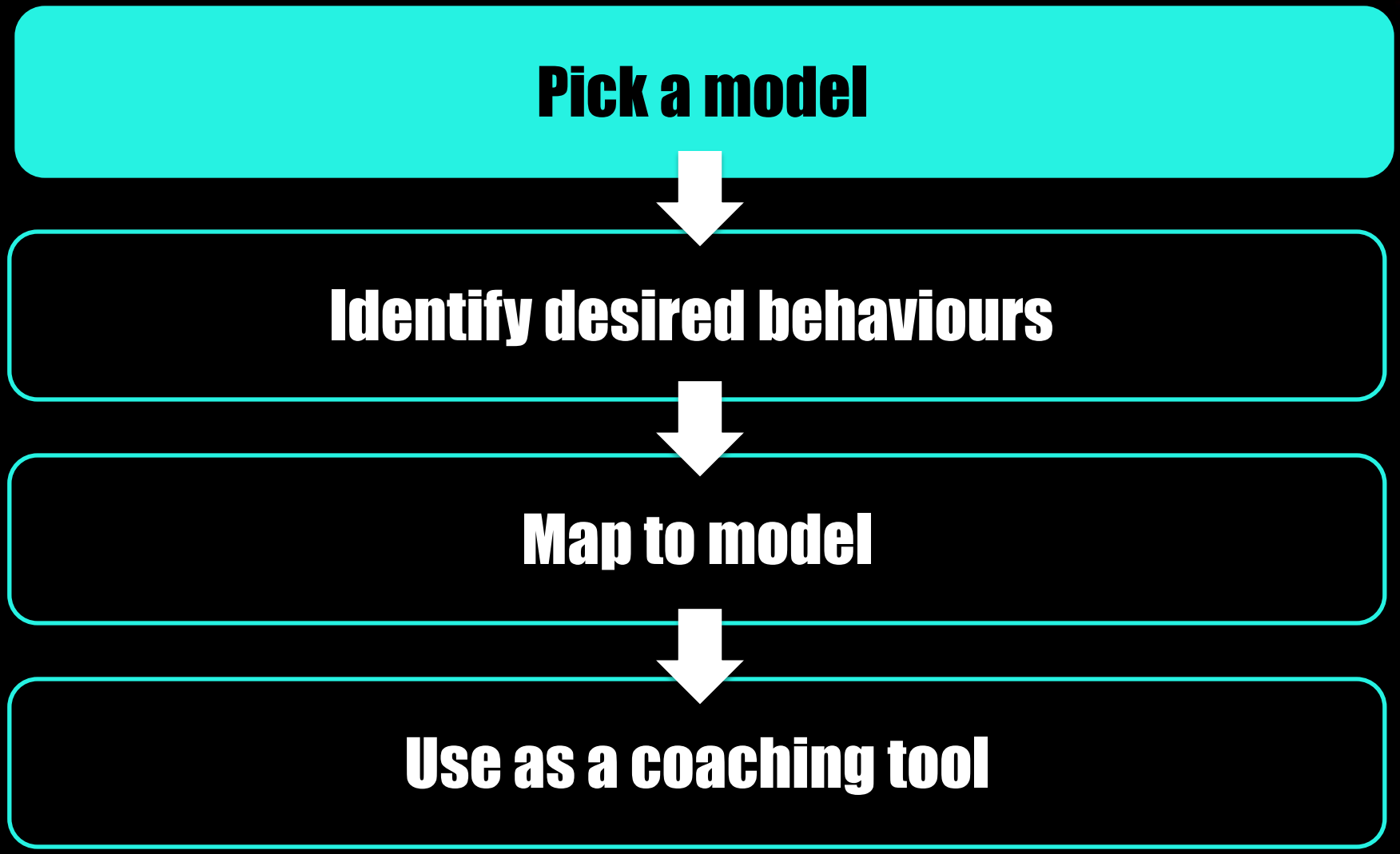

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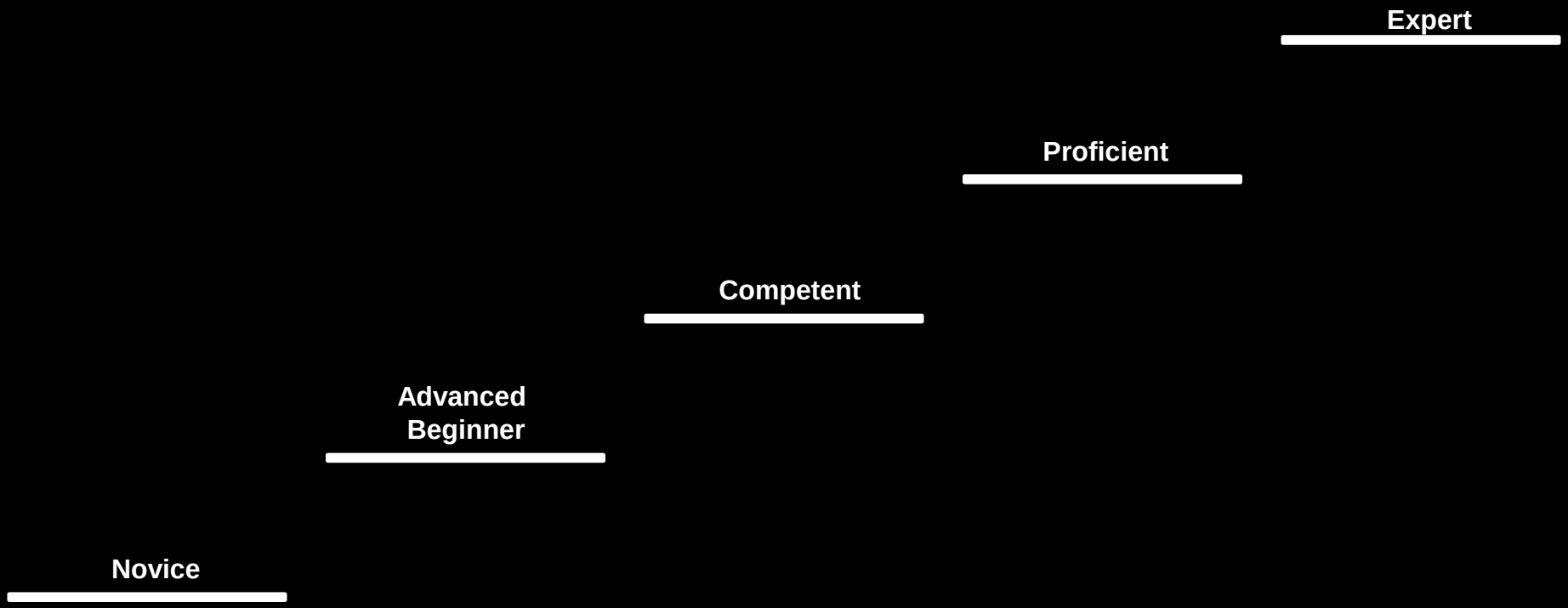
Dreyfus Model of Skills Acquisition



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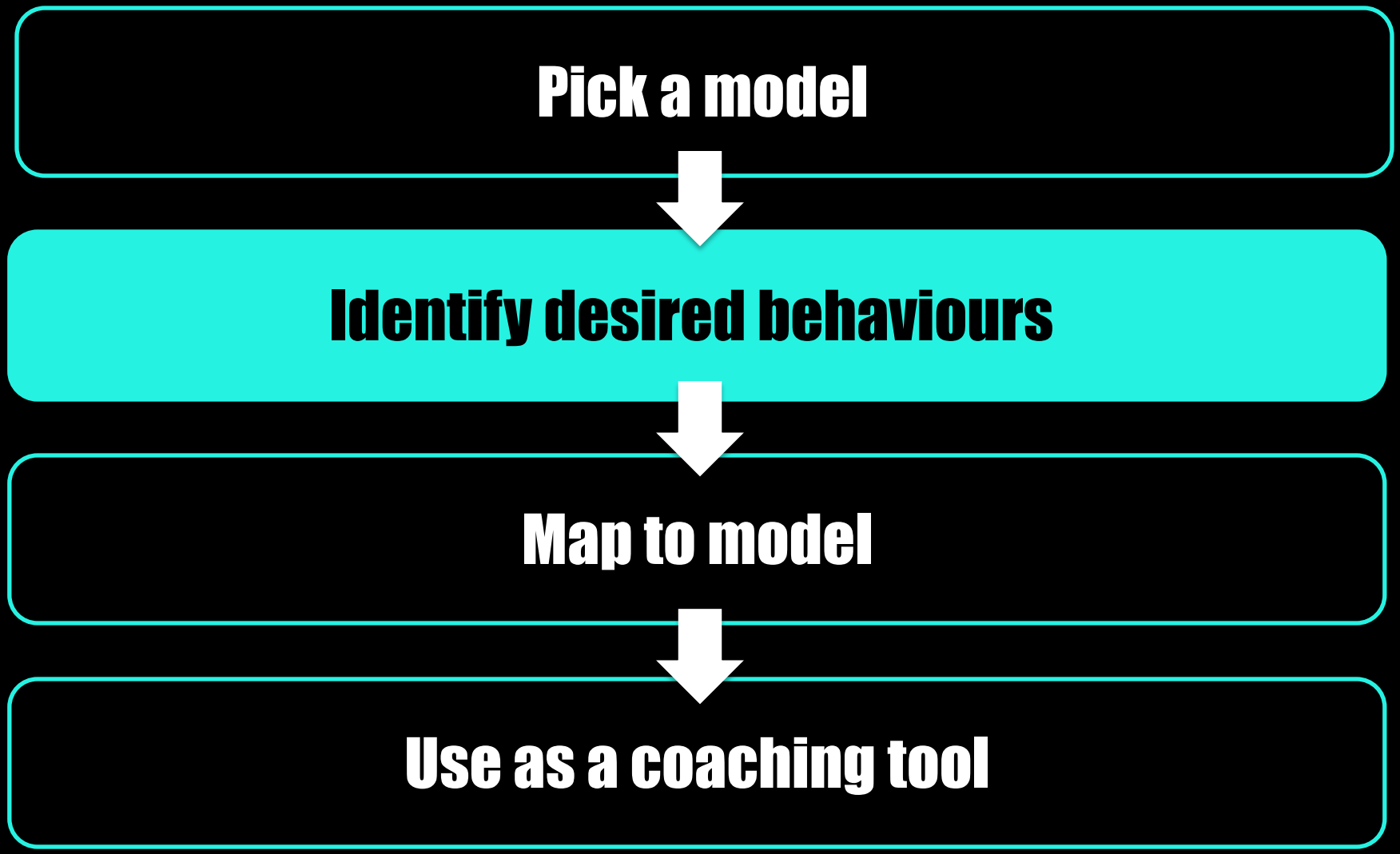

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Agile Practice: Stand Up

Keeps updates short

Encourages shy people to participate

Turns up on time

Understands pigs and chickens

Uses stand ups to help attract help for blockers

Suggests methods to improve stand up

Covers what they did yesterday

Identifies and corrects anti-patterns occurring

Flag blockers

Encourage other methods of communication outside of stand ups

Focus status updates on relevant topics

Covers that they're going to do today

Prompts for other meetings

Steps in when topic is overrunning

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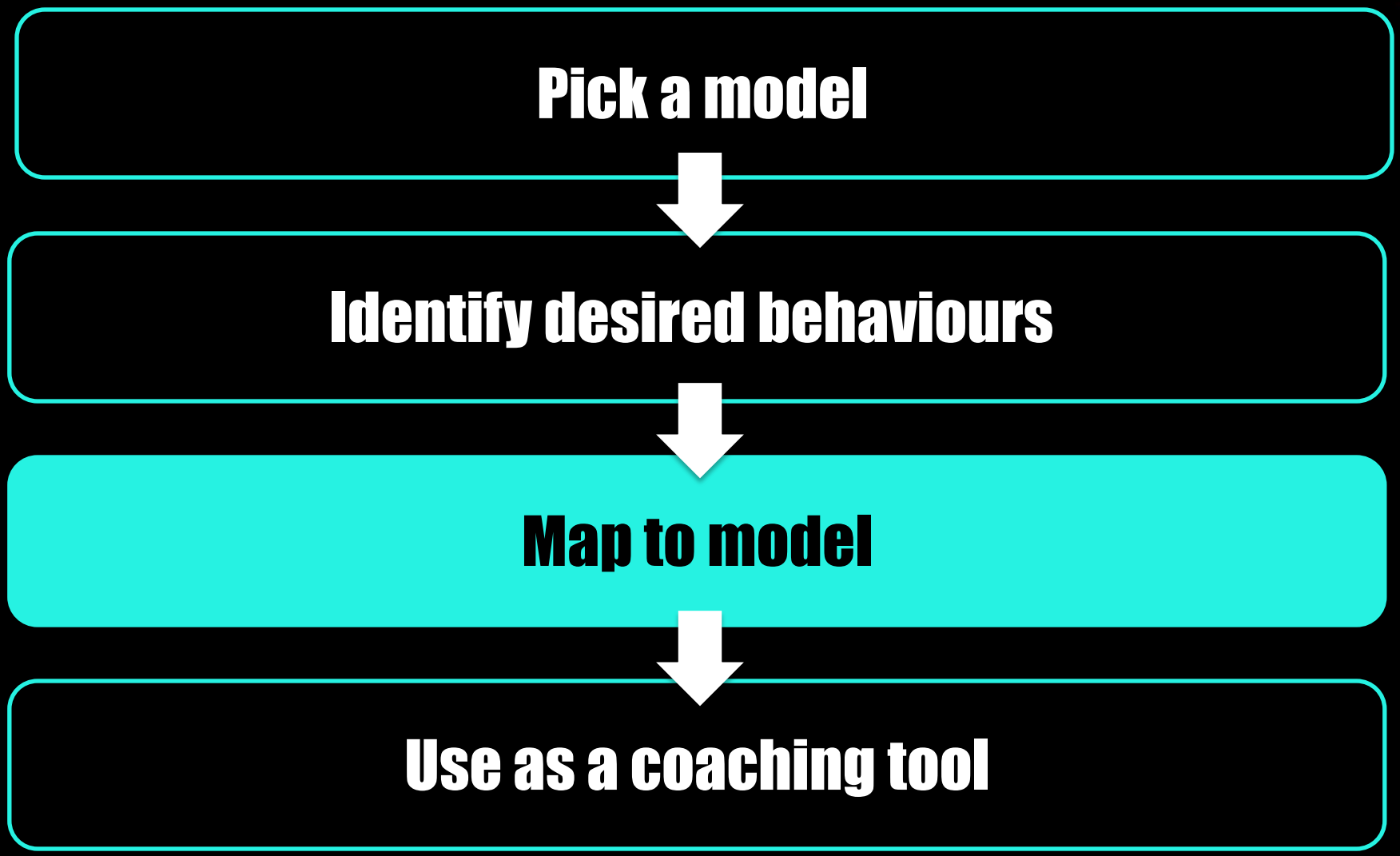

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Flag blockers

Identifies and corrects anti-patterns occurring

Encourages shy people to participate

Keeps updates short

Uses stand ups to help attract help for blockers

Covers what they did yesterday

Expert

Focus status updates on relevant topics

Understands pigs and chickens

Covers that they're going to do today

Prompts for other meetings

Steps in when topic is overrunning

Proficient

Encourage other methods of communication outside of stand ups

Suggests methods to improve stand up

Turns up on time

Competent

Advanced Beginner

Novice

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Your turn...

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Iteration 2 (practice round)

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Participating in Retrospectives

Brainstorm desired behaviours

- one per sticky note
- think of what behaviours you see in your current team
- think of what behaviours you have seen on previous teams
- what behaviours are ideal

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Mapping to the model

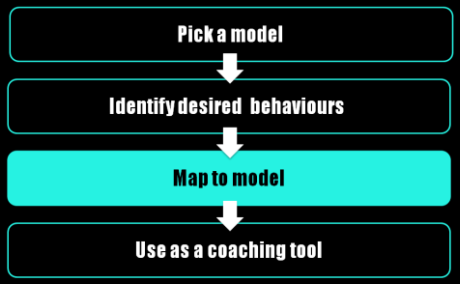
Expert

Proficient

Competent

Advanced Beginner

Novice



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What did we miss?

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Iteration 3

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Brainstorming

Facilitating Retrospectives

Releasing frequently

Agile Estimating

Updating story wall

Test Driven Development

Tracking and reporting

Continuous Integration

Pair programming

Using user stories

Running Demo/Showcase

1. Pick a practice from above
2. Brainstorm desired behaviours for that practice
   - one per sticky note
   - think of what behaviours you see in your current team & previous teams
3. Repeat until time up

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Mapping to the model

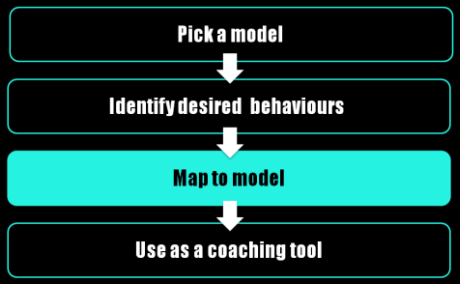
Expert

Proficient

Competent

Advanced Beginner

Novice



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Walkthrough

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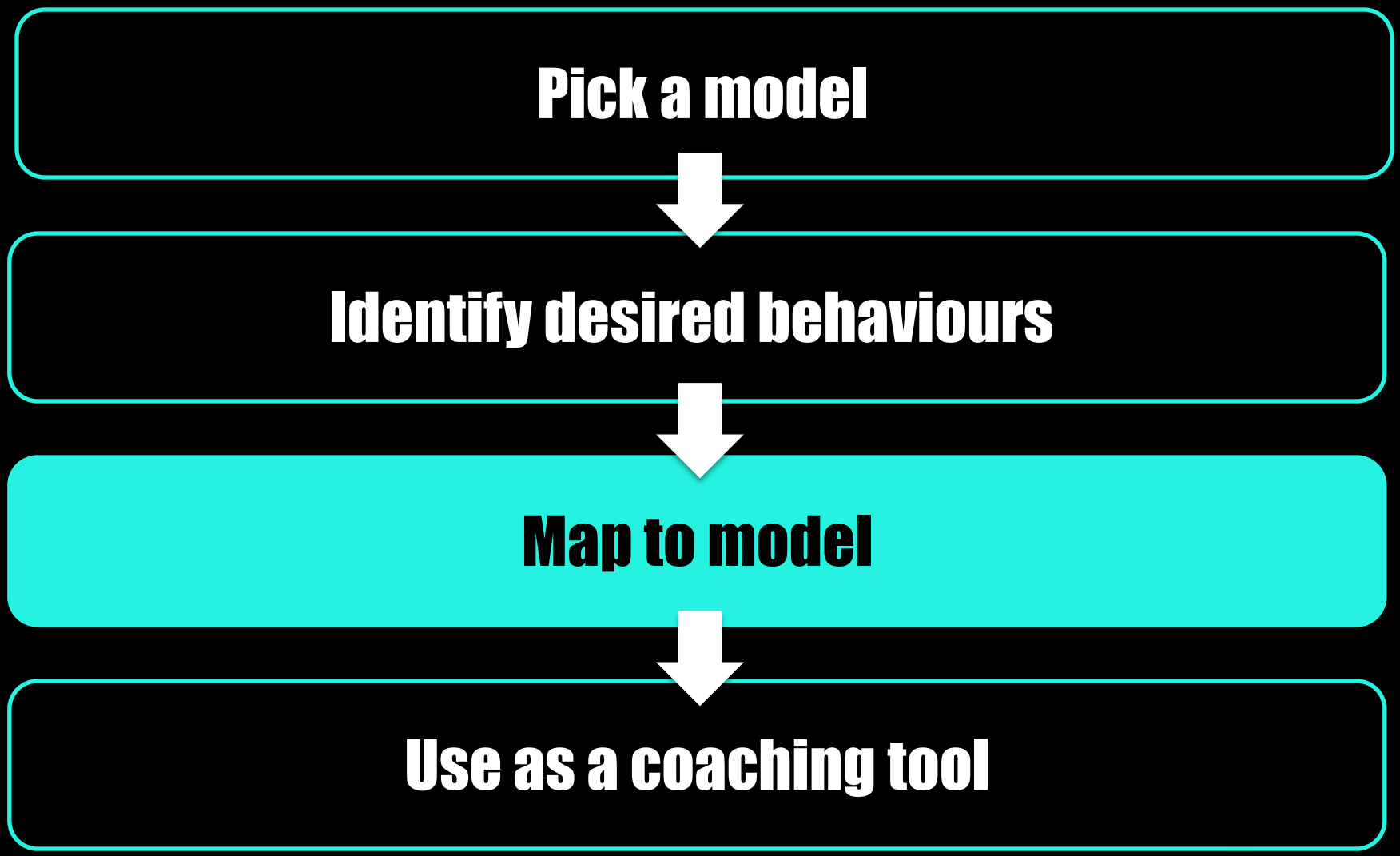

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Discussion

- Did you find it hard to identify different types of behaviour?
  - Why?
  - What caused this?
- How did you go about classifying behaviours?
  - Was it clear what behaviour fell into each category?
  - What were the controversial topics?
- How would you use this as a coaching tool?

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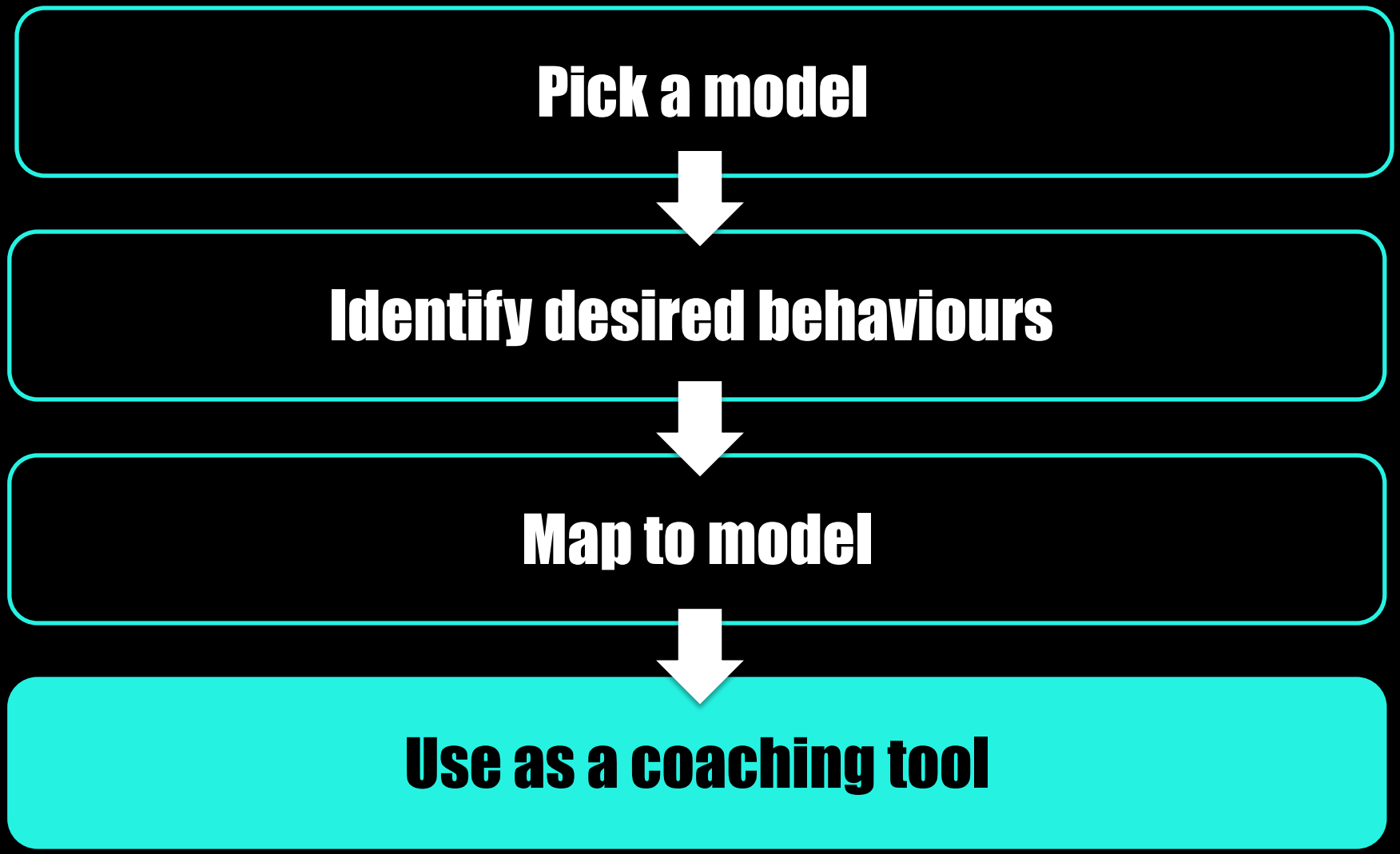

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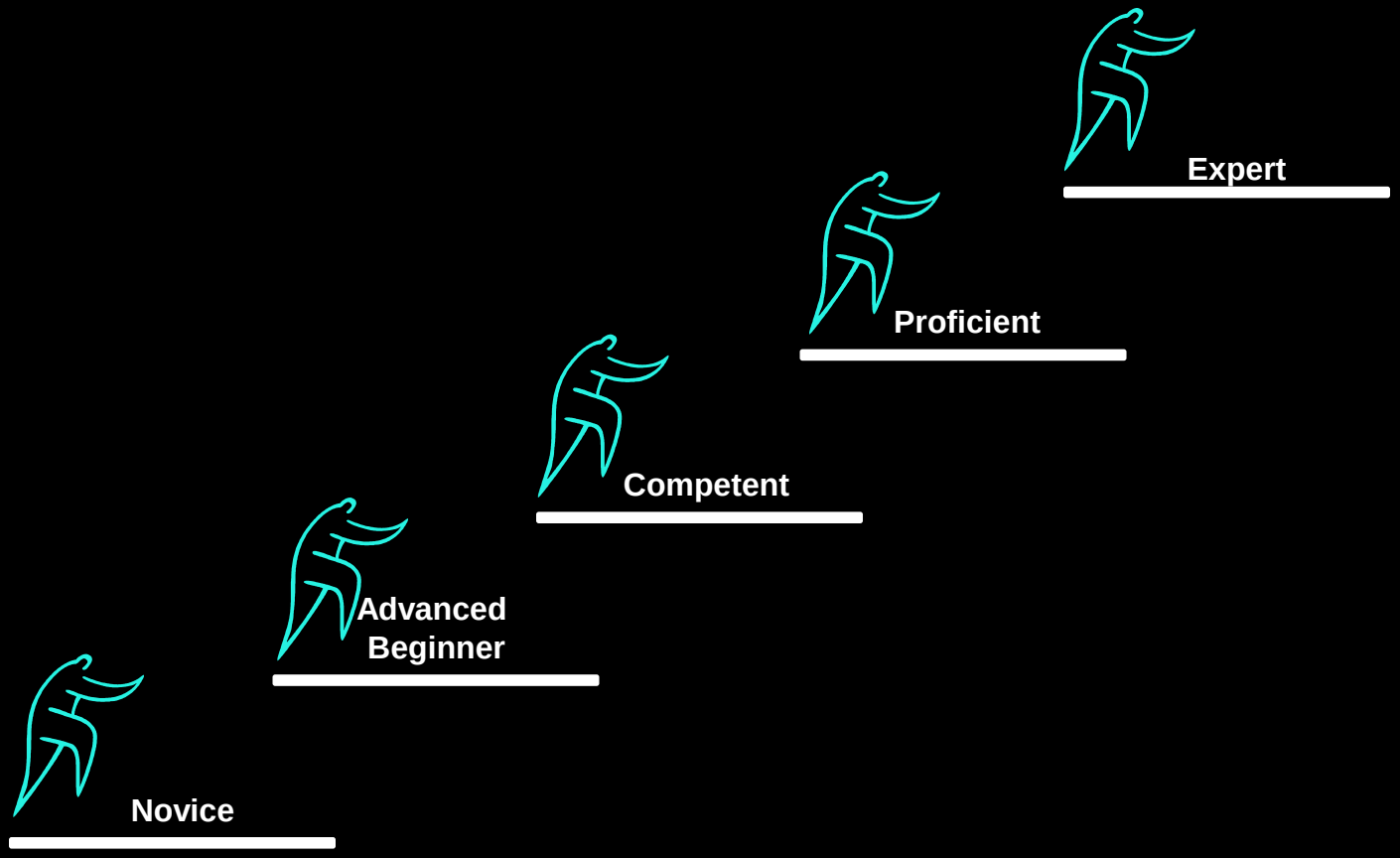
Climb the ladder



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Or rather...

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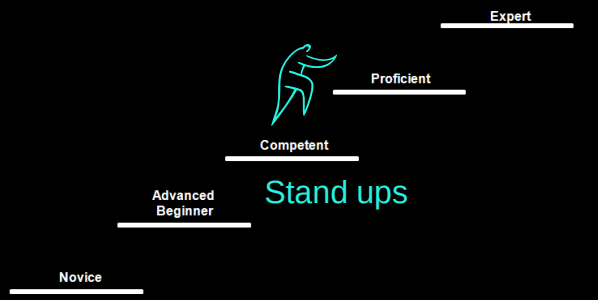
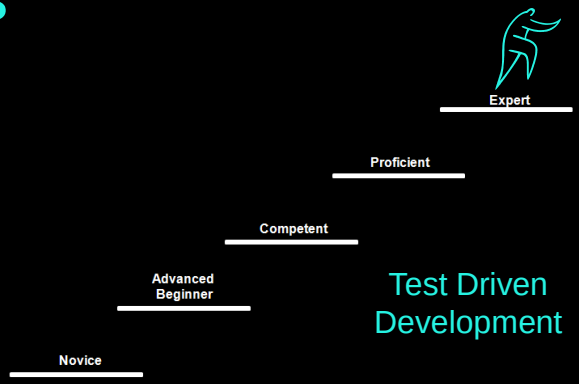
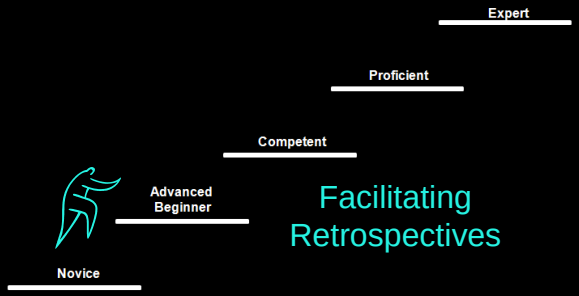
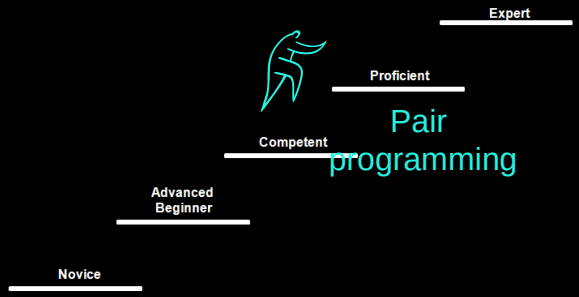
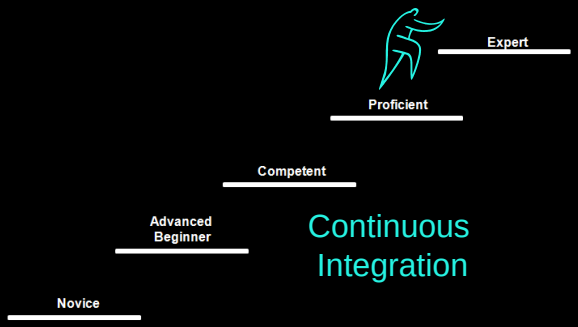
Climb the ladders











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Further refinement

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Group related practices into roles

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A warning...

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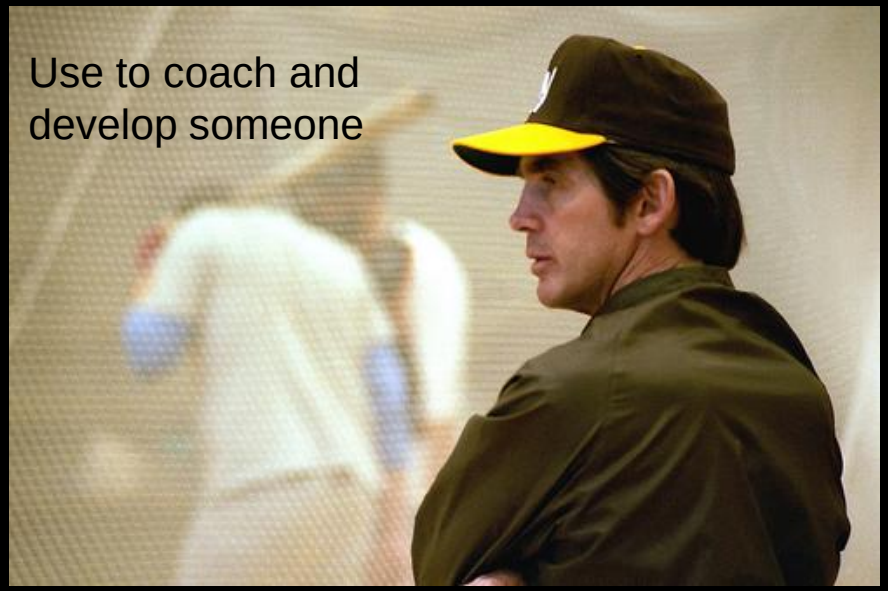

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Concluding thoughts...

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It was easier for me to bring...

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And now you have...

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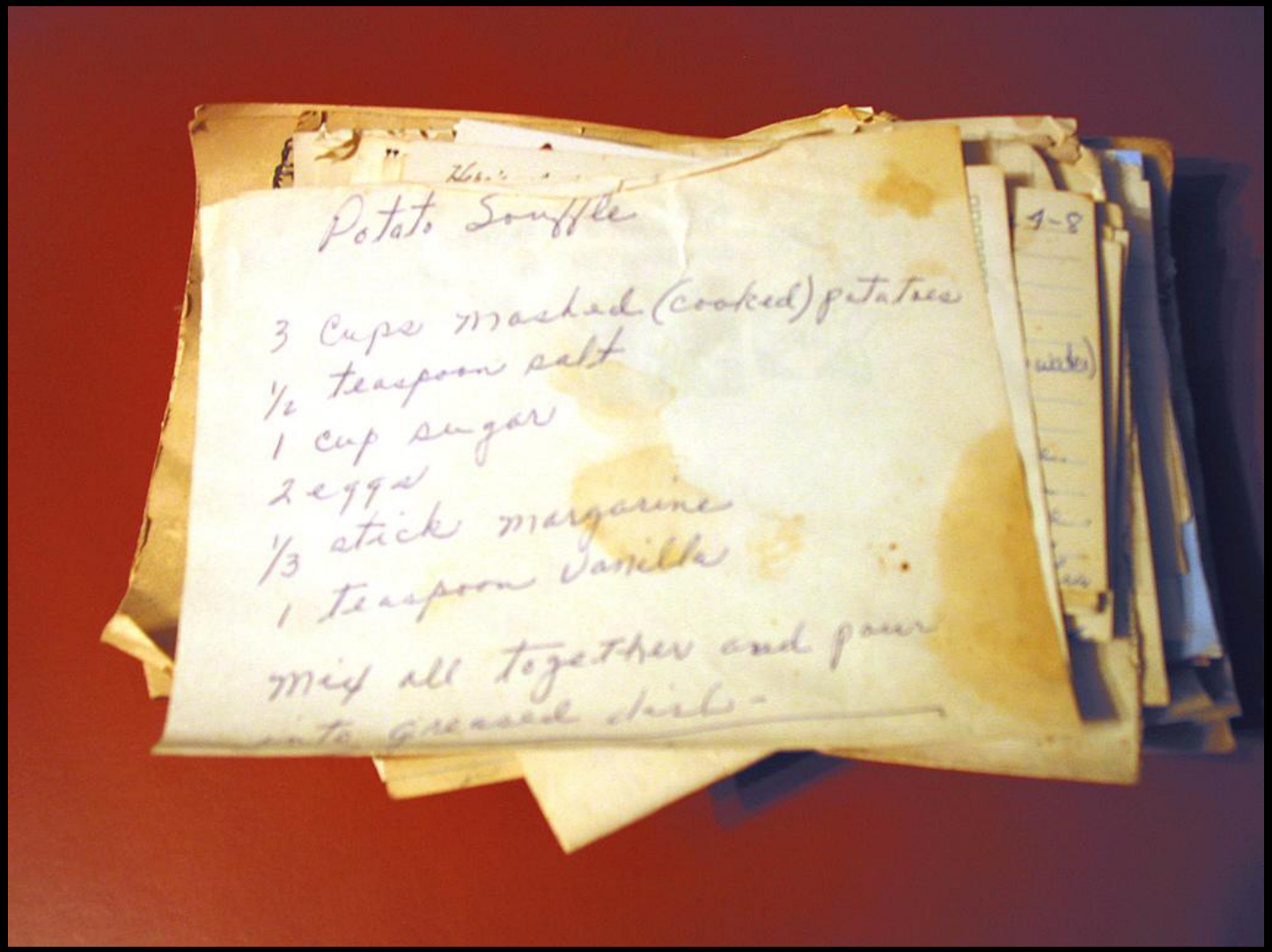

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