Climbing the Dreyfus Ladder of Agile Practices

with Patrick Kua

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Look at what people consider when introducing agile...
Values

Principles

Practices

- Pair Programming
- Continuous Improvement
- Iteration Planning Meeting
- Information Radiators
- On-site Customer
- Stand up Meetings
- Showcases
- Limit Work in Progress
- Test Driven Development
- Refactoring
- Retrospectives
- Behaviour Driven Development
- Release Frequently
- Etc...

In the context of...

Coaching these...

EASIER

HARDER

* see http://agilemanifesto.org/principles.html
** see http://agilemanifesto.org
Practice Adoption
An example using cars
Driving aptitude?
Would you put this driver?
In the seat of this car?
I sure hope not!
“Driving”

Learners

Most people (You and me)

Formula 1 Drivers
Learning about learning

Learning preferences  Teaching approaches  Behavioural models

Our focus
Different Behavioural Models

Shu Ha Ri

Dreyfus Model

Kolb learning model

Conscious, Unconscious Competence, Incompetence
Briefly...
Shu

守

“maintain”, “protect”

Ha

破

“detach”

Ri

離

“go beyond”, “transcend”
[1] Will Taylor, Chair, Department of Homeopathic Medicine, National College of Natural Medicine, Portland, Oregon, USA, March 2007
Kolb’s Cycle of Experiential Learning

Concrete Experience
(1)

Reflective Observation
(2)

Active Experimentation
(4)

Abstract Conceptionalisation
(3)
Dreyfus Model of Skills Acquisition

- Novice
- Beginner
- Advanced Beginner
- Competent
- Proficient
- Expert

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Notice anything?
Notice anything?

![Diagram with labels: Shu, Ha, Ri, 和图示与文字: 守破離 (Shu Ha Ri) and Concrete Experience, Active Experimentation, Reflective Observation, Abstract Conceptionalisation (1, 2, 3, 4).]

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Different Behavioural Models

Shu Ha Ri

Dreyfus Model

Kolb learning model

Conscious, Unconscious Competence, Incompetence

Our focus for this session
# The Dreyfus Model of Skill Acquisition

<table>
<thead>
<tr>
<th>Skill level(*)</th>
<th>Novice</th>
<th>Advanced Beginner</th>
<th>Competent</th>
<th>Proficient</th>
<th>Expert</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recollection</td>
<td>Non-situational</td>
<td>Situational</td>
<td>Situational</td>
<td>Situational</td>
<td>Situational</td>
</tr>
<tr>
<td>Recognition</td>
<td>Decomposed</td>
<td>Decomposed</td>
<td>Holistic</td>
<td>Holistic</td>
<td>Holistic</td>
</tr>
<tr>
<td>Decision</td>
<td>Analytical</td>
<td>Analytical</td>
<td>Analytical</td>
<td>Intuitive</td>
<td>Intuitive</td>
</tr>
<tr>
<td>Awareness</td>
<td>Monitoring</td>
<td>Monitoring</td>
<td>Monitoring</td>
<td>Monitoring</td>
<td>Absorbed</td>
</tr>
</tbody>
</table>


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
Pick a model

Identify desired behaviours

Map to model

Use as a coaching tool
Iteration 1 (an example)
Pick a model

Identify desired behaviours

Map to model

Use as a coaching tool
Dreyfus Model of Skills Acquisition

- Novice
- Advanced Beginner
- Competent
- Proficient
- Expert
Pick a model

Identify desired behaviours

Map to model

Use as a coaching tool
Agile Practice: Stand Up

- Turns up on time
- Covers what they did yesterday
- Covers that they're going to do today
- Encourages shy people to participate
- Identifies and corrects anti-patterns occurring
- Understands pigs and chickens
- Suggests methods to improve stand up
- Encourage other methods of communication outside of stand ups
- Keeps updates short
- Uses stand ups to help attract help for blockers
- Focus status updates on relevant topics
- Prompts for other meetings
- Steps in when topic is overrunning
- Uses stand ups to help attract help for blockers
- Suggests methods to improve stand up
Pick a model

Identify desired behaviours

Map to model

Use as a coaching tool
Novice

Flag blockers
- Keeps updates short
- Focus status updates on relevant topics
- Prompts for other meetings
- Suggests methods to improve stand up

Identifies and corrects anti-patterns occurring
- Uses stand ups to help attract help for blockers
- Understands pigs and chickens
- Steps in when topic is overrunning
- Turns up on time

Encourages shy people to participate
- Covers what they did yesterday
- Covers that they're going to do today
- Encourage other methods of communication outside of stand ups

Expert

Advanced Beginner

Competent

Proficient

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Your turn...
Iteration 2 (practice round)
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
Mapping to the model

- Novice
  - Pick a model
  - Identify desired behaviours
  - Map to model
  - Use as a coaching tool

- Beginner

- Advanced

- Proficient

- Expert
What did we miss?
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

**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
Mapping to the model

Novice

Beginner

Advanced

Competent

Proficient

Expert

- Pick a model
- Identify desired behaviours
- Map to model
- Use as a coaching tool
Walkthrough
Pick a model

Identify desired behaviours

Map to model

Use as a coaching tool
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?
Pick a model
Identify desired behaviours
Map to model
Use as a coaching tool
Climb the ladder
Or rather...
Climb the ladders

Stand ups

Facilitating Retrospectives

Pair programming

Test Driven Development

Continuous Integration
Further refinement
Group related practices into roles
A warning...
NOT! A tool to fire someone with

Use to coach and develop someone
Concluding thoughts...
It was easier for me to bring...
And now you have...
Potato Soufflé

3 cups mashed (cooked) potatoes
1/2 teaspoon salt
1 cup sugar
2 eggs
1/3 stick margarine
1 teaspoon vanilla

Mix all together and pour into greased dishes.
Questions?
Feedback Please
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