

Skill acquisition

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1 Dreyfus model of skill acquisition

According to the model, we go through stages when learning

1. Novice
 - We need instructions for what to do and how to do it
 - We have no interest in why, we just want to achieve the goal
2. Intermediate novice
 - Can perform tasks without detailed instructions
 - Needs support and feedback to feel secure
 - Starts to see patterns in the field
3. Competent
 - Can perform tasks without instructions
 - Independent
 - Ask why things are done a certain way
4. Proficient
 - Understands why things are done in a certain way
 - Can reason about future effects of actions
5. Expert
 - Has intuitions about why things are done
 - Speaks in metaphors
 - Thinks about other ways of doing things

1.0.1 Applied to software development

As measured in the early years of this century:

- 25% at Novice
- 60% at Intermediate Novice
- 8% at Competent
- 6% at Proficient
- 3% at Expert

Few people advance beyond Intermediate Novice, because it requires passion to do so!

Self assessment follows Dunning-Kruger. The lower your skill, the more you tend to overestimate it.

If you want to advance in a skill, you have to challenge yourself.