Trainees have long apprenticed alongside experts, participating more fully as they earn their mentors’ trust. Novice physicians still rely on learning by doing under the guidance of experts. Termed legitimate peripheral participation, learners begin by engaging in simple but real tasks, tackling increasingly complex and more central roles as their supervisors’ trust increases.

Cognitive apprenticeship: Applying the methods outlined here, experts make explicit the thought processes, heuristics, and problem-solving strategies used to address complex challenges.

Modeling: Expert demonstrates an approach to a problem or a patient, serving as a role model for the novice (e.g., during a difficult conversation).

Articulation: Both expert and novice must verbalize what would otherwise be internal thought processes (e.g., by answering “why?”).

Coaching: Expert provides guidance before, during, and after the novice’s performance, providing proactive and reactive instruction and feedback.

Exploration: The novice begins to branch out, applying knowledge or experience from other domains (e.g., a learner may adapt the expert’s approach, applying it in a different manner or in a different sequence).

Reflection: The novice solidifies understanding through deliberate contemplation of past and future performance.

By providing intentionally layered scaffolding throughout a cognitive apprenticeship, the expert supports the novice’s development of patterns for understanding problem solving, encouraging increasing autonomy as trust is earned.

References:

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