Deliberate Practice
Teaching of Tomorrow, November 2018

Can you do this?

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Estimated Accumulated Practice (Hours)

Age of the Pianists (Years)
Deliberate Practice

› A goal-oriented, highly targeted, error-focused, repetitive, effortful practice
› Focus on the process as opposed to the outcome
› Prompt feedback from knowledgeable people
› Apply it immediately

So…it is not “practice makes perfect”, but “perfect practice makes perfect” OR “purposeful practice makes perfect”

How do you teach the complete History and Physical exam (and the oral presentation and the write up)?

It is the beginning of third year…

And now, it is the beginning of 2nd year…

Teaching Complex Integrated Tasks

› How do you teach medical students to gather a complete history?

Lay a foundation with individual parts
BUT, then you have to give them practice putting it all together
The Reason for Deliberate Practice: Learning and Forgetting Curves

Physical Diagnosis or Hospital Sessions-Spaced Repetitive Learning

Third Year-Spaced repetitive Learning helps to limit forgetting
The Teacher as Coach

Deliberate Practice and Skill Development: Bringing the focus to Teaching Methods

Table 1. Four-Step Method of Walker and Peyton™ to Teach a Manual Procedural Skill™

<table>
<thead>
<tr>
<th>Step No. and Name</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Demonstration</td>
<td>Instructor performs the task at normal speed</td>
</tr>
<tr>
<td>2. Deconstruction</td>
<td>Instructor performs the task slowly while verbally breaking it down into simple steps</td>
</tr>
<tr>
<td>3. Formulation</td>
<td>Instructor performs the task slowly while being “talked through” each step by the student</td>
</tr>
<tr>
<td>4. Performance</td>
<td>Student performs the task slowly while talking himself or herself through it</td>
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</tbody>
</table>

*This table was adapted from Hamdorf and Hall™ with permission of the publisher, John Wiley & Sons Ltd, on behalf of the British Journal of Surgery Society Ltd.

The Brain when performing a new task changes with repeated effort
“That’s where your craft comes in.”... Treadwell also realized that while he had always put in the effort, he would sometimes sweat for the sake of sweating. “I really got the mental side of it,” he says. “It’s not just working hard. It’s knowing what you are working on and working for a purpose.”

Laquon Treadwell, on recovering from an ankle fracture
Sports Illustrated, 9/14/15
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Deliberate Practice and Teaching Methods:
Starting down the road to expertise

› Demonstration

› Deconstruction including Task analysis

› Formulation
  - learner talks the expert through the task:
  - this is where learner talks about what they learned and we get the chance to hear what they learned, not what we taught

› Performance

Deliberate Practice in Action

https://www.youtube.com/watch?v=daC2EPuH22w

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