

Teaching Tips

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Clinical Reasoning - Part 3

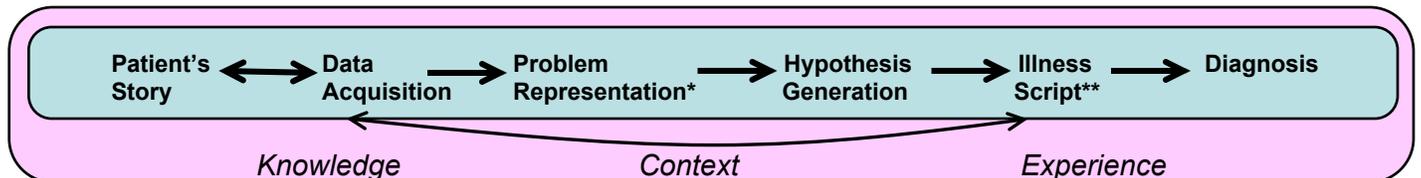
In Part 3 of this Teaching Tips series, we offer several practical strategies to foster the learner's development of clinical reasoning using combined models.

1990s: A Combination of Analytic and Non-Analytic Models (a Dual Process)

With no one approach to clinical reasoning shown to be superior, researchers then studied the impact on accuracy when combining approaches. These studies suggest that the best teaching method is through multiple examples. Eva recommends building a mental database of cases to support the development of non-analytical skills. **This is better achieved by working through a large number of common cases in different contexts than by working through a few complex cases.**

Key Elements and Teaching Strategies

Rather than presenting a new model, Bowen discusses the key elements of clinical reasoning that combine aspects of analytic and non-analytic models, and consider the learner's knowledge and experience within a situational context. Learners may need to develop one skill more than others. The table below highlights these strategies.



| Element/Skill | Symptom of Reasoning Gap | Strategy (ask student to...) |
|---------------|-------------------------------------|--|
| Data Acquis | Presentation lacks important info | Observe preceptor model data acquisition |
| Problem Rep | Disorganized presentation | Articulate explicit summary statement |
| Hypothesis | Differential not linked to findings | List all important findings, then prioritize |
| Knowledge | Far-fetched diagnosis | Describe prototype, compare with case |
| Experience | Reasoning below level | Share past experience with similar case |
| Context | Risk of premature closure | Identify and defend top 2 diagnoses |

References / Resources:

Eva, K. (2004). What every teacher needs to know about clinical reasoning. *Med Educ*, 39, 98-106.

Bowen, J. L. (2007). Educational strategies to promote clinical diagnostic reasoning. *NEJM*, 355, 2217-25.

* one-sentence summary defining case in abstract terms; often sub-conscious process.

** mental recollection of specific experiences with similar clinical features.

