Parallel Universes: Taking a Clinical Approach to Diagnose Learners’ Needs

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Teacher: disseminator of knowledge and a facilitator of learning

Objectives

• Review steps of clinical decision-making
• Review parallel steps of diagnosing learners’ needs
• Introduce “Teaching ROS”
• Review local data on learner-centered needs
• Panel discussion
• Review challenging situations

Clinical Reasoning Cycle

Obtain & filter information
Formulate initial diagnoses
Obtain additional information
Prioritize differential diagnoses
Test final diagnosis

Educational Framework – “Teaching ROS”

• Developed at Stanford Faculty Development Center for Medical Teachers
• Designed to provide teachers with method for analyzing & improving teaching
• Multi-purpose
  – Organize observations
  – Classification of problems
  – Generate solutions
  – Facilitate experimentation

Diagnosing Learners’ Needs
Video Vignette

• What teaching behaviors did you observe?

Educational Framework

• Learning Climate
• Control of Session
• Communication of Goals
• Promotion of Understanding & Retention
• Evaluation
• Feedback
• Promotion of Self-Directed Learning

Learning Climate (LC)
The tone or atmosphere of the teaching setting (including whether it is stimulating and whether learners can comfortably identify and address their limitations).

• Key Components of LC
  1. Stimulation – not pimping, but making sure that attendings ask meaningful questions and encourage questions
  2. Learner involvement (feel more like part of the team; doing meaningful work on team)
  3. Respect & Comfort (should separate these 2 items)
  4. Feel comfortable making mistakes
  5. Small/familiar group setting to comfortably ask questions
  6. Introduce student to all team members (familiarity; interprofessional)
  7. Open to questions
  8. Availability
  9. “Personalization”: what works for one student might not work for another. Use multiple learning tools (e.g., some students might prefer reading articles while others prefer small group discussions)

Communication of Goals (CG)
The establishment and explicit expression of a teacher’s and/or learners’ expectations for the learners.

• Key Components of CG
  1. Expression of Goals
     a. Timing (early and later also)
        i. No later than 2nd day on a rotation.
     2. Explicitly specific terms

Evaluation (EV)
The process by which the teacher assesses the learners’ knowledge, skills and attitudes, based on criteria related to educational goals.

• One student’s comment: “This section seems subjective to most medical students. They feel like they have to seek it out.”

• Key Components of EV
  1. Direct observations – not enough of this in terms of patient interactions
  2. Indirect observation (gather info from others – residents, nurses, patients, etc)
  3. Questioning (verbal on rounds vs. written quizzes/exams)
  4. Express to the medical student HOW you will be evaluating them
  5. Timing is important: real-time evaluation vs. end of rotation
  6. Importance of evaluation against a stated standard to which all learners are compared (i.e., different teachers evaluate differently): example, students at different hospitals for a certain clerkship might have nearly identical feedback but were evaluated very differently as shown by their final grade
Feedback (FB)
The process by which the teacher provides learners with information about their performance for the purpose of improving their performance.

- Key components of FB:
  1. Timely – sooner is ideal; feedback at end of rotation when you can’t make changes is frustrating.
  2. Frequency
  3. Quantity is important: some students may appreciate more detailed feedback while others need generalized.
  4. Setting aside dedicated time & place
  5. Specificity, based on established goals and adjusted goals
  6. Constructive with action plan – use RIME framework early on for feedback
  7. Honesty (both ways)
  8. Bi-directional – teachers should ask for feedback from learners for teacher’s improvement
  9. Positive feedback; compliment sandwich

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Teaching/Learning Cycle

- Feedback
- Communication of Goals
- Learning Climate
- Evaluation
Panel Discussion:
Learner Needs & Challenging Situations

Take Home Points

- Treat teaching session with same diagnostic care as clinical encounter
  – Use your observational & diagnostic skills
- Use Educational Framework as your ROS to generate differential diagnosis of teaching session
- Involve/observe/question learners throughout teaching process
- Explicitly communicate your goals to enable more meaningful evaluation & feedback