BACK TO BEDSIDE TEACHING

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Who Are Our Learners?

- **Adult learners**
- **Minimal medical experience**
- **Much data available**
  - **But in an unusable form**
- **Little processing skills**

Stages of Acquiring Competence

- **Level 1: Unconsciously incompetent (UI)**
- **Level 2: Consciously incompetent (CI)**
- **Level 3: Consciously competent (CC)**
- **Level 4: Unconsciously competent (UC)**

Principles of Adult Learning

- **Goals of adult education**
  - **Make the learner independent of the teacher**
  - **Avoid dependency - encourage independence**

Principles of Adult Learning

- **A sense of incongruity**
  - **The need to know, a deficit, a reason to change, a *learning imperative***
- **Active involvement in a safe and supportive learning experience**
- **Feedback to determine success or failure of the learning endeavor**

Principles of Adult Learning

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Adult Learning Deals With...

- **Consequences of action**
- **Analyzing and solving real problems**
- **Seeking out information in response to problems**
- **Immediate feedback**

Bedside Teaching

Bedside Teaching

"If medicine could be taught by lecturers, it follows that slide projectionists would be the paragons of medical knowledge."

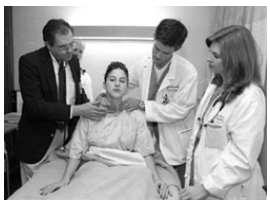
- J. Willis Hurst, M.D.

"Medicine is learned best by the bedside and not in the classroom."

- Sir William Osler

"… there should be no teaching without a patient for a text, and the best teaching is that taught by the patient himself."

Sir William Osler



The Decline (Demise?) of Bedside Teaching

- **There has been a decline in bedside teaching**
  - **30 years ago…**
    - **Bedside teaching comprised 75% teaching time**
  - **By 1978… had decreased to 16%**
  - **In 2006… ???????? (It's pretty pathetic)**
- **Much of education is now technology based**
- **This trend has compromised the clinical exam skills of young physicians**

Bedside Teaching
Why Do It?

- **How do we make a diagnosis?**

- **56% based on comprehensive history**
- **Up to 73% when physical exam**
- **Labs / imaging / etc only adds last 20-25%**

Bedside Teaching
Why Do It?

- **Students want it (and need it!)**
- **Patients like it**
- **It is a critical part of the developing of a competent clinician**
- **The students of today are the teachers of tomorrow**

Benefits of Bedside Teaching

- **Direct observation**
- **Use of all senses – sometimes ALL the senses!**
- **Clarification of the history and physical exam**
- **Teaching history and physical exam**
- **Opportunity to "mold" the learner's clinical skills**
- **Role modeling**
  - **Compassionate care**
  - **Interactive skills**

Bedside Teaching
The Student's Perspective

	Agree It's Effective? (%)	Getting Enough? (%)
Physical exam	99	53
History taking	93	73
Communication	90	79
Basic science	81	32
EBM	65	31
Self-directed learning	63	57
Time mgmt	60	28
Record keeping	55	21

Bedside Teaching
The Student's Perspective

- **100% agreed it was "valuable"**
- **Received enough bedside teaching**
  - **59% of senior level residents**
  - **51% of final year students**
  - **35% of junior level residents**

Bedside Teaching
The Patient's Perspective

- **78% enjoyed bedside teaching**
- **83% did not feel anxious**
- **68% understood their problems better**
- **84% would recommend bedside teaching to others**

Bedside Teaching The Patient's Perspective

- **12% felt confidentiality breached**
- **17% who did not enjoy bedside teaching, stated the experience was not unpleasant**
- **7% who stated discussion was inappropriate, qualified use of medical jargon**

Reality in Bedside Teaching

- **Bedside teaching skills CAN be achieved**
- **Learners DO NOT expect perfection**
- **Teaching is why we went into academics!**
- **Teaching ethic**
  - **It is what WE determine is valuable**
  - **Universities are changing – we need to stand our ground**

Barriers to Bedside Teaching

- **Teacher-related**
- **Teaching climate-related**
- **System-related**
- **Patient-related**
- **Miscellaneous**

Bedside Teaching
Obstacles

- **Need for immediate expert stabilization of critically ill patients**
- **Maintenance of patient flow**
- **Maintenance of patient care quality**
- **Assurance of patient satisfaction**
- **Not trained as teachers**
- **Not paid to teach**

Obstacles to Effective Clinical Teaching

- **TIME**
  - **↑ documentation requirements**
  - **↑ patient volume / acuity (service demands)**
  - **↑ administrative / academic demands**
- **Noise**
- **Interruptions**
- **Concern for patient comfort / anxiety**
- **Confidentiality / privacy issues**
- **Duty hours restrictions**

Obstacles to Effective Clinical Teaching

- **Lack of understanding of learner's needs**
- **Lack of experience**
- **Unrealistic expectations**
- **Discomfort with teaching**
- **Lack of recognition / reward for teaching**

"Daily contact with students, and a little of the routine of teaching, keep us in touch with the common clay and are the best preservatives against that staleness so apt to come as a blight upon the pure researcher."

--Sir William Osler

Key Insights to Bedside Teaching

- **Insure the session is learner-centered**
- **Not the time to demonstrate teacher eloquence on medicine**
- **Will help relieve "performance pressure" on the part of the clinical teacher**
- **We *all* have something to offer the learner**

Clinical Teacher's Roles

- **Patient care delivery (diagnose the patient)**
  - **Legal responsibility to provide highest quality of care**
- **Teach the art and science of clinical practice**
  - **Target the teaching to specific needs**
- **Evaluate the learners (diagnose the learner)**
  - **Assure that residents acquire the knowledge, skills, and attitudes to become competent emergency physicians**

Components of Bedside Teaching

- **Observation**
- **Demonstration**
- **Explanation**
  - **Discussion**
  - **Reflection**
  - **Feedback**
  - **Correction**
- **Supervision**

Bedside Learning

- **Experiential Learning**
  - **Situated learning**
    - **Patient-based**
  - **Guided demonstration**
    - **Patient-based, guided education**
  - **Practice**
  - **Apprenticeship**
  - **Legitimate peripheral participation**
    - **Observers also participate in the bedside learning experience**

Explanation of the Clinical Experience

- **"Experience is an inaccurate teacher"**
- **Learner's experience alone is insufficient**
  - **Clinical events may not be examined carefully**
    - **Unrecognized**
    - **Misinterpreted**
  - **Experience may be an "inaccurate" teacher**
    - **Same mistakes are uncritically repeated**
  - **Need to reflect, connect and further knowledge base**

Deliberate Practice

- **Defined tasks with goals**
- **Feedback – necessary to learning**
- **Refinement of performance**
  - **Repetition**
  - **Variety**
    - **Eg: Ddx of SOB – differentiate, compare, contrast**
- **Challenge to level of competence**
  - **Continually ask questions, challenge**
- **Thinking**

Discussion of the Clinical Experience

- **Adds work of others to the understanding of this patient encounter**
  - **Chance to integrate EBM, experienced clinician's experience**
- **Connects the experience with the learner's own previous learning**

Discussion of the Clinical Experience

- **We are teaching "illness scripts"**
  - **Expanding number of diagnostic triggers by which we link clinical features with diagnostic explanations**
  - **Creating "pattern recognition"**
    - **Efficient, accurate diagnosis and management decisions**
- **We are the clinical teachers… but what exactly IS that?**

The Clinical Educator

- **As with all teaching, to be effective the teacher must know the "ground rules"**
  - **Principles of adult learning**
  - **Types of formal and informal education**
  - **Teaching "microskills"**
  - **The teachable moment**
  - **Use of feedback**

What is a Clinical Teacher?

- **A teacher**
  - **Has knowledge**
  - **Has experience**
  - **Has the role of teacher, role model, mentor**
- **A teacher's natural urge is to share all that you know, however….**

What is a Clinical Teacher?

- ***RESIST THAT URGE!!!***
- **A clinical teacher needs to learn how to be a good clinical *educator***
  - **Not necessarily a natural talent**
  - **Not necessarily intuitive**

What is the Best Way to Teach?

- **Focus on the learner**
- **"Diagnose" the learner**
- **Give the learner appropriate feedback**
- **Understand the principles of adult learning**

Setting the Stage

- **Find out what the learner needs and expects**
- **Tell the learner what is expected of him or her**
- **Assure a safe and supportive environment**
- **Reinforce the need for intellectual honesty**
- **Tell the learner that "thinking out loud" is encouraged**
- **Inform the learner that you will provide feedback**

The Microskills of Clinical Teaching

- **Can be applied to virtually any teaching situation, but best for**
  - **One-on-one teaching (eg. the teachable moment)**
  - **Small group teaching**
- **Ideally, should only last 5 minutes or so**
- **Has several basic components…**

The Microskills

- **Step 1: Get a commitment**
- **Step 2: Probe for supporting evidence**

The Microskills

- **Step 3: Teach general rules**
- **Step 4: Reinforce what the learner did well**

The Microskills

- **Step 5: Correct mistakes**
- **Step 6: Identify the next learning steps**

The Microskills

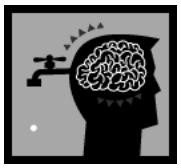
- **Step 1: Get a commitment**
  - **When the learner asks for your guidance or waits for your response…**
    - **Do not just give them the answer!**
  - **"Get a commitment"**
    - **Elucidate what the learner is thinking**

The Microskills

- **Step 1: Get a commitment**
  - **Examples**
    - **What do you think is going on?**
    - **Why do you think the patient is here?**
    - **What do you want to do next in the workup?**
- **AVOID the urge to agree or disagree at this point**
- **You need more information about the learner to be an effective teacher, so…**

The Microskills

- **Step 2: Probe for Supporting Evidence**
  - **Need to know WHY the learner thinks WHAT they think**
  - **Need to understand the learner's reasoning**



The Microskills

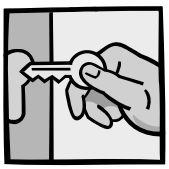
- **Step 2: Probe for Supporting Evidence**
  - **Good types of questions to ask**
    - **What are the findings that led to your conclusion?**
    - **What else did you consider?**
    - **Why did you rule out _____?**

The Microskills

- **Step 2: Probe for Supporting Evidence**
  - **Types of statements to avoid**
    - **I don't think that's right. Any other ideas?**
    - **Wow.. This is a classic case of ____**
    - **What were the vitals? What are the meds?**
      - **(Can get this by asking "Is there anything else you need to know?")**

The Microskills

- **Now, after you…**
  - **Get a commitment, and**
  - **Probe for more information**
- **You can discern…**
  - **What the learner knows**
  - **What the learner needs to learn**
- **Time to apply some general concepts about the case for the learner**



The Microskills

- **Step 3: Teach general rules**
  - **Teach case-specific bits of information**
  - **Give bite-sized pieces**
  - **Example**
    - **"Patients with kidney stones tend to present with unilateral colicky pain and may have nausea and vomiting. The abdominal exam is typically benign."**

The Microskills

- **Step 3: Teach general rules**
  - **Avoid taking over the case**
  - **Example**
    - **"This patient obviously has a kidney stone and needs pain medication and a spiral CT scan."**
- **Avoid a long didactic session… this is not the time for the mini-lecture or monologue**
- **Keep it short and sweet – the educational "hit and run"**

The Microskills

- **You're not finished…**
- **The learner may not know what they did well or could improve upon**
- **Now come the next microskills…**

The Microskills

- **Step 4: Reinforce what the learner did well**
  - **Repeated reinforce what the learner did right**
    - **Builds the learner's self-esteem**
  - **Make the reinforcement behavior specific**

The Microskills

- **Step 4: Reinforce what the learner did well**
- **Examples**
  - **"Your H&P were complete and appropriate for the patient's complaint. Putting together the history of syncope and right lower quadrant pain and getting the additional menstrual history were crucial to your making the correct diagnosis of ectopic pregnancy."**

The Microskills

- **Step 4: Reinforce what the learner did well**
- **Another example**
  - **"Your sensitivity to the patient's concerns about the cost of hospitalization showed how aware you are of the financial implications of your medical care, and you handled it professionally and caringly."**

The Microskills

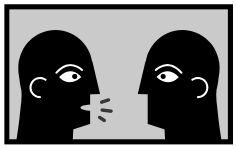
- **Step 4: Reinforce what the learner did well**
- **Don't offer useless reinforcement**
  - **"You did a good job with that patient."**
  - **"You need to be nicer to patients."**

The Microskills

- **Step 5: Correct mistakes**
- **As not every case goes perfectly, now is the time to correct mistakes**
- **Make sure the learner was warned ahead of time that correction is a part of learning**

The Microskills

- **Be nonjudgmental**
- **This step is near the end on purpose**
  - **Do not want to discourage learners**
- **Assure appropriate time and place for correction**



The Microskills

- **Step 5: Correct mistakes**
  - **Start by having the learner self-evaluate**
  - **Now, it's your turn**
    - **Comment on the learner's self-assessment**
    - **Offer observations**
    - **Offer suggestions for improvement**
    - **Be specific**

The Microskills

- **Step 5: Correct mistakes**
- **Example**
  - **"I understand how difficult it is to discern if something is significantly wrong with a patient who cannot give a coherent history, but we should try to perform a careful physical exam and get some information from other sources such as the patient's primary care physician."**

The Microskills

- **Step 5: Correct mistakes**
- **Useless feedback**
  - **"That was not the way to handle that consultant."**
  - **"You clearly need to do more reading."**

The Microskills

- **Step 6: Identify the next learning steps**
- **Ask the learner**
  - **What do you think you learned?**
  - **What more do you think you need to know?**

The Microskills

- **Step 6: Identify the next learning steps**
- **Offer resources for learner to get more information**
- **Decide on an action plan with the learner**
- **If possible, schedule a follow-up session to assure this step is taken**

PubMed National Library of Medicine NLM cochrane

The "Teachable Moment"

The Teachable Moment

- **Reality**
  - **Every case has many, many teachable moments**
  - **Requires close attention from the teacher**
  - **Best done immediately**
  - **Best done gently**
  - **Don't tackle too much in one moment**
    - **Educational "hit and run" – hit your point and move on**

The Teachable Moment

- **Should follow sound bedside teaching principles**
  - **Be sensitive to learner's needs / issues**
  - **Also, be sensitive to patient care issues**
  - **Make it pertinent to the learner**
  - **Never, *never* embarrass the learner**

The Teachable Moment

- **Identification of a teachable moment**
  - **Some areas you can "mine"**
    - **Patient history**
    - **Physical exam findings**
    - **Charting and documentation**
    - **Medical decision-making**
    - **Explication of information**

The Teachable Moment

- **Identification of a teachable moment**
  - **Some sources**
    - **From charts**
    - **From presentations**
    - **From bedside teaching and observation**
    - **From management plans**

The Teachable Moment

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    - **From charts**
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    - **From management plans**

The Teachable Moment

- **Examples – from charts**
  - **E.g. - Documenting tetanus prophylaxis in wound care**
    - **Teach importance of documentation**
    - **Discuss indications for passive and active immunization**

The Teachable Moment

- **Identification of a teachable moment**
  - **Some sources**
    - **From charts**
    - **From presentations**
    - **From bedside teaching and observation**
    - **From management plans**

The Teachable Moment

- **Examples – from presentations**
  - **E.g. – Disjointed presentation**
    - **Teach how to give organized presentation**
    - **Allow presenter to try it again immediately**
    - **Teach formal presentation versus presentation to a consultant**

The Teachable Moment

- **Identification of a teachable moment**
  - **Some sources**
    - **From charts**
    - **From presentations**
    - **From bedside teaching and observation**
    - **From management plans**

The Teachable Moment

- **Examples – from bedside teaching**
  - **E.g. – observe history-taking from a difficult patient**
    - **Teach bedside manner techniques**
    - **Teach alternative sources of medical information**

The Teachable Moment

- **Examples – from bedside teaching**
  - **E.g. – observing a pelvic exam**
    - **Teach patient comfort measures**
    - **Teach techniques to improve exam findings**
    - **Discuss utility of pelvic exam – limitations and value of exam**

The Teachable Moment

- **Identification of a teachable moment**
  - **Some sources**
    - **From charts**
    - **From presentations**
    - **From bedside teaching and observation**
    - **From management plans**

The Teachable Moment

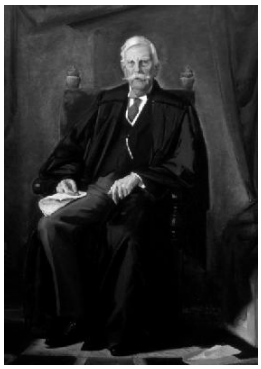
- **Examples – from management plans**
  - **E.g. – Stabilization of patient in acute respiratory distress**
    - **Teach airway evaluation**
    - **Discuss evaluation of adequacy of oxygenation and ventilation**
    - **Delineate uses and limitations of pulse oximetry**
    - **Teach only when appropriate for current patient's care**

The Teachable Moment

- **Examples – from management plans**
  - **E.g. – Patient in ventricular tachycardia**
    - **Discuss stable versus unstable VT**
    - **Explain recognition of VT versus aberrancy**
    - **Discuss management approach depending on type of VT – cardioversion, drugs, etc.**

The Teachable Moment

- **Make it brief – educational "hit and run"**
- **Use facilitated learning techniques versus didactic approach**
- **Keep it focused**
- **Address learner's needs – tailor to individual learner**
- **Give feedback in a timely fashion**



"The most essential part of a student's instruction is obtained...not in the lecture-room, but at the bedside. Nothing seen there is lost; the rhythms of disease are learned by frequent repetition; its unforeseen occurrences stamp themselves indelibly in the memory."

- Oliver Wendell Holmes, M.D.

- **"To study to phenomena of disease without books is to sail in uncharted seas, while to study books without patients is not to go to sea at all."**
- **Sir William Osler**

Thank You
For Your Attention!

Any Questions??