
Teaching Tips for Busy Clinicians

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Goals of presentation

After this presentation, you will be able to:

- ❑ Describe context of clinical teaching
- ❑ Describe the characteristics of an excellent clinical teacher
- ❑ Discuss the importance of creating a positive learning environment
- ❑ Outline specific instructional strategies that can be used in the clinical setting and give suggestions for their use
- ❑ Have an opportunity to practice several educational techniques that you can use in your own teaching.



How many here consider themselves teachers?



How many here consider themselves learners?



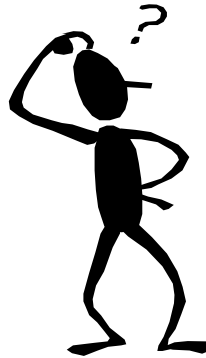
What problems have you had
being a clinical teacher
of students, clinical clerks or residents
in your clinic, ward, operating theater ...?

(write it down)



Define teaching

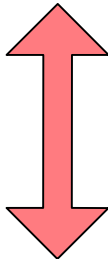
Define learning



Teaching & learning:
a process of cooperative interaction
for the purpose
of helping the learner change
their knowledge, skills, attitudes, behaviour



Teacher



Learner

A



B



What is teaching?

'Teaching is a messy, indeterminate , inscrutable, often intimidating and highly uncertain task.'

'Education for Judgment',
Harvard Business School



The context of clinical teaching



Clinical teaching is ...

- ❑ ... teaching & learning focused on, and usually directly involving, patients and their problems.

J Spencer

- ❑ ... the provision of guidance and feedback on matters of professional and educational development in the context of trainees' experience of providing safe and appropriate patient care.

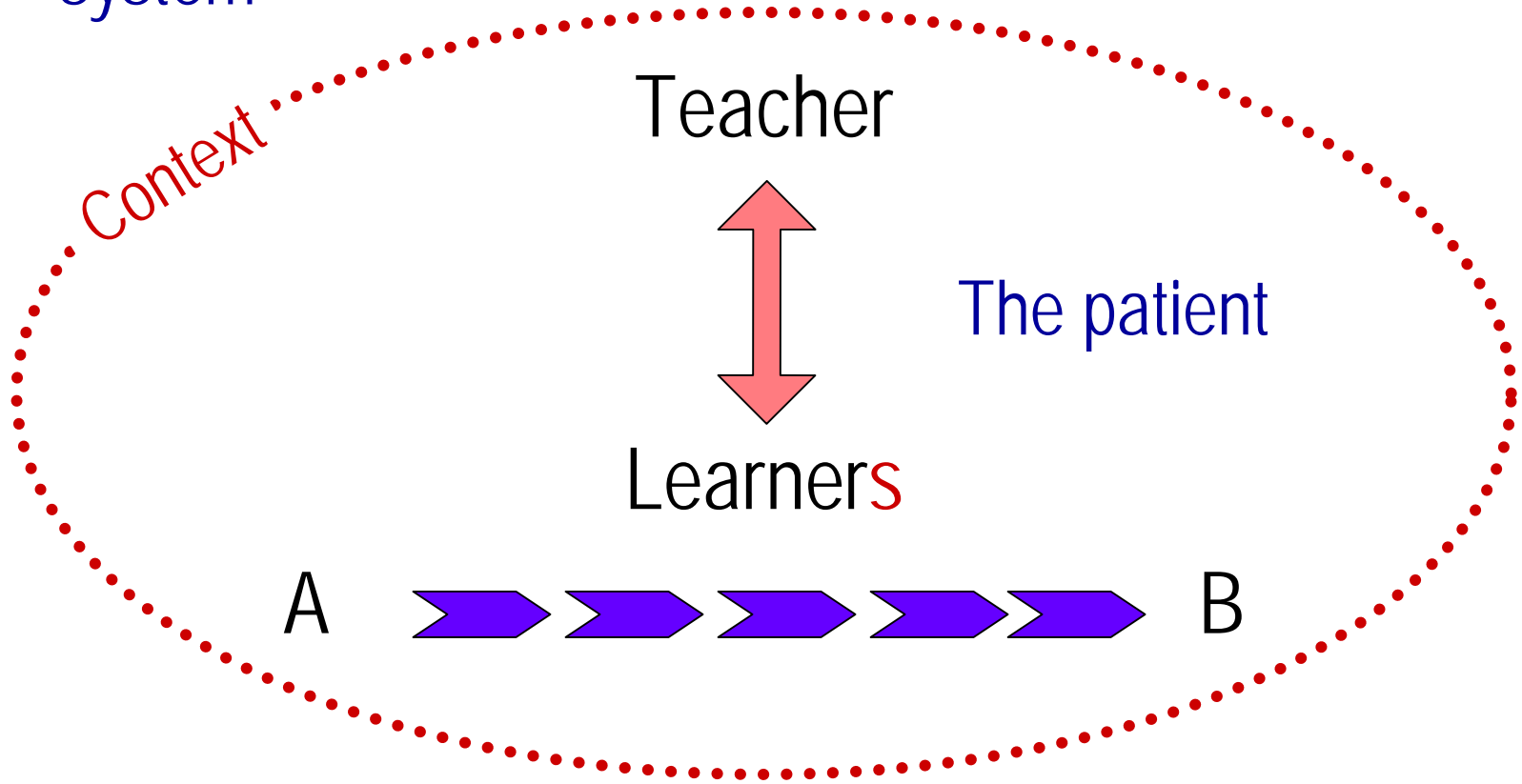
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- ❑ ... variable, unpredictable, immediate and lacks continuity ...

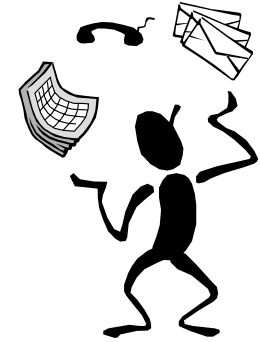
D Irby



Health care
system



Clinical teaching: a balance



- ❑ Education and clinical care
- ❑ Strengths and challenges
- ❑ Experience and principles
 - ❑ Clinical care
 - ❑ Education



Clinical teaching: Strengths

- ❑ Focused on real problems, in context of real practice
 - ❑ Relevance clear to learners
- ❑ Learners are active participants
- ❑ Professional thinking, behavior and attitudes are role modeled
- ❑ Integrated learning of H&P, clinical reasoning, decision-making, professionalism, empathy



What problems have you had,
being a clinical teacher
of students, clinical clerks or residents
in your clinic, ward, operating theater ...?



Clinical teaching: Challenges

- ❑ Time
- ❑ Competing demands (service – education tension)
- ❑ Opportunistic – planning difficult
- ❑ Increasing # of learners
- ❑ Case mix (inpatient wards) – teaching outside expertise; not broad enough for learning
- ❑ Under-resourced
- ❑ Clinical environment not 'teaching-friendly'
- ❑ Few rewards / recognition



Clinical teaching: Potential pedagogical problems

- ❑ Lack of clear expectations & objectives
- ❑ Recall of facts vs. problem-solving
- ❑ Multiple levels of learners, teaching pitched at wrong level
- ❑ Passive observation vs. active participation
- ❑ Inadequate supervision & feedback
- ❑ Little opportunity for reflection & discussion
- ❑ 'Teaching by humiliation'
- ❑ Lack of consideration for patient: privacy, dignity, consent
- ❑ ...



“Clinical teaching, though an educationally sound approach, is often undermined by problems of implementation”



A great clinical teacher



Characteristics of excellent clinical teachers



Think of your 'best clinical teacher'...

What words or phrases would you use to characterize *why* this person is an excellent teacher?

Write it down

Discuss it with the person next to you, and pick your 'top attribute'.



My best clinical teacher ...



Excellent clinical teachers ...

- ❑ Are clear and organized
- ❑ Are enthusiastic: motivate & stimulate
- ❑ Establish rapport with learners
- ❑ Actively involve learners
- ❑ Demonstrate clinical skills
- ❑ Provide direction and give feedback
- ❑ Are accessible
- ❑ Are analytical and knowledgeable



Clinical teachers must possess a wide range of knowledge, skills and personal attributes, and know how to apply them.

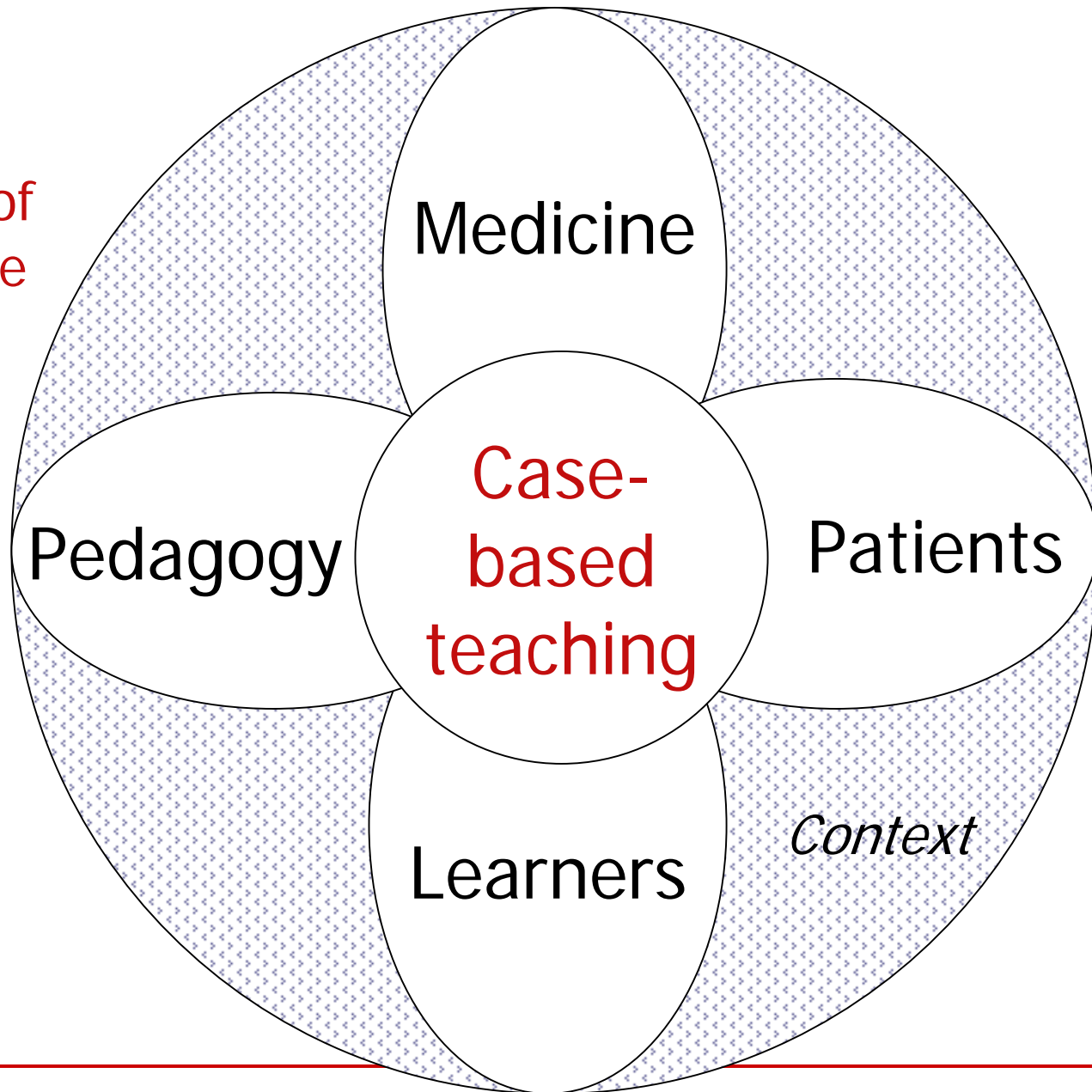


Clinical teachers need to know ..

- ❑ Medicine
- ❑ Patients
- ❑ Learners
 - ❑ General
 - ❑ Specific
- ❑ Principles of teaching (pedagogy)
- ❑ Context
 - ❑ Clinical
 - ❑ Learning
- ❑ Communication skills
- ❑ Curriculum
- ❑ Case-based teaching scripts



Clinical
teachers'
domains of
knowledge



It's not just being an expert ...



The difference between a knowledgeable expert and an effective clinical teacher:

a good teacher connects the content (subject)
and the context (learner, patient)
with pedagogical skills

PCK - "pedagogical content knowledge"

the way that subject knowledge for teaching &
learning is organized & selected



Roles of the clinical teacher

Physician (role model)

- ❑ Knowledgeable, competent
- ❑ Empathic
- ❑ Demonstrates professional behaviors, attitudes

Teacher

- ❑ Interested in teaching
- ❑ Spends time with learners
- ❑ Explains, answers questions
- ❑ Available

Supervisor (& assessor)

- ❑ Gives direction, feedback
- ❑ Delegates responsibility
- ❑ Involves learners

Supporter and Mentor

- ❑ Friendly, helpful, caring
- ❑ Values learners
- ❑ Positive attitude to patients and own career



Creating a positive learning environment



Create a positive learning environment

- ❑ Find the most appropriate setting
- ❑ Provide 'advanced organizers'
- ❑ Turn 'down time' into learning time
- ❑ Give graded responsibility for care
- ❑ Demonstrate enthusiasm for teaching
- ❑ Have fun!



Create a positive learning environment

- ❑ Encourage free exchange of information
- ❑ Form a collaborative learning community
 - ❑ residents as (co)teachers
- ❑ Do not answer everything immediately:
 - ❑ comfort with 'I don't know'
 - ❑ show your own willingness to learn,
 - ❑ show how – capitalize on information technology



Instructional strategies for the clinical setting



Instructional strategies for the clinical setting

1. Teach even when you are not an 'expert'
2. Make the most of the teaching moment
3. Go to the bedside
4. Utilize the 'one-minute teacher' method
5. Use specific methods when time is limited



1. Teaching when not an 'expert'

	Content	Process
Data gather Hx		
Data gather PE		
Problem list		
Investigation		
Diagnosis		
Patient management		

'What' *'How'*



Teaching when not an 'expert' - transfer of skills

With patient



With learner

Clinical skills

Personal qualities

Communication skills

Problem-solving skills

Reflection

Organizational skills



2. Make the most of the teaching moment



A teaching moment can be...

- ❑ A 5-minute discussion at morning report
- ❑ A brief discussion of an unexpected physical finding
- ❑ A case review / discussion at 02h00
- ❑ Formal bedside teaching rounds
- ❑ ...
- ❑ A mini-lecture or formal presentation
- ❑ A month with the clinical 'team'
- ❑ ...



Think of an example of a teaching moment relevant to your context.



3. Go to the bedside



"My method ... (is to) lead my students by the hand to the practice of medicine, taking them every day to see patients in the public hospital, that they may hear the patient's symptoms and see their physical findings"

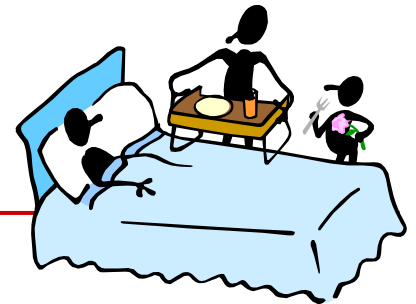


Sylvius, (17th Century Chair of Medicine, Leiden)

What can be learned at the bedside?

Knowledge, skills & attitudes related directly to the patient

- ❑ Skills: history, exam, procedures
- ❑ Respect for patient: dignity & comfort
- ❑ Professionalism
- ❑ Clinical honesty and tenacity
- ❑ 'Healing hands'
- ❑ 'Reflection in action'
- ❑ ...



Bedside teaching tips

- ❑ Plan
 - ❑ which patients?
 - ❑ what learning goals?
- ❑ Assess baseline knowledge & skills
- ❑ Demonstrate & observe at the bedside
- ❑ Develop data & generalize
- ❑ Summarize & synthesize
- ❑ Provide feedback to learners and patients

'the time physicians and students spend with patients should be devoted entirely to the patient'

Hurst quoted in Schwenk



4. Use the 'one-minute teacher' method



The 'one-minute teacher' - steps

1. Get a commitment - make a diagnosis
2. Assess the reasoning involved
3. Focus on a *single* teaching point
4. Identify what the learner did well
5. Identify & discuss areas to improve
6. Discuss steps to improve, or learning for next time



The 'one-minute teacher' example

1. Get a commitment
 - Make a diagnosis
2. Assess the reasoning involved
 - Probe for supporting evidence
3. Focus on a *single* teaching point
 - Teach general rules
4. Identify what the learner did well
 - Reinforce what was done right
5. Identify areas to improve
 - Discuss how to correct errors
6. Discuss steps to improve, or learning for next time



In what situations could you use
the one minute teacher?



Teach even when time is limited



No time to teach? Strategies, techniques & games

- ❑ Mnemonics
- ❑ 'Triggers'
- ❑ Brainstorm
- ❑ Short simulations
- ❑ Frameworks
- ❑ One-item observe & feedback
- ❑ Questions



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A memory aid, such as an abbreviation, rhyme or mental image that helps to remember something

Example?



No time to teach? Strategies, techniques & games

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A small bit of clinical material used to stimulate a *brief* discussion.

Example?



No time to teach? Strategies, techniques & games

- ❑ Mnemonics
- ❑ 'Triggers'
- ❑ **Brainstorm**
- ❑ Short simulations
- ❑ Frameworks
- ❑ One-item observe & feedback
- ❑ Questions

Idea generation with suspension of judgment so all group members can propose ideas without criticism.

Example?



No time to teach? Strategies, techniques & games

- ❑ Mnemonics
- ❑ 'Triggers'
- ❑ Brainstorm
- ❑ Short simulations
- ❑ Frameworks
- ❑ One-item observe & feedback
- ❑ Questions

Practice hands-on procedural or physical exam skills prior to doing it on real patient – *do only the critical or difficult part.*

Example?



No time to teach? Strategies, techniques & games

- ❑ Mnemonics
- ❑ 'Triggers'
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Provide an *approach* to problem rather than details: an algorithm, decision tree.

Example?



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Observe *one part* of history, exam, procedure or part of chart notes by learner, and provide *focused* feedback on it.

Example?



No time to teach? Strategies, techniques & games

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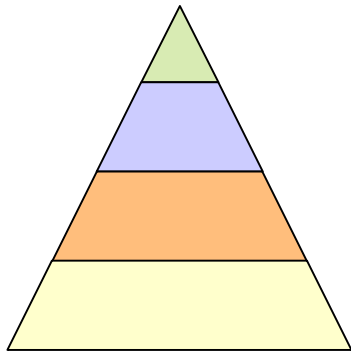


Using questions to promote clinical problem solving

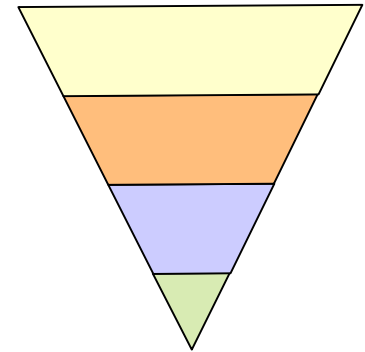
What's the most common teaching strategy used in clinical teaching...
at the bedside,
on the ward discussing a patient,
reviewing a patient in the ER?



Bloom's taxonomy



Evaluation
Synthesis
Analysis
Application
Comprehension
Knowledge



Evaluation

→ Choose best? Argue all sides?

Synthesis

→ Alternatives? New approach? Design?

Analysis

→ Differential Dx? Etiology?

Application

→ Use it? Given this patient ...?

Comprehension

→ Define? Interpret? Compare/contrast?

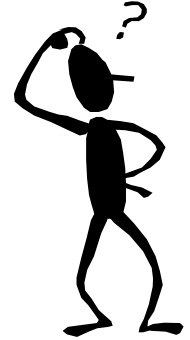
Knowledge

→ Who? What? Name? How many?



Examples of question types:

'...topic...'



Evaluation

Synthesis

Analysis

Application

Comprehension

Knowledge



The “question game”

- ❑ In pairs, choose a topic (medical or otherwise)
- ❑ Ask each other questions alternately that characterize one level of the taxonomy
- ❑ Move from ‘memory’ to ‘evaluation’ levels

- ❑ Remember – you don’t have to answer the questions, just ask!
- ❑ As you do this, think how you would use this in your teaching



How can you use this in your teaching?



In summary ...

- ❑ What I have learned about effective clinical teaching
- ❑ Link between good education and good practice



Things I have learned about effective clinical teaching



Clinical Teaching Pearls (1)

- ❑ Meet individual learner needs
- ❑ Capture attention
- ❑ Actively involve learners
- ❑ Teach concepts & frameworks - connect cases to these
- ❑ Be practical & relevant - go to the bedside



Clinical Teaching Pearls (2)

Use varying proportions of

- ❑ Questions
- ❑ Frameworks
- ❑ Wisdom
- ❑ Feedback

*Adjust your teaching strategies
to the context and learner*



Clinical Teaching Pearls (3)

- ❑ Don't answer everything immediately
- ❑ Show your own willingness to learn
- ❑ Don't teach too much: foster reflection & independent learning
- ❑ Observe performance & provide feedback ... frequently
- ❑ Have fun!



Link between good education & good practice

- ❑ Good clinical teachers are role models for good clinical practice

BUT

- ❑ Competing demands for clinical service and education:
 - ❑ For learner
 - ❑ For teacher

This could be
an advantage



Clinical teaching

- ❑ Provides role models of good practice → Undertake good practice
- ❑ Makes good practice visible → Demonstrate good practice
- ❑ Makes it clear to trainees → Explain good practice



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