



# Medical Education: Teaching on the Fly. Bedside Teaching and Feedback



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## Objectives

1. Recognize different adult learning theories
2. Utilize RIME framework to assess learners
3. Implement SMART goals to assist with learning
4. Utilize bedside teaching as invaluable teaching tool
5. Provide feedback on the fly

## Challenges to teaching

- Time
- Expertise (education, technique)
- Experience
- Too many hurdles



## Definitions

- “On the Fly”
- Adult Learning Theory
- RIME framework
- SMART goals

## What is “on the fly”

- Per ChatGPT
- “doing something quickly, improvising, or making decisions and taking actions spontaneously as situations unfold”
- Short
- Meaningful
- In the moment



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## How do adults learn

- Old axiom: See one, Do one, Teach one
- New axiom: Read one, See one, Do about 3-5, Teach one
- Newest axiom: Read one, See one, Read again, Do about 3-5, Read again, Teach one (then read again).



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# 1. Adult Learning Theory

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- 1. Andragogy:** (*Read one*) Proposed by Malcolm Knowles, this theory suggests that adults have unique learning characteristics and motivations. It emphasizes self-directed learning, where adults take responsibility for their own learning process. Andragogy also highlights the importance of adults' previous experiences and readiness to learn.
- 2. Social Learning Theory:** (*See one*) Originating from Albert Bandura, this theory emphasizes the role of social interaction and observation in learning. It suggests that adults learn by observing others and modeling their behavior, as well as through social reinforcement and feedback.
- 3. Experiential Learning:** (*Do one*) Popularized by David Kolb, this theory posits that learning occurs through a cycle of concrete experience, reflective observation, abstract conceptualization, and active experimentation. It highlights the importance of hands-on experiences and reflection in the learning process.



## 2. RIME framework

## 2. RIME framework

- Coined by Dr. Pangaro
- Quick and standardized approach to **assessing** learners
- Can be used in many scenarios and interactions
- Supported by medical education and internal medicine residencies and ACP

## 2. RIME framework

- Observable skill, knowledge, or attitude
- Something the learner can change
- Need examples

## 2. RIME framework

<b>R</b>	
<b>I</b>	
<b>M</b>	
<b>E</b>	

## 2. RIME framework

<b>R</b>	Reporter
<b>I</b>	Interpreter
<b>M</b>	Manager
<b>E</b>	Educator



• R

I

M

E

## Activity #1-RIME

- Using RIME Framework, assess the learner
- Team up with partner on the table
- Watch this presentation
- Where is learner? Collaborate with partner



• R                    I                    M                    E

## 2. RIME framework

<b>R</b>	Reporter
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<b>E</b>	Educator



• R                    I                    M                    E

### 3. SMART goals

**S**

**M**

**A**

**R**

**T**



### 3. SMART goals

<b>S</b>	Specific
<b>M</b>	Measurable
<b>A</b>	Attainable
<b>R</b>	Relevant
<b>T</b>	Time-specific

### 3. SMART goals

<b>S</b>	Specific
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## Activity #2: SMART

- Using SMART goals and same case
- Team up with your partner
- Turn to your partner and develop a SMART goal
- Collaborate on a SMART goal

### 3. SMART goals

<b>S</b>	Specific
<b>M</b>	Measurable
<b>A</b>	Attainable
<b>R</b>	Relevant
<b>T</b>	Time-specific

## 4. Bedside teaching as a teaching tool

- Per ChatGPT
- refers to a method of teaching and learning where medical students, residents, or other healthcare professionals gather at the patient's bedside under the supervision of an attending physician or senior clinician.
- The primary goal of bedside teaching is to provide a practical and interactive learning experience by directly involving patients in the educational process

## 4. Bedside teaching as a teaching tool



## 4. Bedside teaching as a teaching tool

- Absolutely necessary
- Steps for success
  - Prepare for rounds
  - What are the goals for each day
    - Day 1: bedside manner and communication
    - Day 2: history taking and exam
    - Day 3: diagnosis and counseling of patient
    - Day 4: goals of care/code status
  - On the fly vs summary feedback

## 5. Feedback

- Per ChatGPT:
- communication process whereby information about an individual's performance, behavior, or actions is provided to them, usually with the intention of promoting learning, improvement, or growth.

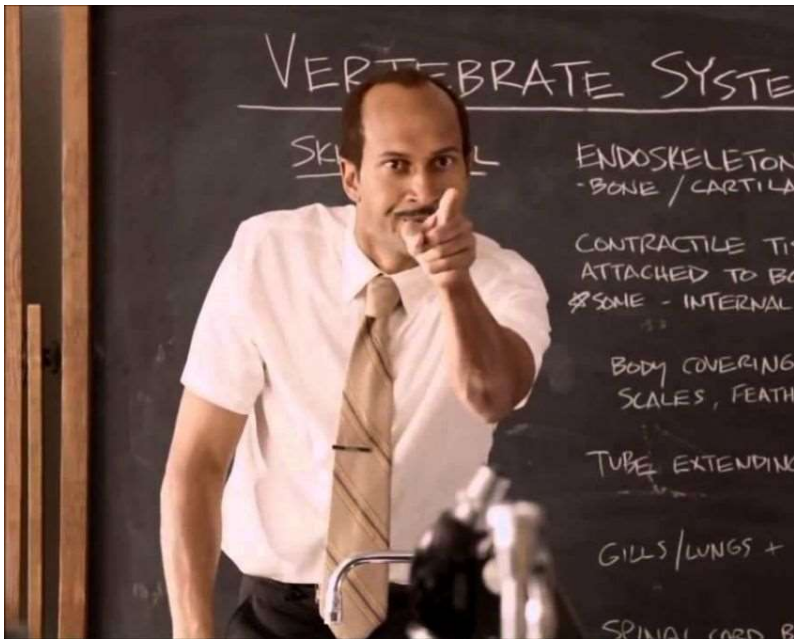


## 5. Feedback



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Maybe it feels like this



Or maybe like this



**But maybe with a**



**Spoonful of sugar**

## 5. Feedback

- How to give it feedback
- Private if severe, public if mild or for the team
- Ask the learner
- Direct and honest
- Give your assessment and example
- Give your goals for change and when
- Teach back if possible

## Activity #3: Feedback

- Get back with your partner and team up
- Using RIME assessment and SMART goals, give your partner your feedback “on the fly”.
- Each of you give feedback but in a different way

## Activity #3: Feedback

- How did that feel?
- Did it feel honest and sincere?
- Was it effective and actionable?

## Take Home Points

1. Be familiar with different adult learning theories
2. Utilize RIME framework to assess learners
3. Implement SMART goals to assist with learning
4. Apply bedside teaching as invaluable learning tool
5. Provide feedback on the fly ... practice, practice





## References

- Kolb, David A, Irwin M Rubin, and James M McIntyre. *Organizational Psychology : an Experiential Approach*. Englewood Cliffs (N.J.): Prentice-Hall, 1971.
- Kolb, Alice Y. and Kolb, David A. (2017) "Experiential Learning Theory as a Guide for Experiential Educators in Higher Education," *Experiential Learning & Teaching in Higher Education*: Vol. 1: No. 1, Article 7.
- Knowles, M.S. *The Adult Education Movement in the Unites States*. New York: Holt, Rinehart, and Winston, 1962.
- Bandura, A. *Social learning theory*. New York: General Learning Press, 1971.
- Pangaro LN. A new vocabulary and other innovations for improving descriptive in-training evaluations. *Acad. Med.*1999; 74:1203 –7.

## References

- **DeWitt DE, Carline D, Paauw DS, Pangaro L. A Pilot Study of a "RIME" framework-based Tool for Giving Feedback in a Multi-specialty Longitudinal Clerkship. 2008. Medical Education, 42: 1205 -1209.**
- Rodriguez R, Pangaro L. Mapping the ACGME competencies to the RIME Framework. 2012. Academic Medicine, 87 (12): 1781.
- Pangaro L, ten Cate O. AMEE Guide - Frameworks for Learner Assessment in Medicine. 2013. Medical Teacher, 35: 524 – 537.
- **Doran, G.T. (1981) There's a SMART Way to Write Management's Goals and Objectives. Journal of Management Review, 70, 35-36.**
- [Pangaro Selected Publications and Talks.doc - Google Drive](#)

## References

- Narayanan V and Nair BR. The value of bedside teaching in undergraduate medical education: a literature review [version 1]. MedEdPublish 2020, **9**:149 (<https://doi.org/10.15694/mep.2020.000149.1>)
- **Subha Ramani (2003) Twelve tips to improve bedside teaching, Medical Teacher, 25:2, 112-115, DOI: 10.1080/0142159031000092463**