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# Enhancing Learning Through Understanding Your Medical Learner.

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# ENHANCING LEARNING THROUGH UNDERSTANDING YOUR MEDICAL LEARNER

May 01, 2017

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## DISCLOSURE STATEMENTS

Katerina Valavanis, MD

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Nothing to Disclose

Nothing to Disclose

#### **OBJECTIVES**

To identify barriers to learning

 To understand how life stage, professional development, learning stage, and metacognitive knowledge are all utilized in developmental learning

To identify fixed versus growth mindsets



- Time constraints
- Preceptor is being pulled in multiple directions
- Clinical setting is not always comfortable environment for learning
- Issues with feedback
- Other learners present
- External stressors / overwhelmed
- Patients too sick or unwilling to participate in a teaching encounter
- Do not always see outcome of visit or hospitalization
- Clinical content does not always match curriculum content
- Personality teacher / learner
- Preceptor unaware of learner's knowledge or interest
- Competing personal or professional priorities
- Difficulty with knowledge base / application of knowledge





Life Stage

Learning Stage

Metacognitive Professional Nowledge

Metacognitive Development

Life Stage

**Learning Stage** 

Metacognitive Knowledge Professional Development

## LIFE STAGE

- Your learner's story
- Competing priorities
- Prior work/education and life events
- Experiences impact perspectives

Life Stage

**Learning Stage** 

Metacognitive Knowledge Professional Development

## LEARNING STAGE

| Stage                | Context               | Emotional<br>Attachment             | Confidence                 | Time<br>Management               |
|----------------------|-----------------------|-------------------------------------|----------------------------|----------------------------------|
| Novice               | Removed               | Low                                 | Low                        | Slow                             |
| Advanced<br>Beginner | Starting to recognize | Low                                 | Too high                   | Faster but gaps                  |
| Competent            | Understanding         | Present and overwhelming; exhausted | Low                        | Slower – choices are frightening |
| Proficient           | Fully understands     | Present                             | Higher                     | Slow – still<br>developing       |
| Expert               | Fully understands     | Present                             | Appropriate; has intuition | Faster and appropriate           |

The Five Stage Model of Adult Skill Acquisition

Life Stage

Learning Stage

Metacognitive Knowledge Professional Development

#### METACOGNITIVE KNOWLEDGE

- Awareness, understanding, and regulation of one's own thought processes
  - Develop skills to plan, monitor, evaluate one's learning
  - Adapt to change and uncertainty in clinical setting
  - Identify personal goals, self-monitor, choose behaviors, and self-assess

 We help our students by thinking out loud and asking them to describe their thinking processes to us

Life Stage

Learning Stage

Metacognitive Knowledge Professional Development

#### PROFESSIONAL DEVELOPMENT

- Continuing development of knowledge, skills, and attitudes while developing a professional identity in one's medical career
- Includes professionalism
- Encompasses life stage, learning stage, metacognitive knowledge
- Understanding your students' professional goals
- Give direct feedback

#### FIXED VS GROWTH MINDSET

- Applies across each concept
- Preceptor response is key
  - o help re-frame
  - o encourage continued growth

| Life Stage    | Learning Stage |
|---------------|----------------|
| Metacognitive | Professional   |
| Knowledge     | Development    |



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#### Life Stage

Difficulty with application of knowledge

#### **Learning Stage**

Difficulty with application of knowledge

#### Metacognitive Knowledge

Tools for assessing student's application of knowledge

# Professional Development

Tools for application of knowledge

FIXED OR GROWTH MINDSET?

- Time constraints
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#### Life Stage

Cannot see connection curriculumclinical content

#### **Learning Stage**

Cannot see connection: curriculumclinical content

#### Metacognitive Knowledge

Can we help the learner see connection curriculum – clinical content

# Professional Development

Can we help learner see connection curriculum – clinical content

**FIXED OR GROWTH MINDSET?** 

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Life Stage

Stressed/overwhelmed

Learning Stage

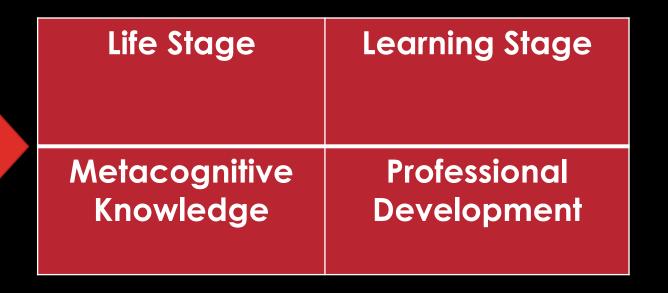
Stressed/overwhelmed

Metacognitive Knowledge Stressed/overwhelmed Professional Development

Stressed/overwhelmed

FIXED OR GROWTH MINDSET?





FIXED VS GROWTH MINDSET



# THANK YOU!

#### THANK YOU!

#### References

- AMEE Guide no. 34: Teaching in the Clinical Environment Shbha Ramani and Sam Leinster Boston University School of Medicine, USA, University of East Anglia, Norwich, UK. Medical Teacher 2008; 30: 347-364.
- Barriers to Effective Teaching. Debra A DaRosa, PhD, Kelley Skeff, MD, PhD, Joan Friedland, MD, MPH, Michael Cohurn, MD, Susan Cox, MD, Susan Pollart, MD, Mark O'Connell, MD, and Sandy Smith, PhD. Academic Medicine, Vol. 86, No 4 / April 2011
- Professional Formation: Extending Medicine's Lineage of Service Into the next Century. Michael W. Rabow, MD, Rachel N remen, D, Dean X. Parmelee, MD, and Thomas S. Inui, ScM, MD Academic Medicine, Vol. 85, No. 2 / February 2010
- Optimizing Learning: Styles and Strategies. Julie G. Nyquist, PhD; Jeffrey Ring, PhD. December 9, 2016. STFM Webinar Series
- The Five-Stage Model of Adult Skill Acquisition. Stuart E. Dreyfus. Bulletin of Science Technology and Society 2004 24: 177
- http://fitnesskinektions.com/wp-content/uploads/2013/04/mind-closed.jpg
- https://www.google.com/search?q=construction+site+confusion&safe
- www.frankfordconsulting.com
- http://corinna.com.au/western-explorer-road-re-opened