

# Competence By Design:



## From Growing Pains to Growing Potential

# Competence By Design at ACH

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July 2018

- Pediatric Nephrology

July 2019

- Pediatric Gastroenterology

July 2020

- Pediatric Neurology

July 2021

- General Pediatrics
- Pediatric Respiriology
- Pediatric Hematology/Oncology
- Neonatal-Perinatal Medicine

July 2022+

- Pediatric Emergency Medicine
- Pediatric Infectious Disease
- Medical Genetics
- Developmental Pediatrics

# Objectives:

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**By the end of the session, attendees will be able to:**

1. Describe the concept of mindset and its impact on teaching and learning
2. Explain how individual faculty can foster growth mindset through the use of EPA assessments
3. Explain how training programs use faculty advisors and competence committees to support the development of learner growth mindset

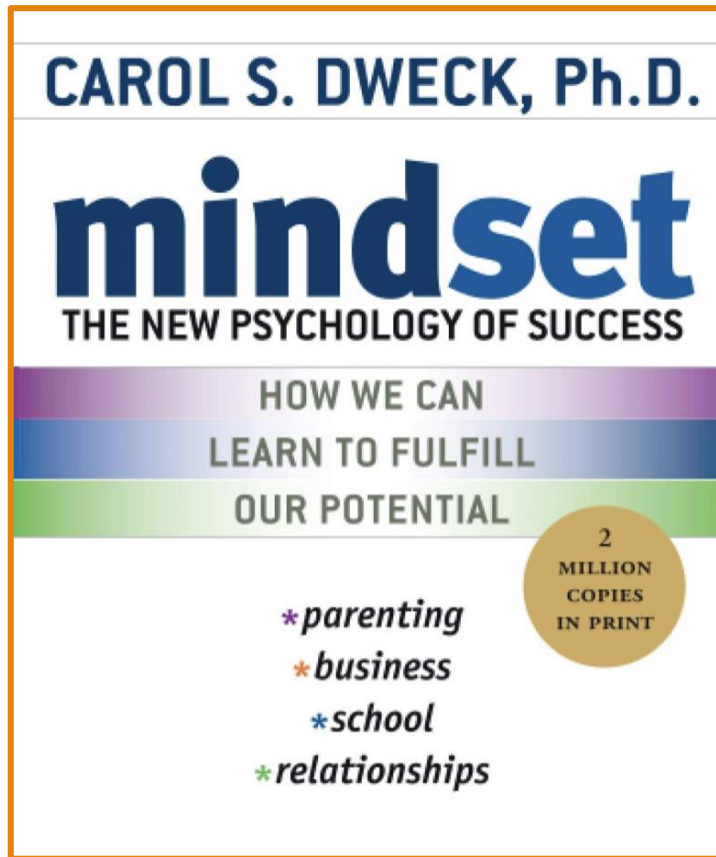
# Reflection.....

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# What is 'Mindset'?

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- A self-perception or “self-theory” that people hold about themselves

Read each statement and decide whether you mostly agree or disagree with it:

- 1) Your intelligence is something very basic about you that you cannot change very much
- 2) You can learn new things, but you can't really change how intelligent you are.
- 3) No matter how much intelligence you have, you can always change it quite a bit
- 4) You can always substantially change how intelligent you are.

# Fixed vs Growth Mindsets

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1 and 2 = Fixed mindset

3 and 4 = Growth mindset



**Fixed Mindset:** *idea that intelligence is innate, something individuals are born with and cannot be altered over time*



**Growth Mindset:** *idea that intelligence can be developed through hard work and perseverance*

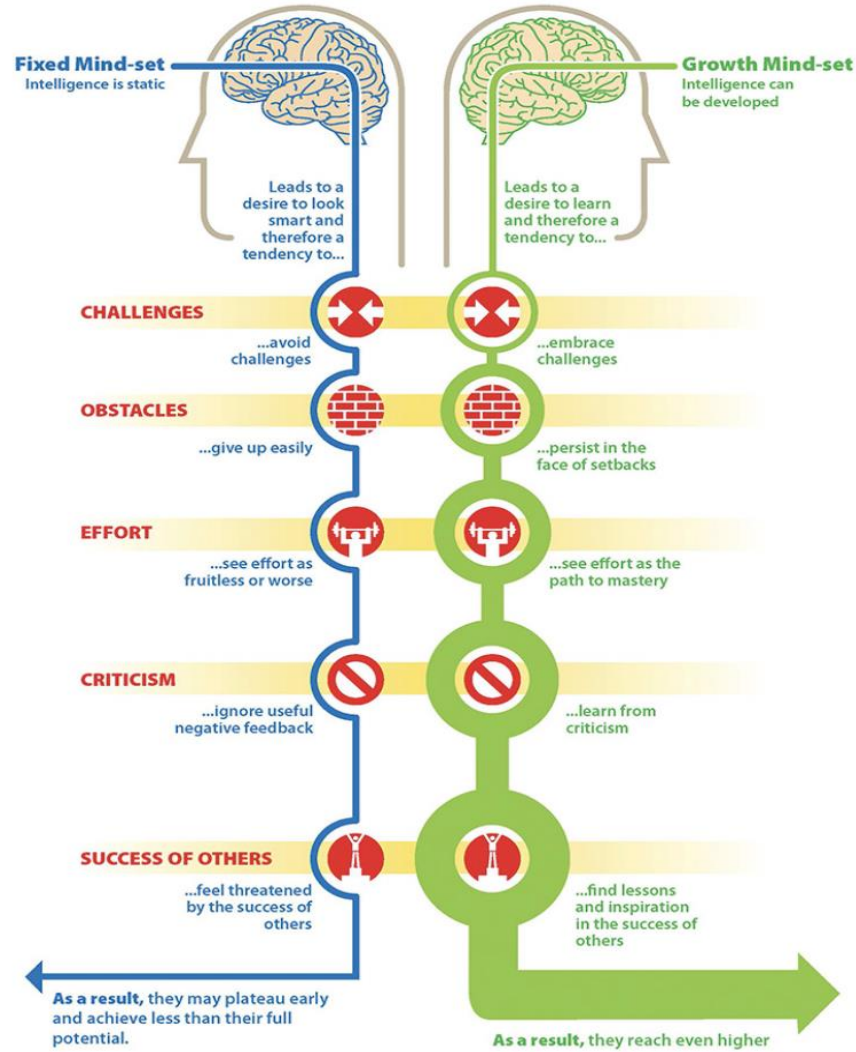
Mindsets alter  
our approach to  
teaching/learning

Mindsets change  
the meaning of  
effort

Mindsets change  
the meaning of  
failure

Why does mindset matter?  
How does it impact learning?

## Two Mindsets



CAROL S. DWECK, Ph.D.

# mindset

THE NEW PSYCHOLOGY OF SUCCESS

HOW WE CAN  
LEARN TO FULFILL  
OUR POTENTIAL

2  
MILLION  
COPIES  
IN PRINT

- \*parenting
- \*business
- \*school
- \*relationships



# What might this look like for our learners?

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## Fixed Mindset



- Does not want to expose deficiencies
- Seeks validation and praise
- Afraid to make a mistake
- Sees effort as sign of lack of ability
- Harder to make a comeback after failure

## Growth Mindset



- Ask questions
- Seeks challenges
- Sees mistakes as learning opportunities
- Values effort as key piece of achieving success
- Able to move through and learn from failure

# What might this look like for our teachers?

## Fixed Mindset



- Create stressful and judgmental environment
- Link success to outcome with minimal acknowledgement of effort or process
- Focus on the inabilities as opposed to ability
- Criticism without offering strategies for success
- No reflective learning from mistakes
- Difficulty sharing own mistakes/learnings

## Growth Mindset



- Believes in potential of learner
- Creates safe environment for learning
- Recognizes effort and its links to outcome
- Provides constructive criticism (i.e.: strategies for how to be/do better)
- Encourages reflection and learning from mistakes
- Open to sharing own mistakes/learnings

# What might this look like for our teaching and learning environments?

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## Fixed Mindset

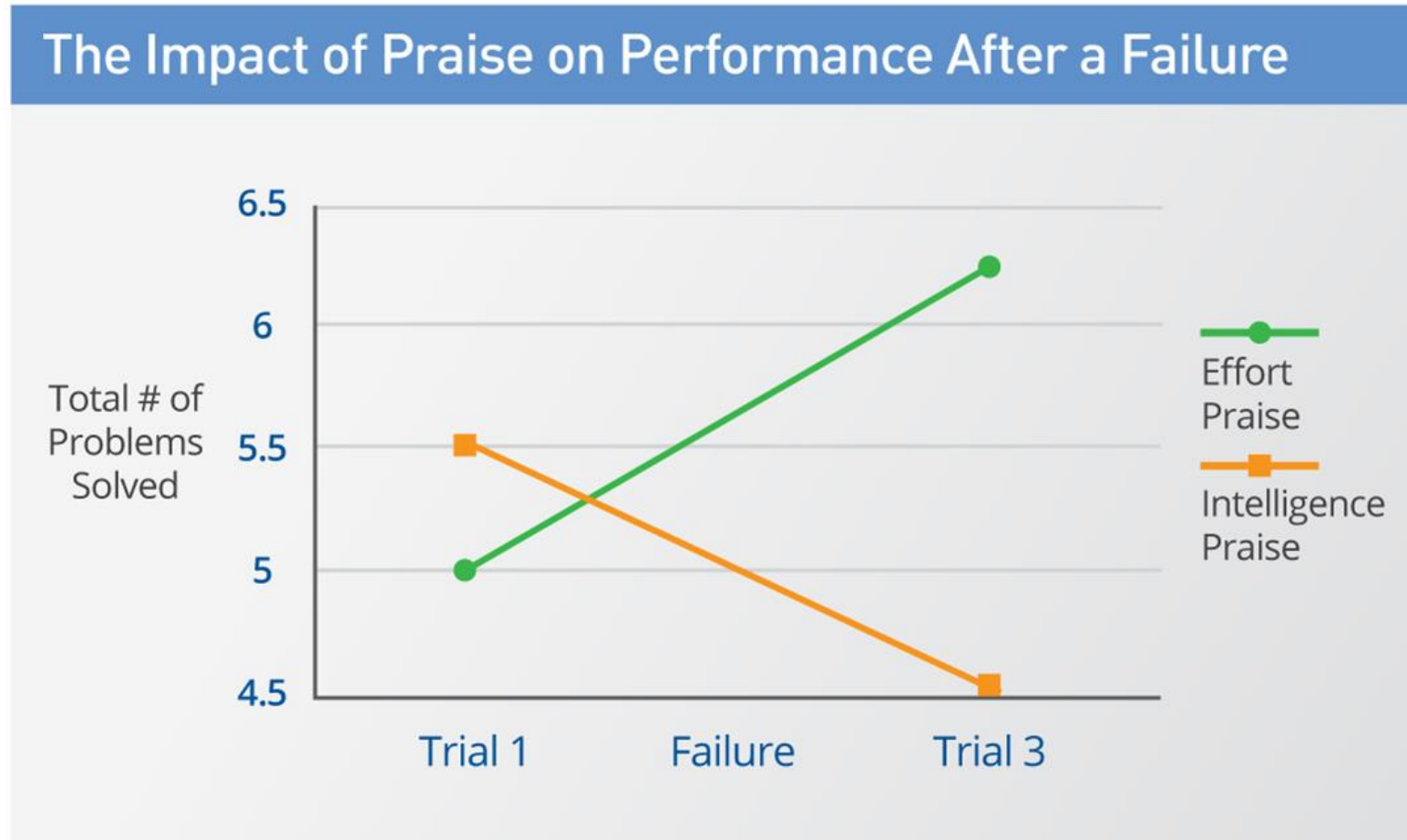
- Criticizing and harsh
- Teachers and learners alike questions the students' potential to learn and grow
- Teachers are in the business of exposing inadequacies

## Growth Mindset

- ✓ Safe from judgement
- ✓ Teachers and learners believe in the student's potential to grow
- ✓ Teachers and learners collaborate for learning and are in the business of helping each other thrive



# Interplay between mindset, teachers, learners and outcomes



# GROWTH MINDSET = FOUNDATION OF COACHABILITY

## COACHABILITY = HALLMARK OF CBD

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### “Coachability”:

An individual’s receptiveness and ability to implement feedback leading to growth and performance enhancement

- *The ability to process and learn from challenges and mistakes*



# But what about the educators?

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- **Creating lifelong learners, beyond residency training, beyond the exam**
- **Better for patient safety and patient outcomes** (Coffey et al, Acad Med 2010, Jegathesan et al., BMC med ed 2016)
- **Takes away the pressures of assessment OF learning and shifts focus to assessment FOR learning**



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# Clinicians

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Doctors

Teachers

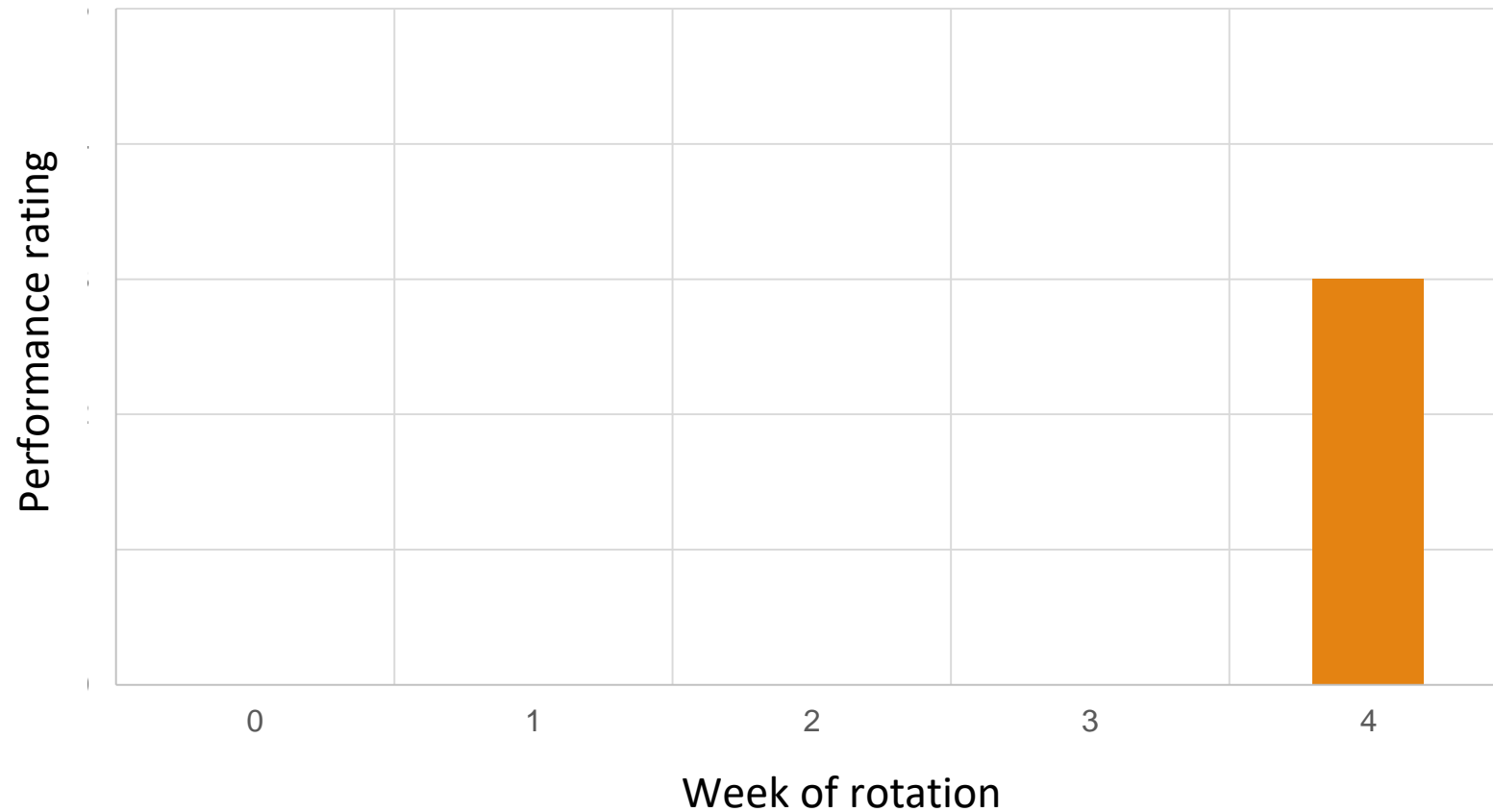
Coach?!

Fostering growth mindsets in learners using EPAs and coaching strategies



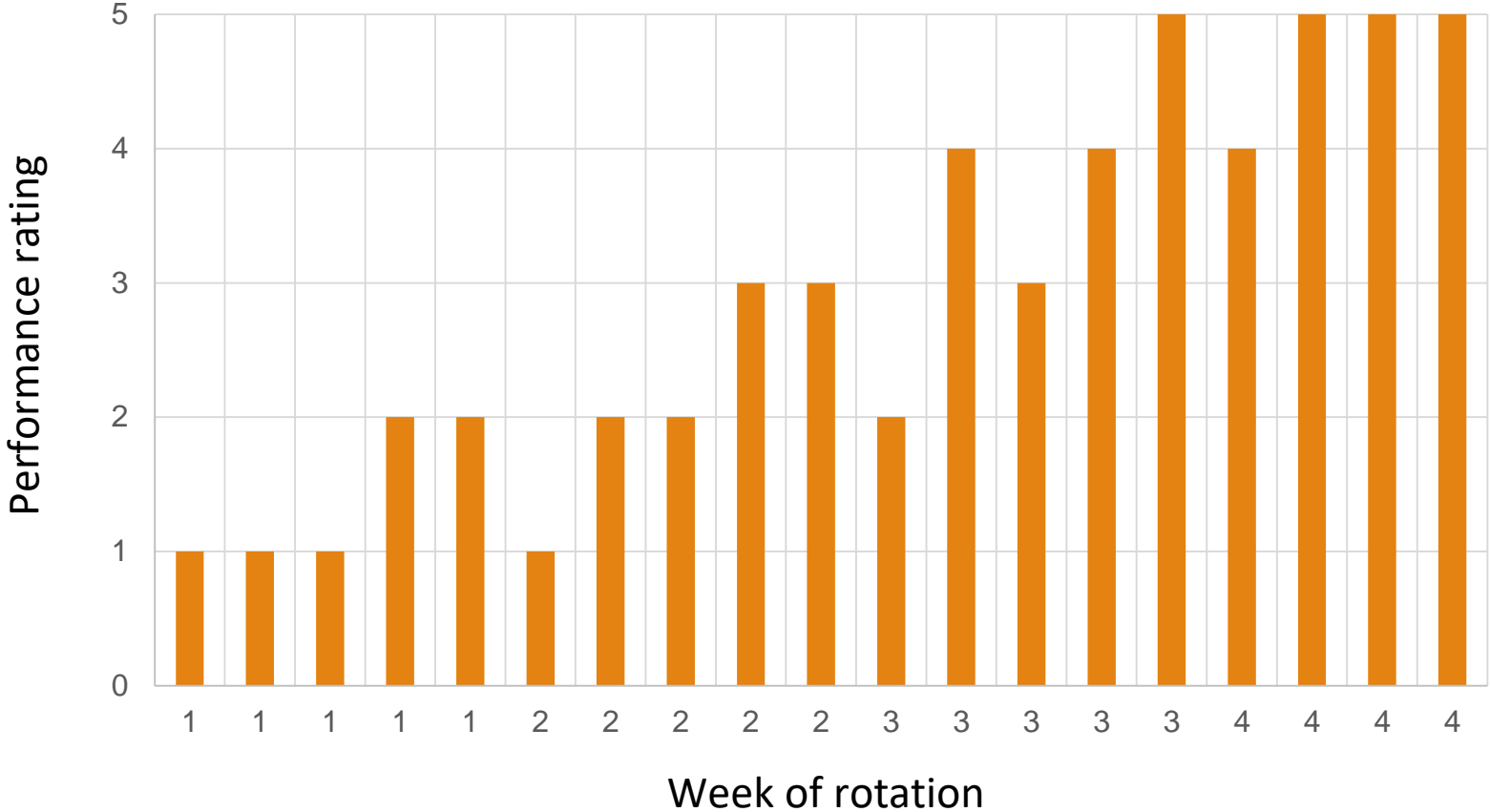
# Progress with one assessment?

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# Progress Over Time

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# Paradigm Shift of Thinking

**Summative assessments**

**Assessment  
OF Learning**

**Formative assessments**

**Assessment  
FOR Learning**



# Clinicians *are* Coaches

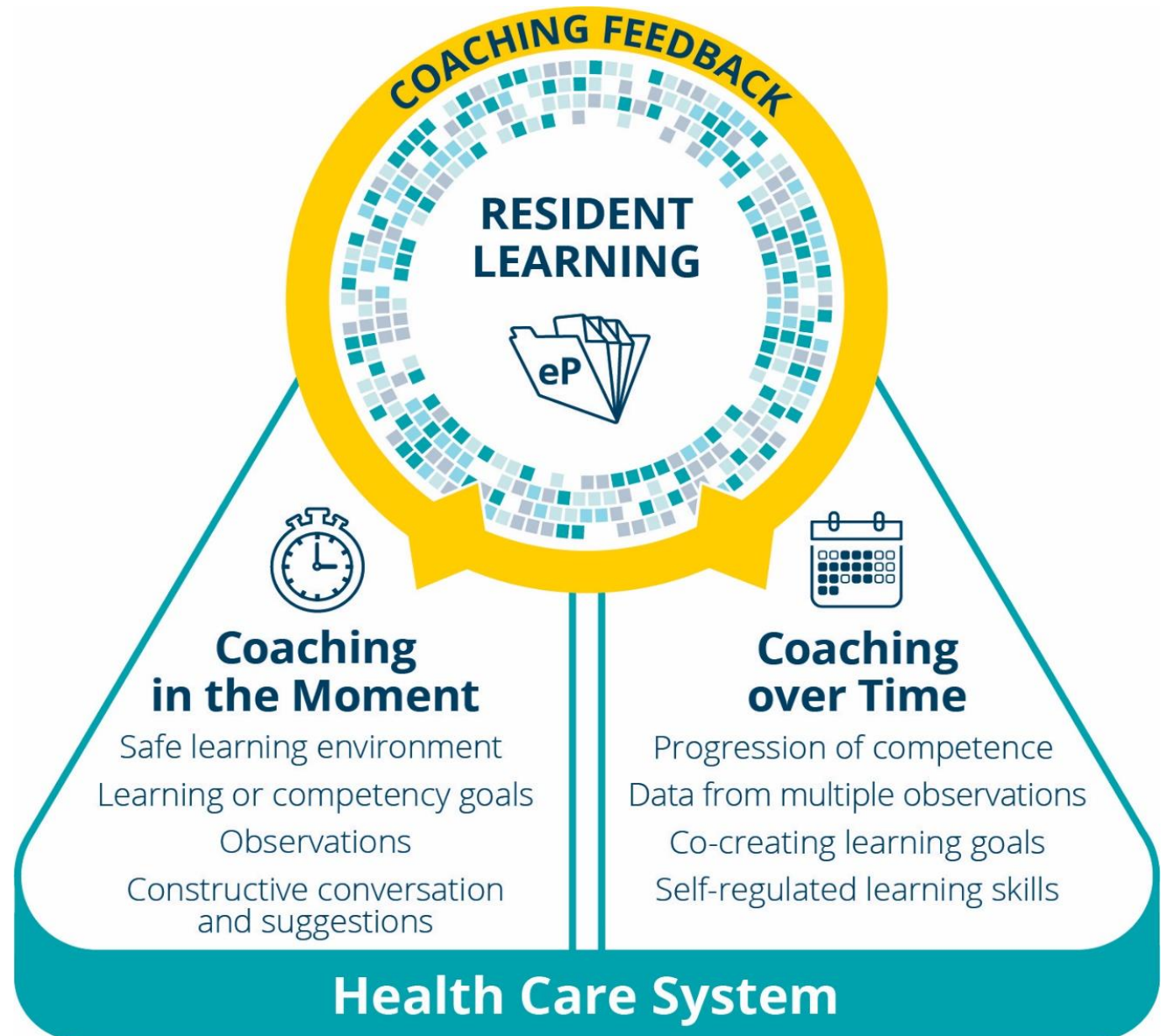
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“a one-to-one conversation ... where the coach facilitates the self-directed learning of the [learner] through **questioning, active listening, and appropriate challenge in a supportive and encouraging climate.**”

Van Nieuwerburgh C, 2012

# Coaching in the Moment:

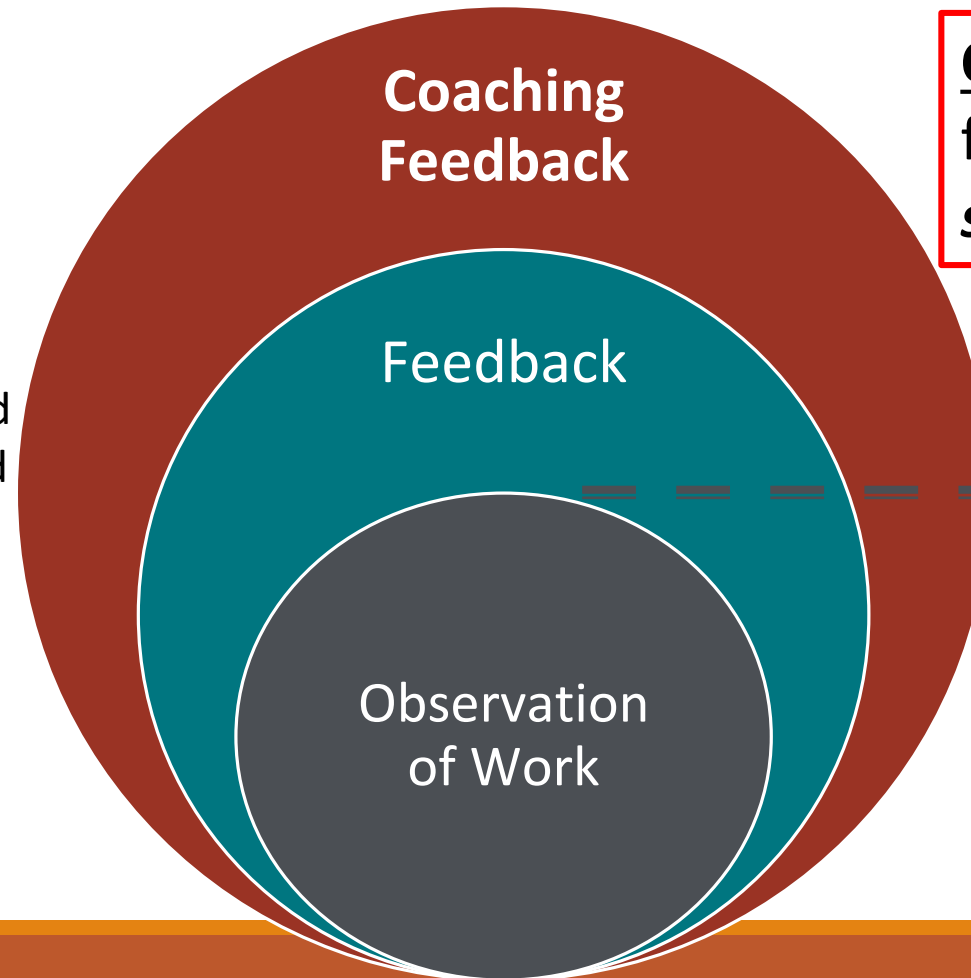
Foundational to  
competency focused  
instruction and  
workplace based  
learning



# Coaching Feedback

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Feedback = *information* about what was observed compared to an expected standard



**COACHING FEEDBACK** = feedback + *actionable suggestions* for improvement

Observer makes determination of quality of observed task

# The Power of Feedback

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*A senior level trainee is working with you today – they are seeing a new consultation and have been given time to prepare. You observe the encounter.*

*You listened as the trainee took their history, did a focused exam and discussed the initial steps in management with the family. The family asked some difficult questions, and you noted the trainee navigated the conversation well, but deferred to your expertise at appropriate time points.*

## **Which feedback statement promotes a growth mindset?**

A: You are a strong trainee, you did all the physical exam maneuvers correctly and seem to have a natural ability to build rapport with families

B: Preparing ahead of time for this consult with a thorough chart review really paid off, you developed an organized approach to the patient. I appreciated the various strategies you used to communicate with the family and that you can recognize your own limitations as well.

# Praise the process

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Mindsets are shaped predominantly by **feedback**<sup>1</sup>

Praising being

*"smart"*

*"strong"*

*"natural"*

→ fosters fixed mindsets

Praising processes of

*"working hard"*

*"reflecting on feedback"*

*"trying different strategies"*

→ fosters **growth mindsets**



# The Power of “Yet”

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*After attempting a procedure unsuccessfully, your learner reflects and states:*

*“I’m not good at finding the landmarks and managing my equipment to do this procedure without a second set of hands...”*

*And you reply:*

*“...yet”*

**YET**

= learning is a continuous process and progression is the goal

# Practice $\neq$ Perfection

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*A resident truly struggled during a clinical task that they had successfully completed before – they did not perform at the expected level of their training; they lacked the appropriate medical knowledge and you had to step in to complete the task.*

How do you provide feedback on “failures” while promoting a growth mindset?

# Mistakes are a good thing

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1

Do not protect learners from failure

2

Do not overstate their abilities

3

Do not withhold constructive criticism

4

Do not judge their mistakes

# Coaching Feedback + EPA = Growth Mindset

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1. PRAISE the PROCESS



2. HONEST FEEDBACK

# The magic of an EPA – in under 10 minutes you can:

- Create a safe learning environment
- Observe a clinical task
- Utilize a framework to provide coaching feedback
- Document a low stakes assessment FOR learning

**EPA Title:** 2.5 Assessing, diagnosing, and managing patients with common pediatric problems

**Key Features:**

- This EPA includes performing a comprehensive and/or targeted history and physical examination for a patient with a new presentation or an exacerbation of a pre-existing illness that is common in pediatric care.
- It also includes developing a differential diagnosis and initial management plan, and presenting the case to a supervisor.
- This EPA does not include assessing and managing patients who are critically ill or have complex multisystem problems.

**EPA Stage:** Foundations of Discipline **Date Of Observation: \*** 09/28/2021

**Presentation: \*** Select **Age: \*** Select **Type of condition: \*** Select

**Setting: \*** Select **Event observed: \*** Please select one or more **Type of observation: \*** Select

**Additional Context Information:**

**Based on this observation, overall: \***

I had to do  
 I had to talk them through  
 I needed to prompt  
 I needed to be there just in case  
 I didn't need to be there

**CanMEDS Milestones associated with this EPA:**

| The following Milestones were demonstrated                              | Not Observed          | In Progress                      | Achieved              |
|---|-----------------------|----------------------------------|-----------------------|
| Develop a plan for initial management                                   | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> |
| Synthesize and interpret information from the clinical assessment       | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> |
| Elicit a history, including the perinatal history as relevant           | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> |
| Select and/or interpret appropriate investigations                      | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> |
| Perform a physical examination relevant to the presentation             | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> |
| Develop a differential diagnosis relevant to the patient's presentation | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> |

**Feedback to Resident and Competence Committee: \***

# Objectives:

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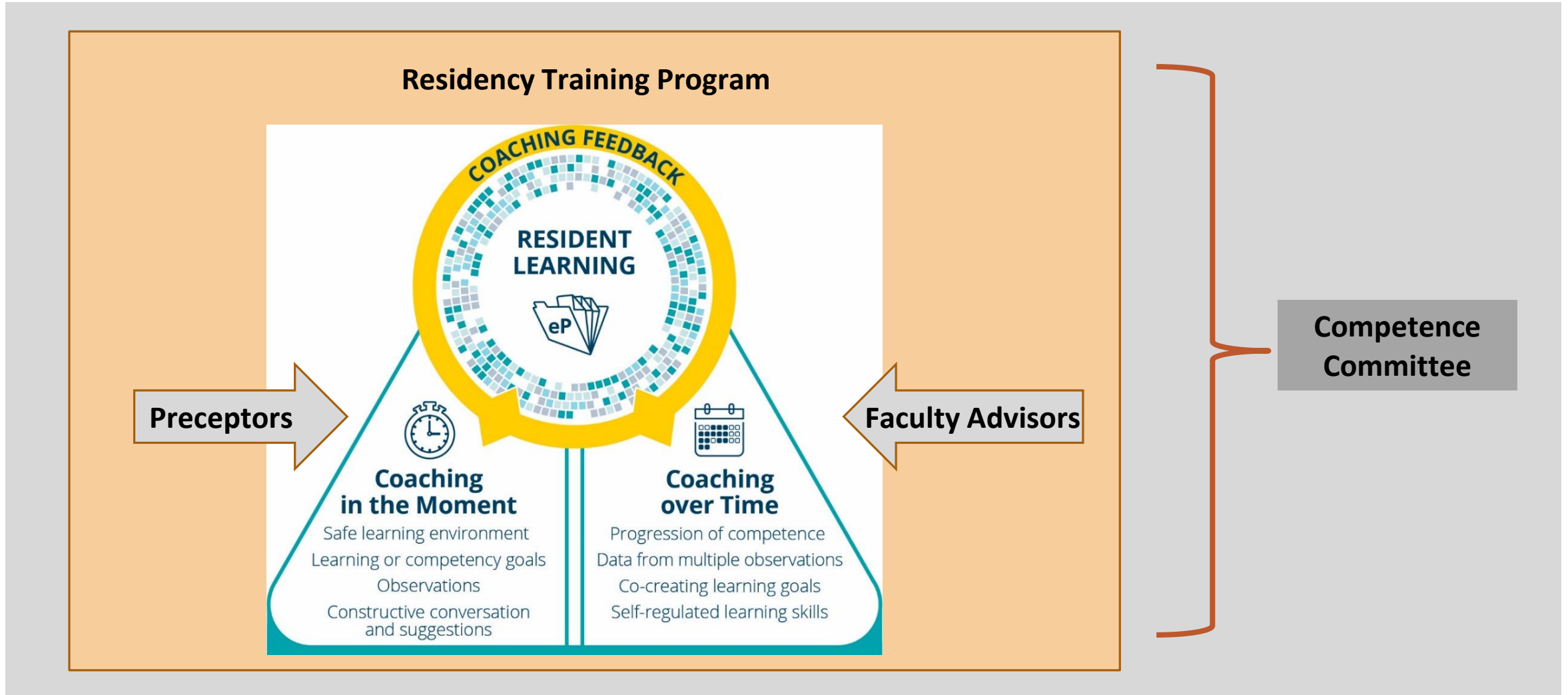
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# **Advisors and Competence Committees: Champions for Growth!**

THE DEPARTMENT OF PEDIATRICS EXPERIENCE

# Adopting Growth Mindset Across the Continuum: A multi-pronged approach







# The Learner

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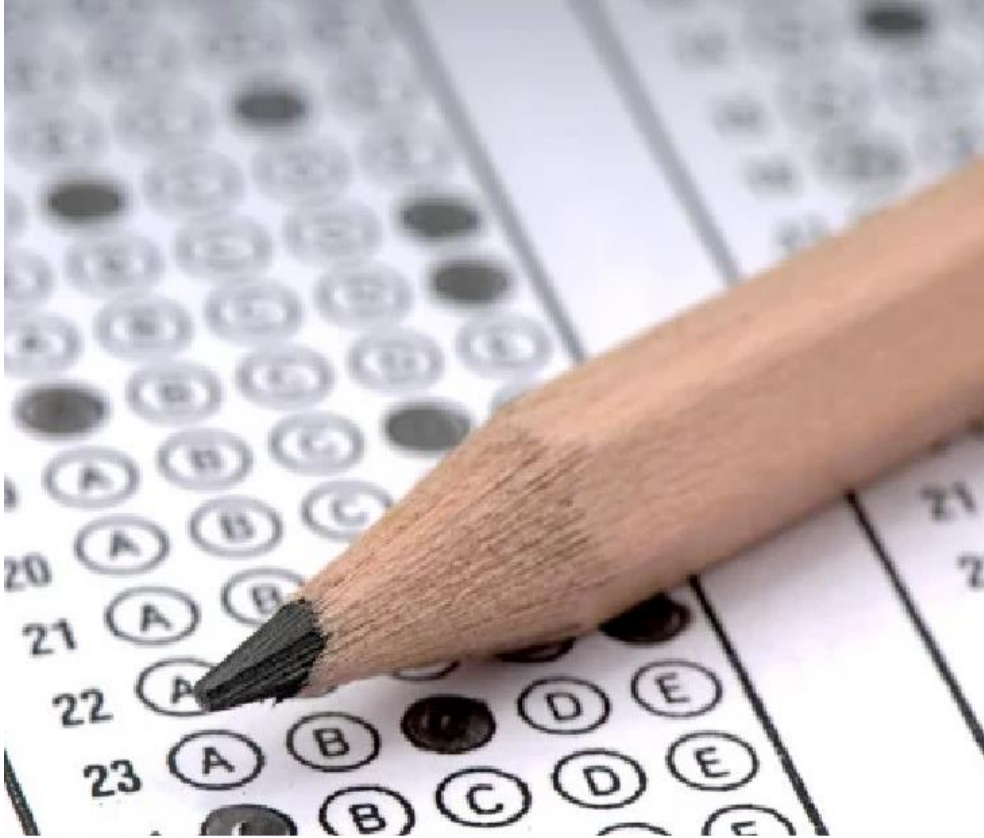
## Think back to your first day of residency...

- You were an A student
  - You were student president in medical school
  - You got your top choice CaRMS match
  - You're excited to be here!
- 



# The Learners

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- Overcoming fixed mindset can be a challenge – In medical professionals, fixed mindset may have been reinforced for years (Shapiro et al, 2019)
- Just introducing the concept of Mindset to learners can be effective in promoting growth, even in adults (Klein et al, 2017)

# Mindset Bootcamp: Our message to the learners

## The Zone of Proximal Development

- Growth Mindset - your skills and aptitudes are not fixed.
- Own your learning
  - Know which EPAs you need and where the learning opportunities are
  - Set your goals and learning plans
- Show us the growth
- Embrace challenge, and level up



A top-down view of various medical and professional supplies on a light-colored surface. A silver stethoscope is coiled across the center. To the right, there are white nitrile gloves, a pair of round-rimmed glasses, a white surgical mask, a spiral-bound notebook, and a silver pen. The background is a soft, out-of-focus grey.

# Faculty Advisors and Competence Committees

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# Goals: Advisors and Competence Committees



Guide clinical  
progress over time



Facilitate the  
development of self-  
regulated learning



## You are now 4 blocks into your residency...

- Have never had anything less than stellar marks before
  - Have received multiple EPAs - “in progress”
  - Have also received some EPAs – “achieved”
- 

**R1, General Pediatrics**

**Dr. Advisor – Faculty Advisor**

# Faculty Advisors and Competence Committees:

## What's the evidence?

### 1. Learner-Centered Education is imperative:

Promoting self-reflection and self-efficacy is one of the most effective ways to support growth in adult learners (Ramani et al., 2017)

### 2. Personalized plans are empowering:

Implementing individualized, learner-initiated educational plans promotes and reinforces growth-mindset behaviour (Ramani et al., 2019)

### 3. Trusted, objective guidance is still necessary:

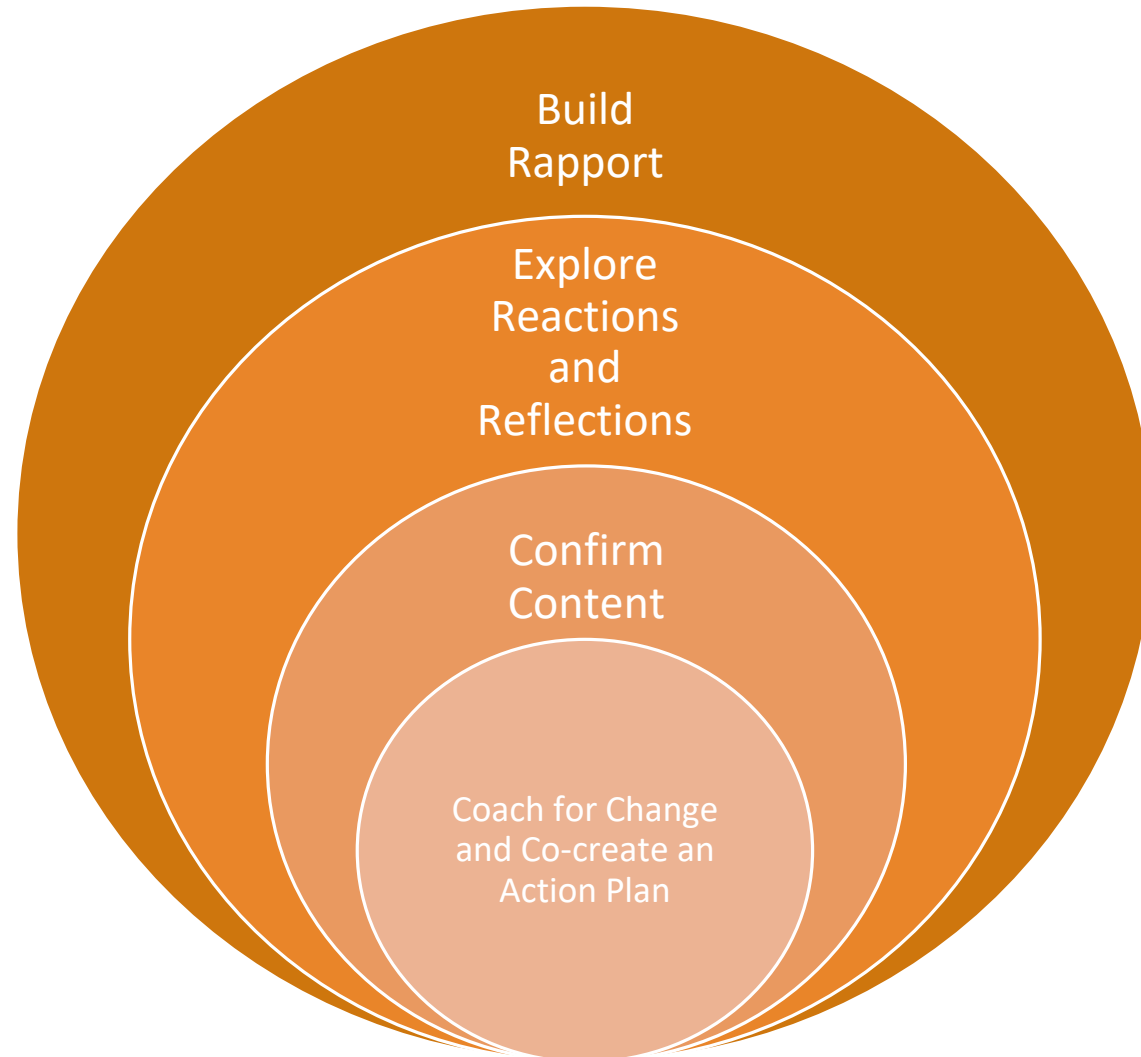
Meaningful external perspectives (especially longitudinal) supports growth and growth mindset (Dweck, 2016)



# How do they do this?

*Guided self-  
reflection*

*Individualized  
coaching*

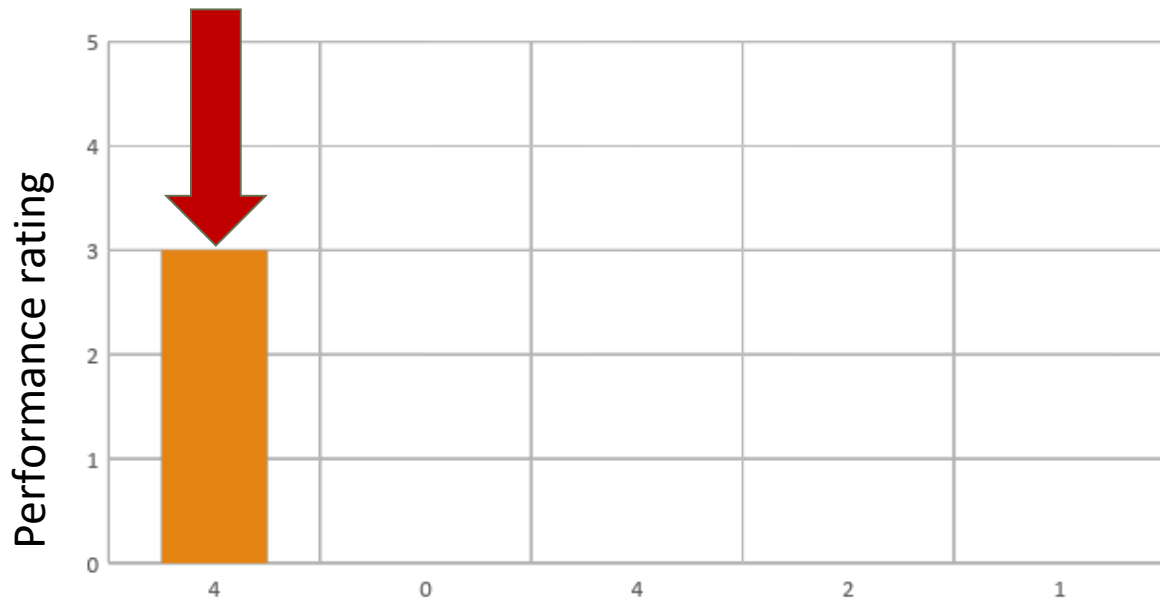


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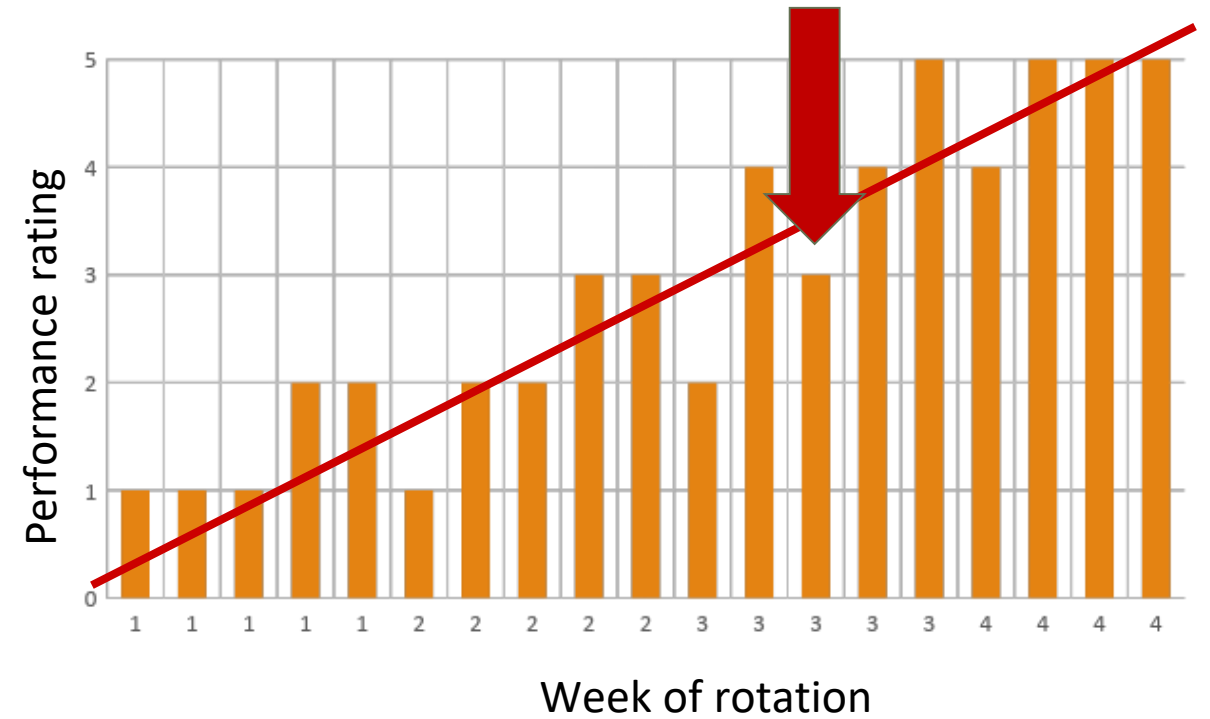
# Basic Competence Committee Principles to support Growth Mindset:

1. Evaluations are reviewed for performance AND patterns of growth - Trying is valued, “failure” is not a sin, but lack of progression is concerning
2. Every single learner can grow – every learner gets feedback and a developmental plan
3. **Progressions** are assigned, not status

Preceptor view



Advisors and Competence Committee view



# Learning Change Plan

| LEARNING CHANGE PLAN   | TIMELINE (1)         | TIMELINE (2)                            | RESOURCES REQUIRED  | CHALLENGES  | IDENTIFIABLE RESULTS                              |
|--|----------------------|---|---|---|---|
| <b>Describe specific, observable changes that you intend to make as a result of this feedback. Specifically identify what you will do.</b> | When will you begin? | When do you think you will see results? | Identify the resources you will draw upon to make the change. Who will you involve in the work? What resources will you need? What learning will you undertake? | What will get in the way of accomplishing change? | How will you know the results have been attained? |
|  |                      |   |   |   |   |

# Learning Support and Remediation

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- Competencies are expected, but the path and the end point are variable
- Everyone could benefit from learning support. Remediation is part of that continuum, and means they have not achieved competencies – ***YET***

## ***Accessing learning support is a normal part of people's development***

- De-stigmatization of remediation leads to a culture where improvement is valued - even for those who are not struggling (Elalloway, 2018., Chau et al., 2019)



**R1, General Pediatrics**  
**Dr. Advisor – Faculty Advisor**

- Dr. Advisor notices that the EPAs in progress are mostly in the area of communication. Asks you to self-reflect as to why
- Notices that all other EPAs are progressing nicely
- Co-develop a learning plan to improve communication in upcoming rotations
- Identifies some additional goals and strategies
- Plan to meet again in 4-6 months

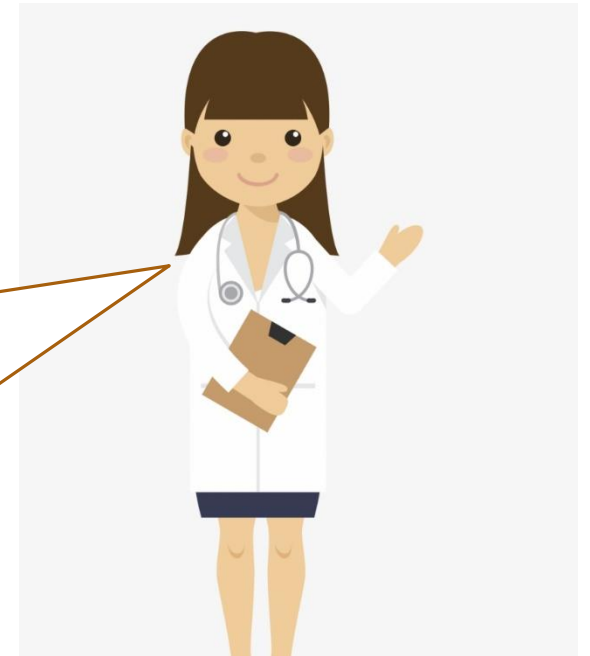
- CC notices that although the EPAs in communication are in progress, there has been improvement over time.
  - All other EPAs have been entrusted
  - Learning goals are in keeping with patterns of performance and appropriate for level
  - Progressing as expected, further learning strategies are provided
- 



I was just reviewed at the CC. I am progressing as expected, but I feel I could do more with some further learning support.  
I heard about this thing called Growth Mindset. I noticed that all the staff and the Department here are really into that stuff

My goals are:

1. Improve my communication with families
2. Improve my foundational knowledge, particularly in basic physiology
3. Start to develop an organized way of studying



**Dr. A – R1 resident**



**Dr. S/W – PD/APD**

Sounds great – I agree that no matter how well you are doing now, we can all continue to improve.  
Let's start with the learning plan you developed with your advisor and your report from the CC. We will build off of that, and around your upcoming rotations  
Go Growth Mindset!

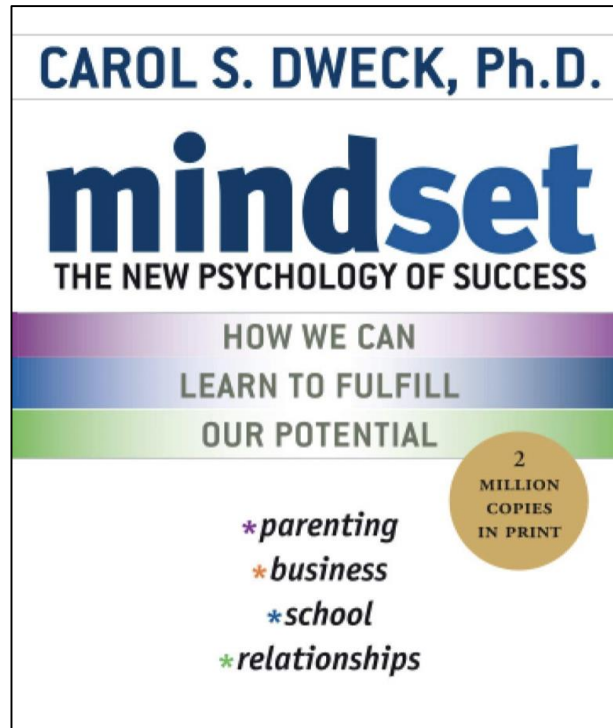


# Conclusion

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Don't Judge.

Coach.

Learning is a process



# Growth mindset misconceptions

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#1 Growth mindset means telling students they can do anything

#2 Growth mindset is only about effort and praising effort

#3 Growth mindset is only about hard work