Mind Makeover: Cultivating a Growth Mindset

Helping learners become reflective, competent pediatricians is an enormous and daunting task. As learners progress across the medical education continuum, they increasingly become more responsible for their own growth and development as professionals. Over the past few years, there has been a strong movement toward the concepts and principles of coaching for continuous professional development. Last year we focused on a Learner-Centered Feedback Model for communication of milestone assessments adapting the framework by Weimer (2002) and using the R2C2 model by Sargeant et al. (2015). At last year’s meeting, we provided examples of how our learners were taking more ownership for their own personal growth and development particularly related to the practice-based learning and improvement, systems-based practice and professionalism milestones.

This year, we are building on the learner-centered model and have included mindset. The definition of mindset is a mental attitude that determines how you will interpret and respond to situations. Carol Dweck, the leading expert in this area, describes core principles related to mindset as one’s belief about ability and how this belief ultimately affects decisions related to learning. She describes a person with a “fixed mindset” as one who believes that intelligence is a fixed trait. If someone has a fixed mindset it’s not enough just to succeed. It’s not enough just to look smart or talented. It’s about being perfect right now. For people with a growth mindset it’s not about immediate perfection. It’s about learning something over time—confronting a challenge and making progress. People with a growth mindset thrive when they’re stretching themselves.

Mindset definition: A mental attitude that determines how you will interpret and respond to situations.

Mindset (from the work of Carol Dweck):

- Belief about ability
- Affects decisions related to learning
- Fixed mindset – intelligence is a fixed trait
- Growth mindset – intelligence can be trained; the brain is a “growth organ.”

When asked “When do you feel smart?”, people with the growth mindset said: “When it’s really hard, and I try really hard, and I can do something I couldn’t do before.” “When I work on something a long time and I start to figure it out”

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When asked “When do you feel smart?” People with the fixed mindset said: “It’s when I don’t make any mistakes.” “When I finish something fast and it’s perfect.” “When something is easy for me but other people can’t do it.”

It’s about being perfect right now. In the fixed mindset it’s not enough just to succeed. It’s not enough just to look smart or talented. You have to be pretty much flawless. And you have to be flawless right away. When do people with a fixed mindset thrive? When things are safely within their grasp. If things get too challenging when they’re not feeling smart or talented they lose interest.

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People were asked about intelligence and how much they thought it was due to effort and how much they thought it was about ability.

Intelligence= _____% effort _______% ability

**Behavioral Interview Questions**

“Behavioral interviewing techniques attempt to relate a candidate’s answers to specific past experiences and focus on projecting potential performance from past actions. By relating a candidate’s answers to specific past experiences, you’ll develop much more reliable indicators of how the individual will most alter their behaviors. They do, however, assume that a person’s future behavior will closely reflect past actions.” - Paul Falcone


“What is wrong with behavioral interview questions? Yes, asking about past behavior can work, but most behavioral questions contain a “tip off” that tells candidates how to give you the “right” answer. The main issue with behavioral questions is that they rob you of your chance to find out if someone is a ‘problem bringer’ or a ‘problem solver.’ Let’s say you ask a candidate a pretty typical behavioral question: “Tell me about a time when you had to adapt to a difficult situation.” This question may sound fine, but the word “adapt” ruins it. That single word signals that you only want to hear about a time the candidate “adapted” (instead of the hundreds of times they failed to adapt). In the case of true high-performer candidates, these folks have plenty of examples to share that describe a time when they successfully ‘adapted’ to a difficult situation. If you asked them about a time they “faced” a difficult situation, they’re naturally going tell you not only about the difficult situation, but also about how they adapted to it. For high performers, it’s practically impossible to even imagine ‘facing’ a difficult situation without also successfully ‘adapting’ to it. But for problem bringers (low performers), the word ‘adapted’ renders this interview question ineffective. Problem bringers have faced countless difficult situations. But it’s unlikely they’ve successfully adapted to any of them. In fact, the times they successfully ‘adapted’ probably constitute such a tiny fraction of the times they ‘faced’ difficult situations that it wouldn’t even occur to them to search their mental database and find an instance where it happened. And that’s something you want to know about. But when you introduce a leading interview question, you’re not giving them the chance to disclose that information. Just remember that attitude is the key driver of new hire success.” – Mark Murphy


**Competency-Based Behavioral Interviewing (CBBI) and Why it is Better than Traditional Interviewing Techniques:**

Competency-based behavioral interviewing is a structured interview process that combines competencies with the premise that the best predictor of future performance behavior is past behavior. These X-factors are behaviors (skills and/or abilities) or sets of behaviors that describe the expected growth mindset. This approach helps identify candidates with the potential to grow into successful performers who can be trained to reach their full potential. It requires asking scenario-based questions that elicit descriptions of specific past situations and behaviors that demonstrate the competencies needed for the job.

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performance in a particular work context. When they are appropriately developed, competencies are the standards of success and the behaviors that are needed to support the strategic plan, vision, mission, and goals of the training program and institution.

It is better because:

- CBBI is designed through a process to determine the competencies unique to your working environment.
- Interview questions are planned and directly tied to the competencies for success as a resident in your program.
- Interviewers are trained on the CBBI process.
- Rating scales are provided to minimize the subjectivity of the interviewing process.
- Interview questions focus on actual current and past behavior rather than “might do” behavior.
- CBBI makes it easier to compare candidates because they are all measured against the same criteria.
- CBBI focuses exclusively on competencies that are job related.

Behavioral Characteristics of the Growth Mindset:

- **Academic engagement** for the purpose of learning (mastery and competence) and not just to receive validation from others
- **Response to failure or challenge** is in my control (a “can do” attitude) and not a “helpless attitude” which might be stated, “It’s not my strength, it was someone or something else’s fault, it’s just the way I am.” Mistakes are perceived as opportunities for growth instead of failures
- **Perseverance of effort** – some might call this tenacity or “grit” (I approach learning with a long-term focus) – By putting more effort into this task over the long term I will master the task. I am not going to give up just because of a setback. It is a speed bump and not a roadblock.
- **Strategic response** – when faced with setbacks or failures, they will try a different strategy instead of working harder doing the same thing they have always done.

Other terms that have been used

- **Agency** – “the capacity and propensity to take purposeful initiative—the opposite of helplessness.” When someone has high levels of agency they tend to seek meaning and act with purpose to achieve the conditions they desire in their own and others’ lives. (Ferguson RF, Phillips SF, Rowley JF, Friedlander JW. The Influence of Teaching Beyond Standardized Test Scores: Engagement, Mindsets, and Agency. Retrieved from The Achievement Gap Initiative at Harvard University website: http://www.agi.harvard.edu/publications.php. 2015 Oct.)
- **Academic Tenacity** – “is about working hard, and working smart, for a long time: the ability to look beyond short-term concerns to longer-term or higher-order goals and the ability to withstand challenges and setbacks to persevere toward these goals.” (Mindsets and Skills that Promote Long-Term Learning by Carol S. Dweck, Gregory M. Walton, Geoffrey L. Cohen download at: https://ed.stanford.edu/sites/default/files/manual/dweck-walton-cohen-2014.pdf)
**Growth Mindset Framework for Interview Questions:**

<table>
<thead>
<tr>
<th>Description of fixed mindset:</th>
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<tbody>
<tr>
<td>Does not like to be challenged. Seeks praise for being smart. If others succeed then the individual feels and acts as if threatened. Frequently gives up with hard tasks. Does not take the hardest/complicated/difficult patients on the team. Does not offer answers to questions unless knows he or she is correct. Blames others for failures. Takes feedback, criticism personally. Doesn’t attempt to change or improve.</td>
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<table>
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<tr>
<th>Description of growth mindset:</th>
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<tr>
<td>Likes to be challenged. Perseveres even with difficult tasks. If others succeed, he or she is inspired. Requests the hardest, most complicated and difficult patients on the team. Speaks up even if he or she does not know the right answer. Believes knowledge and skills can be developed with hard work. Likes to try new things and isn’t afraid of failing. Seeks opportunities to grow and change. Sees failure as a chance to growth. Sees feedback as an opportunity to develop.</td>
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| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

1. Could you tell me about a time you failed or did not accomplish a goal you set for yourself?
2. Tell me about how you prepared for a difficult task.
3. Could you tell me about a time you were unable to get all your work done despite your best efforts?
4. Could you please tell me about a time when you had a lot of “downtime” on a clinical rotation?
5. Could you tell me about the most challenging diagnoses or clinical conundrums you had on one of your clinical rotations during medical school? I am not looking for the most fascinating patient problems your team had but something that was challenging to you personally.
6. Could you tell me about a time you were under a lot of stress or you were overwhelmed with patient care responsibilities?
7. Could you tell me about a time when you were asked to do something that you knew would not work?
8. Could you tell me about a time when you were given a task to do that didn’t seem to make much sense (or wasn’t relevant to your learning)?
9. Could you tell me about a time you received constructive feedback from one of your attending physicians?
10. Could you tell me about a time when you were asked on rounds a question you did not know the answer?
11. Could you tell me how you are preparing for the transition to residency training?
12. Could you tell me about a time you did not do as well as you would have liked in one of your medical school courses or rotations?
13. Could you tell me about a time when you were in a team setting and your opinion/contribution was “ignored”/”undervalued”?
14. Could you tell me about a time you were asked to do something beyond your capabilities?

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Table of Examples of Words High and Low Performer’s Use When Answering Questions Based on the Different Parts of Speech:

<table>
<thead>
<tr>
<th></th>
<th>High Performers usually use these words in their answers</th>
<th>Low Performers usually use these words in their answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pronouns</td>
<td>I, me, we (talk about themselves and what they did)</td>
<td>You, your, he, she they, it, itself (talk a lot more in second or third person language)</td>
</tr>
<tr>
<td>Verb tense</td>
<td>Past tense (when you ask a high performer about a past experience, they will actually tell you about that past experience)</td>
<td>Present tense, future tense (a low performer will describe what they are doing or what they will do – they can’t tell about past experiences because they don’t have them)</td>
</tr>
<tr>
<td>Voice</td>
<td>Active voice</td>
<td>Passive voice (if being used to appear smarter than they really are)</td>
</tr>
<tr>
<td>Emotions</td>
<td>Positive emotions (happy, thrilled, excited)</td>
<td>Negative emotions (angry, afraid, pessimistic)</td>
</tr>
<tr>
<td>Qualifiers</td>
<td></td>
<td>Adverbs (thoroughly, quickly) negation (no, neither), waffling (could be maybe, perhaps), absolutes (always, never)</td>
</tr>
</tbody>
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General thoughts:

- Help learners find the Coaching in Criticism
- Praise for effort - see effort as the path to mastery
- Foster self-reflection
- Develop self-monitoring and self-assessment skills through video review, benchmarking and instruction (have learners complete the same evaluation form as you and discuss)
- Develop goals for learning experiences – what do you want to get out of this experience (teach comprehension monitoring – what do you want to learn from an article.)
- Help trainees learn to foster each other’s self-reflections
- Help learners elicit feedback from their patients
- Accept that you will make mistakes and give yourself a second score
- Teach how to unpack judgment from the evaluation suitcase
- Be a role model of self-reflection and improvement
- Embrace Challenges and persist in the face of setbacks – let your learners know you value challenge seeking, learning and effort above perfect performance – push beyond your comfort zone
- Ask open ended questions to understand – learn, learn, learn – instead of memorize, memorize, memorize
- Ask for feedback and provide the coach with specifics on what you would like feedback - switch from a “push” mindset “your job is to give me feedback” to a “pull” mindset – it is my job to grow and improve and to seek feedback.

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• Seek mastery and competence through deliberate practice – not a grade
• Discourage labels in teachers and learners
• Focus on continuous quality improvement (PDSA) – try small experiments and reassess, if something doesn’t work, don’t see yourself as a failure but instead as a method or strategy that didn’t work
• Create a culture of trainee responsibility of their own learning – have them gather data on their own milestones and data that support their findings.
• Teach for deeper learning instead of rote memorization
• Use techniques such as the trans-theoretical model and advocacy inquiry to promote growth

Growth Mindset Resources:
Carol Dweck’s Growth Mindset Online Quiz:
https://mindsetonline.com/testyourmindset/step1.php

Growth Mindset and Why It Matters – Activities: (copy each video to your browser)
http://whatkidscando.org/resources/pdf/Growth%20Mindset%20Activites%20&%20Assignments.PDF

The Educator with a Growth Mindset: A Professional Educator Workshop:

Mindset Kit - Downloadable activity ideas, Celebrate Mistakes:
https://www.mindsetkit.org/topics/celebrate-mistakes/downloadable-activity-ideas

References:
5. Evidence-Informed Facilitated Feedback: The R2C2 Feedback Model
https://www.mededportal.org/publication/10387