



AMA Innovations in Medical Education Webinar Series

Practical tips to implement coaching in medical education and foster master adaptive learners

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Bill Cutrer, MD, Med
Amy Miller Juve, EdD
Sally Santen, MD, PhD

March 28, 2022

Today's Host



@Maya_Michigan

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American Medical Association

Professor and Associate Chair for Education
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Objectives



Define coaching and identify competencies that make a successful academic coach



Describe the MAL model and explain how coaching supports MAL and lifelong learning



Discuss considerations in coaching a diverse group of learners



Outline steps for developing academic coaching programs

Presenter



Sally Santen, MD, PhD

Senior Associate Dean, Evaluation, Assessment and Scholarship, VCU School of Medicine
Professor, Emergency Medicine and Medical Education, University of Cincinnati College of Medicine
Consultant, AMA

Presenter



Bill Cutrer, MD, Med

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Oregon Health & Science University

What is your primary responsibility in education?

- UME
- GME
- CME
- Medical Student
- Resident
- Allied health profession
- Not for profit organization
- For profit company
- Other



What is Coaching? & Coaching Competencies

Sally Santen, MD, PhD
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University of Cincinnati College of Medicine
Consultant, AMA

ANNALS OF MEDICINE | OCTOBER 3, 2011 ISSUE

PERSONAL BEST

Top athletes and singers have coaches. Should you?

BY ATUL GAWANDE

Physicians powerfully impact patients




No matter how well trained people are, few can sustain their best performance on their own. That's where coaching comes in.

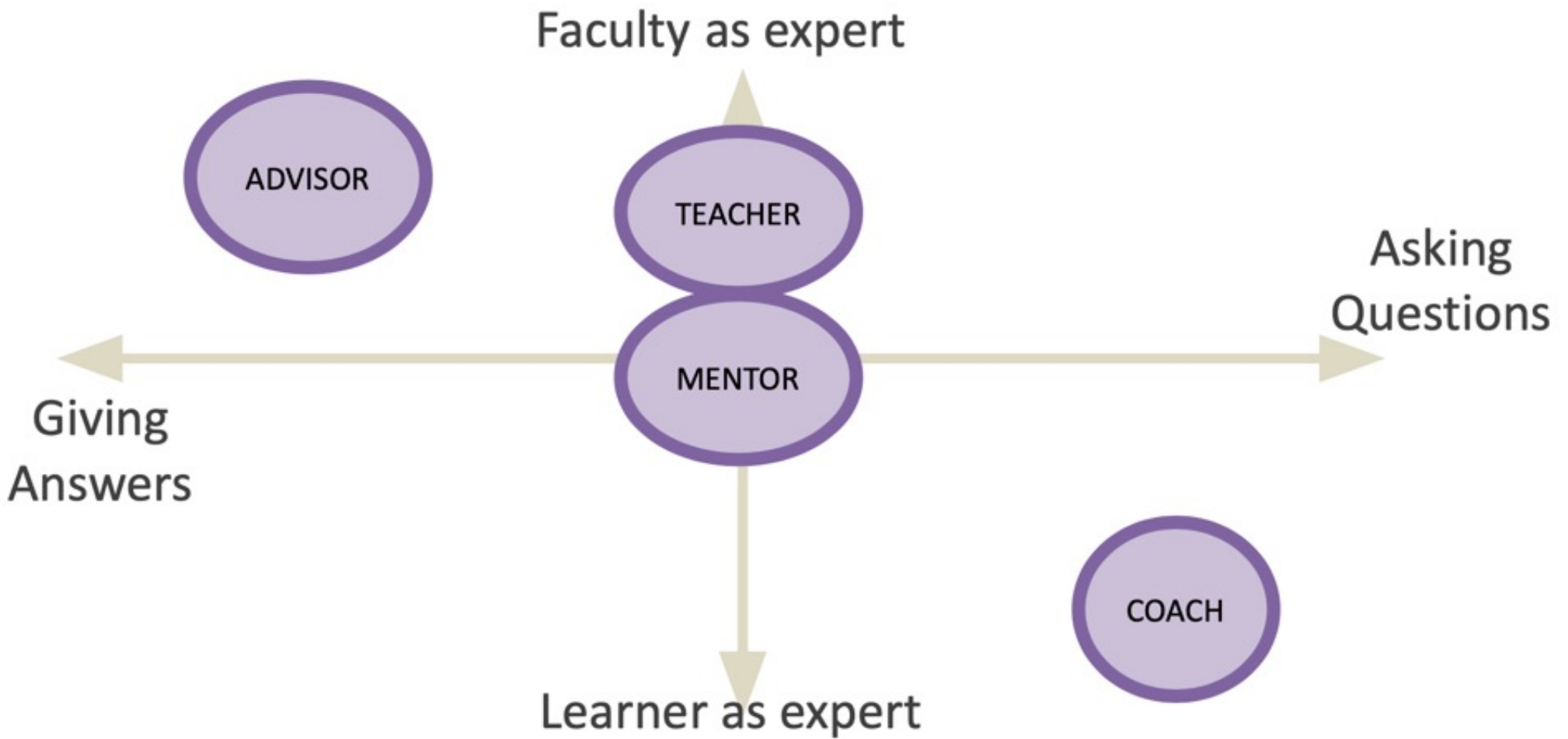
ILLUSTRATION BY BARRY BLITT

“The goal of coaching as applied in medical education is to support a developmental process whereby an individual learner meets regularly over time with a faculty coach to **create goals, identify strategies to manage existing and potential challenges, improve academic performance, and further professional identity development toward reaching the learner's highest potential.**”

Deiorio et al, Coaching: a new model for academic and career achievement, Med Educ Online, 2016



How does
coaching differ
from advising,
mentoring, or
teaching?



RATIO OF ENGAGEMENT



PROBING & LISTENING



TELLING & ANSWERING



ADVISOR

Episodic, issue-focused relationship depending on what the learner needs to know or asks. Based on advisor expertise.

"In my experience, you should find an endocrinology mentor, perform well on an advanced elective, and apply to 10 academic programs"

Refer to coaches when the learner wants to go deeper in exploring goals or solving problems



MENTOR

Longitudinal, personal relationship focusing on the learner's longer-term development. Based on mentor experience.

"What do you like about the work I do? This was my journey; is that a path you see for yourself? Let's partner on finding a research project for you."

Deiorio et al, Academic Medicine 2021, online ahead of print



	STRATEGY	WHAT A COACH SHOULD DO	WHAT A COACH SHOULD SAY
	Strengths-based coaching	Prompt the learner to envision their future Partner with the goal of achieving positive outcomes based on what has worked in the past, as opposed to jumping to immediately "fixing" problems.	<i>"You say you envision yourself as a strong clinician who is respected by their peers. Let's work together with that objective in mind."</i>
	Relationship-building	Promote an environment of safety, trust and respect Create an atmosphere of partnership, honesty, trust, and autonomy.	<i>"I am here to help you be the best physician you can be, even while sometimes we may have difficult conversations. I will always keep your best interests in mind."</i>
	Meeting management	Facilitate learner-driven meetings Ask the learner to set the agenda, and encourage them to set timelines for goals and expectations.	<i>"Let's be sure we set up future meetings so we don't lose momentum. Tell me what an ideal schedule would look like for you."</i>
	Appreciative inquiry	Ask, not tell Lead with questions. Appreciate what's working. Envision what should be. ²	<i>"What does a 'strong clinician' look like; what makes you say you have not achieved this yet? How would you know when you have become one?"</i>
	WOOP & ISMART	Assist with goal-setting & provide accountability Use concrete frameworks, such as Wish Outcome Obstacle Plan (WOOP) or Important Specific Measurable Achievable Realistic Timely (ISMART). ^{3,4}	<i>"While 'matching into a strong internal medicine residency' is an admirable goal, think about the steps along the way and work those into a timeline of goals."</i>

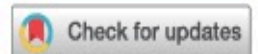
MEDICAL TEACHER

<https://doi.org/10.1080/0142159X.2021.1947479>








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SHORT COMMUNICATION



Beyond advising and mentoring: Competencies for coaching in medical education

Meg Wolff^a , Nicole M. Deiorio^b , Amy Miller Juve^c , Judee Richardson^d, Gail Gazelle^e, Margaret Moore^f, Sally A. Santen^b  and Maya M. Hammoud^g 

Coaching structure and process



- Coaching agreement
- Meeting management
- Managing process and accountability

Relational skills



- Establish a meaningful relationship
- Effective communication
- Cultivate coachee's emotional intelligence

Coaching skills



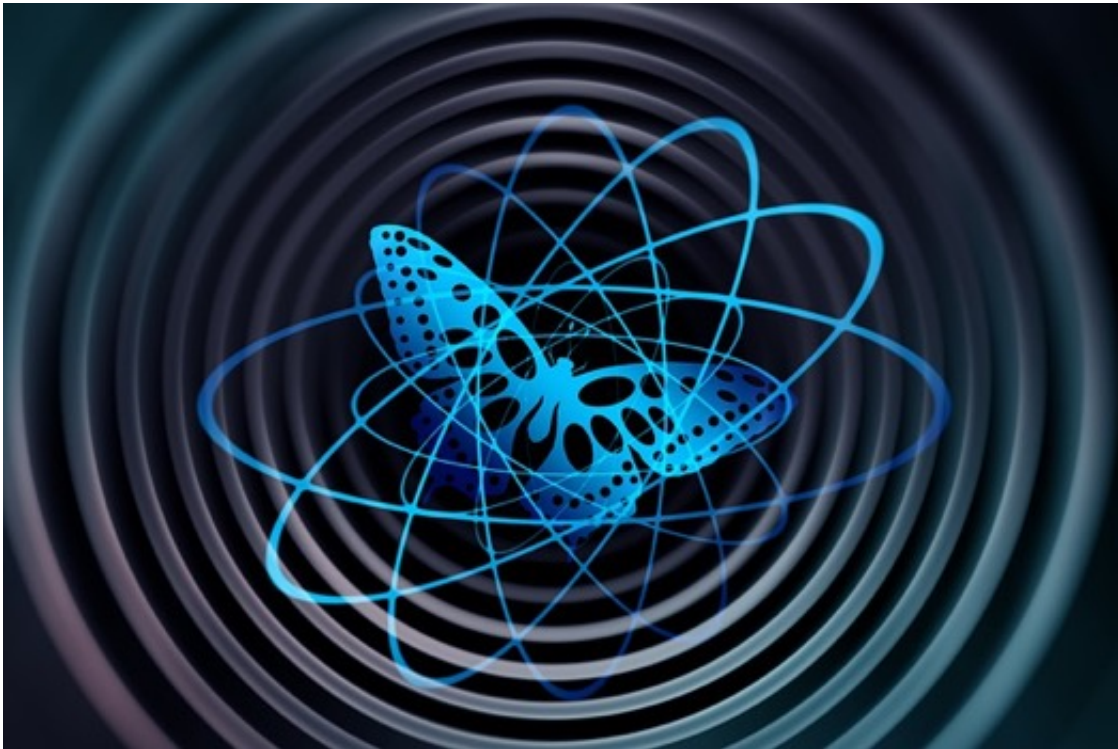
- Fostering the Master Adaptive Learner
- Support coachee in cultivating well-being and professional fulfillment
- Support coachee in improving motivation and self-efficacy
- Help coachee overcome challenges with co-creative collaboration

Coach development



- Cultivate self-development
- Cultivate self-management
- Recognize limitations

Coaching theories and models



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- Identify and use coaching theories and tools that best fit coachee's needs
- Use theories and tools flexibly and adaptively

AMA Accelerating Change in Medical Education Coaching Video Series

Relationship Building

Experienced coach



Competencies

- Establishing a meaningful coaching relationship
- Effective communication
- Meeting management



Produced by
Virginia Commonwealth University School of Medicine

AMA Coaching Videos





Physicians' powerful ally in patient care



Coaching and the Master Adaptive Learner

Bill Cutrer, MD, Med

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Associate Professor, Pediatrics, Critical Care Medicine
Vanderbilt University School of Medicine

Fostering the Development of Master Adaptive Learners: A Conceptual Model to Guide Skill Acquisition in Medical Education

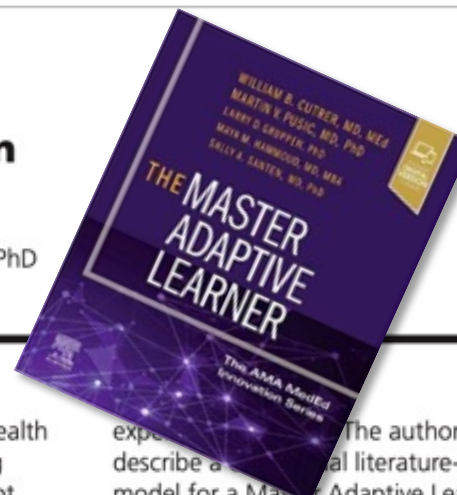
William B. Cutrer, MD, MEd, Bonnie Miller, MD, Martin V. Pusic, MD, PhD, George Mejicano, MD, MS, Rajesh S. Mangrulkar, MD, Larry D. Gruppen, PhD, Richard E. Hawkins, MD, Susan E. Skochelak, MD, MPH, and Donald E. Moore Jr, PhD

Abstract

Change is ubiquitous in health care, making continuous adaptation necessary for clinicians to provide the best possible care to their patients. The authors propose that developing the capabilities of a Master Adaptive Learner will provide future physicians

with strategies for learning in the health care environment and for managing change more effectively. The concept of a Master Adaptive Learner describes a metacognitive approach to learning based on self-regulation that can foster the development and use of adaptive

exp... The authors describe a... literature-based model for a Master Adaptive Learner that provides a shared language to facilitate exploration and conversation about both successes and struggles during the learning process.



[Academic Medicine](#). 2017 Jan;92(1):70-75.

ADAPTIVE Expertise

- Expertise to function efficiently on everyday tasks
- Expertise to create solutions for workplace challenges
- Skills of **adaptive expertise** used when an individual
 - Recognizes that a “routine” approach will not work
 - Reframes the problem in a way that allows her
 - To explore new concepts (learning)
 - To invent new solutions (innovation)

Hatano & Inagaki (1986) *Child Development and Education in Japan*
Schwartz & Bransford (1998) *Cogn Instruc*
Mylopoulos & Woods (2009) *Med Ed*
Carbondell et al. (2014) *Educ Res Rev*
Woods & Mylopoulos (2015) *Med Ed*
Mylopoulos & Woods (2017) *Med Ed*

ADAPTIVE Expertise

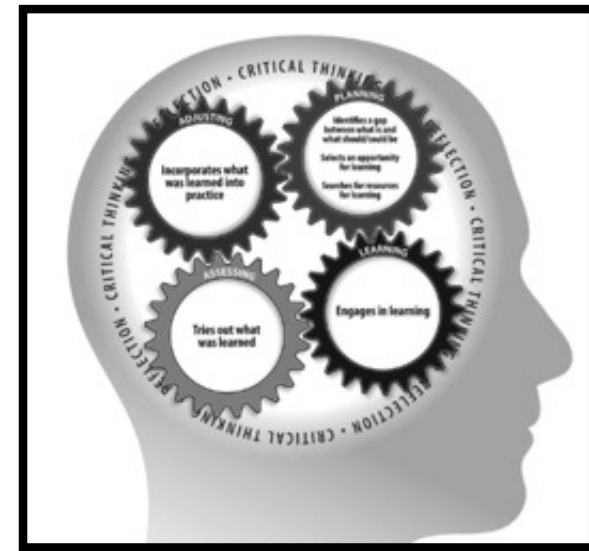
What is it?

- “product of a learned skill set, characterized by habits of mind that develop over time and with practice”
- Characterized by:
 - Better developed metacognitive skills
 - Flexibility
 - Ability to innovate
 - Continuous learning
 - Seeking out challenges
 - Creativity

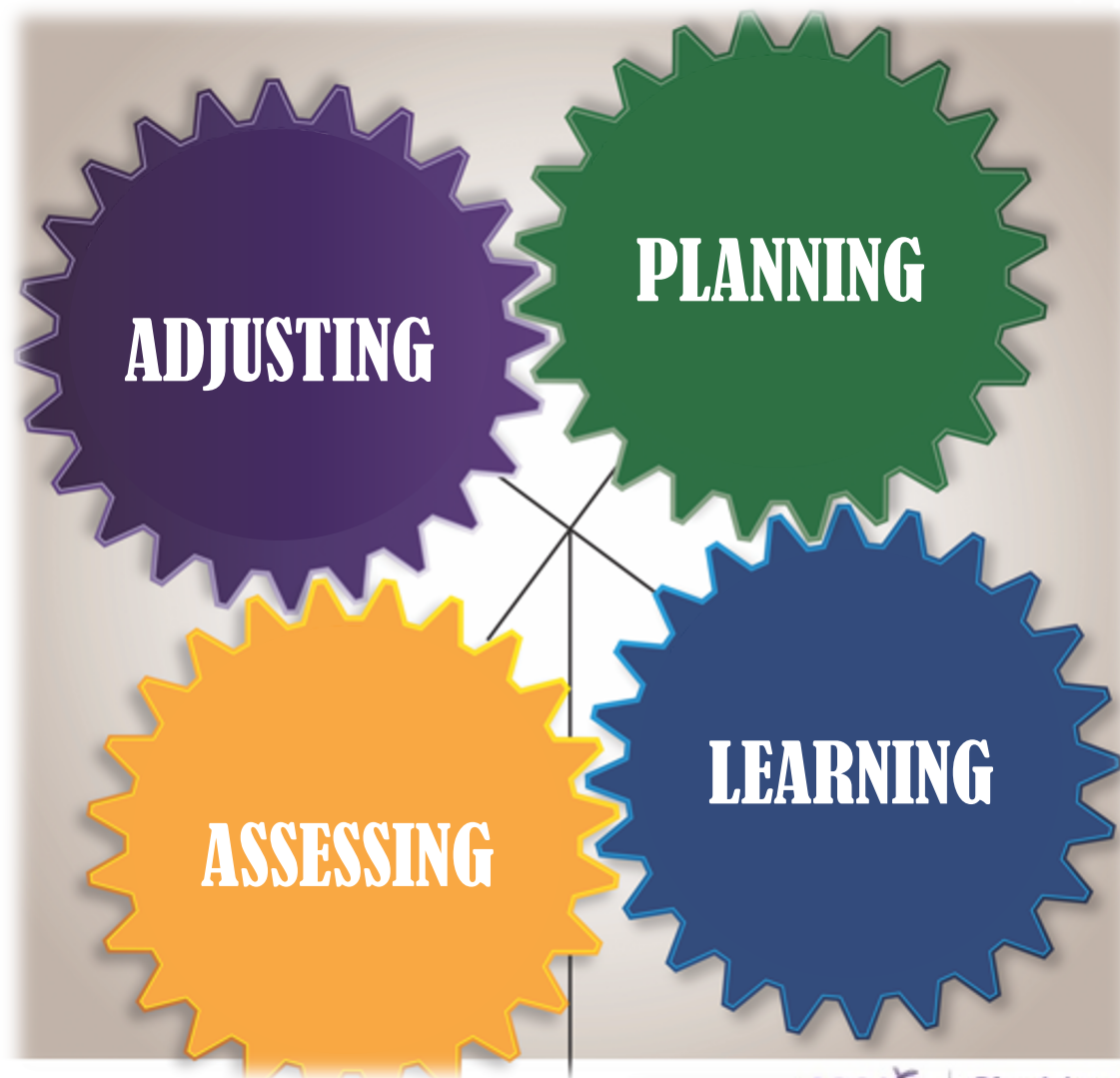
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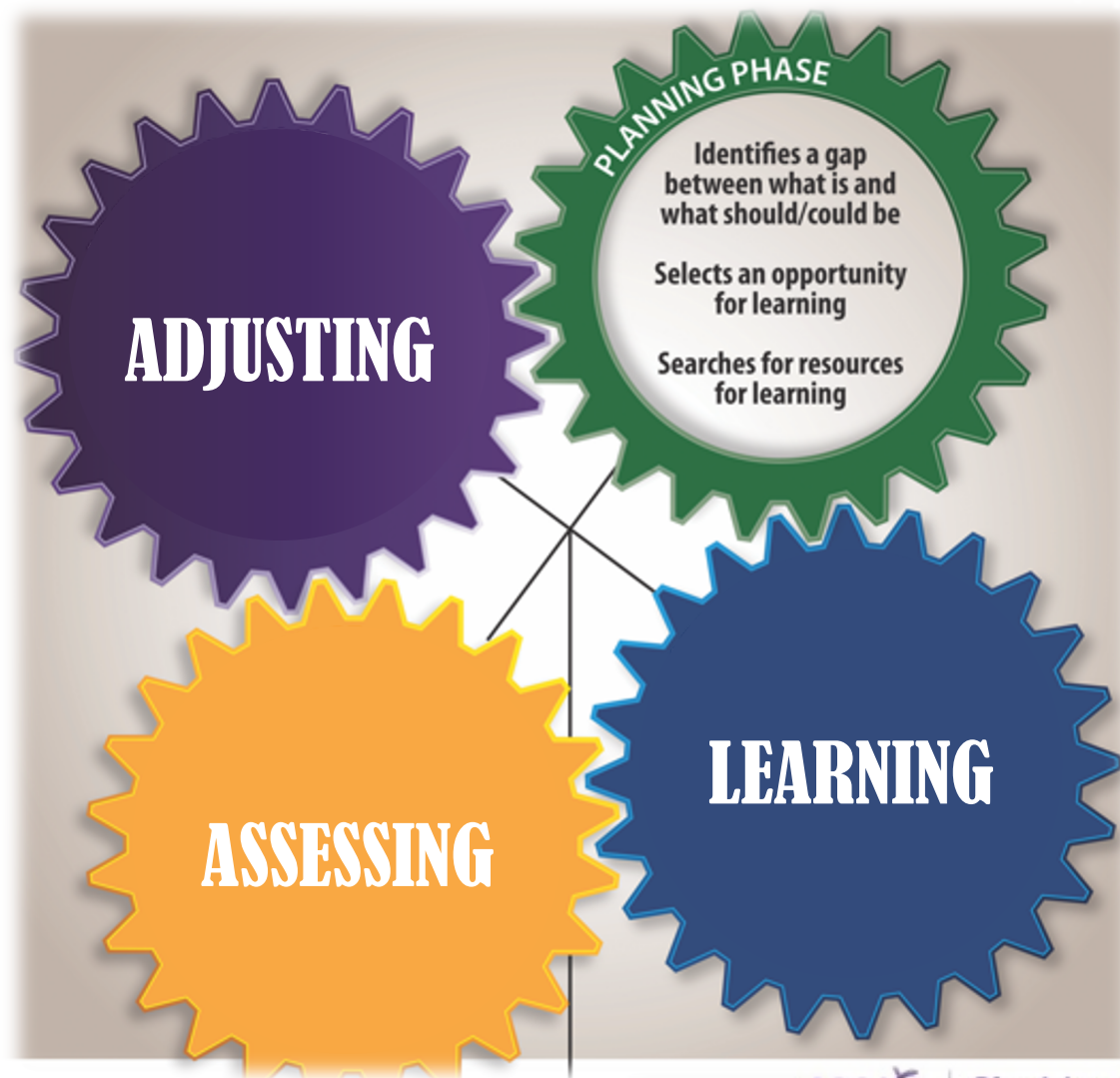
Master Adaptive Learner

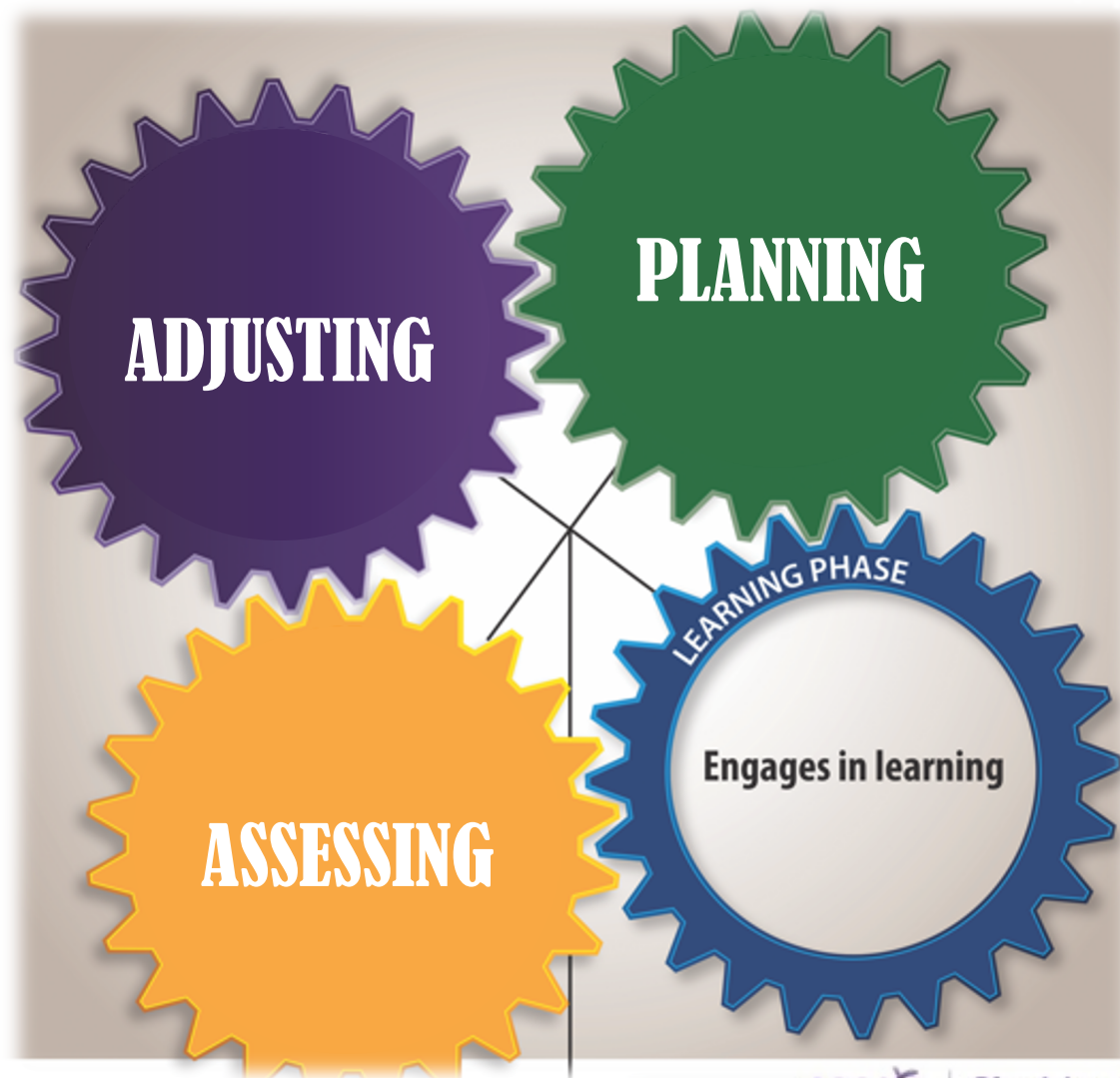
“Individual who utilizes the **meta-cognitive approach** to **self-regulated learning** that leads to **adaptive expertise development**”

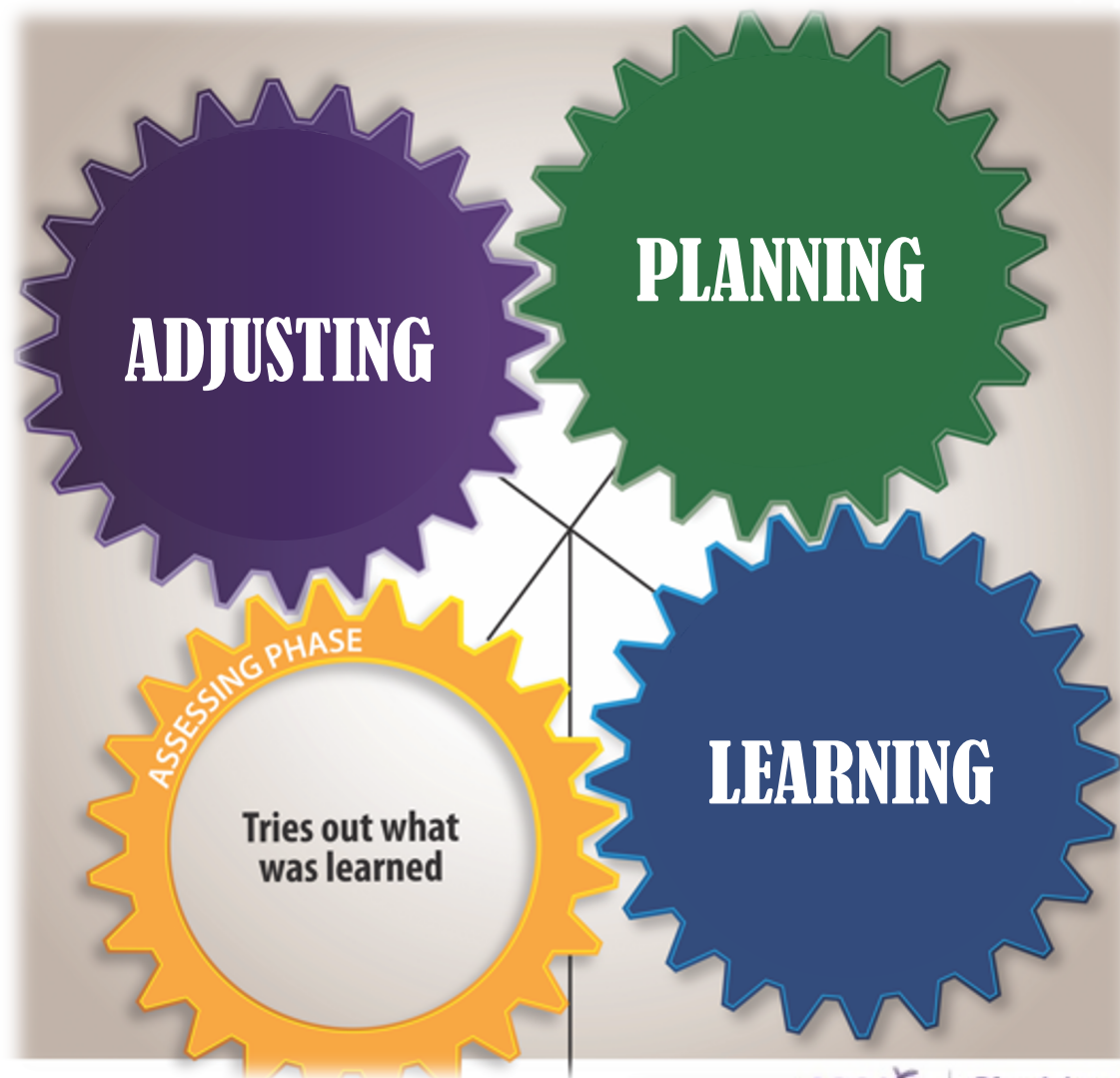


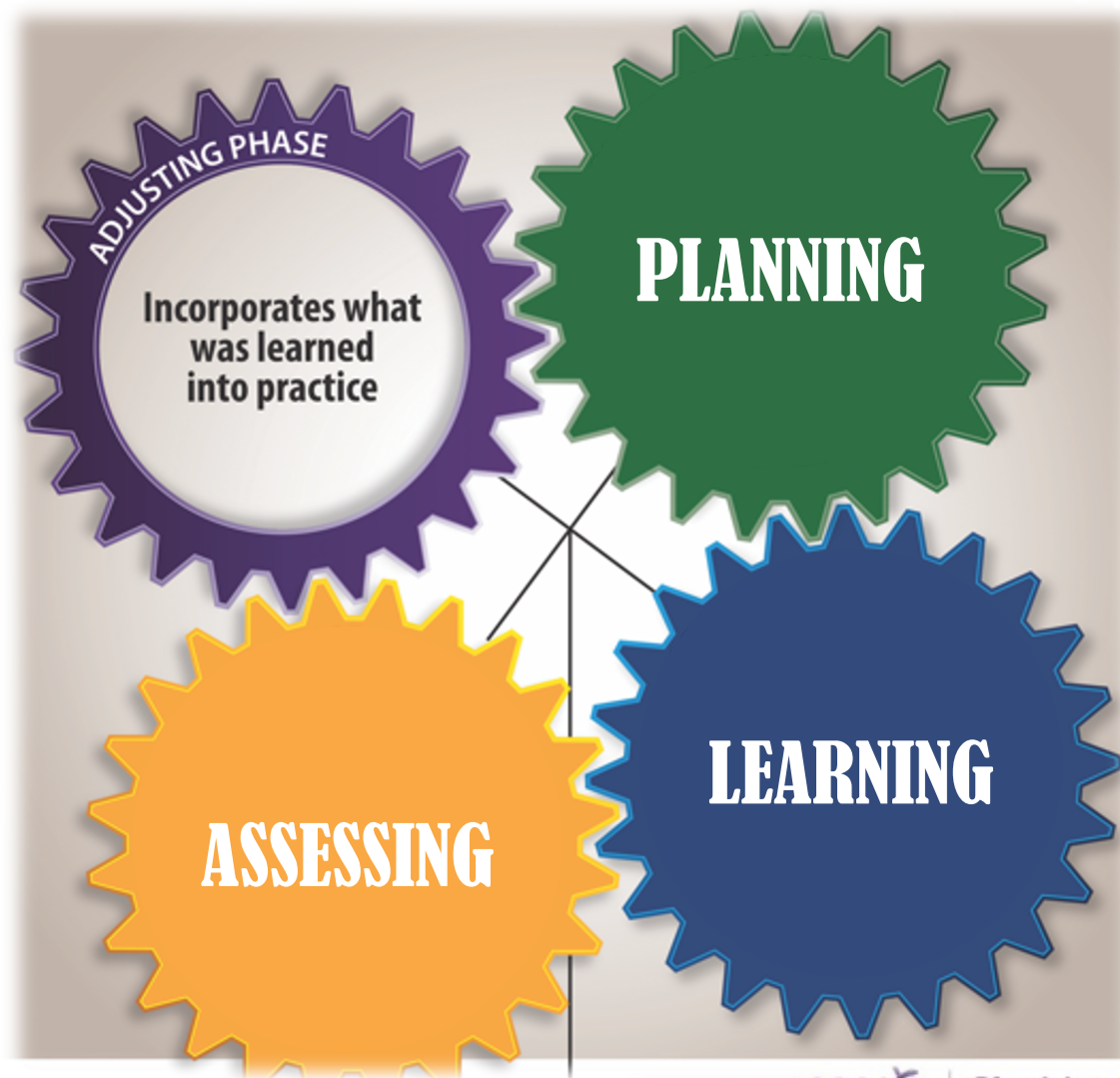
Cutrer et al. (2017) *Acad Med*
Cutrer et al. (2018) *Med Teach*

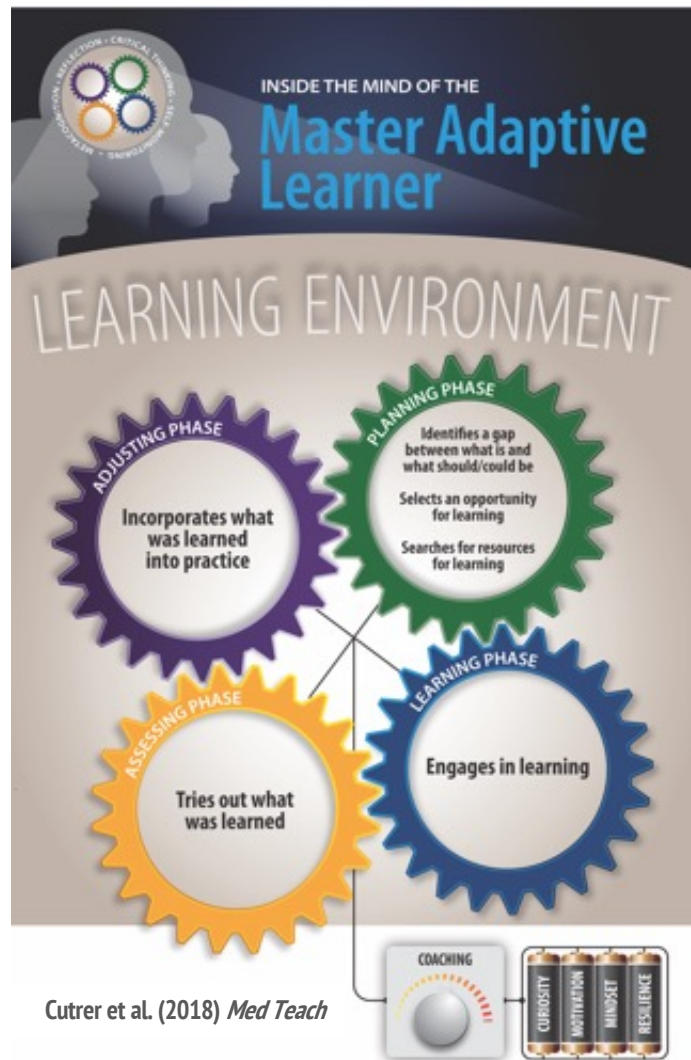












Cutrer et al. (2018) *Med Teach*

Competency based Medical Education (CBME)

Competency outcomes clearly articulated (milestones, EPAs)

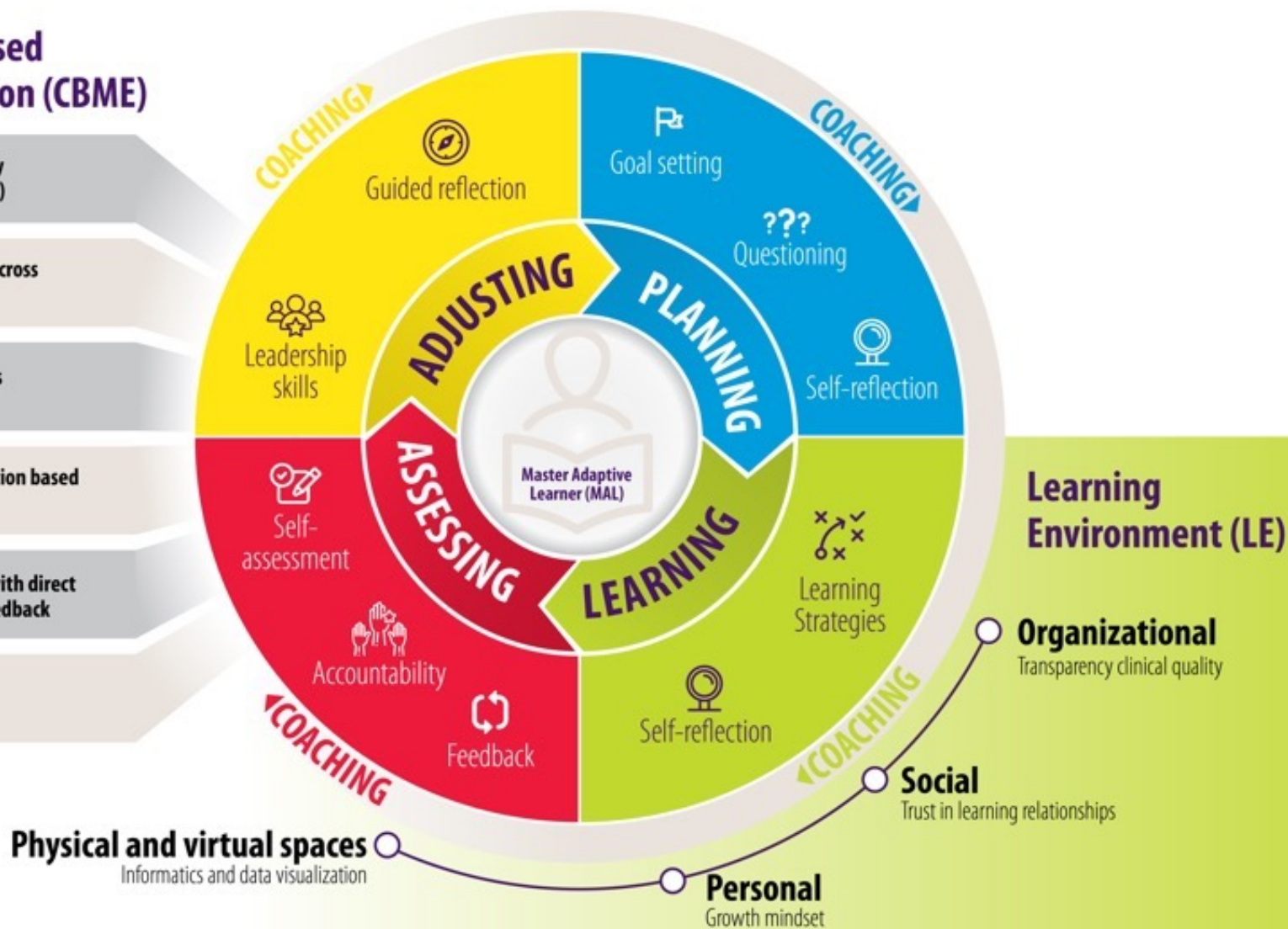
Developmental sequencing across med ed continuum

Tailored learning experiences in authentic roles

Competency-focused instruction based on performance evidence

Programmatic assessment, with direct observation and frequent feedback

Time as a resource





Coaching Support in the PLANNING Phase

1) Know and Utilize Trainee Assessment Data

Sources of Feedback to Consider:



Deiorio & Miller Juve (2019) Chapter 12—How Can I Best Support Master Adaptive Learners Using Coaching
Deiorio & Hammoud (2017) Coaching in Medical Education Handbook



Coaching Support in the PLANNING Phase

2) Ask impactful questions

- What data are most helpful to you in identifying areas for growth?
- What areas of your development as a physician would you like to focus on?
- How would your function as resident improve if you focused on improving “X skill” for the next 3 months?
- Which faculty have been most impactful in helping you improve your knowledge/skills/attitudes? Why?



3) Help learner set appropriate learning goals



Coaching Support in the **LEARNING** Phase

1) Ask impactful questions

- What learning strategies have you effectively used in the past?
- What learning strategies have you tried thus far? How did they work for you?
- What would it look/feel like to be successful in the **LEARNING** phase?
- What has been most useful to you when learning in the past?



2) Be a sounding board as learner attempts different learning strategies

3) Know about available resources if there is concern for learning disabilities or mental health concerns



Coaching Support in the ASSESSING Phase



<https://images.app.goo.gl/b2ugbx82Fr5j3GZm8>



<https://images.app.goo.gl/diFG4Tq25qCjbcv9>



Coaching Support in the ASSESSING Phase

- 1) Carefully review all learner data (Portfolios, Dashboards, etc.)
- 2) Ask impactful questions
 - When have you been able to receive really helpful feedback? Who provided it?
 - Describe was the last time you were surprised by a piece of feedback/assessment
 - What do you do when your faculty member gives you feedback that disagrees with how you view your own knowledge/skills/attitudes?
 - When they rate you higher than you would rate yourself?
 - When they rate you lower than you would rate yourself?
- 3) Normalize the feedback process (including asking for feedback on your coaching)



Wolff & Santen (2019) Chapter 6—What is the Role of Self-Assessment in the Master Adaptive Learner Model?



Coaching Support in the ADJUSTING Phase

1) Ask impactful questions

- What will you do differently because of this learning?
- How will future patients benefit from what you've just learned?
- In what other scenarios might this learning also be important?



2) Discuss potential barriers to implementing change based on new learning

Learner Characteristics





Physicians' powerful ally in patient care



Considerations in Coaching Diverse Learners

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Associate Director, Medical Student Education, Diagnostic Radiology
Associate Division Chief, Neuroradiology
Indiana University School of Medicine

Who is a diverse learner?

- racial and ethnic populations that are underrepresented in the medical profession relative to their numbers in the general population - Blacks, Mexican-Americans, Native Americans (that is, American Indians, Alaska Natives, and Native Hawaiians), and mainland Puerto Ricans
- those from low-income backgrounds
- first generation college educated
- those who identify as LGBTQ+
- those with disabilities

Fundamental principles

- Structural competency – SDOH are stressors that drive inequities not only in health care but also in medical education*
- Marginalized groups may not have had access to advisers, mentors, or family members prior to medical school who are well-versed in common and needed professional advancement strategies and experiences^
- Coaches can be crucial to bridging the gap that learners from groups marginalized in medicine may experience
- Socialization → Lived experiences → Biases in all - linked to affiliation
- Biases and prejudices may show up unintentionally during any interaction; requires intentionality to recognize

What can coaches do?

- Practice core competencies to mitigate inequities and promote equality
- Through professional development activities, become aware of how socialization contributes to their own biases*
- Use reflection-based diversity training – requires high internal motivation~
- Build contextual awareness – how to interact with a diverse group of learners from different privileges, backgrounds, beliefs, ways of expression, and life experiences – being mindful that some learners experience a greater power differential.
- Provide a safe place and time for coachee's self-discovery and to build trust^

What can coaches do?

- Realize we are vulnerable to unconsciously denying the whole identity of another individual based on certain attributes that are different from ours*
- Set culturally sensitive boundaries, not discriminate, and demonstrate respect for the coachee's perceptions, learning style, and personal being
- Understand the coachee's journey and circumstance over their perspective – the latter can lead to misunderstandings~
- Bring out the coachee's own strengths and resilience to help position them for success
- Employ goal-oriented motivational interviewing and confidence-building appreciative inquiry

What can learning institutions do?

- Coaching programs need to focus on building a culture of mutual inclusivity and respect where all participants feel welcomed and differences are valued.
- Ensure there is compliance with established ethical codes to ensure there are no unintended consequences among learners, in particular, those from underrepresented, less privileged, or disadvantaged groups.
- Assemble cohorts of diverse coaches and provide group development opportunities to broaden one another's perspectives and ensure all coaches are prepared to interact with learners of varied backgrounds.

Acknowledgements

- Binata Mukherjee, MD, MBA
- Mark Meyer, MD
- Kimberly Lomis, MD



Program Development

Amy Miller Juve, EdD

**Associate Professor, Vice Chair of Education,
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**Program Improvement and Professional Development Specialist
Graduate Medical Education**

Oregon Health & Science University



Change Management

- Most change efforts encounter problems
- Who/which group is most likely to resist change and why
- Create a plan for resistance
- (OVER) Educate and communicate
- Follow a change management model
 - Kotter, McKinsey, ADKAR, Kubler-Ross, Lewin

01

Define Key Program
Characteristics

02

Define Coaching and the
Coach/Coachee
Relationship

03

Create Structure,
Systems, and Time

04

Ongoing Development of
the Coach and Learner

01

Define Key Program
Characteristics

- Required vs optional
- Assessment of learners
- 1:1 or small group
- Longitudinal growth vs class specific growth
- Coach selection (peer, faculty, staff)
- Cadence of meetings
- Focus on a subset or everyone

02

**Define Coaching and the
Coach/Coachee
Relationship**

- Coaching is distinct from advising and mentoring
- Orient everyone to coaching constructs
- Help each person understand their individual role and expectations (position descriptions)
- Provide additional resources

03

Create Structure,
Systems, and Time

- Clearly (overly) communicate expectations
- Learning management system and tracking
- Protect time, make coaching a priority
- Administrative support
- Checklist or guides

Coaching Session: Quarterly check-in

The purpose of each session is to help the resident reflect upon their educational experiences in order to improve performance, develop academic progression plans and identify resources needed to be successful. The resident is responsible for focusing the agenda for each meeting, based upon their ISMART goal individual learning plan and careful review of the below items.

Pre-meeting preparation check-list
Resident and Coach: Please review the following (as applicable): <ul style="list-style-type: none"><input type="checkbox"/> ITE, AKT and/or Basic exam scores<input type="checkbox"/> Summative evaluations<input type="checkbox"/> Clinical competency reports<input type="checkbox"/> Milestone progression<input type="checkbox"/> ACGME Case logs<input type="checkbox"/> ISMART goal learning plan from last meeting
Resident: please prepare the following (as applicable): <ul style="list-style-type: none"><input type="checkbox"/> Create new ISMART goal(s) after reviewing your current goals<input type="checkbox"/> Progress “report” on goals articulated at last meeting<input type="checkbox"/> Proposed experience/advancement schedule (particularly for CA2s)<input type="checkbox"/> Plan to mitigate identified gaps in knowledge/experience<input type="checkbox"/> Study plan for next exam(s)

Resident and Coach: Please be prepared to discuss the following topics. Resident, please remember you are responsible for focusing your discussion on the items you feel you need the most assistance. Coach, please remember it is your responsibility to review and communicate as needed, all relevant advancement documents (evaluations, test scores etc.) and guide resident to needed resources.

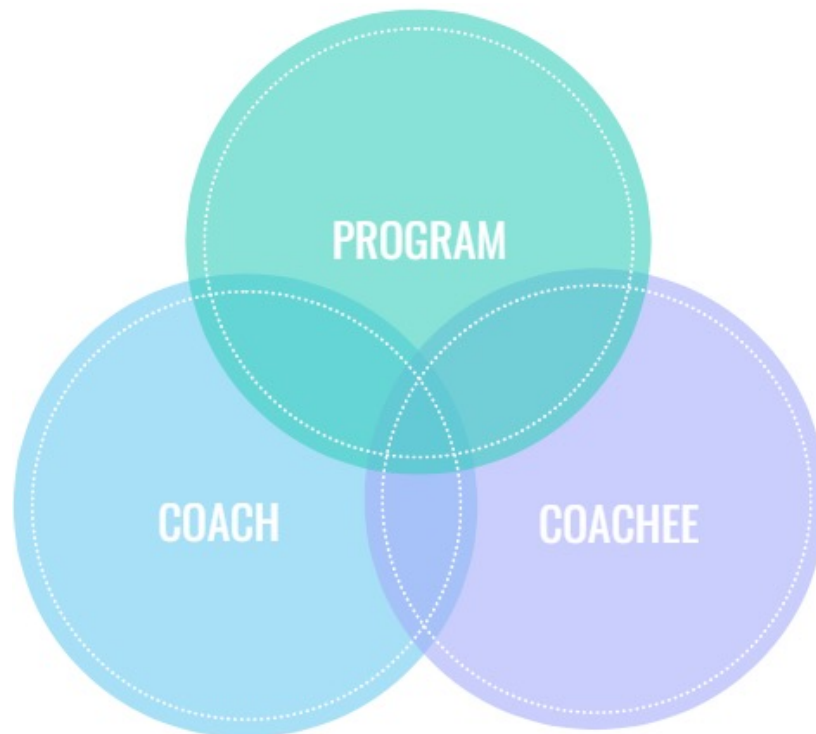
- ☐ What are some of your biggest academic successes since you last met?
- ☐ What have been some of the biggest academic challenges since we last met?
- ☐ How is your individual learning plan going?
- ☐ Can you review your new ISMART goal learning plan with me? Is your learning plan the same or has it changed? If it's changed, how?

04

Ongoing Development of the Coach and Learner

- Practice makes perfect(ish)
- Plan for those who feel they need coaching
- Formative assessment
- Tools for self-directed development
- Who else at your institution can help

Assessment



Assessment: Tools

- Metacognitive Awareness Inventory (Schraw & Dennison, 1994)
- Self-directed Learning Readiness Scale/Learning Preference Assessment (Guglielmino, 1977)
- Attributes of Coaching Instrument (Carney et al, 2019)
- Professional Identity Essay
- Perceived Stress Scale (Cohen et al, 1983)
- STERLinG - reflective practice (Schaub-de Jong et al., 2011)
- Goal Attainment Scaling (GAS)
- Grades, EPAs, Competency, Time in training, Test scores, Patient outcomes

Coaching Programs

- Wellbeing
- Academic (Advancement, Portfolio)
- Peer
- Career
- Learners who struggle (skill development)
- Professional identity
- Career advancement (faculty development)
- One on one or group coaching

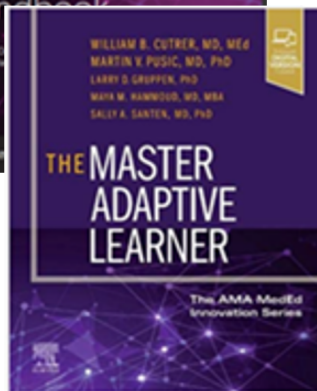
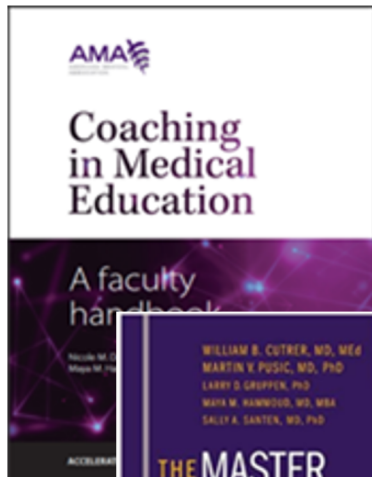
Recap

- Follow basic program development model
 - Problem identification, needs assessment
 - Identify goals, outcomes, and assessment
 - Identify allies and teammates
 - Identify and secure resources
- Consider using a change management model
- Special considerations for coaching programs
 - Identify program characteristics
 - Define coach/coachee relationship
 - Create structure, systems, and time
 - Ongoing development of coach and coachee



Physicians' powerful ally in patient care

Resources



CONTENTS

Coaching video series |
Free webinar: Practical tips to implement
Apply to attend the Academic Coaching
Facilitating Effective Transitions Along the
Coaching/coachee handbooks for educators
How does a learner benefit from coaching?

Coaching video series

Today's medical school coaching programs focus on a wide variety of individualized goals, including professional identity formation and academic performance, while strengthening skills such as community building, leadership, lifelong learning and more.

Nine coaching video modules were developed to support greater understanding of the competencies, skills and approaches used by academic coaches. They can be implemented as a component of a comprehensive coaching curriculum for training coaches. The videos illustrate coaching competencies and include examples of coaching by inexperienced and experienced coaches. Access the modules for free on the AMA Ed Hub™.

- [Coaching Basics](#)
- [Relationship Building](#)
- [Portfolio Coaching](#)
- [Skills Coaching](#)
- [Well-being Coaching](#)
- [Coaching the struggling learner](#)
- [Coaching the excelling learner](#)
- [Coaching the disengaged learner](#)
- [Appreciative inquiry model](#)

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<https://www.ama-assn.org/education/accelerating-change-medical-education/coaching-medical-education>



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Practical tips to implement coaching in medical education and foster master adaptive learners



Questions