

Master Adaptive Learner

What is a Master Adaptive Learner and why is this important to competency-based medical education?

The Master Adaptive Learner (MAL) model describes the process of developing skills for lifelong, self-regulated, self-directed learning. This process has four continuous, integrative phases (Planning, Learning, Assessing, Adjusting) that are impacted by learner characteristics (Curiosity, Motivation, Growth Mindset, Resilience) and supported by coaching. A resident who is a MAL values intentional learning as a core part of their professional identity and actively seeks and incorporates feedback to enhance learning.

How the Master Adaptive Learner model relates to competency-based medical education (CBME)¹

1) Supports the development of life-long, self-directed and self-regulated learning²

- a. When faced with a new situation, the MAL can adapt by creating new approaches.
- b. In CBME, the resident engages in the four phases to close the gaps between what they know and do not know and what they can and cannot do.

2) Provides a framework for reflection and deliberate practice³

- a. While the MAL engages in the four phases, they use the four learner characteristics to help them successfully navigate each phase.
- b. Curiosity helps the resident reflect on feedback and assessments. Motivation, especially internal, fuels the drive to work on learning goals. A growth mindset helps the resident continue to believe that they can achieve their goals. Resilience helps the resident persevere and bounce back when encountering difficulty in achieving their goals.

3) Emphasizes the need for coaching⁴

- a. Coaching is an integral factor in helping the MAL improve their ability to self-assess and act on feedback. A coach provides accountability and a safe environment for setting goals.
- b. With regular meetings, a coach helps the resident create an individualized learning plan. Together, they look at feedback and progress on current goals. Through questioning, a coach helps the resident understand what they need to improve and to create a path to reach the desired goal(s).

¹ Cutrer WB, Miller B, Pusic MV, Mejicano G, Mangrulkar RS, Gruppen LD, Hawkins RE, Skochelak SE, Moore DE Jr. Fostering the Development of Master Adaptive Learners: A Conceptual Model to Guide Skill Acquisition in Medical Education. *Acad Med.* 2017 Jan;92(1):70-75.

² Edje L and Price DW. Training Future Family Physicians to Become Master Adaptive Learners. *Fam Med.* 2021;53(7):559-566.

³ Cutrer WB, Atkinson HG, Freidman E et al. Exploring the Characteristics and context that allow Master Adaptive Learners to thrive. *Med Teach.* 2018;40(8):791-796

⁴ Reynolds AK. Academic coaching for learners in medical education: Twelve tips for the learning specialist. *Med Teach.* 2020;42(6):616-612