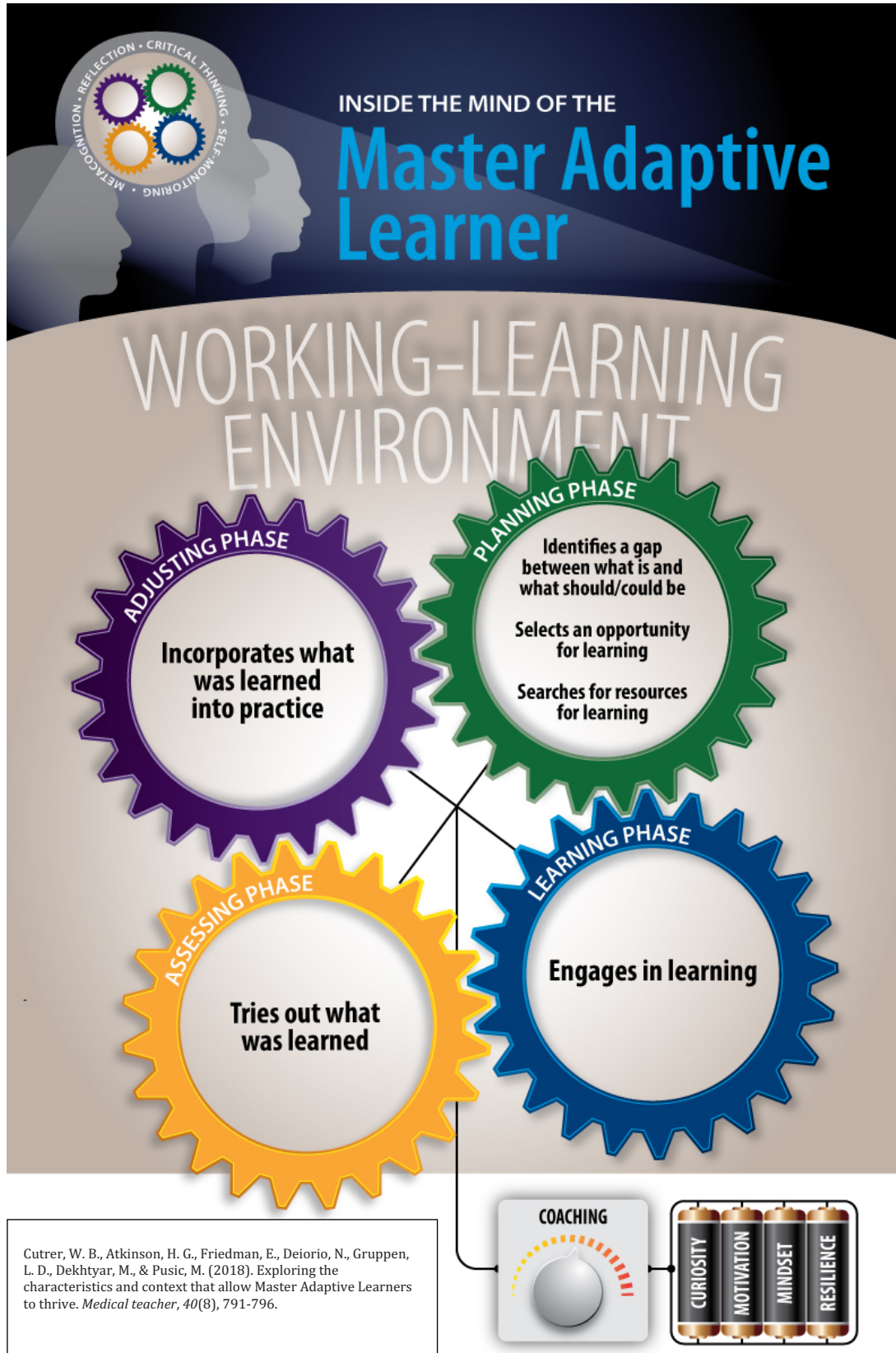
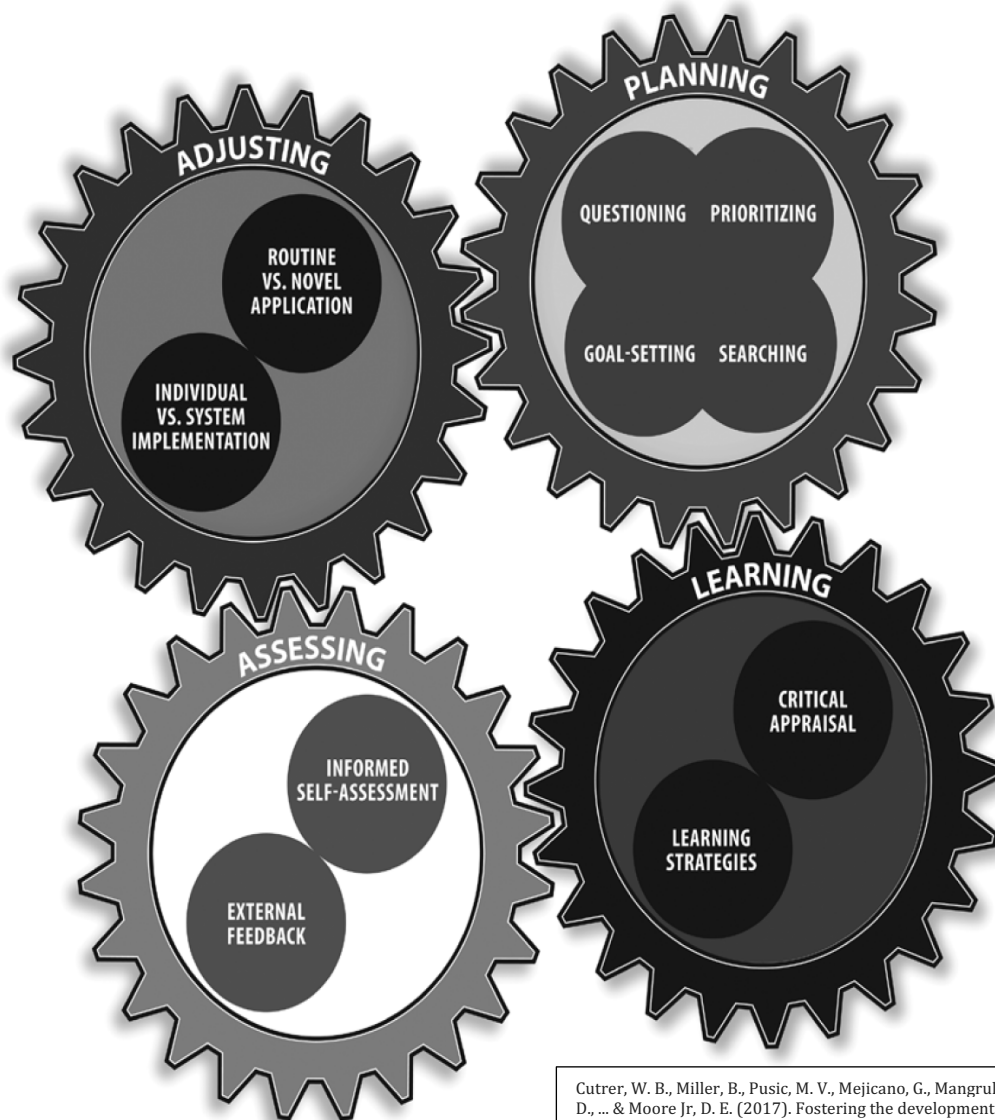


Understanding Knowledge Gaps as a Driver of Master Adaptive Learning: Encouraging and Guiding the Process



Understanding Knowledge Gaps as a Driver of Master Adaptive Learning: Encouraging and Guiding the Process



Cutrer, W. B., Miller, B., Pusic, M. V., Mejicano, G., Mangrulkar, R. S., Gruppen, L. D., ... & Moore Jr, D. E. (2017). Fostering the development of master adaptive learners: a conceptual model to guide skill acquisition in medical education. *Academic Medicine*, 92(1), 70-75.

Figure 3 Skills of the Master Adaptive Learner.

Follow-Up Reading:

- 1) Cutrer, W. B., Miller, B., Pusic, M. V., Mejicano, G., Mangrulkar, R. S., Gruppen, L. D., ... & Moore Jr, D. E. (2017). Fostering the development of master adaptive learners: a conceptual model to guide skill acquisition in medical education. *Academic Medicine*, 92(1), 70-75.
- 2) Cutrer, W. B., Atkinson, H. G., Friedman, E., Deiorio, N., Gruppen, L. D., Dekhtyar, M., & Pusic, M. (2018). Exploring the characteristics and context that allow Master Adaptive Learners to thrive. *Medical teacher*, 40(8), 791-796.
- 3) Pusic, M. V., Santen, S. A., Dekhtyar, M., Poncelet, A. N., Roberts, N. K., Wilson-Delfosse, A. L., & Cutrer, W. B. (2018). Learning to balance efficiency and innovation for optimal adaptive expertise. *Medical teacher*, 1-8.
- 4) Mylopoulos, Maria, and Nicole N. Woods. "Having our cake and eating it too: seeking the best of both worlds in expertise research." *Medical education* 43.5 (2009): 406-413.
- 5) Mylopoulos, M., & Woods, N. N. (2017). When I say... adaptive expertise. *Medical education*, 51(7), 685-686.
- 6) Carbonell, K. B., Stalmeijer, R. E., Könings, K. D., Segers, M., & van Merriënboer, J. J. (2014). How experts deal with novel situations: A review of adaptive expertise. *Educational Research Review*, 12, 14-29.
- 7) Mylopoulos, M., & Regehr, G. (2009). How student models of expertise and innovation impact the development of adaptive expertise in medicine. *Medical education*, 43(2), 127-132.
- 8) Regehr, G., & Mylopoulos, M. (2008). Maintaining competence in the field: learning about practice, through practice, in practice. *Journal of Continuing Education in the Health Professions*, 28(S1), 19-23.
- 9) Mylopoulos, M., & Regehr, G. (2007). Cognitive metaphors of expertise and knowledge: prospects and limitations for medical education. *Medical education*, 41(12), 1159-1165.
- 10) Schwartz, D. L., Bransford, J. D., & Sears, D. (2005). Efficiency and innovation in transfer. *Transfer of learning from a modern multidisciplinary perspective*, 1-51.
- 11) Hatano, G. Inagaki, (1986). Two courses of expertise. *Child development and education in Japan*. NY: WH Freeman.

Understanding Knowledge Gaps as a Driver of Master Adaptive Learning: Encouraging and Guiding the Process

Small Group Activity #1: How Do Students/Residents Identify Gaps?

1. Appoint a note taker to report out your key observations, challenges, and ideas.
2. Discuss the following questions (and any other directions these lead):

How do students in your medical school/residents in your program identify gaps in knowledge, skill, or attitude?

a. How often is this identification learner-driven vs faculty-driven?

b. Do students/residents receive any guidance for acknowledging gaps?

c. How do faculty serve as role models in this process?

Understanding Knowledge Gaps as a Driver of Master Adaptive Learning:
Encouraging and Guiding the Process

3. Brainstorm ideas for this question:

What practical initiatives might improve identification of gaps?

4. Briefly Summarize for the Report-Out.

Understanding Knowledge Gaps as a Driver of Master Adaptive Learning:
Encouraging and Guiding the Process

Small Group Activity #2: What are the Motivational Influences and Consequences of Gap Identification?

1. Appoint a note taker to report out your key observations, challenges, and ideas.
2. Discuss the following questions (and any other directions these lead):

What are the Motivational Influences and Consequences of Gap Identification?

- a. How is gap identification encouraged in your medical school/residency program?*
- b. Are students/residents more motivated to hide gaps or acknowledge them?*
- c. What resources do students/residents have to address gaps?*
- d. How do faculty help or hinder efforts to address gaps?*

Understanding Knowledge Gaps as a Driver of Master Adaptive Learning: Encouraging and Guiding the Process

3. Brainstorm ideas for this question:

What practical initiatives might encourage learner gap identification and learning from identified gaps?

4. Briefly summarize for the report-out.