The Clinician Educator Supplemental Guide

A Joint Initiative of
The Accreditation Council for Graduate Medical Education
The Accreditation Council for Continuing Medical Education
The Association of American Medical Colleges
The American Association of Colleges of Osteopathic Medicine

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Clinician Educator Supplemental Guide

Milestones Supplemental Guide

This document provides additional guidance and examples for the Clinician Educator Milestones. This is not designed to indicate any specific requirements for each level, but to provide insight into the thinking of the Milestone Work Group.

Included in this document is the intent of each Milestone and examples of what might be observed/assessed at each level. Each example is labeled with letter in parentheses to indicate which part of the continuum the example addresses; U = undergraduate medical education, G = graduate medical education, and C = continued professional development. Also included are suggested assessment models and tools for each subcompetency, references, and other useful information.

This Guide can be used to aid in self-assessment or by a trusted colleague offering a peer-assessment. Additional tools and references are available on the Resources page of the Milestones section of the ACGME website.

The Clinician Educator Supplemental Guide is designed help educators identify personal progress and create a professional development plan. The Word version of the Supplemental Guide can be downloaded and customized to meet local needs.

Suggested Use: 1) Select one subcompetency; perform a self-assessment; and specify the behaviors/actions necessary to demonstrate a desired Level (1-5). 2) Identify how to assess whether that behavior/action has been sufficiently achieved. Finally, 3) record an individualized professional development plan in the Notes and Resources section. Work through the various subcompetencies using this model as a "Commitment to Action." The more specific the planning, the more likely one is to complete it and reach the desired Level.
These Milestones are organized under five competencies:

**Universal Pillars for All Clinician Educators**

Demonstrate the commitment to lifelong learning and enhancing one's own behaviors as a clinician educator.

**Educational Theory and Practice**

Ensure the optimal development of competent learners through the application of the science of teaching and learning to practice.

**Well-Being**

Apply principles of well-being to develop and model a learning environment that supports behaviors which promote personal and learner psychological, emotional, and physical health.

**Diversity, Equity, and Inclusion in the Learning Environment**

Acknowledge and address the complex intrapersonal, interpersonal, and systemic influences of diversity, power, privilege, and inequity in all settings so all educators and learners can thrive and succeed.

**Administration**

Demonstrate administrative skills relevant to their professional role, program management, and the learning environment that leads to best health outcomes.
## Universal Pillar 1: Reflective Practice and Commitment to Personal Growth

**Overall Intent:** To seek performance data and develop a learning plan

<table>
<thead>
<tr>
<th>Milestones</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Level 1</strong> Accepts responsibility for personal and professional development by establishing goals</td>
<td>● (U/G/C): Actively solicits feedback on teaching and leadership behaviors</td>
</tr>
<tr>
<td>Identifies the factors that contribute to gap(s) between expectations and actual performance</td>
<td>● (U/G/C): Reviews summative feedback/evaluation for teaching activities and establishes plans for improvement</td>
</tr>
<tr>
<td>Actively seeks opportunities to improve</td>
<td>● (U/G/C): After a challenging precepting encounter with a learner, identifies frustration as a predominant emotion and resolves to explore ways for handling one’s emotions</td>
</tr>
<tr>
<td><strong>Level 2</strong> Demonstrates openness to performance data (feedback from learners and other input) to inform goals</td>
<td>● (U/G/C): Uses feedback to reflect on teaching and leadership performance</td>
</tr>
<tr>
<td>Analyzes and reflects on the factors that contribute to gap(s) between expectations and actual performance</td>
<td>● (U/G/C): Uses appreciative feedback to intentionally continue positive behaviors</td>
</tr>
<tr>
<td>Designs and implements a learning plan, with prompting</td>
<td>● (U/G/C): Consults with educational leaders and mentors to analyze feedback and evaluation data for greatest value</td>
</tr>
<tr>
<td> ● (U/G/C): Reviews feedback and summative evaluations of teaching activities to develop meaningful goals for improving teaching</td>
<td></td>
</tr>
<tr>
<td><strong>Level 3</strong> Seeks performance data episodically, with adaptability and humility</td>
<td>● (U/G/C): Creates list of educational or teaching goals as part of an annual review process</td>
</tr>
<tr>
<td>Analyzes, reflects on, and institutes behavioral change(s) to narrow the gap(s) between expectations and actual performance</td>
<td>● (U/G/C): After meeting with program director and/or educational leaders, initiates an annual plan for attending faculty development sessions and improve personal clinical teaching</td>
</tr>
<tr>
<td>Independently creates and implements a learning plan</td>
<td>● (U/G/C): Creates effective SMART (specific, measurable, achievable, relevant, and timely) plan for improvement in teaching and/or leadership skills</td>
</tr>
<tr>
<td><strong>Level 4</strong> Consistently solicits specific performance data, with adaptability and humility, including from learners, that leads to behavior change</td>
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<tr>
<td>Challenges personal assumptions and considers alternatives in narrowing the gap(s) between expectations and actual performance</td>
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<tr>
<td>Uses performance data to measure the effectiveness of the learning plan and, when necessary, improves it</td>
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<tr>
<td>● (U/G): Solicits verbal feedback from learners and tracks learner evaluations for comments, both reinforcing and modifying, on goal to provide evidence-based data when doing bedside teaching</td>
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</tr>
<tr>
<td>● (C): Reviews workshop evaluation data and makes modifications on best mix of didactics and experiential exercises for the next iteration</td>
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</tr>
<tr>
<td>● (U/G/C): Uses performance improvement methods to iteratively enhance teaching effectiveness with multiple levels of learners in the same clinical setting</td>
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<tr>
<td>● (U/G): Asks learners for feedback, explicitly names the hierarchy inherent in the learner-teacher relationship, and states, “you have the opportunity to work with lots of different faculty members, whereas I don’t; I would love to hear something that someone else does that you think I should incorporate,” and then incorporates it non-defensively</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Level 5</strong> Role models consistently seeking performance data with adaptability and humility and making positive behavior changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coaches others on reflective practice</td>
</tr>
<tr>
<td>Facilitates the design and implementation of learning plans for others</td>
</tr>
<tr>
<td>● (U/G/C): Delivers regional or national conference presentation on impact and methods of reflective practices in improving teaching performances</td>
</tr>
<tr>
<td>● (U/G/C): Serves as senior mentor to clinical educator faculty members using humble inquiry and best mentorship practices</td>
</tr>
<tr>
<td>● (U/G/C): As a leader or mentor, guides a junior faculty member who is an associate program director through a self-assessment and impels further self-reflection in the process of creating a detailed three-year career development plan</td>
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<table>
<thead>
<tr>
<th>Assessment Models or Tools</th>
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</thead>
<tbody>
<tr>
<td>● Direct observation</td>
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<tr>
<td>● Educator portfolio</td>
</tr>
<tr>
<td>● Faculty-observed structured teaching</td>
</tr>
<tr>
<td>● Learner feedback</td>
</tr>
<tr>
<td>● Learner outcomes</td>
</tr>
<tr>
<td>● Journaling</td>
</tr>
<tr>
<td>● Multisource feedback</td>
</tr>
<tr>
<td>● Performance assessment and review</td>
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<tr>
<td>● Self-assessment</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Notes or Resources</th>
</tr>
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<tbody>
<tr>
<td>● The basic elements of reflective practice are cognitive, affective, and behavioral</td>
</tr>
</tbody>
</table>
**Universal Pillar 2: Well-Being**

**Overall Intent:** To develop a plan for personal and professional well-being

<table>
<thead>
<tr>
<th>Milestones</th>
<th>Examples</th>
</tr>
</thead>
</table>
| **Level 1 Recognizes the importance of addressing personal and professional well-being** | ● (U/G/C): Has sufficient self-awareness to seek help for own personal and/or professional well-being  
● (U/G/C): Has read articles about the prevalence of burnout in health care providers and learners  
● (U/G/C): Seeks validation of need for assistance with personal and/or professional well-being |
| **Level 2 Lists resources to support personal and professional well-being** | ● (U/G/C): Knows how to access provider well-being and employee assistance resources at the institution  
● (U/G/C): Names options and practices to enhance resilience that the educator and others have tried  
● (U/G/C): Recognizes that substance use may interfere with well-being  
● (U/G/C): Names family members, friends, and colleagues that the educator can reliably confide in |
| **Level 3 Assesses how personal and professional well-being impact one’s own clinical practice and teaching** | ● (U/G/C): Understands that personal development precedes professional development  
● (U/G/C): Defines compassion fatigue, stereotype threat, imposter syndrome  
● (U/G/C): Develops and/or further enhances own growth mindset  
● (U/G/C): Identifies a mentor and/or coach for personal and/or professional well-being  
● (G/C): Reviews last quarter’s patient experience comments where patients noticed provider being terse and irritable; provider reflects and reaches out to school well-being coach to discuss burnout |
| **Level 4 Proactively responds to the inherent emotional challenges of the clinician educator’s work and develops a plan to optimize personal and professional well-being** | ● (U/G/C): Assesses own emotional intelligence  
● (U/G/C): Enhances own emotional intelligence to recognize situations and manage the situation, self, and others for optimal personal and professional well-being  
● (G/C): Completes a voluntary self-assessment on burnout after reading poor patient experience comments; survey shows possible burnout and provider makes an appointment to speak to a well-being coach |
| **Level 5 Role models pursuit of optimal personal and professional well-being** | ● (U/G/C): Serves as a mentor and/or coach for personal and/or professional well-being |

**Assessment Models or Tools**

- Direct observation  
- Educator portfolio  
- Faculty-observed structured teaching  
- Learner feedback  
- Learner outcomes
## Notes or Resources

<table>
<thead>
<tr>
<th>Resource</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local resources, including Employee Assistance Programs</td>
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</tbody>
</table>

- Professional behavior refers to the global comportment of the resident in carrying out clinical and professional responsibilities. This includes:
  - being reliable, responsible, and trustworthy (e.g., knows and fulfills assignments without needing reminders);
  - being respectful and courteous (e.g., listens to the ideas of others, is not hostile or disruptive, maintains measured emotional responses and equanimity despite stressful circumstances);
  - maintaining professional appearance and attire;
  - maintaining professional boundaries;
- timeliness (e.g., reports for duty, answers pages, and completes work assignments on time); and
- understanding that the role of a physician involves professionalism and consistency of one’s behaviors, both on and off duty.

- These descriptors and examples are not intended to represent all elements of professional behavior. It is important to recognize the inherent conflicts and competing values involved in balancing dedication to patient care with attention to the interests of personal well-being and responsibilities to families and others. Balancing these interests while maintaining an overriding commitment to patient care requires, for example, ensuring excellent transitions of care, sign-out, and continuity of care for each patient.
**Universal Pillar 3: Recognition and Mitigation of Bias**

**Overall Intent:** To recognize own biases in communication and develop approaches to mitigate them

<table>
<thead>
<tr>
<th>Milestones</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Level 1</strong> Identifies common and complex biases to effective education and patient care (e.g., language, disability, cultural differences, internalized oppression)</td>
<td>● (U/G/C): Identifies that race, gender, sexual orientation, language, cultural differences, and disabilities are among the many biases that can impact an individual or a group of learners</td>
</tr>
</tbody>
</table>
| **Level 2** Proactively seeks to assess and reflect on one’s personal biases, both explicit and implicit | ● (U/G/C): Reflects to assess if there are implicit biases in the course materials by meeting with the adaptive technology team to review materials for accessibility  
● (U/G/C): Proactively welcomes (but does not require) learners in a course to identify their preferred pronouns  
● (G/C): After receiving patient experience data presented across different race/ethnicity groups, considers what bedside behaviors might be present/absent across encounters |
| **Level 3** Identifies strategies to mitigate the effects of bias on effective education and patient care | ● (U/G/C): Provides course materials in advance of the class to allow for review  
● (U/G/C): Identifies stereotype replacement/suppression, perspective-taking, and speaking up against bias as strategies to mitigate the impact it may have on the learners  
● (U/G/C): Consistently and comfortably uses “location of self” to proactively signal to learners that they and their identities are fully welcome in educational spaces |
| **Level 4** Addresses personal biases and proactively mitigates the effects of personal bias in effective education and patient care | ● (U/G/C): Uses perspective taking after identifying a bias against physicians who have low performance on an individual assessment; instead of treating the learner differently, speaks with the learner to identify if there was a problem with the course materials/lectures, an issue related to clinical duties, or a personal issue  
● (U/G/C): Consistently solicits perspectives from learners and colleagues about errors made, both nonverbal and verbal, that reveal one’s own implicit bias |
| **Level 5** Mentors others on recognition and mitigation of bias | ● (U/G/C): Leads a workshop on identifying and mitigating microaggressions |

**Assessment Models or Tools**

- Direct observation
- Educator portfolio
- Faculty-observed structured teaching
- Learner feedback
- Learner outcomes
- Multisource feedback
- Performance assessment and review
- Self-assessment
<table>
<thead>
<tr>
<th>Notes or Resources</th>
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</thead>
<tbody>
<tr>
<td>Milestones</td>
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<tr>
<td>---------------------------------------------------------------------------</td>
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</tbody>
</table>
| **Level 1** Demonstrates the basic standards of the profession and presents "fit for duty" | - (U/G/C): Is punctual and prepared for work as described in institutional policies  
- (U/G/C): Completes evaluations in a timely manner                                                                                      |
| **Level 2** Is timely in the performance of duties and takes responsibility for follow-up on details | - (U/G): Adheres to institutional punctuality policies for writing progress notes/addenda  
- (U/G): Is accessible in a timely manner for supervision of learners  
- (U/G/C): Completes necessary requirements for interactions with multidisciplinary rounds and utilization management |
| **Level 3** Takes responsibility for errors/professional lapses and initiates corrective action when indicated | - (U/G/C): Role models looking up answers to questions the educator doesn’t know the answer to (rather than always asking learners to look up the answer)  
- (U/G): Overtly discloses errors with learners and discusses lessons taken for personal growth  
- (U/G/C): Discusses one’s own failure to recognize a microaggression against a learner or team member and determines a plan of action for service recovery |
| **Level 4** Recognizes personal risks to professional behavior and effectively manages those risks to produce the best outcome | - (U/G/C): Reviews personal lapses in professionalism and undertakes steps to resume demonstration of exemplary professional behaviors |
| **Level 5** Consistently role models professional behaviors in the learning and working environment | - (U/G/C): Develops professional development sessions to mitigate the effect of microaggressions patients display toward learners  
- (U/G/C): Seeks opportunities to lead change to support professional culture (joins task forces or committees, meets with leadership or colleagues to troubleshoot identified areas of concern) |

**Assessment Models or Tools**
- Self-reflection, journaling  
- Education portfolio  
- Multisource feedback  
- Objective structured teaching exercise (OSTE)

**Notes or Resources**
<table>
<thead>
<tr>
<th>Milestones</th>
<th>Examples</th>
</tr>
</thead>
</table>
| **Level 1** Identifies various techniques for teaching                    | ● (U/G/C): Identifies small-group methods, large-group techniques, and didactic methods for teaching  
                             ● (U/G/C): Identifies synchronous and asynchronous teaching methods  
                             ● (U/G/C): Defines the hidden curriculum and gives examples from local context |
| Discusses lessons implicitly learned (e.g., hidden curriculum)           |                                                                                                                                                                                                          |
| **Level 2** Delivers instruction in unidirectional manner resulting in passive learning | ● (U/G/C): Provides prepared lectures without first understanding learner needs  
                             ● (U/G/C): Uses consistent language with a patient and models the hidden curriculum of professional education within the team huddle(U/G/C): Avoids behaviors that are contradictory to own teaching |
| Identifies that own behavior (role modeling) is part of the hidden curriculum |                                                                                                                                                                                                          |
| **Level 3** Teaches in a way that invites active learning and encourages critical appraisal | ● (U/G/C): Practices bidirectional teaching for learning to assess baseline knowledge and areas for growth  
                             ● (U/G/C): Maintains professional communications in conversations with the patient and with the team  
                             ● (U/G/C): Actively solicits opinions of all members of the team  
                             ● (U/G/C): Role models appropriate professionalism and communication behaviors  
                             ● (U/G/C): Role models what is taught, while respecting the formal education curriculum  
                             ● (U/G/C): Effectively teaches medication options for congestive heart failure in the classroom only |
| Intentionally role models desired practice behaviors to aid learners        |                                                                                                                                                                                                          |
| **Level 4** Uses scholarly teaching methods for varied levels of learners across settings | ● (U/G/C): Facilitates learning of those with varying levels of knowledge and skills within diverse settings  
                             ● (U/G/C): Employs specific small-group facilitation strategies to improve critical thinking  
                             ● (U/G/C): Role models even with significant stressors, such as being on-call  
                             ● (U/G/C): Role models desired behaviors when there are increased, unexpected, and/or competing responsibilities and tasks  
                             ● (U/G/C): Teaches medication options for congestive heart failure at morning report, in the clinic, in the critical care unit, and in an online workshop |
| Intentionally role models desired behaviors to aid learners across multiple settings |                                                                                                                                                                                                          |
| **Level 5** Serves as a coach to other educators on effective teaching practices | ● (U/G/C): Conducts a peer-teaching evaluation program                                                                                           |
**Works collaboratively to develop educators’ ability to demonstrate evidence-based teaching behaviors**

- (U/G/C): Runs OSTE as part of a faculty development program

**Assessment Models or Tools**
- Direct observation
- Educator portfolio
- Faculty-observed structured teaching
- Learner feedback
- Learner outcomes
- Multisource feedback
- Performance assessment and review
- Self-assessment

**Notes or Resources**
- Definition of facilitated learning: A learning approach where students are encouraged to take ownership and control of their learning process and the role of the teacher changes from supplier of knowledge to facilitator of the process of learning. This is done by providing learning resources and actively challenging students through systematic, problem-based learning and other active learning methods.
- Program director organizations
**Educational Theory and Practice 2: Professionalism in the Learning Environment**

**Overall Intent:** To uphold implicit and explicit expectations of the profession and society in all learning settings

<table>
<thead>
<tr>
<th>Milestones</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Level 1</strong> Understands rights, feelings, traditions, and wishes of learners, patients, and team members</td>
<td>● (U/G/C): In team meetings, notes how goals and perspectives of various stakeholders in a particular patient care case, including interprofessional team members, may overlap and differ</td>
</tr>
<tr>
<td><strong>Level 2</strong> Demonstrates respect for learners, patients, and team members through behavior and communication</td>
<td>● (U/G/C): In team meetings, explicitly states how goals of various stakeholders in a particular patient care case, including interprofessional team members, overlap and differ, and actively works to seek solutions</td>
</tr>
<tr>
<td><strong>Level 3</strong> Recognizes potential obstacles to unbiased and respectful communication, leadership, and educational practice</td>
<td>● (U/G/C): Notes differences in perceptions about learners and reflects about potential implicit biases that may influence those judgments</td>
</tr>
</tbody>
</table>
| **Level 4** Applies strategies to mitigate against obstacles to produce outcomes that are always in the learner’s best interest | ● (U/G/C): Notices microaggressions from a patient to a learner, intervenes empathically in the moment, and debriefs the learner afterward  
● (U/G/C): Takes appropriate actions when microaggressions occur (takes accountability, rethinks harmful assumptions, empathizes, provides support by offering resources and asking how to help) |
| **Level 5** Develops organizational and institutional processes and strategies to facilitate respectful and unbiased communication and problem solving | ● (U/G/C): Leads a professional standards board that reviews learner lapses in professionalism and supports those learners work toward exemplary behavior |

**Assessment Models or Tools**

- Direct observation
- Education portfolio
- Multisource feedback
- OSTE
- For professional identity formation: Defining Issues Test ([https://ethicaldevelopment.ua.edu/about-the-dit.html](https://ethicaldevelopment.ua.edu/about-the-dit.html)) and Professional Identity Essay (see Bebeau, below)

**Notes or Resources**


## Educational Theory and Practice 3: Learner Assessment

**Overall Intent:** To apply and develop principles of formative and summative assessment to improve performance

<table>
<thead>
<tr>
<th>Milestones</th>
<th>Examples</th>
</tr>
</thead>
</table>
| **Level 1** Discusses the goals and principles of both formative and summative assessment | ● (U/G/C): Explains the difference between summative and formative assessment to a learner  
● (U/G/C): Describes when a formative versus summative evaluation should be used |
| **Level 2** Uses appropriate methods and tools for assessment in a specific setting | ● (U/G/C): Differentiates when to use a global assessment versus more focused assessment of performance  
● (U/G/C): Employs pre-/post-test to assess knowledge/skill/competence after an educational activity  
● (U/G/C): Uses daily feedback forms to provide formative assessment  
● (U/G/C): Provides daily verbal feedback to learners to help learners prepare for similar cases during a subspecialty rotation  
● (U/G/C): Ensures assessment is based on learning objectives |
| **Level 3** Uses assessment data to identify strengths and opportunities for improvement of learners | ● (U/G): Uses training exam data and faculty member evaluations from a clinical rotation and identifies areas for improvement  
● (G/C): Uses patient outcomes and patient experience surveys to identify areas of strength for a learner |
| **Level 4** Educates others, and when necessary, advises on selection and use of appropriate assessment methods and tools | ● (U/G/C): Assists faculty members in selecting optimal assessment methods (e.g., intent to change, knowledge tests, practice improvement measurement)  
● (U/G/C): Advises colleagues against using the Milestone Reporting Worksheet as an assessment tool |
| **Level 5** Designs and implements evidence-based assessment methods and tools | ● (U/G/C): Creates post-activity assessment tools such as intent to change and/or practice improvement measurement  
● (U/G/C): Develops daily feedback forms to use in a clinical setting  
● (U/G): Develops and guides the use of a summative rotation assessment form that collates all feedback from the rotation in a manner that lets learners know how they performed during the entire educational experience  
● (G): Designs and creates evaluations or assessments with the intent of informing Milestone evaluations |

### Assessment Models or Tools
- Direct observation
- Education portfolio
- Continuing professional development/maintenance of certification activities in practice
- Multisource feedback
- OSTE

### Notes or Resources
**Educational Theory and Practice 4: Feedback**

**Overall Intent:** To foster conversations that motivate learners to incorporate feedback for performance improvement

<table>
<thead>
<tr>
<th>Milestones</th>
<th>Examples</th>
</tr>
</thead>
</table>
| **Level 1** Describes timing, content, and approaches to conducting feedback conversations | ● (U/G/C): Names the important elements required for effective feedback (communication (method/details/style), specific observations, and culture (behaviors to promote positive feedback)  
● (U/G/C): Identifies resources on how “growth mindset” improves learning  
● (U/G/C): Identifies that effective feedback requires a permissive and healthy learning climate |
| Describes importance of soliciting feedback in developing a growth mindset |                                                                                                                                            |
| Describes importance of establishing a learning environment that values feedback |                                                                                                                                            |
| **Level 2** Elicits learners’ goals and gives predominantly reinforcing feedback based on goals | ● (U/G/C): Identifies a learner’s goal of improved patient education and provides reinforcing feedback  
● (U/G/C): Receives feedback from learners after initial reluctance makes iterative improvement by partially incorporating the feedback into education practice  
● (U/G/C): Does not explicitly state the importance of or rationale underlying feedback but meets with team learners halfway through their rotations and notes specific skills that learners should continue |
| Reviews feedback about self, manages emotional reactions to feedback, and incorporates relevant items |                                                                                                                                            |
| Role models exemplary feedback practices without explicitly setting up the learning environment |                                                                                                                                            |
| **Level 3** Identifies reinforcing and modifying data to give feedback that initiates behavior change | ● (U/G/C): Conducts a feedback conversation that covers the learner’s goals and motivations, and that ends with specific actionable take-home points  
● Asks learners at the end of the rotation or course about what they should continue to do, and what they could do differently  
● (U/G): At the beginning of the learning relationship, explicitly states that feedback is one of the most effective ways for all team members, including oneself, to improve, and that both reinforcing and modifying feedback conversations will be frequent, ongoing, and bidirectional |
<p>| Actively solicits general feedback from learners |                                                                                                                                            |
| Role models exemplary feedback practices and explicitly states importance of feedback in the learning environment |                                                                                                                                            |</p>
<table>
<thead>
<tr>
<th>Level 4</th>
<th>Consistently engages in challenging feedback conversations that results in desired behavior change</th>
</tr>
</thead>
</table>
| **Consistently solicits specific feedback from learners that leads to behavior change** | ● (U/G/C): Asks learners who show differences of all types (e.g., background, learning differences, and strong differences of opinion) about their perspective with humility and curiosity; reflects back the content and tone of what was said; and inquires deeply about other relevant perspectives before suggesting any changes  
   ● (U/G/C): Reflects on implicit bias in direct observations that may affect feedback; incorporates concepts of stereotype threat and imposter syndrome into feedback conversations; uses affirmations to mitigate stereotype threat and uses substitution to check implicit bias  
   ● (U/G/C): Empathizes with a learner who doesn’t want feedback, lacks insight, or doesn’t receive it well, and helps them gain insight into their unprofessional behavior  
   ● (U/G/C): Works with neurodiverse learners to help them communicate better with patients |
| **Supports learning environment in which all learners and faculty engage in actionable feedback** | ● (U/G/C): Meets regularly with all members of the patient team to elicit their goals for the day and hosts feedback conversations afterwards  
   ● (U/G/C) Creates an environment where team members provide feedback to each other, including faculty members |
| **Level 5** | **Guides others to conduct effective feedback conversations** |
| **Guides others to solicit, reflect on, and incorporate feedback** | ● (U/G/C): Performs direct observation of a mentee’s feedback conversations with learners and engages in debriefing and coaching specific to the mentee’s performance during these feedback conversations  
   ● (U/G/C): Reviews various feedback models and role plays with a colleague to improve feedback  
   ● (U/G/C): Consistently role models inquiry mode of feedback, particularly for sensitive or summative feedback; responds to learners with reflection and empathy statements; supportively challenges learners with next steps to get them to the next level of performance  
   ● (U/G/C): Coaches faculty members who struggle with feedback to and from learners to approach feedback with a growth mindset  
   ● (U/G/C): Teaches a course to design an environment in which the learners freely seek and provide feedback |
| **Demonstrates expertise in explicitly constructing and maintaining learning environment in which all learners give and receive feedback to improve performance** | **Assessment Models or Tools**  
   ● Direct observation  
   ● Multisource feedback |
| Notes or Resources | ● Feedback is defined as information communicated to the learner that is intended to modify the learner’s thinking or behavior for the purpose of improved learning.  
● Stone D and Heen S. Thanks for the feedback: the science and art of receiving feedback well. New York: Viking; 2014.  

● OSTE  
● Portfolio or journal review: How do learners rate the educator’s feedback? What evidence shows that the educator incorporated feedback?
<table>
<thead>
<tr>
<th><strong>Overall Intent:</strong> To offer compassionate course correction for learners, all of whom struggle at some point in the educational program</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Milestones</strong></td>
</tr>
</tbody>
</table>
| **Level 1** Identifies a learner who needs improvement | ● (U/G/C): States the value of remediation  
   ● (U/G/C): Records specific observations of learners who struggle and notifies teaching supervisors; does not “kick the can down the road” |
| **Level 2** In conjunction with the learner, identifies factors that contribute to poor performance, identifies helpful resources, and develops individualized learning plans | ● (U/G/C): Has a conversation with a learner who struggles; asks clarifying questions about underlying contributing factors; empathizes with the learner; collaborates on a learning plan that encompasses the learner’s struggles; and suggests reading materials, reflective exercises, and practice sessions to improve skills  
   ● (U/G/C): Develops individualized learning plans with referral to local and national resources; identifies specialty-specific resources for improvement  
   ● (U/G/C): When looking at factors that impact a learner who struggles, considers issues such as challenges related to imposter syndrome, electronic health record (EHR), financial stress, and knowledge/understanding of a specific clinical area as part of defining the issues |
| **Level 3** Implements learning plans and follow-up strategies and successfully guides a learner who is struggling toward a short-term goal, separate from formal remediation | ● (U/G/C): Follows up a learning plan with conversations that impel reflection, direct observation with specific feedback to change maladaptive behaviors, and referral to mental health services to mitigate burnout  
   ● (U/G/C): Documents follow-up and helps learners identify additional resources to support their growth  
   ● (U/G/C): Implements individualized learning plan with routine coaching |
| **Level 4** Develops and implements a formal remediation plan with outcome measures | ● (U/G/C): Has conversations with learners whose struggles extend into multiple competencies and that indicate broader issues such as learning preference, mental health, and/or lack of sleep; determines a viable improvement path that may include removing the learner from current clinical rotations; coaches the learner through reflections and standardized patient interactions, notes areas of success and areas for further improvement; continues iterative practice and reflection  
   ● (G/C): Identifies quality metrics, including patient comments, that are necessary to successfully complete a remediation plan  
   ● (G/C): Explains formal remediation as it relates to continuing medical education (CME) and graduate medical education (GME)  
   ● (C): Uses continuing professional development and CME resources as part of remedial plan |
<table>
<thead>
<tr>
<th>Level 5</th>
<th>Guides others in remediation recognition and management (in all four remediation domains: identification, clarification, intervention, assessment)</th>
</tr>
</thead>
</table>
| ● (C): Uses outcomes data to extend or conclude a for-cause focused professional evaluation | ● (U/G/C): Oversees a cadre of remediation coaches who support learners who struggle throughout a program and mentors the communication and coaching skills necessary for them to succeed  
● (U/G/C): Identifies potential legal, human resources, and medical board considerations within the remediation process  
● (U/G/C): Designs training program for faculty members in how to remediate a struggling learner |

<table>
<thead>
<tr>
<th>Assessment Models or Tools</th>
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</thead>
</table>
| ● Direct observation  
● Multisource feedback  
● OSTE  
● Portfolio or journal review: How do remediating learners rate the educator’s remediation coaching and administration? How does the educator balance advocacy for the student with adherence to necessary guidelines? |

<table>
<thead>
<tr>
<th>Notes or Resources</th>
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</thead>
</table>
| ● Baars GJA, Stijnen T, Splinter TAW. A model to predict student failure in the first year of the undergraduate medical curriculum, *Health Professions Education* 2017 3;1:5-14. ISSN 2452-3011. [https://doi.org/10.1016/j.hpe.2017.01.001](https://doi.org/10.1016/j.hpe.2017.01.001).  
● Kalet A and Chou CL. *Remediation in Medical Education: A Course Correction*. Springer; 2014.  

<table>
<thead>
<tr>
<th>Milestones</th>
<th>Examples</th>
</tr>
</thead>
</table>
| **Level 1**  **Contributes to programmatic evaluation as directed by others**  <br>Carries out an action plan designed by others to address areas identified as needing improvement |  ● (U/G/C): Participates in a program evaluation committee  
  ● (U/G/C): Differentiates between program evaluation and assessment  
  ● (C): Participates in continuing professional development unit process improvement plan(s)  
  ● (U/G/C): Thoughtfully completes a survey regarding the program  
  ● (U/G/C): Follows an action plan for the program which could involve coaching/teaching/giving more feedback |
| **Level 2**  **Describes the importance and elements of comprehensive programmatic evaluation**  <br>Describes how to create an action plan |  ● (C): Engages on CME/continuing professional development committee with oversight of continuing professional development program evaluation  
  ● (G): Names the elements required by the ACGME for programmatic assessment  
  ● (U/G/C): Describes the importance of evaluating the learning environment in programmatic evaluation  
  ● (U/G/C): Describes the association between programmatic quality and future practice patterns  
  ● (U/G/C): Articulates the components of SMART goals  
  ● (U/G/C): Describes the PDSA (Plan, Do, Study, Act) cycle |
| **Level 3**  **Conducts comprehensive programmatic evaluation for curricular areas of responsibility**  <br>Creates an action plan to address areas identified as needing improvement |  ● (U/G/C): Solicits evaluation data from a variety of stakeholders within and outside of the department or unit  
  ● (U/G): Uses learner outcome data to inform program/curricular evaluation  
  ● (U/G/C): Develops evaluation tools to collect data from a variety of sources (e.g., learning outcomes, satisfaction, graduate outcomes)  
  ● (U/G/C): Uses course survey data and conducts a focus group to identify areas for improvement in the course  
  ● (U/G/C): Ensures action plans are specific, measurable, attainable, relevant, and timely  
  ● (U/G/C): Uses program evaluation model such as Logic Model or Kirkpatrick for comprehensive evaluation and action plan |
| **Level 4**  **Uses theory or frameworks to guide programmatic evaluation** |  ● (U/G/C): Uses accreditation framework and data for program evaluation  
  ● (U/G/C): Employs utilization-focused evaluation theory to identify and engage stakeholders at every step of the evaluation process |
| Uses varied approaches to address programmatic areas of improvement | ● (U/G/C): Uses the Donabedian model to assess the quality of medical care to identify program gaps  
● (U/G/C): Identifies a new program or strategy from conference proceedings or the literature to address an area for improvement |
|---|---|
| **Level 5** Develops and implements multi-site evaluations or meta-evaluations | ● (U/G/C): Coordinates program evaluation efforts at multiple sites  
● (U/G/C): Develops a system to engage educators at sites outside of the Sponsoring Institution in program evaluation  
● (U/G/C): Presents outcomes of innovative program improvement efforts at a local, regional, or national conference |
| Disseminates interventions that support programmatic improvement | ● (U/G/C): Develops tools to collect feedback from learners about community sites to inform program evaluation and improvement |
| Assessment Models or Tools | ● ACCME criteria  
● Donabedian (2005) Model for Evaluating the Quality of Medical Care  
● Kellogg’s Logic Model  
● Moore’s or Kirkpatrick’s Model  
● University of California San Francisco’s six programmatic principles |
● ACGME. Developing Faculty Competencies in Assessment course.  
● ACGME. Common Program Requirements. [https://www.acgme.org/what-we-do/accreditation/common-program-requirements/](https://www.acgme.org/what-we-do/accreditation/common-program-requirements/).  
<table>
<thead>
<tr>
<th>Milestones</th>
<th>Examples</th>
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<tbody>
<tr>
<td><strong>Overall Intent:</strong> To deliberately facilitate professional development of learners across the career continuum, which encompasses knowledge, skills, attitudes, and professional identity</td>
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</tbody>
</table>
| **Level 1** Describes differences between coaching, sponsoring, advising, and/or mentoring in relationship to continuous professional development of learners | - (U): Describes the professional development changes that occur from pre-clinical to clinical to graduating medical student  
- (G): Describes the growth and change in professional identity from general medicine resident to specialty fellow  
- (C): Describes the growth of a geriatrician who becomes a clinical expert and educator on fall prevention  
- (U/G/C): Includes specific definitions of mentoring, advising, sponsoring, and coaching when describing interactions with a learner |
| **Level 2** Identifies approaches or strategies (e.g., learning plan) for different learners to provide coaching, sponsoring, advising, and/or mentoring | - (U): Connects a Year 2 medical student to resources to learn more about a career in a specific specialty of medicine  
- (G/C): Provides article access to faculty members and programs to aid in career exploration and skill development for someone interested in a clinician-educator career  
- (U/G/C): Links a mentor-seeking learner to a women-in-science mentoring program  
- (U/G/C): Encourages a learner to include strategies on professional identity formation in the learner's individual learning plan  
- (U/G/C): Enhances standard teaching/educational activities with longitudinal provision of support of learner professional development  
- (U/G/C): Identifies the key elements of an individualized learning plan |
| **Level 3** Employs a variety of approaches or strategies for coaching, sponsoring, advising, and/or mentoring | - (U/G/C): Uses the GROW model (Goal, Reality, Options, Will), as an example, for coaching learners in a small group, clinic, or program  
- (G): Individualizes support of professional development to learners based on their intended post-graduation interests (fellowship versus community practice versus academic practice)  
- (C): Sponsors a more junior faculty member for a leadership position  
- (U/G/C): Engages mentors and follows up with the learner on progress  
- (U/G/C): Individualizes support of professional development to learners across the career continuum  
- (U/G/C): Uses appreciative inquiry questions as part of the semi-annual check-in  
- (U/G/C): Co-creates a self-directed learning plan with the learner and facilitates the learner's repeated engagement with the plan |
| **Level 4** Implements best practices for coaching, sponsoring, advising, and/or mentoring | - (U/G/C): Supplies relevant mentorship and resources for learners who are underrepresented in medicine (URiM) |
### Level 5

**Demonstrates expertise (e.g., teaching, researching) for coaching, sponsoring, advising, and/or mentoring**

- (U/G/C): Designs a program using the GROW coaching model that includes faculty development and measurement of impact
- (U/G/C): Coaches the learner to adapt the learning plan and respond to feedback
- (U/G/C): Teaches, researches, or writes a review article for a specific subject
- (U/G/C): Speaks at national conferences about professional development
- (U/G/C): Implements a system to improve learner access to guidance to improve professional development
- (U/G/C): Is recognized as a leader/educator of other advisors, mentors, coaches, and sponsors
- (U/G/C): Customizes existing curricula to provide personalized education for the learner

### Assessment Models or Tools

- Mentor Education Tool

### Notes or Resources

- Manuel SP, Poorsattar SP. Mentoring up: twelve tips or successfully employing a mentee-driven approach to mentoring relationships. *Med Teach* 2021;43:384-387.
- Wolff M, Deiorio NM, Miller Juve A, Richardson J, Gazelle G, Moore M, Santen SA, Hammoud MM. Beyond advising and mentoring: Competencies for coaching in medical
**Educational Theory and Practice 8: Science of Learning**

**Overall Intent:** To demonstrate how clinician educators use the knowledge base of adult learning and development, health professions education, and its associated disciplines for their roles as educators.

<table>
<thead>
<tr>
<th>Milestones</th>
<th>Examples</th>
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</thead>
</table>
| **Level 1** Describes scholarly approaches for science of learning, teaching, fostering intellectual curiosity, and learning preferences | ● (U/G/C): Discusses neuroscience of cognition  
● (U/G/C): Describes the zone of proximal development  
● (U/G/C): Explains single and double loop learning  
● (U/G/C): Describes how they keep up with the medical literature and subscribes to electronic tables of contents of journals  
● (U/G/C): Identifies Glassick’s criteria for scholarship and Boyer’s definition of scholarship  
● (U/G/C): Describes learning theories that promote comprehension, engagement, retention, recall, and reflection in learners |
| **Level 2** Incorporates theories and strategies for teaching and promoting intellectual curiosity for different learning preferences | ● (U): As a UME course director, incorporates periodic knowledge checks to enhance retrieval of facts based on the spacing effect  
● (G): As a fellowship research director, designs and implements a career development workshop  
● (U/G/C): Aids in identifying development and career goals, and incorporates both self and group reflection as part of the design  
● (U/G/C): Names the steps of the “learning ladder,” identifies where any given learner is on the ladder, and can name ways in which teaching could be tailored for those learners |
| **Level 3** Routinely incorporates variety of approaches derived from literature and other high-quality sources to improve teaching practices and promote intellectual curiosity | ● (G): Encourages a senior endoscopy director in charge of endoscopy training for a gastroenterology fellowship to attend a national workshop on endoscopy about the Dreyfus model of development and cognitive load theory; the director changes the teaching program to include simulation, sequencing of endoscopic cases based on complexity, and a faculty development to decrease extrinsic cognitive load  
● (U/G/C): Encourages a CME course lecturer to incorporate a more active learning strategy; the lecturer converts part of the slide materials to include audience-response polling and adds two schemas to help with organizing a differential diagnosis for back pain  
● (U/G/C): Attends national medical education conferences to discover and incorporate new advances in evidence-based education  
● (U/G/C): Reads texts and treatises in educational theory and science to increase effectiveness  
● (U/G/C): Converts a large-group didactic lecture to a flipped classroom approach to maximize opportunities for active learning |
<p>| <strong>Level 4</strong> Role models and coaches for scholarly approach to science of learning, teaching,                                                                          | ● (U/G/C): When updating teaching scripts, consults recent primary literature to enhance the clarity and impact of their teaching |</p>
<table>
<thead>
<tr>
<th>Level 5</th>
<th>Contributes to new knowledge in the science of learning</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>● (U/G/C): Participates in a study to explore the application of critical reflection theory and transformative learning on identity and career development for URiM pre-medical and medical students</td>
</tr>
<tr>
<td></td>
<td>● (U/G/C): Conducts a mixed-methods study applying sociocultural learning theories to explore interprofessional team dynamics during a robotic surgery</td>
</tr>
<tr>
<td></td>
<td>● (U/G/C): Acts as senior author to mentor advanced learners to develop their independent expertise as medical education investigators</td>
</tr>
</tbody>
</table>

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<thead>
<tr>
<th>Notes or Resources</th>
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</thead>
<tbody>
<tr>
<td>● AAMC Medical Education Certificate Course (<a href="https://www.aamc.org/what-we-do/mission-areas/medical-education/meded-research-certificate-program">https://www.aamc.org/what-we-do/mission-areas/medical-education/meded-research-certificate-program</a>)</td>
</tr>
<tr>
<td>● Academic journals: <em>Journal of Graduate Medical Education (JGME)</em>, <em>Academic Medicine</em>, Association for Medical Education in Europe (AMEE) <em>BEME</em> [Best Evidence Medical and Health Professional Education] <em>Guides</em></td>
</tr>
<tr>
<td>● ACCME. Education design resources. <a href="https://accme.org/resources/educational-design-resources">https://accme.org/resources/educational-design-resources</a>.</td>
</tr>
<tr>
<td>● AMEE. BEME Guides. <a href="https://www.bemecollaboration.org/BEME+Guides/">https://www.bemecollaboration.org/BEME+Guides/</a>.</td>
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</tbody>
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**Educational Theory and Practice 9: Medical Education Scholarship**

**Overall Intent:** To encourage clinician educators to base their teaching in scholarship (theory and evidence) and contribute to the literature

<table>
<thead>
<tr>
<th>Milestones</th>
<th>Examples</th>
</tr>
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</table>
| **Level 1** Describes definition of educational scholarship | • (U/G/C): Describes how they keep up with the medical literature and subscribes to electronic tables of contents of journals  
• (U/G/C): Identifies Glassick’s criteria for scholarship and Boyer’s definition of scholarship  
• (U/G/C): Names medical education journals, online forums, and courses that enhance personal educational practices  
• (U/G/C): Identifies forums for dissemination of educational approach, curricula, and/or research |
| **Level 2** Participates in medical education scholarship and the dissemination of educational approaches, curricula, and/or research findings | • (U/G/C): Participates in development of curricular modules for local courses  
• (U/G/C): Participates in a medical education research project to learn fundamental qualitative, quantitative, or synthetic skills  
• (U/G/C): Edits a section of a medical education scholarly article or chapter  
• (U/G/C): Serves as a reviewer for MedEdPortal submission |
| **Level 3** Expands medical education scholarship or evidence through regular dissemination of educational approaches, curricula, and/or research findings | • (U/G/C): Presents a medical education study at a regional or national medical education conference  
• (U/G/C): Writes a section of a medical education scholarly article or chapter |
| **Level 4** Serves as the principal investigator for medical education scholarship | • (U/G/C): Designs theoretical framework and completes and evaluates a trial on assessing the effect of clinical and educational work hours on patient safety |
| **Level 5** Demonstrates expertise in the field of medical education scholarship and provides guidance, consultation, and mentoring across medical education | • (U/G/C): Mentors a more junior faculty member in writing a book chapter using education theory and practice  
• (U/G/C): Serves a section editor or associate editor for a medical education journal |

**Assessment Models or Tools**
- Academic productivity
- Educator philosophy
- Educational portfolio
- Multisource feedback
- Scholarly presentations

**Notes or Resources**

*Note: Focus on Boyer’s expanded definition of scholarship.*
| Note: Focus on Glassick’s criteria for scholarship. |
## Educational Theory and Practice 10: Learning Environment

**Overall Intent:** To foster an ideal, diverse, and inclusive environment that optimizes learning

<table>
<thead>
<tr>
<th>Milestones</th>
<th>Examples</th>
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</thead>
</table>
| **Level 1** Defines learning environment | ● (U/G/C): In orientation materials, uses the term “learning environment” to describe various clinical settings in which training will occur (e.g., operating rooms, clinic, catheterization lab)  
● (U/G/C): Advises learners to contact pharmacy to better understand drug interactions when they have a concern regarding drugs listed on discharge paperwork  
● (U/G): Provides the learner with the contact numbers and description of role for team members (e.g., nurse, physician assistant) who help carry out various patient care tasks  
● (U/G/C): Defines the Interprofessional Education Collaborative (IPEC) Core Competencies for Collaborative Practice |
| Defines different roles and how they contribute to the interprofessional learning environment | |
| **Level 2** Describes elements of an effective learning environment | ● (U/G/C): Articulates to the learner the importance of face-to-face communication with interdisciplinary team members versus electronic or pager communication, when possible, to manage complex patients  
● (U/G/C): Encourages open communication with a new team as a strategy to optimize patient care and the clinical learning environment  
● (U/G/C): Orients learner to team organizational chart and structure, including the charge nurse, certified nurse assistant, case manager, and speech therapist |
| Describes the value of an interprofessional team-based approach in the learning environment | |
| **Level 3** Employs best practices in fostering an effective learning environment | ● (U/G/C): When a disagreement about the course of patient care arises, works with team members to seek to understand differing perspectives  
● (U/G/C): Provides educational resources to develop facilitation and teamwork skills while on an ICU rotation based on current team science  
● (U/G/C): Invites various provider types (e.g., nurse practitioner, case manager, pharmacist) to actively engage in rounding  
● (U/G/C): Solicits performance feedback from all team members when developing end-of-rotation evaluation |
<p>| Engages effectively in interprofessional learning environments | |
| <strong>Level 4</strong> Works collaboratively and leads others to foster effective learning environments | ● (U/C/G): Identifies when changes/interventions need to occur to create a collaborative learning environment |</p>
<table>
<thead>
<tr>
<th><strong>Clinician Educator Supplemental Guide</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Creates and manages effective interprofessional learning environments</strong></td>
</tr>
<tr>
<td>(U/G/C): Solicits feedback from all team members when drafting clinic workflow guidelines</td>
</tr>
<tr>
<td>(U/G/C): Facilitates in-person conversation when conflict arises between team members</td>
</tr>
<tr>
<td>(U/G/C): Provides professional development to all team members on teaching strategies for various learner roles (e.g., medical students, midwifery students, fellows) and competency levels (novice to expert)</td>
</tr>
<tr>
<td>(U/G/C): Encourages and role models for all team members to solicit, provide, and accept feedback from one another</td>
</tr>
<tr>
<td><strong>Level 5 Leads system-level strategic efforts to improve learning environments</strong></td>
</tr>
<tr>
<td>(U/C/G): Solicits and reviews annual evaluation to identify system-level problems with a learning environment and adjusts the experience to ensure optimal education</td>
</tr>
<tr>
<td>(U/G/C): Assesses individuals based on their education and develops appropriate onboarding resources</td>
</tr>
<tr>
<td><strong>Coaches others in development of effective interprofessional learning environments</strong></td>
</tr>
<tr>
<td>(U/G/C): Develops a program for interprofessional training in a single environment</td>
</tr>
<tr>
<td>(U/G/C): Delivers a workshop at a national meeting describing how a program changes clinic workflow and teaching to incorporate families and a social worker into the learning environment</td>
</tr>
<tr>
<td><strong>Assessment Models or Tools</strong></td>
</tr>
<tr>
<td>● Direct observation</td>
</tr>
<tr>
<td>● Educational portfolio</td>
</tr>
<tr>
<td>● Multisource feedback</td>
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<td><strong>Notes or Resources</strong></td>
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</tbody>
</table>
### Educational Theory and Practice 11: Curriculum

**Overall Intent:** To apply a stepwise approach in curriculum design

<table>
<thead>
<tr>
<th>Milestones</th>
<th>Examples</th>
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</table>
| **Level 1 Identifies the elements, types, and purpose of a curriculum** | (U/G/C): Names six steps of curriculum development in medical education (problem identification, needs assessment, writing of goals and objectives, designing educational strategies, implementation, evaluation)  
(U/G/C): Reads examples of curricular innovations in MedEdPORTAL  
(U/G/C): Describes differences between explicit and hidden curriculum |
| **Level 2 Participates in developing a curriculum** | (U/G/C): Identifies gaps in learners' knowledge, attitudes, or skills and makes instructional changes to address them  
(U/G/C): Joins a team of educators in writing a new module for a course  
(U/G/C): Converts an in-person workshop to online (and/or vice versa) |
| **Level 3 Adapts curriculum to meet the needs of the learner** | (U/G): Reads a curriculum on MedEdPortal for medical students and adapts it for residents  
(U/G/C): Reads course evaluation data and makes changes to teaching methods |
| **Level 4 Leads development of a curriculum** | (U/G): Designs, implements, and assesses a new elective for learners on new methods for point-of-care ultrasound  
(U/G/C): Convenes a group of educators to design, implement, and assess a workshop series on interprofessional humanism |
| **Level 5 Coaches others to develop curriculum for the needs of their learners** | (U/G/C): Comprehensively evaluates an existing curriculum, makes suggestions to a curricular team based on ongoing gaps for learner experience, and helps the team design assessable strategies to address the gaps  
(U/G/C): Mentors a junior faculty member to lead a curriculum development process |

**Assessment Models or Tools**
- Aggregated exam data (board pass rate, in training exam)
- ACGME survey data
- CME data
- Quality and patient safety data
- Any validated tool that exists for the goals/objectives (e.g., mini-CEX)

**Notes or Resources**
<table>
<thead>
<tr>
<th>Reference</th>
<th>Date/Publication Details</th>
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### Overall Intent
To acknowledge and provide support and resources in the arduous process of becoming and being health care professionals.

<table>
<thead>
<tr>
<th>Milestones</th>
<th>Examples</th>
</tr>
</thead>
</table>
| **Level 1** Describes relationship between well-being, burnout, learning, and patient safety | ● (U/G/C): Describes well-being, burnout, and learning  
● (U/G/C): Defines professional identity and the reward for growing and becoming clinically stronger (with connection to purpose)  
● (U/G/C): Describes learning environments and well-being environments as one in the same  
● (U/G/C): Defines psychological safety and how it relates to patient safety and optimal learning |
| ● Describes signs of physical, emotional, and/or professional distress | |
| **Level 2** Shares approaches to support well-being | ● (U/G/C): In a peer discussion, shares own approaches to managing clinical and teaching demands using department or institutional resources  
● (U/G/C): Incorporates ample breaks for networking, nourishment, and recharging during a three-day board review course  
● (U/G/C): Identifies the signs of those experiencing depression or considering suicide  
● (U/G/C): Identifies signs/signals of burnout in a colleague or peer |
| ● Recognizes learners or colleagues in apparent distress | |
| **Level 3** Employs various approaches that support and foster well-being and reduce burnout | ● (U/G/C): Intervenes in a crisis  
● (U/G/C): Gets the learner to the right person for help  
● (U/G/C): Identifies a faculty member, chief resident, or chair who can list school and hospital resources for well-being and to address burnout  
● (U/G/C): Talks openly and constructively with a colleague who may need help managing well-being (e.g., question, persuade, refer (QPR)) |
| ● Intervenes and identifies resources for a specific situation | |
| **Level 4** Employs system-based approaches that foster well-being and reduce burnout and consistently provides support and resources to foster well-being and reduce burnout | ● (G): Uses internal and ACGME survey data on well-being to advocate for well-being and stress reduction resources when meeting with the dean or hospital president  
● (U/G/C): Recognizes a distressed learner, intervenes to facilitate health care referrals and use of employee assistance programs (EAPs), and follows up to ensure that the learning environment can continue to support the learner |
<p>| ● Guides learners or colleagues in distress and provides on-going support | |
| <strong>Level 5</strong> Uses experiences with learners to assess, reimagine, and create new system- | ● (U/G/C): Engages in scholarship or research on well-being |
| |</p>
<table>
<thead>
<tr>
<th>-based interventions and structures to support well-being</th>
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<tbody>
<tr>
<td>Guides others in recognizing learners in distress and educates them in available resources</td>
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<tr>
<td>● (U/G/C): Goes to institutional leadership to ask for environmental or physical changes to enhance the well-being of learners (i.e., higher-level advocacy)</td>
</tr>
<tr>
<td>Assessment Models or Tools</td>
</tr>
<tr>
<td>● Well-being index</td>
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<tr>
<td>Notes or Resources</td>
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</tbody>
</table>
## Diversity, Equity, and Inclusion (DEI) in the Learning Environment

**Overall Intent:** To acknowledge and address the numerous factors in diversity, equity, and inclusion that affect learners, the learning environment, and patient care

<table>
<thead>
<tr>
<th>Milestones</th>
<th>Examples</th>
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</table>
| **Level 1** Defines diversity, equity, inclusion, racism, and oppression (structural, institutional, interpersonal, and internalized) and their impact on the learning environment | • (U/G/C): Provides examples of commitment to self-reflection and growth in DEI such as reading, attending courses, small-group learning, or individual coaching  
• (U/G/C): Completes unconscious bias training and other professional development to raise self-awareness, knowledge, and skills in DEI  
• (U/G/C): Describes systemic disadvantages and racism within the health care system and educational programs |

| **Level 2** Identifies inequities and applies strategies to mitigate racism and oppression and develop a diverse, inclusive, and equitable learning environment | • (U/G/C): Follows specific steps to demonstrate allyship when witnessing a microaggression  
• (U/G/C): Creates a welcoming and inclusive environment and actively engages all learners regardless of race, ethnicity, gender, sexual orientation, and/or ability  
• (U/G/C): Gives examples of systemic racism and a strategy used to address it within the local environment |

| **Level 3** Applies best practices in diversity, equity, inclusion, and anti-oppression in one’s own learning environment | • (U/G/C): Advocates for allyship and DEI values in all venues, including large groups, committees, and department meetings  
• (U/G/C): Uses inclusive language to address learners, colleagues, and patients  
• (U/G/C): Uses an inclusive range of images and case studies when teaching |

| **Level 4** Designs learning experiences that engage and support persons from diverse backgrounds, orientations, abilities, experiences, and perspectives | • (U/G/C): Conducts ongoing DEI needs assessments for the learning environments  
• (U/G/C): Develops or replicates DEI initiatives in multiple venues  
• (U/G/C): Measures the impact of DEI programs  
• (U/G/C): Is recognized as an expert in DEI best practices or programs |

| **Level 5** Role models and advocates for best practices in diversity, equity, and inclusion in the learning environment, and works to systemically address inequities | • (U/G/C): Institutes a DEI program within an educational curriculum that is based on assessment of needs  
• (U/G/C): Provides examples of leading others—informally or formally—to advance DEI initiatives  
• (U/G/C): Uses the local Community Health Needs Assessment (CHNA) to tailor educational experiences  
• (U/G/C): Collects race, language, and other community-level data to identify local disparities in care and incorporate it into teaching and learning practices  
• (U/G/C): Implements strategies to recruit, retain, and support diversity in all forms among leaders, faculty members, and learners |

**Assessment Models or Tools**  
<table>
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<tr>
<th>Notes or Resources</th>
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</thead>
</table>
### Administration 1: Administration Skills

**Overall Intent:** To function efficiently and effectively within an organization

<table>
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<tr>
<th>Milestones</th>
<th>Examples</th>
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</thead>
</table>
| **Level 1** Describes administrative domains of program management | ● (U/G/C): Describes the recruitment life cycle and relevant timelines in medical education  
● (U/G): Identifies the data collected in AAMC GME Track, the National GME Census database (e.g., Resident Survey, Program Survey, Fellowship and Residency Electronic Interactive Database (FREIDA)) |
| Describes components of legal, regulatory, and accreditation functions | ● (U/G/C): Describes the roles of licensing authorities for medical practice and whom to contact to initiate the process of learner licensure  
● (U/G): Differentiates learner, resident/fellow, and full licensure |
| **Level 2** Identifies best administrative practices for effective program management | ● (U/G/C): Identifies effective strategies that result in successful recruitment, including virtual approaches and social media  
● (U/G/C): Recognizes effective recruitment strategies in DEI that meet community needs  
● (U/G/C): Compares different tools to meet program needs (e.g., interview scheduling, rotation scheduling, call requirements)  
● (U/G/C): Creates spreadsheets and can share data visually |
| Identifies relevant resources for legal, regulatory, and accreditation functions | ● (U/G/C): Identifies effective strategies that result in successful recruitment, including virtual approaches and social media  
● (U/G/C): Recognizes effective recruitment strategies in DEI that meet community needs  
● (U/G/C): Compares different tools to meet program needs (e.g., interview scheduling, rotation scheduling, call requirements)  
● (U/G/C): Creates spreadsheets and can share data visually |
| **Level 3** Employs best administrative practices for effective program management | ● (U/G/C): Employs effective strategies that result in successful recruitment  
● (U/G/C): Chooses the most effective options/approaches  
● (G/C): Identifies program human resources/full-time equivalency (FTE) needs |
| Employs effective approaches to perform legal, regulatory, and accreditation functions | ● (U/G/C): Employs effective strategies that result in successful recruitment  
● (U/G/C): Chooses the most effective options/approaches  
● (G/C): Identifies program human resources/full-time equivalency (FTE) needs  
● (U/G/C): Responds to and elevates issues in program administration (e.g., too much critical care time, absence of key experiences)  
● (U/G/C): Shares data in different formats based on the audience receiving the data |
| **Level 4** Consistently demonstrates best practices across administrative domains | ● (U/G): Finds funding for additional training lines; manages off-cycle learners  
● (U/G/C): Works with and assists other program administrators in other specialties |
| Consistently integrates legal, regulatory, and accreditation functions into practice | ● (U/G): Ensures surveys are completed and in-service assessments are tracked and shared appropriately  
● (U/G): Ensures learners know program recordkeeping and information sharing with external stakeholders |
| **Level 5** Leads and guides others for best administrative practices for effective program management | ● (U/G/C): Runs mentorship program  
● (U/G/C): Is recognized as an authority on novel strategies for successful recruitment |
<table>
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<tr>
<th>Leads and guides others in legal, regulatory, and accreditation functions</th>
<th>● (U/G/C): Navigates efforts to instruct other program directors how to prepare a new program application or for successful site visit</th>
</tr>
</thead>
</table>
| Assessment Models or Tools | ● Direct observation  
● Educational portfolio  
● Identification of program responsiveness to stakeholders  
● Multisource feedback  
● Review of learner and program surveys |
| Notes or Resources | ● AAMC. GME Leadership Development Certificate Program. [https://www.aamc.org/professional-development/leadership-development/gme-leadership-development_certificate-program](https://www.aamc.org/professional-development/leadership-development/gme-leadership-development_certificate-program).  
### Administration 2: Leadership Skills

**Overall Intent:** To develop individual and collegial leadership abilities to achieve program outcomes

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<tr>
<th>Milestones</th>
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</table>
| **Level 1** Identifies essential styles, skills, and attributes for leadership | ● (U/G/C): Differentiates leadership styles and how they can effectively collaborate with other styles  
● (U/G/C): Identifies specific leadership resources to understand the various leadership styles |
| **Level 2** Identifies own leadership style and develops leadership skills with guidance | ● (U/G/C): Develops effective leadership attributes with a guide or mentor  
● (U/G/C): Takes a leadership assessment survey, reflects on results, and applies to own leadership skills |
| **Level 3** Independently assesses situations and determines which leadership skills are needed to achieve intended outcomes in routine situations | ● (U/G/C): Performs a needs assessment to identify the optimal leadership style to apply in a one-on-one teaching encounter for learner development  
● (U/G/C): Identifies gaps and brings an expert in to teach leadership styles |
| **Level 4** Leads others to achieve intended outcomes in complex and dynamic situations | ● (U/G/C): Applies different leadership styles on an interdisciplinary team (for residents/fellows, medical students, nurse practitioners, physician assistants) on an inpatient medical service  
● (U/G/C): Creates a multidisciplinary work group in response to a citation from a regulatory visit |
| **Level 5** Leads diverse individuals and teams to achieve program- or system-level outcomes | ● (U/G/C): Demonstrates mastery of team leadership  
● (U/G/C): Works effectively with faculty members in other disciplines and interprofessional team members to manage residents/fellows during a pandemic, applying leadership skills to assist in multiple areas, including revenue, schedules, and negotiations relevant to the health system |

**Assessment Models or Tools**

- Direct observation
- Educational portfolio
- Leadership or personality assessment tools
- Multisource feedback
- Program evaluation results
- Review of a written curriculum or decision-making tool

**Notes or Resources**

- Program evaluation can be completed using theories like Kellogg’s Logic Model, Moore or Kirkpatrick’s Model, and other data, including board pass rates, continued accreditation, and team member retention
- Leadership assessment tools can include: DiSC Model (Dominance, Influence, Steadiness, and Conscientiousness), Myers-Briggs Type Indicator, and others
## Administration 3: Change Management

**Overall Intent:** To incorporate change management as a skill for ongoing continue quality improvement in medical education

<table>
<thead>
<tr>
<th>Milestones</th>
<th>Examples</th>
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</table>
| **Level 1** Describes why change management is important in medical education | ● (U/G/C): Using the COVID-19 pandemic as an example for necessary change, describes how academic institutions have had to rapidly adapt their educational programming  
● (U/G/C): Recognizes need for change |
| **Level 2** Participates in change management initiatives | ● (U/G/C): Supports and does not impede change initiatives  
● (U/G/C): Is an early adopter of a new learning management system |
| **Level 3** Facilitates and manages change management initiatives | ● (U/G/C): Creates a proposal to improve night float  
● (C): Participates in a super-user group after implementation of a new EHR to provide feedback and suggestions for improvement to the implementation team |
| **Level 4** Implements change and reviews outcomes | ● (U/G/C): Implements various types of changes (technical or transformational) at various levels of the institution (program, department, or institutional level)  
● (U/G/C): Consistently uses tools to evaluate ideas and initiate change  
● (U/G/C): Implements a well-being program using Kotter’s model of change to address learner and clinician burnout |
| **Level 5** Coaches others how to create and implement change management | ● (U/G/C): Coaches learners and faculty members implementing a leadership project to include change management frameworks as part of a leadership development program |

### Assessment Models or Tools
- Dashboards

### Notes or Resources