

Formative Assessment to Gauge Student Medical Knowledge Competencies

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What are **Formative Assessments**?

Formative assessments are assessments **for** learning. They identify strengths, areas for improvement, and learning needs by showing both the learner and educator where the learner is in their progress, and where they need to go. Educators can also use formative assessments to evaluate and improve their teaching.

Key Components to Implement Formative Assessment Programs:

- Systematically incorporated into curriculum
- Provide constructive feedback and data
- Learner instructed on seeking, receiving, and using feedback
- Continuously integrated throughout curriculum
- Mapped to summative assessments & outcomes
- Learners and educators held accountable for monitoring progress

Tip: Work backwards from learning outcomes to identify milestones appropriate for formative assessments.

Formative assessments improve student outcomes by encouraging deeper learning, informing remediation, and engaging students in their own learning process. They also build non-academic skills such as self-regulated learning and intrinsic motivation.

This webinar focused on **Just-in-Time Teaching**. In this strategy, educators use data from formative assessments to adjust in-class activities.

Examples of Formative Assessments

Recall

- Pre-work questions
- TBL iRAT
- iClicker questions
- 1-minute paper
- Study guide

Integration/Application

- Concept map
- Diagramming
- Case-based learning
- Simulation
- Observation rubric

Metacognition

- Muddiest point
- Self-assessment
- Reflection journal
- Exit poll
- Study plan

Selected References

Konopasek, L., Norcini, J., & Krupat, E. (2016). Focusing on the formative: building an assessment system aimed at student growth and development. *Academic Medicine*, 91(11), 1492-1497.

Wood, D.F. (2018). Formative Assessment. In *Understanding Medical Education* (eds T. Swanwick, K. Forrest and B.C. O'Brien). <https://doi.org/10.1002/9781119373780.ch25>