

Formative Assessment and Active Learning: Tools for Nurturing Thinking Skills

Bukurie Gjoci, Massachusetts Maritime Academy

Abstract

This article examines the literature on the effectiveness of the use of formative assessment combined with active learning strategies in college classrooms in general and especially in teaching and learning of mathematics. It gives a description of what formative assessment and active learning represent, the evidence for effectiveness of their use in providing opportunities for feedback and revision, which leads students to a higher level of thinking and a better understanding. How different types of formative assessment and active learning can be conducted in different classroom communities aligned with other perspectives of learning environments (learner-centered, knowledge-centered, and assessment-centered) help in improving students understanding and logical thinking skills, and in promoting lifelong learning skills, will be explored as well.



Bukurie Gjoci is an assistant professor in the Science and Mathematics Department at Massachusetts Maritime Academy. Gjoci guides her students' learning through a question-and-answer process, allowing them to share the excitement of discovery. She believes every mathematical exercise, when performed properly, increases intelligence. Her research in the study and teaching of mathematics includes educational tests and knowledge measurement, assessment's use in teaching, mathematical task design, and problem posing. Gjoci holds a bachelor's degree from University of Tirana, a master's degree from Colorado State University, and a PhD from Columbia University.