Appendix 1. Classification and description of the active teaching methods used in the study (based on Prince and Felder 2006).

Type of active teaching method	Description
Inquiry learning	Students are presented with questions to be answered, problems to be solved, or a set of observations to be explained.
Problem-based learning	Students are confronted with an open-ended, complex, authentic (real-world) problem and work in teams to identify learning needs and to develop a viable solution.
Project-based learning	Begins with an assignment to carry out one or more tasks that lead to the production of a final product.
Case-based teaching	Is designed to engage students in a discussion of specific case studies that resemble or are real examples; it uses a guided inquiry method and provides more structure than PBL during small-group sessions.
Discovery learning	Students are given a question to answer, a problem to solve, or a set of observations to explain, and then work in a largely self-directed manner to complete their assigned tasks and draw appropriate inferences from the outcomes.
Just-in-time teaching	Combines Web-based technology with active learning methods in the classroom. This method is commonly used in the flipped classroom approach, where students study material before an interactive session.
Peer instruction	This method enables students to generate knowledge through discussion with their peers and is often used in the interactive session of the flipped classroom.
Educative gamification	Using video game design and game elements in learning environments.