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# **An Innovative Educational Escape Room Framework for Active Learning in Classrooms**

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## **Abstract**

Active learning techniques are educational tools that engage students with hands-on and interactive learning experiences. However, despite proven pedagogical advantages, active learning activities can be difficult to implement in traditional university classroom setups. We present a newly developed template for an educational escape room that can be used in a class of any size or discipline, does not require any special equipment, and is supplemented by free and accessible technology. We describe implementation of the escape room template in a plot-driven, dynamic sleep laboratory escape room, using puzzles to reinforce lecture content about circadian rhythms and sleep cycles in a large introductory neuroscience course of 300 students. This proof-of-concept innovative educational escape room framework combines escape room principles, technology, and physical paper elements to provide a new way of engaging students with complex course concepts in an interactive way, connecting best practices in education, applied neuroscience, and computer science.