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### **Documents**

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Effective Learning Behavior in Problem-Based Learning: a Scoping Review

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#### **Abstract**

Problem-based learning (PBL) emphasizes learning behavior that leads to critical thinking, problem-solving, communication, and collaborative skills in preparing students for a professional medical career. However, learning behavior that develops these skills has not been systematically described. This review aimed to unearth the elements of effective learning behavior in a PBL context, using the protocol by Arksey and O'Malley. The protocol identified the research question, selected relevant studies, charted and collected data, and collated, summarized, and reported results. We discovered three categories of elements—intrinsic empowerment, entrustment, and functional skills—proven effective in the achievement of learning outcomes in PBL. © 2021, International Association of Medical Science Educators.

#### **Author Keywords**

Academic outcomes; Effective learning behavior; Higher education; Problem-based learning; Student behavior

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