

10th International Conference on Modern Research in SOCIAL SCIENCES

Prague, Czech Republic 19 - 21 September 2025

Cognitive and Metacognitive Dimensions of Educational Evaluation: Towards a Competency-Oriented Framework in Light of OECD-PISA Findings

Dr. Corina Costache-Colareza, Ruxandra Victoria Paraschiv, Mihaela Rus, Mihaela Baiceanu, Mihaela Sandu

Titu Maiorescu University of Bucharest, Romania

Abstract

Educational evaluation is undergoing a profound transformation, moving from traditional behaviorist approaches toward frameworks centered on cognitive and metacognitive development. This paper explores how evaluation practices can be redesigned to foster competencies, self-regulation, and problem-solving abilities, drawing on insights from psychology, pedagogy, and international assessment models. The OECD–PISA framework provides a relevant reference, as it shifts the focus from knowledge reproduction to functional competencies such as reading, mathematical, and scientific literacy. Cognitive processes, including attention, memory, and reasoning, alongside metacognitive strategies such as planning, monitoring, and reflection, are identified as key drivers of learner performance in both classroom contexts and large-scale international assessments. By aligning educational evaluation with these dimensions, schools can better prepare students for lifelong learning and adaptability in a rapidly changing society. The paper argues for the integration of formative and competency-based assessment practices that mirror PISA's vision, ensuring that evaluation becomes not only a measure of achievement but also a catalyst for cognitive and personal growth.

Keywords: assessment; cognition; competencies; metacognition; OECD-PISA