Masha Etkind and Uri Shafrii

Research Insights

Pedagogy for Conceptual Thinking and

Meaning Equivalence
Emerging Research and Opportunities

Pedagogy for Conceptual Thinking and Meaning Equivalence: Emerging Research and Opportunities

Part of the Advances in Educational Technologies and Instructional Design Book Series

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Description:

Research in neuroscience and brain imaging show that exposure of learners to multi-semiotic problems enhance cognitive control of inter-hemispheric attentional processing in the lateral brain and increase higher-order thinking.

Multi-semiotic representations of conceptual meaning are found in most knowledge domains where issues of quantity, structure, space, and change play important roles, including applied sciences and social science. Teaching courses in History and Theory of Architecture to young architecture students with pedagogy for conceptual thinking allows them to connect analysis of historic artifact, identify pattern of design ideas extracted from the precedent, and transfer concepts of good design into their creative design process.

Pedagogy for Conceptual Thinking and Meaning Equivalence: Emerging Research and Opportunities is a critical scholarly resource that demonstrates an instructional and assessment methodology that enhances higher-order thinking, deepens comprehension of conceptual content, and improves learning outcomes. Based on the rich literature on word meaning and concept formation in linguistics and semiotics, and in developmental and cognitive psychology, it shows how independent studies in these disciplines converge on the necessary clues for constructing a procedure for the demonstration of mastery of knowledge with equivalence-of-meaning across multiple representations. Featuring a wide range of topics such as curriculum design, learning outcomes, and STEM education, this book is essential for curriculum developers, instructional designers, teachers, administrators, education professionals, academicians, policymakers, and researchers.

Topics Covered:

- Conceptual Thinking
- Curriculum Design
- Digital Era
- Evidence-Based
 Informed Consent (EBIC)
- Instructional Design
- Knowledge Access
- Learning Outcomes
- Meaning Equivalence Reusable Learning

Objects (MERLO)

- Pedagogy
- STEM Education

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