

The fourth r: creating rigorous thinking through mediated learning experience and feuerstein's instrumental enrichment program.

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Complex problem solving is a product of rigorous engagement with the content and process of experience. Such engagement leads to deeper structural thinking and affective/motivational commitments that transcend the traditional "status" expectations ascribed to individuals, particularly within the minority communities in society. Mediated Learning Experience (MLE) is a mechanism to create conditions for rigorous engagement, and can be structured into specific activities and experiences, such as is represented by Feuerstein's Instrumental Enrichment program.

The need for rigor in the curriculum and in teaching strategies can be well documented, particularly in its absence. The kinds of interactions contributing to rigor can be clearly defined. The mediational qualities, as prescribed by the concepts and processes of MLE, can be operationalized to promote rigorous engagement. As they are described, the process of instruction leading to enhanced complex problem solving becomes apparent. Of special importance is linking the student, the materials to be learned (the tasks), and the interaction into an intentional and reciprocal relationship. It is here that the parameters of MLE are explicative in a deep understanding of the process of engagement, and the relationship to complex mental operations and problem solving thinking are elucidated.

This conceptualization elaborates the process of structural cognitive modifiability (SCM), and provides vivid linkage to MLE as its dynamic. From this perspective the application of MLE to both task and learning process becomes clear, and can be seen in the paradigm which underlies the Instrumental Enrichment program. By linking elements of task (the Cognitive Map) and dimensions of the learner's functional and need systems (the Cognitive Functions) we can identify elements of rigor in the contents of the instruments and in the didactic processes embedded within them. Specific examples from several instruments, and from instructional interactions with students, provide evidence of this phenomenon. The application of MLE and SCM, through the use of programs such as FIE, can thus be seen as building qualities of thinking and problem solving that can be described as cognitively rigorous, and as meeting important requirements for learning experiences of all students, especially those for whom prior experiences have been insufficiently mediated or successful.

¹*Gli autori definiscono il termine "Rigore" come "quarta R" in quanto tradizionalmente nel sistema educativo anglossassone le "tre R" (reading, riting, and rithmetic) sono considerate i contenuti di base dei programmi di apprendimento.*

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