

Teacher as a Mediator in Science Classrooms

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Abstract:

Teacher is the connection between students' sociocultural experiences at home and school, and also acts as a mediator using different teaching practices and strategies to mediate their learning and cognitive development. In classroom settings, teaching can be redefined as assisted performance, which includes sets of mediational tools so that teachers make appropriate stimuli available for the child's interaction and to help the child select and organize these stimuli in ways that develop his/her thinking processes. In this investigation, I conducted interviews and classroom observations to examine the mediational tools in science classrooms in a US high school. Findings indicate that the mediational tools that science teachers used included: 1) *raising correlated questions*, 2) *concept maps*, 3) *quote, question, and objective*, 4) *prior knowledge*, 5) *no right or wrong*, and 6) *analogies or examples*. Different mediational tools can facilitate class activities and allow teachers to gradually direct students to be active constructors of knowledge. The investigation contributes to identifying the most effective mediational tools for teachers to use in science classrooms and what actions teachers can take in order to make learning a much easier transition to allow the growth and construction of knowledge.

Keywords:

Teachers, mediational tools, science classrooms.