

## 1 - Learning Science: Conceptual Understanding | Empirical

### SP - (16018) - USING DIFFERENT MEDIATIONS TO STIMULATE DEVELOPMENT OF RELATIVISTIC ZONE IN CONCEPTUAL PROFILE OF REFERENCE FRAME

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#### Short Abstract

The importance of Modern Physics themes in basic education is widely recognized. However, as these are complex subjects, it is necessary to develop, as well as use in the classroom, resources that can facilitate their understanding by students. Among these themes, Einstein's Theory of Special Relativity (TSR) stands out. In this way, the present research relates the use of different resources through the four levels of mediation according to the Cognitive Networks Mediation Theory (CNMT), in order to stimulate the development of the relativistic zone of the conceptual profile of referential for understanding the Theory of Special Relativity (TSR) by third year high school students in a public school in Brazil. Students answered pre-test and post-test questionnaires, immediately before and after the activities during Physics classes. Some students were selected and interviewed. The results obtained suggest that the use of different levels of mediation, especially *hypercultural* mediation, can contribute to the construction of mental images and the development of this conceptual profile zone.