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Primary teachers' cognitive organizers in classifying natural phenomena the role of scientific stereotypes

The aim of this study is to examine primary teachers' cognitive organizers used in classifying natural phenomena. Although primary teachers' function according to Science Curriculum, their cognitive organizers affect their practices especially whenever they had to innovate in handling pupils questions or puzzles. Teachers asked to categorize 20 phenomena from different disciplines or topics of Science and to create groups of them. The elaboration of protocols shows that: 1) Primary teachers' conceptual milieu is very restricted, although they teach a wide variety of scientific topics. 2) Their conceptual frameworks include crude and uncultured concepts formed by sense experience, 3). Scientific topics and disciplines are used as unifying concepts instead of scientific ones. Our findings suggest that unifying and simplifying concepts or theories like energy, particulate nature of mater, etc should be prominent in prospective primary teachers' Science Curricula at the university level.