

ZMATH 2016d.00136

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Mexican high school students' social representations of mathematics, its teaching and learning.

Int. J. Math. Educ. Sci. Technol. 46, No. 5, 700-720 (2015).

Summary: This paper reports a qualitative research that identifies Mexican high school students' social representations of mathematics. For this purpose, the social representations of 'mathematics', 'learning mathematics' and 'teaching mathematics' were identified in a group of 50 students. Focus group interviews were carried out in order to obtain the data. The constant comparative style was the strategy used for the data analysis because it allowed the categories to emerge from the data. The students' social representations are: (A) Mathematics is ... (1) important for daily life, (2) important for careers and for life, (3) important because it is in everything that surrounds us, (4) a way to solve problems of daily life, (5) calculations and operations with numbers, (6) complex and difficult, (7) exact and (6) a subject that develops thinking skills; (B) To learn mathematics is ... (1) to possess knowledge to solve problems, (2) to be able to solve everyday problems, (3) to be able to make calculations and operations, and (4) to think logically to be able to solve problems; and (C) To teach mathematics is ... (1) to transmit knowledge, (2) to know to share it, (3) to transmit the reasoning ability, and (4) to show how to solve problems.

Classification: C24

Keywords: views of mathematics; high school students; social representation; metaphorical thinking; beliefs; conceptions

doi:10.1080/0020739X.2014.997319