



## ABP como estrategia para desarrollar el pensamiento lógico matemático en alumnos de educación secundaria [

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text (article)

Analítica

In the latest PISA assessment conducted in Mexico (2015), the third graders of high school, on average, were located on level two "students can interpret and recognize situations in context that require only direct inferences" by what the research project proposes to implement strategies to achieve the level IV on mathematics skills specified by PISA. This level considers "students are able to work effectively with explicit models for complex concrete situations" favoring the mathematical logical thinking of students. The research was conducted with 60 subjects from 14 to 15 years attending the Technical Secondary School No. 78 "Dr. Guillermo Massieu Helguera", in the Municipality of Chimalhuacán in the State of Mexico. The sample is not random without randomization with an intact group with pretest and posttest. It is an exploratory quantitative research scope. The purpose is to make a first approximation to obtain data to meet and propose inputs and strategies that support the development of mathematical and logical skills of abstract thinking. Implementation of an instrumental design considering the strategy of problem-based learning, which can generate significant new knowledge was resulted that the strategy implemented 92.4 % of students used the knowledge gained to select viable alternative solutions to problems, 73.3 % established relationships between variables of a problem using mathematical language and 66% through language could pose a problem for algebraic solution. The results are considered relevant but are not representative

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