

ZMATH 2005c.00911

Zhou, You-shi

Mathematics conceptual change learning based on constructivism.

J. Math. Educ. (Tianjin) 13, No. 3, 19-22 (2004).

Conceptual change learning means that students transform, develop and reconstruct their former concepts, it is a conversion course from pre-concept to scientific concept. The main cause of misconceptions in mathematics conceptual conversion includes the factors: routine concepts, conceptual imagoes, and transfer. According to constructivism, and based on the theory of conceptual conversion avenue, mechanism and qualification, we ought to adopt the following teaching strategy: we should realize students' mathematics conceptual change learning upon finding out their former concepts, leading to cognition collision and constructing conceptual network. (author's abstract, mod.)

Classification: C30

Keywords: constructivism; mathematical concepts; conceptual change learning; teaching strategy