

# **„Does music make you smart? A comparison of mathematical achievement between students from schools with and without musical magnet programs by Nadine Fritsche**

## **Abstract**

The focus of this paper is the assumed correlation between mathematical and musical achievement in elementary school students. The first part of this paper examines the foundations of memory, learning and motivation and summarizes fundamental theories. Furthermore the author refers to the historic roots of the disciplines math and music. The effects of stress and fear on everyday school reality are also considered. In the chapter about the „Mozart-Effect“ the author discusses empirical studies about enhanced achievement in mathematics after working with classical music in music class. The second part of the paper concerns an empirical study that was conducted at elementary schools in Berlin. Students answered questions about their learning styles, motivation and personal well-being in music class. In addition they were asked to solve a set of mathematical problems. The main thesis assumed that children from music-magnet schools would demonstrate an overall higher level of mathematical performance. Several sub-thesis work with individual attitudes towards music. The results do not demonstrate any significant differences between students from music-magnet schools and general elementary schools.