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EDITORIAL DESK

Mozart and the S.A.T.'s

By Ellen Winner and Lois Hetland (Op-Ed) 629 words

CAMBRIDGE, Mass. -- Almost daily we hear that the arts make kids smarter. Last week's issue of Parade magazine, for example, reported that children who studied the arts in high school got higher S.A.T. scores. And at the Grammy awards last week, Michael Greene, the president of the National Academy of Recording Arts and Sciences, said that children who studied the arts scored higher on tests in math and science.

In fact, there is an association between the arts and S.A.T. results. But what's causing what? Do the arts lead to academic success, or do achievement-oriented students take more arts courses?

The most common claim is that classical music in particular has a magical power to improve children's brain development. In the children's music section of Tower Records here in Cambridge, for example, a compact disk called "Music for the Mozart Effect" is sold with the claim that studies have shown that Mozart can raise a child's I.Q.

At least two states, Georgia and Michigan, have mandated the distribution of classical CD's to all families with newborns. Thomas Finneran, the Speaker of the House in the Massachusetts Legislature, supports a program to give books and music to all of the state's children 4 and younger. Distributing books and music to babies and young children is a laudable proposal for many reasons. But will these efforts raise your child's I.Q.?

Since 1997 we have been analyzing the research relevant to the claim that the arts lead to academic success. So far we have found no actual scientific evidence on the effect of music on infant brain development and subsequent school success.

Frances Rauscher, a psychologist at the University of Wisconsin at Oshkosh, has shown that when college students listened to a Mozart piano sonata for 10 minutes, their scores on spatial reasoning tests improved. But this "Mozart effect" was short-lived, lasting only 10 to 15 minutes.

In other studies, Dr. Rauscher and her colleagues showed that young children who learned to play the piano also improved their spatial abilities. But this difference appeared on only one of several tests. And it is impossible to say how long the improvement lasts. Children were tested within days of their latest piano lesson.

Do these results justify the inference that listening to classical music will lead to school success? Alas, they do not. Nor did Dr. Rauscher make such a claim.

Fifteen research teams have tried to replicate these results, but only four have clearly supported the original findings. Dr. Rauscher's results may hold up in the end.

But there is a long and uncertain chain from a transient effect in the laboratory on a few spatial tests to the demonstration of long-term dividends for mastering basic academic skills.

Don't get us wrong. We think the arts should be a basic component of every child's education, and we strongly endorse any proposal to increase arts education for children. The importance of listening to and learning to play classical music, or for that matter engaging in any of the arts, is beyond dispute -- but not because the experience will raise academic test scores. People who live by such practical rationalizations for the arts are in danger of having their position undermined should science not support these claims.

We don't justify math in our schools by how well it improves musical ability. So why should we require such distant transfer effects in the case of music? Music, like math, physics and poetry, is an essential part of our culture. Children improve their future lives immeasurably by gaining a deep understanding of its structure and its beauty. This is justification enough for music in our schools.

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