

# Music lessons enhance math test scores

NEW Canadian research has found that high school students who take music classes perform better in more "academic" subjects such as math and science than non-musical students.

Carried out by researchers at the University of British Columbia, the new study looked at 112,916 school records for students in British Columbia who started the first grade between 2000 and 2003 and who had completed the last three years of high school, including at least one standardised exam for math, science or English in the 10th or 12th grade.

Around 13 per cent of the students included had participated in at least one music course, including concert band, conservatory piano, orchestra, jazz band, concert choir and vocal jazz, in grade 10, 11 or 12. However, the researchers did not include general music as it does not require making or practising music, or guitar courses as they required no previous music experience.

The findings, published by the American Psychological Association in the *Journal of Educational Psychology*, showed that the students who participated in music courses, who had higher achievement in



*Learning to play an instrument could improve a child's performance in other school subjects, according to new research.*

music, and who were highly engaged in music, also had higher exam scores in math, science and English.

## **ONE YEAR OLDER**

Not only did the researchers find that these associations between music and exam performance strong, but they were

also consistent across all three subject areas, and continued to be significant even after the researchers had controlled for demographic factors such as gender, ethnicity, socioeconomic background.

The team also found that the associations were stronger for those who took instrumental music rather than vocal

music courses.

"On average, the children who learnt to play a musical instrument for many years, and were now playing in high school band and orchestra, were the equivalent of about one academic year ahead of their peers with regard to their English, mathematics and science skills, as measured by their exam grades," said study author Peter Gouzouasis.

"It is believed that students who spend school time in music classes, rather than in further developing their skills in math, science and English classes, will underperform in those disciplines. Our research suggests that, in fact, the more they study music, the better they do in those subjects," added Gouzouasis.

"Learning to play a musical instrument and playing in an ensemble is very demanding. A student has to learn to read music notation, develop eye-hand-mind coordination, develop keen listening skills, develop team skills for playing in an ensemble and develop discipline to practice. All those learning experiences play a role in enhancing children's cognitive capacities and their self-efficacy."

**AFP Relaxnews**