CultureCase

Arts education can help with students' maths ability

This research was conducted by **Katharine Smithrim and Rena Upitis**

Summary

This paper sets out the results of a major research project examining the impact of the Learning Through the Arts (LTTA) programme in Canada. The LTTA is a model of arts education where professional artists develop a multi-year curriculum of activity that the artists then delivers directly to a group of students. The research took data from students aged 9-12 who had completed the programme and compared that with students from a series of 'control schools'. They found that after three years in the programme students scored significantly higher than other students for maths.

Data were gathered from a large and carefully sampled group of students

The research tested just over 4,000 students at schools engaging in the LTTA programme across Canada prior to their involvement and again after 3 years of the programme. 2,602 students at schools identified as appropriate control schools were also tested. The research used standardised tests for literacy, numeracy and problem solving, writing, as well as tests for attitudes towards school, the arts and other subjects. Only the results for maths (especially computation) showed a significant improvement amongst students in the LTTA programme compared to those that in the control schools. The improvement was seen across children of all backgrounds, and only took place after the full three years of the programme.

Explaining the impact of the LTTA programme

In subsequent interviews and focus groups the students, their teachers and parents expressed how the physical, social and expressive nature of the activities also made a difference to concentration levels. The greater attention that students gave to schoolwork as a result of the LTTA programme was the most likely explanation for the difference in computational ability that was highlighted by the test scores.

Keywords

interview **focus group** **control group** **maths** **Canada** **children**

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