

# Theatre programmes can increase children's maths ability

**Home > Impacts of arts and culture > Educational impacts of arts and culture**

This research was conducted by **Mike Fleming, Christine Merrell and Peter Tymms** at the **University of Durham, UK**

## Summary

The paper looks at a study conducted on schoolchildren who participated in the National Theatre's 'Transformation' project: it took place in a deprived neighbourhood in east London and was designed to improve the children's self-confidence and communication skills. They found that participants in the programme increased their self-esteem and improved in maths when compared to their contemporaries who did not take part in the scheme.

## The project comprised a bespoke set of workshops over two school terms

In the informal workshops the children undertook variety of writing and storytelling exercises. They were taken to see performances at the theatre, and the children themselves devised work which they performed for each other at the end of each year. This process was repeated annually for three years for the same group of students.

## The research tested a range of attitudes and abilities

The researchers tested the pupils' 'reading, mathematics, picture vocabulary, non-verbal ability, and attitudes to reading, mathematics and school' prior to their involvement with Transformation and at the end of the second year of the project. Two of the four schools participating in the programme were matched with 'control' schools (in the same geographic area with a similar pupil profile).

## Interesting findings... but a few things to keep in mind

The study found that the self-esteem of the pupils after participating in the programme was significantly higher than those in the control schools, and that the programme increased the mathematics performance of the children who participated in it. The authors caution against making too much of this finding, but nonetheless ponder whether the increase in maths ability was due to accelerated cognitive development or enhanced self-esteem factors brought about by Transformation.

### Keywords

theatre UK experiment self-esteem school writing maths performance

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