LEGO bricks build better mathematicians

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Credit: University of Derby

A study carried out by the University of Derby has found that LEGO plays a vital role in the development of maths skills in children.

The study 'Children's construction performance and math: controlling task complexity and predicting mathematics performance' was conducted to examine the relationships between spatial and

mathematical abilities in children.

A student from the University of Derby worked with 96 children aged seven to fourteen, from Etwall Primary School, Granville Community School and John of Rolleston Primary School. The study revealed that there is a link between LEGO building skills and mathematics performance.

Dr Miles Richardson, Head of Psychology, worked with the student to conduct the study.

He added: "This is interesting as LEGO construction skills were found to be a unique predictor of maths performance, independent of factors we already know about."

Co-author, Dr Thomas Hunt noted "Overall those who performed best on the LEGO task had a higher maths SAT score. In particular, in year six, the best performing pupils on the LEGO task scored a whole maths SAT level higher".

Dr Richardson continued: "The study also provides a method to control and quantify the difficulty of LEGO tasks across childhood and adolescence. This provides the possibility of developing LEGO based kits to improve the mathematical ability of children.

"We hope the findings will encourage the development of play-based ways of engaging children to develop skills essential for maths."

Provided by University of Derby