## Associations between spatial cognition and maths in Primary School



Funding: ESRC, Bloomsbury Colleges, NCCA

Lab members: Katie Gilligan, Emily Farran

## Maths Skills: Katie Gilligan

The CogDev lab has investigated associations between spatial and mathematics skills, using both longitudinal and cross-sectional approaches.

Secondary data analysis of the Millennium Cohort Study has shown that spatial performance at 5 and 7 years is a significant predictor of mathematics scores at age 7. Furthermore, cross-sectional investigation highlighted differences in the relationship between spatial and mathematics skills through development from 6-10 years. Spatial scaling and mental rotation were found to be particularly important for mathematics for children aged 6-8 years.

Based on these findings our current study is exploring the use of instructional videos as a novel training method for improving spatial thinking. The study will investigate the impact of spatial training on; spatial skills that have been specifically trained (near transfer), non-trained spatial skills (immediate transfer) and mathematics skills (far transfer).