Whitworth Mathematics and Art Primary Masterclasses

Initiative

Demi Allen, Charles Eaton, Helena Stage, and Alex Watson (all from the School of Mathematics) collaborated with Steven Roper from The Whitworth and artists Jasmine Walne and Gemma Latham to create interdisciplinary masterclasses for primary school students. These workshops, delivered over a week at The Whitworth in October 2018, explored connections between mathematics and art through the themes “Random Walks and Tapestries” and “Symmetries and (Digital) Art”. Aimed at making new connections between the Key Stage 2 syllabus and students’ everyday experiences, the workshops introduced a range of mathematical topics and encouraged students to explore the presence of these in both traditional and digital art exhibited throughout the gallery. The students went on to use these mathematical ideas to create their own artworks, some of which are pictured below. The use of probability and symmetry to explain patterns observed in both art and mathematics provided a valuable connection to students’ future learning pathways, making the masterclasses a departure from everyday learning and a natural continuation into their future studies. Further similar activities are planned for Key Stage 4 students in early 2019, and the masterclasses are planned to be repeated in future years.

How Demi, Charles, Steven, Helena and Alex have made a difference

These masterclasses are the first collaborative venture between the School of Mathematics and The Whitworth, and represent an innovative approach to public engagement in Greater Manchester. Such events are essential for highlighting connections between mathematics and other disciplines, and for reaching out to broader audiences. Furthermore, the masterclasses have provided a springboard to investigating further connections between subjects and fostered the inquisitiveness essential to the future of science. One participating teacher commented: “A fantastic experience. It gives us great ideas to link maths and art to try in school. I would love more children to be able to experience this.”