

CETL-MSOR Conference 2015

Andrew McGettigan & Rich Cochrane: Fine Art Maths Centre at Central Saint Martins - a case study report on mathematics support in a unique setting.

Fine Art Maths Centre at Central Saint Martins (CSM) was awarded funding by Sigma in June 2014. CSM is a leading centre for fine art education. It is a constituent college of University of the Arts London, the largest specialist art and design university in Europe.

Fine Art Maths Centre is the first sigma-funded mathematics support centre based in such an institution. The focus of the undergraduate and postgraduate taught courses is the production of practical work, there are no examinations or tests. And no compulsory mathematical components! Quantitative disciplines have little to no presence within the university.

That said, all life, intellectual and otherwise, is open to art practice and mathematics is no exception. The prevalence of the digital and the complexity of contemporary life means that artists are increasingly drawn to mathematics and associated domains of knowledge such as computing. Our challenge is how to enable those interests to develop into practice that produces artworks given that students may have stopped studying maths at 16. What does this setting imply for mathematics support?

Artists can have an interest in topics that, in a standard maths syllabus, would be considered somewhat advanced, such as algorithms, set theory, topology and non-Euclidean geometry. Our remit at FAMC is to expand the ability of CSM to support a broader range of art practice and to open possibilities for skill development otherwise closed down for lack of technical support.

Our talk will outline our vision, the practical challenges that have arisen from implementing it and how what we do differs from other sigma centres. We will discuss our series of short workshops based on a no prerequisite, drawing- and practice-led approach to mathematics support.

Workshops have covered:

- Euclidean geometry;
- linear perspective and projective geometry;
- non-Euclidean geometry and topology;
- algorithms and programming;
- 'infinity' (covering some calculus and set theory).

This talk will provide an overview of our first full year of activity, our future plans and discuss possibilities of generalising our approach to mathematics support across the arts and humanities.

We aim to run an accompanying practical workshop in the introducing the mathematics of linear perspective.