

# Painting like Mondrian

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## Short presentation

In this poster we present a LOGO made microworld that may serve as an interdisciplinary educational platform for Art, Maths and Computing. The microworld was originally created in a classroom of children between 12-14 years old, as part of the ICT curriculum. The aim of this activity was to help students find ways to produce their own drawings by imitating Mondrian's unique painting style. Since Mondrian's paintings are characterized by geometry (horizontal and vertical lines that form rectangles, some of them filled with colour), students have also the opportunity to study what is the impact of math functions and/ or geometrical shapes on the appearance of a painting and how they can change its various visual effects just by playing with the variables and parameters of these functions or shapes. Also important to the aesthetics of the painting is the idea of randomness, which may be applied to certain points of the drawing procedure (the distance between lines, the colours of the painting, etc.). From the programming point of view, children have the chance to take decisions at a technical level and see the results at the drawing level.

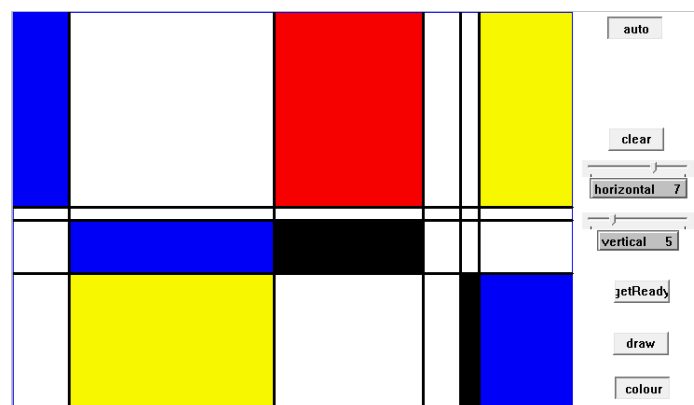


Figure 1. *Painting like Mondrian microworld screen caption*

Another interesting feature is that each student (and teacher) has adequate degrees of freedom to produce his/her one tool of painting depending on the decisions that he/she will take both at the mathematical and at the technical level. The same activity or scenario can lead to a variation of implementations (microworlds), according to the taste of each student or teacher. The microworld exists also in a second version to be used by children of younger ages (6-10).

The idea behind this microworld as mentioned earlier, was to create an interdisciplinary platform that could be exploited by teachers of ICT, Maths and Art, enhancing the dialogue between them and their disciplines, whilst giving the opportunity for co-teaching. Finally, the inherent rhythm that Mondrian's paintings possess, gives us the motivation to further develop this microworld in the future and expand its range of disciplines by including also music education.

## Keywords

Microworld, Art teaching, ICT teaching, Math teaching, interdisciplinary