

Fostering creativity using Scratch

In July of this year, the first national rollout of the NCTE/Lero summer course, *Scratch* Programming and Numeracy in Senior Primary Classes, will take place in Education Centres around the country.

Scratch is a free application, developed by the MIT Media Lab, which allows users to create and share their own interactive stories, animations and games. Children develop 21st century skills, including creativity, critical thinking, problem solving and communication, as they work collaboratively or individually on *Scratch* projects.

Scratch is easier to use than traditional programming languages as it consists of graphical blocks which snap together similar to Lego bricks or jigsaw puzzles to produce animations and other resources. *Scratch* projects are made up of objects called sprites which can be instructed or programmed to move around the screen and integrated with images, graphics and audio.

Elaine Lyons from Ballingarry NS, Co Limerick, has been using *Scratch* with her class for over a year. "I find *Scratch* highly motivating. The children are on task, focussed on creating animations and games. *Scratch* enables children to collaborate in a meaningful way. Children are planning, problem-solving and using mathematical skills to create projects which are personal to them."



"Additionally, while *Scratch* certainly supports the mathematics curriculum, it can also integrate well into other curricular areas such as language, SESE and Art. For example, one child in my class created an animation based on the lifecycle of the butterfly which incorporated mathematical and computing knowledge with their science lesson."

Here are some other ideas of how you might use *Scratch* in your classroom.

- ✦ Visual Arts – Children use the paint editor to create new images and develop animations and audio recordings to accompany their drawings.
- ✦ Language – Children create collaborative stories, incorporating images, narration, music and animations.
- ✦ Maths – Children in senior classes develop fun interactive maths games for

junior classes.

- ✦ SESE – Children create an interactive *Scratch* project to illustrate a key historical event.

During the development process, *Scratch* projects can be shown to the class at different stages to encourage peer and self assessment. Finished projects can be published on the school blog or website and/or shared on the MIT website. Consider also using *Scratch* as a differentiated activity for exceptionally able students.

For resources and *Scratch* updates in Ireland visit

www.scratch.ie. Resources are also available on the MIT website <http://scratched.media.mit.edu>. If you want to learn more about *Scratch*, with a particular focus on numeracy development, sign up to one of the free NCTE/Lero summer courses via your local education centre. See www.ncte.ie/courses for the course description. As places are limited early booking is advised.

Lero – the Irish Software Engineering Research Centre has been running an Education and Outreach programme since 2007 to promote programming in schools. In 2012, Lero and the NCTE combined efforts to develop and roll out Scratch teacher training.

Compiled by **Madeleine Murray**, National Coordinator, NCTE. www.ncte.ie.

Free Summer Online Courses from NCTE

Many teachers are anxious to explore how to use, or how to better use the interactive whiteboard in their classroom but cannot attend a face to face course.

This summer, the NCTE is making its course on 'Using the Interactive Whiteboard to support Literacy' available as an online course. Any teacher with a Teaching Council Registration Number can enrol. Teachers must be comfortable with using ICT and the internet in order to complete an NCTE online course.

The ever popular 'Developing e-

Learning in your School (Primary)', with a focus on literacy, is also available online this summer.

Both online courses will qualify for EPV days (tbc). See www.ncte.ie/onlinecourses for details. Enrolment opens 16 April.

Four face to face courses which focus on ICT for literacy/numeracy will also be available this summer. Topics include Scratch, ICT for infant classes, creating ICT resources and interactive whiteboards. Contact your local education centre to enrol on a face to face course.

