

Module 5

SCRATCH



Module 5

Suggested Duration of Module

4 Hours

Objectives

Content of Module 5:

Digital Learning Framework and DL Plan

Other Digital Technology Resources from PDST Technology in Education

Create a Scratch Project

Support for Teaching Scratch

Other programming Resources

The Digital Learning Framework

The <https://www.dlplanning.ie/> website contains a number of useful resources to assist schools in developing their Digital Learning Plan, from the Digital Learning Planning Guidelines and Framework to video exemplars linked to the Framework highlighting how teachers are integrating digital technologies in their classrooms.

The purpose of this section is to provide an overview of the benefits of planning for the integration of digital technologies in the primary classroom. It also includes links to a number of useful resources to assist schools in developing their Digital Learning Plan.

Benefits

The benefits of using a school Digital Learning plan include:

Assessing where the school is in terms of digital technology development and where it would like to be

Identifying the digital technologies, software and skills available in the school

Ensuring an agreed vision for digital technologies within the school aligned with the Whole School plan

Allowing the school to integrate digital technologies more effectively into their teaching, learning and assessment activities based on the particular circumstances of the school

Identifying targets to integrate digital technologies more effectively into teaching, learning and assessment.

Participant Activity

Using the [template](#) provided, develop an Digital Learning Action Plan for your class for the first term of the school year.

Tips

Aim to ensure that the Digital Learning team includes a range of digital technologies skills and proficiency reflective of the staff as a whole.

Be realistic. Look at what tasks will be attainable by the staff as a whole. Once this has been achieved, you can start on the next goal.

The journey of a thousand miles starts with a single step!

Useful Links

[The Digital Learning Framework](#)

[The Digital Learning Planning Guidelines](#)

[The Digital Learning Framework Video Exemplars](#)

[The Digital Learning Plan Template](#)

Create a Scratch Project

Break into groups of 2 or 3.

Plan out a project.

Build it in Scratch.

Be as creative as you can. Use the resources you have seen throughout the week.

Incorporate the following into your project:

- At least two sprites

- Costume or Background Change

- Broadcast

- Variable

- Images and sounds

- Numeracy aspect

Upload your project to scratch.mit.edu.

Present your project to the Group

Present your project to the group.

Get feedback on your project.

Implement a new and improved version of your project

Create a version 2 of your Scratch project by adding some new features or functionality.

Support for Teaching Scratch

ScratchEd

<http://scratched.gse.harvard.edu/>

Launched in July 2009, ScratchEd is an online community where Scratch educators share stories, exchange resources, ask questions, and find people. Since its launch, more than 7,500 educators from all around the world have joined the community, sharing hundreds of resources and engaging in thousands of discussions.

Participant Activity

In pairs or groups go to <http://scratched.gse.harvard.edu/> and find some resources suitable for your class. Discuss any other Scratch resources you find useful.

Discuss Scratch

<http://scratched.gse.harvard.edu/discussions>

Discuss Scratch is a forum section within <http://scratched.gse.harvard.edu/> . There are hundreds of discussions where you can find solutions to your Scratch questions or you can also start your own discussion. The discussions are categorised into various sections.

Participant Activity

Consider an aspect of Scratch you found particularly challenging this week. Search <http://scratched.gse.harvard.edu/discussions> for help with this topic. Create a small project that reinforces your learning on this topic *e.g.* if you found costume changes difficult create a project with one sprite who changes costume.

Other programming resources

There are other programming resources available to teachers.

CS First

CS First provides lesson plans and video materials to introduce students aged 9-14 to computer science using Scratch. The materials are thematic to attract students with varied interests. Each theme contains up to 10 hours of content across 8 learning activities. The materials are free and available online at www.cs-first.com/materials.

Teachers may request a free classroom pack (containing teacher and student resources) by registering a CS First class/club at their school www.cs-first.com/start-club.

Participant Task: Visit the Google CS First Materials page (<https://www.cs-first.com/materials>) and attempt the introductory lesson **High Seas Activity**.

ScratchJr

There is a free ScratchJr app available that is suited to younger children. The app is available for both iPad and Android devices. The www.scratchjr.org/teach.html website has resources and lesson plans for teachers that wish to use the application with their class.

If you have access to an iPad or Android tablet install the free ScratchJr app and attempt one of the lesson plans available on their website.

Blockly

This has been developed by Google and is similar to Scratch. It works in a similar fashion to Scratch by dragging blocks. There are a series of challenges or games for children to complete. These can be accessed at the following link <https://blockly-games.appspot.com>

Bee-Bot

This is suitable for younger classes. It is a programmable robot that can move around the floor based on instructions input. The robot can be purchased online but there is also a free app available that can introduce basic programming to younger children.

Sphero

Using Sphero SPRK+ and the Sphero Education app, learn to code by drawing paths, using Scratch blocks, or writing your own JavaScript text programs.

<https://edu.sphero.com/>

Hour of Code

This is a yearly event that takes place that encourage people to learn how to code. There are many resources available on the website: <http://code.org/learn>

European Code Week

This is another annual event where schools commit to doing some coding during the week. Details are available on the website: <http://codeweek.eu/>

Today's objective was to cover:

Create a Scratch Project

Support for Teaching Scratch

Other Digital Technology Resources from PDST Technology in Education

The Digital Learning Framework