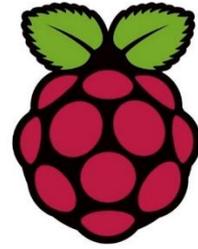




Raspberry Pi School Radio Player



Overview: We are going to do something a bit different with this resource pack. Most of the School Radio resources focus on using your School Radio system to accomplish a number of radio related tasks that will help you to meet key requirements of the National Curriculum as well as help your students to get the most from their radio station.

In this tutorial we will be looking at how students can build their own School Radio Player hardware using a Raspberry Pi. This project relates directly to several areas of the Computing section of the National Curriculum.

Key skills used include:

- Introduction to how the Internet is used to deliver School Radio to listeners via tablets, PC's, laptops and phones.
- See how even a very simple digital device (such as a Raspberry Pi) can be used to gain access to School Radio.
- Learn how to setup a basic Raspberry Pi installation from scratch.
- Update the new Linux installation and install & configure the additional software needed to convert the Pi in to a School Radio player.
- Discuss how the project could be advanced with the addition of a user interface, wireless compatibility or even hardware I/O (buttons to turn the volume up and down!).

Computing – Years 1-6

General Aims

The national curriculum for computing aims to ensure that all pupils:

- can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation. (page 204)
- can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems. (page 204)

Attainment Targets

By the end of each key stage, pupils are expected to know, apply and understand the matters, skills and processes specified in the relevant programme of study.

Key Stage 1