

Raspberry Pi Jams at Wyche Innovation Centre, Malvern Case Study

More details at <http://malvernraspberryjam.eventbrite.co.uk>

Monthly Raspberry Pi computing sessions (“Raspberry Jams”) have been running successfully each month at the Wyche Innovation Centre in Malvern as an afterschool club aimed at students in Years 5-8 inclusive. The initiative is being hosted by Key IQ Ltd that operates the Centre, in collaboration with Little Pi Shop which is a local business headquartered at the Centre. The local STEMNET Contract Holder has been involved from the outset in helping to publicise the sessions and helping to keep STEM Ambassadors informed so that they can assist.

The initiative has been running since February 2014, and came about because Key IQ wanted a way to continue the momentum gained after a successful Raspberry Pi student workshop at the Malvern Festival of Innovation 2013. Key IQ provides the space and sets up a number of computer monitors for the sessions. Little Pi Shop loaned some demonstration Raspberry Pis and accessories and helps run the activities. We have also had support from the local Chartered Institute for IT (BCS) for some refreshments and accessories, and the Institute of Physics, The IET and the Raspberry Pi Foundation have since provided some Raspberry Pis to enable the sessions to continue and grow.

We can accommodate up to about 25 students, and typically have 18-20 participate each session. They come from a number of the local primary and secondary schools from both Herefordshire and Worcestershire. We also have some older students from local secondary schools who come along sometimes to assist.

Olivia from Colwall Primary School was asked why she liked the session and said “Its fun and I learn to code”. Her friend Rebecca from Malvern Parish Primary School added “I like it because it is better than school and at school we just move (Scratch code) blocks around whereas here it is harder and gives me more of a challenge”. Oliver from Malvern Wells Primary School stated “My brother does a lot of coding so I want to do some too, and I find it fun and relaxing”.

During each session we tend to complete a CodeClub exercise or a bespoke mini-project such as lighting up some LEDs. We have explored using Scratch, Sonic Pi and Python languages. Some students bring their own kits, and other use the ones supplied at the Centre. Next year we are looking at the possibility of loaning Raspberry Pi kits to some of the students that don’t have access to their own so they can work on projects between sessions and then show progress the next time round.



STEM Ambassador Paul Whittaker working with students from The Chase School on python coding using the large video wall at the Centre.



Busy Raspberry Pi jam session at the Wyche Innovation Centre.



Scratch coding exercise on a Raspberry Pi with female software engineers of the future.