

Introduction to the pilot - Britannia Village

So we introduce Scratch in year three, and by year five they've done quite a lot, and some of the students start to lose motivation and engagement. So we have been taking part at the LGfL Picoh Pilot. We got 15 of these to try them in the classroom and see how they worked.

And it's been going really well. So I've been teaching my Year five computing class and they've been using the Picoh online with scratch and programming to do lots of the things in our computing curriculum.

But having the Picoh gave it a real purpose, so that they could actually see the coding principles come to life and the excitement when the first group got their posts to start working and responding to the code as they had input made it all worth it.

Picoh talking: 'At Your score is zero, and your second question is'

So one example is in year five, we have to explain to them what a variable is and try to get them to understand that. And explaining it can be tricky. I'm not an expert in computing, even though computing leads. But by getting that across to them using the Picoh is suddenly much more than it has much better results. So for example, they can put their name in at an input variable and then the Picoh will say 'Hello, whatever their name is', and then they get excited.

As they start to understand. And I've seen some of the students who struggled with the concept before start to discuss variables and understand them much more during lessons.

Student: 'So I have created a timetable quiz with my Picoh now his way as soon as you come in to ask you your name and use a variable to get your name as the answer to will Hello, and then it will say your name.'

So another example of something that the Picoh's help us teach is the idea of conditionals, which is something I found difficult to teach, but likes if then else statements. So we had a project where we were getting the Picoh's to be like Quiz Masters where they would ask at times table question and then depending on what the person wrote at the answer if they got it right the Picoh would react in one way. and if they got it wrong it would react at another way.

For example, it might turn a different colour, or might shake its head or at its head if they get it right. And the students understood. If a certain condition was met, one piece of code would happen at if it wasn't, the other piece of code would happen as now they understand that computing principle.

Picoh talking: 'Good luck with the times table Quiz, Your first question is seven times five'.

We had to talk about conditionals in the past, we had used scratch in the same way but actually having a physical device that was more human-like just gave it more meaning at more purpose, and they seem to understand the concept better.

So it's gone really well so far.

We kind of planned for this pilot for a series of six lessons to start with. We were just introducing them to the PicoH at how it works, and we showed them the footage from the space launch, which made them really excited and stimulated by it being too late to drop out. The first lesson was about actually connecting the PicoH, so it would work so that they could control it, and the instructions were really clear on the PicoH website.

So we followed those. And it just worked. At every single student impairs, they could connect their PicoH to their Chromebooks, and they could use scratch. and we did a few simple explorations to start.