MicroBit Q&A

1) What do you think about the MicroBit?

    - Mr Meradith: I think it's a great little educational tool and an excellent introduction to electronics and programming.

    - JPP: I think that it is an excellent product and that is very reliable and they have never failed me and that the kids have enjoyed using it and that when using it they kids will always keep going, the value for money is very great and cheap and they have lots of value with the extra addons.

    - VSW: It’s an interesting idea. It’s cheap, robust and I kind of like how it’s got a choice of programming languages for doing stuff with it. It’s a nifty little thing, and I haven’t used it enough to see exactly how powerful it is, but you can do a lot with it.

2) Do you think MicroBit is better than its competitors?

    - Mr Meradith: No.

    - JPP: I do, because I am not so into coding compared to my colleagues, and I want something which is instantly accessible, where with an arduino you need to have all these extra plugins and software which are unreliable and you need to have some computer knowledge. Even more so for the raspberry pi because it's nothing you can immediately hop into where the microbit is instantly accessible. If put at university where everyone had the same knowledge then I would probably be tempted to use the other ones.

    - VSW: Raspberry Pi is a lot more fully featured, and Arduino has a whole host of physical electronics to supplement it. Arduino is a bit of a niche between Raspberry Pi and the MicroBit. It would be useful in Primary schools, because it’s a tangible device that children can play with and it’s cheap enough so if they break it, it doesn’t matter so much. They can use Scratch with the MicroBit to get it to do something in a different context.

3) Is it easy to use?

    - Mr Meradith: I believe so.

    - JPP: I think it is very easy because there are instant good to go downloads which work that will engage a youngster and you need almost no knowledge of coding, if you can use a phone you can use a microbit, but it still has increasing layers of complexing that allow higher level use of the device.

    - VSW: I took me about an hour to get it set up and to play with it. I think I wrote a program that counted from 10 to 1. So it was reasonably quick to get it out of the box and do stuff with it, despite not knowing how it worked. Someone who might feel nervous about electronics and coding may find it harder, but I thought it was reasonably easy myself.

4) What skills are needed to know how to use the MicroBit before you use it?

    - Mr Meradith: Introductory electronics and introductory programming.

    - JPP: Nothing, you can just dive in. You could give one to a 6 year old and still get a result or even give it to a university student and they could make something entirely different and still get value out of it.

    - VSW: If you’re a teacher, you’d probably want some projects lined up in ascending levels of difficulty. The projects would mean you’d have resources that you can give to a class, and let them progress and do some fun stuff.

5) What challenges can you face when using the MicroBit?

    - Mr Meradith: The MicroBit doesn’t have any GPIO ports, so it doesn’t have much of the coding potential as the Arduino board.

    - JPP: School budgets, its battery powered and batteries are a huge thorn in teachers' sides because they run down and this goes for a lot of different systems. If they could run off of usb power like the raspberry pi they would be better, though the support for kids is good the support for teachers is not that flash they assume that the teachers are on to it, and not all are. As the kids can often know more about it, a lot of teachers because they are more into devices than a lot of adults.

    - VSW: I remember having trouble getting physical connections connected to the MicroBit. If you’re using it to connect it to other electronics, take note that the “Alligator” clips may wear away some of the gold contacts. But I struggled with getting the buttons to do what I wanted. Keeping track of the MicroBits is also a bit of an issue, especially in school where you want to make sure they all come back, and which ones belong to which person/group. And because it’s such a small device, it could be easy for it to slip off the desk and then be stood on.

6) Do you recommend it?

    - Mr Meradith: Yes.

    - JPP: Yes I do, with what you are able to learn from it I greatly recommend it.

    - VSW: If a primary school teacher asked me what would be a good device to buy for an entire class, and have a play at coding, I think it might be reasonable. It’s a quarter of the price of a Raspberry Pi, and you don’t need a screen, you don’t need a keyboard. You can just connect it to an existing machine and then you have the stand-alone thing that just works! It’s got batteries which is very cool, so you can leave it running. And it doesn’t have a lot of things that could go wrong, unlike the Arduino board where you have the coding and the engineering. So I think at a primary school level, it might actually be a cool thing to take along and let kids play with it, and if they want to do electronics, they can do that as well.