

LEGO® Education – WeDo 2.0 review

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The first time I used LEGO Education WeDo 2.0 was with a group of year 4 students from the Royal Grammar School (RGS) in Newcastle. I was really excited to get a chance to use the new WeDo 2.0 kit after the success I'd had using WeDo in the classroom already.



I began the session by explaining that we were going to be using a “top secret” new product from LEGO Education, and from that point the pupils were hooked. Their interest only deepened when the children were told they were going to be building robots and models that they could control wirelessly. The group were immediately engaged, enthused and eager to make a start.

The first thing we decided to test out was the app. We watched the opening video featuring the LEGO Education characters Max and Mia, which was greeted with a chorus of giggles, “wows” and “this is so cool”. After the video we looked at the different tabs, explained what they did, and how pupils could use the app effectively.

We started with project A: Milo the Science Rover. Straight away I noticed the pupils were more emotionally attached to Milo than they had been with the models in the previous WeDo kit, so the



characterisation and continuity is a great move. Being able to see projects A-D and how Milo develops also whet their appetite.

We really liked the introduction of prompts in the “explore” section as it helped prepare the pupils and gave them an understanding of what needed to be accomplished. This also gave their work relevance, which I felt sometimes lacked in the original WeDo. The pupils worked effectively through all stages, building the model and coding the controlling program. I did have some initial reservations about hooking up a number of Bluetooth devices at the same time, as I thought we'd end up with groups controlling models that weren't theirs. However, it was seamless, with a very straightforward process helping you to pair each device. Once this happened and the model was running based on their commands the pupils were really chuffed.





In the past I had really struggled to get the pupils to provide a meaningful reflection on the builds they had created. They would have to do this in their book, or open a different piece of software, and while this is usual practice, the momentum sometimes got lost. However in the WeDo 2.0 app, pupil reflection, notes, build images and ideas can be captured using the notebook tab. The pupils found this easy to use, and were able to quickly and effectively reflect on their work and the questions we posed at the beginning of the build.

The pupils then went on to complete project B: Milo's Motion Sensor and C: Milo's Tilt Sensor, and the response was exactly the same as before. They were enthused; they found the app easy to use, and the builds challenging yet rewarding. We even delved deeper into computer science by discussing the difference between an input and an output, and what these were in relation to Milo.



After this positive experience I really wanted to give the pupils the time and freedom to create their own models. I really liked how clicking on the gears tab gives the pupils a standard build and then a couple of extended variations. I would regularly get frustrated with WeDo because of the lack of building instructions for the introductory mechanisms. This required pupils to deconstruct the models in their head during their model construction, a skill that is great for computer science, but would sometimes cause a struggle. In contrast, the extension tasks which are step by step, and pupils would complete these easily. This isn't the case with WeDo 2.0. Whilst pupils could have looked through the "Guided Projects" for a model they wanted to build, I thought it would be a good opportunity to encourage them to think creatively by deconstructing a guided build they'd already made and then create a completely new model. The pupils were able to do this really well, and created a vast variety of models including a dolphin, race car, dinosaur, frog, gorilla, crane, and a snake.

The whole class had a great time, and I thoroughly enjoyed using the kit. I'm really looking forward to the next time I use it, and exploring the various computing opportunities it offers.

