## Minister tries out Glynllifon Digital playground

Arloesi Gwynedd Wledig working with Coleg Meirion-Dwyfor is trialling LoRaWAN technology which allows things to talk to the internet without 3G or WiFi. It features low battery usage, long range and low bandwidth which is particularly useful in rural and remote areas.

The trial, which also involves Gwynedd Council, will assess how the Internet of Things could benefit rural communities in Gwynedd.

Local tech developers and students have been working together to think how the Internet of Things could help solve some of the problems rural areas face and a number of sensors have already been placed around Glynllifon's extensive grounds which, for example, can send an alert if a litter bin needs emptying, if a vaccine fridge is getting too warm or if a gate is opened during the night.

The project has received funding through the Welsh Government Rural Development Programme 2014 — 2020, which is funded by the European Agricultural Fund for Rural Development and the Welsh Government. It's also funded by the Nuclear Decommissioning Authority and Gwynedd Council.

Julie James said:

"It's been great to see this development at Glynllifon using LoRaWAN technology, which is ideal for developing the Internet of Things in rural areas. I'm pleased it has been supported by the Rural Development Plan and I look forward to hearing the impact the project has made and what lessons can be learned for other rural settings.

"In our Mobile Action Plan we have said we need to support innovative and emerging technologies, particularly in rural areas, and this is very much an example of that."

Debbie Tebbutt, the college's Assistant Principal, said:

"It is hugely exciting to trial this kind of technology at Coleg Glynllifon and shows our commitment to promoting innovation in agriculture and countryside management systems."

Rhian Hughes, from Arloesi Gwynedd Wledig, said:

"There is huge potential for this type of technology in rural

areas. This project shows the relevance of Internet of Things to rural areas and how it could help some of the challenges facing areas such as Gwynedd, like how to deliver better public services in remote areas, can community buildings be cheaper and easier to run and how to stop theft from farms; and if develop our own answers there are great opportunities for local companies to design and build new devices."

Arloesi Gwynedd Wledig is one of Menter Môn's LEADER programmes which looks for innovative solutions to the challenges facing the Gwynedd economy by piloting new initiatives.

Over the coming months, a Gwynedd Agri-tech IoT challenge has been created aimed at a group of students (from the Agri, Computing and Engineering dep) to develop their ideas, with input from local experts and a prize will be awarded to the best proposal/prototype in May 2019. For the computing and engineering students, this is a great opportunity to use cutting edge technology in a real-world setting and they will gain valuable experiences and what it is like to try to develop solutions for industries they may know nothing about. The Agri students will get a head start by learning how technology can be used on a working farm.