

Eight projects from Moate Students proposed for the BT Young Scientists and Technology Exhibition

Students from Moate Community School have been investigating various scientific ideas for this year's BT Young Scientists and Technology Exhibition. Ideas range from creating apps to investigating bogland and grassland habitats.

The following projects are proposed from Transition Year students.

Jack O'Donovan and Therese Hamm are designing a food storage container to pro-long the shelf-life of fruit and vegetables in developing countries in their project 'Fridge Free Freshness'. They are testing the effectiveness of a number of factors at reducing food spoilage.

In their project 'The Beauty of the Bog', Niamh O'Reilly, Hannah O'Connor and Lisa O'Brien are creating a resource pack for Junior Cycle Science classes to use to determine the health of local bogs. They will compile the results of their All Ireland Bog Survey on their 'Bogged' app.

Colm Shortall, Jamie Ravenhill and Philip King are investigating the effect of glyphosate weed killer on soil micro-fauna in their project 'Overkill with Weed killer'. They will also study the changes in soil content that occur when glyphosate weed killers are applied to grassland habitats.



Emma Kelly and Brian Conlon are investigating the impact of gorse fires on bog land habitats in their project 'Ireland's Burning Problem'. The group have been monitoring the regeneration of a number of sites which were subjected to gorse fires in May 2017.

'Can the Technology of IOT devices create an intelligent monitoring system to increase the quality of living for the less physically abled' is the project of Joe Murtagh, David Healy and Mark Sheridan. The students are creating a system that will detect when a less physically able person has broken routine or if they have fallen over will send an alert to someone in the locality to assist that person.

David Murtagh's project focuses on how Virtual Reality can be used to develop a client's understanding a possible renovation of their house before laying a single block, avoiding errors and unnecessary expense. The title of his project is 'The uses of VR Technology for Architecture'.

Owen Collins is working on project to develop a Plug Timer which will extend the life of batteries for mobile phones and laptops. He is creating an app which will monitor the current charge of the device and maintain charge between 40% and 80%. This has an important environmental impact reducing the disposal of batteries which are composed of potentially hazardous materials.

Many thanks to Sineád O'Reilly at Ericsson, Athlone, and her team of engineers for their support with these Technology projects.

Second Year student Adam Kelly is attempting to answer the question 'Will Beet Beat Other Cattle Feeds?' in his project. Adam has compared the weight gains of weanlings were fed different diets on his family farm. Adam is also studying the impact of feed type on rumen fermentation.

All the budding young scientists continue work on their projects while they anxiously await the results the judges as to whether they are accepted for the Exhibition at the RDS in January. Good luck to all.