

This virus won't stop us

Staff and learners at Teagasc colleges are working together to ensure education is neither undermined nor delayed

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On Thursday 12 March, 2020 the learners participating in programmes in Teagasc colleges were forced to depart due to Government guidelines for dealing with the ongoing global COVID-19 pandemic. While learners left the premises, they did not leave our programmes.

Without hesitation, Teagasc set about transforming its traditional education delivery model to one based on remote learning. This ensured that all learners could complete their course as scheduled.

In education, we normally teach face-to-face in our classrooms and impart skills through demonstration in the field, animal handling facilities or workshops. All of our programmes include considerable practical learning periods with Teagasc host farmers, during which learners gain valuable work practice.

Fortunately, many of the practical skills had been delivered and assessed over the winter. Also, in Ballyhaise College, many of our students were on practical learning periods with our hosts in March and were only

In the autumn, courses will be delivered as 'blended' learning with a combination of remote and carefully socially distanced face-to-face teaching to maximise protection against COVID-19. Classroom scenes like those depicted will be a thing of the past for the foreseeable future.



due to return to campus later in the spring. This gave us the opportunity to plan our new approach.

Online platform

In Teagasc, we have been using Moodle, an online virtual learning platform for a number of years. This package is 'open source', which means that it is used by many education providers across the world and is the leading package for online learning environments.

Until March, we had been focusing our use of this package on part-time and distance education programmes. Before engaging with our full-time learners, we had to ensure that all were registered.

To register, every learner must have their own email address and not one that belongs to another family member. Every learner was contacted by phone and asked to confirm their personal email address. This allowed us to set them up with a Moodle account.

Two challenges for learners connecting remotely were access to a PC/laptop and a high speed broadband connection. With Moodle, there is also a smart phone app which allows learners to connect through their 3G mobile signal. In Teagasc Ballyhaise



College, we created a YouTube channel where we uploaded instructional videos on how to use Moodle.

Teaching online is a significant and ongoing challenge. In Teagasc, we quickly embraced a cloud-based online video conference package called Zoom.

The teacher sets up a Zoom class and emails an invite to the learners. They can then watch the class live on their laptop or phone. Participants can ask questions during the class through a 'chat' function. An advantage is that the class is recorded and can be watched back later.

With any remote class, you lose the immediacy of the classroom where a teacher can walk around, engage with learners face-to-face and carry out what they have been trained to do. We have enhanced interaction by using another online tool called 'Kahoot'. Teachers use Kahoot to set up quizzes, which monitor learner engagement and progress in real time.

Skills

Gaining and developing skills is major component of all Teagasc programmes. Whether it be welding, drying off a cow, braiding a horse, sharpening a chainsaw or grafting a new fruit tree, learners need to be shown at close quarters how to do this and subsequently have the opportunity to practice and become proficient.

In Teagasc, we have used instructional films since as far back as the

Student profile: Noel Duffy, Edgeworthstown, Co Longford

I completed the Level 5 Certificate in Agriculture this year. When Ballyhaise had to send students home in March, I was still on practical learning with Raymond Brady, a dairy farmer from Mullahoran, Co Cavan. We discussed the restrictions and agreed that I would complete my placement as planned. I had completed my work practice before the lockdown at the end of March.

I already had my own Gmail address before one of the college teachers phoned me during March and logging into Moodle worked for me from the start. I accessed all college work from my phone over the internet. If the college sent any emails I was able to see them on my phone instantly.

My brother, who is also on the course, uses the Moodle app. We have a laptop at home, which I used for some of the assignments, but this is shared with everyone in the house, so it was often easier to work from my phone. It was definitely easier to complete the assignments on a computer.

I found the exams online to be straightforward. The very first exam didn't work for me the first time I tried it, but the college contacted me with a new pin number and I completed it with no issue.

I will be continuing on with Level 6 this September. I would advise anyone starting to make sure they keep up with the work and deadlines as the year goes on, as you don't want to leave everything to the last minute.

into our colleges this September and our programmes will be delivered using blended learning.

This means we will teach our skills as we have always done in the large open spaces that we have around our farms, while many classes will be delivered remotely on Zoom. Where social distancing cannot be maintained, learners will be required to wear face coverings.

Teagasc will offer a fresh round of Open Days this October at all of our colleges. Should you have any further questions on completing one of our many programmes, we will be delighted to answer them and show you the many ways we have of delivering our programmes effectively and safely.



1980s. The creation of videos, digital rather than on tape, took on a new significance with the pandemic restrictions. For the few skills that were not yet completed in college, staff created instructional videos and put these on our YouTube channel. Together with pre-existing videos there, learners had access to a comprehensive resource.

Assessment

To complete any educational programme, learners must undertake assessments. We transitioned our assessments online. For first year level 5 learners, we again used Moodle and re-focused exam questions to a multiple choice (MCQ) format. Exam times were scheduled and communicated with the class via email. Learners logged into Moodle and took the exam.

No two people got the same exam, as Moodle randomises the questions and the MCQ answers. For a few not-yet-completed skills assessments, staff developed video resources, which were built into Moodle exams. For example, to test learners' knowledge of the required cleanliness of an animal for the factory, animals in various states of cleanliness were filmed and the video presented in the exam. Again, no two students were presented with the same animals in this assessment.

For second year Level 6 learners, we used Moodle and an online pack-

age call 'Jot Form,' which facilitates learners to provide longer answers to exam questions.

For skill assessments, learners submitted videos of themselves carrying out the skill for example, slurry spreading. The teacher marked the learner based on the content of the submitted video.

Virtual Open Days

We were aware that there was uncertainty about courses starting in September 2020, so in June this year the Teagasc colleges held virtual open days. These were attended by hundreds of prospective students and continue to be watched back on the Teagasc YouTube channel.

As mentioned earlier, it is possible to engage with most of our remote learning from a smart phone. However, to get the most from remote learning, we are requesting all our learners starting back this September have a PC/Laptop. It is not practical to share a computer with others in a household who may also require the PC for their studies.

A PC is essential to complete assignments on Word or spreadsheet packages. Learners will also need access to broadband. Where this is not available, a strong 3G signal has worked for many learners.

Blended learning

Unlike with the strict lockdown this spring, we will take our learners back