



A critical challenge facing the education sector is how to ensure that schools are developing the capacities of young people to take advantage of opportunities in the growing digital economy. In addition to preparing students for modern-day careers, effective use of digital technologies can also support a range of educational and social objectives, from enabling pupils of all abilities to learn at their own pace to helping teachers bring lessons to life through new and exciting techniques and encouraging students to explore and learn in ways that unlock their own creativity and understanding.

■ Schools need more than a good wi-fi connection and ICT lab to ensure students have opportunities to thrive and compete in today's digital economy. Anna Doody and Ann-Marie Whelan report on a new initiative in Scotland that is helping schools maximise their digital potential and develop a whole-school digital framework to support innovation in learning.



The Digital Schools Award scheme was launched across Scotland in September 2016 by HP, Microsoft and Intel, run in partnership with Education Scotland and Skills Development Scotland to support schools trying to use technology more effectively in the learning environment. Open, and free, to all primary and secondary schools, the programme provides a roadmap and resources to schools that want to optimise their



use of digital in the classroom. It recognises schools that demonstrate best practice and supports the efforts of those trying to maximise their digital potential.

To achieve the award, schools must show that they have set out and adopted a whole-school digital strategy, that they are committed to ongoing professional education for teachers and provide evidence of how digital technologies are being used to enhance learning.

The Digital Schools Award framework aims to help schools improve their digital approach in several areas, including Leadership and Vision, Digital Technology for Learning and Teaching, School Culture, Professional Development and Resources and Infrastructure. The framework targets wholeschool deployment, as well as individual teaching and learning, to ensure digital technology is not focused on one person or department. Schools must achieve 70 per cent on a self-assessment questionnaire to be eligible for the award.

At the beginning of May, 38 schools were officially awarded Digital School status, joining 43 that achieved accreditation last year.

Among them were the first three secondary schools to achieve the award.

## GRYFFE HIGH SCHOOL - PRIORITISING THE DIGITAL

As a starting point for participating in the Digital Schools Awards programme, Gryffe High School – a progressive secondary with over 80 teachers and more than 960 pupils – put together a digital team of staff and identified the school's main priority areas. A key task for the team was to develop a digital policy, which has put a strong focus on staff CPD and investment in additional ICT rooms and the provision of laptops and tablets.

Online learning environments such as *Edmodo*, *Glow* and *Show My Homework* are widely used throughout the school. Colin Deans, head of ICT at Gryffe, notes that these platforms are crucial for developing key skills to ensure pupils are as fully prepared as possible for positive post-school destinations. 'Digital learning environment encourage independent learning, collaboration and creativity amongst other skills that employers and further education look for in the modern pupil', he says.





Many teachers are also helping to develop these vital skills through flipped learning, which is enabled by the school's digital learning environment and which is particularly beneficial for more senior students. Teachers to digitally provide pupils with all the materials and support they require to take ownership and drive forward their own learning at their own pace.

To ensure that pupils coming into high school are equipped to make the most of digital technologies, the school works closely with its associated primaries and offers a four-week transition programme using *Microbits* and coding programs such as *Scratch, Kodu* and *Code Academy*. Through this initiative, Gryffe High School teachers work with pupils in their final year (P7) at each feeder school, introducing coding and ensuring they understand internet safety messages. In addition to the transition programme, there is a coding club run in conjunction with West College Scotland that is helping primary students improve problem solving and logical thinking skills as they navigate the move to secondary school.

Augmented reality is also used during students' transition to secondary school in order to give pupils a fuller experience of Gryffe ahead of attending the school and to encourage independent learning. Using the augmented reality application, pupils can use their tablets and smartphones to treasure hunt for trigger images to access multimedia content of key staff and information relating to Gryffe. According to Deans, feedback from this initiative has been extremely positive, particularly from pupils with additional support needs.

## LARBERT HIGH SCHOOL – UPGRADING THE TECH

At Larbert, a high school with around 1,750 pupils and 130 teachers, a bring-your-own-device concept was introduced for students four years ago and is now completely embedded in the school culture. In the coming academic year, the school will pilot a scheme whereby each pupil in S3 (third year of high





school, approximately equivalent to England's year 10) will be provided with a tablet. The school's wifi system has been upgraded to support all pupils being connected at all times.

Every staff member has their own computer and each classroom has a smart board. 'All staff have the same access to what we class as basic digital technology', says Andy Auld, depute rector at the school. 'The culture within LHS allows staff to access the resources and infrastructure available and appropriate levels of support through CLPL in digital learning and teaching to ensure they are able to include technology at their level within their teaching and learning.'

Digital technologies are used across all subject areas to enhance teaching and learning, from physical education using annotated filming to give feedback on performance to modern languages recording examples of pronunciation



videos.

According to Auld, a top priority for the school is to develop the ability of students to create, evaluate, analyse and apply at all times in their education. 'Our main focus is on closing the attainment gap', he adds. 'And feedback is the biggest contributor to improving attainment.'

Teachers can now provide students with detailed feedback on progress and next steps quickly and easily at any point during and after lessons when required. 'Tracking pupil work remotely allows students the opportunity to have ownership of their learning', says Auld. 'Staff are able to facilitate more variety in learning experiences and ultimately enhance pupil experience.' The teacher's role has remained much the same, however. 'They engage, inspire and motivate all students. But within their classes they now have the benefit of being able to engage students in a number of new, exciting and different ways through technology.'

Auld says the teachers at Larbert have been exceptionally motivated and dedicated to providing all students with the best possible learning experiences and opportunities through the use of digital learning environments. 'The culture shift within Larbert High School has been a process that has been evolving over the last number of years to ensure we are preparing all students who leave with the skills, qualities, knowledge and experiences to be successful in the future world.'

## CREATIVELY IMPROVING TECHNOLOGY IN THE CLASSROOM

The Digital Awards team has seen a lot of tech innovation appearing in schools, which they are happy to be supporting. In many schools the traditional ICT Suite has been replaced by a central Hub (usually the school calls it a STEM Hub but others have different names) which enable pupils to access a range of technologies, including programmable devices and greenscreens, as well as laptop and desktop computers. This enables crosscurricular working with the STEM topics and a focus on these subjects as opposed to just technology itself.

Many schools have had great success engaging parents through digital technology through some creative approaches. These include drop-in digital sessions run by the pupils themselves where parents can come and learn alongside their children. Others offer 'Brekkie and Bytes' sessions where parents can have a breakfast roll and find out more about the digital technologies in the school. This is also an excellent way of ensuring that parents are also educated in eSafety for their children as well.

Other schools have moved away from the staff being responsible for the teaching of technology and Digital Leaders/Champions, pupils who have been given this role, teach classes and in some cases run Professional Development sessions for the staff. In these schools the pupils get an excellent learning experience through their peers and the staff become more confident in their own ability with the support of the young teachers. In a couple of schools the pupils have visited the local university and taught the student teachers how to use technology effectively when they are out on their placements.

Finally, some schools use technology to reach out to the community and they visit residential homes for the elderly and show them new technologies while



the residents can share their own stories of the 'olden days'. This initiative is just so inspiring and is working to develop the pupils' confidence and digital citizenship.

Other examples of innovative practices implemented by Digital Awards schools include:

- Connecting the learning of British Sign Language to technology via a green screen, where they have created videos that they share via online media and use social media to connect with the local deaf community.
- Creating films in iMovie about their community which they have then been able to share with the public on an open evening.
- Using QR codes to guide younger pupils to specific games/activities without the need to type in URLs.

- QR Codes used in Treasure Hunts around the school.
- Use of *HP Reveal* to help at transition for pupils moving from primary to secondary school.
- Use of *Spy Quest* for collaborative working one pupil had their Quest added nationally to the provision of existing missions.
- Using a green screen to create a video that appeared to show that a dinosaur had been in their Primary 1 classroom that morning for part of a dinosaur introductory lesson.

Although nearly 1 in 4 schools were involved with the Digital Awards scheme this year, we are looking forward to a much expanded level of participation in the upcoming year. In addition to supporting schools with improving their digital framework, it's a great way of recognising the value of the creative practices of teachers and the impact it is having on student learning. The validation visit that is part of the award process seeks opportunities to affirm and articulate the good work that teachers do and to act as a catalyst for innovation by sharing examples of excellence they have seen elsewhere.

Schools that have been involved have felt that their participation in the program was valuable and that it required much fewer resources and time than they had anticipated. We're looking forward to continuing to support schools in achieving success with their digital learning strategies.

For more information please visit www.digitalschoolsawards.co.uk/

