

IMPACT OF COVID-19 on Schools ICT Service

September 2021



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Carmarthenshire
County Council



KEY SERVICE STATISTICS DURING COVID-19

Supported over **2,200**
TEACHERS WORKING
FROM HOME



...plus an extra **150 LEARNING SUPPORT ASSISTANTS** who were supporting specific students or groups of students

Provided the following equipment to students at home:



1,603 DEVICES

241 4G MIFI DONGLES

Rolled out **CLOUD BASED**
WEB FILTERING
to **STUDENT**
CHROMEBOOKS



by end of May

Implemented **1751**
NEW LAPTOPS TO
TEACHING STAFF



Installed over **160 new switches** by
the **end of the Autumn Term**



ICT in Schools

Our Digital Schools Strategy set out an ambitious vision to move our schools forward in several difference areas. The unexpected but extremely welcome introduction of the Hwb Programme, some £5.5m of Welsh Government funding, completely transformed the vision of ICT in Schools and came at a most opportune time, with devices arriving just after lockdown began.

Whilst the Strategy had started the transformation of the networks and hardware, access to the additional funding for infrastructure and devices allowed most of the original objectives to be achieved quicker than planned.

It was fortuitous that when the pandemic struck, that significant numbers of new devices had been ordered and were on their way from the manufacturers. This put us in an extremely favourable position to respond quickly to ensure that our teaching staff were able to continue teaching from home, using Microsoft Teams or Google Classroom.

Our Digital Schools Strategy: How it affected our response during the Pandemic:

Hwb First

The decision was made in 2018 to move all locally hosted email and collaboration services into the Hwb environment. Whilst there were several objectives behind the decision, it also meant that staff and learners had invested significant time in Hwb and they were developing quality skills from using the applications within it.

With staff and students familiar with Hwb and some schools already sharing homework and other tasks within the environment, it was natural progression for all virtual learning to transition into Hwb as well. Whilst it cannot be underestimated how difficult the journey from physical to virtual teaching was for some staff, the hard work of the staff and the schools did achieve the transition for everyone.

Since students have returned to their physical classrooms, a significant amount of learning has remained within Hwb and schools are eager not to lose the benefits and skills achieved from transitioning to an online delivery. Consideration is being given in 2021/22 as to whether providing each student with their own device is practical, affordable and achievable.

There remains a challenge to continue investing staff time in using all of the different packages within Hwb and to ensure that teachers and learners are trained in and adopt any new functionality.

Efficient & Effective Networks

Whilst the school networks were not under pressure during lockdown, it did give the opportunity to upgrade the infrastructure without directly affecting teaching and learning.

39 schools received upgraded network switching (funded by the Hwb project) during the Summer Term, when ICT Support Staff were allowed to revisit school premises.

The remainder of schools will be completed by October 2022.

Security of Data & Online Services

Having moved the core schools systems into Hwb, there was significant confidence that the data storage and provision of any online services were extremely safe. With regulation from Welsh Government and our own ICT Security Officer, plus regular testing from the Hwb Team, the investment in security from all parties has been considerable.

During the pandemic, all new devices provided to both staff and students were linked to Hwb and all users were required to authenticate with their Hwb username and password in order to gain access to the device, before being asked to re-enter the details again to access the Hwb platform.

In order to keep learners safe online at home, any loaned Chromebooks were also enrolled in cloud-based web filtering so that students would have the same level of protection as in school. Carmarthenshire was the first Authority in Wales to roll-out this functionality after an extensive testing programme.

Whilst the iPads loaned from the Authority did not have filtering enabled, these were targeted at Foundation Phase learners, when the device was used under the supervision of an adult.

Digital Schools & Classrooms

When learners returned to school, with their schoolwork focused on the resources contained within Hwb, it was imperative that the devices purchased from the Hwb Programme funding were circulated to schools quickly. Approximately 8,000 devices were circulated to schools between June 2020 and October 2020. A further 5,800 devices were circulated to schools between January and July 2021 to keep our students learning.

Every teacher now has their own allocated device, centrally managed and updated using the Hwb environment. This gives all teaching staff the tools to remote teach should a further lockdown or firebreak occur. There was also a dedicated process implemented to ensure that any existing laptops that were faulty were able to be replaced using a fast-track process to ensure continuity of teaching.

What other responses were required?

Working under guidance from Welsh Government and alongside the Education Department, IT Services provided over 1600 devices and nearly 250 connectivity devices to learners at home.

The effort and logistics committed to supporting our learners via the Continuity of Learning Programme should not be under-estimated and although it was achieved in the end, the rollout of devices was not as quick as anticipated.

The Welsh Government strategy was to re-use older devices from schools and to turn them into Chromebooks. The time and effort required to contact schools, wait for them to clear their data and then to meet ICT staff was significant and progress at times was frustrating. Many devices came from schools without chargers and additional time was spent and costs incurred in obtaining new and waiting for them to be delivered before they could be distributed.

Distribution required a set of policies and procedures, checked by other CCC officers to ensure that schools staff were kept safe whilst issuing devices and that the exercise was legally compliant. If this exercise were repeated, the Authority would manage the distribution of the devices to eliminate inconsistencies between different distribution hubs. In some cases, learners who were directly supplied from the Local Authority had a far better and quicker experience than those supported by a Hub.

Overall...

the pandemic put significant demands on the Schools ICT Service and staff responded well under often difficult conditions. However, if there were to be a further lockdown, some elements (particularly supporting students at home) would be approached very differently.



What Challenges Did We Face?

- The balance of deploying a major replacement project whilst not being able to have access to school buildings or permitted to work in close proximity to school staff was particularly challenging.
- Some key (but not critical) elements of the Hwb project were delayed due to access issues or because schools did not want internet access interrupted during term time. This has set the overall infrastructure element back by several months, although end-users and particularly learners, have not been affected.
- Connectivity for learners at home was alleviated in the short term by the provision of 4G MiFi dongles by Welsh Government (although funded by Carmarthenshire) but for a minority, overall usage was low.
- The coordination of over 1600 devices to students at home was a huge logistical and technical project that consumed significant resources but did not reach learners as fast as anticipated.
- Upskilling teaching staff to move from a classroom-based delivery to online delivery was a significant task, although support from Education and schools staff ensured everyone was able to support learning.

What Is The Short, Medium And Long-Term Impact?

The rollout of significantly increased numbers of devices and the large-scale adoption of online/blended learning is a huge achievement and has permanently changed the way learning is delivered.

With online and blended learning now firmly embedded into the provision of education, schools are now revising their plans to ensure that the method of delivery continues. With the potential for recording lessons and making learning materials available safely within the Hwb environment, it allows students to revisit lessons and for those isolating at home to remain learning whilst recovering from illness.

Long term, there remains the challenge of ensuring that students have access to devices in order to undertake their learning at home and in school. Whilst the Hwb Programme will ensure that there are greater numbers of devices available, further discussions are taking place about how this can be improved.

Connectivity is also critical and whilst the Authority is taking every opportunity to lobby all stakeholders to improve connectivity within the County, affordability for families should not be forgotten.