EDUCATION, YOUTH & CULTURE OVERVIEW AND SCRUTINY COMMITTEE

Date of Meeting	Thursday, 18th March 2021
Report Subject	Hwb Digital Programme
Cabinet Member	Leader of the Council and Cabinet Member for Education
Report Author	Chief Officer (Education and Youth)
Type of Report	Operational

EXECUTIVE SUMMARY

In June 2019, Welsh Government announced a major investment in schools Information technology infrastructure and technology called the HWB Programme. The programme's aim is to raise digital standards in schools by investing in technology to ensure a minimum level of provision across all schools in Wales. The programme provides consistent access to a range of infrastructure, tools and resources to transform digital classroom practices. Equipment is allocated through a fair formula across Wales to support schools to meet the aims of 'Our National Mission', the roadmap set out by Welsh Government, which includes a strong focus on digital learning.

During the lockdown period schools and the Council responded swiftly to concerns about digital disadvantage. Any learners without access to a device were identified and all additional resources from council stock and agreed donations were delegated towards those pupils, a total of 340 devices.

Currently no schools report that they have learners without access to suitable devices and 165 broadband connectors supplied through the HWB allocation are being maintained until July 2021. 84 pupils across 8 settings have requested access to a data uplift scheme being provided through the Hwb programme this term.

In January a gap analysis of devices was undertaken across all Flintshire schools to identify the number of end user devices still needed to reach the ratio of devices to learners agreed for Flintshire as part of the national plan. This has identified that a further 6225 devices are needed in total.

All schools, teachers and students can access the HWB platform as a gateway to digital education services which can inspire teachers and learners to embed digital practices confidently over a sustained time period.

The effective roll out of all phases of the HWB programme has enabled learners in Flintshire to engage to a high level with distance and blended learning and has supported the progress and wellbeing of pupils throughout the pandemic period. There has been very effective working between Education and IT Services to support the delivery of the programme. IT Services have provided significant resources and time to ensure the successful delivery of this programme.

RECOMMENDATIONS	
1	That members note the implementation of the national Hwb programme in Flintshire schools and the work undertaken to increase the ratios of devices to pupils.
2	That members are assured Flintshire learners have not been digitally disadvantaged during the lockdown period by the effective actions of schools and the Council's Education and IT services.

REPORT DETAILS

1.00	**EXPLAINING THE HWB DIGITAL PROGRAMME**
1.01	**Background** In June 2019, Welsh Government announced a major investment in schools IT infrastructure and technology called the Hwb Programme. The programme is intended to raise digital standards within schools by investing in technology to ensure a minimum level of provision across all schools in Wales and that the provision meets the published Education Digital Standards. These standards are: • Based around best practice • Cover the whole school infrastructure and devices • Developed to standardise and future proof school infrastructures • Developed in partnership with Welsh Government and the Society of IT Managers. The initial investment was estimated at £105m over 4 years. The release of funding was based around 'waves' with each wave covering specific technologies. The elements that made up a particular wave have to meet the national Digital Standards across all schools before Councils can move on to the next wave. Funding is dependent on demonstrating compliance with these standards, specific timescales and commitments from Councils around future investments to support sustainability.
1.03	**Progress to date** £50m was released in year 1 (2019/20) of which the Flintshire allocation was £2.5m with 85% to be spent on equipment and 15% on implementation services. This covered Waves 1 to 3 (core network

	infrastructure in schools such as cabinets, network switches as well as wired and wireless network infrastructure). It should be noted that whilst cabling within schools does feature in the standards, no funding was allocated to bring existing cabling up to meet them. A decision was made within Flintshire to fund this work using the 15% allocation.

£30m was released in year 2 (2020/21) of which the Flintshire allocation was £1,510,694.17 with 90% to be spent on devices from a national catalogue and 10% on implementation services.

Through a national procurement exercise, it was clear that there would be significant financial benefits to Flintshire if we switched our networking technologies from Cisco to Aruba. In doing so it would allow us to complete Waves 1 to 3 and mean we would have £570k from this allocation left to begin work on Wave 4 (end user devices).

This technology shift represented a major challenge as it was new technology requiring extensive training and support but staff were committed to doing this as it was clear that the benefits to our schools would be significant.

It was also clear that if we were to meet the time constraints placed on us, we would need to significantly supplement the schools IT support model by utilising corporate IT colleagues and, where possible, external resource. |
| 1.04 | The Covid-19 pandemic has also added to the complexity, urgency and focus for some of the work. Schedules were impacted by; the inability to be able to access face to face training for the new technology, supply chain issues with technology providers and ensuring safe methods of work for colleagues.

By April 30th 2021 we will have:

- Completed network surveys in all schools
- Completed network designs for all schools
- Ordered and receipted in excess of 6000 items of equipment to support Waves 1 - 3
- Updated cabling in all schools to meet Digital Standards
- Completed earth bonding work on all schools networking equipment
- Migrated all networking infrastructure from Cisco to Aruba
- Replaced existing wireless capability with latest technology and extended that capability across the whole school
- Ordered, receipted and delivered the following Wave 4 equipment to schools:
    - 1794 laptops
    - 1459 desktop pc's
    - 2071 Chromebooks
    - 1566 iPads
    - 1125 monitors
    - 83 Charging Trolleys |

	- Implemented a technology called Govroam in all schools which will allow a wide range of public sector partners to connect securely to their own network via the schools wireless network - Migrated from one premise web content filtering solution (Smoothwall) to cloud hosted solution (Websafe) - Undertaken significant engagement with schools to understand their requirements. In addition to the above work which forms part of the HWB programme, we have also: - Re-provisioned 180 devices from the corporate desktop replacement programme to support digitally disadvantaged learners - Ordered and delivered 165 MiFi devices to provide broadband for digitally disadvantaged learners - Worked with the Neumark Foundation who have funded 90 devices to date to support digitally disadvantaged learners in Years 10 and 11 - 84 pupils across 8 settings have requested access to a data uplift scheme being provided via the Hwb programme this term - Designed and delivered a secure remote access solution which allows schools based colleagues to access SIMS (schools information management system), Masterpiece (corporate finance system) and P2P (electronic ordering solution) from home - Increased Internet capacity for Mold Alun and upgrades ordered for Hawarden and Flint High Schools - Reviewed internet capacity at all remaining high schools.
1.05	Delivery of this work has been overseen by a HWB Programme Board with Chief Officers and senior managers from the Governance and Education portfolios. The board has met regularly and has been kept updated through detailed highlight reports by the senior IT managers who have led these stages of the project. The implementation has consumed a significant amount of resource within both the schools' IT support model but also from corporate IT. This has had a major impact on the delivery of scheduled corporate IT projects but with the support of the Chief Officer Team this work has been reprioritised, recognising the importance of this programme on our schools and learners. The achievements have been really positive as they have supported our schools and learners at a particularly difficult time for them and the increase in provision of end user devices along with increased wireless capability in schools has meant that schools have much more flexibility in how they are able to deliver blended learning for pupils. Throughout the project, we have relied heavily on the commitment and expertise of the Council's IT staff, many of whom have worked weekends and evenings in order to minimise disruption for schools and to meet the required deadlines. We have worked with local companies to deliver cabling, electrical work and to support deliveries and have also worked with our partners at Theatre Clwyd who have supported us in recent months with secure delivery and storage facilities.

1.06	**Next Steps** Welsh Government has funded the procurement of an additional 50,000 Chromebooks for learners across Wales in addition to agreed HWB funding. Flintshire will be receiving 2,682 of these in late April/early May. As part of the year 3 funding, (£15m across Wales) the Council will be receiving £749,808. This will be used for further investment in Wave 4 end user devices from the national catalogue. We have undertaken significant consultation with schools to complete a gap analysis which looks at the devices a school currently has, number of pupils on roll and aspirations around device ratios for pupils in Flintshire schools. The aspirational device ratio for schools has been set following discussions with headteachers and learning leads and will be: - One device per pupil for secondary phase - One device per pupil for Year 5 and 6 - One device between 2 pupils for Year 3 and 4 - One device between 3 pupils in Foundation phase - Schools and settings have also factored in an additional 15% of the school population to cater for devices for vulnerable learners and for small group interventions. In order to meet this aspiration and excluding the year 3 funding allocation, we have identified a requirement for an additional 3583 devices for learners. We are awaiting the release of the latest version of the national catalogue before we can fully model these requirements but estimate that by using an average cost of £350 per device against the latest HWB funding we will be able to purchase approximately 2,101 devices. This will still have a gap of around 1442 devices to reach the optimal learner/device ratio. To date the HWB programme has very much focused on infrastructure, networks and connectivity and the engagement with the Welsh Government EdTech group (the national group which oversees the project) has been led by IT colleagues. As the programme moves forward, the emphasis will move to digital curriculum delivery and the lead role will move to the Education Portfolio.
1.07	**Considerations going forwards:** We will be developing a generic digital strategy for schools which they will then be able to adapt for their own local use. This will include both the impacts of the sustainable development principles and the Well-being Goals. As a condition of accepting the HWB grant, all schools and Councils had to make a financial commitment to ensure that there was a sustainable fund to maintain and replace equipment on a cyclical basis. The Council has agreed to set aside funding to replace all equipment funded as part of Waves 1 to 3. At the Schools Budget Forum in September 2020, schools agreed to fund the replacement of any subsequent devices for Wave 4 and beyond. Schools accountants will be working with schools to ensure that this commitment is fulfilled.

We will continue to monitor internet capacity/usage at remaining secondary schools and primary schools and increase where required. To date this cost has been absorbed within existing budgets but may need to be reviewed moving forward if there are widespread requirements for increases based on the performance reports that we run.

We will also be making good use of regional consortia and other key partners to share best practise in supporting digital learning.

2.00	RESOURCE IMPLICATIONS
2.01	Human resources to facilitate the continued delivery and maintenance of infrastructure and resources in a timely manner and to monitor programme delivery. Supplementary funding via school budgets over 3 years and beyond to maintain a suitable school stock of appropriate devices.

3.00	IMPACT ASSESSMENT AND RISK MANAGEMENT
3.01	N/A

4.00	CONSULTATIONS REQUIRED/CARRIED OUT
4.01	Consultations with schools have been undertaken as part of the device gap analysis.

5.00	APPENDICES
5.01	Appendix 1 – Hwb Programme Memorandum of Agreement

6.00	LIST OF ACCESSIBLE BACKGROUND DOCUMENTS
6.01	None.

7.00	CONTACT OFFICER DETAILS
7.01	**Contact Officer:** Jane Borthwick – Primary Support Officer **Telephone:** 07425 613360 **E-mail:** jane.e.borthwick@flintshire.gov.uk

8.00	**GLOSSARY OF TERMS**
8.01	**Hwb** – The digital platform for learning and teaching in Wales.
	Ed tech – Educational technology.
	Chromebooks – Desktop devices similar to laptops.
	Cisco – network technology provider.
	Aruba - network technology provider.
	SIMS - schools information management system which holds all pupil, staff and other information.
	Masterpiece - corporate finance system.
	P2P - electronic ordering solution.
	Govroam - allows a wide range of public sector partners to connect securely to their own network via the schools wireless network.
	Gap analysis - identifying need against existing provision.
	Digitally disadvantaged learners - those without access to broadband or suitable devices, those having to share devices.
	MiFi devices - provides broadband where none available.
	Neumark Foundation – charitable foundation supporting vulnerable learners.