

Agenda Item	4.
Report No	PEO 15/18

HIGHLAND COUNCIL

Committee: People

Date: 15 March 2018

Report Title: **ICT in Learning**

Report By: Director of Care and Learning

1. **Purpose/Executive Summary**

1.1 This report introduces a presentation at Committee by staff and pupils from two Inverness Primary Schools regarding the use of ICT in Learning and sets out the progress being made towards the delivery of the key objectives of this policy

2. **Recommendations**

2.1 Members are asked to:-

- I. note the strategic direction in enhancing Digital Learning & Teaching; and
- II. scrutinise and comment on the progress made in the delivery of the authority responsibilities.

3. Introduction

- 3.1 Highland Council has committed to 'strive to achieve the highest standards in all our schools, so every young person has the opportunity and skills to succeed by supporting an accessible and broad curriculum for all.' The Council will 'promote the wider use of technology and blended teaching approaches to support the way our children learn'.
- 3.2 In February 2015, Members of the Education, Children and Adult Services Committee endorsed the ICT in Learning Strategic Action Plan. Since then, significant progress has been made on key areas, and we have commenced the rollout of one:one devices.
- 3.3 The model for ICT provision in Schools was developed by a cross-Service Strategy Group, and involves:
- Achieving the benefits of the Google Suite for Education within the curriculum.
 - A reduced number of managed devices (desktops), retaining teacher, support for learning and subject specific devices such as computing science and graphic communications.
 - The provision of a one:one (Chromebook) device for learners from P6 to S6.
 - The ability for personal devices to be used for learning purposes by staff and pupils (where approved).
 - Access to a wider range of technology in primary schools suitable for very young learners.
 - Increased use of eLearning across all stages of the curriculum, and especially the Senior Phase.
- 3.4 As set out in a report to Committee in January 2017, the approach must be a long term strategy with well laid out plans that cover all areas:
- Infrastructure – This is concerned with networks, wireless and ability for personal devices and technologies to connect, the right bandwidth capacity to support an increased pupil devices and robust local network.
 - Devices - The increased amount of and appropriate mix of laptops, mobile devices and PCs available to schools as part of the ICT provision.
 - Pedagogy – the science of the way technology is used in learning and for learning. Pupils using technology that is relevant for them and helps them acquire digital literacy skills. The ways in which we use content, tools and services that are available from any device at any time including distance learning.
 - Supporting Leaders - Head Teachers and leaders require support from the service to take ICT in Learning forward in their schools and develop their own vision with pupils.
 - Staff Continuing Professional Development - how we provide staff with opportunities to enhance their knowledge and acquire necessary skills.

- Transforming Culture - the ways in which we as a service ensure the use of ICT in Learning is inclusive and relevant, accountability is understood for taking ICT in Learning forward and how we engage with communities to support digital access.

4. The National Strategy: Enhancing Learning and Teaching Through the Use of Digital Technology: A Digital Learning and Teaching Strategy for Scotland

4.1 Digital technology is already embedded within Scottish education. It has a place within Curriculum for Excellence, Initial Teacher Education and the Professional Standards set by the General Teaching Council for Scotland.

4.2 The national strategy aims to create the conditions to allow all of Scotland's educators, learners and parents to take full advantage of the opportunities offered by digital technology in order to raise attainment, ambition and opportunities for all. Given the work already undertaken and being delivered in Highland, we are well placed to deliver these national aims:

4.2.1 Develop the skills of our educators

- Provide educators with access to a range of career-long professional learning opportunities, that will allow them to make the most effective use of digital technology to enrich learning and teaching and develop the digital skills of their learners.
- Actively share experiences, information and opportunities that will support the professional development of educators.

4.2.2 Improve access

- Have an ambitious strategy regarding the use of digital technology in education and actively look for opportunities to continually invest in a sustainable digital infrastructure, including the procurement of appropriate digital devices.
- Ensure that digital technology is a key consideration in all local authority investment programmes pertaining to improvements in the education estate.
- Facilitate dialogue between local authority IT and education departments to ensure that education establishments receive appropriate and effective digital access and that the future needs of learners are proactively and regularly considered.
- Support education establishments in delivering digital access to all learners.
- Actively participate in Education Scotland's 'Digital Leaders Group' and look to share knowledge across local authority boundaries.
- Ensure that all learners and educators within the local authority area can access relevant digital tools and services by assigning them with a Glow login.

4.2.3 Enhance curriculum and assessment delivery

- Actively work with SQA to share experiences in order to help develop and improve approaches to digital assessment.
- Support education establishments in delivering the revised technologies area of Curriculum for Excellence, with particular focus on Digital

Literacy and Computing Science.

- Support education establishments in identifying how digital technology can be used to enhance learning and teaching across all curriculum areas.

4.3 Empower Leaders

- Develop local strategies that will help educational leaders to ensure that all learners can benefit from an education enhanced by digital technology.
- Provide access to a range of career-long professional learning opportunities for educational leaders, allowing them to make informed decisions about the best use of digital technology to enrich education and promote digital skills development.
- Actively share knowledge and examples of how digital technology can enrich education and facilitate digital skills development across education establishments and local authority boundaries.

5. **The Highland Picture**

5.1 In delivering the local authority responsibilities, the following strategic actions have been taken:

Develop the skills of our educators

- Training programmes in place for all staff on the use of Google suite, GLOW and E-safety.
- Good practice exemplars shared between staff via Google suite, GLOW and Yammer.
- Training programmes in place for probationer teachers.

Improve Access

- Authority ICT policy in place.
- ICT in learning strategy in place.
- School network upgrade being implemented.
- Chromebook implementation plan in the process of being delivered.

Enhance Curriculum and Assessment Delivery

- ICT Learning and Teaching policy in place.
- E-safety policy in place.
- SQA digital assessment strategy being developed.

Empower Leaders

- ICT in Learning Strategy in place.
- Bespoke training programmes for senior managers delivered at Headteacher meetings.
- Support provided to Headteachers by ICT implementation team and Quality Improvement Team.
- Examples of good practice shared between Headteachers through GLOW and Google Suite.

5.2 Taking the Strategy Forward

5.2.1 Chromebooks have now been rolled out to the Millburn and Dingwall ASGs. The Portree ASG is next in the roll out schedule (**Appendix One**).

5.2.2 Many of our other schools are pushing forward with this development due to the positive impact on learning and teaching, supported by some external funding from the Scottish Government, and involving

- Caol Primary - Robotics
- Ullapool High School - Raspberry Pi
- Balloch Primary - Lego Mindstorms
- Munloch Primary – Lego Mindstorms
- Lundavra Primary- Lego WeDo
- Inverness Royal Academy - Visualiser
- Balnain Primary – 10 Chromebooks
- Balloch Primary – 4 Chromebooks
- Mallaig Primary – 2 Chromebooks
- Charleston Academy – 20 Chromebooks
- Tain Royal Academy – 9 Chromebooks
- Dornoch Academy – 8 Chromebooks
- Golspie Primary – 10 Chromebooks
- Farr High School – 5 Chromebooks
- Avoch Primary – 10 Chromebooks
- Poolewe Primary – 5 Chromebooks
- Dingwall Primary – 5 Chromebooks
- Hilton Primary – 10 Chromebooks
- Golspie High School – 5 Chromebooks
- Bun Sgoil Ghàidhlig Loch Abar – 4 Chromebooks

5.2.3 Training has rolled out smoothly, in line with Chromebook Rollout schedule with the following ASGs trained in both basic level Google Suite tools and E-safety.

5.2.4 All schools Chromebook 'ready'

- Milburn
- Dingwall
- Portree
- Kinlochleven

Partially Completed:

- Gairloch
- Mallaig
- Lochaber
- Kingussie

To be completed by July:

- Grantown Grammar
- Ardnamurchan
- Dornoch
- Invergordon
- Plockton

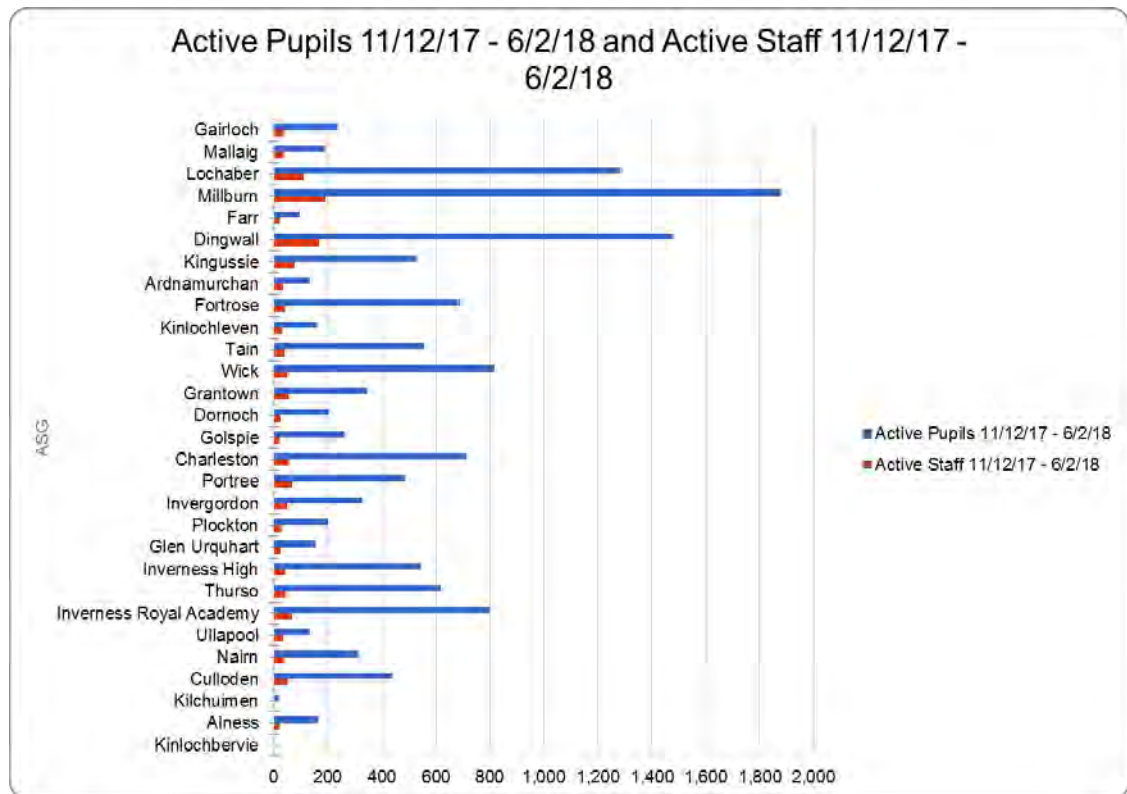
5.2.5 The training has received a positive response. Headteachers have reported a significant increase in confidence amongst staff following Google Suite sessions.

5.2.6 In addition to new activity via one:one devices, much work has been done to

enhance eLearning opportunities across the authority. Over 100 pupils are accessing 19 subjects on line. The Council is also working in partnership with Comhairle nan Eilean Siar as part of the eSgoil initiative, promoting access to a range of tutor led initiatives.

5.2.7 Pupil and staff activity

The graph below shows the current level of Google Suite usage by each ASG.



The immediate impact of the Chromebook rollout is obvious, with Millburn and Dingwall ASGs having the highest usage.

5.2.8 The examples listed below are only a very small sample of the excellent work that is going on across Highland schools, which will be reflected in the presentation by two Primary Schools at the Committee:

- Highland Council approach well received at the Scottish Learning Festival.
- Kinlochleven Primary pupils delivered at the national BETT Conference.
- Balloch Primary senior pupils have been engaged with UHI on programming in order to develop their skills and then share this across the school.
- Tain Royal Academy Senior Phase assessment takes place online in Maths. Chromebooks have enabled the school to meet individual assessment requirements more efficiently, maximising the opportunity for pupils to succeed.
- Excellent use of the collaborative tools offered within Google Suite by Raigmore and Drakies Primary, with several classes working together to create an E-safety charter as part of Safer Internet Day 2018. This

involved face to face collaboration initially, but then working collaboratively via a purposely created Google Classroom.

- A teacher at Millburn Academy has created video tutorials explaining how to use Google Sheets for creating graphs. These can then be embedded into a Google Doc and if there are any updates/changes to the data in the table, this will automatically update the document.
- Intergenerational IT Classes - P6 pupils have been working alongside local residents on a 6 week project with Care Lochaber to share their digital skills. The children and adults have enjoyed sharing skills and knowledge before having a cup of tea, cakes and a blether!
- Balnain Primary is making effective use of Google Hangouts to share literacy skills between both classes as well as effective use of the devices for working towards STEM project related work.
- Golspie Primary pupils are sharing their work across the school and are able to feedback to each other and have the teachers' feedback on their work using Google apps.
- Bun-Sgoil Ghaidhlig Loch Aber use of apps such as Google Classroom is helping make learning relevant, personalised and provides further challenge. Children have been further developing the skills they need for life, learning and work. Children have been using the Chromebooks to research and consider career options using apps such as Hangouts to share research as well as using G Suite apps to present their information.
- 3 Highland Schools have successfully achieved Digital Schools Award status - Caol Primary, Lundavra Primary and Kinlochleven Primary - with a number of other schools pending.
- Lundavra Primary and Kinlochleven Primary have been award Google Reference School status.
- A growing number of schools have created Young Digital Leader opportunities to have pupils driving the digital learning forward and this model is paying dividends already in terms of pupil and staff confidence in this area. Schools who have appointed pupil Digital Leaders include:
 - Inshes Primary
 - Milton of Leys Primary
 - Drakies Primary
 - Kinmylies Primary
 - Dingwall Primary
 - Balnain Primary
 - Caol Primary
 - Cradlehall Primary
 - Invergordon Academy

5.2.9 E-safety training

The Council has ensured a focussed approach to Digital Citizenship and eSafety by all Schools, as part of the roll out of one:one devices. This encourages pupils to use these devices safely, but also to be safe in all of their activities on the internet, including in their use of social media.

A number of schools have received 'bespoke' training in E-safety based on interest/progress levels including:

- Cradlehall Primary
- Lochardil Primary
- Auldearn Primary
- Achtertyre Primary
- Glenelg Primary
- Hilton Primary
- Bridgend Primary
- Grantown Primary
- Kinmylies Primary
- Smithton Primary
- Balnain Primary
- Merkinch Primary
- Tore Primary
- Munloch Primary
- Abernethy Primary
- Deshar Primary
- Cawdor Primary

Between March and July 2018, there are a series of dates in the calendar for 'bespoke' training for all other ASGs not within touching distance of rollout schedule.

The Safer Internet Day 2018 was a huge success, and had 'buy in' from more Highland Schools than ever before, with the topic of Online Safety being escalated to a higher level of importance across pupils, staff and parents. <https://sway.com/WxHyds6jNE3ZM1SC?ref=Link>

5.3 Challenges

Inevitably, as part of this technology dependent ground-breaking work, there have been challenges, as below:

- There were initial delays in the network refresh programme, but on site surveys of the next phase of schools are due to commence March 2018, with any physical works on site due to commence April 2018 onwards. Care and Learning are working closely with colleagues in ICT Services, to ensure a detailed programme is available from Wipro, and will be providing further communications to schools as soon as that is available. A reminder of the planned rollout order, by ASG, is set out in Appendix 1.
- While network refresh is now rolling out, this still creates frustration for those schools that do not yet have access to full functionality. For example, the unreliability of the network on a day to day basis has meant that three training sessions have had to be rescheduled.
- In a small number of schools, there was an apparent lack of confidence in the policies and procedures that supported pupils to take the one:one devices home. This has been addressed.
- In a small number of schools, the pace of implementation has been slow, despite support being offered to help with both the practical and

pedagogical challenges.

- Controls have been put in place to limit access to YouTube, so that pupils under 13 years of age cannot create an account and cannot comment, like or bookmark videos. We are piloting a more restricted access to YouTube in a small number of primary schools, to identify if this is a setting that should be applied across all Primary Schools
- Filtering has been put in place to prevent access to offensive sites, but this has prevented some appropriate research into social issues by senior pupils. This continues to be addressed and monitored.

6. Implications

- 6.1 Resource – All resourcing implications have been factored by the Council into the implementation plans.
- 6.2 Legal - There are no legal implications.
- 6.3 Community (Equality, Poverty and Rural) – The successful implementation of the ICT in Learning Strategy and eLearning will help all pupils and all Highland Schools to have equity regarding access to the curriculum.
- 6.4 Climate Change/Carbon Clever – The successful implementation of the ICT in Learning Strategy and eLearning will have a positive impact on reducing carbon emissions by reducing unnecessary travel.
- 6.5 Risk - It is important that the work being carried out around improved network capacity results in improved performance and connectivity in schools.
- 6.6 Gaelic – eLearning provides many opportunities for development in Gaelic medium education.

Designation: Director of Care and Learning

Date: 6 March 2018

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Appendix One

Chromebook Rollout by ASGs

Quarter	Dates	Proposed Timelines ASG	Chromebook-Tranch	Wipro Classification
Q3	Aug-Oct-2017	Millburn	1	Phase 1
Q4	Nov-Jan-2018	Dingwall Portree	2	Phase 1
Q5	Feb-Apr-2018	Kinlochleven/Kingussie/Gairloch/Mallaig/ Lochaber	3	Phase1/Phase 2
Q6	May-July-2018	Grantown Grammar/Ardnamurchan/Dornoch/Inverg ordon/Plockton	4	Phase 2
Q7	Aug-Oct-2018	Wick/Inverness High School/Fortrose/Charleston	5	Phase 2
Q8	Nov-Jan-2019	Inverness Royal Academy/Golspie	6	Phase 2
Q9	Feb-Apr-2019	Thurso/Culloden	7	Phase 3
Q10	May-July-2019	Ullapool/Alness	8	Phase 3
Q11	Aug-Oct-2019	Nairn/Farr/Tain	9	Phase 3
Q12	Nov-Jan-2020	Glenurquhart/Kinlochbervie/Kilchuimen	10	Phase 3