Education and Children's Services

Digital Strategy 2-18 2018-2021

This Digital Strategy for Perth & Kinross outlines the vision and actions that will be undertaken to embed digital literacy, learning, teaching and assessment practices in our Early Years, Primary, Secondary and Specialist Provision schools from 2018-2021.

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PKC Digital Strategy 2-18

Introduction

This strategy outlines Perth and Kinross Council's vision and approaches to be undertaken to embed digital literacy, skills, learning and assessment practices in our Early Years, Primary, Secondary and Specialist Provision schools from 2018-2020.

This strategy is aligned with the <u>National Improvement Framework Improvement Plan</u> the <u>National Digital Learning and Teaching Strategy for Scotland</u> and the <u>PKC Raising</u> <u>Attainment Strategy</u>. The development of digital skills also contributes to a key priority outlined in the <u>Tayside Plan for Children</u>, <u>Young People and Families (2017-2020)</u>:

"Our children, young people and their families will be meaningfully engaged with learning and combined with high quality learning experiences, all children and young people will extend their potential."

Our Vision

Our vision in Perth and Kinross is to effectively and appropriately use digital technology to enhance learning and teaching, to equip our children and young people with vital digital literacy skills, alongside literacy and numeracy skills, which will lead to improved educational outcomes and prepare them fully for life beyond school. We are committed to improving outcomes for all learners.

We recognise that children and young people are growing up in a world where technology is an intrinsic part of life and as such it is vital that we embed the use of technology in our approaches to learning and teaching and enable children and young people to acquire the relevant skills to ensure they are digitally skilled and digitally literate and equipped for life after school.

Purpose of the Strategy

The purpose of this strategy is to set out clear direction for the development of digital literacy and the use of technology in learning and teaching approaches within educational establishments in Perth & Kinross. It includes:

- Clear objectives for all schools and establishments
- Overarching aims to be achieved by 2021
- Key actions for ECS, schools and early years settings

We will use the following key improvement themes from the PKC Raising Attainment Strategy, to drive forward the development of the use of technology and digital literacy:

- Leadership at all levels
- Excellence in learning and teaching
- Effective interventions
- Engaging with families and communities

Overarching Aims

Our overarching aims articulate with the National Digital Learning & Teaching Strategy for Scotland and link closely with the national approaches to Developing creativity, employability and skills outlined in the <u>Career Education Standard</u> and The National Improvement Framework and are to:

- Develop the skills and confidence of educators in the appropriate and effective use of digital technology to support learning and teaching;
- Improve access to digital learning and technology for all learners;
- Ensure that digital technology is a central consideration in all areas of curriculum and assessment delivery;
- Drive and encourage innovation and investment in digital technology for learning and teaching for all learners, including the use of technology to engage with families and the wider community; and
- Design and deliver an appropriate curriculum which genuinely equips children and young people for learning, life and work with relevant skills which lead to sustained positive school leaver destinations.

Challenges and Opportunities in Perth and Kinross

There are many examples of good practice taking place already in our schools and early years settings which exemplify our overarching aims.

Some examples include:

- The widespread use of the app SeeSaw in primary schools to journal learning activities and communicate these to parents;
- Schools who have attained and registered for the Digital Schools award;
- The work some LMGs in developing a Digital Learning & Teaching Strategy;
- The use of iPads to support learning in early years settings;
- The use of Sway and filmmaking to communicate and promote parental engagement and communication with school and wider communities;
- The use of Office 365 and Google classroom to create paperless class work and a visual learning environment; and
- Schools that have been proactive in the development of coding clubs and activities.

The above demonstrates there are pockets of good practice and innovation already taking place across Perth & Kinross schools and establishments however there are many challenges for establishments and the local authority in relation to keeping up with the relentless pace of change in the field of digital technology. Probably the biggest challenge currently is ensuring the infrastructure supporting digital learning is fit for purpose. In the context of a largely rural school estate, the general broadband provision and Wi-Fi coverage in some of our more remote areas, which is the responsibility of the Scottish Government, is yet to be equal to the standard of our urban areas. More information about this can be found here: http://www.pkc.gov.uk/article/14704/next-generation-broadband

There is also challenge in providing relevant professional learning for all staff, the majority of whom are less practiced in digital skills than the young people they are teaching. In the development of the new school, Bertha Park High School, there is an opportunity to shape and determine the future vision for digital learning across Perth & Kinross.

Measuring Success

Over time, and by 2021, we will be able to demonstrate:

- An increased number of staff who have undertaken career-long professional learning in digital learning and teaching approaches;
- A reported increase in confidence of educators in effective and appropriate use of technology and digital learning and teaching;
- Reported fitness of purpose of the ICT infrastructure resulting in an improved quality of digital learning;
- Aspects of the curriculum relating to the use of digital technology are relevant, ambitious and forward looking;
- Approaches to assessment that make effective use of digital technology for all learners;
- Digital technology being used effectively to enhance and deliver learning & teaching across all curriculum areas and in Secondary, through use of the Virtual Campus; and
- An increased number of young people leading digital learning and teaching.

(Baseline data will be taken from the 2018 ICT survey and improvements measured annually until 2021).

Key Principles

The following key principles for effective learning and teaching in developing digital literacy and the use of technology skills underpin the aspirations of Perth and Kinross Council:

- Frequent opportunities for learners to engage with technology in a wide range of contexts, mediums and platforms for relevant purposes;
- The use of relevant, real-life and enjoyable contexts which build upon learner's own experiences and skills, including opportunities to lead digital learning;
- Collaborative working and independent thinking and learning;
- Making meaningful links for learners across different curriculum areas;
- Building on the principles of Assessment for Learning;
- The development of problem-solving skills and approaches;
- Appropriate and effective investment in ICT; and
- Full utilisation of available resources such as GLOW.

Responsibilities

It is the responsibility of all educators to ensure that children and young people achieve relevant experiences and outcomes in technologies to realise the overarching aims set out in this strategy.

Schools and Early Years Settings will:

- Encourage staff to share innovative and effective practice both face-to-face and through digital platforms;
- Ensure that students and newly qualified staff are sufficiently supported in the appropriate and effective use of digital technology;
- Look for opportunities to use digital technology to engage with parents and carers and supporting them to understand the benefits of digital technology in education;
- Ensure that appropriate career-long professional learning opportunities are offered to a range of staff;
- Ensure learners are involved in sharing their digital experiences and skills and that they are given opportunities to comment on the use of digital technologies to deliver learning and teaching;
- Work with the local authority to obtain appropriate digital solutions which support and enhance learning and teaching;
- Ensure all learners including those with additional support needs are able to access appropriate digital technology for learning and teaching;
- Ensure that all learners become resilient and digitally intelligent users of technology and can stay safe, maintain personal security and successfully manage their online identity;
- Ensure that the use of digital technology is a central consideration in the planning and delivery of any learning and teaching across the curriculum;
- Provide a range of opportunities for learners to develop their digital skills across the curriculum;
- Work to identify opportunities to enhance assessment using digital technologies;
- Ensure that the use of digital technology within their establishment aligns closely with evolving self-assessment and improvement guidance such as 'How Good is Our School? 4';
- Actively seek to identify existing expertise within the staff complement and ensure that their knowledge is capitalised upon;
- Develop a young digital leaders role for learners appropriate to the setting;
- Ensure that cyber resilience and internet safety is central to all digital technology use in the establishment;
- Involve parent councils and parent/carer groups in discussions around the use of digital technology to help realise anytime/anywhere learning;
- Take full advantage of all of the resources available in GLOW and promote the use of GLOW for all staff and pupils; and
- Ensure compliance with data protection legislation in all use of digital tools and applications.

PKC Education and Children's Services will:

- Provide staff 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 all teaching staff;
- Invest in a sustainable digital infrastructure, including the procurement of appropriate digital devices and supporting resources;
- Ensure that digital technology is a key consideration in local authority investment programmes pertaining to improvements in the education estate;

- Facilitate dialogue between local authority IT and Education and Children's Services 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 and virtual learning platforms where appropriate, to all learners;
- Actively participate as a local authority in Education Scotland's 'Digital Leaders Group' and look to share knowledge and collaborate across local authority boundaries and within the regional collaborative;
- Provide regular training for education establishment digital leaders and GLOW administrators;
- Ensure that all learners and educators within the local authority area can access relevant digital tools and services by supporting the use of GLOW; and
- Provide support and guidance to schools to ensure compliance with data protection legislation.

Key next steps for schools and early years settings:

Schools and early years settings should review the standards, expectations and responsibilities set out within this strategy and evaluate current provision.

It is expected that all schools and early years settings will:

- Consider digital literacy and pedagogies as a priority across all curricular areas in the next three years;
- Consider pedagogical approaches to the use of digital learning and the use of ICT through a focus on effective learning and teaching and inclusive practice in all classrooms and playrooms;
- Nominate an individual to take strategic responsibility for the development of digital learning and teaching and the administration of GLOW within the establishment;
- Work towards increases outlined in the measuring success' section of this strategy;
- Develop the role of Pupil Digital Leaders in each establishment to provide peer support and to act as ambassadors for digital skills;
- Ensure all staff, in all sectors, can access a range of professional learning opportunities to ensure they fulfil their role in teaching digital literacy and the appropriate use of digital technology to enhance learning and teaching across the curriculum. In particular the offer to secondary staff to offer virtual learning; and
- Ensure the use of all third party digital applications complies with data protection legislation.

Participation in the Digital Schools Award programme may enhance and support schools' developments in these areas.

Key next steps for PKC Education and Children's Services:

Digital Leads and Champions

Whilst it is recognised that all staff in all schools and early years settings are leaders of learning, ECS will continue to work with the Digital Learning Reference Group and the Virtual Campus Development Group to deliver and further develop our PKC approaches in implementing this strategy. It is envisaged that each establishment will nominate a strategic lead for ICT and digital learning but that there will also be a number of digital champions developed. This is a professional learning group of innovators in this field who will receive additional training with a view to them supporting colleagues to build capacity in digital skills across the system and to further develop the PKC Virtual Campus.

A professional learning programme has already begun and will be developed further in session 2018-19 to ensure delivery of relevant professional learning across the authority.

Virtual Campus

The PKC Virtual Campus is an online, 'anytime, anywhere' learning platform. Pupils access resources in a virtual classroom, communicate with the teacher and submit work using a learning platform on GLOW. Increasingly teachers are looking to develop their skills in storing and distributing learning resources digitally in this way. GLOW provides all teacher and pupils with a significant amount of free storage and access to a huge range of resources which can support this style of learning and teaching.

The PKC Virtual Campus Development Team has been set up to support the delivery of virtual learning across Perth & Kinross Secondary schools. This consists of 2 Faculty Principal Teachers, a secondary Quality Improvement Officer and the Digital Literacy and Digital Skills Officer from the Education Scotland team. The team has put together a support package of training for staff and pupils involved and will provide training across schools for pupils and staff during 2018/19 in virtual learning platforms. This development aims to address areas of inequity of access for young people across Perth and Kinross for whom there are barriers to them studying their chosen subjects or for whom attending school is proving difficult. It is planned that this will be rolled out gradually as more staff become trained and skilled and when learning from the pilots has been considered.

In developing the virtual campus, ECS will seek to work with partners who are already delivering online learning to young people. This will include the virtual learning environments which support eSgiol, SCHOLAR and Perth College UHI.

Bertha Park High School

In the development of the curriculum plan and pedagogical approaches in Bertha Park High School there has been a great deal of research and consideration undertaken regarding approaches to the use of digital learning and ICT. The opportunity to build a school 'from the ground up' affords the exciting opportunity to take a ground-breaking approach to the use of ICT from the outset, without the constraints of the leadership of change both in terms of infrastructure and hardware but also in relation to pedagogy, workflow, staff skills and training. It is part of this vision that staff recruited will take up post on the understanding that digital literacy and learning will be a core function of the educational experience at the school and that digital learning and skills will be a key accelerator of the attainment at the school.

Action plan for improvement

In order to achieve the overarching aims of the strategy by 2021, an action plan for improvement has been created (see Appendix 1).

Monitoring and review of the Digital Learning and Teaching Strategy:

The monitoring and review of the Digital Learning and Teaching Strategy will be undertaken via the following:

- Annual ICT schools survey;
- Digital Learning and Teaching Reference Group;
- Term visits in secondary schools; and
- Via the ELAV process.

The Digital Learning Reference group will meet at least 4 times per year to monitor progress of the action plan for improvement.



Digital Learning & Teaching Action Plan



Overarching Aim 1: Develop the skills and confidence of educators in the appropriate and effective use of digital technology to support learning and teaching

Actions	Timescale and Resources	By Who
Develop a program of Career Long Professional Learning (CLPL)		
opportunities		Digital Learning and Digital literacy
 Use a blend of twilight, whole and half day training, Inset and LMG training and in-class support during school day Further development of digital leaders in school and community of teachers sharing practice CLPL focus on iPad, GLOW (including both Office 365 and G Suite) and Seesaw Endorse and promote online CLPL from partners such as Apple, Microsoft and Google and increase numbers of staff with online accreditations 	Ongoing through to 2021 Training facilities/school lets Advice and Support from partners from XMA, Education Scotland, Apple, Google, Microsoft	team officers (Education Scotland) XMA staff, PKC Digital Skills team, Digital QIO
 Establish Apple Regional Training Centre Champions (RTC) to deliver iPad CLPL 		
 Maintain multi-channel approach to support professional learning eg website, twitter, Yammer groups, communities 		Digital Champions
of practice and share digital practice via PKC Education		QIO Digital and PKC Digital Skills Team
twitter and blogAppoint Digital Graduates trainees to provide support and	September 2018	
training to teaching staff across Perth & KinrossPlan and deliver a support plan and training for the	October 2018	Head of Secondary & Inclusion/QIO Digital
migration to GLOW for all school staff	August 2020	
		QIO Digital, IT Service Manager, Digital Skills Team

Overarching Aim 2: Improve access to digital technology for all learners

Actions	Timescale and Resources	By who
	Jun 2018 – December 2020	
Collaborate with Corporate IT to establish infrastructure	Corporate IT resources	IT Service Manager
improvement plan including:	corporate in resources	TI Service Manager
Broadband width		
 Upgrading of server provision 		
Wireless Access Points	December 2018	
Move to cloud based storage and solutions		
Relevant IT information and briefing papers see appendix		
Add human resource capacity to existing IT team to enable the infrastructure to be delivered on time		
infrastructure to be delivered on time		Head of Secondary & Inclusion
The hardware estate		
Modernise devices across schools	Schools DSM 2018-2021	
Create AV equipment replacement programme	XMA as procurement partner	Heads of establishments
New school provision		
 Promote accessibility features of technologies in schools 		
 Review procurement options for schools 		Digital Skills Team
		Heads of Establishments/QIO Digital

Overarching Aim 3: Ensure that digital technology is a central consideration in all areas of curriculum and assessment delivery

Actions	Timescale and Resources	By Who
 Implement revised Technologies advice including Computing Science and Digital Literacy through CLPL 	Ongoing through to 2021	Schools
 Utilise broad range of devices in CLPL school visits eg drone, robots, cameras such as Parrot minidrone, Dash robot, Blu Bot, 360° camera, Sphero drone and other types of device Work with SQA to roll out digital assessment (including 	Ву 2021	Digital Skills Team
 standardised testing such as SNSA) Identify how digital technologies can be used in all curricular areas 	From October 2018	Schools

• Overarching Aim 4: Drive and encourage innovation and investment in digital technology for learning and teaching for all learners including the use of technology to engage with families and the wider community

Actions	Timescale and Resources	By who
 All schools and establishments evaluate current digital provision and impact and links to HGIOS 4 and GTC 	Ву 2019	Schools
registration to inform their own required actionsSchool applications for Digital Schools Awards	Ongoing through to 2021	
 Maintain the Digital Learning Reference Group to inform and inspire decision making and policy development and support implementation of the strategy 	June 2018	QIO Digital
 Support schools in establishing Digital Leaders program for pupils 	June 2019 XMA	QIO Digital
 Advise on IT provision for new school and plan for training 	September 2018	Education Scotland Digital Learning Team, PKC IT team, QIO Digital, HT BPHS
 PKC and schools' development of consistent digital policies that support learning and teaching e.g. Acceptable Use Policy 	360° Safe self-evaluation toolkit Digital School Scotland Self-evaluation toolkit	Schools, QIO Digital
 Ensure GDPR compliance Participate in Digital Leaders national body and share inter- authority knowledge 	Compliance Training for school staff	Compliance Team, School Staff QIO digital
 Support schools and establishments to consider and promote the use of digital technology in parental engagement and family learning 	Ongoing to 2021 use of tools such as website, twitter, Seesaw	School staff, Digital Skills Team, QIO Digital
 Provide schools and establishments with Digital Engagement Guidance 	September 2018	MIS GDPR/DPIA project officer

Overarching Aim 5: Design and deliver an appropriate curriculum which genuinely equips children and young people for learning, life and work with relevant skills which lead to sustained positive school leaver destinations

Actions	Timescale and Resources	
 Actions Promote STEM, the Digital Skills industry and Computing Science for all genders Explore and utilise the Young Scot 5Rights framework which seeks to protect young people and make the internet and digital world a better and more empowering place for them Explore and utilise the World Economic Forum Digital Intelligence and other resources Ensure staff are delivering entitlements, experiences and outcomes of Curriculum for Excellence Ensure staff are fulfilling their responsibilities in relation to The GTCS Standards Implement the Career Education Standard As per the Perth & Kinross Skills Framework (2015) ensure young people develop, profile and understand their digital skills and abilities Implement the key actions in local and national policy Working in collaboration with the Developing Young Workforce Board and employer partners ensure children and young people have regular opportunities to engage with digital industry professionals appropriate to age and stage Ensure staff are aware of the local land national labour 	Timescale and Resources Ongoing from October 2018	All schools and establishments
 Ensure staff are aware of the local land national labour market information relating to digital post school destinations Deliver a Virtual Campus pilot in the Senior Phase Roll out the Virtual Campus model, widening choice and accessibility 	2018/19 2019-2021	QIO Digital, Digital Skills Team, Virtual Campus Development Group