Digital Learning &Technology
in Perth & Kinross

ECS Learning Hub

Hello again...

They've let us do another issue which is just as well since there has been a ton of digital stuff been happening in the past month, with the unveiling of the National Digital Learning and Teaching Strategy during the Scottish Learning Festival as well as the Digital Schools Awards and the upcoming refresh of the Technologies Experiences and Outcomes, including rewritten Computing Science and new Digital Literacy outcomes. In this issue we'll take you through a few things like that as well as the usual look at apps, sites and other tech that we think you could take a look at or delve a little deeper into.
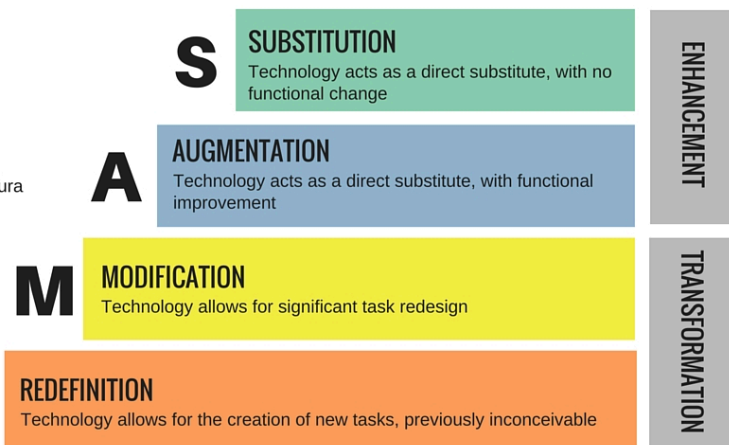
Explaining the SAMR model

Eh? The what now?

You can't beat an acronym. Everybody loves them.... We've strewn a fair few though this newsletter like CPD, HGIOS, MIE etc and you can be sure we'll find more as the months roll on. We kickoff though with SAMR - a model that describes technological integration in the classroom and the impact that it has. It's a useful model to think about when we are beginning to use digital technology more in our lessons. The model describes 4 stages of integration.

THE SAMR MODEL
Dr. Ruben R. Puentedura

S SUBSTITUTION Technology acts as a direct substitute, with no functional change — ENHANCEMENT

A AUGMENTATION Technology acts as a direct substitute, with functional improvement — ENHANCEMENT

M MODIFICATION Technology allows for significant task redesign — TRANSFORMATION

R REDEFINITION Technology allows for the creation of new tasks, previously inconceivable — TRANSFORMATION

As an example, let's think of creating a story. If we use a word processor to type up the story we'd say that technology is being used as a **Substitution** - essentially replacing the paper medium for "paper" under glass. Then again, you may use features of the word processor that offer you a functional improvement like a spell checker, thesaurus or changing fonts - we call that **Augmentation**. We next move into **Modification**, where the technology allows us new ways to develop the task. Here we could use text-to-speech tools to write and add in pictures or collaborate online through Glow in a co-authored story where each person can be adding to the document at the same time. With **Redefinition** we can change the task significantly - we could use animation tools to create our story as a stop-frame film with narration and sound effects, uploading the finished movie for others to see, comment and feedback, garnering an authentic audience for our work.

In digital learning we recognise that in many cases we start in the realms of substitution and augmentation. Don't get worried about that though - if the skill you're assessing is the handling of the written word then making an animation will not provide you with that evidence . But if the goal is to allow a young person to demonstrate their learning in a way which is meaningful and engaging for them, then using the creative tools that allow some modification or redefinition of the task could benefit both the learner and the teacher. You can find our more about the SAMR model at

https://www.commonsensemedia.org/videos/introduction-to-the-samr-model

PERTH & KINROSS COUNCIL

iTeach
therefore I am...

See what we did there? Unimpressed? Join the queue...

iTeach are our iPad learning partner in Perth & Kinross who can work with primary and secondary schools on a tailored program of CPD on iPads that involves working with staff and pupils in school, as well as providing strategic guidance for leaders in developing their own vision about sustainable approaches to iPad curriculum use.

Anna Miller, Education Manager for Scotland says

'We are thrilled to be working with schools across Perth and Kinross to support and inspire teachers with their use of technology. We want to help teachers to understand the ways in which the devices can enhance everyday classroom activities, and how they can help save time as a professional working tool. We look forward to working closely with schools to plan a project which will support the aims of their school development plan, rather than the use of technology being an additional pressure for staff, with clear, measurable outcomes.
Most of all we want to share practical ideas from our own classroom experience, and our work across Scotland, so that everyone gets the most out of the investment that has been made in technology.'

Any school who would like to consider working with iTeach in the coming years should contact Michael Conlon, Digital Learning and Technology Officer mconlon@pkc.gov.uk

iTeach DIGITAL LEADERS

A Strategy revealed...

After months of consultation the National Digital Learning and Teaching Strategy was finally revealed at the Scottish Learning Festival. The strategy sets out a number of actions at a national level and with expectations of local authorities and education establishments in delivering on the vision. It is based around four key objectives: the skills of educators; access to digital technology; curriculum and assessment; and leadership.

In Perth & Kinross we'll be absorbing what that means for us as a Local Authority and, using the skills and experience of our teachers and learners, develop our own strategy, one that takes into account our mix of rural and city schools. We will set up a Digital Learning Reference Group made up of practitioners, leaders and representatives from our IT and information security teams to help move this forward.

Let's take a look at each objective.

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

In PKC over the next few years we will support staff in schools with a range of CPD opportunities that could involve twilights, in class visits and training as well as the more traditional whole day CPD training or in-service day sessions. We'll also have the blog for videos and tipe as well as this monthly newsletter.

What we also want to achieve is to connect staff to online development opportunities like the Microsoft Innovative Educator program and the upcoming Apple Teacher program which both aim to keep professional skills flourishing in the use of digital in the classroom, based around self paced professional development that can be undertaken at a time that suits you.

Improve access to digital technology for all learners

At the Scottish Learning Festival the Deputy First Minister John Swinney was unequivocal that maximising the impact of digital will be determined by the extent to which connectivity and the hardware used in classrooms are up to the job for the learning and teaching experience that is planned - "The wires have got to work".

This is a challenge in a climate of financial austerity that schools across Scotland face but in Perth & Kinross we have been building on our infrastructure and determining the most sustainable and managed approach to improving connectivity in schools. All of our sites have been surveyed for wireless coverage and we continue to look for opportunities to invest and increase bandwith across the estate. It also means looking at how technology for young people with additional support needs, from dyslexia or visual impairment to profound multiple learning difficulties or physical disability.
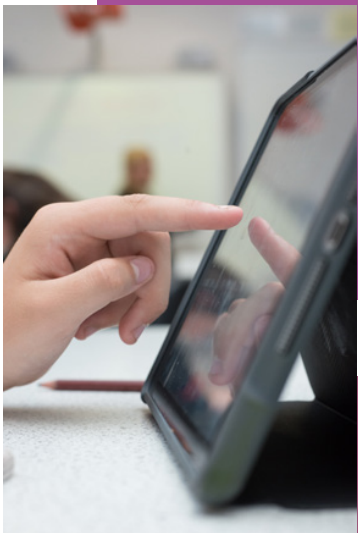
Ensure that digital technology is a central consideration in all areas of curriculum and assessment delivery

The strategy aims to develop teacher abilities in enhancing learning and teaching, using digital tools to engage and empower young people in describing their learning. It will be about ensuring education is relevant to learners' experience of the world, reflected in the tools we use to teach, learn and assess, providing personalised feedback whilst reducing the workload burden of marking.

In some instances this may be about leveraging the power of pupils' own technology to connect with learning and assessment tasks where Bring Your Own Device is set up in the school.

In essence this is about digital tools becoming embedded in the everyday work of learning and teaching.

Leadership is one of the key features of schools where successfully integration of technology has had a measurable impact on attainment and achievement. All leaders of learning should be involved in developing a vision for what that looks like in their context and define the building blocks necessary for that, whether it be CLPL, finance or learning environment changes, amongst others. In digital rich schools like ESSA Academy in Bolton or Tynecastle High in Edinburgh, it has been leadership from the very top that has empowered teachers and learners to define a new paradigm about what learning looks and feels like. in PKC we will work with school leaders and IT to plan for progress in areas we think we still have work to do, like infrastructure and sustainability.

Empower leaders of change to drive innovation and investment in digital technology for learning and teaching

The word "digital" is threaded through HGIOS 4 and HGIOELC, across the 3 themes, and recognises the place of digital in not only increasing pupil creativity and employability but also in our own use for self-evaluation, collaboration and in communication. In the very best schools inspectors are likely to see all staff take responsibility for digital literacy, with learning enriched by effective use of digital technologies.

Schools will be able to use self-evaluation tools which are focused around the use and impact of digital technologies, to inform their next steps and contribute to school development planning. Excellent work is already going on across our schools and we will continue to develop the capacity of schools to improve in this area.

How Good Is Our School 4
&
How Good Is Our Early Learning and Childcare

Notes from the
Scottish Learning Festival 2016

The annual Scottish Learning Festival descended again at the SECC in Glasgow for two days of keynotes, seminars, sharing and inspiration around Scottish Education. Digital technologies were there in abundance, from 3d printers, animation, new interactive technologies as well as the presence of companies like Google and RM.

Digital Schools Award

The SLF also saw the formal launch of the Digital Schools Awards Scotland, a new national awards programme which aims to promote, recognise and encourage a whole school approach to the use of digital technology in primary schools.

Schools that successfully complete the programme will receive a nationally recognised Digital Schools Award accredited by Education Scotland.

The 3 step programme has been developed to help schools assess progress and recognise excellence in the use of digital technology at primary level while providing practical support and encouragement. The programme is supported by industry partners HP, Hewlett Packard Enterprise, Microsoft and Intel in Scotland.

Find out more at http://www.digitalschoolsawards.co.uk/become-a-digital-school

Adventures in Computing Science

Also launched on the day was information and resources that will support Computing Science outcomes, with an overview of national advice and guidance, offering practical and insightful ideas for teaching computing science with a particular focus on the early – second level curriculum. There was a wealth of ideas on how to incorporate computing science into learning and teaching and how to access a wide range of contemporary and engaging resources to take inspiration back to school.

All of the information and resources can be found in the technologies professional learning are of GLOW which can be found here - there's loads of stuff!

http://bit.ly/23vze5J

5Rights

Young Scot, Scottish Government and 5Rights introduced Scotland's 5Rights Youth Commission – a diverse group of young people passionate about their rights online. We heard what their '5Rights' mean to them, and how children and young people can be empowered to access technology creatively and fearlessly. The powerful campaign will help inform both civic and commercial institutions to consider what they need to do to champion and support young people in the digital domain.

http://www.youngscot.net/scotlands-young-people-stand-up-for-their-digital-rights/

"Sometimes I regret what I post online and wish there was some easy way to make it disappear."

THE RIGHT TO **remove**

THE RIGHT TO **KNOW**

"We should know who is holding and profiting from our information."

"There is too much emphasis on what is illegal and not enough about what is unpleasant or distressing."

THE RIGHT TO **Safety & Support**

THE RIGHT TO **informed and concious choices**

"Unless we understand the technologies we use daily we can't control how they make us behave."

"We need to be taught the skills to use digital technologies effectively."

THE RIGHT TO **digital literacy**
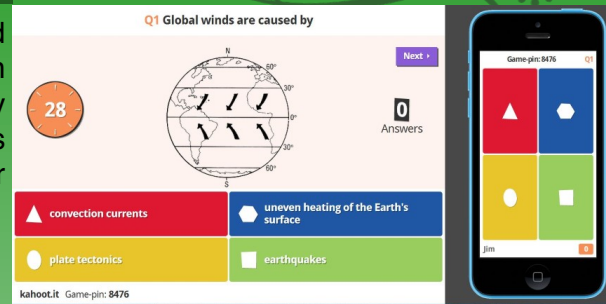
Fee, Fo, Five Feedback

5 **GiANT** ways to introduce formative assessment using digital tools. Use feedback you get from pupils about their learning to inform what you do next, developing rich conversations and higher order thinking skills.

Kahoot!

Kahoot lets you easily set up quizzes, polls, and discussions that pupils respond to on PC or on their own devices. The website lets you control how long they have to respond and you can insert images and videos into the questions. Save your responses and use the kahoot again later to get a sense of progress.

https://getkahoot.com/

Q1 Global winds are caused by

28 — Next ▸

0 Answers

▲ convection currents

⬡ uneven heating of the Earth's surface

◯ plate tectonics

▢ earthquakes

kahoot.it Game-pin: 8476

Game-pin: 8476

Jim

Plickers

Plickers lets teachers collect real-time formative assessment data without the need for student devices. Pupils are given a special card that the software on your phone or iPad can recognise, with four possible answers. Pupils just hold up their card and a quick scan pulls in all the answers and presents you with your results. This makes it really easy to check for understanding before you move on. All your pupils can participate and because every card is unique its harder to cheat by copying your friends response!

https://plickers.com
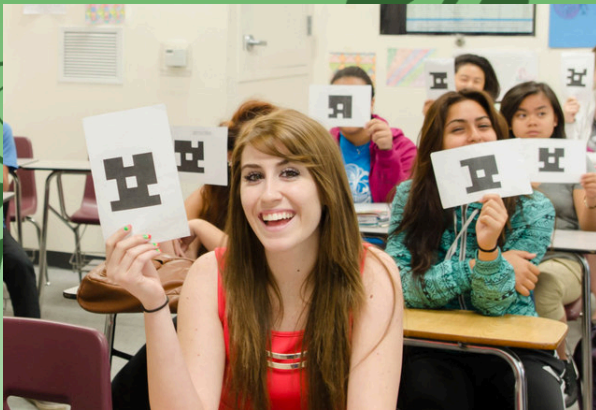
Microsoft Forms

Free as part of your Glow/Office 365 account, forms are so simple to set up and distribute. Quickly assess student progress and get feedback with easy-to-create surveys, quizzes, multiple choice and more. Setting up takes minutes and you get real-time feedback as pupils complete their responses. Display or send the link, or create a QR code. Forms can be used in class during learning or as exit passes or even as homework.

https://forms.office.com
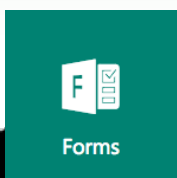
Socrative

Socrative is a well established, and one of the best, free web tools around and has a broad range of applications. It's really very simple to set things up in preparation for a lesson, or even on the fly. Created by teachers, you can set up multiple choice, true/false and short response questions and it provides you with very good visual displays of where the learning of the class sits. Socrative apps for student and teacher are also available.

http://www.socrative.com

Answer Garden

This is a really minimalistic feedback tool that requires no login or account to use. Simply "plant" a question and watch a word cloud grow as you start to collect responses. Set answers to 20-40 characters and enjoy the brainstorming and quick responses build up a really neat feedback session. We've used it on entry and exit and to build understanding of story and character and to develop literacy skills.

https://answergarden.ch

Forms

socrative

News & Reviews

Google Expeditions

The Google Team have been visiting some of our schools with their Google Expeditions tech. Using Google Cardboard and some phones pupils can go on virtual trips to Mars, Machu Picchu, underwater at the Galapagos Islands, Barcelona or dozens of other places. Digital technology is now giving our young people the chance to explore beyond what they read in books and immerse themselves in a way that was not feasible before. In the **SAMR** model we'd say that that was definitely **Redefinition.** Here we have pupils at Inchture Primary travelling the world! @inchturePrimary

Free Duck Duck Moose!

No It's not a campaign to release three animals from captivity - it is the amazing news that the brilliant apps from Duck Duck Moose are now available for **FREE** on the app store. Made for early years and including apps like Draw and Tell, which has endless crayons, paint, stickers and paper to create a picture that you can narrate over and tell a story or tell us what it represents. Brilliant!

How good is our ICT?

Interested in having your say about ICT in the Council? Want to know more about how the ICT you use last year was rated last year; what difference your feedback made; and how you can contribute to this year's ICT Customer Satisfaction Survey?

Between 17 October and 4 November 2016, look out for your personal email invitation to complete a short online ICT Satisfaction Survey from our ICT benchmarking partners SOCITM.

We know everyone says "your feedback is important to us"....... but we really do mean it. Here's what you told us in last year's survey and how we used your feedback in 2015/16.

socitm

Book Creator Comics!

We're mad daft for Book Creator because you can pull together all of the images and video you've created and paste them in a book, add drawings and sounds and narrate over the pages if you want and it is **SO** easy to use. Now the team have added the ability to create your own Comic books. This can be used at every age and stage to tell stories and describe understanding - write the history of Egypt, tell the story of your summer holidays as an amazing adventure or explain world religions. Your only limit is your imagination.

Primary Computing Science CPD

Through Nov/Dec we'll be holding twilight sessions with Education Scotland on Computing Science in Primary, sharing a wealth of ideas and resources to bring this important part of the curriculum to life. You'll be surprised at how easy and engaging it is to develop computational thinking in the classroom. Look out for an email in the post and check out the Digital Learning Blog for dates and how to sign up.
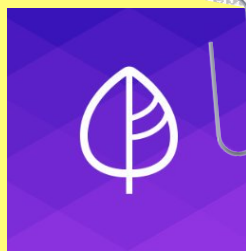
Free Animation

If you are looking for a really easy stop frame animation tool then we'd suggest having a look at **Lego Movie Maker**. All you need to be able to do is tap on the screen for every image you need for your animation. You can set the "onion skin" option so you can see the last image ghosted on the screen which lets you see the last position of your plasticine, leaves, pen marks etc - you don't even have to use lego!. We've seen it used to create those popular whiteboard animations , pupils telling the history of Stirling Bridge and explaining solids, liquids and gases using buttons. **Free** on the App store.

Microsoft Classroom

News just in! Microsoft Classroom will now appear as a tile in your Office 365 apps in GLOW. This will become your homepage for managing all of your classes. Organize multiple class sections, create and grade assignments, collaborate with other teachers in Professional Learning Communities (PLCs), and provide feedback to students.

Look out for updates on the blog after the holidays or check out http://bit.ly/2bXGvpI

Padcaster

If you'd like to take your movie making in class to another level across the school, for animations, news reporting, your school show and green screen work then you could consider this piece of kit which acts as your own professional TV studio. The Padcaster is a box that will host an iPad and comes with a lighting and sound rig with a lens thread and a .45 wide angle lens.

You can purchase a tripod and a green screen kit alongside this for the whole solution. The Padcaster itself comes in at approx £275 depending on what size of iPad you will be using it with.

Find out more from mconlon@pkc.gov.uk

Yammer

Yammer is the social network on Glow for learners and teachers and is heading towards 15,000 unique users across Scotland. Teachers have been using it for Professional Learning Communities or setting up groups for pupils in their class to chat about learning beyond the walls of the school. It's like twitter and facebook but secure for learners and staff Why not search and join the PKC Digital Learning group to get a feel for it. We love that it is also an **app** for your phone which saves you going in to Glow to check the latest conversation and you get notifications just like you do with other social networks.

The progress we'll make in developing Digital Learning and Teaching in Perth & Kinross will be wholly determined by the community we develop and the stories we share with each other about how we are using the tools at our disposal and pupil engagement with them.

Please visit the blog, follow twitter and join the "PKC Digital Learning" Yammer group in Glow and share with us your experience.

https://blogs.glowscotland.org.uk/pk/digitalpkc/

Join the Yammer group by searching in Yammer for

PKC Digital Learning

Solve your glow problems at

glowadmin@pkc.gov.uk