



Full STEM Ahead

The newsletter of the RAiSE Team Issue 8 August 2018



Hope you had a great summer!

Check out the [Full STEM Ahead site](#)

Support and inspiration at a click of your mouse!

Click here for the printer friendly version of our newsletter



Save the date

[Maths Week Scotland](#)—10-16 September

[Digital Day](#)—13 November

What's new online

This month we have added links to the following pages:

Maths: [Sumdog](#)

Risk Assessments: [ClassDojo](#)

Useful Resources: [Royal Society of Edinburgh](#); [Holywood Trust RSE Talks 2018-19](#)

Farewell Keith

Sadly we said farewell to Keith Walker as he left us at the end of last session for the sunny slopes of retirement. Keith will be well known to many of you not only as part of the RAiSE Team but also in his role as Outdoor Learning Development Officer and, before then, secondary science teacher (indeed, Keith probably taught many of you!). He was a valued member of our team bringing with him not only his expertise in science but also his knowledge of our schools. But we will probably miss him most for his enthusiasm, humour and unfailingly positive outlook. We are sure all of you who have worked with him and benefitted from his wit and wisdom will join us in wishing him well. You'll be genuinely missed, Keith!

As featured on Yammer

The session has only just started but so far we've shared info on:



- National Maths Week Scotland
- Generation Science 2019 programme
- Talk Money Week Scotland
- STEM Clubs
- Digital Literacy skills
- The Primary Science Education Conference
- SSERC CPD opportunities
- and much, much more!

We have also had staff sharing activities which have worked for them, and asking for new ideas on how to deliver aspects of science.

Join our Yammer group and make sure you don't miss out.

"Never trust a computer you can't throw out a window."

Steve Wozniak
Co-founder of Apple

CPD coming soon

Thank you to everyone who responded to our recent survey about your STEM needs. Based on your feedback Karen and Carol have planned an extensive programme of CLPL twilights for this session. These will include:

- Using the WeDo 2.0
- Meet the Robots
- Introduction to Micro:bits
- Integrating Technology and Literacy
- Introducing the Subsea UK STEM Project
- Starting with Scratch
- Addressing Science Skills
- Textile Technology
- Introduction to Cubelets
- Using Green Screen
- Get Hands on with SSERC activities:
- Sound
- Chemistry
- Forces
- Inheritance
- Electrical circuits
- Constructing with wood
- Technology Orienteering
- Introducing Tinkercad
- Computational Thinking using Barefoot
- Learning through 'The Lost Words'
- Improving Gender Balance
- Assessing STEM
- Digital Schools Award
- STEM Capital - what is it and how to develop it
- Introducing the Astrobiology Project

As you can see, there will be lots to choose from so check out the CPD directory to find out when courses are available near you. In addition to our CLPL programme, Karen and Carol will also be available to come to your school to do bespoke training with you and your class or colleagues. Just drop us an email and let us know what you're interested in.

If you do just one thing this month ...

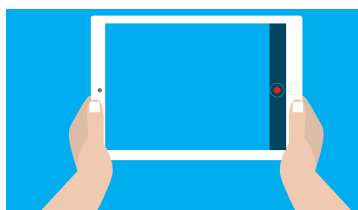
... take a look at www.reachoutcpd.com.

A collaboration between Tigtag and Imperial College London, they offer a fantastic range of FREE online CPD courses for primary teachers covering everything from plants to planets. Each one provides teachers with concise topic knowledge and a whole raft of resources to use in class, including captivating short videos, practical activities and experiments, whiteboard visuals and more. Topics covered include:

- Seasonal Changes
- Environment and Habitats
- Light and Sound
- Forces and Magnets
- Future of Energy
- Working Scientifically
- Food and Feeding
- Body Systems
- Plants
- Planet Earth and Space
- Animals and Humans
- Rocks and Soils

There is so much more to discover and each unit only takes about 20 minutes to complete, so we encourage you to try it out (and record it in your GTCS profile!).

iPads



Great news! You can now purchase iPads centrally (still using your school budget though) and have them connected to your school network. These centrally purchased iPads will also have access to a range of useful education apps. Contact EducationICT@dumgal.gov.uk for more information and support. Unfortunately, it is not yet possible to add devices already purchased by schools to the school wifi, however, watch this space. Bring Your Own Device (BYOD) is being piloted in the Authority and if successful may be rolled out to more schools in the future.

If you are lucky enough to have access to iPads, then Apple provides some good support to help you use them effectively and innovatively in your classroom. Find out more here: <https://www.apple.com/uk/education/>

Hollywood Trust RSE Talks

The Royal Society of Edinburgh (RSE) in collaboration with The Hollywood Trust, has launched their 2018-19 brochure of school talks. All of the talks are by experts, keen to enthuse and excite students from P6 to S6, on a wide range of subjects from biology, astronomy and physics to literature, culture and the arts. Many of their speakers will work with you to tailor their talks to fit with class curriculums and for different age groups and class sizes. In their programme, [Hollywood Trust Talks 2018-19](#), you will get a flavour of some of the speakers they have available, along with their lecture topics. If, however, there is a particular topic that you would like to cover, just get in touch and they will endeavour to find a speaker to suit.

The talks are FREE to schools. The RSE will cover all speakers' costs, including travel and accommodation. All the school needs to provide is a venue for the talk and, of course, the audience! If you would like to invite them to your school then contact Kate Kennedy, Outreach Officer, 07502 111 610, email kkennedy@these.org.uk, for further details.



General Data Protection Regulations (GDPR)

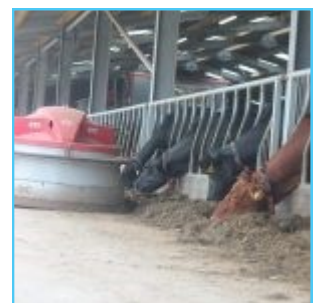
You can hardly have missed the mass of emails hitting your inbox asking you to confirm your agreement or re-register with websites due to the GDPR changes introduced last month. However, be careful about what you are agreeing to. Some sites, such as Accelerated Reader, have asked schools to sign and return new contracts, but **do not sign any contracts without first referring to Susan Martin, Education Support Services Manager**. She will be able to obtain appropriate legal advice for you to ensure that the contract/agreement is a Local Authority one and does not leave you personally liable.

These changes have also raised concerns amongst teachers about whether sites which require staff or pupils' information to be shared (ie to create pupil accounts) comply with regulations. Some have questioned whether sites such as SeeSaw or Class Dojo are okay to use, having heard that they are banned in some authorities but approved in others. In D&G schools should follow the guidance provided by the [Procedures for Assessing Suitability of Websites Which Require Pupil and Staff Personal Details to be Registered 2017](#). This provides a flowchart to guide you through the process of assessing websites, and a matrix to assess the level of risk. In addition, there are blank forms to record your risk assessment and seek parental permission. You will find partially completed forms for some commonly used sites on the [D&G Risk Assessments](#) page of our website. We are working to try to cut down the amount of paperwork schools need to complete for the most commonly used sites. Please use the survey above to tell us the sites you have pupil accounts on and would like to see included in a more streamlined system.

RAiSE Team Visit D&G

We are one of eight authorities who are part of the RAiSE project, and towards the end of last session we were delighted to welcome Primary Science Development Officers from across Scotland and Gayle Duffus from The Wood Foundation (who provide funding for RAiSE) to Dumfries and Galloway. Karen Creighton put together a full and wide-ranging two-day programme showcasing rural STEM. We visited Threave Estate, Tongland Hydro Station, a robotic milking parlour, egg production units, a gin distillery and Cree River Hatchery, as well as meeting with representatives of RHET, The John Muir Award and the Scottish Dark Sky Observatory. We also made charcoal with Keith Walker! Everywhere we went, we saw STEM in action, and our visitors were particularly struck with how high tech some traditional industries, such as dairy farming, have become.

Often we think of STEM industries as being located in the central belt, yet all of this is on our own doorstep. Plus they are keen to work with schools. If you would like support in making contact with STEM industries near you, get in touch with RAiSE Teachers, Karen Creighton or Carol Moyes.



The Digital Divide

The RAISE Team attended the Learning Through Technology conference in Edinburgh and as you would imagine, there were lots of examples of schools using technology to enhance their pupils' learning, but an interesting theme to come out of it was that of the 'digital divide'. This theme was picked up on in an Insight article in Tes Scotland (15 June 2018) which opened with the statement: "The 'digital divide' among pupils is a well-known factor in Scotland's attainment gap between rich and poor. But the failure of many teachers to get to grips with new technology may be worsening the problem - and leaving students at a further disadvantage." They also stated that 90% of teachers, based on a Tes Scotland Twitter poll, don't feel "they have the tools they need to make the most of technology in their classrooms." Infrastructure and access to technology obviously have a part to play, however, a number of teachers also expressed concerns that they didn't have the knowledge or skills to make the most of the technology they did have. The RAISE Team will be in post next session, so please do get in touch if there is an aspect of technology you would like support with and, together, let's close the digital divide in our schools.

School Showcase

Wallace Hall



Wallace Hall Primary School early years and P1 pupils had a fantastic time integrating STEM with Literacy. They have been carrying out a number of themed activities using a beautiful pop-up version of Roald Dahl's Charlie and the Chocolate Factory as inspiration. The project was an opportunity to enhance transition for their rising 5s as well as encourage parental engagement. Visit our [blog](#) to see more pictures.

Are you running an afterschool club, have entered a competition or just have some great STEM curricular work? Have it showcased in the Full STEM Ahead newsletter.

Don't be shy! If you have a piece of work or activity you would like us to share with fellow practitioners across Dumfries and Galloway, then send a photograph and short description (no more than 150 words) to gw08moyescarol@ea.dumgal.sch.uk and look out for yourself in next month's issue! Even better, upload it to our Yammer group.

St Joseph's

Congratulations to Brodie Thomson, S2 pupil at **St Joseph's College**, who was one of only 24 pupils from across Scotland to be awarded the Scottish Engineering Leaders Award recently.

Penninghame



P1 being introduced to Google Sketchup. They loved it! Showed them the basics, how to draw shapes and how to make them 3D and off they went on their own exploring. They were so excited! Visit our [blog](#) to see more pictures.

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