



Full STEM Ahead

The newsletter of the D&G RAiSE Team Issue 12 May 2019

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



As featured on Yammer

We hope you are finding our weekly round ups helpful, but have you also spotted the following on Yammer?

Updates from: the 2nd D&G STEM Conference; Topical Science Update; Maths Through Stories; Bang Goes D&G; Skills Development Scotland;

Opportunities from: Maths Week Scotland Small Grants Fund; Caerlaverock Wetland Centre;

Challenges and competitions from: National Schools Partnership's Glass Guardians recycling project;

FREE Resources from: Crash Course Kids—Science; Royal Bank of Scotland—Money;

Missed it?! You can still catch up; just search the group to find old posts quickly.



CPD coming soon

You can now view upcoming CPD courses, and book a place, by visiting the D&G Council Launch Pad in Glow (click on the icon of the building with columns [below the icon of a house]) then selecting the DG CPD app tile.

- 27 May 19—Intro to D&G Closing The Numeracy Gap Intervention Materials—Glenluce Primary
- 28 May 19—Intro to D&G Closing The Numeracy Gap Intervention Materials—Castle Douglas Primary
- 28 May 19—Microsoft OneNote Class Notebook—Lockerbie Academy
- 30 May 19—Microsoft Teams—Wallace Hall Academy
- 30 May 19—Intro to D&G Closing The Numeracy Gap Intervention Materials—Lockerbie Primary
- 10 Jun 19—Microsoft Forms—Moffat Academy
- 11 Jun 19—Microsoft OneNote Class Notebook—St Joseph's College
- 12 Jun 19—Microsoft Forms—Wallace Hall Academy

Thank you to everyone who has come along and supported our CLPL programme. We hope this has made you feel more confident in delivering STEM, and/or has inspired you to try something new with your pupils.

We will be looking at our programme for next session, and would be interested in hearing of any aspects of STEM in which you would like training. Please contact Karen at gw08creightonkaren@ea.dumgal.sch.uk to share your thoughts.

2nd D&G STEM Conference

We had been pleased with how our first conference went last session, but our 2nd STEM Conference proved to be even bigger and better!

Our key speakers from The Wood Foundation, Education Scotland, and our own Authority, all gave a consistent message—STEM skills will be vital to our young people as they enter the jobs market.

Responding to feedback from last session, this year delegates were able to select from a range of workshops in addition to speaking to partner organisations in our Marketplace.

A new, and very popular, feature was our Schools' Showcase. Staff and pupils from across the region shared the fantastic STEM work they are doing. The knowledge and enthusiasm of the young people was particularly commented upon by representatives from Education Scotland and The Wood Foundation.

Of course we appreciate it is not always easy to get out of school, so we were delighted to be able to use QR code technology to share even more work from our schools. We include one of the codes in this month's newsletter, but look out for more on our Yammer group.

Plans are already being made for next year's conference and we look forward to welcoming even more delegates in 2020.



Scan me

Spreading the STEM message

Karen and Carol have been out and about recently supporting some major STEM events.

They were happy to support the recent Bang Goes D&G event organised by the Developing the Young Workforce (DYW) team. The event occupied the entire Easterbrook building at the Creighton with almost every secondary school in the Region bringing their S1-3 pupils. It was a fantastic event with a wide range of STEM industries represented.

They were also delighted to be invited back to the D&G Science Festival at the Easterbrook Hall. Organised by the Glasgow Science Festival team, it was a fantastic day out for families. The RAiSE team stand was again popular with a chance for families to learn about thrust and jet propulsion by challenge each other to a balloon rocket race; and to learn about buoyancy but floating and sinking fruit and veg.

3 Minute Learning

Researchers at Glasgow University have developed a resource called 3 Minute Learning which uses short, graded passages about science topics to encourage reading skills. Based on the principals of reciprocal reading, pupils are asked to read a passage then answer 4 questions around predicting, summarizing, questioning, and clarifying.

So far it has been used in secondary schools with very positive feedback, especially for engaging reluctant readers. However, as they are graded, many of the passages would be appropriate for primary pupils. The team who have developed it are keen for some primary schools to test it, and if you would like to try it you can sign up here: <https://3ml.org.uk>

If you do try it could you please give the team some feedback using the short survey below. The RAiSE Team would also be interested to hear what you thought of it.

<https://www.surveymzmo.com/s3/5009291/3mlTeacher-FeedbackRAiSE>

Just some quick comments would be appreciated.

“There’s nothing I believe in more strongly than getting young people interested in science and engineering, for a better tomorrow, for all humankind.”

Bill Nye,
The Science Guy

Could you be part of the STEM team?

Although our formal involvement in the RAiSE Project comes to an end this session, it won’t be the end of support for STEM in D&G. While Carol Moyes will be retiring, Karen Creighton will continue in the role of Principal Teacher STEM and will be joined by a team of practitioners from across the Authority to build on and further develop the work of the RAiSE team.

If you would like to be part of this exciting opportunity, further details can be found in [Engage \(13 May 2019\)](#) and letters of interest should be made to David Maxwell by Sunday 26th May 2019.

Mission Moon

A number of schools have signed up to take part in the First Lego League Junior Mission Moon challenge. One school taking part is Penpont Primary, and teacher Lynne Smith tells us that her pupils are really enjoying the project. ‘They are so engaged in the activities, and the team working skills they have demonstrated have been fantastic.’



Participating schools will celebrate their achievements at an Expo at Dumfries and Galloway College on Thursday, 13 June. If you would like to be part of it, you still have time to get involved if you can allocate a couple of days to work on the challenge. You can purchase your Mission Moon Inspire Kit (£35 per kit; £125 for 5 kits) and register for the event at <https://firstlegoleague.theiet.org/junior/>

Learner in STEM

My name is Helena and I am an amateur astrophotographer and astronomer from Scotland. I've always had a strong interest in space from a very young age but that interest grew even further when back in 2016 I applied for a programme called 'The Dengineers'. My application was successful and they came and built a dark sky observatory in my back garden! Having the den has changed my views on astrophotography and astronomy. It has motivated me to do more with my photographs, promote my work and even create a YouTube channel to inspire young women in science!

I am currently an S2 pupil studying at The Douglas Ewart High School. Due to my age, I haven't chosen my exam subjects yet. However, I am extremely passionate about the sciences (particularly physics) and hope to be able to take them on in S4. There is a wide range of fields that you can choose to go into when you study astrophysics and I have an interest in many of them. These include Martian robotics, training astronauts, working at The European Space Agency or even becoming an astronaut and travelling to The International Space Station...or even Mars! Recently, I've decided to set up an Indiegogo campaign so that I can raise money for a high-quality telescope to take my astrophotography and astronomy to the next level. Having this new equipment will allow me to put more content out on my YouTube channel, involve the local community by giving out tutorials and stargazing events and inspire young women in science even further! You will be able to find more information on my campaign via my Facebook page 'Helena's Astrophotography' or via my YouTube channel 'Helena's Astrophotography'.

We're sure you'll agree Helena is quite an inspirational and driven young lady, and will join us in wishing her all the best in her future plans!!

Do you have a learner who would fit the bill for our future "Learner in STEM" posts? if so, please let us know!!



Hall of Heroes video challenge

What did you do for Digital Learning Week? Did you try one of the Digital Learning Week activities? Or did you come up with something of your own? Whatever you tried do share it with us on the Yammer group—you could feature in our next Schools Showcase.

If you haven't tried anything yet, you're not too late. In collaboration with our ICT Development Officers, Janet and Laura, we are running our own

D&G video challenge around the Hall of Heroes at the National Wallace Monument. The Wallace Monument is celebrating its 150th anniversary, and 2019 also marks the first female figureheads to be included in the Hall of Heroes, so it seemed a fitting theme for our challenge.

It's easy to take part. All you have to do is to create a 60 second film about one of the heroes on display. These will then be edited together to create a short movie. Contact Carol on gw08moyescarol@ea.dumgal.sch.uk to be allocated your hero.

Pupils at Portpatrick Primary have just completed their video which you can see on our Yammer group. It took them about an afternoon to make, and teacher Mandy Whorlow tells us she got the idea from a biography of William Wallace she saw on the internet. 'Those willing to go on camera had a line each. Everyone else was on lighting, videoing and editing jobs.' she said. 'Two of my pupils edited the video using Serif Movie Plus that Karen kindly took us through last week. It was off topic, but we are in the middle of gathering evidence for our digital schools award so it was a very valid activity to do. The kids are proud of their effort. Glad we participated!'

If you need help do get in touch with Karen, Carol, Janet or Laura. Not only will it develop your video skills, it's also a chance to research a little about Scottish history and the people who shaped it.

The deadline to submit your 60 second videos is Friday 31st May, so get filming!



School Showcase

Portpatrick



As part of their week long digital technologies activities, they have been creating 'quicky' short animations on the theme of Natural Disasters using 2Animate.

Pupils have also taken part in our Hall of Heroes video challenge. See their fantastic biopic about William Wallace, and their animations on our Yammer page.

Whithorn & Garlieston



Great partnership has been established between the Cold Case Whithorn Team and Whithorn and Garlieston Primary Schools. An amazing opportunity for the pupils!

Use the link to view a video filmed during a previous input where the pupils were archaeologists:

<https://twitter.com/CaseWhithorn/status/1074693618336743425>

Cargenbridge



Thank you to Cargenbridge Primary for hosting RAiSE PSDOs from across Scotland and sharing their fantastic partnership with Dupont Teijin Films. Great to hear about the rich learning opportunities the partnership has provided for pupils.

Kirkcudbright



P6/7 and P7 at Kirkcudbright Primary welcomed Professor Lockhart (University of the West of Scotland) of BREATH, who led a workshop introducing the pupils to a 'Cinderella disease' prevalent in Dumfries & Galloway, COPD.

The 2 classes had the opportunity to measure their lung capacity, compare healthy / unhealthy lungs and construct 'breathing' lung models.

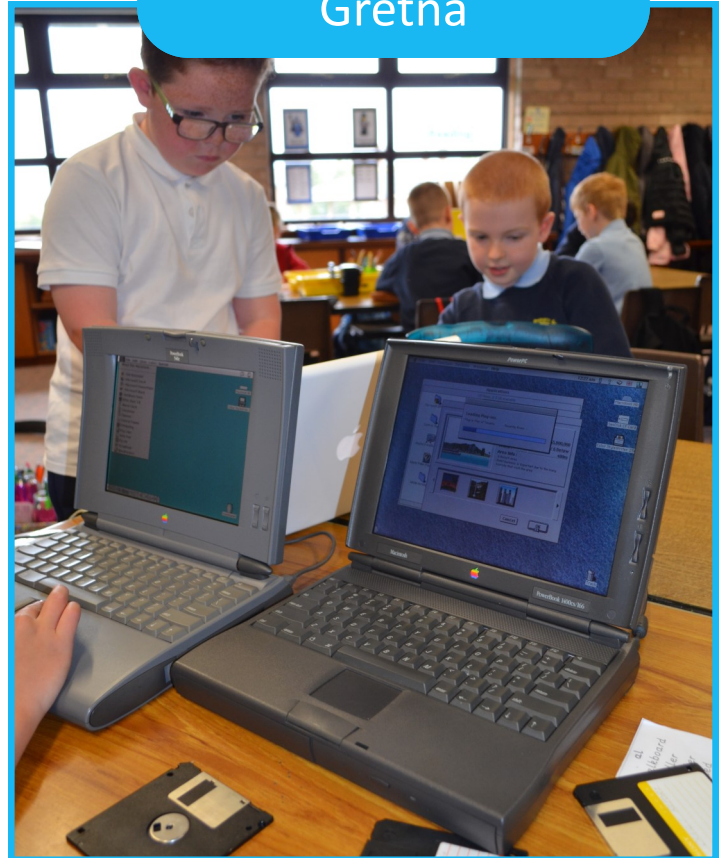
Many thanks to Professor Lockhart for this very informative and enjoyable input.

Colvend



Carol Moyes's favourite kind of morning! Introducing P5-7 pupils at Colvend Primary to coding. Great team work and problem solving.

Gretna



The laptop charging trolley at Gretna Primary is broken but this hasn't stopped P3/4 from doing ICT this week! Instead they tried out some old laptops, exploring how portable computing technology has evolved over the last 25 years. They all decided that the old PowerBooks, eMate and iBook were much heavier, bulkier and slower than Mr Dolderson's state-of-the-art ThinkPad!

Kirkgunzeon



Carol Moyes had another fab morning working on coding. Pupils were so focussed!

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.

Contact
US

Karen Creighton gw08creightonkaren@ea.dumgal.sch.uk
Carol Moyes gw08moyescarol@ea.dumgal.sch.uk

