



# Full STEM Ahead

The newsletter of the RAiSE Team Issue 7 May 2018

## 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

[Outdoor Classroom Day](#)—17 May

[World Oceans Day](#)—8 June

[My Money Week](#)—11-17 June

[Great Science Share Day](#)—19 June

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

[Digital Day](#)—13 November

## CPD Coming Soon

The RAiSE Team will be offering a range of twilight training sessions in term 4. Bookable now through CPD Directory:

Digital Technology Outdoors

28 May—Rephad Primary, Stranraer

29 May— Kirkcudbright Primary, Kirkcudbright

30 May— Troqueer Primary, Dumfries

7 June— Hecklegirth Primary, Annan

Green Screen Training

22 May—Hecklegirth Primary

23 May—Sandhead Primary

Introduction to Animation and Coding for Learning Assistants

1 June—9.30 am—Castle Douglas High School

1 June—9.30 am—Maxwelltown High School

1 June—1.00 pm—Stranraer Academy

1 June—1.00 pm—Annan Academy

Want to attend but the time or location doesn't suit? Want support with a different aspect of STEM? Get in touch with any member of the RAiSE Team who will be happy to discuss bespoke training for your and your colleagues.

## What's New Online

This month we have added links to the following pages to the Full STEM Ahead website:

General Support & Resources: [Education Scotland Technologies Planning](#)

Planning: [Computer Science Overview – Mr Milliken, Busby Primary](#); [Skills Development Within the Sciences – Stranraer Cluster](#); [Technologies Planning – Education Scotland](#)

Biodiversity & Interdependence: [Science & Plants for Schools](#)

Maths: [Mathsticks](#)

## As Featured on Yammer

Join our Yammer group, [D&G Full STEM Ahead](#), and find out more about:

- Food for Thought funding opportunities
- Food education resources
- CPD Opportunities from the University of Edinburgh
- Links to newsletters from: Education Scotland STEM; the Scottish Mathematical Council; and the British Science Association
- Sumdog contests
- Story Time From Space
- Topical Science Update
- How to get a rain gauge from SEPA

Plus links to great resources and ideas not featured here. Don't miss out—ask to join today!

## We'll Be Back

We are delighted to confirm that the RAiSE Team will continue next session, albeit in a slightly reduced capacity. While Karen Creighton and Carol Moyes will continue, Keith Walker will be retiring at the end of this session.

We know many of you will have benefitted from Keith's support, not only through RAiSE but in his previous role as Outdoor Learning Development Officer. We'll miss his wit and wisdom but wish him well in his retirement.



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## Help with STEM Planning and Assessment

We know many schools are revisiting their STEM, and particularly Technologies, programmes and planning in light of the introduction of benchmarks and updated Es&Os, so we have added a new page within the General Support & Resources section where we will share examples of planning, programmes and progression from teachers, schools and authorities across Scotland. Developing planning can be a major task, but there is no need to 're-invent the wheel' ... you might want to change the tyres and up date the hub-caps however to suit your school's particular context.

If you would like to share anything that you have developed, or you know of a particularly good piece of planning and/or assessment work, please share it with us.

## D&G Science Festival

The RAISE team had a stand at the D&G Science Festival and it was non-stop from start to finish with about 100 families visiting our stand. They tried out a number of STEM related activities: Kapla blocks, pushing a skewer through a balloon (without bursting it!), investigating UV light, and being transported to a tropical paradise thanks to the 'magic' of green screen. Carol and Karen couldn't have managed it without the help of 7 fantastic S5 pupils from St Joseph's College, who kindly volunteered to give up a Saturday afternoon (and just before their exams too!).

It was a great opportunity to chat to parents about STEM as well, and we are keen to meet more parents. If you would like a member of the RAISE Team to join you at a parents' evening or summer fayre to run an interactive stand, then we'd love to hear from you.

*"That's well cool!"*

*Carrutherstown Primary P4/7 Pupils on using Lego WeDo for the first time.*



Delegates try out activities from Glasgow Science Centre

## Digital Schools Award Scotland



Digital Schools Awards Scotland is a national awards programme which aims to promote,

recognise and encourage a whole school approach to the use of digital technology in primary and secondary 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 and secondary level while providing practical support and encouragement. The programme is supported by industry partners HP, Microsoft and Intel in Scotland.

Calside Primary were awarded their Digital School status in November 2016, one of the first in Scotland, but there are another 23 schools across the Authority who have registered and will hopefully soon be joining them. Is your school one of them?

If not, you might want to give it some thought. You can find out more about the award at <https://www.digitalschoolsawards.co.uk/> and by visiting our [Full STEM Ahead](#) site where you will find full details of the Evaluation Guidelines.

## First STEM Conference

Last month, we held our first STEM Conference, with over 80 representatives of primary and secondary schools joining us.

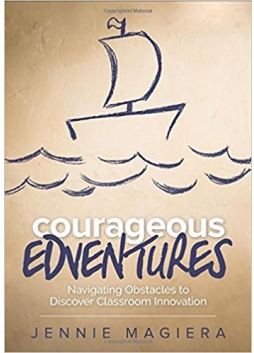
The event was held at Dumfries & Galloway College who kindly provided refreshments and lunch. There was also the opportunity to tour their facilities and chat to staff about ways in which the College can support our schools.

It was a busy day, with speakers from Education Scotland, STEM Ambassadors, Digital Schools Awards Scotland, and Improving Gender Balance Scotland all sharing current initiatives and opportunities to support our young people in STEM learning. But it wasn't all listening; Glasgow Science Centre gave participants the chance to get hands on with investigations using pendulums.

In addition, there was a lunchtime 'market place' where attendees were able to network with a wide range of local and national organisations and find out more about the opportunities they offer.

Feedback has been extremely positive and plans are already being made for a similar event next session.

## Book Of The Month



**Courageous Edventures—Navigating Obstacles to Discover Classroom Innovation - Jennie Magiera - ISBN: 9781506318349**

As teachers we all have a role to play in raising the STEM capital of our pupils, and one way we can do this is by actually using technology ourselves in innovative ways. But how to get started? While we may be willing to try something new, the challenges of a typical teaching day can often send us hurrying back to the safety of the familiar. If that's you, then you are not alone.

Jennie Magiera may have written the book, but she would be the first to recognise the challenges that come with innovation:

*"On July 29, 2010, I was getting ready for bed and decided to check my e-mail. As I read through my messages, I burst into tears—big, melodramatic sobs. My husband peered over my shoulder to see what I was reading and exclaimed, "Oh, congratulations, honey! You got the iPad grant! Look at you, crying because you're so happy." As he pulled me in for a congratulatory hug, I sullenly corrected him. "No, Jim. I'm not crying because I'm happy. I'm crying because now I actually have to do all the garbage I made up in the grant. I have no idea what I'm doing."*

And that more or less sets the tone for the book! It explains what innovation is, and gives practical advice and strategies to help you achieve it in your classroom—even if you don't have a class set of iPads!

### If you do just one thing this month ...

... take a look at the [STEM Learning](#) website. It's full of fantastic resources and CPD opportunities for primary and secondary, such as:

[The Lighthouse Keeper Challenge](#) -everything you need to run a STEM activity day for 7-11 year olds

[Graphing Stories](#) – which develops graphing skills for secondary pupils using videos

[Host an Alien Invasion](#) – E is definitely for Excitement in this great idea for a STEM day for 7-14 year olds

[Assessment for Learning in STEM Teaching](#) – an 18 hour online course for primary and secondary teachers

There is so much more to discover, so we encourage you to have a look.

### School Showcase



### Heathhall

Miss Douglas and her P1 class at Heathhall PS decided to try something a little different for assessing their weather topic. Miss Douglas says: 'Turns out Green Screen really isn't that difficult, even with P1, and the kids absolutely love it.'

Computer animation in action at Penninghame. So engaged! Peer assessing and debugging with no prompting.



### Penninghame



## School Showcase



St Ninian's

Congratulations to Ben, P3/4 pupil from St Ninian's PS, who has been crowned Scotland's Power Wise Champion by electricity firm SP Energy Networks. Ben entered the PowerWise drawing competition with his interpretation of what he would miss most if he had no access to electricity – the lights, being able to charge his tablet and of course, his tablet.



Gretna

Gretna Primary Science Club have been learning about chemical reactions and polymers by making 'slime'! We explored how by varying the concentrations of PVA, water and borax solution we could alter the consistency of slime produced.



Gretna

The boys and girls in Gretna Nursery were really excited to dismantle and explore the parts of the old nursery computer after it broke! Maybe inspire a future Bill Gates or Steve Jobs in the audience?



Wallace Hall

Worldwide STEM success!!  
Congratulations to the Wallace Hall Academy team who competed at First Robotics Competition in Detroit, USA. They won 1st Place for teamwork in the world! Many congratulations to the learners and staff on this success. What a fantastic STEM experience to have taken part in. WOW!

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