



e-Newsletter 47

Welcome to the last Discover Primary Science and Maths E-Newsletter of 2016! We are taking this opportunity to fill you in on the final few DPSM updates of 2016 before a new exciting year of Primary Science begins...

DPSM Programme Updates

Teachers' Continuing Professional Development

The wheels of CPD are well and truly 'turning'. Over 100 schools across Ireland are taking part in our programme of CPD this year.

CPD will help these schools to:

- Operate a whole school approach to engaging with science and maths
- Help grow a love of investigation amongst children by assisting teachers to apply the DPSM/ESERO framework of inquiry based science teaching and learning
- Make science teaching easier by using the DPSM Classroom Activities Planning Guide and DPSM/ESERO framework of inquiry to deliver the science curriculum in a cross curricular manner
- Understand the relevance of and be able to use space as a cross curricular theme in their planning and teaching

Registration of CPD will open again in early September 2017. More details will be sent to principals and will be found on the website at that time.

Science Foundation Ireland Discover Science and Maths Award

Last year 546 schools were presented with Science Foundation Ireland Discover Science and Maths Award and this year we want even more schools to get the recognition they deserve for all their STEM work.

Registration for your school's intention to apply has been open since the 3rd of October, and we are so excited to see so many schools registering already!

If you have yet to register don't worry as [registration](#) is open until March 16th, 2017. If you're a little bit anxious about what exactly is involved, don't be! Everything about the awards is [described on the website](#). There are also [toolkits](#) on the website with information on each step of the award.

We would strongly urge you to consider saving your STEM work in a digital Log of Evidence for the following reasons:

- You are helping save the planet
- Blogs and websites can be easily seen by parents and the wider school community
- It is more difficult to lose the Logs of Evidence as copies can be kept in the school
- If students upload the work on the digital media, then this can count as evidence in step 2 Technology

We have developed a special [Toolkit](#) on how you might submit a Digital Log of Evidence using a blog. We are promoting more towards submission of Digital Logs of Evidence in the coming years with an eventual phase out of hardcopy logs of evidence by 2019.





Ireland's Schools Make Big Bang In Science Video Competition

On Monday, 14th of November the winners of the ReelLIFE SCIENCE video competition were announced as Gaelscoil Riabhach from Loughrea, Co. Galway at primary school level and Patrician High School, Carrickmacross, Co. Monaghan at secondary school level.

Each school won €1000 for their individual projects. Fourth class students from Gaelscoil Riabhach interviewed NASA astronaut Ron Garan about his experiences aboard the International Space Station in their video about 'Life in Space'. While Patrician High School Transition Year students John Ubaldo and Colm Lonergan explored 'How The Sun Works' in their animated video.

[View all of the winning videos.](#)



Fourth class students from Gaelscoil Riabhach, Loughrea, Co. Galway. Photographer Brian Ó Meacháin.

CALLING ALL PRIMARY SCHOOLS – Would you like to train like an astronaut in 2017?

Are you a primary school teacher? If so, then don't miss the chance to register your class to the Mission X challenge 2017 and train with ESA astronaut Thomas Pesquet and his crew members! You have until 31 December 2016*! Find out more information on the ESA website.

* This date may change depending on the application procedures of the different countries so please check with your national Agency/referent. Lee Cummins is the Irish contact for the mission and you can contact him at leecummins75@hotmail.com or register online at <http://trainlikeanastronaut.org/>

National STEM Weeks

Maths Week 2016



Maths Week ran from the 15th to the 23rd of October and saw over 209,000 pupils taking part in Maths Week events all across the country.

Many events took place during the course of the week. James Tanton Mathematician-at-Large from the Mathematical Association of America entertained 1200 senior cycle students in the RDS. The Maths Museum of Catalonia presented workshops and shows in Tralee Institute of Technology, while Fernando Blasco presented in the Concert Hall, University of Limerick and in Cork Institute of Technology.

The events were not just aimed at primary and secondary school students but also adults and people in 3rd level education. There were events for parents designed to help their children develop a positive attitude to maths in Waterford and Dublin. World juggling champion, maths and science presenter Dr. Ken Farquhar entertained 300 students at an event in DIT Kevin St on Wednesday 19th October.

Everyone got involved in maths week! And if you didn't this year there is always Maths Week 2017!



Rosa Vallebella at the launch of Space Week 2016

2016 marked the introduction of a new national STEM week, Space Week.

Space Week aims to engage people of all ages in space-related activities that vary from small locally-organised events to larger events. Events are coordinated by Blackrock Castle Observatory and supported by Science Foundation Ireland and ESERO Ireland.

The Space Week website is packed with resources for teachers, families and organisations to help explore the wonders of the Universe around us all.

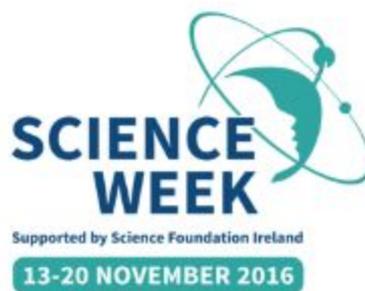
Over 7,000 people across the island of Ireland participated in activities in 2016 with events that included SpaceUp, Dream Big and Space for Growth.

Hundreds of primary school events took place, and many schools even enjoyed visits from astronauts and aquanauts. We look forward to seeing what's ahead for Space Week 2017!



St Pius X GNS getting involved in Space Week 2016

Science Week 2016



Science Week was a major success this year!

During Science Week there were over 800 events organised across the country with an amazing 200,000 people getting involved.

Regional Festivals were held in Cork, Kerry, Sligo, Limerick, Galway, Mayo, Cavan/Monaghan and the Midlands. Aiming to highlight the exciting world of science and how it shapes the world around us, these festivals featured a wide range of events including family open days, schools outreach events and events exploring the science behind things in our everyday lives from fashion to food to sport.

To check out what happened during Science Week visit our website www.science.ie.



Science Foundation Ireland Discover Centres

Discover Primary Science & Maths has a network of over 50 Science Centres with approved workshops and/or outreach resources. Check out what's happening in your area:

Global Action Plan (GAP)

For schools aiming for STEM excellence, GAP's DPSM accredited workshops are delivered in schools by a team of scientists and expert facilitators.

Now taking 2017 bookings, primary workshops are tailored to each group's interests, schedule and abilities. Strong links are made to the national curriculum with practical actions that each student, teacher and school can implement to make environmental impact.

For details on workshops such as Water Wise, The Colour of Science and more visit www.globalactionplan.ie/education.

Contact Gráinne on 01 883 2185 / education@globalactionplan.ie for further information and bookings.

Global Action Plan - Water Explorer

Water Explorer is a fun, interactive online educational resource engaging 8-15 year olds across 11 different countries to learn about water issues and develop the confidence to act on them.

Students navigate the website, completing a series of water challenges, and benchmark their progress interactively with their peers nationally and internationally.

This highly competitive programme is free and schools/youth groups can win prizes, workshops and a place at national and international Water Explorer Finals.

Register free online: www.waterexplorer.ie



Berrings N.S the national winners of Water Explorer

With over 2,000 teams and 50,000 Explorers in 11 different countries Global Action Plan Ireland's Explorers have made a huge splash this year!

Earlier this month Berrings N.S the national winners of Water Explorer represented team Ireland at the Water Explorer International Competition in London, placing second!

Convent of Mercy G.N.S were runners up in the national finals of Water Explorer, and their efforts saw international recognition when they were awarded the WAF Water Explorer prize. WAF acknowledges and promotes individuals and organisations all over the world that implement sustainable projects to secure water, clean air and food, and empower local communities - a huge achievement for this ambitious school.

As a result of Water Explorer, 95% of students believe that it is important to protect and save our water. To date the Water Explorer message has reached over 400,000 people, who have saved an astonishing 1.7 million m³ of water – that's enough to fill almost 600 Olympic-sized swimming pools.

Visit our website at: www.globalactionplan.ie

Lough Gur



Dr. Niall Smith from Blackrock College Observatory facilitated a Science Week workshop in the Lough Gur Heritage Centre on the 14th of November for Athlacca National School. It was a great success and included a visit to the Great Grange Stone Circle where children were encouraged to explore and experiment at this most historic of locations. Science is everywhere - especially in Lough Gur!

Visit our website at: www.loughgur.com

Irish National Stud



Irish National Stud is closed for the season, but never fear they will be re-opening on the 30th of January 2017.

Visit our website at: www.irishnationalstud.ie



IPCC are delighted to announce the launch of the 'Discovering the Wild Bogs of Ireland Primary Schools Education Pack'. The pack contains cross-curricular worksheets for primary school students. These worksheets are age appropriate and take a spiral approach to teaching students about bogs with four worksheet booklets available as follows: Junior/Senior Infants, 1st/2nd class, 3rd/4th class and 5th/6th class. This will ensure that children expand on their knowledge and understanding of peatlands as they progress through school.

The worksheets focus on SESE Geography and SESE Science curricular areas exploring bogs and also include activities that will develop students' skills in literacy and numeracy - key priorities in all primary schools. The senior worksheets also offer students practical investigations that can be undertaken in the classroom, encouraging inquiry-based learning.

These worksheets are now available to download at www.ipcc.ie/discover-and-learn/resources/.

Visit our website at: www.ipcc.ie

Brigit's Garden



Students from Killeen N.S during Science Week at Brigit's Garden.

There has been so much energy and excitement at Brigit's Garden this November for the Galway Science Festival 2016!

Over 400 primary school students came to Brigit's Garden during the Galway Science Festival to take part in the new 'Nature's Power: Energy in Action' workshops. Students generated electricity themselves using a hand-crank generator and compared it to how much energy is used by every-day appliances using plug-in energy monitors. They pumped water and saw hydro and wind energy in action using the Pumped Storage Hydro-electric generator. Students also viewed solar panels and a wood-pellet boiler which generate electricity and hot water for the centre.

Visit our website at: www.brigitsgarden.ie

The Rediscovery Centre



The Rediscovery Centre is an award-winning environmental research and education centre and the umbrella organisation for 4 social enterprises. In 2015 The Rediscovery Centre, in collaboration with Dublin City Council, received funding to redevelop the boiler house building in Ballymun into a bespoke national demonstration centre for reuse, innovation and education for sustainable development.

The repurposing of the boiler House will establish Europe's first 3D textbook as a centre for education for sustainable development highlighting resource efficiency. The centre will open in January 2017. It will operate as an education centre, eco destination & visitor attraction. Interactive exhibitions, participatory workshops and education programmes for all ages will challenge conventional thinking about how we live, inspire thought about how we use resources and stimulate positive environmental action.

For Bookings

Phone: 01 842 9811

Email: education@rediscoverycentre.ie

Visit our website at: www.rediscoverycentre.ie

Irish National Sailing and Powerboat School



Ahoy me maties!

Well, shiver me timbers but we Sea Explorers at the Irish National Sailing and Powerboat School in Dun Laoghaire can't wait to take you to the beach and the harbour for a school tour! We sure have a busy and exciting lesson planned!

Come with us to check out the plants and animals in their natural habitats. Fun and excitement are assured as children do what they love best! Investigating, examining, and exploring in the fresh air from Salthill to Seapoint! Following a hearty snack, our Sea Explorers magically transform into Pirates as we explore the harbour's surroundings, seeking out caves, seals and all the excitement a busy harbour has to offer.

The natives, especially the sailors are usually pretty scared when they see us in our pirate boats with our Jolly Roger flying high! With an "Arr" or "What be happening" from our motley crew, they tend to get out of our way pretty quickly as they know we are after some "booty"! Inevitably, we find something to keep our hearty crew happy!

Visit our website at: www.inss.ie



Get ready for Engineering Week 2017 at Galway Atlantaquaria

To celebrate Engineering Week 2017 we will be holding a special Exploring Engineering Workshop at Galway Atlantaquaria in conjunction with the Discover Primary Science and Maths Programme.

Students will carry out our Engineering Trail, developed and produced in association with STEPS Engineers Ireland. The trail looks at how important engineering is to the aquarium and covers topics such as structural engineering and how the building is constructed, mechanical engineering and how water is brought into and moved around our tanks, and bio-medical and bio-engineering and how marine life may hold the answer to immortal life and natural glues.

Students will also carry out an Explorers Engineering Activity on designing and building Flood Defences in the Nautilus Classroom.

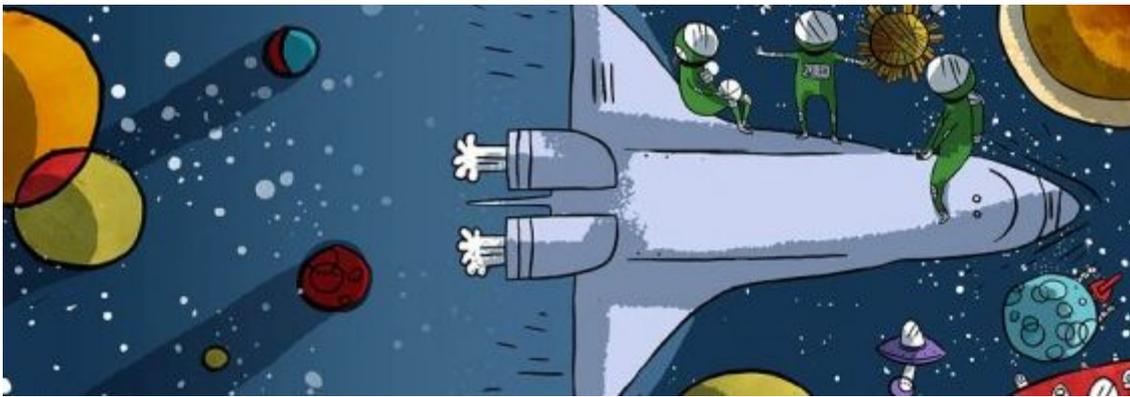
Exploring Engineering Workshops

Suitable for students from 3rd – 6th Class Primary Level

Class Size: Max 30 students

Cost: €5 per student

Visit our website at: www.nationalaquarium.ie/



CIT has loads of events planned during Christmas.

Jolly Christmas Junior Space Camp (December 18th, 12:00 - 13:30)

[Junior Space Camp](#) at Blackrock Castle Observatory has a Christmas twist. Make Snowflakes, SnowGlobes and Frozen Slime. A fun and hands-on workshop for 5-7 year olds.

One Parent must attend; booking is essential. €10 per child.

Junior Space Camp (January 8th, 12:00-13:30)

Explore and Experiment with Science! A fun and hands-on workshop for 5-7 year olds.

One Parent must attend, booking is essential €10 per child.

Christmas opening hours

Closed December 24th, 25th and 26th 2016 and January 1st, 2017.

Visit our website at: www.bco.ie



Santa at Imaginosity – Sunday the 27th of November

Come and meet Santa and his magical elves at Imaginosity on Sunday, 27th November (10am-6pm). During each session throughout the day, visitors will get the chance to join Santa and his merry elves for interactive festive story time in Imaginosity's theatre, and then individually meet Santa and receive their very own Christmas gift!

Santa experience costs €4 additional charge on standard museum admission rate. Advance online booking essential at www.imaginosity.ie!

New Year 'Curiosity Camp' at Imaginosity

This Christmas holiday, join the Imaginosity Team for a New Year 'Curiosity Camp' and explore the best Imaginosity has to offer, from Monday 2nd to Friday 6th January, 2017. Campers will explore different topics daily, from Science and Engineering to Drama, Art and Movement, alongside daily supervised play on the museum floor. Camp will run daily from 9.00am-1.00pm (4-6 years €120 per week) and 9.00am-2.30pm (7-8 years €135 per week), daily rates are also available.

Call 01-2176130 to book your child's place.

After-School classes at Imaginosity

Imaginosity's educational, fun after-school classes return for a second 10 week term in January 2017. All classes are suitable for children of all abilities, aged 5-9 years. Spanish (Monday), Art (Tuesday) and Curiosity (Wednesday), classes run once a week (3-5pm) for two hours, including an hour long activity and an hour of supervised play in the museum.

Term two runs from week commencing 23rd January to the week commencing 3rd April (excluding mid-term break week commencing 20th February).

All classes are €100 per child, per class for a 10 week term.

For further details on each class please visit www.imaginosity.ie, or call 01-2176138 to book your child's place.

Join Imaginosity's elves this Christmas for fun festive story time performances throughout December

Join Imaginosity's in-house Elves this December for a fun, fully interactive festive story telling performance. The 30 minute interactive workshop (suitable for children up to 9 years of age) led by the Elves, takes place in Imaginosity's in-house theatre throughout the month of December, and is guaranteed to get the whole family into the festive spirit.

Visit www.imaginosity.ie for all show dates and times. Performance is FREE with standard museum admission rates.

Festive workshops at Imaginosity

Workshops throughout the month of December at Imaginosity will follow a festive theme.

Visitors to Imaginosity can enjoy Christmas Story Time, Gingerbread Man Craft, Elf Training Boot Camp, Decorate a Polar Express Ticket, Candy Cane Lane finger painting and White Christmas snow globe craft.

All workshops are FREE with standard museum admission, visit www.imaginosity.ie to book.

Imaginosity are also launching their 'What's the story' competition in January so keep a watch out for that!

Visit our website at: www.imaginosity.ie

Griston Bog



In the next few weeks the walkway in Griston is going to be replaced.

Over the summer Griston Bog staff started to run tours for the general public. Groups have enjoyed learning about the special uses of certain bog plants, bird watching (this year we have seen a large number of Kestrels), investigating pond invertebrates and learning how turf was cut on the bog.

These tours take place monthly.

Visit our website at: www.ballyhouraoutdoorclassroom.com



Partner organisations

SEAI



Register for a Teacher CPD workshop at your school and learn about energy through the Primary Science Curriculum with Exploring our Energy resources - lessons and interactive whiteboard activities. Workshops take place after school and can count towards Croke Park hours.

To book contact Chloe on (01) 400 2225 or email seaiworkshops@eeu.antaisce.org
[View Primary resources on our website.](#)

Entries into SEAI's One Good Idea closed on the 25th of November. The competition allows pupils come up with their ideas for energy saving and tackling climate change and was open to all 3rd to 6th classes. Pictured above are last year's winners from Ardfert NS, Co Kerry.



Now going into its eighth year, the RDS Primary Science Fair will take place in 2017 at the RDS Dublin, 12-14 January , MIC Limerick, 19-21 January.

All the information you need to know about visiting the fair is available on the [RDS website](#).



SFI Discover, SFI Discover,

Wilton Park House,

Wilton Place,

Dublin 2.