



## Welcome

Welcome to this special edition of the JCT Science Newsletter, where we take the opportunity to tell you about our exciting new initiative called STE(A)M in Junior Cycle.

### The Vision

To provide Junior Cycle Teachers with rich STE(A)M CPD experiences in keeping with national and international best standards; this provision will allow for interdisciplinary responses to societal challenges in subject-specific and cross-curricular contexts.

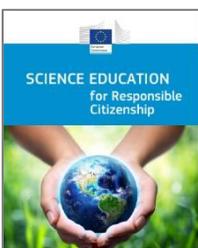
### Context and Rationale

The introduction of the new Science Specification in September 2016, and the move to outcomes based education across all subjects in conjunction with Junior Cycle reform, offers an exciting opportunity to provide novel professional development opportunities in line with some of the proposed action items outlined in the [“STEM Education in the Irish School System Report” \(2016\)](#).



This report proposes several actions aimed at supporting in-service teachers in the enhancement of STEM Education including the linking of formal and

informal STEM education providers in the creation of non-traditional and innovative CPD for STEM teachers.



A [report](#) to the European Commission which offers a 21<sup>st</sup> century vision for education suggests that Science Education has a responsibility to contribute to solving societal problems.

Collaboration between formal, non-formal and informal education providers can ensure relevant and meaningful engagement with all societal actors, thus providing valuable learning experiences in Science and active citizenship. The ability to

“engage with science as a reflective citizen” is an integral part of the development of scientific literacy, as outlined in the Curriculum Specification for Junior Cycle Science.

### Why STE(A)M?

The Irish report on STEM Education recognises the potential for both cultural and economic development through the intersection of STEM with The Arts and suggests that future initiatives should take account of the STE(A)M hybrid. The European report highlights how innovative and creative solutions to the grand challenges of our time (e.g. climate change, world food shortages, human health) are often found in the margins between disciplines. Finally, Junior Cycle reform, underpinned by the Principles, Statements of Learning and the Key Skills, provides exciting and unique opportunities for a fruitful engagement between Science and The Arts. It provides for the development of transversal learning opportunities that both enhance and transcend subjects, supporting the transition to Senior Cycle and the development of lifelong learning capacities. From this unique opportunity emerges the STE(A)M in Junior Cycle initiative.



### Our Partners

JCT are delighted to introduce our inaugural partners. This is an evolving partnership space and, as the initiative evolves with the roll out of more junior cycle subjects, we will invite new partnerships across STE(A)M disciplines. [Click](#) on each logo to visit our partners’ respective websites.

#### Amgen Biotech Experience (ABE)

[Amgen Biotech Experience](#) Scientific Discovery for the Classroom Ireland  
 Amgen Biotech Experience aim to empower teachers to bring biotechnology into their classrooms and to open the eyes of pupils to career possibilities involving molecular biology. The Amgen foundation seeks to advance excellence in science education to inspire the next generation of innovators.

#### BIAZA (British and Irish Association of Zoos and Aquariums)



BIAZA pursue their vision of conservation of the natural world through their participation in conservation programmes. They work to motivate and inspire people to modify their behaviour and to help with conservation through the provision of high quality environmental education.

#### Science Gallery Dublin

Science Gallery Dublin is part of a global science gallery network pioneered by Trinity College. Their educational programmes provide young people with the opportunity to pursue creative ideas that interrogate and explore the boundaries of art and science. It is their belief that young people hold the creative potential to tackle the world’s biggest challenges.



#### SEAI (Sustainable Energy Authority of Ireland)



SEAI has a vision for Ireland’s energy needs to be met in a way that is sustainable, affordable and clean. SEAI’s schools programme supports schools through the provision of resources, through its “One Good Idea” competition for primary and post-primary children and now through its engagement with STE(A)M in Junior Cycle

#### SFI/ESERO (Science Foundation Ireland; European Space Education Resource Office)



SFI promotes and supports the study of, education in and engagement with STEM. Through its association with ESERO, it promotes space as a theme to inspire and engage young people in STEM subjects while all the time aiming to catalyse, inspire and guide the best in STEM education.

#### World Wise Global Schools (WWGS)



World Wise Global Schools is Ireland’s National Developmental Education programme for post-primary schools. Set up in 2013, the aim of the

programme is to increase the number of schools engaging in quality development education, also known as global citizenship. Global citizenship supports people to fully realise their rights, responsibilities and potential as global citizens to take meaningful action for a sustainable world.

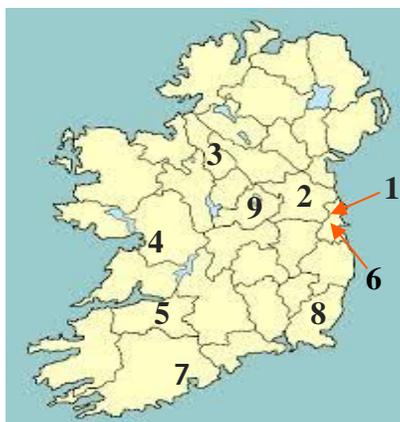


Inaugural partners CPD day, May 2017

## The Year Ahead

In conjunction with our partners, JCT are pleased to be able to offer numerous elective CPD events at a variety of venues. We would like to thank all our partners for their participation in this venture, which we hope will offer Science teachers a unique CPD experience. Should you wish to register for an event, please follow the appropriate link and give the necessary details. Due to anticipated demand these events will be offered on a first-come-first-served basis and waiting lists will be established where appropriate. All CPD events are designed to align with the Curriculum Specification for Junior Cycle Science, while also offering exposure to a broader STE(A)M agenda.

## Programme of Events



- 1 - November 18<sup>th</sup>
- 2 and 3 - November 25<sup>th</sup>
- 4 and 5 - December 2<sup>nd</sup>
- 6 and 7 - January 20<sup>th</sup>
- 8 - February 24<sup>th</sup>
- 9 - March 3<sup>rd</sup>

## Register by Following the Link

**Nov 18<sup>th</sup>**

VENUE: Science Gallery Dublin

**Scientists at work**

Contributing Partners:  
SFI/ESERO, ABE  
and Science Gallery Dublin

[Register here](#)

**Nov 25th**

VENUE: Tayto Park, Meath

**Sustainability**

Contributing Partners:  
WWGS, BIAZA  
and Science Gallery Dublin

[Register here](#)

**Nov 25th**

VENUE: Carrick-on-Shannon Education Centre

**“One small step...”**

Contributing Partners: SFI/ESERO, SEAI  
and Science Gallery Dublin

[Register here](#)

**December 2nd**

VENUE: Galway Atlantaquaria

**Sustainability**

Contributing Partners:  
WWGS, BIAZA  
and Science Gallery Dublin

[Register here](#)

**December 2nd**

VENUE: Limerick Education Centre

**Scientists at Work**

Contributing Partners:  
SFI/ESERO, ABE  
and Science Gallery Dublin.

[Register here](#)

**January 20<sup>th</sup>**

VENUE: Dublin West Education Centre

**The ‘H’ Factor**

Contributing Partners:  
SEAI, WWGS  
and Science Gallery Dublin

[Register here](#)

**January 20th**

VENUE: Fota Wildlife Park

**Sustainability**

Contributing Partners:  
WWGS, BIAZA  
and Science Gallery Dublin

[Register here](#)

**February 24th**

VENUE: Wexford Education centre

**Scientists at Work**

Contributing Partners:  
SFI/ESERO, ABE  
and Science Gallery Dublin

[Register here](#)

**March 3rd**

VENUE: Science Gallery Dublin

**The Scientist’s Dilemma**

Contributing Partners:  
SEAI, ABE  
and Science Gallery Dublin

[Register here](#)

CERTIFICATES OF ATTENDANCE WILL BE PROVIDED FOR ALL **STEAM** EVENTS

You can also register on our website [www.jct.ie](http://www.jct.ie)

Keep in touch:  
Twitter: [@JCTScience](https://twitter.com/JCTScience) join our 654 followers  
Queries: [info@jct.ie](mailto:info@jct.ie)  
or at our individual addresses [here](#).

Kind regards, The JCT Science Team