

## Welcome

Welcome to this special edition Newsletter where we take the opportunity to tell you a little of what has been going on with 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

Innovative and creative solutions to the grand challenges of our time such as Climate Change, Issues of Human Health, Use and Abuse of Big Data and Maintaining Biodiversity are often found in the margins between disciplines.

Junior Cycle reform provides for the development of transversal learning opportunities that both enhance and transcend subjects.

Collaboration between formal, non-formal and informal education providers can ensure the provision of cohesive and cross disciplinary CPD support for teachers.

The world is changing at a rapid pace. As teachers we have an opportunity to empower our young people to think, choose and

innovate in ways that will enhance and sustain our world, now and into an unknown tomorrow. It was on this premise that the theme for STE(A)M in Junior Cycle 2020-2021 was born.

## Solution Generation Online

### Our Partners



As we made the decision to move online, we were joined by 11 partners in offering 9 events, over three weeks in March. Thank you to the 500+ teachers who registered to participate in these events - some attending multiple events - with teachers from across multiple subjects attending this unique CPD opportunity.

## The Workshops

### Using Big Data to Solve Big Problems with AMGEN Biotech Experience Ireland

Scientists are increasingly using computers, online tools and shared big data sets to run research and uncover new insights. This interactive workshop explored how researchers use big

data to answer questions in medicine and in food science.

Resources for this workshop are available [here](#).

### Ethical AI in the Digital Age with ADAPT

How can we empower ourselves to be able to use technology and live in a balanced digital society where we are not just be driven by technologies but drive technologies? In this interactive workshop the ethical dilemmas arising from technological advancements were considered.

Resources for this workshop are available [here](#).

### Powering your Sustainable Future with ICRAG & GSI

In this workshop participants explored the renewable energy options available to power their local area. Spanning solar power, wind turbines and geothermal energy, this workshop encouraged participants to link the global challenge of climate change to local practicalities of sustainable energy both on and below the ground.

Resources for this workshop are available [here](#).

### Thinking with your Hands with DCCoI

Through a series of simple and practical origami exercises, Ruth Duignan, Design Lecturer in the Limerick School of Art & Design, demonstrated how teachers and students can use a design approach to solve problems. This workshop explored what design is and how the processes and techniques used by designers can be used in all areas of study to promote collaboration and excite students.

Resources for this workshop are available [here](#).

### The Value of Stuff with the Rediscovery Centre

This interactive workshop looked at how we value things through the lens of the circular economy as we move towards a more sustainable future.

Resources for this workshop are available [here](#).

### Biodiversity – The Future is in our Hands with BIAZA

This interactive workshop highlighted the drivers of biodiversity loss and explored why biodiversity is important to protect. Teachers considered how they and their students might tackle the impact of humans on biodiversity in local and global contexts.

Resources for this workshop are available [here](#).

### Our Energy Matters: At home & at school with SEAI

In this interactive workshop participants evaluated how their everyday actions contribute to energy use. Participants also explored what their key drivers are round conscious energy use.

Resources for this workshop are available [here](#).

### Past, Present & Future: Development of Medical Devices in Ireland with CÚRAM

This interactive workshop took participants on a journey exploring how events in Irish inventors' lives led them to develop devices prominently used in medicine to this day.

Participants also considered the role of form and function in the design process.

Resources for this workshop are available [here](#).

### The Global Grand Challenge of Antimicrobial Resistance with APC Microbiome and the School of Pharmacy UCC

Antimicrobial resistance is a societal challenge of global significance. This workshop explored problem solving, collaboration, argumentation and evidence-based decision making needed to generate a sustainable solution to this global challenge.

Resources for this workshop are available [here](#).

### Sharing the learning

Each night teachers shared their ideas for how the workshop connected to their subject and then contributed to a padlet, which allowed us to consider the cross curricular applications and connections.

### Let us know about your ideas!

As we begin to work with our partners to plan towards STE(A)M 2021-22 we are interested in hearing what you have to say.

If you did participate in STE(A)M 2021 online, then we hope you might contribute to [this short survey](#).

If you DID NOT participate then let us know how we can make STE(A)M in Junior Cycle more relevant to you by filling the survey [here](#).

### Stay in touch- and encourage others to connect!



- Share this newsletter with colleagues
- Follow us on twitter [@JCTSteAm](#)
- Use #steamination to share classroom practice
- Visit our webpage [www.jct.ie/steAm](http://www.jct.ie/steAm)

Regards, The JCT STE(A)M Team