

# Morning Session



8.30	Registration					
9.20	Keynote - Brendan Tangney, Bridge 21 TCD					
10.00	We need to talk - are we making the right connections?	Digital Magpie - stealing the ideas of others	Exploring Coding - Experience from the classroom	Genius Journals	A Look Inside the Youth Media Team	Snap 4 Arduino
10.30	The Provision of Computer Science in Upper Second Level Education Internationally	Connecting the Unconnected	Teaching & Learning with Minecraft Education Edition	Acmhainní Tacaíochta don Ghaeilge		
11.00	Break					
11.30	An Ethical Framework for Technology Enhanced Learning	Shakespeare, tablets and Bridge 21	PDST Digital Citizenship	Computing in the Irish Curriculum	ABAIR & léigh: nascanna idir na fuaimeanna & an litearthacht	MineCrafty - tips for Minecraft EDU project based learning
12.00	ATS2020 Project Using ePortfolios to foster transversal skills	Fit-for-purpose ICT infrastructure in schools	IDEAL - Integrating Digital Education into Adult Literacy			
12.30	Lunch					

# Afternoon Session

12.30	Lunch						
1.45	Create your own textbook using an iPad	Build a Bridge 21 and get over it	Meet Edison 18	STEAM Build your own musical instrument	Breakout EDU - an introductory workshop	Swift Playgrounds (coding on iPad for Primary and Secondary)	
2.15	Mindfulness through creative arts & technology	Online Learning on School Placement	PDST: Animating Education: Fís in action				
2.45	Excavating with the exceptional: Minecraft in gifted education	Computational Thinking for Post Primary Students	iTeam - The Student Tech Support Team	An Introduction to delivering Computational Thinking	Digital Storytelling: Adobe Spark & Flipsnack		
3.15	Teachers' perceptions of how iPad tech can support learners with autism	All Aboard: enabling staff and students to flourish in the digital age	Connecting the Pixels: Teaching Mathematical Concepts through Digital Media				
3.45	Break						
4.05	Capstone - Anne Looney						
4.55	Conclusion						

## Vendor Exhibition

1	Heremon Education Software	<a href="http://www.primaryplanningtool.ie">www.primaryplanningtool.ie</a>
2	CJ Fallon	<a href="http://www.cjfallon.ie">www.cjfallon.ie</a>
3	Léargas	<a href="http://www.leargas.ie">www.leargas.ie</a>
4	Whizz Kids	<a href="http://www.whizzkids.ie">www.whizzkids.ie</a>
5	ICS	<a href="http://www.ics.ie">www.ics.ie</a>
6	VS Ware	<a href="http://www.vsware.ie">www.vsware.ie</a>
7	Wriggle	<a href="http://www.wriggle.ie">www.wriggle.ie</a>
8	Get Smart Media	<a href="http://www.getsmartmedia.org">www.getsmartmedia.org</a>
9	Cloudschool	<a href="http://www.cloudschool.ie">www.cloudschool.ie</a>
10	Junior Cycle for Teachers	<a href="http://www.jct.ie">www.jct.ie</a>
11	Green IT	<a href="http://www.Greenit.ie">www.Greenit.ie</a>
12	Prodigy Learning	<a href="http://www.prodigylearning.com">www.prodigylearning.com</a>
13	DIT	<a href="http://www.dit.ie">www.dit.ie</a>
14	Camara	<a href="http://www.camara.ie">www.camara.ie</a>
15	All Aboard Initiative	<a href="http://www.allaboard2017.ie">www.allaboard2017.ie</a>
16	The IT Group	<a href="http://www.itgroup.ie">www.itgroup.ie</a>
17	Premier Captioning Realtime	<a href="http://www.pcr.ie">www.pcr.ie</a>
18	The Educational Company of Ireland	<a href="http://www.edco.ie">www.edco.ie</a>

## CESI Executive 2016/2017

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Miriam Judge	
Catriona Lane	
Richard Millwood	
Katie Molloy	
Susan Nic Reamoinn	
Neil O’Sullivan	
Elizabeth Oldham	
Conor Power	
Tony Riley	
Dermot Walsh	

CESI would like to thank all vendors for supporting this event.  
Please contact [conference@cesi.ie](mailto:conference@cesi.ie) to book a stand for 2018.

## Keynote 9.20 - 9.55

### Brendan Tangney,

*Bridge 21 TCD*

**Venue: E214**



Brendan Tangney is a Professor in Computer Science in Trinity College Dublin, the University of Dublin and a Fellow of Trinity College. He is co-director of Trinity's Centre for Research in IT in Education (a joint initiative between the School of Education and the School of Computer Science & Statistics) and has held visiting positions in the Universities of Sydney and Kyoto. He is a member of the Editorial Boards of Computers & Education and the AACE Journal of Computers in Mathematics & Science Teaching.

Brendan Tangney has published widely in the field of Technology Enhanced Learning on topics including teaching coding, teacher professional development, mobile learning and 21st century teaching & learning. He was instrumental in setting up and directing Trinity's Masters in Technology and Learning, for which he served as course director for many years. More recently he was instrumental in the creation of Trinity's innovative postgraduate certificate in 21st Century Teaching & Learning.

He is academic director of Trinity's Bridge21 project, a major design based research project which is looking at how technology can be used to support a 21st century approach to teaching and learning in Irish classrooms. Since 2007 Bridge21 has run workshops for over 12,000 students and 1,000 teachers. The Trinity Access21 project is a major Google funded partnership with Trinity's outreach unit (the Trinity Access Programmes) which is looking at how the Bridge21 model can be used in schools to support progression to higher education, particularly in areas with traditionally low progression rates, by strengthening the key skills of students through a range of innovative practices and supports with a particular emphasis on computer coding.

## Capstone 4.05 - 4.45

### Anne Looney,

Incoming Executive Dean,

DCU Institute of Education

**Venue: E214**



Anne is currently the Interim CEO at the Higher Education Authority in Dublin and in Spring 2017 will become the founding Executive Dean of Dublin City University's new Institute of Education. From 2001 until 2016 she was the CEO of the National Council for Curriculum and Assessment, the agency responsible for curriculum and assessment for early years, primary and post-primary education in Ireland. A former teacher, she completed her doctoral studies at the Institute of Education in University College London. In 2014/2015 she was Professorial Research Fellow at the Learning Science Institute Australia, based at Australian Catholic University in Brisbane.

Her research interests include assessment policy and practice, curriculum, initial teacher education and professional standards for teachers and teaching. She has also published on religious, moral and civic education, and education policy.

She tweets at @annelooney



Conference Homepage:

<http://www.cesi.ie/conferences/conference-2017>

## Presentations 1 10.00 - 10.25

### We need to talk - are we making the right connections?

**Presenters:** Deirdre Butler & Mark Brown

**Venue:** E214

This is a fishbowl session where the two presenters start by putting the development of new models and frameworks for digital skills, literacies and competencies under the spotlight. They will critically debate the pros and cons of some recent frameworks relevant to the Irish context.

### Digital Magpie - stealing the ideas of others

**Presenter:** Damian Quinn

**Venue:** E201

This presentation will be a selection of recommendations of websites/apps/technologies that have been "stolen" from the presentations of others from conferences over the years, some which may have been forgotten and are worth revisiting and recommending again.

### Exploring Coding - Experience from the classroom

**Presenters:** Michael Carey & Conor Power

**Venue:** E206

A look at the Junior Cycle for Teachers pilot programme 'exploring coding'. The programme supported the short course in coding across 22 schools nationwide. This presentation will look at the learning from the pilot and how this will inform the next phase - 'implementing coding'.

### Genius Journals

**Presenter:** Maggie Green

**Venue:** E205

Genius Journals allow the children to explore their thoughts and ideas and to develop concepts and designs. Every edit is an opportunity for learning and the children are engaged and motivated!

## Workshops 1/2 10.00 - 10.55

**NOTE:** These Workshops are double sessions spanning session 1 & 2

### A Look Inside the Youth Media Team

**Presenters:** YMT

**Venue:** E306

Following on from last year's successful and popular workshop, the Youth Media Team are again offering attendees an opportunity to learn with them. In this session you can become a member of the team and learn the processes involved. The team will take you through their workflow from preparation through to the actual interview leading to the blog post which proves that the job is done!

### Title: Snap4Arduino [Workshop - Double Session]

**Presenters:** J Byne et al.

**Venue:** D109

This workshop will introduce students to computer systems using Snap4Arduino. Snap is a block-based programming environment (yes, just like Scratch), the version we will be using allows you to interface with a small Arduino micro-controller. This session will introduce what an Arduino is, the Snap4Arduino environment and playing around with various inputs and outputs (LEDs, light detectors, servo motors etc.). We will have laptops available, but you are free to bring your own if you would like help setting it up. Pretty much anything with a USB port should work (Windows, Apple, Linux, ChromeOS).

## Presentations 2 10.30 - 10.55

### The Provision of Computer Science in Upper Second Level Education Internationally

**Presenters:** Neil Keane & Anna Walshe **Venue:** E214

The session will share the main findings of research commissioned by the NCCA and conducted by LERO, the National Centre for STEM UL and the Third Level Computing Forum.

### Connecting the Unconnected

**Presenter:** Joanna Norton **Venue:** E205

What do pasta, refraction, hairdressing and architecture all have in common? When flicking through photos in a fashion magazine, at what stage do you stop to consider the geometry of the image? Connecting the Unconnected uses local context as a learning canvas to make links between concepts and disciplines.

### Teaching & Learning with Minecraft Education Edition

**Presenter:** Stephen Howell **Venue:** E206

Minecraft Education Edition is a new version of Minecraft designed for teachers and classrooms. It's filled with lots of new pedagogical features that will make it easier for you to give learning objectives, set tasks and manage your worlds while students play collaboratively & build portfolios.

### Acmhainní Tacaíochta don Ghaeilge

**Presenters:** Máire Nic an Rí et al **COGG** **Venue:** E201

During this session, Máire and Pádraig will give an overview of the online resources which in most instances are available free of charge. An Chomhairle um Oideachas Gaeltachta agus Gaelscolaíochta (COGG) relates to both primary and post-primary education and the three main areas of work are: provision of

## Workshops 1/2 10.00 - 10.55

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## Morning Beak 11.00 -11.25

## Presentations 3 11.30 - 11.55

### **An Ethical Framework for Technology Enhanced Learning**

**Presenters:** Laurence Cuffe

**Venue:** E205

I want to look both at ethical issues which are likely to arise as the technology we use to teach becomes more sophisticated, and ethical issues which already exist as the cultural matrix within which we teach becomes more diverse. The discussion will be informed by the increasing diversity of ethical frameworks available, among which Roboethics, Carol Gilligan's ethics of care, and Daniel Starks work differentiating Care ethics from ethics based on a Confucianism.

### **Shakespeare, Tablets and Bridge 21**

**Presenter:** Sharon Kearney

**Venue:** E206

This presentation will share a modern methodology for teaching English/the humanities and 21C literacies that combines technology, teamwork and project-based work. It will demonstrate how teachers can use digital technologies to enhance the teaching of traditional curriculum content.

### **PDST Digital Citizenship**

**Presenters:** Siobhan O'Sullivan et al

**Venue:** E214

ICT is rapidly becoming an integral part of teaching learning and assessment, however as students become citizens of the digital community, they must be guided and facilitated in how to behave responsibly online and develop good judgement when interacting in a global digital society.

## Workshops 3/4 11.30 - 12.25

**These workshops are double sessions spanning session 3 and 4**

### **Computing in the Irish Curriculum**

**Presenters:** Richard Millwood et al

**Venue:** E306

The Computational Thinking for Life group at Trinity College Dublin in collaboration with CESI Exec members proposes a workshop session to debate computing in the Irish curriculum, using 'Open Space Technology' (a misnomer - no technology involved). It will facilitate participants to set the agenda, air their interests and concerns and find common ground.

### **ABAIR & léigh: nascanna idir na fuaimeanna & an litearthacht**

**Presenters:** Neasa Ní Chiaráin et al:

**Venue:** D318

Léireofar sa cheardlann phraiticiúil seo na bealaí is éifeachtaí AB AIR a úsáid le haird na bhfoghlaimeoirí a dhírú ar fhuaimneanna na Gaeilge. Tá tábhacht leis seo mar gheall ar an mbun-nasc idir cumas litearthachta na bhfoghlaimeoirí agus fuaimeanna na teanga a bheith ar a dtail acu. Tá taighde idir lámha againn ar an ábhar seo (a bhfuíochas le COGG) sa tSaotharlann Foghraíochta agus Urlabhra.

### **MineCrafty - tips for Minecraft EDU project based learning**

**Presenters:** Tony Riley & Sinead Herlihy

**Venue:** D109

In this hands on session we'll give examples of how we have used Minecraft in our classrooms to promote project based learning. We'll also discuss how using Minecraft has helped bridge the gap for some of our SEN students. Participants will be shown some of the new features of Minecraft EDU and be given examples of project based lesson plans to fit the Irish curriculum.

Those new to Minecraft will get a chance to create your first 'build'.

## Presentations 4 12.00 - 12.25

### **ATS2020 Project Using ePortfolios to foster transversal skills**

**Presenters:** John Hurley et al

**Venue:** E201

This session will give insight into the ATS2020 project. The project focuses on the use of ePortfolios to support key skills and formative assessment.

### **Fit-for-purpose ICT infrastructure in schools**

**Presenter:** Tom Lonergan

**Venue:** E214

The purpose of ICT Infrastructure for your school is to support the model of teaching, learning, assessment and administration that your school is hoping to implement. This session will hope to assist in identifying some key 'fit-for-purpose' elements of ICT Infrastructure, and review a number of approaches in how to plan, select, procure, implement and support these elements for your school.

### **IDEAL - Integrating Digital Education into Adult Literacy**

**Presenter:** Niamh Maguire et al

**Venue:** E205

KWETB Adult Basic Education Service offers a presentation and workshop based on key learning from our participation in IDEAL, an Erasmus+ Strategic Partnership. The presentation will explore how to use technology with adult literacy, basic skills and language learners including interactive white boards, touch screens and tablets, video making, gaming and social media.

## Workshops 3/4 11.30 - 12.25

**These workshops are double sessions continued from session 3**

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## LUNCH 12.30 - 1.40

## Presentations 5 1.45 - 2.10

### Create your own textbook using an iPad

**Presenter: Cormac Cahill**

**Venue: D318**

This hands on activity based workshop will show you how to easily create your own textbooks for use in the classroom using your iPad. The same process can also be used by students to work collaboratively to create their own books. The workshop will primarily use the Book Creator App but will also showcase how other apps can be used in conjunction with it to create books containing a variety of digital multimedia.

### Build a Bridge 21 and get over it

**Presenters: D Walsh, A Alsheaibi, G Lawlor**

**Venue: D109**

Prototype and test an online learning activity using the Bridge 21 model during a Design Thinking task. Given a Wordpress theme, working in pairs, your task is to build a prototype of a Bridge 21 learning activity. You will evaluate your fellow participants' learning activity, post feedback to their blog and test your learning activity back in your own class by accessing it online.

### Meet Edison 18

**Presenters: Ian Roller et al.**

**Venue: E203**

The session will give participants the opportunity to try the Edison robot. Edison robots can be programmed from a number of FREE software applications. They come with a set of programs in the form of barcodes making them suitable for junior classes in primary school, but they can also be used by older students who can download software (drag and drop or python based) to create their own programs on a computer, tablet or mobile phone.

## Workshops 5/6 1.45 - 2.40

**NOTE: These Workshops are double sessions spanning session 5 & 6  
Apple swift workshop will span 4 sessions 1.45 - 3.40**

### STEAM Build your own musical instrument

**Presenter: Kate Delaney**

**Venue: E206**

Everyone has used MaKey MaKey to play a banana piano. This hands-on workshop gives participants the opportunity to work in teams to explore this technology further. Using recycled art supplies and conductive materials, participants will design and build their own instrument and use Soundplant software to generate each sound.

### Mags & Pam: Breakout EDU - an introductory workshop

**Presenters: Mags Amond, Pamela O'Brien**

**Venue: E205**

The message in this workshop is that immersive problem solving in code-breaking teams is an energising way to engage students, of any age, in their learning. 'BreakoutEDU games teach critical thinking, teamwork, complex problem solving, and can be used in all content areas.

### Swift Playgrounds (coding on iPad for Primary and Secondary)

**Presenters: Miriam Walsh & Michael O'Kane**

**Venue: E306**

Swift is a powerful and intuitive programming language created by Apple for developing apps. It makes programming easier, more flexible and more fun. Swift is not only great for getting you started with coding, it's also really powerful. For first-time coders, there's Swift Playgrounds. An iPad with Swift Playgrounds will be available for attendees to explore and follow proceedings.

(please feel free to bring your own iPad as well).

## Presentations 6 2.15 - 2.40

### **Mindfulness through creative arts and technology**

**Presenters:** Daithi O'Murchú

**Venue:** E214

Making Connections: transformation through technology and teamwork is a wonderful concept but as a Vision, without practical application and meaningful action in everyday school life, it will fail! Mindfulness through Creative Arts and Technology MCApT- Making Connections: transformation through technology and teamwork, will present, and debate, based on the most recent research in Ireland , Europe and the USA.

### **Online Learning on School Placement: Implications for Professional Learning**

**Presenter:** Alan Gorman

**Venue:** E203

This presentation documents the design, implementation and evaluation of an online intervention. Entitled LINTE (Learning in Networks through Enquiry), this intervention sets out to support student teachers as they engage in a period of school placement.

### **PDST: Animating Education: Fís in action**

**Presenters:** Michael McNamara et al

**Venue:** E201

This session will provide an outline of the animation making process, as detailed in the newly launched PDST Fís Animation Course. We will explore how animation making supports and enhances learning in the classroom from both an academic and social perspective.

## Workshops 5/6 1.45 - 2.40

**These workshops are double sessions continued from session 5**

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(please feel free to bring your own iPad as well).

## **Presentations 7 2.45 - 3.10**

### **Excavating with the exceptional: Minecraft in gifted education**

**Presenters:** Muireann O'Sullivan et al

**Venue:** E201

This session will explore the capacity for Minecraft Education Edition as a tool in the mixed-ability classroom, focusing specifically on the facilitation of achievement of potential among gifted students. This session will also examine Minecraft's potential to act as an aid for learning in a sensory way; kinaesthetically, visually and logically, particularly for those gifted students who require more stimulating challenges and opportunities to have a greater influence over the form taken by their learning environment.

### **Computational Thinking for Post Primary Students**

**Presenter:** Colette Kirwan

**Venue:** E203

The aim of this research is to firstly ascertain if problem solving abilities can be developed in second level students through studying the fundamentals of Computer Science; and secondly to establish if lessons drawn from current research on Computational Thinking pedagogies and Massive Open Online Courses (MOOCs) can be successfully married to help empower secondary teachers to teach this subject.

### **iTeam - The Student Tech Support Team**

**Presenter:** Frieda Crehan

**Venue:** E206

Malahide Community School is a very technically enriched learning environment. The challenge was to provide to support and maintain the technology with limited people power. The solution was to harness the technical skills, curiosity and enthusiasm of the students into a tech support team. The team is in its second year of existence and has been a great success for both the school and its members.

## **Workshops 7/8 2.45 - 3.40**

**NOTE:** These Workshops are double sessions spanning session 7 & 8

### **An Introduction to delivering Computational Thinking**

**Presenters:** J Lockwood, G O'Mahony et al.

**Venue:** D109

There are many tools proposed for introducing Computational Thinking including: Scratch, App Inventor, Lego Mindstorms and CS Unplugged. In this workshop, we will present another tool called Bebras to help deliver Computational Thinking material through engaging and fun problems. We hope to show that Bebras can be used cross curricular and for all ages.

### **Digital Storytelling: Adobe Spark and Flipsnack**

**Presenters:** Mary Jo Bell & Ciara Brennan

**Venue:** E205

In this hands-on session, we will show you how to turn ordinary photos into stunning videos with Adobe Spark. It is perfect for bringing school and classroom photos to life and can be embedded on your school website or blog. With Flipsnack, we will show you how to create stylish, digital flipbooks. Like Adobe Spark, it can be shared online, or embedded on your school website or blog.

### **Swift Playgrounds (coding on iPad for Primary and Secondary)**

**Presenters:** Miriam Walsh & Michael O'Kane

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(please feel free to bring your own iPad as well)

## **Presentations 8 3.15 - 3.40**

### **Teachers' perceptions of how iPad tech can support learners with autism**

**Presenter: Jennifer Fox**

**Venue: E203**

This presentation explores the attitudes of Primary school teachers who utilise iPad technology to support learners with autism in their classrooms. The study explores the benefits and challenges facing teachers and the areas iPad technology is used. The presentations would highlight the findings of my study which analysed the perceptions of over 32 Irish primary school teachers.

### **All Aboard: enabling and empowering staff and students to flourish in the digital age**

**Presenter: Iain MacLaren**

**Venue: E201**

I will give a brief overview of the 'All Aboard' project and explore the scope for extending and sharing this approach to digital skills and confidence building across all sectors of education. Issues raised will include CPD, digital badges, international developments, openness and sharing.

### **Connecting the Pixels: Teaching Mathematical Concepts through Digital Media**

**Presenter: Paul Curran**

**Venue: E206**

Some learners struggle to see the purpose of understanding abstract mathematical concepts. Often the prospect of using those concepts in a practical way is given as a reason for learning it. But what if familiar practices from digital technologies that learners already engage with could be used to aid the understanding of abstract mathematical concepts?

## **Workshops 7/8 2.45 - 3.40**

**These workshops are double sessions continued from session 7**

### **An Introduction to delivering Computational Thinking**

**Presenters: J Lockwood, G O'Mahony et al.**

**Venue: D109**

See previous page for description

### **Digital Storytelling: Adobe Spark and Flipsnack**

**Presenters: Mary Jo Bell & Ciara Brennan**

**Venue: E205**

See previous page for description

### **Swift Playgrounds**

**Presenters: Miriam Walsh & Michael O'Kane**

**Venue: E306**

See previous page for description

## **Break 3.45 - 4.00**

## **Capstone 4.05 - 4.45**

**Anne Looney (see page 6)**

**Venue: E214**

## **Closing Comments 4.50 - 4.55**

**Thank you for attending & supporting CESICON 2017.**

**We look forward to seeing you at CESICON 2018.**

**Contact [conference@cesi.ie](mailto:conference@cesi.ie) or [info@cesi.ie](mailto:info@cesi.ie)  
if you would like to present next year.**