Edtech50

Magazine

Yearbook 2020

The people, products and projects shaping education technology across the UK

The Education Foundation
REFORM • TECHNOLOGY • INNOVATION

EdtechUK

aws

Portsmouth College put the iPad at the heart of their teaching and learning strategy

academia
the technology group

Solution Expert
Education

In March 2013, Portsmouth College received a Good Ofsted report, but they didn't want to sit back on that. They knew that they would need to be innovative if they were to move from Good to Outstanding. They felt that their students needed to be working harder, and become more independent. They also felt that it was important to improve the digital literacy of their students and prepare them for the modern workplace. Introducing the iPad on a 1:1 basis would also ensure that the project was inclusive, as all students would be working with the same technology.

Why iPad?

Students love learning with iPad because it's portable, powerful and easy to use. It features a gorgeous 10.2-inch Retina display, a powerful A10 Fusion chip, fast wireless[2], all-day battery life[3] and advanced cameras. Built-in apps for creativity and productivity include Clips, GarageBand, Pages, Numbers and Keynote. And with iPadOS, support for Apple Pencil and the Smart Keyboard[1] ,and amazing learning apps on the App Store, including augmented reality (AR) experiences, learning with iPad is unbelievably fun.

What advice would you give to other colleges considering a similar iPad project?

Simon Barrable said, "I would recommend that you have a vision statement which is reviewed and refreshed on a regular basis. You must keep innovating and moving the project forward. We now have another set of targets that we are working towards. Don't become complacent." Watch the video about Portsmouth College and their iPad project via:

edu.academia.co.uk/case-studies/

What were the best moments of the iPad project?

Principal of Portsmouth College, Simon Barrable said, "In November 2017, we were awarded the Association Of Colleges award for effective use of technology in Further Education (FE). This was something that we were all very proud of and it was reassuring that we were at the forefront in using IT in FE. It has also been great to share our experiences at numerous events and conferences across the UK."

Apps are available on the App Store. Title availability is subject to change.
[1]Apple Pencil is sold separately. Apple Pencil (1st generation) is compatible with 9.7-inch iPad Pro, 10.5-inch iPad Pro, 12.9-inch iPad Pro (1st and 2nd generations), iPad Air (3rd generation), iPad (6th and 7th generations) and iPad mini (5th generation).The Smart Keyboard is compatible with iPad (7th generation), iPad Air (3rd generation) and 10.5-inch iPad Pro.
[2]Data plan required. Check with your network provider for details. Speeds will vary based on site conditions.
[3]Battery life varies by use and configuration. See apple.com/uk/batteries for more information.

Contents

Jisc

independent schools council
Digital Strategy Group

tes

Cover: Primary School, Haringey. Photo: Kent Matthews, 2017

EdtechUK

The Edtech 50 Yearbook 2020

Welcome to the Education Foundation's Edtech 50 that celebrates the people, products and projects that are shaping education technology across the UK.

The Edtech 50, now in its third year celebrates the work going on across the vibrant and growing EdTech sector to support great teaching and enhance learning. Supported by sponsor Amazon CWS and with partners Jisc, ISC Digital Group and TES we shine a light on EdTech champions, great products and projects creating new approaches and reaching out into our communities across the UK.

The richness and commitment to supporting our teachers and learners across England, Wales, Scotland and N.Ireland is uplifting – real stories of optimism; people going the extra mile to inspire, share knowledge and nurture new skills. We always need to find out more of what works – but there are real areas of promise. We know too, that context, leadership, changing cultures and listening to educators and young people is important too.

We received hundreds of nominations and our judges shortlisted and helped the Education Foundation team shape the Edtech 50 and 'Ones to Note' sections.

The EdTech Sector is growing and needs to believe in itself, focus and share how it is shaping our education nation for the good.

We hope you enjoy the Edtech 50 magazine and thank our sponsors, advertisers, people who nominated, our judges, the Education Foundation team, and all in the growing Edtech 50 network.

The Edtech 50 Yearbook 2020 heralds the moment when we no longer ask whether technology has a place across our education system; but how it can be best used.

Ty Goddard, The Education Foundation, Edtech UK
Ty@ednfoundation.org
@ty_goddard

Spark Penketh High School, Warrington, MakerSpace / TES

1

The Education Foundation and Edtech UK

The Foundation was founded in 2011 and has a successful track record of pioneering projects and major partnerships with leading innovative national and international organisations. The Foundation advises organisations, governments and plays a leading role in developing the education technology sector across the UK.

The Education Foundation team are recognised experts in scaling up education projects and initiatives. The Education Foundation has a passion to help support teachers, learners and to create a more open and connected education system. Its pioneering Education Reform Summits help set the agenda for future thinking and policy development.

Edtech UK is a strategic body, established by the Foundation to support the adoption and to accelerate the growth of the education technology sector across the UK and globally. Our reports, policy work, advocacy, educator network and community events develop EdTech across Schools, Colleges and Universities.

Ty Goddard, The Education Foundation, Edtech UK

Jisc

A digital approach to education, whether that is how students access learning, to new ways of assessing knowledge throughout life, is critical to the impact of education, now and in the future. That's why I'm proud that Jisc, as the UK's digital solutions provider for education and research, supports the Edtech 50. The expertise and energy of these digital leaders is an inspiration and we are committed to support current and future generations of innovators, for example via our Step Up programme. This seeks to ensure the brightest and best SMEs can work with the highest level of educators to bring above quick and novel solutions to a range of issues that improve the student experience. I congratulate all of the Edtech 50 and look forward to seeing them progress as well as continue to benefit the digital student experience across the UK.

Paul Feldman, CEO , Jisc

Amazon Web Services

Amazon Web Services (AWS) Worldwide Public Sector helps government, education, and nonprofit customers deploy cloud services to reduce costs, drive efficiencies, and increase innovation across the globe. With AWS, you only pay for what you use, with no up-front physical infrastructure expenses or long-term commitments. Public Sector organizations of all sizes use AWS to build applications, host websites, harness big data, store information, conduct research, improve online access for citizens, and more. AWS has dedicated teams focused on helping our customers pave the way for innovation and, ultimately, make the world a better place through technology.

Paul Nicholls, Amazon

Edtech UK News and Views

EdTech is one of the fastest growing sectors in the UK, accounting for 4% of all digital companies, and UK businesses have become world leaders in developing innovative new technologies for schools. HMG, Digital Strategy, 2017

Boost our digital infrastructure with over £1bn of public investment, including £176m for 5G and £200m for local areas to encourage roll out of full-fibre network. Industrial Strategy, Building a Britain Fit for the Future, 2017

The Government will undertake, 'Sector Deals with emerging and disruptive industries where there is a compelling case to do so, beginning with artificial intelligence. The collaboration with government will drive growth in new sectors such as robotics and autonomous systems (including drones) and educational technologies (EdTech) – where we are investing £30m to test the use of innovative EdTech and artificial intelligence in online digital skills courses.' Industrial Strategy, Building a Britain Fit for the Future, 2017

Investments in UK EdTech Companies was just £9.9m in 2013. By 2017, this figure had risen to £66.9m, increasing to £90.9m distributed over 50 investments in 2018. This marked a 140% increase on the total amount invested in the market in 2016, highlighting that the UK EdTech sector is booming. Beauhurst, 2019

The UK EdTech sector is on track to reach £3.4bn by 2021, with the global EdTech market, on current forecasts standing at £128bn by next year, up from £45bn in 2015. Daily Telegraph, Jan, 2020

We need a sector deal to nurture growing hubs all over the country and link and listen to educators,' said the Education Foundation. EdTech businesses also face procurement and investment challenges – the education market is a long, slow burn. Education Technology Magazine Jan, 2020

The question is no longer whether technology should have a place in the classroom, but how technology can be most effectively be integrated in ways which achieve improved outcomes for young people. EEF, (Education Endowment Foundation)

We know that implementing technology well can support school improvement. Department for Education, 2019

Our developing EdTech Nations

Across the UK a range of education technology policies help support teachers and learners. Digital learning is showing impact across a range of education institutions, supporting knowledge, skills development and creativity.

Credit Education Scotland

England

England's new EdTech Strategy
The Department for Education's EdTech strategy published in April 2019 aims to reduce teacher workload, boost student outcomes and help level the playing field for those with special needs and disabilities.

The Strategy – backed by £10 million – will support innovation and raise the bar in schools, colleges and universities across England.

Teachers, lecturers and education experts will unite with innovative businesses to harness the power of technology to tackle common challenges, and to ensure those working in education are equipped with the necessary skills and tools to meet the needs of schools, colleges, and their pupils.

EdTech exports are worth an estimated £170 million to the UK economy, and the strategy will develop the Government's ambition for tech firms to work with the education sector by a series of 'testbed' programmes.

Drawing on existing expertise in the system, the strategy will also launch a series of 'demonstrator schools and colleges', which will showcase best practice and provide peer-to-peer support and training for teachers, lecturers and school leaders.This will be supported by free online training courses for teachers and school leaders, produced by the Chartered College of Teaching, which will provide access to high-quality continued professional development and equip them with the knowledge required to make the best use of technology

"Harnessing the power of modern technology can help us transform lives and unlock children's potential. This initiative will shine a light on some of the best practice across the system which are helping to cut workload while improving teaching and learning. Teachers and leaders need to continue to share their learning and experiences with each other so that the whole sector can realise the full potential of technology." Department for Education spokesperson

Northern Ireland

Strategic planning at Government level has ensured a useful and funded platform for educational technology throughout Northern Ireland. Equitable infrastructure has ensured the pace of educational technologies has been able to move efficiently. The C2k project provides the infrastructure and services to support the enhanced use of ICT in grant-aided schools across Northern Ireland. C2k is managed by the Education Authority and delivers its services through a contract; Education Network (ni); operated on behalf of C2k by Capita IT and Networks.

Scotland

The Scottish Government published a digital learning and teaching strategy in 2016 which aims to create the conditions to allow all of Scotland's educators, learners and parents to take advantage of the opportunities offered by digital technology in order to raise attainment, ambition and opportunities for all.

The strategy sets out a series of national actions and local expectations structured around four objectives:
- develop the skills and confidence of teachers
- improve access to digital technology for all learners
- ensure that digital technology is a central consideration in all areas of curriculum and assessment delivery
- empower leaders of change to drive innovation and investment in digital technology for learning and teaching

"We are seeing increased use of technology to support and enhance education right across the country and the Edtech 50 does a fantastic job of highlighting particular successes. I am delighted to see a number of Scottish schools recognised for their digital achievements and I hope they can inspire others to replicate that success." John Swinney, MSP, Deputy First Minister, Cabinet Secretary for Education and Skills

Wales

Our National Mission for Education in Wales is to provide children and young people with the skills, knowledge, experiences and resilience, with digital competence an integral element, to enable them to thrive in a constantly changing world.

Hwb is the Welsh Government platform for improving the use of digital technology for teaching and learning in schools in Wales.

It provides all pupils, teachers, maintained schools and colleges, and other stakeholders such as trainee teachers with access to a range of bilingual digital infrastructure, tools and resources including an all-Wales Microsoft Education licensing agreement that is helping to transform digital teaching and learning in Wales.

Through the investment in broadband and the Hwb platform, the Welsh Government have provided a national platform capable of supporting and delivering real transformation to the Education sector.

Hwb is more than a platform, it is key to the transformational changes to education in Wales, ensuring digital is at the heart of the new Curriculum for Wales which will be rolled out from September 2022.

"As part of our national mission for education in Wales, we have committed to provide our learners with high-level digital skills. I want all our learners to grow up to be digitally competent, allowing them to evolve into enterprising, creative and critical thinkers, giving them a best chance in life. That's why we've made digital competence a key part of our exciting new curriculum, due to roll out in 2022." Kirsty Williams, Minister for Education, Welsh Government

Looking Back to Look Forward

TEC Partnership

The Edtech 50 spotlights new schools and new approaches across our education system. EdTech that support educators, children and adults to learn; consolidating knowledge, re-skilling and exciting creative minds.

Layton Primary School
Located in Blackpool, where eight neighbourhoods are among the 10 most deprived areas in the country, Layton Primary School has witnessed first-hand the impact of technology at the heart of the curriculum. The school embarked on a long-term strategic EdTech journey eight years ago, at which point educational outcomes saw the school in the bottom 42% in the country.

Pupils in Blackpool face knock backs in their every-day lives and so Layton's vision was to develop pupil's: resilience, collaboration, problem solving skills and critical thinking – in order to be life-long learners; teaching pupils to code develops all of these skills. Pupils learn to code when they start school and by the time they are in KS2 are writing their own code. These transferable skills are then applied across the curriculum to: solving mathematical and literacy problems, science investigations, analysing historical sources and as a result end of KS2 results have been significantly above national averages for the past eight years. Today – Layton Primary has 1:1 devices and was graded as 'Outstanding' by Ofsted.

"Enabling children to ask questions, respond quickly, react to feedback and discuss learning builds independent learners who can discuss and question each other to further their progress. ICT has the potential to enable this to happen in every classroom, every day in every lesson." Jonathan Clucas, Headteacher, Layton Primary School.

Shireland Collegiate Academy
Shireland Collegiate Academy is a large inner city secondary school in Smethwick, Sandwell in the West Midlands. Over the past few years the Academy has gained a reputation for effective use of technology to improve standards, innovative curriculum design and embedding new approaches to learning. The Academy has been judged as Outstanding by Ofsted in 2006, 2010 and 2013.

The trust will be designing and developing a number of new Technology Primary Schools, with the first called, Shireland Technology Primary has been designed and built to inspire new ways of technology-enabled thinking that provides pupils with real-world learning experiences.

Technology has the power to excite our pupils, it offers endless opportunities to explore a rich and varied curriculum and provides a platform for pupils to truly excel.

"This is an amazing opportunity for us to provide a very different form of Primary school for our community. Shireland Technology Primary will use the latest technology to provide an on-line thematic curriculum delivered via a Flipped Learning based methodology. We will deliver a rich curriculum experience for our pupils which will establish the perfect platform for them to join us at Shireland." Sir Mark Grundy, Edtech 50 winner, CEO, Shireland Collegiate Academy

Grimsby Institute, Training Education Careers (TEC) partnership
The TEC Partnership is one of England's largest providers of further and higher education. With a rich history of developing innovative training and education solutions for the community, the Partnership comprises of the Grimsby Institute, University Centre Grimsby, Scarborough TEC, Skegness TEC, The Academy Grimsby and Career 6 – a new generation Sixth Form with a focus on career paths.

The TEC Partnership serves some of the most deprived coastal towns in the UK; it provides education to thousands of students and is the top-rated college group in the country. It could not do this without the 'digital dynamite' of the Learning Technology Team. They have transformed the performance of hundreds of staff across a vast geographical area which in turn has transformed the lives of young people and adults returning to education. Not only has this team transformed performance, but it has also delivered significant monetary savings. They are unparalleled in their transformational impact.

Universities
Universities are embracing technology but some are moving at pace, using technology to enhance teaching and learning, facilitate innovative research, communicate better and improve efficiency in management and administration activities. New areas of high importance are supporting students by using technology to provide 'early warning' over study challenges.

The University of Leicester has a 'digital by default' whole system view and has senior leadership charged with leading this approach. The University of Northampton's, new Waterside campus provides thoughtful new learning environment design to support their active blended learning approach.

THE SCIENCE OF WHERE™

DIVE INTO DATA SCIENCE

Easily make sense of complex data for meaningful teaching and learning.

The world's leading mapping and analysis software allows you to...

- Collect primary data quickly and accurately
- Access high quality secondary data at local and global scales
- Make data meaningful through easy to create maps and infographics
- Ask and answer questions about complex subjects like climate change

Esri's GIS technology powerfully supports the effective delivery of the geography and wider curriculum in Primary, Secondary and SEND Schools.

Get free access for your school today:
https://schools.esriuk.com/

Edtech50

Celebration
Ambition
Inspiration

"The Edtech 50 is a celebration of the people, products and projects shaping this dynamic and growing sector across the UK.

EdTech is growing across Britain and Northern Ireland – supportive for educators, learners, and, if implemented well helps improve education.

This EdTech sector needs bold and imaginative policy to support it, investment, super fast broadband; but above all it needs focus and passion from Governments to fully realise its potential for education, skills, new jobs and growth across our country."

Ty Goddard, Chair, Edtech UK & Edtech 50 Judging panel

People

The people shaping UK EdTech today

Russell Prue

Broadcaster, author and educator, Russell designs and hand-builds live education radio stations for schools all over the world. He is both inspirational and influential in the way he uses education radio to develop key literacy skills and motivate young people in showcasing their confidence and resilience behind the microphone.

Following a research project, he looked at many technologies and could already see a gap developing between speaking and listening and writing skills. Learners were also showing signs of increased levels of boredom and reluctance and disengagement from their normal learning environments. His key insight was that 'live' is exciting, thrilling and full of risk and adventure, exactly what was missing from so many young people's experiences of learning.

This led to the development of a host of successful products, including Anderton Tiger HUB Studio and HUB Reporter, for which he was nominated by members of the public.

The Anderton Tiger HUB reporter is a complete 'radio station in a box' solution. This product is a tiny fraction of the size of the original system. The reporter comes in one flight case that can be setup in minutes and reflects over 10 years' experience in the "Education Radio" business.

Children can experience presenting and broadcasting their own live radio shows independently and without adult intervention. This is crucial for developing confidence and building self-esteem, as groups are able to showcase their own talents with quality kit to produce outstanding education radio broadcasting.

He's a 'massive presence,' noted one of the judges; another commented that oracy and eloquence are such important skills, along with the ability to debate, discuss and disseminate; all of which are promoted by these products.

→ Al Kingsley

When Al is not being Managing Director of NetSupport, he is a governor at Dogsthorpe Infants School, Peterborough, cited in the Edtech 50 Schools. He's also chair of the Board of Trustees for Hampton Academy Trust, and fulfils a number of key roles locally and regionally, such as Employer Ambassador for the East of England Apprenticeship Ambassador Network. Al is very active on social media too and hosts the schooltrustee.blog – resources and ideas for trustees, governors and school leaders, with, in his own words 'a healthy sprinkle of #Edtech along the way.'

→ Andy Caffrey

Following 15 years' teaching, culminating in his role as Assistant Headteacher (Data & Technologies), Andy left the classroom to become Regional Director of EdTechTeam UK, training teachers to use technology to support teaching and learning in the classroom. On behalf of Google for Education, he works as part of the team who deliver the Google Certified Innovator Academies. By all accounts, including that of one of our judges, he is approachable and generous. Edtech 50 submissions referenced his impact in shaping the way that EdTech has grown at The Bentley Federation, (an Edtech 50 School). And on a personal level, this comment about Andy appears indicative: 'I have found that few people walk alongside you for the whole of your EdTech journey.'

→ Judge's Insight: Jules Daulby

The advances in EdTech are very exciting and for pupils with SEND often liberating. From the free assistive technology such as immersive reader in office365 to technology such as the newly launched Clicker 8 there are more and more chances for children to flourish and thrive. EdTech removes barriers and it's wonderful. I hope, with work such as the Edtech 50 we will see tech becoming ubiquitous in schools which in turn will allow pupils with SEND to feel typical as it will be the 'norm' to use any technology required. I've seen the magic work and look forward to a day when all children will have the EdTech they need to achieve. **Jules Daulby, Edtech 50 judge, Teacher, @WomenEd, @WomenEd_Tech**

Malcolm Wilson

Malcolm has taught in primary schools for over twenty years and is currently ICT Curriculum Development Officer for Falkirk Council Education Services. Key roles in numerous government initiatives (Scottish and UK) over the years. Started his blogging career in 2005 as a mechanism to enable various teachers to provide feedback to help evaluate classroom response systems for the education authority and manufacturers.

These days Malcolm maintains blogs on digital technology for Falkirk Council, on mobile devices and e-safety; as well as sharing and connecting with a worldwide learning network on Twitter (@claganach). He and the team at Falkirk Council are responsible for encouraging and supporting teachers across 72 educational establishments to use digital technology in learning & teaching, through practical hands-on professional development sessions. One of the many accolades from participants on his courses captures the general tone of feedback: 'I wish all my teachers at school had been 'Malcolms'...'

→ Sarah Knight

Sarah is Head of Change – Student Experience at Jisc. She led on the development of the six elements of capability and the design of the Digital Experience Insights learner surveys. Her vision and strategy have had a tremendous impact on HE and FE. Sarah is influencing culture change in the sector with @CANagogy and the CAN (Change Agent Network) events where best practice in the student-staff partnership in harnessing new technologies is shared. Sarah and her team at Jisc also worked closely the Education and Training Foundation in developing the Digital Teaching Professional Framework (DTPF) – which is now adopted by the FE sector.

→ Nick Madhavji

Nick Madhavji is an EdTech entrepreneur who is the CEO and Founder of Joskos Group – an award winning, specialist provider of high quality ICT equipment and support services to schools/ Multi Academy Trusts across the UK. Nick's vision is the driving force to ensure educational institutions use the right technological tools to remove obstacles to learning and to help create transformational learning experiences. Served as an Executive Council Member for trade group, British Educational Suppliers' Association (BESA).

→ Judge's Insight: Andrew Dowell
Me, teaching, tech and FE
Early in my teaching career I sought technology to increase engagement in my lessons and help reduce my workload. Without an IT background this started with learning extra features in MS Office and navigating the smart board in one of my teaching rooms. Moodle also became a core part of my teaching toolkit, giving my students access to digital assignment briefs and resources to help them achieve higher grades, most importantly they could access these anytime, anywhere. I also started a blog to direct students to additional reading so they could keep up to date with sporting innovations.

From there I began to explore the use of QR codes to bring worksheets to life and assessment tools like Kahoot to gather students starting points and to measure distance travelled in lesson. Most students in my classes had a reasonable level of digital literacy, so quickly took to the new apps and websites I was introducing and supported one another to learn. They particularly liked that they could now access what they needed, when they needed it most, in a format of their choosing.

My use of technology to enhance learning was recognised by the College's management team and I was asked to start running some sessions so other teachers could explore some of my innovations. I have found that basic digital training is often overlooked in pursuit of the next shiny new app/ gadget that is going to revolutionise the classroom, so we must make sure that we go back to basics and ensure our teachers and students have digital skills that will allow them to thrive in the modern workplace.

Furthermore, there are some incredible tools available for schools and colleges now, e.g AR, VR, AI but we must consider how they fit into our teaching and learning strategies before investing significant sums of money, that many colleges do not have.

EdTech has given to rise a fantastic community of educators who collaborate and curate content online for others to benefit from. This group is helping to drive the sector in the right direction, many of these individuals have been recognised as part of the EdTech50. Finally, It is great to see that companies are investing in Accessibility tools which are making the classroom much more available for our staff and students, with many of these tools in the student's pockets already. **Andrew Dowell, Edtech 50 judge, Head of Professional Status, The Education and Training Foundation (ETF)**

The Educators

→ Elaine Topham
Senior Learning Technologist, The Grimsby Institute
Elaine Topham works on the ongoing transformation of the Grimsby Institute. Led by Principal, Debra Gray and, Deborah Kellsey Millar, Group Director of Technology, the Institute is drawing national attention.

Our judges commented on Elaine's positive contribution, and that the Grimsby Institute is a leading voice in the Further Education sector.

→ Simon Luxford-Moore
Seen as a VR champion at ESMS (Erskine Stewart's Melville Schools) College, Edinburgh. Also pioneers ClassVR (and other VR) good practice in the community and on Twitter. 'Never just adding technology for the sake of it.' Many nominations.

→ David Adam
David, class teacher at Dedridge Primary School, Livingston, uses filmmaking with a class of ASD learners of mixed ages and abilities to support writing. When children have difficulties in transferring their ideas into writing, filmmaking bridges that gap.

→ Gary Spracklen
Headteacher, Prince of Wales School, who contributed, as a member, to the UK Gov's Education Technology Action Group. Has 'truly embraced the use of EdTech ...not just for its own sake.' 'A leader with a long history of innovative use of technology.' (Edtech 50 judge)

→ Nic Ford
Deputy Head (Academic) at Bolton School. 'Nic has created a culture in the classroom where using technology is normal, whilst supporting creativity, coding and maintaining high academic standards.' In his own words – runner, writer and speaker, pedagogy and technology geek. In the words of others – simply an 'inspirational leader.'

→ Steven Hope
Head of Independent Learning at Leeds City College. 'Drives change and makes it happen' in the words of his nomination.

→ Jon Neale
Jon Neale is, in the words of his nominations a 'true ambassador for purposeful integration of technology in education in the UK -- always putting education and pedagogy before technology.' Google for Education Certified Innovator & Trainer, Apple Distinguished Educator, UK Apple RTC Advisory Board & Co-Spaces global ambassador. Digital Learning Leader at Halcyon London International School.

→ Becki Bawler
A lead teacher for ICT and the Digital Competency Framework at Risca Community Comprehensive School in South Wales. Also advises schools across the five local authorities in the region. Becki blogs regularly from @BeckiBawler. She is also a member of the Gender Equality Collective: EdTech Collective Leadership Panel.

→ Catherine Jessey
Assistant Headteacher, Peacehaven Community School, Apple Distinguished Educator, member of the GEC: EdTech Collective Leadership Panel. Of particular interest to Catherine is the role of unconscious bias in the perpetuation of gender stereotypes and what teachers can do to tackle this.

→ Rachel Smith
Currently Digital Leader and foreign languages teacher at a secondary school on the Isle of Man. For her, languages and technology are natural partners. Sits on the Apple Distinguished Educator's Board for Europe, India, Africa and the Middle East. Edtech 50 Judge, Nicole Ponsford: 'an Apple legend.'

→ Dr Sarah Jones
Deputy Dean (Computing, Engineering & Media) at De Montfort University
An Apple Distinguished Educator who holds a PhD in Immersive Storytelling, looking at how different

narratives emerge within VR, AR and any other emerging technologies. She's working to define a form of film practice around immersive experiential film as well as having worked on a Google Digital News Initiative project (with the Coventry Telegraph) building a VR game around the Blitz.

→ Esam Baboukhan
e-Learning Manager at City of Westminster College. Has worked closely with Microsoft and shared the use of Teams to work more closely with parents and promote better learners' engagement and ownership. Comments Edtech 50 Judge, Vikki Liogier: 'he's a leading EdTech professional in the UK.'

→ Rory Steel
Transformed Beaulieu Convent School into the leading 1:1 gigabit cloud-connected school in Jersey. In an all-girls school, Rory championed the need for IT to be compulsory for all. Now Head of Academy at Digital Jersey.

→ Simon Pile
Simon works in his school (as Assistant Head, Anson Primary School, Brent) and beyond to support positive digital learning opportunities for all. His publications, including – the 'Why Use' series – 700,000 downloads of free resources) sit alongside his engagement with supporting others.

→ Matt Warne
Head of Computing and IT at the Royal Grammar School (RGS) Worcestershire, Matt has 'spearheaded a technological revolution in the school.' Provides CPD for the RGS family of schools and more widely through their Apple Regional Training Centre. All this and facilitating the Girls Can Code Club. 'A great advocate for EdTech,' says Mark Anderson, Edtech 50 Judge.

→ Tony Newland
Committed and creative use of music and media tech with pupils at SWAAY, Berkshire.

→ Claire Jones
Deputy Headteacher, Layton Primary School, Blackpool

Claire is 'leading change in a massive way' with headteacher, Jonathan Clucas at Layton Primary School, Blackpool; an Apple Distinguished School. She inspires her team in their use of technology to transform teaching and learning (often with the Swift Playgrounds app). Claire is clear that not all her pupils will go on to be coders, but that such transferable skills, as part of a wider educational offer at Layton, will be a real asset for her children. It will open up a whole new world of possibilities; especially important in a catchment area of significant deprivation.

→ Kierna Corr
Kierna is a highly committed Early Years Teacher from Northern Ireland. She is a passionate educator who

shares her love of little humans with the world through her blog – nosuchthingasbadweather.blogspot.com

→ Sarah Clark
MIE Expert, Trainer and Fellow at Queen Anne High School, Dunfermline, Fife...encouraging and empowering people to explore EdTech at the schools she works at, the events she attends – online and offline.

→ Greg Hughes
Physics teacher since 1990 and a passionate ICT in education advocate for nearly as long. As one of the Vice Principals at The de Ferrers Academy, Burton-upon-Trent, Greg Hughes is responsible for all aspects of Curriculum Design, Websites, Learning Technologies, ICT Resources, and Online Safety. A major part of his role focuses on the highly successful 1:1 iPad programme at one of the largest schools in the UK.

→ Abdul Chohan
Founder of the Olive Tree Free School, former CEO at the Essa Foundation Academies Trust. Selected for his pioneering role in the increasingly widespread use of portable technology in education. ('The courage required to take the first difficult step is always the most difficult.') His workshops on mobile-based learning are much valued in the education industry.

→ Laura Griffin
Laura Griffin, School Leadership Team, at the Greater Horseshoe Special School in Newton Abbot, is a licensed practitioner of Thrive. Through the use of Thrive-Online, an integrative model drawn from child development, neuroscience and attachment research, the programme helps teachers to assess and support children's emotional and social development.

→ Dr Amanda Taylor-Beswick
Social Work Academic at Queen's University, Belfast. Has 'transformed social work digital professionalism'. Many public nominations, and support from Edtech 50 judges.

Products

Imaginative, supportive and trusted by educators

Enhance Digital Teaching Platform – ETF

Enhance is a digital training platform for teachers and trainers in the FE and Training sector. It is designed to help develop teaching and training practice using technology. The aim is to support innovation in teaching and training and to improve learner outcomes, equipping learners for the changing world of work where using technology is becoming increasingly important. ETF offers a range of small modules that both teaching and support staff can utilise to develop their digital capabilities. Edtech 50 judges liked what they saw, and in the words of the nomination: 'the bite sized training modules are ideal for dipping in and out. The modules do exactly what they say they do with practical examples of how to apply them in various learning contexts. They ensure it is easy for teachers to gain achievement. They are brilliant.'

→ Judge's Insight: Mark Martin

Diversity is no afterthought. All of the talents for all of our futures. 'We are on a mission to make the UK the most innovative education system in the world. In order to reach this goal we need to ensure the Institutions, Curriculums and Technology reflects us all. We want to prepare young people for the future of work with the latest tools and innovation. This will help them to access the opportunities that exist on their doorstep.' **Mark Martin, Edtech 50 judge, teacher, author and EdTech leader. @urbanteacher**

→ SpyQuest

This unique, Scottish, online interactive gaming concept succeeded in being selected for the Edtech 50 in 2018. Two years on, the siren calls of the secret world of international espionage have recommended Spyquest again to members of the public and our judges. One of the former informs us that the Quest in SpyQuest has been a 'wonderful tool which allows children to learn whilst 'playing', gives a great introduction to the books and has allowed follow up activities based around writing an 'Agent' based story.' A local government officer in Scotland (or should that be agent?) talks of 'inspiring reluctant readers.' SpyQuest is on an EdTech mission – should you choose to accept…

→ Mindful Education

Learning platform of media-rich professional courses & apprenticeships. In partnership with colleges around the UK, courses (e.g. Accountancy, Law, Management) are highly flexible – learners choose how, when and where they want to study. Lecturers find the detailed analytics invaluable, enabling them to tailor their own input. It's a very effective way to blend on-line content with classroom learning, maximising the impact. Nearly twenty public nominations were received for Mindful Education from lecturers and students, extolling its virtues. 'It allows us to check learning via the software and pick up where students may benefit from more help …the videos and questions are very useful for revision.' Laura Knight, one of our judges, says of this Edtech 50 2018 listed company – 'the number of nominations speaks volumes. The goal is inclusive; the product is high quality.'

→ SISRA Observe

SISRA Observe is a bespoke system that supports schools' and MATs' CPD processes – from recording and analysing all types of observations, to identifying individual CPD needs and self-reflection. It gets to the heart of reducing teacher workload by systematising activities previously paper or spreadsheet based…'making planning accessible, simple and robust.' The SISRA team in general and Charlotte Harling, in particular, receive numerous comments – both on her inspirational approach as well as the customer support provided.

→ Little Bridge

An online platform for learning English that has been used globally for over 10 years. It provides young learners with safe opportunities to learn and apply their new English skills with peers globally. They do this through stories, activities and games, underpinned by pedagogy. For the students who are refugees and who do not speak English – Little Bridge has been an 'amazing resource.' An Edtech 50 Judge notes: 'A fantastic product, clearly having a huge impact on children around the world. A real bonus that this can be used to help support whole families with learning English together in a fun, supportive environment. As well as a lot of plaudits from our judges, there were very many public nominations for Little Bridge.

→ Canvas Learning Platform

Instructure's VLE, Canvas, a cloud-based learning management system is widely used throughout the FE sector. This learning platform is open, intuitive and streams all the digital tools and content that students and teachers need. As well as enabling seamless accessing of learning resources – checking timetables, submitting assignments and receiving feedback and marks etc, there are many innovative and imaginative options available; including peer marking, anonymous grading and group chats. As one Head of e-Learning puts it…'these are just a few of the things that keep the learners engaged. And better yet it's all in the palm of their hand.' There's also a shout out for the UK Canvas team – 'their continuing support has been an absolute life saver.'

EdShed

Sheltering under the EdShed umbrella are a range of exceptional and innovative educational products, including The Literacy Shed, Spelling Shed and Maths Shed. It's a company run by teachers and for teachers.

The Spelling Shed is a spelling platform designed by a team of Primary School teachers. It's built with primary school students, teachers and parents in mind and aims to make spelling fun for students as well as simple for teachers to manage.

It includes a whole school spelling scheme, giving 100% coverage of the National Curriculum, the ability to create unlimited custom lists, a tablet and mobile game for students to use (to practise spelling) and an online game.

This is underpinned by a teacher hub, which allows simple management of student records, teachers and classes; plus the ability to set and monitor homework assignments.

A whole-class Hive game allows all pupils to play alongside each other as an alternative for a weekly spelling test. A live leader board adds to the fun.

Finally, the Spelling Shed App has been developed to be 'dyslexia friendly' with three levels of difficulty to support pupils of all abilities through the spelling lists with appropriate degrees of challenge.

There were many (*shed-loads!*) of positive comments about this product with teachers making comments like 'it grabs their attention and thus makes them want to learn. The eagerness to take home the printed spellings is a pleasure to see.' Our judges agreed with such assessments and also cited the role of co-founder Rob Smith in 'tirelessly promoting literacy.' In the company's own words – spelling made awesomer…

Now›Press›Play

Now›Press›Play fuses wireless technology, drama and sound to create unique educational experiences for primary school learners that bring the curriculum to life. It was founded in 2012 by three friends, who love learning but hate sitting down. They discovered they weren't alone. Since then, they've worked with over 40,000 children across the UK.

In a 'now›press›play Experience' every child is given a pair of wireless headphones. Immersed in sound, they become the main character in a story, meeting people, discovering places and solving problems on an educational adventure they'll never forget.

In the words of Osi Ejiofor, Education Technology Consultant: 'this resource has helped to stimulate imagination and creativity and has a huge impact on engagement and outcomes in writing tasks. It provides students with a level of immersion that they would not otherwise be able to have. From space travel to sailing on the Titanic, now›press›play is inspiring many young minds.'

'From space travel to sailing on the Titanic, Now›Press›Play is inspiring many young minds.'

→ Lyfta
Great for teaching KS2 and KS3 Literacy, PSHE, Citizenship, SMSC, Geography, R.E. and Art, Lyfta is a computer and tablet-based platform where teachers and pupils can explore immersive, human-focused documentary stories from around the world. It challenges children to think, and explore complex issues, for example, around gender, race, bias – as well as enabling children to explore real environments and 'meet people from around the world that they may not ever experience in real life.' Both the public submissions and our judges highlight the reach and quality ('breath-takingly high') of this video-based learning product. As one Edtech 50 judge puts it: 'A powerful product which allows staff to introduce challenging and difficult concepts to children, as well as increase their experience and understanding of the wider world.'

→ GoBubble
GoBubble is a child-safe social media platform. It offers an alternative to mainstream social media with inspirational ideas for the classroom paired with safe online communication. In its pre-moderated space, every user is verified by a school. Children are exposed to authentic digital citizenship practices in real time. Teachers and parents have noticed many positives with lots of children giving each other 'likes', paying each other compliments and generally acting with kindness and sensitivity. In the words of one – 'it's preparing them for future interactions whilst giving them more time to be children.' Our judges were of the same mind. As Edtech 50 Judge, Andrew Dowell, summed it up – it's a great tool for supporting digital citizenship.

→ 2Simple
2Simple was created twenty years ago by primary teacher, Nigel Canin, who spotted the need for creative educational software. Used by UK primary schools, the aim of the 2Simple software is to create a space where children can be creative, while using the technology and tools they will have for the rest of their lives. Their offer includes the 'mash' series of tools (Purple Mash, Mini Mash and Serial Mash), with Purple Mash, a website for elementary school students full of tools, educational games and themed resources, being the most popular. As an Edtech 50 Judge notes: 'Very few products have been able to evolve and move with the times as 2Simple has, without compromising the range of quality products that they provide. Simple to use but highly engaging and effective.'

→ Judge's Insight: Osi Ejiofor
Technology in education has the power to make what may seem impossible, possible. There was a time when I had a student in my class who could not speak much English at all, so I wondered how I was going to communicate with her. I was able to use a mobile device to speak in English and it would translate and speak to her in her language. Without technology in that moment, I would've been stuck and it would have been impossible for me to communicate effectively with the child but because of technology I was able to do so. The joy and spark of amazement on the child's face is something I will never forget. There are many others who I have taught over the years who would not be able to access or engage with learning if not for the magic of technology. **Osi Ejiofor, Edtech 50 judge, teacher and EdTech consultant**

Sparx Maths

Sparx, a socially focussed learning technology company, has spent the last 8 years reimagining the way maths is taught and learnt in schools with the aim of improving numeracy, and therefore life opportunities.

From personalised maths homework for every single student to providing teachers with real-time insights into class and student progress, Sparx Maths is acting as a catalyst for transformational change within schools across the UK.

Over 38,000 questions covering the KS3 and GCSE maths curriculum are devised and handwritten by the Sparx content team (mathematicians, scientists, teachers, tutors, graphic designers and grammar experts). Questions are backed up by tutorial videos on every single topic that help explain concepts in different ways and encourage independent learning

Dan Sandhu, CEO Sparx and their Education Research Team is committed to an ongoing programme of research in the hope that an evidence-based design culture will soon underpin all improvements within education.

It's this wider commitment to evidence-based approaches which Edtech 50 judge, Martin Hamilton, highlights: 'Sparx make a fantastic case study on how to best develop EdTech based upon a research and evidence-informed approach.' Reinforcing this point is the news that Sparx Maths, with the Education Foundation, are part of the newly formed EdTech Evidence Group, who are calling for a 'step change' in the quality of EdTech evidence available to schools.

'A fantastic case study on how to best develop EdTech based upon a research and evidence-informed approach.'

→ **Avantis ClassVR**
The product is a 'standalone' Virtual Reality headset complete with a unique student-friendly interface, gesture controls, embedded educational resources and simple-to-use teacher controls. This enables teachers to control, manage and monitor the AR and VR learning taking place in a structured and well-paced learning environment…for one user, it's an amazing product with superb support and resources. 'We use Avantis ClassVR to help enhance our curricula with the use of AR and VR. The resources can be tailored to suit our learners and the technical support is first-class…' Comments one Edtech 50 Judge, – this system can be used throughout the entire curriculum to enable pupils to experience first-hand places and periods of history that would otherwise be impossible. The technology both transforms learning and broadens students' horizons.

→ **Wakelet**
Put simply, Wakelet is a visual content platform. For educators and students, it offers a better way of doing things on the Web. It provides a means to bookmark, organise and curate content from across the web and use it to create beautiful, informative and engaging collections. It claims to be the 'easiest way to capture and share multimedia resources with students, teachers and learning communities.'
The ever-expanding world wide web can be, if not tamed, at least harnessed to provide coherently created content for pupils, whether YouTube videos, images, Instagram posts, weblinks or PDFs etc. A couple of our Edtech 50 judges are particularly enthusiastic, including Andrew Dowell, who comments: 'Personally use. Fantastic tool for collating resources or items to read later. Great for student use to aid assignment writing. Adapting to user feedback and constantly updating.'

→ **Judge's Insight: Sian Rowles**
After hearing the marvelous Mererid Hopwood say that as soon as you can say one word in Welsh then you are on the bilingual bus (shwmae!), I began to see EdTech in a new way.

EdTech50 is a great way of encouraging more people aboard, so I was keen to see schools whose innovative use of Hwb tools improved standards across the curriculum, but who are also open to sharing how they did it, pitfalls and all. Privileged to contribute to judging this year, I hope to celebrate the successes of each EdTech50 cohort and encourage any remaining digi-phobes aboard our digi-bus.

As our schools develop the Curriculum for Wales to reflect their community's interests and priorities, the effective use of EdTech in each classroom would be transformational. I believe it will be key to the successful implementation and the achievement of our National Mission, including equity and excellence for all. **Sian Rowles, Edtech 50 judge, Education Advisor, Pembrokeshire**

Apple Pencil/iPad, Microsoft Teams, Google Classroom

Game-changing products, nominated by educators.

No landscape survey of education technology in the United Kingdom would be complete without reference to the game-changing products of Apple, Google and Microsoft. A number of educators and our judges make this point very eloquently. Many teachers see the Apple iPad as transformational – 'there simply is not a more flexible, adaptable tool available to schools. The iPad offers unrivalled opportunities for podcasting, movie making, animating, communication and coding. With the right training, teachers can deliver lessons that would simply have been impossible five years ago.' In the words of our judge, Emma Darcy, 'the iPad is…in part responsible for allowing schools to embrace the shift change from fixed ICT suites to flexible classrooms where the learning takes place on mobile devices.'
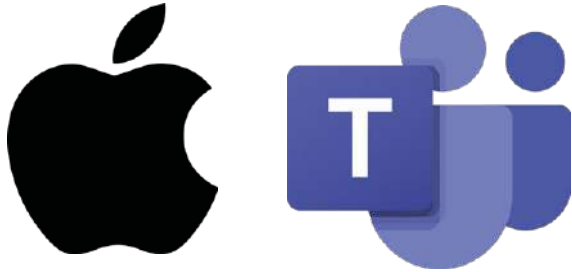
From the Google Suite for Education products, Emma also draws attention to the impact of Google Classroom. She comments: 'Not only has it given pupils the ability to engage with their learning in one easily accessible place, it has substantially reduced staff workload and allowed the use of technology to be embedded with real purpose across the curriculum.' Similarly, from the Microsoft range of educational products, Microsoft Teams is singled out by teachers for unified communication, management of homework and complete integration with Office365.' In addition, a SharePoint based student handbook and the Assignments section of Teams has replaced the traditional homework diary – 'facilitating better communication and oversight of student activities.'

Projects

Breaking new ground – pioneering approaches

Hodder Education Historic Environment webinars

Carmel Jones has taken the very real problem of most GCSE history students not being able to actually visit the historic environment site they are studying for their exams. She has been to each site and made a VR 360 tour which focuses on what students need to learn.

Students and their teachers can then watch/use it together to actually see the site from all angles and to hear the history directly linked to it. The exam requires students to link the site exactly to the history and the question. In the words of one educator: 'Carmel's genius 360 tour idea means that all students can do this AND then can then use the 360 tour when revising too.'

These tours bring the site into the classroom, removing a huge amount of red tape for teachers who would otherwise take trips of students out to the sites. It also helps those that are prohibited by budget and distance as the site can be studied in class. As one of our judges comments: Carmel tirelessly supports the schools she works with and develops innovative solutions, often working alongside Nathan Ashman, using a variety of technologies to help support and develop History teaching.

→ **Lessonvu at Aston University Engineering Academy**
First school to have a complete whole school roll out of video lesson observation, review and reflection technology in all classrooms recording all lessons. The project aims to provide teachers with the ability to securely review and reflect on any and all of their teaching. Changing lesson observation 'from a threatening experience to a constructive experience.'

→ **Barton Peveril Sixth Form College Library**
Implementing G Suite for Education has transformed Barton Peveril Sixth Form College, 'bringing the college library into the 21st century.' In particular, the use of Google Sites proved a tipping point for the college – students apparently like it as they get a much more user-friendly experience and can easily find the resources they need, both inside and outside the classroom. Teachers like it as they have more ownership and creative freedom.

→ **Digi Ladies**
A group of educators, the brain-child of Laura Dickinson, who are working to promote girls in tech. 'Laura is truly inspirational to us ICT leads in North Tyneside. She has made a huge impact on us which in turn has had a huge impact on our primary schools.' There's a fantastic group of girls from year 5 and 6 who are becoming the most amazing young advocates for women and girls to pursue careers in tech.

→ **Judge's Insight: Bukky Yusuf**
EdTech provides the opportunity to remove learning barriers for students that struggle to access the curriculum and demonstrate their learning in innovative ways. It is also a tool that can provide a foundation for young people to develop digital skills which can be utilised beyond the classroom i.e. as part of entrepreneurial initiatives / in the workplace.
Bukky Yusuf, Edtech50 judge, Science & EdTech teacher and leader

Castlemilk Family Centre

The staff at Castlemilk Family Learning Centre have worked diligently to become a digitally equipped team and nursery. The Centre is involved in piloting the first Seesaw online learning journals for early years in Glasgow and in the latest phase of Glasgow City Council's iPad roll-out.

Castlemilk Family Centre wants to showcase that digital learning can take place prior to primary school. There is a commitment across the staff teams to delivering a digital environment through all the centre's rooms, which cater for age groups from six weeks to five years.

They recently achieved Digital School status; the first in Glasgow and one of the few early years establishments in the whole of Scotland. It has also been supporting other early years establishments in their digital journey. Plans are at an early stage jointly with Glasgow City Council, to create an Apple regional training centre.

There has been a noted dramatic increase in parental engagement levels with the introduction of Apple iPads and the Seesaw App. Indeed, Seesaw have made adaptations to their app, creating a version which includes the Curriculum for Excellence experiences and outcomes. It enables tracking of children's learning and instant sharing with parents. This version of Seasaw is suitable for early years establishments across Scotland.

Techpathways London

The London Connected Learning Centre, headed up by Sarah Horrocks, runs TechPathways London. It is supporting an incredibly broad spectrum of educators to increase their knowledge of London's digital opportunities. By working with youth workers, teachers, arts practitioners and other stakeholders, the scope of the project, (managed by Caitlin McMillan), is huge, aiming to encourage young people into digital and creative digital careers.

Making Space

Three projects that make and create space to enable work for tech

→ **Spark Lab STEM classroom,
   Howard Junior School, King's Lynn**
→ **AmmA Centre, Northern Ireland,
   multimedia creative learning centre**
→ **Spark Penketh High School, Warrington,
   school makerspace**

Making space, maker space, making it happen – the three projects grouped here make and create both physical and intellectual space for Science, Technology, Engineering, the Arts and Mathematics (STEAM) to flourish in schools and colleges, in universities and in towns and cities, across the United Kingdom.

In King's Lynn, Norfolk, Howard Junior School has demonstrated its commitment to immersive practical learning by building its own Spark Lab, a classroom dedicated to STEAM. It allows students the freedom to explore concepts and technologies not usually available to them.

Spark Lab offers exciting and hands on robotics and coding sessions; in addition to allowing students to create their own 3D models. There are no chairs in the Spark Lab; it is designed not for lectures or writing large volumes of text, but for active participation.

In the north-west, we received many nominations for Caroline Keep, who is Director of Spark Penketh, the first school makerspace in the UK, and who is committed to embedding maker education across the curriculum. She's also the co-founder of Liverpool Makefest, a festival to promote science, technology, engineering, art and maths and maker-education for young people. The festival is now in its fifth year and has been rolled out nationally across all UK libraries.

Caroline recognises that EdTech is much more than classroom management systems and iPads, it includes all areas of Industry 4.0 from robotics to digital fabrication, from VFX to physical computing …'crucial skills – not currently taught within the national curriculum.'

There are no chairs in the Spark Lab; it is designed not for lectures or writing large volumes of text, but for active participation.

So, she has pioneered a way to bring these skills into the classroom through the creation of a digital pathway that runs alongside the National Curriculum to enable whole-school teaching of Industry 4.0 skills. For one of our Edtech 50 judges, Nicole Ponsford, she is a 'real inspiration and making MakerSpace happen!'

In Armagh, Edtech 50 judge, Corinne Latham, praised the contributions of Averil Morrow, Director of the AmmA Centre; a multimedia creative learning centre within the Education Authority (Southern Region), Northern Ireland. It is a centre where digital technology, alongside traditional media, can be used creatively by organisations and individuals from schools, the youth sector and the community.

Individuals and groups can learn skills in a range of digital, audio and multi-media design areas. Through the creation of video productions, musical soundtracks, animated films and web pages, new pathways to learning evolve and thereby enhance and enrich the educational experiences. The development of skills, creativity and networks has the 'potential to contribute to individuals' future education choices, training and employment prospects.' It's also an Apple Regional Training Centre and offers professional learning opportunities for teachers and school staff throughout Northern Ireland.

Left: Spark Penketh High School, Warrington.
Below: Howard Junior School, King's Lynn.

→ **Petroc College Learning Tech and
   Library team**
Petroc College of Further and Higher Education's Learning Tech and Library team is cited for highlighting technology for education, promoting the use of Google applications and introducing VR into the FE Classroom. Bespoke VR is created by the subject lecturer for the classroom supported by the team. It's often 'providing learners with their first experience of using VR but not using technology for the sake of using it!'

→ **Night Zookeeper SkyKids Challenge**
2018 Edtech 50 winner, Night Zookeeper, the digital learning tool that inspires writing through competitions, fun and the power of story has gone over to the other side; in this case, Sky TV. In a 'really important extension,' SkyKids Challenge moves Zookeeper from the classroom to the TV. Participants' ideas could even end up in the animated series. The Zoo needs you…

→ **The Penrith Hub**
The Penrith Hub is part of a collaborative cluster of nine schools, developed by Martyn Soulsby; bringing people and resources together across a ten-mile radius in the Eden Valley. They are adapting the North Lakes School's own MAT Intranet solution powered by FrogLearn and aim to reduce the number of emails being circulated by adding notices and forums to the Hub in an area usually isolated from this type of interaction. Next Steps – the plan is to expand usage…which will mean the Penrith Hub will 'reach 9 headteachers, 100 teachers and over 100 support staff/governors across 9 schools.'

→ **Steam School**
Founded by Jade Parkinson-Hill, Steam School broadcasts interviews with inspirational people from the worlds of science, tech and digital media into schools to help young people to prepare for careers in the tech sector. Changing the world for the better through science and technology. An Edtech 50 judge: 'A machine for steam!'

PIONEERING EDTECH SOLUTIONS
MADE BY TEACHERS, FOR TEACHERS

Gluu identifies existing and evidenced best practice in schools, and creates a 'shared goal partnerships' with international brands to scale the innovation globally

For example, Shireland and Britannica have partnered to create the UK's first content collaboration between a UK MAT and a global publisher to support teachers. Aimed at reducing teacher workload and ensuring a thought-through curriculum mapped to the new Inspection Framework, the Shireland and Britannica team set about building a set of resources aimed at improving teaching quality and pupil outcomes.

Find out more
www.gluu.tech

Code the Future Project

In May 2018, North Ayrshire Council in Scotland made a pledge to tackle the digital skills gap by providing access to Code Clubs for all learners aged 9–13 by August 2020.

This aim is being delivered through the Code the Future partnership between North Ayrshire Council IT, Education, Transformation and Libraries to help assist schools and libraries run Code Clubs and STEM events.

Using volunteers and a 'train the trainer' approach, pilot Code Clubs have been set up across North Ayrshire, with 24 active clubs currently registered in schools, libraries, and community centres.

As well as regular club meetings, there are also summer holiday code clubs provided. Venues are carefully chosen such as local schools that offer free school meals and activities during the summer break, ensuring that the events are accessible for all. The Coding the Future team noted that 'we saw kids who had never used Scratch before use a selection of the fantastic Code Club Scratch projects to design and build their fully functioning games. Along with the coding skills that Code Camp taught the kids, they also learned creative problem-solving, logical reasoning, decomposition, and computational thinking.'

As Rosslyn Lee and the Coding the Future project team put it – 'the programme is all about improving digital literacy here in North Ayrshire, with the aim of addressing the digital skills gap that exists in this country. There is no better way to improve this than by developing our younger generation and equipping them with the necessary skills.'

'It is all about improving digital literacy here in North Ayrshire, with the aim of addressing the digital skills gap that exists in this country.'

→ Bolton College: Chat Bot, Ada and FirstPass

Bolton College was cited for Ada, the campus digital assistant in the Edtech 50 2018 awards. Technical innovations at this college continue apace with FirstPass: Bolton College's Formative Assessment Project. Aftab Hussein and the ILT Team has designed a project which seeks to support students and teachers with the assessment of open-ended formative assessment questions.

A teacher poses a question. He or she trains the natural language classification model that underpins the question. The question is posed to the student who then responds with free form text. The model analyses the text and offers the student real-time feedback. Early trials demonstrate that the quality of work improves when real-time feedback is offered to the student. Bolton College will continue to develop the service over the next year or two. 'Definitely a pioneer,' notes Edtech 50 Judge, Martin Hamilton.

→ London Design & Engineering UTC student projects

Geoffrey Fowler, CEO and Principal, James Culley, Assistant Principal, LDEUTC, cite student Florin Rotaru for his 'professional level and dedicated' work on the Augmentifit project. In particular, Florin created a 'management' Padlet to track classmates' progress and share with stakeholder, Peapodicity. Similarly stellar input has come from students, Adeel Khaliq and Ashraful Islam on a LDEUTC Motorsports project. They and their peers combined newly learnt CAD skills, 3D Printing, laser cutting, post processing skills, electronics, programming, and their passion for Motorsports to create a high-quality replica of a Formula Steering Wheel. This is part of the larger end product of a full-scale Formula E cockpit to help simulate the entire feeling of racing a Formula E car.

→ FemEdTech (@femedtech)

Hashtag networking feminist critical digital educators. It writes women back into the EdTech picture, inspiring role models.

→ SmartSTEMs

SmartSTEMs organise hub events (as well as industry/education sector outreach) to inspire pupils to explore STEM and STEM careers. A typical SmartSTEMs Hub Event is where pupils aged 10-14 are hosted at a College or University for a STEM based day to expose them to as many role models and career opportunities as possible. The day features passionate and inspiring speakers, several interactive workshops and an industry fayre at lunch time. SmartSTEMs' business model is designed to be 'scalable and replicable and delivered through intertwined initiatives of hub events and outreach.'

→ Mini Game Jam

The Game Jam is a transition cluster event. Primary schools participate in this one-day event (in person or virtually (e.g. from South Uist via Skype) and make games in Scratch based on a given theme. The event aims to encourage teamwork and transition from primary to secondary; with secondary schools hosting local events and West College Scotland hosting a final. Co-ordinated by Dr Amanda Ford, the last word goes to her daughter – 'I think my mum is very inspiring...running computing clubs...also, teaching teachers to help them set up clubs/game jam events.'

→ Digital Learning: student teachers leading in schools

The project sees these student teachers from University of South Wales delivering sessions in schools. They aim to support schools with the possibilities of technology as a tool that can be integrated into the lessons and enhance opportunities to develop cross-curricular and project-based learning. This is one part of the work of Mathew Pullen for the university, as he looks to develop the approaches of the next generation of teachers in the UK and beyond.

→ The mTech.Academy Smart Cities Challenge

As their signature project for 2018/2019, 300 students researched smart cities around the world (the mTech Academy Smart Cities Challenge) to develop solutions that will help transform their own Northern Ireland communities into the smart cities of the future. The project culminated at Mobile World Congress (MWC) in Barcelona, where student representatives presented their smart cities visions, outlining how they will use technology to tackle a wide range of real-world issues, many of which Belfast City Council are also working on. Included are new traffic options, more efficient lighting, better waste management etc.

→ Judge's Insight: Mark Anderson

As ever it has been my absolute pleasure and a privilege to support the work of the Education Foundation in developing this fantastic representation of all that is good in teaching and learning with technology in the UK. We are lucky to have so many amazing teachers, schools and businesses working so tirelessly to support our young people – those we care about so much. The case studies here provide a fantastic roadmap that demonstrates the creativity, passion and drive to use technology in education within the UK. There is an awful lot here to be proud of. And so, regardless of whether you receive an award or not, keep doing the work you do every day to support those in our schools – you are inspirational. **Mark Anderson, @ictevangelist, Edtech 50 judge, Educator, Speaker, Consultant, Blogger & Author**

→ Judge's Insight: Viki Liogier

More than ever education institutions must rethink how they operate. The digital revolution is impacting every industry with new ways of engaging, interacting and operating. The development of competent learners in the digital age is the key to the future. We are training students to become career surfers who will ride the digital wave and embrace the digital disruption with multiple jobs and a portfolio of careers. **Vikki Liogier, Edtech50 judge, ET Foundation**
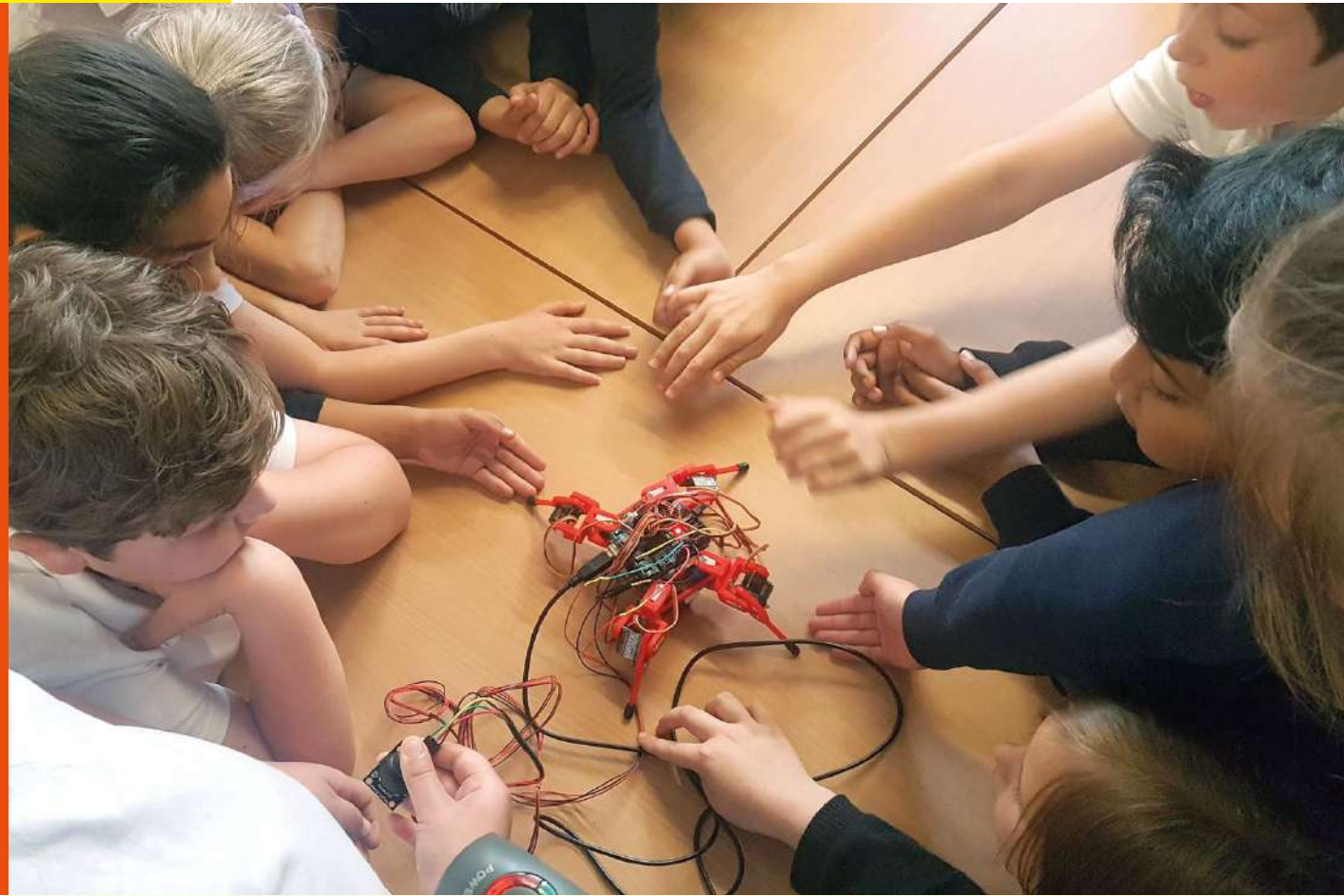
The Creative Computing Club

The Creative Computing Club provides young people in Suffolk with the opportunity to learn new digital skills in a fun and informal learning environment. It organises weekend, after-school, in-school, and private tutoring for 8 to 16-year-olds in computer programming, video game design, hardware programming, electronics and robotics. In the centre's own words – 'one of the best things about having our own centre is that we can do big electronics projects and learn new skills like soldering. We had several people soldering for the first time. Our youngest solderer was just 8-years-old.' There were a huge number of complimentary nominations for the club, and especially for its founder, Mathew Applegate. Typical comments are: – 'an amazing place to go for my son with ASD. Matthew is great with the children and inspiring. His dedication and commitment to getting children hands-on experience with electronics, software and robotics is astounding. The kids just love his group sessions.'

'An amazing place to go for my son with ASD.'

→ UCL Educate Accelerator Programme

UCL EDUCATE is a research accelerator programme that helps and supports EdTech innovators to develop world-class products and services.

This means that learners today are benefiting from evidence-led EdTech, that is better able to answer the challenges teachers face in the classroom and the needs of learners, and so improve academic outcomes.

→ Digital Innovation rOundtables

The London Digital Innovation Roundtable community of practice is free to attend and is hosted by various FE colleges. Each session is focused on an agreed theme and lasts 3 to 4 hours. Gatherings are well attended and offer networking opportunities and peer support in the London area. At the roundtable, the group of eLearning Managers and other Digital FE and HE colleagues share stories, remedies and best practices – to learn from one another and avoid pitfalls.

It was the brainchild of Julian Bream, whose 'charm and tireless enthusiasm' for this 'invaluable resource' is cited by many Edtech 50 survey participants, and endorsed by our panel of judges.

→ Harlow College Digital Strategy

Educators often make the point about not using technology for technology's sake. We are delighted to highlight Harlow College's cross-college digital strategy, which underpins its integrated use of technology for all students across all delivery areas and training for all staff. Students explore their own learning; and the use of technology allows them to do that. Each student has individual needs which conventional teaching can sometimes struggle to meet. 'Using technology like the iPads meets those needs.' As the nomination makes clear: the ongoing project is 'to be ahead when using technology.' This strategy puts them in a good starting place.

→ Foundation for Digital Creativity

Co-founded by Claire Garside, the Foundation for Digital Creativity is advancing the education of adults and children thereby inspiring future generations to create, invent and learn through digital making. Through bespoke workshops and CPD, the Foundation uses the Internet of Things to educate learners, for example, about climate change, pollution and environmental issues – using a STEM/STEAM Maker Ed approach. 'These workshops engage learners with environmental issues, but also ignite and nurture skills and interest in STEAM subjects, with particular a focus on Computer Science.'

→ Recreation Road Infant School Digital Team, Norwich

Louise Stone, Infant School Computing Lead and Apple teacher, set up Digital Leaders in her school. 'My team of 16 year 2 leaders (plus 70 more willing helpers) is still as important to our school as the day I set it up over seven years ago.' Whilst the leaders are only in year 2 they share their learning throughout school which has a positive impact on everyone and leaves a lasting legacy.

→ MFL Twitterati Podcast

The #MFLtwitterati podcast is designed to celebrate the voices of the modern language teaching community in the UK, Ireland and beyond by showcasing 'the fab ideas and resources they share on Twitter.' The main idea of this podcast is to share language teachers' innovative practice; enhancing teaching and learning both in and out of the classroom. Edtech 50 Judge, Ceri Anwyn James, comments; 'I follow the #MFLTwitterati Podcast and can say, hand on heart, that it is very good, and extremely useful for MFL teachers. There is nothing similar out there.'

→ The BCoT Maths website

The BCoT Maths website offers a range of free GCSE and Functional Skills maths resources created by Learning Technologist Charlie James and GCSE maths resit students. It's revised every year by them to make it more accessible for incoming resit students. The website is used across the UK and although free, provides 'everything a student needs to know and learn in one place.' Basingstoke College of Technology is a 2018 Edtech 50 winner.

→ The Plus Apps Project

Assistant Principal, Chris Bateman, has developed a suite of Apps via Microsoft PowerApps to significantly reduce workload and increase efficiency across a number of school systems.

Reach+ (Rewards App); Behave+ (Behaviour reporting app). More are in the pipeline in Manor School Sports College's concerted drive towards paperless systems.

Ed Tech and Inclusion

Mainstreaming Assistive technology – a good for all

This is an exciting time where technology companies are developing tools which provide multiple advantages. Taking cloud platforms as an example, they can provide security and financial benefits but can also also save teachers' time and help support ALL learners including those with SEND. Some key benefits we see across devices and software from major tech companies include:

- **Text to speech**
  Enabling those with a visual impairment or difficulty with reading to have their device read content to them.
- **Speech to text**
  Providing those who find writing or typing difficult/impossible a way to record their work simply by speaking.
- **Voice recognition**
  Enabling users to control their device's functions with their voice.
- **Predictive text**
  Just as when sending a text message, this feature can be enabled to help those who struggle with spelling. It can even be used to speed up the process of writing for those who type slowly or use an alternative interface such as switches.

Support for executive function – memory, organisational skills, time keeping and time management – are all important abilities that can be impacted by a range of special needs. Simple productivity tools such as calendars, to-do lists, cloud storage and collaborative documents can all be used to support learners in these areas to be more independent and productive.

Adam Gordon, SEND and Inclusion manager, LGFL

Judges' Commendations

Some of the people, products and projects that deserve special mention

Blended Learning Consortium
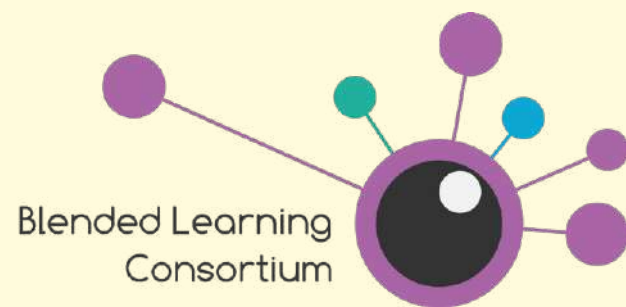
Blended Learning Consortium – Peter Kilcoyne

The Blended Learning Consortium, (initiated by Peter Kilcoyne, when at the Heart of Worcester College, alongside partner colleges), was awarded Edtech 50 status in 2018 for its provision of high-quality shared resources, specifically developed for the FE curriculum. The Consortium has demonstrated that the most effective way of creating appropriate resources is through a 'co-development process, where the costs and expertise are shared across the partnership.' Our judges are marking the project's further development and expansion; while noting also the democratic approach adopted through a voting process to determine future subject areas.

→ Hwb
Hwb is the digital platform for learning and teaching in Wales; a national, centrally-funded VLE for every learner, member of school staff and governor in all maintained schools, and local authority education teams. It is the Welsh Government's strategic digital channel to support the delivery of the curriculum in Wales.

As well as thousands of bilingual resources, all users have free access to tools for practitioners to create and share resources, including opportunities to develop their own professional networks, and the use of Google for Education and Microsoft Office 365.

Hwb enables collaboration on every level from teacher-to-teacher, teams across clusters to national announcements and documentation. For example, in Pembrokeshire a T&L sharepoint hosted in Hwb provides all teachers in the county with access to a co-constructed, ever-growing range of resources related to the twelve pedagogical principles underpinning the Curriculum for Wales. Hwb is a game-changer in Wales.

→ Steve Moss, Educational Consultant and Chair of the EN(ni) Innovation Forum
Over 30 years' experience of applying digital technology in educational contexts – as teacher, headteacher, teacher educator, school adviser and inspector, plus overseeing technology planning and implementation in school capital programmes in England.

Chair of NAACE and at EN(ni) Innovation Forum (C2K). The Innovation Forum has been established to drive benefits realisation from the ENni network services provided to schools across Northern Ireland. The forum seeks to identify, create, support and promote innovative education practices that utilise ICT effectively to provide improvements in teaching, learning and institutional effectiveness.

→ Education Scotland (Foghlam Alba) Digital Skills Team
The Education Scotland Digital Skills team was created to support the implementation of the Scottish Government's Digital Learning and Teaching strategy. It also focuses on the national priority for digital more generally around digital literacy and computing science. The team consists of two educations officers who work at a regional level and six development officers working at national, regional and local levels and is led by the senior education officer for Technologies.

The team of development officers provide a programme of professional learning and capacity building support in computing science, digital literacy and DLT. This is direct support for practitioners to meet their identified needs at all levels. They provide advice and guidance to local authorities developing digital strategies in line with national policy and gather data on the progress of local authorities to meet the objectives and expectations within the Scottish Governments DLT strategy.

→ David Whale
Unsung hero behind a lot of the evangelism for BBC Micro:bit. He 'popped up everywhere, usually unpaid as a volunteer for the Institute of Engineering and Technology.' Embedded software engineer, author of Adventures in Minecraft.

→ Dawn Hallybone
Dawn recently joined the 2Simple team, following on from her role as part of the Inclusion Team at LGfl, prior to 23 years with an ICT and Computing remit in junior schools. She is a firm believer that digital tools can both engage and enhance the curriculum for all learners. She is keen to embed mental health and wellbeing approaches, providing support for schools, teachers and the whole community. Secondary school governor and recently appeared before the Digital Skills All Party Parliamentary Group.

→ EdTech Strategy – England
England's EdTech strategy published in April 2019 set the course for the creation of a national network of demonstrator schools and colleges. The EdTech testbed programmes, including the assisted technology test bed is underpinning the new approaches to EdTech adoption in England.

→ Toni Scullion
Passionate teacher of Computing Science and founder of the charity dressCode. Toni was a finalist for Scottish Women in Technology (SWIT) secondary teacher of the year 2017 and awarded Cyber Security teacher in the same year. And winner of SWIT Secondary Teacher of the Year in 2018. Toni's leadership of dressCode aims to make a dent in the Computing Science gender gap in Scotland; aiming to inspire, support and engage pupils. When it comes to cracking codes and the gender gap, for once we do need a dressCode. Blazing a trail; articulate and empowering leadership on the national stage.

→ Judge's Insight: Nicole Ponsford
I have sat on the corners of education and technology for twenty years. But like my other passion for equality, diversity and Inclusion. I feel that these elements should be the 'norm' – rather than the *new*. Technology is an integrated part of modern life, as is diversity – these are not the bolt ons, not the *strange* but at the core of modern society, education and culture. Both offer opportunities – and both are part of today's world. We need to get real about EdTech and equality – not later but now. The future is here and is celebrated in the Edtech50. **Nicole Ponsford, Edtech 50 judge, CEO and Co-Founder of The Gender Equality Collective**

→ Judge's Insight: Zaitoon Bukhari
With the ubiquity of technology nowadays, we cannot deny the huge impact it has on staff and students work, school and home life. That's why we have chosen a digital platform in a bid to capture, cultivate and collaborate more effectively and efficiently. Here at Witton Park Academy we believe that technology is just a tool;the real impact comes from how these tools are used to enhance teaching and learning. By reinventing basic tasks that were once paper based, we have enthused and engaged our students further as well as providing an innovative platform for our teachers. **Zaitoon Bukhari, Edtech 50 judge, Teaching and Learning Lead for EdTech,Witton Park Academy**

Paul Watkins, Ysgol Bae Baglan

Committed teacher, #MicrosoftEDU Fellow for Wales, are just some of Paul 'Lanny' Watson's passions. But put at its simplest, he inspires others. In the words of the submission: 'he has inspired me... to enhance teaching and learning approaches...when I was doubtful.' And through his 'tireless' championing of social learning video-based platforms like Flipgrid, his students end up connecting globally – 'the best learning environment in which to be.'

Ones to Note

The response to the call for public nomination
was such that we have included a 'Ones to note' section

Ones to Note: People

→ Dr Katherine Jewitt
Visiting Honorary Associate in The Open University's Faculty for Science Technology Engineering and Mathematics, an independent Educational Technology and Management Consultant and a researcher at University of Glasgow's School of Education. The nomination states that Dr Jewitt's 'research is original. Nobody else has utilised virtual reality to create a three-way partnership between education provider, apprentice and apprenticeship provider – the employer.'

→ Mike Ward
Mike Ward is Group IT Director at the Dean Trust. His nomination makes the point that Mike has a vision and 'gets' the need for change within IT in Education, and the importance of training, support, mentoring and coaching – at all levels. 'A champion of technology throughout his time with the Dean Trust… using Google G Suite (especially), CleverTouch, BenQ Collaboration, – education centred solutions and robust support.'

→ Drew Buddie, @digitalmaverick
Former ICT Co-ordinator at Royal Masonic School, now in Egypt, and cited in his nomination as a 'classroom practitioner who can also effectively communicate to his peers.' One of the Edtech 50 judges cites Drew's consistent excellence in innovation and his inspiring demonstration of the power of practical applications like Makey Makey by commenting simply that he has been 'an influencer over many years.'

→ Sheffield College, Nicholas Hart and David Stewart
Nicholas Hart and David Stewart are lecturers & learning and development coaches at The Sheffield College (Principal, Angela Foulkes), where they specialise in advancing practice through digital technologies. They are experts in the use of G Suite and have driven the implementation of Google Classroom at the college. They have changed the way teams, areas and faculties use virtual learning environments and are leaders in the further education sector for doing this.

→ Lawrence Tijjani
Lawrence Tijjani is a former teacher that describes himself as @justaguy_LT. He is a motivational role model, EdTech entrepreneur and key note presenter that encourages all to overcome their barriers. Lawrence also works with disengaged young people to develop their use of technology in education alongside their digital skills.

→ Abid Patel
Abid is an IT director, Leading Learning Trust, Google Certified Trainer and Innovator, with unique insights in EdTech and how it can help to transform student learning.

Ones to Note: Products

→ ClickView
ClickView is a video learning application that allows teachers and students to access curriculum-related video material. It gives access to 1000s of video, film, documentary clips that can be easily edited into schemes of work, used in lessons and shared amongst staff. In the words of one educator – 'I don't think we could live without it now.' Another cites the 'fabulous, ever-evolving platform of video content…easy to use with other systems.'

If users find this a great resource, there was an avalanche of praise for the ClickView team, which will no doubt please the company's new Managing Director (UK), Michael Wilkinson. Many teachers refer to the high level of customer support provided by Tammy Woods and Daniel Wooten. In the company's own words – the aim is to engage students in higher order thinking with interactive videos.

→ mifuture app
Former international rugby player and PE Teacher, tasked with providing careers provision, Gemma Hallett from Pontypridd, took redundancy and 'co-created miFuture app with 2,500 young people.' The miFuture app is a 'better way of connecting Generation Z with career opportunities they can swipe through to matches apply. Simplifies the careers process for both opportunity providers and young people. Our Etdech 50 judges were impressed: 'Just wow!'

→ imoves
Co-founded by Imogen Buxton-Pickles, imoves supports teachers through movies, music etc to help their children become healthier, brighter and happier.

→ Your Favourite Teacher
YourFavouriteTeacher offers online GCSE English and Maths videos, worksheets and checklists. As an ex-teacher, founder Kate Meeks, seeks to alleviate some of the immense pressure on teachers, while still securing in-depth knowledge for students taking their GCSEs. In the words of the nomination: ' it's rare to see an EdTech product that has been designed by a teacher and brought to market by them…'

→ Century
Century is a intervention tool that combines learning science, AI and neuroscience. Century is able to understand each student, their individual strengths, weaknesses and behaviours. It tailors learning content and assessment accordingly, enabling teachers to challenge every student in the most effective way. Used worldwide, they aim to use the latest developments in machine learning and data science.

→ BlueSky
BlueSky was formed by ex-teacher, Denise Inwood as a performance management software tool that integrates performance management, quality assurance, lesson observations and collaboration. It captures all the data relevant to staff performance; enabling leaders to make assessments, but also giving individual staff the 'power to define their own professional development needs.' If the components of BlueSky are, by definition, functional and prosaic, the name captures something more poetic around the founder's aim to reflect key attributes for herself, her colleagues and her school customers, including, 'aspiration, clarity, brightness… reaching for the sky.'

→ Progressay
Founded by Moktar Alqaderi, Progressay, uses AI to radically reduce the time spent marking. Progressay's AI powered rubrics can highlight specific criteria 'in a flash to save teachers' time' but also to give 'unparalleled marking precision,' for example, focusing on grammar, understanding, inference, sentence structure and other combinations. Supported by our judges and in the words of the nomination: 'it's an amazing start-up…using ground-breaking research into AI marking.'

→ The OGAT Software and Data Team
The Software and Data Team of OGAT, (Outwood Grange Academy Trust), have developed software, (oCloud) that has changed how easily the Trust can track and monitor students, ensuring accurate and timely interventions and reducing staff workload alongside. This software, according to the nomination, 'has helped the Trust transform lives.'

→ BoomWriter UK
BoomWriter is a collaborative writing tool which aims to help teachers inspire students in all types of writing – fiction, non-fiction and vocabulary-focused writing activities. 'The idea behind this business is great; giving children a purpose to their writing as it is published in a book which they can then take home. They are able to write their own chapter, then read other pupils' work and then vote which pieces should be published.'

→ Immersive Minds
Immersive Minds is about integrating games-based learning in schools. They produce a range of creative learning experiences by blending their wide knowledge of international curricula, education and public learning. Products include the development of a 'Minecraft world' to help students explore and understand the Refugee Crisis. (#TeachingtheToughStuff). It's this powerful use of game-based technology tackling serious world issues that impresses Edtech 50 Judge, Emma Darcy. And in the company's own words, it illustrates their passion for lighting up learning with innovative digital technologies.

→ Carter's Yard Phonic Flashcards
Carter's Yard Phonics Flashcards are a set of 64 multi-sensory flashcards that are used in classrooms throughout the UK. Created by primary teachers, Carter's Yard Phonics Flashcards support children as they progress from producing individual sounds to reading words and allow them to learn at their own pace, with or without input from an adult. The many nominations for this product talked about the improvement in pupils that struggle and how the Flashcards 'reinforce the work of the teacher and serve as a reminder of the phoneme sounds.' Edtech 50 Judge, Laura Knight, suggests this a fabulous use of AR in EYFS/KS1.

→ Inverkeithing Cluster Schools Project, Fife, Scotland
The Inverkeithing Cluster Schools Project, Fife, focuses the use of technologies and cloud learning, to support quality learning experiences and outcomes, and to enhance teaching and learning practices, as part of Fife's overarching e-Vision School Improvement Plans. The programme is instilling a 'deep understanding of the power that using technology brings to learning and teaching through collaboration, gaining new knowledge and understanding, reflection and achieving together.' All primary staff have received GLOW and Office 365 training with the result that pupils are able to switch between individual and group work in school and out of the school environment; supporting them in their new technology learning behaviours.

→ Tootoot
Founded by Michael Brennan, Tootoot is an app which provides a safe, anonymous environment to report and resolve pupils' concerns discretely. Globally ambitious, but still rooted locally; with partnerships such as their involvement with Wigan Council's Deal for Children. In their own words – 'it's the new way to listen to your pupils.'

→ Times Tables Rock Stars
TT Rockstars was created by Bruno Reddy to address with passion to that perennial problem for teachers of some children not having a secure grasp of the timetables. His solution was to come up with a carefully sequenced programme of daily times tables practice – in either paper form or online. It's been taken up by over 14,000 schools, both primary and secondary, worldwide.

→ Emile Education
Founder of Emile Education, Glen Brooke-Jones, was previously cited in the Edtech 50 2018 listings. This time the nomination is in relation to Numeracy Intervention with Emile, an app and online intervention programme.' It is suitable for Primary & Year 7 Catch-up Sessions, specifically targeted and developed for students who enter secondary school significantly below expected levels. The nomination makes the case that students who are behind tend to 'fall further behind during secondary schools.

Ones to Note: Projects

→ Nottingham College Hybrid On-line Learning Project
Nottingham College's Learning Technology Team has been developing their online learning offer for learners and teaching staff with a hybrid model involving the integration of both G Suite and Office 365. The project aims to offer seamless access for both learners and teaching staff to high-quality, relevant and engaging learning resources in an 'always on' format. Each vocational area is assigned a Learning Technology Coach in the quest for truly blended learning, while reducing time spent on tasks such as formative assessment, tracking and target-setting…

→ The Edward Shackleton Project
Crosswaite Church of England Primary School, cited in the EdTech Schools 50 2019 listings for its paperless approach and whole-school use of Google G Suite, has been nominated again. This time it's as a result of the link the school, headed up by Matt Jessop, has made with Redgate Primary in Formby, located 90 miles away. Through Google Classroom both schools have been working collaboratively. Supported by Peter Rafferty and the respective school's staff teams.

→ S4SNextGen from Speakers for Schools

S4SNextGen is a free online platform which connects employers with state schools, with a view to 'levelling the playing field' for young people from state schools. (On board are the Bank of England, Disney, the V&A, Spotify). S4SNextGen has developed a safeguarded platform to help employers streamline, centralise and track their work experience offering. Our judges are very supportive of this innovative platform and from the employers' point of view, it really does take some of the work out of work experience.

→ The Wallace Smart Environment

The Wallace High School, Lisburn, made the Edtech 50 Schools listing in 2019 and have now completed the building of their smart room; hence this further nomination. It's a fully functioning smart room with a range of interactive technologies. 'A cutting edge, interactive area for pupils to engage directly with the environment. From smart sensors to smart mirrors.' The Wallace smart room is used across the key stage 3 curriculum. MFL are using Siri in a range of languages through to accurate environment monitoring with data logging. Wallace High School believes it's the first school-based smart AI environment.

→ Digital Design at St Cyres School

St Cyres School, Penarth, is an Apple Distinguished School which made the Edtech 50 Schools listings in 2019 on the basis of its truly innovative and effective learning experiences. It is appearing in this list because of the work of Damian Parker, Head of Art, Design and Technology and that of Laura Hilltout, Deputy Director of Faculty with Tophatch.

→ Weeks of Maths...

Sumdog is a founding partner of Maths Week London – alongside the Education Foundation and others – and also part of the Scottish Government's Maths Week Scotland. The aim in both initiatives is to celebrate the importance of maths in our everyday lives and encourage a positive attitude towards maths for students, teachers and parents. Sumdog, whose adaptive learning maths programme was previously cited in the Edtech 50 2018, are running these Maths Weeks' contests for school classes to compete against each other in London (22nd – 26th June 2020) and across Scotland (28th September – 4th October 2020).

→ Sussex STEM

Sussex STEM (Science, Technology, Engineering & Maths) are passionate people who work in partnership with employers and schools to nurture STEM talent across the South East. Backed by Canterbury Christ Church University - who wouldn't want to support this initiative? The reach and impact is impressive with over 63,000 students from schools across the region and around 200 companies engaged per year with activities, projects, events and competitions. Sussex STEM takes part in Engineering UK's national 'Big Bang' programme and will be hosting the event in July 2020.

→ LGFL

LGfL was set up by the 33 London Boroughs in 2001 as a not-for-profit charitable trust. And that continues to this day - local authorities are still the trustees, setting the course and ensuring education focus and value for money. The London Grid for Learning provides a safe and filtered broadband connection, network services, a common learning platform, online content and support communities for all schools across London. The organisations' commitment and leadership for education technology shines bright.

→ iRead

iRead is an EU funded project which aims to develop personalised learning technologies (reading apps) for primary school children across Europe. The focus includes children with dyslexia and those for whom English is an additional language. Part of the project involves sharing lessons learned through the design process in collaboration with industry. Edtech 50 Judge, Andrew Dowell, notes the benefits of iRead for ESOL and SEND students through gamification.

→ Judge's Insight: Ian Phillips

These people projects and products show there is a real momentum growing in the EdTech movement and increasingly the stories and resources are beginning to all speak with one clear voice. All young people and the teachers in our schools and colleges do not have reliable and consistent platforms to learn how to develop digital intelligence. Developing Digital Intelligence or Digital Intelligence Quotient DQ is essential so we can embrace the advantages that technology provides and learn how to minimise the disadvantages - like its ability to distract us. It is heartening that partnerships and collaborations across all sectors and phases, from EdTech companies and educational organisations to teachers and senior leaders are all beginning to give time and resource to continue this momentum, but it is only the beginning. **Ian Phillips, Edtech 50 judge, Assistant Head, Director of ICT, The Haberdashers' Aske's Boys' School**

→ Judge's Insight: Tracy Atkinson

2019 proved to be a notable year of digital learning development across Scotland's schools, FE and HE. From large-scale educational programmes such as Glasgow's iPad initiative and Edinburgh's Data Education project (both of which have attracted global attention) to the tireless work of individual educators, industry professionals and Education Scotland's Digital Skills Team. Through their shared passion, skills and knowledge of the effective use of digital tools and pedagogies to enhance learning and teaching, they are a continuous source of information and support to Scotland's educators as they strive to meet the digital needs of Education 4.0. **Tracy Atkinson, Edtech 50 judge, Teaching Fellow in Digital Education, University of Strathclyde, Digital Schools Award (Scotland) Validator, CEOP Ambassador**

Dai Barnes – in Memoriam

This nomination is for Dai Barnes, who died too young, last August.

Perhaps the best way to know why I've nominated Dai is to listen to the podcasts he did with Doug Belshaw called TIDE, or Today in Digital Education, a continuation of the conversation they started on the successful #edtechroundup online chat.

Dai resisted so much of what we often see and hear in EdTech circles. Sometimes things I said. For example, at the school where he taught computer science and where he was director of digital strategy, he refused to insist on one technology. He believed that choices and use of technology was a construction that belonged to the relationships between a teacher and their students. It was not something that could be imposed or procured – it had to come through trust.

Of course, this meant that his school had a broad ecosystem of kit, for teachers and kids. Not simple but effective. Dai saw his role to provide the support to make the learning fly. Instead of policies, directives and FAQs, Dai had an informal surgery for staff to discuss how to use the technology to better support learning...and fix problems. Typically offbeat and effective.

Technology isn't a solution, Dai often said, it is a representation of our world view, and a channel for our relationships. Dai would insist that we can't always blame the technology, and if we want better EdTech we have to work on being better people, friends and professionals.

I was lucky to call Dai Barnes my friend and I miss him. But his nomination is for the impact he had on the EdTech space through his expertise, generosity in making connections and his open approach.

Eylan Ezekiel, January 2020

Some of our work in the EdTech Sector
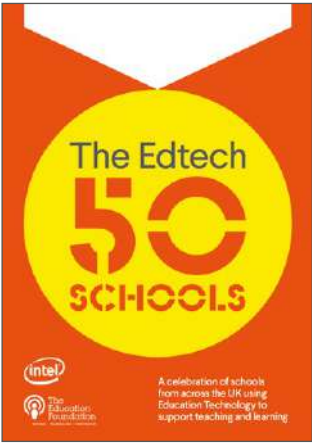
Our forthcoming schools guide and tool kit for senior leaders published with The Independent Schools Council Digital Strategy Group

Acknowledgements

Sheffield Hallam University HALLAM FESTIVAL OF EDUCATION

20:20 VISION FOR EDUCATION

SHEFFIELD 12 JUNE 2020

CREATE/DISCUSS/STIMULATE
ANALYSE/LEARN/ENGAGE
THRIVE/CONNECT/INNOVATE
GROW/LISTEN/DEBATE/SHARE
CELEBRATE/THINK/INSPIRE
EMPOWER/EXCITE/IMPACT

Join us in celebrating the 150th anniversary of the Forster Education Act — *and looking forward to the future.*

For more information visit **HallamEdFest.org.uk**

@HallamEdFest

tes