

# NAACE

THE EDUCATION TECHNOLOGY ASSOCIATION

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Image Credit: Viktor Krivitskiy [Unsplash](#)

## What's the world coming to?

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Advancing Education. The Naace Journal. Spring, 2022

### A letter from the chair of Naace

Dear Members,

I write this after returning from the first BETT Show since Covid-19 restrictions resulted in a two-year hiatus, and whilst it was fantastic to meet with colleagues face-to-face again after so long, I'm left with the view that although everything has changed, in some ways nothing has changed!

We are faced with many of the same debates; the impact of education technology on outcomes, the benefits of digital experiences for engagement, teaching (or learning) with technology, teacher confidence, and meaningful learning experiences, to list just a few. These are, of course, meaningful discussions and ones that we should be regularly revisiting, however with schools having made such advances over the last two years, perhaps the questions now need re-framing.



As ever, with the contributions we receive for inclusion in Advancing Education, members are presented with a range of articles designed to share new and innovative approaches to learning, challenge our thinking and provide practical activities that can be explored by colleagues in their own contexts. In this edition, Christina has skilfully collated articles specifically focussing on how educators are making the world a better place for young people, and during such a time of turbulence, this could not have been better timed.

We all know that technology has the potential to change the lives of young people in so many ways, yet we often become hindered by our own pre-conceptions of what meaningful learning experiences are, when viewed from our own professional contexts. An opportunity presents itself now to reflect on the broader curriculum opportunities that access to devices, online resources, and collaborative learning platforms, for example might provide us with. The opportunity for young people to engage in truly collaborative learning experiences with schools and young people in different contexts and countries has never been more pertinent.

Christina would be delighted to hear from members who are engaged in such activities and are willing to share their work more widely. Action research has long been an essential component of improving pedagogy and practice, and surely the sharing of innovation is needed now more than ever.

We are always extremely grateful for the contributions we receive for the Naace Journal and on behalf of the Naace membership, I thank everyone for their time and willingness to contribute to some of those familiar debates I alluded to earlier, and to prompt some new ones! We have a responsibility to the young people and colleagues we work with to ensure that we are reflective, challenging and contributing to the advancement of education technology, to ensure it really does make a difference and make the world a better place for us all.

*Gavin Hawkins*  
*Chair Naace Board of Management*



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## Editorial

### The world is changing

The world is changing in ways in which no-one of my generation could have prophesied, so in this journal edition, I have focused on the ways in which educators are trying to make the world a better place for young people. I am pleased to say there is good news.

### How can digital opportunities be exploited for good?

How prescient is Andrée Jordan's article about The Peace Room, a MirandaNet Fellowship project, begun in South Africa in 2008, inviting children to make the world a better place? Now more than ever, we need to offer our children strategies that will help them feel that equally in the playground and in global politics, there are ways of dealing with mindless aggression, even when they are catching the edge of the relentless news about Ukraine and feeling that their own world may be under fire. Let's help them to talk this through. This Peace Room has been archived but in the current climate might there be Naace members who would like to help in setting up a similar project? Let me know.

The next article, "The precious silver lining in this crisis", is drawn from a chapter in *Teacher Experiences and Practices in the Time of COVID-19: Implications for Understanding Quality in Teaching* which we reviewed in the last edition of this journal. In my view the authors should all receive accolades for collating this book of essays from teachers so quickly. What is pleasing is the positives that teachers have derived from the experiences they and their students have had online in the pandemic. A typical comment is by a student who said, 'The online option was perfect for me and my situation'.

Indeed, it appears from the experiences and practices of teachers during the COVID-19 pandemic, that stakeholders need to respect the expertise and professionalism of teachers and their ability to learn from experience. The article illustrates this view by explaining the findings of the Northampton University Active Distance Learning (ADL) research and development project in which the practitioners highlight the process of transitioning to online delivery and finding creative offline ways of reaching students. During this process teachers at all levels demonstrated their capacity to be innovative and to take ownership of accelerating changes in how they think and work. It will be a triumph for the profession if, at last, we are trusted to learn from experience and implement appropriate solutions.

*Professor Christina Preston*

*Dr Christina Preston, a member of Naace for 28 years, joins the Naace Board of Management from an academic background, offering the association a great deal of insight*



*into research about education technology and also effective professional development programmes for teachers. As a retired professor of education innovation she brings an international slant to Naace as she has worked with teachers and researchers in Argentina, Brazil, Chile, China, the Czech Republic, India, Mexico, Pakistan, Saudi Arabia, South Africa and Syria. This led her to create a professional organisation, the MirandaNet Fellowship, which seeks to explore the integration between edtech learning and practice. Christina has plenty of experience in providing advice – both academic and practical – to curious education practitioners. As the Editor of Naace's *Advancing Education Journal*, Christina plays a pivotal role for the association in organising, collecting and reviewing relevant academic material which will benefit the association's membership.*

Emma Hartnell-Baker asks whether the messages from the Department of Education about teaching phonics are conflicting. She quotes from a Department of Education report from 2019 that says, 'We are living in a digital world with technology transforming the way we live our lives – both at home and in the workplace'. But she discovers in her doctoral research that more than 1 in 4 children are not learning to read before they start high school. She also enquires whether mandated strategies for synthetic phonics instruction result in even more children being failed during the pandemic. Emma argues that the recent list of DfE validated Systematic Synthetic Phonics (SSP) programmes may, indeed, be preventing advancements in technology that could more effectively meet the needs of young readers in KS1. Clearly a topic where Naace policy advice might be welcome. In addition, Naace members may have knowledge about this to add. These findings promote reflection on how slowly the education system responds to changes in technology.

### **Changing our minds**

Allison Allen reviews the findings about safeguarding from 13 years ago. Has the message changed during this period? She offers a fascinating list of technical terms then and now, as well as an overview of the disinformation that now assaults us, when she is reviewing the original guidance in the light of today's digital offerings. The guidance does still hold true thirteen years later and Becta's PIES model (Policies, Infrastructure, Education and Standards) shown in the article is much used in schools now.

In her summing up, Allison is sensible about analysing poor behaviour online in the context of poor behaviour in any kind of situation: 'risk is a factor in any human interaction' she points out. Banning technology in school, she concludes, will not help young people to learn to use these resources positively and wisely.

In John Cuthell's piece, *Liminal Space*, he reiterates our knowledge developing around 2012 about the informal dynamic knowledge creation in collaborative digital contexts that occur as participants move from textual communication to blogging, web creation, online video conferencing and other such collaborative environments. Interactive and collaborative technology can be seen as creating a liminal space – a passage through which a person moves from one state of being to another. Participants in this liminal space are transformed by acquiring new knowledge, a new status and a new identity in the community, a change that is of critical importance if learning is to be successful. This paper relates concepts of liminal spaces to the metaphors we use to understand the learning process. He explains the concepts of bricolage; social constructivism; collaborative learning; and informal and formal learning.

A brief overview of the eSIR report by Peter Twinning, written in 2006, indicates that the wisdom about Educational Change and Information and Communications Technology (ICT) in this report is still relevant today. This report was again funded by Becta, the agency that oversaw so many important research projects when we were still learning about the implications for education of digital resources for education. The report covers a wide range of elements from the education perspective: learning platforms, management Information systems, collaboration, advice and support for learners, assistive technologies, mobile devices, extending the curriculum, new pedagogy, new assessment and access. However, Peter Twinning points out that in 2006, just as like today, the key issues that emerged related to 'human' rather than 'technical' issues.

### **Book reviews**

Turning to book reviews in another book that already makes the most of discoveries during the pandemic, Dr Elizabeth Hidson discusses the arguments in *Reflecting on Video-Enhanced Dialogic Assessment for international teacher training in the wake of Covid -19*. Our second book review, the *Springer Handbook for Online Learning Contexts: Digital, Mobile and Open* follows on from the success of the 2017 Springer

Handbook on Digital Learning for K-12 Schools. This time Dr. Ann Marcus-Quinn and Dr. Triona Hourigan address the gap in the literature concerned with global case studies of successful Digital, Mobile and Open Education.

### **The news**

And finally to the news for Naace members. First we have covered the latest about MESHGuides international outreach. These summaries of research findings are developed by volunteers so that teachers can pick up the latest research in a form they can assimilate quickly. The website is run by a charity so that a new government cannot pull the plugs, and the international popularity of these updates is gaining ground.

Now something to look forward to. From June 21st to 23rd Naace are joining MirandaNet Fellowship, Technology, Pedagogy and Education Association (TPEA formerly ITTE) and MESHGuides at the 64th annual ICET World Assembly hosted by Bath University and called Digital Technologies in Teacher Education. The participants are talking face-to-face as well as online about building creative global teacher education communities post-pandemic. This will be a chance to catch up with colleagues and exchange expertise about how Naace has grown and matured over the years. At last, a face-to-face conference with a strong education innovation approach. We are looking for contributors who have ideas about creativity in digital technologies in learning in general and also with a focus on making digital education effective during the pandemic. We need 100 by end of April to be viable. We do hope as many Naace members as possible will be able join us.

Let's hope that by June we will have a more peaceful world again.

*Regards*

*Dr Christina Preston, Associate Professor of Education Innovation, De Montfort University*



# How can digital opportunities be exploited for good?

## The Peace Room : inviting children to make the world a better place

Andrée Jordan



Has there been, or will there ever be, a time when the world will know and live in peace? How many people through the years have striven to reach this goal. Each one promoting the possibility in whatever way possible to everyone they can reach.

In 1963, after a family holiday to Corsica, my father (who had lived through the second world war) wrote to someone we met there, "if our children can play together on the beach, we have far more chance of a world at peace." I have carried on his ideals throughout my working life, believing that to work in an increasingly global world, children need to have experienced a wider, global "family", to have enjoyed their differences and similarities and get to understand each other through working together. Lindiwe Mabuza (Former South African High Commissioner to the United Kingdom) said, "if children work together, they are less likely to point guns at each other when they are older."

Today the world has become such a small place, so connected, that it is easy to find almost anything, however peace remains elusive. The Peace Room became a website that we developed as teachers to challenge children to work towards making the world a better place, and to help others to live in peace.

### How it came about

I was very privileged to be invited by Professor Christina Preston, founder of MirandaNet, to be part of a team of educators who went to Free State South Africa in 2008 as part of the MirandaNet "eLapa project". We were wanting to kick start the use of Informations and Communications Technology (ICT) in the

classroom as a tool for all, rather than as a subject for the more computer savvy. We worked with schools in Free State, encouraging children to use computers to put their ideas down, to record their research, and to share their work with others by using a web platform.

While there, I met the most amazing woman called Molly, the granddaughter of a lady called Mrs Bidwell who lived in South Africa in the 1940s. Seeing a world at war, she wondered how she could instil in her grandchildren and their friends the idea that peace was attainable. She, with the help of her gardener, built an actual child sized house in her garden, with a work room, a kitchen and a "Peace Room". Here, her grandchildren and her friends had meetings, nominating names of people who had been "world contributors", who had made a positive difference to the world. The names would be debated and voted on. Mrs Bidwell was a very wise person. She would choose to nominate people to provoke arguments to make the children think. For example, she nominated Adolf Hitler "for his commitment to the arts". The children, of course, refused him entry



**She decided to build, with the help of her gardener, a Peace Room, in her garden. It looked like this.**

For those who were voted in, the grandfather would make some real, bound biographies and put the books on a bookshelf in the Peace Room. Those first world contributors welcomed into the Peace Room included Elizabeth Fry for her work in prison reform, Grace Darling for the first lifeboat rescue, Thomas Edison for the invention of the electric lightbulb, Dr Simpson who helped develop chloroform for use in operations, Dr Barnardo for his work with homeless children, James Mackenzie - a heart specialist, and Aknaton - pharaoh of Egypt for uniting upper and lower Egypt.

As I heard Molly tell the story, and show me the actual building, I was enthralled. This idea fitted so well into our school remit in Bromley. I asked her if I could put her Peace Room into the virtual world, so that children the world over could contribute, nominate, debate and vote in people who had been world contributors? Those who had "made a difference". Molly agreed and kindly gave me a copy of a book "Minutes of The Peace Room" that Mrs Bidwell had made.

Having absolutely no knowledge of how to build a website, I worked with Francis Howlett, giving him the layout and what I wanted the site to be able to do. With thanks to Molly, to Francis, to MirandaNet, and to Free State Education, the Peace Room was launched. The first pilots were with children from Free state schools as part of the eLapa project. When the children from South Africa then came to the UK we introduced it to children in The Ravensbourne School and other schools linked to the project via MirandaNet. A chance meeting with John Rolfe from the British Council led to a Global Schools Partnership between my own school and Retief High School and we began using The Peace Room to get children across the globe to work together.



## What happens?



The idea was simple, though at the time, a radical one: children holding a live debate to challenge their ideas of who they think might be worthy of being given a place on the bookshelves of “The Peace Room”. The theme can be introduced and the children then research who they would like to nominate. There is a PowerPoint available on the website to help; <https://www.worldcitizens.net/ftp/PeaceRoom.ppt> The nomination then leads on to a debate. This can be with just one class, or it can be a video conference with another class in another school which can be anywhere in the world (time differences being the main challenge for some countries). One of the children is chosen to be the Chairperson. They are given a gavel and they make sure everyone gets the opportunity to speak. During the debate, a child nominates someone for the Peace Room. Their argument needs to be persuasive. They need to give good reasons as to why their nominee should be chosen. Others can question them or make comments, which they can then answer. Then the room (or rooms) vote and the Chairperson declares the result and either accepts or rejects the nomination, hitting the gavel on the desk.

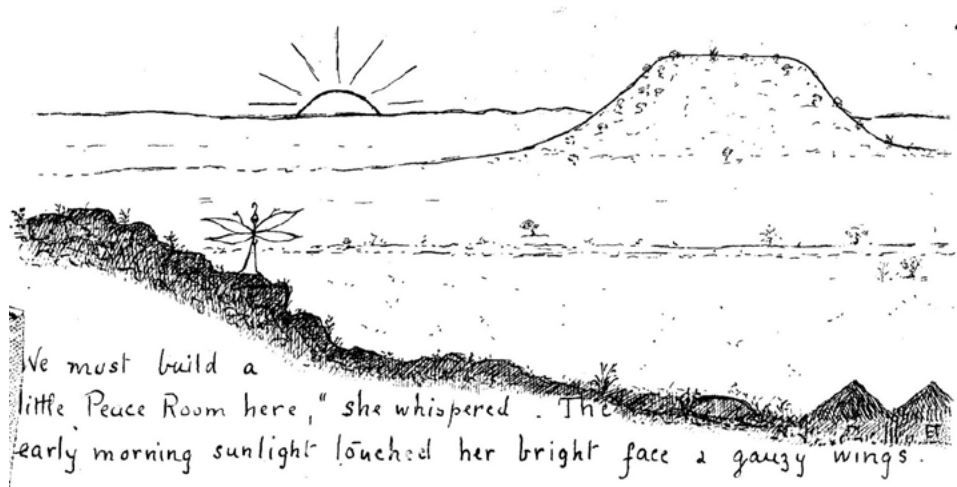
The children then get the chance to improve or change their own nominations. Often this is set as homework. In another lesson, they are guided to The Peace Room website and shown around it. [https://www.worldcitizens.net/peace\\_room/](https://www.worldcitizens.net/peace_room/)

The website has a welcome page with a picture of the outside of the building and an explanation, with a “click here to enter the Peace Room” link which takes them to a plan of the Peace Room itself. Here they could look at other nominations which had been accepted into the Peace Room by clicking on the Bookshelf, and those nominations which were pending by clicking on the window seat. To submit their own nominations or to vote for others, they had to create an account and log in. They could then go to another page by clicking on the table for submissions and on the chair to vote.

Any nominations receiving 10 or more votes were accepted into the Peace Room. Authors of accepted nominations were then emailed a “WorldCitizens” certificate for their nomination.

## How The Peace Room has been used

In my work as International Coordinator at The Ravensbourne School, I have used The Peace Room with children from year 6 to year 13 (10 to 18 years of age) and with children from South Africa, India, China,



Vietnam and Malaysia, Nigeria, Zimbabwe, and many European countries. The differences in the age of the groups do not seem to make any difference. The contributions have always been varied and have challenged thinking. There are always some common nominees: Nelson Mandela, Mahatma Gandhi, Mother Teresa, religious leaders and figures from the major religions. Other nominees have been less famous, "My Mum" or other family members are often suggested. One particular nominee I found very thought provoking was for a dustman who collected rubbish. The child explained that this person deserved to be in The Peace Room because he was deaf, and sometimes people shouted at him, but he never got angry, he just kept on doing his job, and making the world a better place.

Different cultures tended to choose different types of people. In China, sports personalities were very popular whilst in South Africa, Oprah Winfrey was often nominated for her work with children's homes in their country.

## The benefits

Language skills improve. Children have always enjoyed the live debates. Not all children want to be at the forefront, but as a class activity, they all like to listen and gain understanding of the need for persuasive argument and clear thinking when writing about someone to nominate.

Research skills improve. One of the rules is that they cannot "copy and paste". Plagiarism can be rife at first, but they learn how to quote properly, and cite any references. They learn how to check their sources, which in these days of "fake news" is such an important skill.

Working with children from other countries enlarges their horizons. One child, when asked how it had changed him, said, "Oh miss I thought they would live in mud huts but they are just like us, they watch the same films, they just wear a head covering."

The project increases motivation. When they see how well the children from other countries write, they are motivated to do better themselves.

With the rapid development of technology, we have never been better placed for working with others across the world. Although the time difference will always be a challenge, people have never been more able

to work together. The pandemic has increased the use of video conferencing. With so much online teaching, the suggestion of having a video conference with children in another school in another country is so much simpler. The use of apps has mushroomed and children are well equipped to use them.

The outlook has changed too. People the world over are so much more aware of problems and the need to find solutions. Children are willing to stand up for and make the world a better place, knowing only too well what the consequences of not doing so could mean.

Currently the Peace Room website is not functional, but I would love to see it once again being used. There will always be room for more nominations, allowing children to envision themselves becoming those who would be welcomed into The Peace Room, world contributors who have made the world a better place. Hopefully The Peace Room has and can continue to help to do just that.

### Footnote

The MirandaNet website was set up in 1994 by Jane Dorner and then further developed by Francis Howlett and John Cuthell. These innovators could envision how a website could be used to develop a community. From the start members could submit their profiles on MirandaNet in a manner later taken up by LinkedIn; this was later expanded to allow members to submit journal papers and articles. There was an early mail list for members, called MirandaLink and a vibrant forum for interactive contributions. The World Ecitizens project was developed by MirandaNet to foster international learning and linking, and from this grew the Peace Room project which is described in this article. The Peace Room would not have been possible without Francis Howlett's innovative skills. Web developments have led to the archiving of all these pioneering projects and only an archival shell remains. We would welcome ideas from Naace members about resuscitating it.

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### Andrée Jordan MA(ed), BSc Life Science Fellow: MirandaNet Senior Fellow



*Retired Teacher of Science, Psychology and Health and Social Care. Assessor of NVQs for Teaching Assistants. International Coordinator for The Ravensbourne School for 13 years.*

*During her career, Andrée enabled many students to work with others across the globe, with the use of video conferencing, ICT and web platforms to share work. She linked The Ravensbourne School to others using various British Council Projects. In 1999 her husband introduced her to a British Council Comenius Project with other schools in Europe which began her international journey and the first of many Comenius projects. This expanded when she was invited in 2003 to join the MirandaNet eLapa project. This led to a ten year link with Retief High School in South Africa using Global Schools Partnership funding via the British Council. Using Connecting Classrooms, she linked ten schools in Bromley with ten schools in Vietnam and another ten in Malaysia, whilst using the eTwinning platform to link with schools in Europe and beyond. Her international work also included partnerships in China, India, Nigeria and Zimbabwe. Her one aim remains the same, to do all she can to make the world a better place.*

## “The precious silver lining in this crisis”: positives that have emerged from teaching during Covid.

*Carol Hordatt Gentels, Sarah Younie, Marilyn Leask and Helen Caldwell*



### Introduction

Our research (ICET/MESHGuides, 2021; Hordatt Gentles & Leask, 2020; Caldwell et al., 2021; Leask & Younie, 2021) suggests that during the pandemic many teachers have demonstrated tremendous capacity for leadership of learning and innovation. They have shown willingness and capacity to change their mindsets, upskill, acquire the knowledge and instructional competencies they thought necessary for managing rapidly changing teaching and learning contexts. They have collaborated with each other and parents in different and meaningful ways.

Consequently, the narrative about teachers and what they can do has shifted. This is evident in reports from global organisations who have described the response of teachers during the pandemic as heroic and praiseworthy. At the International Summit on the Teaching Profession hosted by Education International (EI, 2020) in June 2020, Ministers of Education from across the globe praised:

The leadership of educators during the crisis, the ways in which they came together as a community to share ideas, knowledge, and experience to support their students has been exemplary. One minister referred to the mobilisation of educators as the precious silver lining of the crisis.

The Ministers further described teachers as essential, frontline workers who had shown, ‘leadership, resilience, adaptability, creativity, and dedication to their students’ by taking on the role of ‘navigating this crisis, overcoming challenges, and ensuring educational continuity for students’ (EI, 2020, para 2). Stakeholders began to suggest that ‘teacher voice is a critical element in any successful approach’ (Doucet et al., 2020, para 9) for delivering quality education in the time of COVID-19, and indeed in times of any future global crises.

This change in how teachers and the quality of their pedagogy and practice are viewed runs counter to pre-pandemic dominant discourses of ‘performativity’ and ‘oppressive, neo-liberal’ environments that stifle teacher agency and creativity (Ball, 2012, pp. 31–32). In accountability driven environments, teachers’ ideas are marginalised and excluded from decision making about teachers’ work. What teachers have accomplished during the pandemic, however, provides evidence that teachers have the capacity to be innovative and to take ownership of accelerating changes in how they think and work.

## Work in progress

A case study can be seen in practice at the University of Northampton, UK, where a pedagogical model of Active Blended Learning (ABL) has been implemented across the institution since 2014. Its goal is to enhance student engagement through a digitally rich learning environment in which students interact with content, peers, and tutors (Armellini et al., 2021; Palmer et al., 2017). The ABL precedent meant that lecturers were well placed to make the transition to Active Distance Learning (ADL) in response to the demand for remote learning when the COVID-19 pandemic began (Caldwell et al., 2021). Through ADL learners make sense of ideas using digital tools to demonstrate their understanding, and then build upon them through social online learning. Collective knowledge construction is mediated by technology tools, the exchange of tangible outputs, and synchronous and asynchronous interactions (Caldwell et al., 2020; Caldwell et al., 2021).

In many ways the online environment has advantages over a face-to-face setting. There is also much to be learned from the theory and practice of quality online pedagogy that can be adopted to improve the quality of face-to-face teaching.

## Learning – Teachers Experiences During COVID-19

Although online learning was missing many of the opportunities that make schools great learning environments – social interaction, community activities and face-to-face creative collaborative work across subjects, benefits of online learning emerged from the data including:

- Seeing the home of the student through a virtual lens gave new insights to other needs impacting students.
- Children with special needs who found school an uncomfortably challenging and competitive space found it a relief to be taught online.
- Some quiet students engaged more online than normally in the classroom through using the chat function to pose questions.
- Using online platforms to showcase students' work; to also gauge the progress of students' work, increase accessibility and make it more open to all.
- Teachers encouraged more independent learning among students.
- Multimodal approaches to teaching were used: more video clips, PowerPoints, multimedia resources.

Teachers often stated that they wanted to continue with some forms of remote learning, especially those ones that allow as much direct contact with students as possible. Teachers appreciated the possibility of providing students with lecture recordings and presentations and sharing them. Similarly, students reported liking recorded lectures because they could play them back repeatedly to learn more difficult material at their own pace. Teachers also reported that they also want to keep building the improved relationships with parents and community and capitalise on parents' involvement with supporting teachers' work. Overall, teachers positively testified to the unintended professional development that the pandemic created:

COVID has provided us with many opportunities for developing ourselves which we did not do before.

Teachers want to maintain taking ownership over their own professional learning by continuing to train themselves and improve their capacity to teach online.

## Reaching Students without Online Access

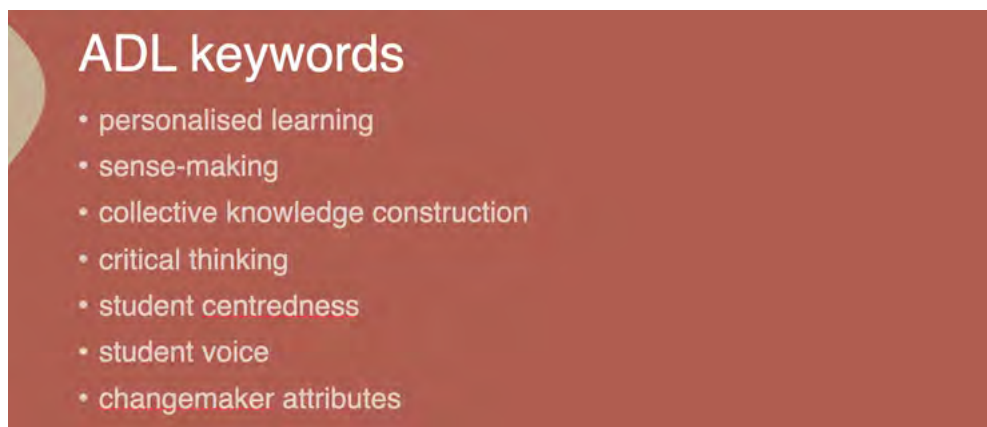
Our research also showed that for many teachers, it was difficult to reach their students online. Their responses demonstrated dedication, creativity and innovation in working without online tools. More

specifically, issues with poor wi-fi access, limited connectivity, limited devices and limited funding to buy data severely hampered their ability to establish and maintain contact with their students. One teacher, for example, reported he had seen only 10 % of his students in four months.

The data gathered demonstrated that to overcome this problem, teachers had to be innovative and creative. Teachers worked to involve their communities in reaching students. Some relied on social media such as Whatsapp to communicate with students and parents. Others had to rely on producing packages of paper worksheets to distribute for children to collect, complete and return for marking. In one country, teachers used the egg vendor to distribute materials. Others approached store owners to be collection spots. In another country, a teacher came up with a plan to paint community blackboards on shop walls on which she and some colleagues wrote lessons and activities for children in the area to copy and work on. Others utilised technologies such as solar-powered radios (provided by charities) to link with their students. These findings from the ICET/MESHGuides (2021) global report, speak to teachers demonstrating quality in teaching through their motivation and determination to meet the learning needs of their students despite the challenges arising from the pandemic. They showed their willingness to navigate and manage dramatically changed educational landscapes with professional agency and autonomy. For example, there was evidence in teacher reports of being willing to engage in 'joint productive activity' by sharing power in the online classroom, and collaborating with teacher colleagues, parents and students to build knowledge of what worked. Teachers facilitated meaningful conversations with their students that extended beyond the set curriculum. They contextualised learning by devising strategies to connect the new learning environments (both on and offline) to students' 'new' lives in the pandemic. The experiences and practices of teachers during COVID-19 also conveyed heightened awareness of the value of online pedagogy for stimulating quality in teaching. This is evident in findings of the Technology for ADL group at the University of Northampton.

### **Tech for ADL Research Group Findings**

From the literature review, drawing on the key theories of constructionism (Harel & Papert, 1991), connectivism (Downes, 2010; Siemens, 2005), and communal constructivism (Leask & Younie, 2001), we provide examples below of ADL practice that embody key principles of effective teaching for online learning as mentioned earlier namely dialogue, digital making and online posting in the construction and sharing of knowledge in online environments. The four examples of active online pedagogy which follow demonstrate the application of the Active Distance Learning pedagogy model in higher education teaching developed at the University of Northampton during COVID-19. These illustrate models of quality in teaching online which maximise the affordances of online teaching technologies.





## Padlets

### Exploring the potential of Padlet

PDT2016 AS1 workshop session 25th and 27th January 2021

- 1. Remake**  
Remake this Padlet and add your name and today's date to it (there is a video demo below). We are going to use this to explore the features available to you for AS1.  
Follow the numbers!  
When you are asked to add something to a post, click the three little dots in the top right of the post to edit it, then add.  
As you work your way through the posts also add any notes or questions to each one if they crop up as you work.
- 2. Set up**  
Go to the daisy wheel on the top right.  
Add an icon.  
Change the wallpaper.  
Choose a colour scheme for posts (pastel or bright).  
Choose a font.
- 3. Share**  
Go to share on the top right.  
Go to add members and look for Jean Edwards by typing in the name and if you want to share, choosing it. (you will have to share your PDT2016 AS1 Padlet with me).
- 11. Add voice**  
Open this post in edit and click the three little dots at the bottom right.  
Choose Voice.  
(you might need to click 'allow' to let Padlet use your microphone)  
Record some yourself or some environmental sound.
- 15. Add Padlet**  
Open this post in edit and click the three little dots at the bottom right.  
Choose Padlet.  
A menu will open on the right of your screen. Choose another padlet to add here.
- 13. Add Draw**  
Open this post in edit and click the three little dots at the bottom right.  
Choose Draw.  
Make a doodle on the whiteboard that opens and add here.
- 16. Add something else of your choice**  
Choose something else from outside Padlet to add to this post. It could be a word doc or powerpoint presentation; a screenshot or a link to a GoogleMap; etc  
You will need to either upload (if the item is on your device) or add using a link (if the item exists online).
- 16. Change colours of posts**  
Click the three little dots at the top right of a post to change its colour.

*Teacher's instructions for students to remake and respond to Padlets*

Students remake and reclaim the Padlet by following the teacher's list of directions/instructions (See Figure 1) to edit the posts to generate a new Padlet on a theme of their choice that demonstrates their understanding of the tool. In engaging in this activity, they are articulating their ideas and then sharing them with their group. The remade Padlets are posted in a 'Padlet of Padlets' and the group is invited to respond to the new set of posts.

The image shows a grid of 14 Padlet posts, each with a title, description, and a small image or icon. The posts are arranged in a 2x7 grid. The topics include:

- The curriculum**: EYFSP curriculum, Statutory framework for the early years, National curriculum.
- Art and design (EY expressive arts and design)**: Tayasui Sketches app, Tayasui Sketches app.
- Citizenship**: Thinkuknow Website, Children's workforce?, Virtual tour of the Houses of Parliament.
- Computing (EY Understanding the world)**: Scratch App and web tool, Merge Cube.
- Design and technology (EY Understanding the world) (EY Expressive arts and design)**: Lego, Confidence is Key!, LEGO Education.
- English (EY Communication and Language / literacy) (EY Expressive arts and design)**: Telescopic text.
- Geography (EY Understanding the world)**: Google my maps, United States, Map my walk.
- STEM**: Draw and Tell app.

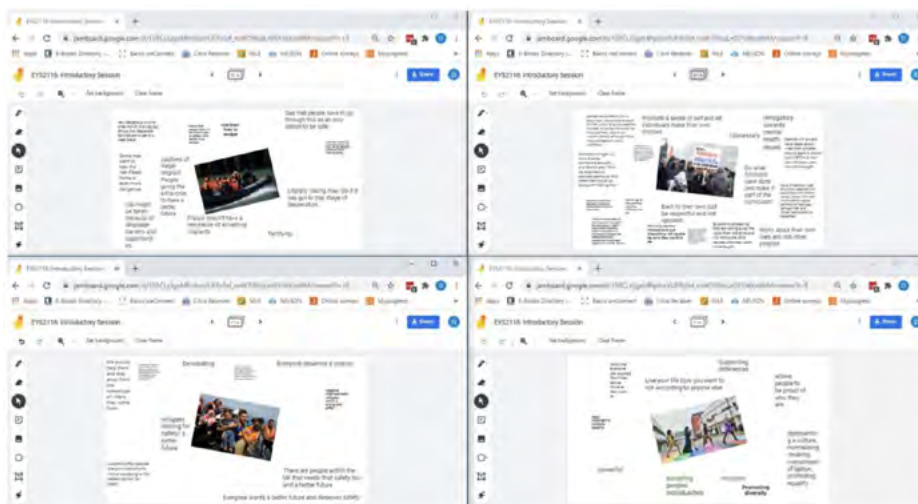
## Jamboards



Digital tools facilitating the co-construction of knowledge through collaboration

A Jamboard is a digital interactive whiteboard developed by Google. Here it is used for an interactive slide presentation on the impact of COVID-19 on children and families. Students begin by using the tools Kahoot and Mentimeter to explore and compare their personal reflections at the start of the teaching session. They are shown some theoretical frameworks. They then split into breakout groups to discuss the impact on an imaginary child in relation to her bedroom, her home, city, and the world. Each group uses sticky notes within Jamboard to record their responses and then they come back together to present their ideas and recommend some solutions as a whole group. This demonstrates how technology can facilitate the process of collective knowledge building within a learning community.

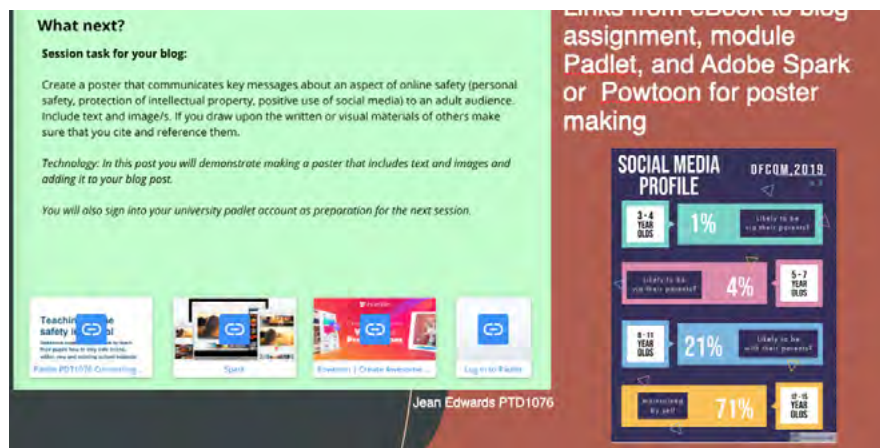
## Images and reflections used collaboratively



A pre-face-to-face task adding pace to online learning

In this example, students are invited to post an image and a reflection on what educational research means to them as a pre-session task. The resulting set of images then provides a hook for a discussion in a virtual space, bringing together the synchronous and asynchronous activities. The use of images makes powerful stepping stones for the group to use to develop shared understandings, increasing the pace of the online teaching. In this way, technology can make for a more seamless link between learning that takes place before and after an online teaching session.

## Inclusive learning environments



*A structured collection of digital tools creating a flexible learning space.*

In this example several digital platforms and artefacts are combined to create a visually rich environment that allows for the evolution of ideas. The teaching session is structured and presented through the medium of a flip book using Book Creator. Within the pages are links to a collection of complementary tools: a blog for the assignment, a Padlet summarising progress across the module, and Adobe Spark and Powtoon for the session task of poster making on the theme of online safety. These tools combine to create a learning space that accommodates individual learning differences by offering flexibility and choice in the ways students access material, engage with it and demonstrate what they know, in line with the Universal Design for Learning framework suggested by CAST (CAST, 2018).

### Discussion

In summary, these four examples illustrate ways in which the online environment can provide an Active Distance Learning experience (ADL). Data gathered from students on ADL courses during COVID-19, indicate that carefully chosen combinations of collaborative tools can engender a feeling of belonging to a community that engages in social online learning and can offer choices that promote inclusivity for a diverse range of learners. They found it helped them feel as if the social aspect of university-level study was present, meaning that opportunities for networking and peer-support still existed regardless of geographical separation.

Students expressed satisfaction saying:

- I find that the UON experience is supportive, encouraging, and motivational.
- The online option was perfect for me and my situation.
- The course itself is highly engaging.
- Studying online allowed me to hear from peers from all walks of life.

The University of Northampton's education department is research-led and conducts specific research projects looking into online teaching and learning. This means that their practice is up-to-the-minute and continually developing, rather than clinging to outdated teaching styles.

The Tech for ADL research group concluded that an ADL approach can:

- facilitate sensemaking through digital making;
- enable virtual placements and debates;

- punctuate online sessions with creative digital activities;
- improve the pace and activity in online sessions;
- capture and share online collaborations;
- offer opportunities for assessment and reflection;
- increase accessibility and inclusivity;
- sustain a sense of community

## Conclusion

In conclusion, there is much to be learned from what has happened during the COVID-19 pandemic about that which constitutes quality in teaching. The lessons we have learnt with respect to how teachers responded to providing continuity of learning during the pandemic provide important insights into how we can future proof educational practices to ensure quality in teaching is maintained. Given that future crises are inevitable, whether through natural disasters, pandemics or human made conflicts, we can plan to future-proof against disruptions to schooling. We now know what is possible with using educational technologies to fill the gap when teachers are removed from children, and how learning can be supported; with access to the internet and technology devices, online content repositories to support the curriculum and teachers' digital competencies for online pedagogies. The lessons learnt enable teachers to have 'emergency planning toolkits' in place, ready to go should such circumstances arise again.

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## Conflicting messages from the Department of Education about teaching phonics?

*Emma Hartnell Baker, teacher and doctoral student*



**‘The secret of change is to focus all of your energy, not on fighting the old, but on building the new’. – Dan Millman**

Are conflicting messages from the DfE preventing more than 1 in 4 children from learning to read before they start high school? In addition, have mandated strategies for synthetic phonics instruction resulted in even more children being failed during the pandemic?

This quote from the DfE report 2019 makes a valuable statement about technology that suggests policy is moving in the right direction:

‘We are living in a digital world with technology transforming the way we live our lives – both at home and in the workplace. But we must never think about technology for its own sake. Technology is an enabler and an enhancer. For too long in education, technology has been seen as something that adds to a teacher’s workload rather than helps to ease’. (DfE 2019)

Indeed, increased accessibility to digital technologies in schools has meant that teachers have been provided with alternatives to teaching that have paved the way for possible changes to their pedagogical practices (Hedberg, 2011). Teachers have described how digital technology can facilitate differentiated learning, and how it can “improve grades, retain students’ focus and even build the confidence of many children” (Williams, 2018) Within the Speech Sound Pics (SSP) Approach, used across Australia to teach reading and spelling skills, digital technologies are used in reception classrooms to facilitate self-directed learning of lower order, “closed” knowledge; a practice that frees teachers to not only more easily track individual learning of target grapheme recognition and blending skills, but to spend time with individual children who might otherwise not get the 1:1 attention they need. Research results and teaching practice indicate that the best instruction is explicit, systematic, sequential, active, and engaging. Effective teaching emphasises discovery and understanding and is aided by frequent opportunities to practise spelling, writing, and reading skills in meaningful contexts.



## The SSP Approach technology

The SSP Approach technology offers this to the children, with the teacher taking on a supervisory role, able to step back and observe the learning journey of each child.

Approximately 30 minutes per day, four days a week is spent cumulatively learning the 90+ commonly used phoneme to grapheme correspondences within four (phonics) Code Levels, and 400+ high-frequency words that may include one or more correspondences not taught within the Code Levels. Code Level texts offer students practise in blending the graphemes within meaningful text which includes these high-frequency words. The children also write sentences using the code that they know and explore new correspondences. The aim is to finish Phase 2 around the middle of Year One, at which time children are in the 'self-teaching' phase (Share 1995). During Phase 2 children also explore the "complicated constellation of skills and knowledge that impact reading comprehension" (Cervetti et al.2020) The learning of basic phonics skills is covered within the daily half-hour routine, allowing for more time to be spent on comprehension strategy instruction, multifaceted language interventions, explicit instruction in key vocabulary, spelling strategies and text discussions.

Phonemic awareness is a linguistic skill, but not a skill that is needed either for learning or subsequently for understanding language. However, it is essential for those learning to read and spell in English because written letters are linked to the phonemes underlying the spoken word. Without phonemic awareness, the child cannot connect the units underlying the written word (graphemes) with the units underlying the spoken word (phonemes) Even if they know the word is 'apple' and understand there is some relation between the letters and the spoken word, if they cannot hear those phonemes, they will not be able to figure out what the relationship is between the two representations, or which letters are being used to represent which speech sounds ie a/pp/le – or identify the schwa sound preceding the /l/ phoneme.

The first 3 or 4 weeks of term 1 in Reception are therefore spent developing phonemic awareness, to be able to isolate, segment and blend the phonemes that they will map to graphemes to 'kick-start' the learning to read process in Phase 2. This early phase, even though only lasting a few days, is essential as the teacher uses activities to ascertain which children are at risk of reading difficulties and to get them thinking about and listening for the smallest sounds in spoken words. <https://youtu.be/PhDspWproiA>

Learning the most common grapheme to phoneme correspondences is considered a constrained skill (Pfost, Hattie, Dörfler, & Artelt, 2014) given the closed, correct-or-incorrect nature of this knowledge. This knowledge of the alphabetic code is critical in the development of reading and spelling, and is relatively easy with good phonemic awareness. Traditional drill and practice are effective ways through which to acquire and retain closed knowledge in memory (Joseph, Eveleigh, Konrad, Neef, & Volpe, 2012; Musti-Rao, Lo, & Plati, 2014) and especially when utilised through 'spaced repetition'. The SSP 'Code Level video lessons' provide a method of engaging learners in self-directed drill and practice, at their 'Code Level' and students then practise and consolidate skills with the SSP Spelling Piano app and work poster. This work poster is a plastic laminated A3 sheet that is written on with a whiteboard pen, and then rubbed off ready to be used the next day. Spaced repetition is utilised, with each student independently working through the four 'Code Levels' at their pace. A fully differentiated learning environment is made possible because of the technology; something that a teacher cannot easily do when teaching the whole class, or even within small group instruction. Indeed, it could be considered an ineffective use of teacher time when such a practice may be facilitated via other means (Musti-Rao et al., 2014).

Within each Code Level is a group of commonly used phoneme to grapheme pairings, and each Code Level word only consists of these combinations. For example, the Green Code Level only consists of graphemes s (s) a (æ) t (t) p (p) i (I) n (n) and words could therefore include sat, ant, tin, pin, Stan, Nan, pants etc.

Children also use technology to learn the commonly used words alongside these commonly used graphemes. These high-frequency words often have one or more grapheme to phoneme correspondence not taught within the four Code levels. For example, the children might learn within the Green Code Level that the grapheme 'a' can represent the phoneme /æ/ but will need to also understand the different mappings required to read and write more complex sentences eg The ant was in a pan. ði ænt wɪz ɪn pæn (IPA symbols) Using technology children can segment and blend Code Level and High-Frequency Words and consolidate blending skills using 'Code level' readers. Because of technology, they move through the grapheme teaching progression together, as a class, but everyone is learning at their pace – able to take the time they need to secure the required knowledge into long term memory.

This is reflective of Stern (2014) and Flewitt et al. (2014) who submit that a benefit of using digital devices is that they can offer opportunities for self-directed, independent and individualised learning within a visually appealing context. Being able to work at their pace, knowing what they are learning and being able to evaluate their own progress leads to intrinsic motivation and learning outcomes. Self-regulated learning is known to have a strong positive impact on student achievement (Hattie, 2009).

Technology is also used within Phase 1, with 30 step by step lessons offered in the SSP I Can Read Without You app and reinforced with the Spelling Piano app for ipads; also bridging the gap between learning at home and in the classroom (parents can download the apps) Because speech sounds are abstract in nature, this is a hard concept for children to grasp. Within the Speech Sound Pics (SSP) Approach, this difficulty is overcome within Phase 1 using 'Duck Hands, Speech Sound Lines and Numbers' and the 'Speech Sound Monsters', which all have their own English Speech Sound, linking directly to the sound (in the same way phonetic symbols are used within the IPA). They sit together, from left to right, to build words. Children learn to 'follow the Monster Sounds to say the word!'. These can also be used as Speech Sound Pictographs and embedded onto letters, showing children the 'sounds' the letter/s represent in each word. Because they do not 'pair' with letters until in a word this makes ongoing and cumulative learning of the written code easier, even when they move from commonly used phoneme to grapheme combinations to the whole code, as shown on their Speech Sound Wall.

Shallow (transparent) orthographies, also called phonemic orthographies, have a one-to-one relationship between graphemes and phonemes, which is understandably easier to learn (and teach!) Within English there are numerous ways to represent each speech sound (eg 14 ways to represent the /s/ speech sound) and graphemes can represent numerous sounds (eg the letter s can represent at least 3 different speech sounds) These are displayed on the SSP Speech Sound Wall, within the Spelling Clouds. In opaque orthographies, such as English, spelling-to-sound correspondences can be very ambiguous (Frost, 2012) Children with limited understanding of the meanings of the words of spoken language will be impaired in their ability to correctly pronounce words, even when only the commonly used combinations are used, for example, they may see /ow/ and fail to differentiate between the pronunciation of 'tow' and 'town', even when the words are in context. They will be impaired in their ability to derive meaning from text, even for words they have correctly identified and pronounced.

Another benefit of using the SSP Approach technology is that the most frequently used written words are included, and 'Code Mapped®' i.e. visually segmented. According to Fry et al (2004) the first 100 words on his word list make up 50 per cent of all text, and the first 1000 make up 90 per cent of all written material.

Unfortunately, most schools still teach phonics and 'sight words' separately, even though all words can be orthographically mapped. Many teachers have not received training in phonetics or have the necessary understanding of the linguistic units of speech and print to be able to apply the differentiated teaching activities and give students corrective feedback. By observing the step-by-step lessons themselves, teachers are being taught the structure of the English writing system and its relationship to sounds and meaning for ALL words. They learn the English speech sound system and develop a knowledge of morphemic patterns such as prefixes, suffixes, and roots, as well as knowledge of grammatical and text structures.

The school version of the ICRWY app now includes training. However, teachers can use the Speedy Six Spelling program lessons on the whiteboard, from the ICRWY school app, to check that they themselves understand the phoneme to grapheme mapping of the target words, and the universally accepted mapping, as seen when transcribing words using the IPA. Differences in pronunciation are discussed; dialectical differences add another dimension to the written code that is not discussed within commercial systematic synthetic phonics programs. With adequate knowledge, teachers can proactively address these issues. Although there is a huge focus on teaching children phonics systematically, less attention has been paid to the issue of whether teachers themselves understand how the sounds in spoken language map with the letters in words, and the theoretical and scientific underpinnings for understanding literacy development. Teachers cannot teach well what they do not understand themselves (Moats 2009) The SSP Approach technology is designed to not only support all learners but also the learning needs of parents, carers, teacher aides and teachers. Functionally illiterate parents and carers can learn to read alongside their children.

Data and feedback collected from SSP Approach teachers suggest that this technology enables the children to learn more of the common 'letter sounds' in a shorter period than when the teacher was 'teaching from the front'. Teachers need to know where students are in their phonics learning so they can move them beyond this point. Providing "whole class" instruction is unlikely to accomplish this. None of the currently 'validated systematic synthetic phonics program developers have included technology in this way, however. Guidance notes mandate that the program 'be built around direct teaching sessions, with extensive teacher-child interaction and involve a multi-sensory approach. The programme should include guidance on how direct teaching sessions can be adapted for online delivery, live or recorded.

Also, 'Where computer-based resources are included, these should support or supplement direct teaching by the teacher, but not replace it.' (DfE January 2022) This explains the heavy focus on teacher-led instruction.

Due to the nature of the instruction, mandated to be predominantly teacher-led, it is unclear how the highest number of UK children will move from the grapheme-phoneme correspondences included in the programs, to read 'authentic texts'. In 2018/2019 27% of children were unable to read at expected levels at the end of primary school. Could reading levels improve if the technology used by so many Australian teachers was used in the UK?

Only 85% or so of these Grapheme Phoneme Correspondences (GPCs) are taught within the currently validated commercial programs, and only these are tested at the end of Year 1. A 'print to speech' i.e. 'grapheme to phoneme' approach is taken within commercial synthetic phonics programmes. And yet, as observed by Moats 'One of the most fundamental flaws found in almost all phonics programs, including traditional ones, is that they teach the code backwards. That is, they go from letter to sound instead of from sound to letter. Such programs disregard the fact that speech evolved at least 30,000 years before writing.

Alphabetic writing was invented to represent speech; speech was not learned from reading. Following the logic of history, we should teach awareness of the sound system (phonology) and anchor letters to it. The print-to-sound (conventional phonics) approach leaves gaps, invites confusion, and creates inefficiencies.'

Children learning with the SSP Approach in Australia, rather than the Systematic Synthetic Phonics (SSP) programs in the UK, learn the code from speech to print; they listen to the sounds in words and understand that the group of graphemes being learned will map for the words in that code level, but this might not occur within other words. That is, they understand that English has a deep orthography, but can learn about it systematically and logically, using the SSP technology as their mobile 'reading teacher'.

As such, Australian SSP Approach teachers report that more children meet the expectation for 'reading' before the end of their reception year, rather than at the end of year 1, as they are not constrained by the instructional method expected by the DfE with regards to synthetic phonics. However, the Phonics Screener Check was trialled in South Australia; an initiative driven predominantly by synthetic phonics advocates. In 2018 the Department for Education engaged Dr Jennifer Buckingham to provide advice regarding the expected achievement of year 1 students undertaking the check by mapping the items to the Australian Curriculum. Dr Buckingham advised that, according to analysis, it is reasonable to expect year 1 students to decode 28 items correctly out of the 40 items in the PSC. This engagement and involvement with the pilot was unusual, as Buckingham is Director of Strategy for MultiLit, a synthetic phonics program <https://multilit.com/our-team/jennifer-buckingham/> Jolly Phonics was used by almost all the schools taking part, with MultiLit also used widely. Only 43% of Year 1 students were able to correctly decode 28 words or more. [https://www.education.sa.gov.au/sites/default/files/evaluation-uk-phonics-screening-check-sa.pdf?acsf\\_files\\_redirect](https://www.education.sa.gov.au/sites/default/files/evaluation-uk-phonics-screening-check-sa.pdf?acsf_files_redirect)

One of those primary school leaders (GOPS) decided a change was needed. They piloted this new 'tech supported' approach to teaching phonics and the following year 81% passed.

In 2020 NAPLAN (standardized) testing the school had the highest performance score in the state (overall) 'massive' improvement over historical average (2015 – 2018), big improvement 2019 -2021 (no NAPLAN in 2020), in top 3 schools in the state for percentage of students in yrs 3 – 7 in High Bands for Reading. Spelling improvement is also shown <https://www.speechsoundpics.com/phonics-with-technology> This use of technology to teach the common GPSs (tested within the PSC) seems worthy of consideration by the DfE Validation Panel.

Another relevant finding by Hattie in his 'Visible Learning' research is that the proportion of teacher talk to listening needs to change to less talk and more listening and observing student learning. Most teachers do not perceive they are dominating lesson time with their talk, but they are, as is shown by video analysis and class observations. This 'less teaching, more learning' approach, used within the SSP Phase 2 routine, is an effective way to keep children engaged and on-task and because students move through the phonics learning more easily, teachers can devote more time to engaging children in tasks that require more open-ended, contextualised, higher-order thinking such as reading comprehension and writing skills. As an observer of learning, they are also in a better position to recognise learning difficulties early.

Technology is used within a learning routine that seeks to help reception teachers, responsible for the academic, emotional, and social needs of young children with different background knowledge and interests in the same classroom and can ensure that foundational reading and spelling skills are developed for all. There is more time available for implicit learnings of the mappings of the orthography (i.e., how spellings are likely to be pronounced) with learning from explicit instruction that accelerates implicit learning. When

integrated within a holistic literacy program, phonics applications such as the SSP I Can Read Without You (ICRWY) and SSP Spelling Piano apps can be used in classrooms to more effectively facilitate students' independent, self-directed learning of letter-sound knowledge and may also offer a unique way to deliver teacher training <https://vimeo.com/688741373>

In 2018, the Education Secretary called upon the technology industry to demonstrate support for “innovative teaching practices ...backed up by evidence of the impact they are having on schools, colleges and universities” (Department for Education, 2018). This message appears to conflict with the way in which phonics is to be taught according to the DfE validation panel members. The pandemic further reinforces the commitment of SSP teachers in Australia to this new ‘partnership with technology’; even when schools were closed, the learning of phonics continued.

In contrast, and as outlined within Learning during the Pandemic: a review of research from England (July 2021) ‘reading and phonic knowledge’ were of most concern to primary leaders. DfE-commissioned analysis conducted by EPI and Renaissance Learning, and separate research conducted by NFER and EEF, shows that pupils’ reading has suffered during the pandemic. This is troubling because according to the government’s own measures, over a quarter of pupils completing primary school were not reaching the expected standard in reading. And this was before the pandemic, and after a decade of mandating synthetic phonics.

Recent criticism of the synthetic phonics approach (and especially when there is a reliance on only a few of the DfE endorsed programmes) is that phonics is taught separately from the other elements needed to read (Whyse & Bradbury 2023) A differing view might be that systematic phonics can be taught separately, and quickly, using technology. The aim of instruction is to achieve ‘mastery’ of these constrained skills in a short period of time so that learners can engage deeply and fluidly in intentional, imaginative reading and writing practices. Teachers have more time to offer 1:1 support to those who need it and to spend more time working on unconstrained skills; meaning-based skills such as oral language, vocabulary, comprehension, composition and critical thinking skills. UK children today read less frequently than any previous generation and enjoy reading less than young people did in the past, according to the National Literacy Trust. There is clearly a missing link between decoding and automaticity, which has wide-reaching, negative effects.

The effective teaching of systematic phonics is unarguably the foundation of efficient reading, however, and the monitoring of phonic mastery indicates a crucial role for educators. Technology can also be used seamlessly between home and classroom. Estimations are that there are more than two billion smartphone users and more than one billion tablet users worldwide in 2017 (Statista, n.d.) and yet few studies are dedicated to evaluating the impact of smartphone and tablet apps on reading and spelling skills. The majority of people are connected in some way to the internet, so performance data can be recorded and transferred easily and automatically. Moving forward, ‘Shaping Brains’ software is an innovative approach to these issues in development that is adaptive enough to offer personalised learning sessions that facilitate more than just the quick and easy learning of phonics and high-frequency words. Earlier mastery of these skills is essential, however, and technology truly has been an enabler and an enhancer to Speech Sound Pics (SSP) Approach teachers in Australia. The question is whether those on the Systematic Synthetic Phonics Validation Panel are ready to embrace change?

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*Shaping Brains  
for Thinking & Learning*

# Changing Our Minds

## Safeguarding learners in a digital world – after 13 years, has the message changed?

*Allison Allen, Director of Outstream Consulting*



In 2009, in the middle of a global downturn in business, Siôn Simon, the then Minister for Further Education, called for better, more effective use of learning technologies, of the need for a step change for FE, and for a new approach to teaching, learning and management through technology. Complex planning was led by Becta with BIS, DCSF, and LSIS, and crucially it included Safeguarding learners: “increase level of knowledge about and application of e-safety..... Work with partners and stakeholders on adoption of safeguarding practice and production of guidance, by September 2009.” The main guidance with associated documents and activities was commissioned by Becta as follow on to e-safety guidance for 14-19 year olds. This e-Safety guidance with checklists for Further Education & Skills providers and learners, with its 16 modules, is still in use worldwide today and I have provided a link at the end of this article.

Globally in those 13 years, many events have affected our knowledge and behaviours, not least the worldwide COVID-19 pandemic, which transformed many of us into home-workers, dependent on technology for communication and access. Importantly, our education systems changed at a pace to support learning from home, often called ‘remote learning’. We are collectively confronted with a smörgåsbord of information, communication, collaboration, socialising, meeting, playing - and more, through a range of technologies largely unknown 13 years ago – and accompanied by potential risks to our safety and that of our young people.

The Glossary from the Guidance offers explanations for terminology that was unfamiliar then but seems commonplace and applicable now, or even obsolete – including; VOIP and Skype, WAP, Virus, URL, Spoofed Web sites, Spam, Social networking, Sexting, Search Engine, Identity theft and fraud, Firewall, Downloading. Contrast those with some current terms – some are familiar, while others are new concepts

with relevance to Safeguarding (definitions are provided in the Endnotes); Metaverse for example - which is “trending” according to the World Wide Web Foundation, with companies from Meta (formerly Facebook) to Microsoft, Nike to Tinder, manoeuvring for a future where interaction online takes place primarily in virtual environments. Gartner describes the Metaverse as “a collective virtual open space, created by the convergence of virtually enhanced physical and digital reality”. It is physically persistent and provides enhanced immersive experiences, and it is still being built! Then there is Disinformation (which may be provided by individuals or orchestrated by governments), Clickbait, Artificial Intelligence (AI), AI algorithms (which may include author bias) Data privacy and GDPR, KCSIE (now FE not only schools), Remote/ distance learning, Digital Citizenship, Trolls/Bots, Doxing.

### **What did the original guidance say?**

The digital world allows for many types of learning provision and ways of learning. It opens up a huge range of positive experiences and opportunities but, like most things in life, there is always an element of risk. Ensuring that these learning experiences are positive and safe is the responsibility of both the provider and the learner.

The provider has a duty of care to ensure that they are considering the needs and welfare of their learners, and this includes appropriate levels of protection, education and empowerment when learning is digital. The provider must ensure that their technology is robust, protected from threats to both the organisation and users, and offers the learner a safe environment to enhance the learning experience. The learner has a contribution to make regarding their own safety and that of the organisation; learners can maximise their learning experience if they understand how to stay safe online and can use their technology in the most appropriate way.

This is a complex landscape and there are many combinations of providers and learners. There are also many variations in the provision of, and access to, learning that need to embrace where, how, and when learning takes place. In each situation there is a need to consider both policies and practices that are effective for the provider, learner, and other partners so that learning takes place safely and effectively and innovation is fostered.

### **The FE & Skills Learners**

For the purpose of this guidance “learners” are categorised as follows:

Child or young person: someone up to the age of 19 (up to the day before their 19th birthday), care leavers up to the age of 21 (up to the day before their 21st birthday or beyond if they are continuing to be helped with education or training by their local authority), or up to 25 (up to the day before their 25th birthday) if they have learning difficulties or disabilities.

Adults in family learning a range of learner categories will be present

As with all learning circumstances, providers will find that specific attention must be given to:

Special educational needs (SEN): children, young people and adults may have additional learning needs.

Cognitive or behavioural difficulties.

Vulnerability: children, young people and adults may find themselves in vulnerable situations, or be regarded as vulnerable, where additional safeguarding is a necessary requirement. A vulnerable adult is any person aged 18 or over who is or may be in need of community care services because of disability, age or illness, and who is or may be unable to take care of themselves, or is unable to protect themselves from significant harm or exploitation and can include; older people, people with a visual or hearing impairment,

physical disability, learning disabilities or mental health problems and people living with HIV or AIDS.

Inclusion and diversity, (particularly with reference to the 6 key strands: Race, Gender, Disability, Age, Religion / Faith, Sexual orientation)

Key access issues, for example with regard to disability such as visual impairment: Information needs to be posted in a way that is visually accessible. Too often, this may be sacrificed for aesthetics with images that are too 'busy', inappropriate use of colour and so on.

Disability should not be seen as a learning need but issues about provision

Learners themselves may be in different places at different times to access their learning and may use their own mobile devices, home laptops or personal computers, online facilities in libraries and community centres as well as the technologies offered by the provider. Learning may take place at any given time during day and night, and information may be accessed outside of the secure platforms, intranets and so forth that the learning provider, employer, or other agency has made available. Learning may be individual, mentored or collaborative, or in a community. In any of these cases, a teacher/lecturer may or may not be present in the physical or virtual sense and may be in the role of "learner" too. It is crucial that learners are e-safety empowered.

### **Key messages for providers**

- Maximise the benefits that digital technologies bring by being aware of the opportunities
- Engage with your learners to understand the latest technologies in use and consider the implications of using these as learning tools
- Recognise the different kinds of learners for whom you provide
- Educate learners to identify the risks present in human interaction that may be masked or amplified by technology and help them develop the skills they need to safeguard themselves.
- Involve stakeholders in assessing the risks associated with the technologies and developing appropriate policies and guidance to mitigate against those risks.
- Work with your partners to develop consistent and coherent policies and guidance. Your partners may include schools, FE colleges, work-based learning providers, Local Safeguarding Children Boards, Education Improvement Partnerships, HE providers and other appropriate bodies.
- Involve managers, staff, and learners in developing acceptable-use policies and establishing reporting procedures for unacceptable use.

### **Legality of content**

Online content poses legal risks for learners and institutions, both in the content accessed by learners and the content added to any digital repository. These can be categorised as risks associated with content, contact, conduct and commerce.

There are many legal sources for online content, music, movies, software, and other intellectual property. Downloading music and video from peer-to-peer networks is common practice among teenagers. In using technology to access and exchange content, learners need to be aware of the law relating to copyright and illegal downloads. Some learners may see a learning provider's system as offering an opportunity to bypass their home provider's restrictions, so acceptable use policies must cover this and point out the learner's individual responsibility should a copyright breach be the subject of legal action.

Ensuring staff have a good understanding of the legal requirements surrounding the recording and storage

of digital media, including audio and images is also essential.

### **Inappropriate content**

The natural curiosity of young people and many adults puts them at risk of accessing content which is considered inappropriate – examples include pornography and material that incites racial hatred or violent extremism.

Learners may also be tempted to send inappropriate material through a mobile device or post inappropriate material to social networking sites. This may include the posting of personal data, which may be theirs, or someone else's, or the posting of material that brings an individual or provider into disrepute.

Some of this content can be blocked by appropriate filters, but acceptable use policies can cover the use of networks or premises to view inappropriate material. Clearly education and training around the consequences of such activities will help learners evaluate and modify their own behaviour.

### **Suitability of content**

Employers very often use social networking sites to assist in their recruitment of employees. Staff and learners need to understand the implication of using social networks, particularly how the information they put into the public domain could be used by others.

### **Contact**

The internet provides everyone with the opportunity to establish contact with others who they would not be able to contact in other ways. This contact can be beneficial and developmental with some good examples which include the e-mentoring schemes that are used across the country. These schemes are usually well monitored and regulated. Similarly special interest groups can use the internet to discuss and share ideas without geographical constraints.

It is worth highlighting the particular vulnerability of learners with special educational needs and disabilities. They may well be more trusting, less cautious, and more open in their responses to others. Educating these people about working safely online may require more time and individual advice from the staff that support them, and possibly more monitoring and moderating techniques online.

Inappropriate contact between children and adults has been a high-profile aspect of internet safety reports though incidents are rare. Everyone who comes into contact with children or vulnerable adults as part of their learning should have had appropriate checks and training.

### **Conduct by the learner**

Each institution or partnership will set out its own acceptable use policies, but there are some general rules of conduct which apply to all.

Staff and learners must be advised to be careful about giving out personal information such as their name, email, phone number, home address or any combination of data that can inform a stranger who they are and where they can be found. Learners may be tempted to use mobile devices, or classroom equipment, to carry out activities that are not part of the lesson. Organisations should work with learners to deal with this.

Emails, instant messages, files, pictures, texts – all can contain viruses or unacceptable content. The source of these should be checked before they are opened, and if in doubt, attachments should be checked for viruses by an administrator.

Information accessed online should be treated with caution. Not all sources are reliable and those people who are contacted through social networking sites and chat rooms may not be who they claim to be.

The internet is an increasingly popular way to share music. Whilst there are heavy financial penalties for infringement of copyright, there are also plenty of sources from which music and videos can be downloaded legally. However, learners should be made aware that by putting a music file on a peer-to-peer site, they may be allowing other users to access their computer files.

### Conduct against the learner (Cyber bullying)

Bullying by computer or mobile phone is sadly on the increase. According to an Ofsted report, four out of every ten learners have been the victim of cyberbullying. Cyberbullying is defined by the Government as 'the use of information communications technology (ICT), particularly mobile phones and the internet, deliberately to upset someone else'.

Cyber bullying may consist of threats, harassment, embarrassment, humiliation, defamation, impersonation or identity theft. In extreme cases, physical bullying has been recorded on a mobile phone. Often reported as 'happy slapping', the recording is then sent out to a wide audience by using mobile phones or social networking sites. Any form of bullying, whether by text messages, compromising images or verbal and physical abuse should be regarded seriously and action taken.

Concerns also exist about the use of technology by learners to victimise staff. Clear policies, and appropriate penalties for any breaches need to be included in an acceptable use policy to reassure staff and protect the organisation.

Cyber bullying incidents are a cause for concern in many learning communities. It is vital that providers and their communities understand the issues and are familiar with prevention and response strategies.

### Risk mitigation

Having identified the key issues and risks identified with e-safety for FE & Skills providers and learners the next step is to apply a model of "risk mitigation".

### The picture today



Using Becta's PIES model (Policies, Infrastructure, Education and Standards) that is now an integral part of e-safety guidance, provides a framework to audit an existing scenario and a checklist for ensuring that the correct e-safety measures are either in place, or need to be put in place. It offers a simple way of mitigating against risks through a combination of effective policies and practice, a robust and secure technology



infrastructure, education and training for learners and employees underpinned by standards and inspection.

### Has the message changed?

Technology has the power to blur the line between what is real and what is not. In a persistent, all-encompassing digital world, the sensory experience is heightened, which in turn escalates the experience of harassment, bullying, grooming, and hate speech. In fact, there is much research that indicates that abuse in virtual reality is “far more traumatic than in other digital worlds”.

There are new influences and experiences that can be safeguarding risks – such as state-sponsored trolls, the negative psychological and physical effects of VR, disinformation and so on that do demand a greater awareness, knowledge, and use of digital literacy tools such as validation and verification. There is an expectation emerging of Digital Citizens who understand how to support others while keeping themselves safe.

However, as explained 13 years ago, it is important to recognise that e-safety risks are not simply the result of using technology and “switching off” technological functionality is not a solution. Although we know that by far the majority of human activities are positive and life enhancing, risk is a factor of any human interaction; technology can have the effect of masking or reducing apparent threats while amplifying the results or implications. If behaviour is risky in the real world, it is risky in the virtual world and learners need support to evaluate activities.

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<https://www.dropbox.com/sh/7zOioaknhtmpbqe/AADQbTMLVxFgvOdAwHFzWmCVa?oref=e&n=9755142>

Please acknowledge source

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### Allison Allen



Allison is a Director of Outstream Consulting and has held a number of education leadership and governance roles in complex multi-stakeholder environments. Currently she is chair of governors for a multi-academy trust (leading on safeguarding, curriculum, standards, anti-racism, and special educational needs); she is a Naace Fellow, past Trustee of Naace and of London Grid for Learning, a Senior Fellow of MirandaNet and a Founder Member of the Chartered College of Teachers.

Allison has a proven track record at senior level within the education sector, as an author and specialist in school leadership development, using education technology to enhance the life chances of children, supporting the moral imperative to develop learners who have the higher thinking skills and confidence that sustains effective, safe, innovative use and creation of technology.

## Liminal Learning

*John Cuthell: retired Virtual Learning director and MirandaNet Fellowship director*

### Learning stages

When we conceptualise the process of learning it is usually twinned with teaching - whether in behaviourist terms of stimulus and response, or in its empty vessel formulation of information transmission. The metaphors we choose almost always move through the iterative cycle of unconscious incompetence to unconscious competence. These stages of learning are grounded in Piaget's work [1] [2], which led to the 'developmental folk myth' that informs many teachers' praxis. This expects learners to pass through a series of stages, each predicating its successor. This praxis contains two pillars of received wisdom: learner readiness, and stage competence. What this means for students is that, first, they are not expected to be able to cope with concepts and applications which have been determined to lie outside the bounds of their developmental stage: second, that each stage needs to be consolidated by practice.

Much of Piaget's research took as its focus the growth of mathematical and scientific concepts. Children's ability to understand the tasks which they were set, and to explain them in appropriate terms, was taken as a demonstration of their competence: the language encoded the 'scientific' expectations imposed on the children. The methodology and findings have been questioned (Donaldson, 1978 [3]; Gardner, 1983 [4], 1993 [5]; Seigel and Brainerd, 1978 [6]) but the original thesis still retains its power over pedagogy, teacher attitudes and the curriculum.

#### PIAGET'S FOUR STAGES OF INTELLECTUAL (OR COGNITIVE) DEVELOPMENT

<b>Formal operational.</b> Adolescence through adulthood
<b>Concrete operational.</b> Ages 7 to 11
<b>Preoperational.</b> Toddlerhood (18-24 months) through early childhood (age 7)
<b>Sensorimotor.</b> Birth through ages 18-24 months

*Figure one*

If we consider these stages as parts of the learning process we can apply them to the ways in which we learn and gain competence, rather than being tied to a specific chronology. We can see its development in the work of Bruner [7]; [8].

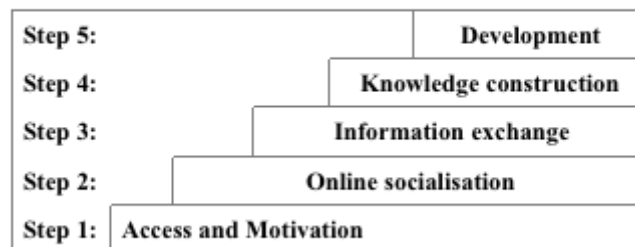
#### BRUNER'S STAGES OF LEARNING: 'MODES OF REPRESENTATION'

<b>Symbolic representation</b> (based on language)
<b>Iconic representation</b> (based on images)
<b>Enactive representation</b> (based on action)

*Figure Two: Learning with, and through, technology*

Salmon's work on e-learning [9] produced a competence sequence of learning acquisition in an online environment, in which learning is enhanced and changed through the use of communications technologies. These models can best be described as grounded theory, in that they are based on observation and experience of learning in technology-based environments. These models are Salmon's 5-Step Theory; Braided Learning and Learning in Liminality.

### SALMON'S 5-STEP THEORY

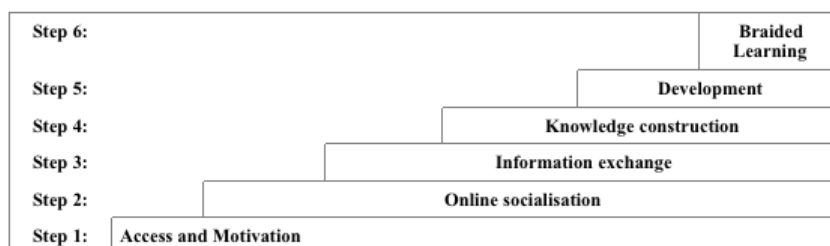


These collaborative technologies create a liminal space – a term drawn from anthropology that describes a rite of passage, in which a person moves from one state of being to another. Participants are observed to be transformed in this liminal space by acquiring new knowledge, a new status and a new identity in the community. If learning is to be successful, this change is of critical importance. Whilst remote and informal learning is largely what has been understood about mobile learning, the concept can now be extended to include these informal spaces in which learning takes place – the liminal spaces that those who push the boundaries of digital possibilities now inhabit intellectually [10] & [11]

### BRAIDED LEARNING

#### BRAIDED LEARNING

Towards Collaboration: the construction of knowledge in an online environment  
 From: Salmon (2002) 5-Step Theory [9]; Cuthell & Preston (2007) Braided Learning [12]



The processes can be described as a form of Bricolage [5], in which people build new knowledge from what is at hand.

Current models for e-learning and the construction of knowledge through online communities tend to be predicated on stages that move from access and motivation, through information exchange and the construction of knowledge, to the development of links with other communities. These were described by Salmon (2002) in her five stage model [6]. Preece (2000) similarly identified five components of online community activities [7].

Braided Learning Theory (Haythornthwaite, 2007 [14]; Preston 2008 [15]; Preston and Cuthell 2012 [16])

tracks the informal dynamic knowledge creation in a number of collaborative contexts such as MirandaNet and MirandaMods, in which participants move from the textual debate of a conventional mailing list, through to video conferencing, micro blogging contributions and collaborative concept maps. This collaborative technology creates a liminal space in which participants can be observed to be transformed by acquiring new knowledge, a new status and a new identity in the community. If learning is to be successful, this change is of critical importance. Whilst remote and informal learning is largely what has been understood about mobile learning, the concept can now be extended to include these informal spaces in which learning takes place – the liminal spaces in which those who push the boundaries of digital possibilities now inhabit intellectually (Cuthell, Preston, Kuechel and Cych, 2009 [17]).

### **THE KNOWLEDGE CREATION PROCESS AS BRICOLAGE**

Participants in the liminal space apply the instructions they have to the task in hand, and try to learn the routines as they go along. The use of the tool becomes shaped by the outcome, and the skills develop through use, because the intentional outcome is to develop new knowledge. The practice becomes one of “do-it-yourself”, analogous to one in which items are taken “off the shelf” and used in whatever way the participant sees fit. The French term for this is “bricolage” – whether for a do-it-yourself store, a builders’ merchant or the act of constructing new knowledge and understanding in this way.

In “The Savage Mind” [18], Levi Strauss used the term “Bricolage” to describe the way in which the non-literate, non-technical mind of “primitive” man responds to the world around him, as someone who works with his hands and uses devious means compared to those of a craftsman, and who has nothing else at (his) disposal. Levi Strauss describes the bricoleur as adept at performing a large number of diverse tasks, with the rules of his game, always to make do with “whatever is at hand” [18]. Whereas an engineer works with concepts, Levi Strauss describes the bricoleur as working with signs, the very concrete objects with which meaning is constructed [18]. “...

The process involves a “science of the concrete”, which is carefully and precisely ordered, classified and structured by means of its own logic. The structures are “made up”, and are ad-hoc responses to an environment. They establish homologies and analogies between the ordering of nature and that of society, and “explain” the world and make it able to be lived in. The bricoleur constructs the “messages” whereby “nature” and “culture” are caused to mirror each other. Levi Strauss saw bricolage as a way in which pre-scientific societies construct a belief system which explained their world [18].

Papert [19] used the concept of bricolage in relation to the concept of “chunking” [14], a process in which knowledge is broken into “mind-size bites”, which enables new knowledge and understanding to be constructed from it. His thesis was that previously learned strategies could be used as a tool in concept formation. The knowledge that is constructed is not achieved through linear, sequenced steps. Indeed, it is not achieved by ‘chunking’ in its accepted sense, since chunking is a concept based on pre-determined structures and stages. Instead, the knowledge is constructed in terms of language, iconic representations and the outcomes which they produce. This knowledge construction is dynamic. Users tinker, tweak and work towards the final artefact which in its construction will define the knowledge, both for the auteur and others of the peer group.

The process, then, is one of working from the specific (the task that must be completed) to the general (learning from that experience to apply to future experiences). The signs by which they work are those of the Graphical User Interface; the “devious means” that they use incorporate a range of online technologies, making do with “whatever is at hand” [5]. Their work gives an account of their lives in a world where allusion, reference and quotation seem the only possibility.

The synthesis must be that learning is seen as experiential, observational and a semiotic experience – again illustrating the ways in which users have internalised the processes and skills associated with higher-order thinking (Bloom, 1956 [20]; 2001[21])

Various interactive applications and social software have significantly changed the way of using computing technologies from consumption to creation. A series of studies have provided rich evidence of the ways young people are using technology and the Internet for socialising, communicating and for learning.

### LEARNING: INFORMAL OR FORMAL

Pachler and al. [22] suggest that the key defining aspect of informal learning is one of agency: that is, who determines the learning goals. They view informal learning as a natural activity by a self-motivated learner. This could be in a group, without a tutor being aware of such activity; it could be either intentional or tacit learning, in response to some stimulus; it could be what they term “serendipitous”, without the learner necessarily being aware of what is being learnt.

So, who determines the trajectory and outcomes of learning – the institution, or the learner? Should learning only be intentional, or is incidental learning equally valid? Formal learning provides the structure, signposts, and scaffolding for a beginning learner. Informal learning, on the other hand, builds on the foundation of existing knowledge, and a sense of context that provides the framework for understanding.

### BLOOM'S TAXONOMY REVISITED

Bloom's Taxonomy (Bloom & Krathwohl, 1956) [20] should be considered as a classification of learning objectives that has been developed into a theoretical framework and used to focus on the ways in which learning could be delivered, tested and assessed.

It became a way of classifying the goals and objectives of the educational process and used for building curricula (and then, of course, testing).

Bloom's Taxonomy identified the three domains of Cognitive, Affective, and Psychomotor in which learning was seen as cumulative, with one level building on the previous. The presupposition was that the education process (together with teaching and testing) should focus on all three domains to produce an approach to education that was holistic.

**COMPARISON OF TAXONOMIES OF THINKING SKILLS**

Bloom's (original) Taxonomy: Low to High		Revised Digital Taxonomy: High to Low	
THINKING SKILL	Level		THINKING SKILL
Knowledge	Low	High	Creating
Comprehension	↓	↑	Evaluating
Application	↓	↑	Analyzing
Analysis	↓	↑	Applying
Synthesis	↓	↑	Understanding
Evaluation	High	Low	Remembering

*Figure Three*

In the revised taxonomy (Anderson, Krathwohl, et al (Eds.. (2001) [21] the highest-level skill is now Creativity (an update of Synthesis in the original taxonomy) which is now seen as a higher-level thinking skill than evaluation. The descriptors change from nouns – statements of what the skill is – to verbs – statements of how the skill is demonstrated.

## Learning in Liminality

In anthropological terms liminal spaces – embedding rites of passage, with people moving from one state of being to another – were three-layered multiverses incorporating a physical space, the virtual space of trance and dream and a visual space of representation: paintings left behind on cave wall; artefacts. Shamans and creatures from Myth entered these spaces, left behind their constraining present and found their identities shifting and changing. They brought back to those unable to cross with them (their communities, cabined, cribbed and confined by spatial temporality) messages to guide them in their daily life. The shamanistic ability to shift time, shift place and shift shape linked the grounded earth world with fluid visions to guide their future.

Van Gennep's concept of Liminality (1909; 1984) [23] identified the in-between-ness of those in a condition of dislocation, where hierarchies are reversed and uncertainty rules. Jung (1978)[24] referred to liminal spaces as boundaries between states of being, where the liminal space offers the possibility of a re-creation of self, where symbolic actions create meaning for the participants. Conflict, chaos, uncertainty and the breakdown of old structures accompany these actions.

Liminality brings with it a sense of power and possibility that is in part a release from prior constraints (temporal; spatial; personal; professional) and in part a reflection of the autonomy engendered by the de-stratification of existing professional power relationships of learning. The liminal spaces that we inhabit and within which we work are everywhere, and nowhere, and this is particularly true when we consider the Liminal Space that is afforded by what can be called Web 2.0 technologies, and which consists of a number of constantly-shifting elements.

The learning that such spaces afford, and the ways in which this learning can be evaluated, is considerable. The possibility of learning in Liminality, especially through the agency of personal digital devices and new technologies creates new affordances for autonomous learning.

An integral part of making a range of technologies work together – possibly for the first time – is the acceptance of the fact that conflict, chaos, uncertainty and the breakdown of old structures accompany these actions. But then, learning is a conditional and contingent process ...

“As the use of a new technology changes human practices, our ways of speaking about that technology change our language and our understanding. This new way of speaking in turn creates changes in the world we construct.” (Winograd and Flores, 1988, p.6) [25]

The term 'Web 2.0' is notoriously slippery, often appropriated for a number of conflicting purposes. O'Reilly's 2005 summary [26] includes the use of the Web as an applications platform, the democratisation of the Web, the use of new methods to distribute information and the use of the Web itself as a Platform. As hardware and software developed and became ubiquitous so the initial Web 2.0 concepts have become internalised as expectations and performative actions by users, despite the fact that institutions have either been slow to implement Web 2.0 possibilities or, in the case of the educational establishment, rejected them in their entirety. Some teachers, however, quickly realised the possibilities offered by Web 2.0 for learning and teaching, and in particular for their own professional development. No longer would they be dependent on whatever professional development their institutions saw fit to offer.

The affordances of Web 2.0 technologies have been explored by education professionals in the MirandaNet Community (MirandaNet, 2012) for a number of years (Cuthell, 2008 [27]; 2009a [28]; 2009b; Cuthell et al., 2009 [29]; 2011 [30]; Preston & Cuthell, 2012 [31]), and have been combined to produce an approach to professional development that has enabled innovative developments to be evaluated in terms of their



effectiveness for learning. Devices ranging from conventional desktop and laptop computers, through netbooks and tablets to smartphones, coupled with web-based applications – collaborative concept mapping; wikis; video streaming; web conferencing – have supported collaboration and community across a diverse range of settings, geographical locations and time zones.

### Shape-shifting to a conclusion

As participants have expanded and developed the range of technologies and affordances provided by digital technologies, so the concept of social constructivism has accommodated these and expanded into the liminal spaces that are no longer constrained by temporal or physical boundaries, and are therefore truly mobile.

The extension of social constructivism theory builds on evidence that the praxis of those participants in liminal space is one that constructs knowledge: “the working heuristic of discovery” [32]. They take for granted the constraints and difficulties within which they work. What they produce is a result of their discovery of the ways in which the information given, created and found, with the tools in their hands and the time available – all transmuted into their knowledge creation.

The existential reality of learning is very different from the functionalist expectations of learning, yet so much policy is predicated on limited functionalist outcomes.

In this context, many young people’s transformational learning experiences outside school are now significantly different from the traditional routes practised in school.

Social networking sites are used to build a range of identities important to them, but their experience in this field rarely takes them into deeper learning stages. The ideas, concepts and attitudes create the knowledge they absorb: these diverse palimpsests are incorporated into their own truths that can lead to magical thinking. And, as each layer of their conceptual rhizome builds, so these false concepts become more deeply embedded.

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## John Cuthell



John ran *Virtual Learning*, a consultancy specialising in research, evaluation and change management aspects of e-learning. Part of his work involved research into the training and development needs of industry and education.

For a number of years John was the Research and Implementation Director for the *MirandaNet Academy*, developing practice based research accreditation for teachers. International *MirandaNet* action research projects evaluated the global impact of interactive whiteboards on teaching and learning and the role of CPD in professional development.

John worked in education and researched and evaluated the impact of new communications technologies on teaching, learning and working. With a background in Language, Communication Studies and Cognitive Psychology, his main focus was the extension of a long-term PhD research project on the impact of ICT on thinking, learning and working, published as '*Virtual Learning*' (2001, Ashgate, Aldershot).

## Educational Change and ICT A brief overview of the eSIR report (2006)

Twining, P., Broadie, R., Cook, D., Ford, K., Morris, D., Twiner, A., & Underwood, J. (2006).



### Overview

This report was based on research carried out in 2005 into aspect of the English Department of Education's digital technology strategy, specifically:

Priority 2: Integrated online personal support for children and learners

Priority 3: A collaborative approach to personalised learning activities

The project team included members spanning Early Years, Primary, Secondary, FE, academia, the commercial sector and policy makers.

The approach taken was to define the eSIR reference statement, which set out a vision for what would be in place if the digital technology strategy was being effectively implemented (see Figure 1). This was the reference point against which practice was examined.

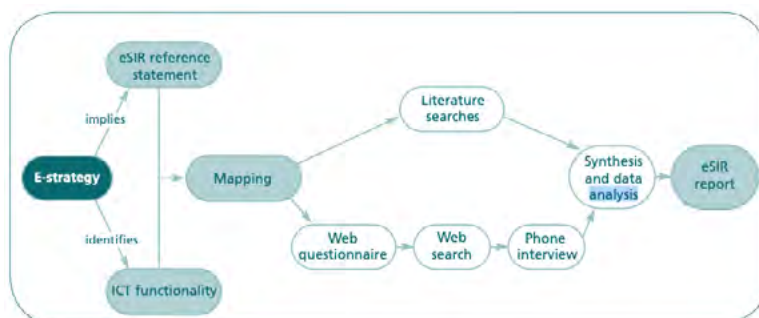


Figure 1. The eSIR Reference Statement (Twining et al., 2006, p. 14)

The methodology adopted (see Figure 2) included: mapping a range of 'ICT functionality' to the eSIR Reference Statement, conducting a literature review, and an online questionnaire targeted at key people involved in implementing the digital technology strategy across phases of education. Where the

questionnaire highlighted specific examples of digital technology implementation web searches were carried out to deepen the data, followed by phone interviews with respondents. Figure 3 summarises the scope of the data generation.

The research explored a range of areas, such as: Learning platforms, Management Information Systems, collaboration, advice and support for learners, assistive technologies, mobile devices, extending the curriculum, new pedagogy, new assessment, and access. However, the key issues that emerged related to 'human' rather than 'technical' issues. Change management was the major concern, which included seven specific aspects:

### **Complexity, change and the e-strategy**

Transforming education through the use of ICT, as envisaged in the e-strategy, represents a second order change<sup>100</sup>. It requires rethinking familiar ways of doing things<sup>101</sup>. This is particularly difficult in the context of the education system, because of the dynamic and interrelated nature of its multiple components<sup>102</sup>. (Twining et al., 2006, p. 66)

### **Focus on people**

... no amount of technology will bring about the transformations that it calls for without the active involvement of teachers<sup>116</sup> and other people at all levels in the education system (Twining et al., 2006, p. 70)

### **Buy-in**

Buy-in, which is often talked about in terms of 'ownership', is important in the introduction and management of change processes in order to ensure that people – the key to innovation – are convinced of the benefits they will gain from being involved with and committed to the initiative. It is recognised that, without this ownership, the anticipated changes may be subverted, undermined or blocked<sup>128</sup>. (Twining et al., 2006, p. 74)

### **Leadership**

Implementation of the e-strategy thus depends on senior management buy-in to the role that ICT can play in enabling their educational vision to be realised. Senior management buy-in, however, requires that SMT members have sufficient understanding of the ways in which new technologies might be used in order to be able to see how the functionalities these offer relate to their strategic educational vision. The active involvement of senior management plays a crucial part in the successful implementation of change within their organisation (Twining et al., 2006, p.77)

### **Support**

... there must be a robust technical infrastructure<sup>137</sup>. ... there must be just-in-time support at the point of need<sup>139</sup>. ... staff must be given opportunities to engage in continuing professional development in order to learn how to use new technologies<sup>140</sup>. ... (Twining et al., 2006, p. 79)

### **Shared understandings**

There is widespread support for the view that we need to have a shared vision informing our use of ICT in education. However, many researchers and commentators believe that there is a lack of shared vision on the role of ICT in education ... (Twining et al., 2006, p. 82)

### **Procurement**

The prevalence of economies of scale and scope in e-learning developments favours regional or even

national provision, which creates a tension when balanced against the desire to press autonomy, responsibility and funding down to the most local level possible (for example Interview 31 – LA). Procurement strategies also need to recognise the portfolio benefits which derive from risk sharing.

### Leadership

Implementation of the e-strategy thus depends on senior management buy-in to the role that ICT can play in enabling their educational vision to be realised. Senior management buy-in, however, requires that SMT members have sufficient understanding of the ways in which new technologies might be used in order to be able to see how the functionalities these offer relate to their strategic educational vision. The active involvement of senior management plays a crucial part in the successful implementation of change within their organisation, (Twining *et al.*, 2006, p.77)

### Conclusion

None of these findings were new – they were well documented in the extensive literature on the implementation of ICT in education which spanned the previous 25+ years. Indeed, perhaps the most important finding within the report was that: While many of these implementation issues are not ‘new’, the fact that the evidence collected as part of this review clearly indicates that they are still the most important factors affecting the implementation of ICT in education is itself significant, (Twining *et al.*, 2006, p. 3)

In the years since 2006, when the report was published, technology has changed considerably, however, the implementation issues remain very much the same, as evidenced by their frequent ‘re-emergence’ in the research literature (e.g. see Twining *et al.*, 2013; Butler *et al.*, 2018; Twining *et al.*, 2021)

### This article summarises:

*Educational Change and ICT A brief overview of the eSIR report (2006)*

Twining, P., Broadie, R., Cook, D., Ford, K., Morris, D., Twiner, A., & Underwood, J. (2006).

The eSir report can be found in full here.

*Educational Change and ICT: an exploration of Priorities 2 and 3 of the DfES e-strategy in schools and colleges. Coventry: Becta.* [http://oro.open.ac.uk/6408/1/Twining\\_et\\_al\\_2006\\_educational\\_change\\_and\\_ict.pdf](http://oro.open.ac.uk/6408/1/Twining_et_al_2006_educational_change_and_ict.pdf)

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## Peter Twining



*Peter is passionate about enhancing education systems, with a particular focus on school age learners. A Professor of Education (Innovation in Schooling & Educational Technology) at the University of Newcastle (Australia), having formerly been Professor of Education (Futures) at the Open University (UK). He has also been a primary school teacher, initial teacher educator, the Head of Department of Education at the Open University, the Co-Director of the Centre for Research in Education and Educational Technology, and Co-Editor in Chief of Computers & Education. He has brought in over £10million of external funding, most of which was focussed on issues to do with the purposes of education, the management of educational change, and enhancing education systems, informed by understandings of learning, pedagogy and the potentials of digital technology.*

*He blogs at <https://halfbaked.education>, is [@PeterT](#) on Twitter and his LinkedIn profile is at <https://www.linkedin.com/in/peter-twining/>.*

# News

## Digital Strategy Beyond the Crisis - Discussion at BETT22



Image Credit: [Danny Nicholson](#) CC BY ND

During BETT, Naace were pleased to have the opportunity to present its thoughts about the strategies we need to be thinking about as we move away from the COVID crisis. Laurence Boulter chaired a Bett Academy Live panel discussion with Naace Board Members on the Friday morning. Joining Laurence on stage were Vice Chair, Ed Fairfield and Nadya French, Head of Computer Science at Longhill High School. Many exhibiting at Bett this year had wondered whether turn-out would be as we have seen in previous years. With most observing that attendance was remarkably healthy we were pleased that this was reflected in the attendance for our discussion which was close to capacity. It is reassuring to know that the Naace perspective is welcomed!

Laurence initiated the discussion by reminding us that although many schools had found lockdown challenging, there had in fact been an uptake of use of the SRF over this time, with more schools successfully achieving NaaceMark than we might typically see over this period. Our initial theme for discussion was then the lessons learned by School Leadership.

It was clear that provision had been a major consideration over the period of crisis and Ed shared his observations where school leadership had clarified their priorities and spent more thought in matching the provision of equipment with the activities they were enabling. He reminded us that infrastructure needs to be considered from the outset and aligned with what schools wanted to achieve. Many schools have demonstrated a clearer sense of purpose over recent months and Ed urged that schools continue to work closely with providers to ensure this, and that providers are always pleased to engage in this way. The panel agreed that much of the above is best facilitated by a strong sense of vision within the leadership, and this was a feature many SRF schools over this time.

The discussion moved on to how the move to online learning had impacted pedagogy and Nadya described the typical support offered to teachers to enable learning to continue. She observed that as with infrastructure, the “job at hand” brought with it a degree of clarity and that support using Google and Microsoft collaboration tools were the first port of call in many schools, and this was for the most part, effective.

The discussion did highlight questions of sustainability and Laurence questioned whether all, in responding to the crisis with urgency had, when deploying the new equipment acquired over lockdown, done so in a

way that meant it was supported over the longer term. Laurence aired his concern that where this might not be true and access to devices became depleted over time, teachers would no longer plan for their use, and any progress in pedagogical development would be lost. Nadya and Ed confirmed that there was some acknowledgement of this within schools and that some schemes were available to enhance sustainability, although they recognised that that this may not be the case in many circumstances where initiatives did not benefit from a sense of vision in the school leadership.

The session ended with some discussion about whether there had been any marked change in pedagogy or whether there were emerging classes of software or apps were growing in popularity. Laurence described an initiative in a school recently awarded NaaceMark, that pivoted their curriculum around a sunflower seed issued to every pupil and aired his concern that the work of innovators might not been captured or shared. Nadya and Ed reported that there was no clear pattern in this area, and that for the most part, the use of Microsoft and Google collaboration tools had become the backbone of most activity.

At the end of the session, the panel was asked if Naace would be reviewing the SRF in the light of the Government's recent White Paper. Laurence reminded the questioner that the SRF is reviewed regularly to reflect changing priorities, and this would be taken into account at the next review.

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## Digital Technologies In Teacher Education World Assembly

### *Building Creative Global Teacher Education Communities Post-Pandemic:*



#### **International research-based collaboration**

64th ANNUAL CONFERENCE HOSTED BY THE BATH SPA UNIVERSITY

June 21-23, 2022

Use this url to sign up: [https://www.icet4u.org/upcoming\\_world\\_assembly.php](https://www.icet4u.org/upcoming_world_assembly.php)

#### **A chance to catch up with colleagues**

Learning from our peers has been a casualty of Covid – or has it? At last, a face-to-face conference with a strong education innovation approach. Four key professional associations in digital education are collaborating to share our knowledge: Naace, MESHGuides, MirandaNet Fellowship and the Technology, Pedagogy and Education Association (Formerly ITTE).

We are looking for contributors especially those who have learnt more ways of making digital education effective during the pandemic. Do join us also for the MirandaNet party celebrating this edtech professional collaboration since 1992. Now all the MirandaNet resources will be transferred to the TPEA website to ensure their value to the professional for many years to come.

### **100 sign-ups are needed by the end of April**

Despite this upbeat encouragement to you all, as we are sure is the case for many of your institutions, the higher education sector in the UK is experiencing serious financial challenges, and as a small, niche university, Bath Spa is no exception, indeed, it is particularly vulnerable. Therefore, we cannot run the ICET World Assembly (WA) at a loss and we must inform you that the BSU conferencing team have imposed the deadline of the end of April for us to have signed up 100 people for the World Assembly to break even.

### **Travel restrictions**

In terms of travel to the UK, there are now no legal restrictions and although there is still a relatively high incidence of covid infection, the rates of serious illness and hospitalisation are greatly reduced. At Bath Spa and in the Apex Hotel precautions are in place and we think that you can all be reasonably confident of a safe stay.

From the ICET conference committee

Linda La Velle, Christina Preston, Sarah Younie

For more information about speaking email [christina@mirandanet.ac.uk](mailto:christina@mirandanet.ac.uk)

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## **From in-person teaching to avatars in the metaverse: just how many ‘realities’ will universities have to address in future?**



***Professor Dame Madeleine Atkins DBE will be addressing the NCUP Annual Luncheon in the Cholmondeley Room & Terrace at The House of Lords,***

20th May 2022 11.45am – 2.30pm

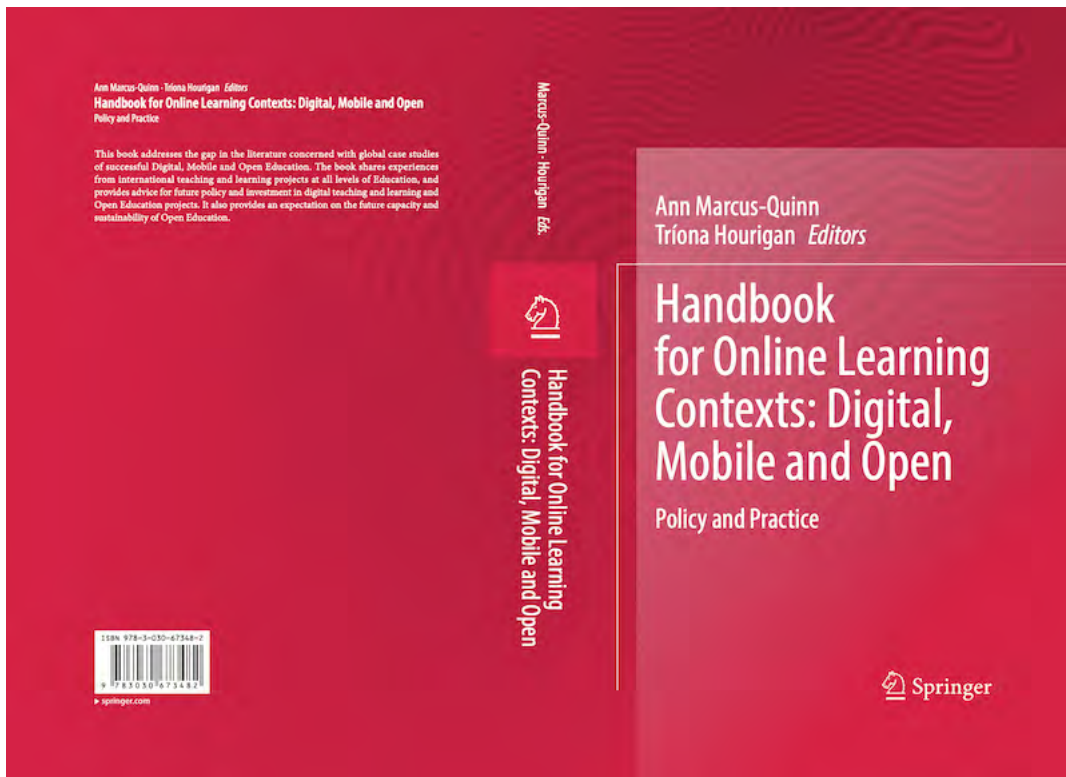
The title of Dame Madeleine Atkins' speech will be "From in-person teaching to avatars in the metaverse: just how many 'realities' will universities have to address in future?" A three-course, seated lunch with wine is included in the ticket cost, which we have kept as low as possible for this prestigious event.

For tickets, please click here: <https://www.eventbrite.co.uk/e/ncup-house-of-lords-luncheon-20th-may-2022-tickets-272120117597>

## Book Reviews

### Springer Handbook for Online Learning Contexts: Digital, Mobile and Open.

Dr. Ann Marcus-Quinn and Dr. Triona Hourigan



Following the success of their 2017 Springer Handbook on Digital Learning for K-12 Schools Dr. Ann Marcus-Quinn and Dr. Triona Hourigan have published their second Springer Handbook together; Springer Handbook for Online Learning Contexts: Digital, Mobile and Open. This Handbook addresses the gap in the literature concerned with global case studies of successful Digital, Mobile and Open Education. The book shares experiences from international teaching and learning projects at all levels of Education, and provides advice for future policy and investment in digital teaching and learning and Open Education projects. It also provides an expectation on the future capacity and sustainability of Open Education. The chapters in this publication reflect both top down and bottom up approaches and are drawn from authentic contexts. As such this publication presents concrete examples of good practice in this domain from around the world. When working on this book it was essential to capture case studies which offered a diverse range of reported experiences in this area. Without doubt the arena of digital and Open Education is a contested space and there are many facets to be considered. Covid-19 has accelerated the dialogue around digital education in general across sectoral levels of education and has also impacted work-based and professional training. While the impact of Covid-19 may be seen as the ultimate disruptor the chapters provided here may offer a guiding framework for remapping how we engage critically with all that the technology can afford us while not relinquishing our educational and cultural values. Professor Selina McCoy (ESRI, Dublin) has written the preface for the book.

## Reflecting on Video-Enhanced Dialogic Assessment for international teacher training in the wake of Covid-19

*Dr Elizabeth Hidson, Senior Lecturer in International Initial Teacher Training, University of Sunderland*

New technologies alter the structure of our interests: the things we think about. They alter the character of our symbols: the things we think with." (Postman, 1992, p. 19)

It might seem unusual for an educational technology enthusiast to cite a writer whose work warned of the dangers of 'technopoly' (Postman, 1992), but those of us involved in EdTech will be familiar with a range of critical debates. Postman described technological change as ecological – that it creates a new environment. The challenge is to move beyond pedagogy plus a side-order of technology, and towards technologies that are embedded effectively within the educational environment to enhance teaching, learning and the way that education is planned. This has become more significant than ever in the last couple of years.

Living with, or in the wake of, the Covid-19 pandemic, many of us involved in education have experienced dramatic changes to the way that education and schooling takes place. We have experienced school closures, the contraction of face-to-face teaching and an increase in distance, hybrid and blended approaches in school environments that we had never previously imagined at this scale. Recent calls for 'Covid keepers' (O'Connell, 2021) and to 'build back better' (Riggall, 2020) have resulted in educators seriously considering what we have learned in recent years about our educational ecologies. Have online parents' evenings become a game-changer? Have snow days become a thing of the past? What are the implications of measures taken during the pandemic and are they worthy of being retained?

During the first year of the pandemic, a range of expedient changes were made in the UK in relation to teacher training and placements when schooling was severely disrupted (DfE, 2021). Virtual placement activities and the accreditation of online teaching and online mentoring were key amendments. In the international initial teacher training sector and the assessment-only route to QTS, many of these amendments also took place, but they varied enormously from country to country, depending on local and regional policy and legislation. With so many variables to consider, the international initial teacher training team at the University of Sunderland focused on consolidating connected practices into a quality-assurable framework to allow successful completion of teacher training and assessment.

Video-enhanced lesson observation was already an established element of the international teacher training programme. Although the programme benefited from in-country tutors who would visit the trainees in their placement schools to observe lessons and provide feedback, a number of trainees would be based in regions where a tutor visit was less practical logistically. Observing remotely, via a recorded lesson or live-streaming, was the standard option in these cases.

Teaching portfolios, historically paper-based and spanning two or three A4 level arch folders during a PGCE, had already been moved to a digital eportfolio platform, organised against the summative Teachers' Standards (2011) used in England to recommend for Qualified Teacher Status (QTS). However, the programme staff had been trialling a more dialogic process, where the final assessment moved beyond the documentary evidence in the eportfolio. Dialogic assessment instead involved using artefacts stored in the eportfolio supplemented by examples from practice, allowing a professional two-way discussion.





Responding to the variations in international school responses to Covid, the team brought together these practices under a central umbrella: Video-Enhanced Dialogic Assessment. Assuming that teaching practice was able to continue in some practical form: either face-to-face in school or hybrid, with the teacher teaching from school but all or some of the pupils learning from home, video enhanced lesson observation would become the core method of university staff observing lessons and giving feedback. Lessons could either be streamed and recorded live, or recorded and submitted to the university system afterwards. A combination of Microsoft Teams and Panopto (embedded into Canvas, the university's VLE) made the process technically straightforward. Guidance was given for trainees' placement of recording devices and a briefing document for school senior leadership teams was created outlining the way that the university handled the video recordings. A key feature of a trainee's acceptance onto the programme was for the headteacher to sign to confirm that lesson recording was possible and permissible, so this important hurdle had already been addressed.

With university video-enhanced lesson observation processes in place, attention was focused on assessment of the teaching placement evidence. The teaching portfolio was made up of clusters of evidence from across the placement – lesson plans, teaching resources, assessed work: all giving a snapshot of practice. What the team wanted was a deeper insight into practice and so the online dialogic assessment interview was selected as the mechanism for this. During the meeting, lesson observations and selections from the eportfolio could be discussed. A key benefit of this process was the potential to touch on relevant evidence to demonstrate points being raised and sharing screens to examine specific points. Trainees enjoyed the opportunity to discuss their practice and felt that it gave them the chance to offer additional evidence that they were not going to get 'caught out' for having forgotten to upload a document. They valued the depth of the feedback and the quality of the discussion, with some suggesting that it was actually really good preparation for job interviews.

Downsides and limitations in the process varied from technical glitches to logistical issues working across timezones. Although the technology was being used firstly to overcome issues and then to embrace the potential of looking in depth at the outcomes, this required a time commitment from all involved. Lesson observation, arguably what Shulman might have termed a 'signature pedagogy' of the teaching profession (Shulman, 2005) is a time-consuming process whether in person or online. The lesson must be observed in real time, feedback has to be captured (usually formally written up) and shared and discussed. The assessor has to have a good working knowledge of the eportfolio before beginning the viva-style interview. The

transparency and rigour involved meant that quality assurance and moderation was integrated. If anything, it was even more rigorous than it had been before because now, all lessons were recorded and could be reviewed by external examiners if necessary. It was also possible to treat this as a piece of action research (Hidson et al., 2021) and explore it from the perspective of scholarship of teaching and learning (Boyer, 1990).

What was learned? Firstly, the technologies used meant that protocols and practices were clearer, and made more sense overall. A blended programme such as this international initial teacher training programme could be truer to itself by embracing the technologies around remote lesson observation, eportfolios and online interviews. Following on from this, notions of 'evidence' became more sophisticated and holistic. Trainees could show examples while discussing them. Being able to have professional discussions around evidence and practice 'raised the bar'. Finally, although the various approaches were consolidated into one overall process – Video-Enhanced Dialogic Assessment (VEDA), they had already existed but were now being fully embraced. This was not just a case of pedagogy for a pandemic and there is no turning back.

As we move forward, all trainees now submit at least two recorded lessons for video-enhanced lesson observation and feedback, in addition to those observed by school-based mentors and visiting university staff. All trainees now participate in the dialogic assessment process as a standard part of their programme. The programme has experienced an ecological shift – embracing the affordances of the technologies means that the things we think about and the things we think with are now different.

Liz Hidson gave a presentation about this book, Hidson, E.. (2021). Video-Enhanced Dialogic Assessment: Online Vivas for teacher assessment. <https://doi.org/10.25416/edgehill.16608679.v1>

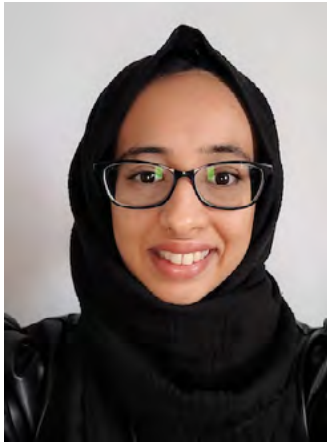
The powerpoint is available on the National Teaching Repository hosted at Edge Hill which is here [https://figshare.edgehill.ac.uk/articles/conference\\_contribution/Video-Enhanced\\_Dialogic\\_Assessment\\_Online\\_Vivas\\_for\\_teacher\\_assessment/16608679/1](https://figshare.edgehill.ac.uk/articles/conference_contribution/Video-Enhanced_Dialogic_Assessment_Online_Vivas_for_teacher_assessment/16608679/1)

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## Finally

### We extend a warm welcome our new sub-editor



Hanefa Osman studied Education Studies at undergraduate level at De Montfort University, Leicester. She then went on to complete Education Practice at Masters level. Whilst working as a teaching assistant at a school during the COVID-19 pandemic, Hanefa realised the importance of technology in education and hopes to use her knowledge on digital technologies to make a difference.

