EDUCATION & TRAINING FOUNDATION

Outstanding Teaching, Learning and Assessment (OTLA) Action Research Project

Using simulations to build essential digital skills in prison learning

Novus – June 2022

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For further information regarding the Shaping Success Action Research programme and this project go to https://ccpathways.co.uk/practitioner-research/otla-8/.

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CONTENTS

Using simulations to build essential digital skills in prison learning

Novus

SUMMARY

This project evaluates the use of simulations to support learners in developing digital skills in practical contexts previously excluded in prisons, for example, performing online transactions, accessing social media. It also considers how prisoners with digital design skills can be involved as 'learner-designers' in the production of simulation prototypes.

RATIONALE

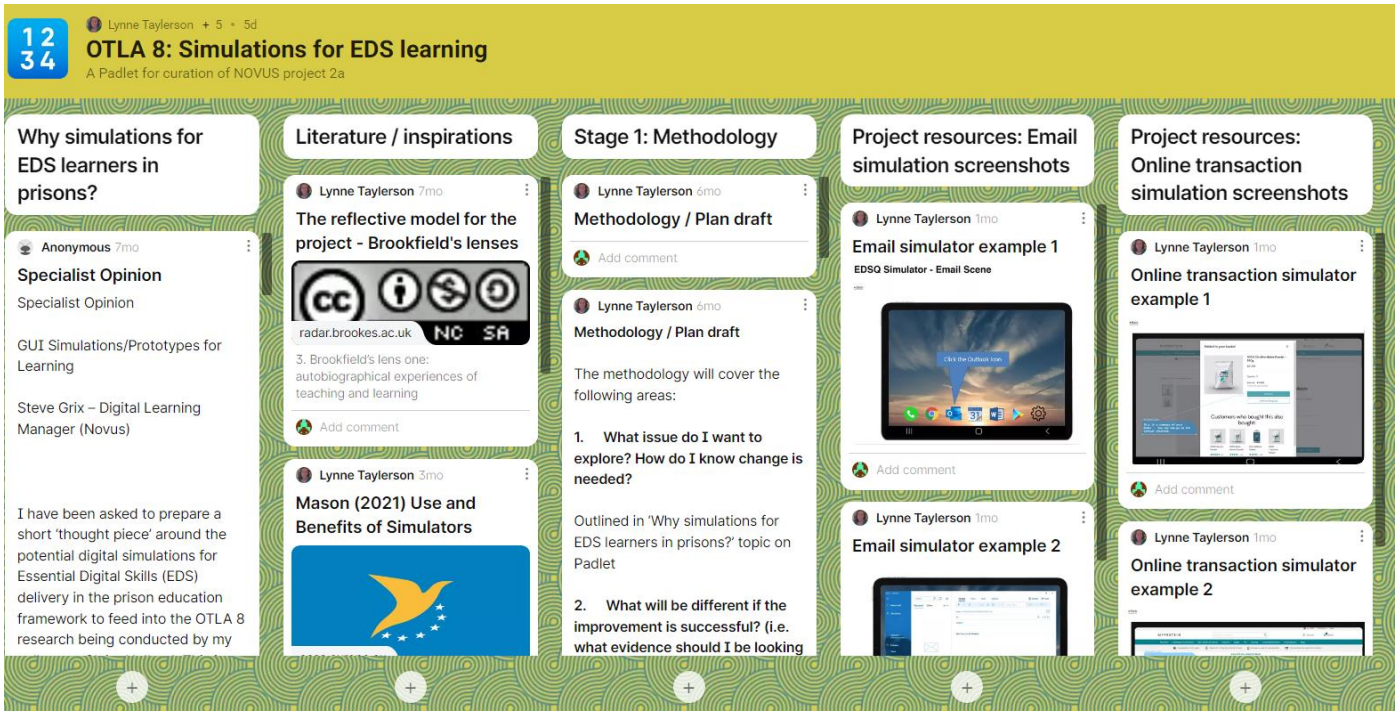
Simulation is often used in education and training when access to the 'real thing' is not possible or involves risk, for example, pilot training in aviation (Masson, 2021). We were keen to explore the potential of using digital simulations for Essential Digital Skills (EDS) delivery in the Prison Education Framework (PEF) context where public protection is a priority. Simulations can provide a safer, more accessible and richer learning experience and can also be more cost effective as they can be accessed on-demand, at the learner's convenience. We wanted to find out whether these potential benefits could be enjoyed by learners and staff on prison education programmes.

Other Contextual Information

Novus had already developed a concept resource to simulate the functions of a smartphone which this project used a starting point of our research activity. We planned to test this smartphone simulator with learners as the first stage of our research into the use of simulations.

Within the group of prisons we also have a number of digital Content Creation Centres (CCCs) in which learners can develop the skills and abilities in simulation creation and which would provide us with opportunities to explore alternative graphical user interface (GUI) simulations.

A Padlet board was used to collect and collate evidence from the project including screenshots of simulations designed, tutor, officer and learner feedback, research methodology details and potential next steps.



APPROACH

Phase 1:

We identified areas of the Essential Digital Skills (EDS) qualifications that prison learners find challenging (e.g., online transactions) and reviewed our past experience in using digital simulations and in involving learners in collaborating on their designing simulations.

Phase 2:

We met with the design team at the Digital Creation Centre to identify which simulators would be most valuable for learners and to plan the first steps in the design process. We created a feedback form for use with learners, colleagues and digital learning specialists who piloted the existing smartphone simulator. We also carried out research into how simulations can be made for enhancing digital skills development in the prison context.

Phase 3:

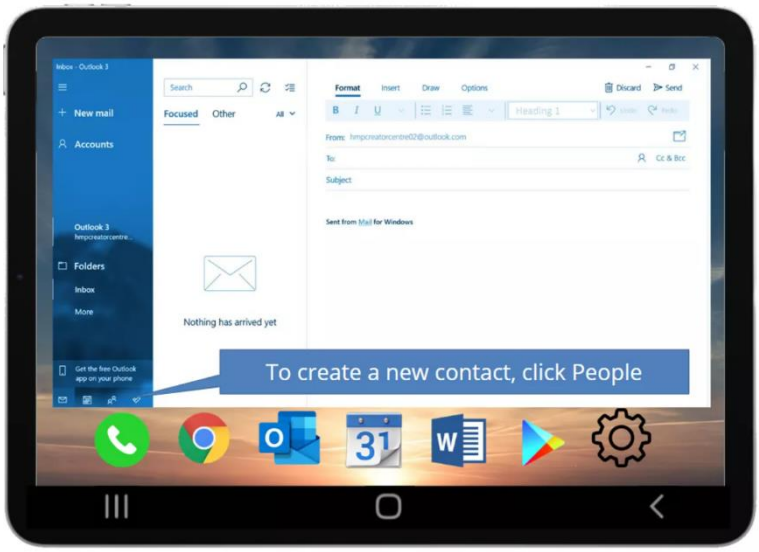
We piloted the smartphone simulator and gathered feedback from learners and officers and, with a view to planning for sustainability, we used the findings to begin to form ideas about the possibilities of creating this type of content by expanding the extent of our collaboration with HMPPS. The response was very positive - “It’s had a really good response! Particularly with learners who aren't quite confident with tech etc. Comments such as, 'I didn't know you could do that,' would come from learners who didn't know that you could perhaps use your phone to tap and pay in the same way as you would with a debit card.” “When I first was introduced to the simulator… it inspired me to try and create my own interactive resources using PowerPoint I have since made a mock-up of a Twitter feed and this is a regular template I use to deliver lesson content.”

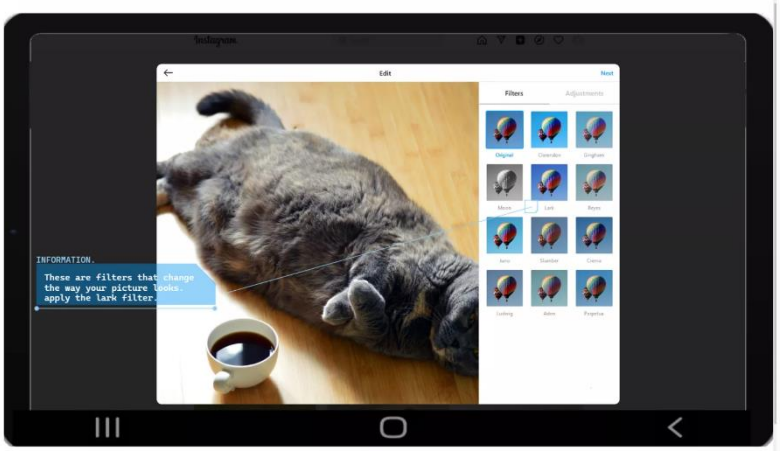
Phase 4:

The CCCs were given ideas for possible simulation development including a Zoom interface, a conference call, a Trip Advisor rating site, a My Builder interface.

Design work was begun on prototypes. See below for examples -

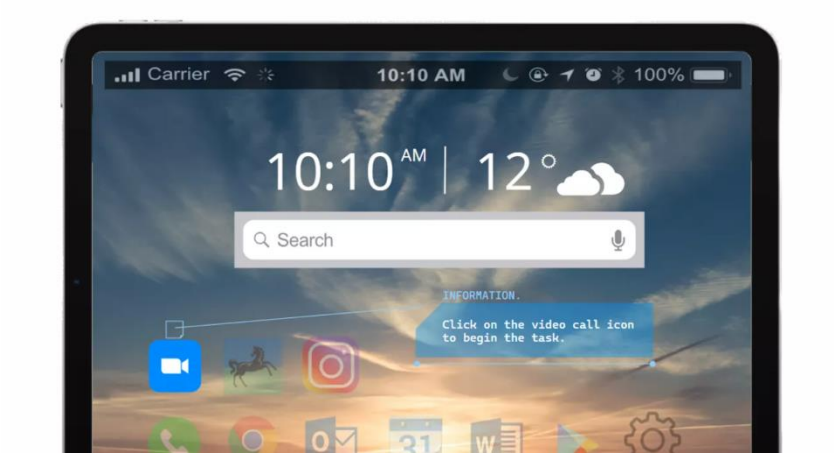
An email client simulator:

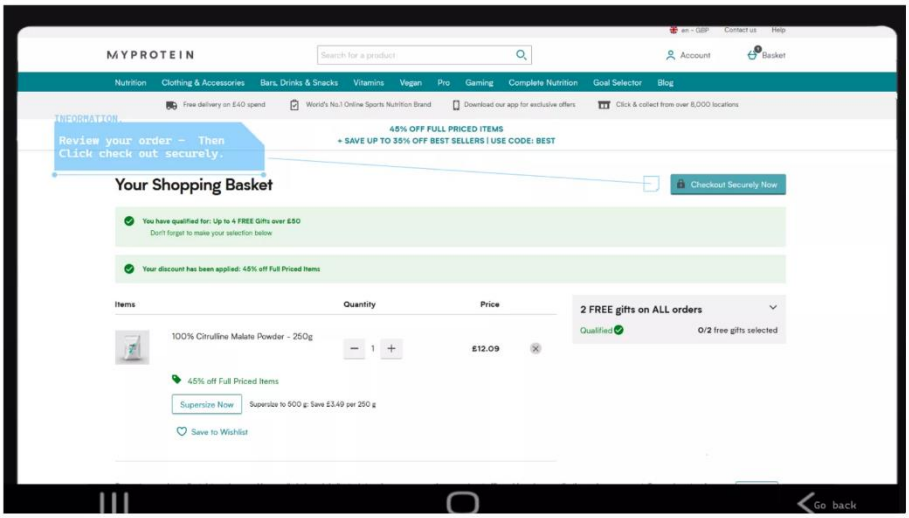




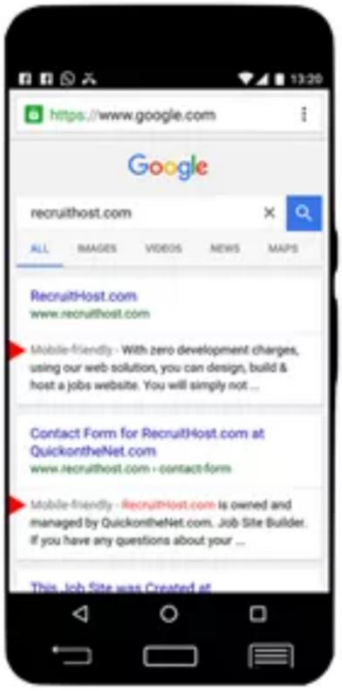
A photo filter application of the smartphone simulator:

A video call simulator:





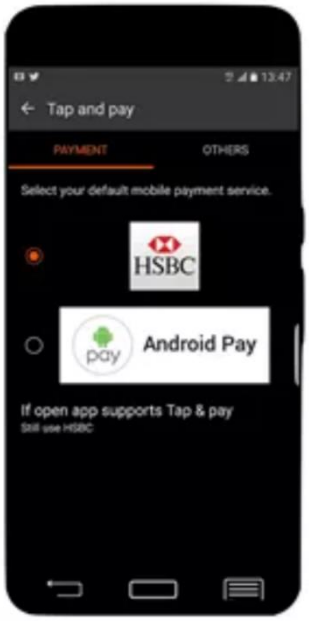
An online transaction simulator:



Unlike older phones which could only access a small part of the internet. New smartphones have full access and most websites have been created or adapted for smaller screens as well as larger ones. Google's search engine will even tell you which are 'mobile friendly' as shown on our phone's screen. Click on the home button to return to the main screen.

And extensions of the original smartphone simulator to include web browsing:

…and online banking and payment options.



You can now integrate your bank accounts with your smartphone and pay using 'contactless' technology. Handy if your forget your cash or card. Click on the home button to return to the main screen.

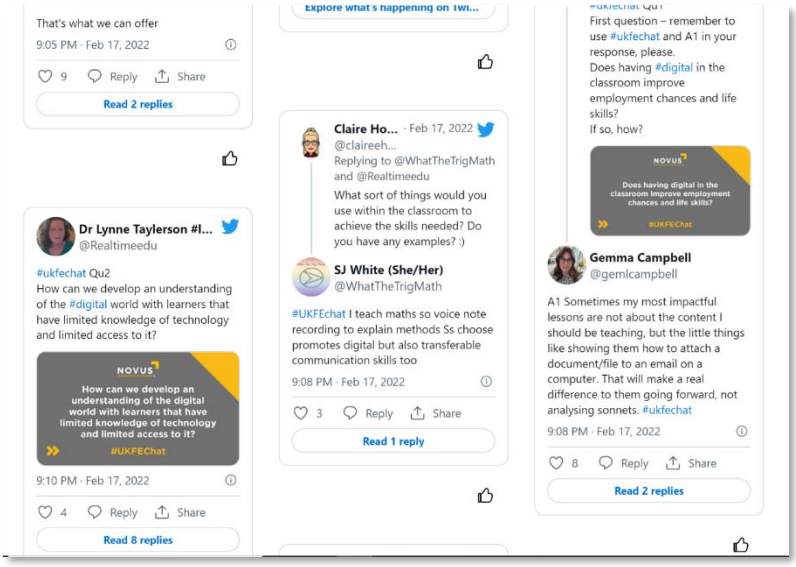
However, it proved difficult to be able to transfer simulations from the CCCs due to the low bandwidth on site. This meant further feedback from learners was limited to the original smartphone simulator.

In light of this bandwidth issue we decided to utilise the CCCs in a different way, developing another questionnaire based on Brookfield's 4 lens reflective model (OCSLD) (2013) to gather feedback from learners and staff about their role in the design of the simulations.

Phase 5:

We began to extend our professional network and signed up to present a session at a Digital Sprint CPD conference hosted by the LTE Group,

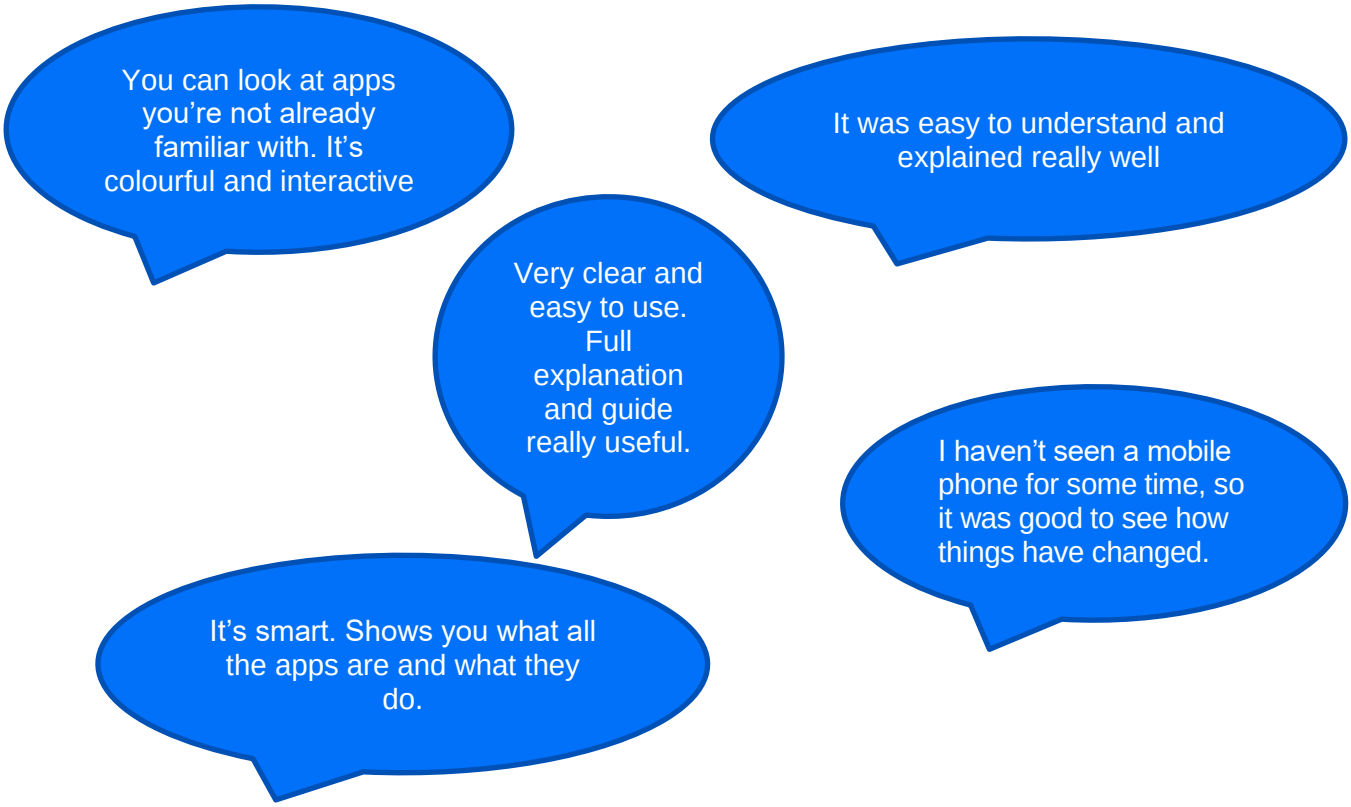
We also took part in a dedicated Twitter chat as part of a weekly #ukfechat. Our topic was simulation use and digital skills learning in prison:



OUTCOMES AND IMPACT

Teaching, Learning and Assessment

The feedback from both learners and tutors on their experience of using the smart phone simulator was very positive and encouraged us to continue to plan to develop similar resources. Feedback comments from learners included:



Tutors were equally delighted by the impact it had on learners. One tutor (see Appendix 2) completed our first Digital Literacies lockdown CPD programme and introduced the iPhone simulator into her sessions once she returned to face-to-face delivery. She said the learners were 'amazed' by the interactive phone. One learner who has been in prison for 18 years 'had never seen anything like it!'

Another tutor agreed that the phone simulator would be ideal for learners to use as an introduction to phone technology, especially for any learners who have not had a smartphone. They also suggested that other simulations could be created with Facebook, WhatsApp and other platforms being careful with the content that is showcased.

An officer supervising these learners commented that simulations allowed them to experience the hands-on experience of digital tools for the first time. She added that participating in a discussion around smartphone use was really useful to allow learners to understand how digital tools now inform so much of our personal and working lives e.g., shopping travel, paying bills, seeing a doctor, staying in touch with family.

Professional Development

Professional Standard	How our project outcomes demonstrate this standard
4. Be creative and innovative in selecting and adapting strategies to help learners to learn.	The project expanded on an existing innovation, the smartphone simulator, to design prototypes for a new range of digital tool and device simulations for use in prison learning. It also allowed prisoners with digital design skills to work in authentic commercial scenarios for a client to a defined brief.
6. Build positive and collaborative relationships with colleagues and learners	This project enabled us to strengthen the collaborative working between areas of different organisations in design and delivery of digital learning. In particular, the collaborative working between colleagues working on two other OTLA projects (2b &2c) has resulted in the sharing of perspectives and resources which in time will be used with learners across the region.
15. Promote the benefits of technology and support learners in its use	The project supported colleagues and prisoner learners in designing and using digital tools more effectively to enhance their delivery of prison learning and qualifications

Organisational Development

We have benefited greatly from regular meetings with our colleagues working on two other OTLA research projects (2b and 2c) as we have been able to discuss the key features of simulations as teaching and learning resources whether they are paper-based or electronic. We intend to continue develop these links with staff in different vocational areas.

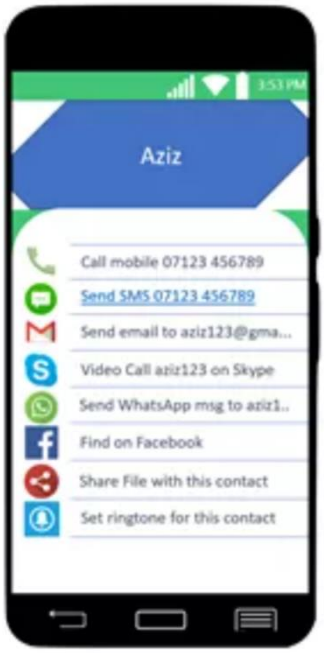
In particular, our project activities with colleagues in our Content Creation Centres have provided us with opportunities to provide further advice and guidance on simulator design and the use of simulations around the prison estate (and further afield). This will assist in the modernising of the e learning available to prisoners on the Virtual Campus 2 platform or in other institutions.

Ideally, we would aim for each studio to be working together as one department so we can utilise the strong members of the teams. We still have some system and bandwidth restrictions but the team are looking into resolving those issues and there is the ability to share assets and work across the centres through MS teams.

LEARNING FROM THIS PROJECT

Input from prisoners using the phone simulators was very valuable in helping to determine the ideal target audience for these tools. We now know that older prisoners serving longer sentences greatly appreciate exposure to tools and interfaces which are entirely new to them. Younger learners recently in prison are already aware of mobile technologies and how to use them so find them less engaging and valuable.

Tutors who introduced the simulators in their lessons reported how the activities provided opportunities for learners to acquire not only the skills involved in using the device but to develop their understanding of key vocabulary associated with the everyday tasks in shopping, travel, banking, use of social media e.g. download, upload, tweet, Bluetooth.



Aziz didn't answer so we could send a message to him to ask for a call back.

Click on the Send SMS button.

Findings from our own project together with discussions with colleagues on our two other OTLA projects also confirmed for us some of the key features of effective simulations whether they are paper-based templates, PowerPoint slides or electronic interactive software.

Authenticity, use of colour, accessible and simplified layout are important.

For example, after seeing how engaged learners were in using the electronic smartphone simulator one tutor was inspired to create a Twitter feed template in PowerPoint that she now uses to present an overview of her lessons.

We have also learned much more about the potential of our Content Creation Centres to involve learners in creating or modernising courses by making them more engaging and interactive to the target audience. We need to balance the number of people working on projects with those who are being trained on the software.

Once we have a pool of skilled personnel, we can customise the teams as required for the intended project. This will allow prisoners performing design work to work with real clients on realistic industry projects giving them valuable, authentic work experience as designers.

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APPENDICES

Appendix 1: The Project Team

Project Role	Name	Job Role	Contact
Project Lead	Claire Holland	Digi Tech Course Tutor	cholland@novus.ac.uk
Project Deputy	Steve Grix	Digital Learning Manager (Technologies)	SGrix@novus.ac.uk
Mentor	Lynne Taylerson	CCC Mentor	lynne@realtimeeducation.co.uk
Research Group Lead	Bob Read	CCC RGL	bobread945@gmail.com

Appendix 2: Case Study
Feedback from a tutor

Due to how FS is delivered, I have only used the smartphone simulator a few times with my learners and I am trying to make it a regular feature in my lessons, especially with new learners. It's had a really good response! Particularly with learners who aren't quite confident with tech etc. Comments such as, 'I didn't know you could do that,' would come from learners who didn't know that you could perhaps use your phone to tap and pay in the same way as you would with a debit card.

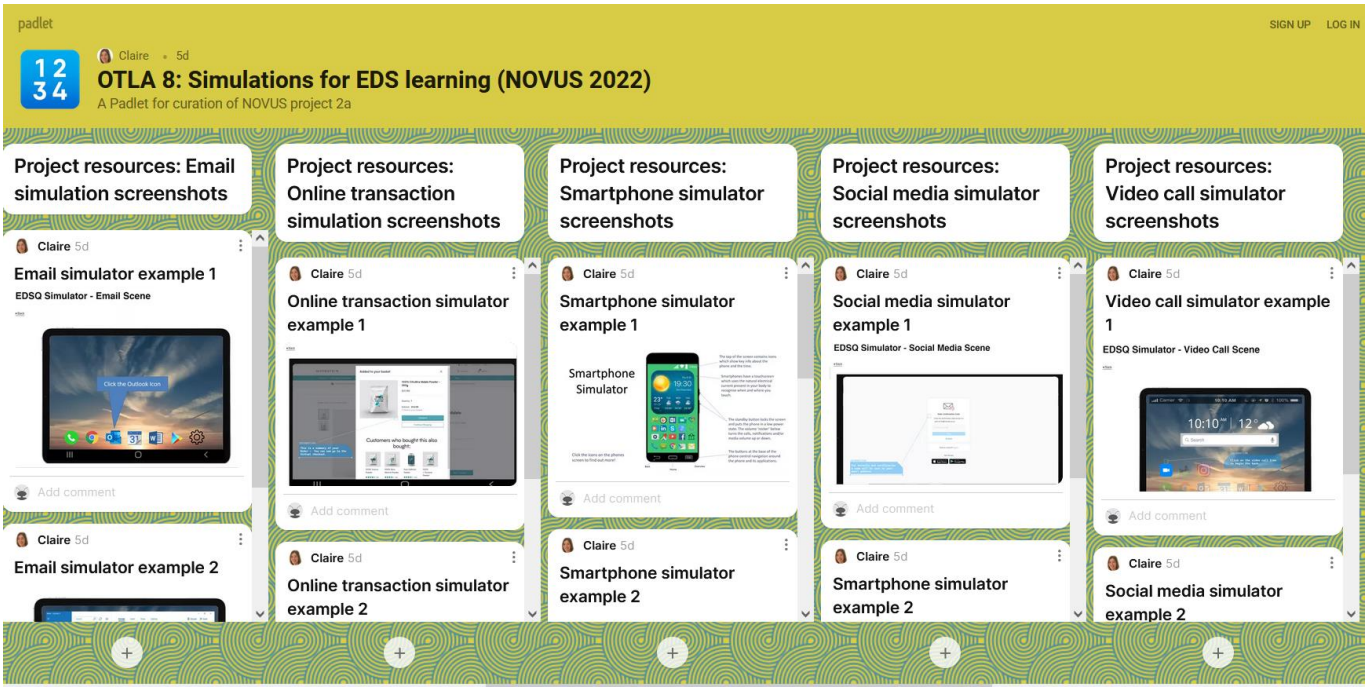
I used it on the board and discussed as a group because I didn't think to share it with the learners to explore themselves, but this is something I am intending to do after discussion with Claire.

I think that it was a good introduction to learners who are perhaps not familiar with smartphones etc. I quite liked that when using the 'camera app', there's the option to 'share' which again, helps to demonstrate to learners how quickly/easily things can be done on a smartphone.

I have to confess that when I first was introduced to the simulator when I was doing the Digital Literacies course last year, it inspired me to try and create my own interactive resources using PowerPoint I have since made a mock-up of a Twitter feed and this is a regular template I use to deliver lesson content. I use different aspects of the Twitter menu for different parts of the lesson: Home - starter task; Notifications - Quick tasks/introduce new vocab; Messages - Writing tasks/proof reading tasks etc I've also managed to create a FS English Trivial Pursuit game and also an attempt at an interactive phone quiz.

Appendix 3: Padlet board

The Padlet board used to collect and collate evidence from the project including screenshots of simulations designed, tutor, officer and learner feedback, research methodology details and potential next steps can be viewed here: https://padlet.com/c_collins2/OTLA8_NOVUS2a



Appendix 4: Participants and Stakeholders

No of learners?	**30**	No of staff?	**19**
No of organisations?	**1**	No of employers/ stakeholders?	**1**

Appendix 5: Research/ Evaluation Approach

Participant/observer (e.g. practitioner reflective accounts, logs)	**x**	**Interview/survey** (e.g. polls, questionnaires, learner interviews)	**x**
Observation of practice (in person, video, observation notes)		**Document analysis** (e.g. learner work, session plans, annotated resources, policies)	**x**
Custom test/assessment (of knowledge, skill, attitude, participation) for your 'intervention'		**High-stakes learner assessment** (e.g. A Level results, End Point Assessment, BTECs	
Before/after assessment (e.g. measures of progress or change in attainment, participation)		**Comparative trial** (e.g. comparing participants' outcomes against a 'control' group	
Other (specify):	Simulation use Action research		

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