Augmented Reality
Supporting Young Offender Learners

Richard Booth & Darryl Jones
Outline

• Welcome & Introductions
• History & Background (Darryl)
• Augmented Reality (AR) Presentation (Richard)
• Q&A (All)
Biography

Richard Booth

Over 21 years’ experience of the development, use and support of Information Learning Technology (ILT) within the FE & HE sector.

Supporting staff in their use of ILT and application of technology in their teaching & learning. He has collaborated with the Joint Information Systems Committee (JISC) on several ILT development areas and events, including AR demonstrations and awareness/dissemination events.

His lead of the current AR project to support young offender learners, developing targeted AR resources for prison establishments in the UK and with partners across Europe, has been of primary importance.

Darryl Jones

Was the previous Regional Head of Learning, Skills & Employment for HMPPS in the West Midlands.

Over 15 years’ experience working in and with a wide range of institutions offering Offender Learning including adult male, female, young offenders and high security establishments. Worked nationally introducing the PEF, DPS etc.

He has experience of quality assurance, contract management, English, mathematics and vocational training.

Darryl spent 16 years in various further education institutions (lecturer to Curriculum Director).

Previously, he worked in the Hospitality Sector throughout the UK /Europe. He is also currently an Ofsted (Office for Standards in Education) Inspector.
History

• 2015 Ofsted recommendation about AR at Shrewsbury College
• 2017 Erasmus bid – lost by 6 marks
• 2018 – Erasmus bid – approved 270,000 Euros (£240,000)
• Linked with 3 European partners (2 Romania/1 Belgium)
• 2020 – Final year of the three-year project duration.
   (Plus additional five month extension due to current lockdown).
What we knew when setting up this project?

❖ We know that when an offender is released from prison, they are much less likely to continue committing crime if they have a job. Yet only 17% of ex-offenders are in PAYE work a year after coming out of prison and only half of employers say they would even consider employing an ex-offender.

❖ Within the prison walls, it starts with education. We must ensure that more offenders leave prison with the basic skills that are essential to entering the workplace and with the skills employers need.

❖ Reoffending by those released from custody costs society around £15 billion per year.
What we knew when setting up this project?

❖ Evidence suggests that engaging in education in prison may reduce the likelihood of reoffending.

❖ Ipsos MORI research commissioned by the Ministry of Justice (MoJ) and Department for Education (DfE) in 2015 showed that offenders who participate in education are significantly less likely to reoffend within 12 months of release.

❖ Many ex-offenders have multiple problems in their lives, including troubled family relationships, drug and mental health problems, lack of suitable accommodation, low educational achievement and poor employment records.
What we knew when setting up this project?

❖ 42% of those leaving prison had been expelled from school when children compared to 2% of general population

❖ 47% have no school qualifications at all - not one single GCSE - this compares to 15% of the working age general population

❖ Between 20 and 30% of prisoners have learning difficulties or disabilities and 64% have used Class A drugs

❖ Over 50% of prisoners have the English and maths skills of a primary school child.

❖ Too many prisoners are reaching the end of their sentence without securing basic skills in English and mathematics.
<table>
<thead>
<tr>
<th>Level</th>
<th>Reading ability</th>
<th>Ability expectation</th>
<th>prisoner numbers (6 months)</th>
<th>Ability expectation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Level 2</strong></td>
<td>Builds on level 1 by requiring candidates to extend their basic skills. It recognises their ability to take responsibility for some decisions about how they select and apply these skills to meet the demands of largely straightforward tasks.</td>
<td>Level 2 can be broadly related, in terms of level of demand, to GCSE grades A*-C.</td>
<td>50</td>
<td>Able to read and write to complete a job application. Also competent to undertake any written assessments.</td>
</tr>
<tr>
<td><strong>Level 1</strong></td>
<td>Helps candidates to develop the basic skills that are important for key skills competence, and recognises their ability to apply these skills in meeting given purposes within routine situations.</td>
<td>Level 1 is broadly related in terms of level of demand, to GCSE grades D-G or National Curriculum level 5.</td>
<td>1497</td>
<td>Able to read and write limited text. Would require support to complete a job application. NEEDS EDUCATION</td>
</tr>
<tr>
<td><strong>Entry Level 3</strong></td>
<td>Understands basic short straightforward texts</td>
<td>Level expected of an 11-year-old</td>
<td>1323</td>
<td>Able to read very limited text. Unable to comprehend words. Would require lots of support to complete a job application. NEEDS EDUCATION</td>
</tr>
<tr>
<td><strong>Entry Level 2</strong></td>
<td>Can obtain information from short documents, signs and symbols</td>
<td>Level expected of a 7-year-old</td>
<td>576</td>
<td>Unable to read text. Unable to comprehend words or complete paperwork. NEEDS EDUCATION</td>
</tr>
<tr>
<td><strong>Entry Level</strong></td>
<td>Can obtain information from common signs and symbols</td>
<td>Below National Curriculum Level 1</td>
<td>405</td>
<td>Unable to read text. Unable to comprehend words or complete paperwork. NEEDS EDUCATION</td>
</tr>
</tbody>
</table>
Two published documents that influenced the Erasmus Bid.

• Unlocking Potential: A review of education in prison by Dame Sally Coates in February 2016.

  *Education should be “at the heart” of prisons*


  *We will also continue to look at how in-cell technology could support prisoner learning.*
Unlocking Potential: A review of education in prison: Key Recommendations

❖ More bespoke learning as well as private study for prisoners can be facilitated by smarter use of ICT.

❖ There should be a fundamental review of the overly-restrictive regulations that currently restrict its use across the prison estate.

❖ The planned investment in digital infrastructure should be used to enable more flexible learning across prisons.

❖ The security arrangements that currently underpin the use of ICT in the prison estate should be reviewed.

❖ Governors should be allowed to develop an approach that allows suitably risk-assessed prison learners to have controlled access to the internet to support their studies and enable applications for jobs on release.

❖ The government should continue to develop an approach that encourages and supports employers to work in prisons and to employ prisoners on release. (On line job applications)
In essence Dame Sally Coates found:

• Limitations of the Virtual Campus
• Poor recognition of the VC by prisoners
• Lack of good e-content
• Lack of up-to-date hardware and software
• Unnecessarily restrictive security and access restrictions.
❖ Digital delivery and support for education can reap dividends in prison. For example, digitally delivered in-cell learning can help engage and educate hard-to-reach and vulnerable prisoners.

❖ Remote access to education and training material from the wings of a prison could help all prisoners continue to learn during difficult regime periods, when it might prove hard to get them to education spaces.

❖ In the future we want to see all prisoners have the chance to access increased education opportunities through digital technology.

❖ ‘There should... be work carried out to accelerate the testing and use of ‘in-cell’ or tablet learning technology (including the capability to provide teaching via video links).’

❖ Pursuing greater availability and use of technology in-cell and on wings is also of benefit to wider areas of prison life. Lord Farmer’s review on ‘The Importance of Strengthening Prisoners' Family Ties’ (August 2017) stated ‘Technology introduced to support education could be used to deliver important areas such as allowing prisoners greater access to pastoral resources and support from their cells and such like.'
Education and Employment Strategy - conclusion

❖ We will continue to support projects that are testing the use of laptop and tablet technology, as we look forward to a system which takes full advantage of digital technology and uses it to improve not just a prisoner’s rehabilitation journey but also their wider wellbeing whilst in custody.

❖ We are also encouraging greater digital innovation from new education suppliers in how they deliver their services, and each has been specifically asked to detail their plans as part of the new education framework procurement.

❖ All digital technology development and innovation in prisons will need to adhere to strict security standards and testing, but we will not let this be a barrier to progress.
We saw this as an opportunity to change the approach to learning.
To date so far.............

• Held Initial discussions with HMPPS Security at National Level and Digital Technology representatives. Still awaiting agreement to proceed fully.

• Chose a site with Governor support to undertake ‘Explanation Activity’.

• Developed resources

• Purchased 10 iPads (41 across partners)

• Worked with the Education Training Foundation (ETF)

• Working with European partners

• Staff and prisoner evaluation sessions
Recent Developments:

• A recent article (June 2020) published in the ‘Insidetime’, the national newspaper for prisoners and detainees regarding children in Young Offenders’ Institutions in England are to get tablet computers in their cells.

• The Right Honourable Lucy Frazer MP – UK Prisons Minister announced a trial would take place in HMP Feltham, HMP Werrington, HMP Wetherby and HMP Cookham Wood.

• The Office for Standards in Education (Ofsted) have replaced the Common Inspection Framework and replaced with Education Inspection Framework.

We feel Augmented Reality can assist with the 3 I’s.

**Intent** – it can assist with Curriculum design

**Implementation** - Assist with the development of innovative Teaching and Assessment methods

And

**Impact** – improving the Attainment of qualifications, Progress, Knowledge and skill development.
Recent Developments:

The Prisoner Learning Alliance has published a new briefing, *The Digital Divide: Lessons from prisons abroad*.

The briefing looks at **effective uses of digital technology in prison education** around the world from Spain and Australia, including examples such as in-cell tablets and virtual-reality headsets. Projects in other countries demonstrate that it is possible to provide safe, secure, restricted intranet and internet access to prisoners.

Based on these examples, some of the recommendations include:

- HMPPS should develop and implement a **national strategy** to ensure that there is a single consistent secure infrastructure for connecting devices and making apps available for learners of all abilities to access educational content.

- **In-cell devices must become the norm** and an automatic entitlement that is removed only in exceptional circumstances.
MoJ Evaluation of digital technology in prisons – 2020
(University of Leicester)

The aim of the research was to evaluate digital technology in prisons to identify what the benefits are, as well as any disadvantages of implementing the technology.

The specific questions addressed whether prison technology:

• Increases access to and improves the communication of knowledge within prisons for both prisoners and staff.
• Improves prisoner confidence in using IT.
• Improves prisoner relationships with staff, other prisoners and those outside of the prison, and reduces prison violence.
• Increases staff job satisfaction and prisoner wellbeing.

Recent Developments:

Outcomes beneficial to both prisoners and staff were expected from these:

• More opportunities for prisoners to build skills (including IT skills), and assist in their rehabilitation.
• Ability for prisoners to be more responsible for themselves.
• Improved relationships between prisoners and between prisoners and staff, thereby reducing prison violence.
• Improved relationships between prisoners and people outside of prison.
Recent Developments:

• More than half of children in custody are BAME, report warns

The majority of children in youth custody are Black, Asian or minority ethnic (BAME), a report by the Youth Justice Board (YJB) has warned. (7 September 2020)

Provisional figures from May show that White children account for 47% of those in custody while BAME children account for 53%.

In the year to March, Black children made up 28% of the children in custody in England and Wales, despite accounting for only 4% of the population of children aged 10 to 17, the report said.

• People under 18 who are sentenced to custody are sent to secure centres for young people, not to adult prisons.

• Usually girls aged 12 and over, boys aged 12-14 and older boys who are considered vulnerable are sent to a Secure Training Centre (STC).
Finally from me:
Augmented Reality
Supporting Young Offender Learners

Richard Booth
What is Augmented Reality?

• **Augmented Reality (AR)**
  ‘process of super-imposing computer generated content over a live view of the world’.

• **Learners use digital devices**
  > scan an image > enable viewing of videos & resources
  > information, instruction or reinforcement.

• Learners encouraged to learn independently at their own pace
  > inside and outside of the classroom and workshops.
AR use within a Prison Establishment

Within a Prison institution, technology has been difficult to introduce over the years, due to:

• nature of the setting > types of learner > restrictions to security and safeguarding of both offender learners & the outside world.

• A range of interactive resources have been developed

• The AR resources available within the Learning Centres/Classroom/Workshops and within learners own cell (long-term vision)

• They have immediate access to key information, resources and support.

• The resources will be in a number of formats, AR posters and learning cards.
AR use within a Prison Establishment

For first time offenders, getting past the first few days is the hardest part.

• The first resources cover ‘Prison Induction’ process
• Great benefit to ‘the learner’ & aims to put them at ease, prison information direct from fellow prisoners & to show that they are not alone.
• AR can provide learners with a more interactive way of learning, facilitate research, activities, instruction and information.
• A series of AR posters and learning cards to act as a trigger to an individual resource, video, or multiple resources giving information on a range of instructional and skills based topics that will be engaging and interesting.
Security for mobile devices

Max Cases (MAX Shield Xtreme)

• Extreme Shock & Impact Protection
• Air-military grade triple protection case provides shock and impact protection
• Tri-moulded polycarbonate/TPU/silicone sleeve
• Built-in kickstand offers ergonomic typing and viewing angles.
The Augmented Reality system used to create and access the learning resources is called **Zappar**.

Learners will use the Zappar app on a mobile devices to trigger resources by zapping a Zapcode. This will display a menu that learners can choose which specific resource content or ‘chunk of learning’ they require.
AR in 3 easy steps!

Using the Zappar AR app, staff and learners trigger the resources by scanning the Zapcode.

READY
Download Zappar for free from your Google Play or App Store.

AIM
Point your device at any object featuring a zapcode.

ZAP
And hey presto! Watch it come magically to life.
The Learner Experience
Resource Examples
Support for Staff & Learners

A Teacher/Trainer/Staff guide & Learner guide have been produced to give:
• introduction to Augmented Reality
• information on how to use the App on mobile devices
• information on using the resources
• how to support the learners.

Initial ‘Explanation Activity’ Project

There have been introduction sessions to support both staff & learners throughout the ‘Explanation Activity’ project process at HMP Hewell

Post-lockdown

Sessions will take place at HMP Swinfen Hall for the second ‘Explanation Activity’ project
Contacts

Richard Booth - ILT Coordinator and Project Lead
Shrewsbury College Group
e: richard.booth@shrewsbury.ac.uk
p: 01743 342 442

Darryl Jones – QA Consultant
e: darrylj108@aol.com