FUNCTIONAL SKILLS WITHIN PRISONS –
C-Pen ExamReader and ReaderPen
SUPPORTING FUNCTIONAL SKILLS IN
ENGLISH, LEVELS 1-3

Update: January 2019. The HMPPS/MoJ National Research Committee (NRC) has granted retrospective approval for this study.
Abstract

Children with learning difficulties become adults with learning difficulties. Some will learn strategies and may have use of a myriad of tools, such as text to speech, apps, laptops, but what happens to those who not only leave school without any formal qualification but also may have found themselves in a system of spiralling non-engagement, due to adverse childhood experiences or lack of support from the right people at the right time? Some of those who find themselves in this position may find themselves entangled into a life of crime. One third of prisoners identify themselves with a learning difficulty, 42% had been permanently excluded from school (Coates, 2016).

Education is of great import within the judicial system, Coates recently stated: “Education should be at the heart of the prison system and I am reassured that so may people share my belief in the power of education to unlock potential and transform lives”. (Gov.UK, 2016).

With a similar ethos and belief, this study set out to gain insight how to support and release the full potential of learners in prison. I therefore considered the individual learner’s needs and an understanding that once outside the prison system they will have access to assistive technology. Having access to such components may increase the concept of unlocking the potential Coates recognised to be important in the transforming of lives, to help reduce potential re-offending and increase positive rehabilitation. However, the handling of assistive technology within prisons must overcome some serious hurdles before such a study could commence. The right tool was needed, one which was acceptable for use in prisons and was felt to provide support rather than a hindrance; the C-Pen ExamReader and C-Pen ReaderPen were identified as fitting legislative requirements, with consideration for safety and usability.

Previous research had proven the C-Pens were successful in promoting independent learning and confidence building. However, the identified user strategies and concepts to-date were aimed at primary-aged children either learning to read or enhancing existing programmes for secondary-aged students. I did not wish to discourage learning and supporting reading, writing and spelling within prisons, but I felt it should no longer be considered ‘cheating’ if a device is used to support this gap in learning; after all, in the real world we would not stop an adult accessing supportive devices or apps if required, to enable unrestricted access to relevant information. I recently attended a conference at the Dyslexia Association in Ireland, Donald Ewing (Head of Psychological and Educational Services) was asked to pose a prize question and he asked for the capital of an obscure country; he then pointed out that those partaking could use their phones, this was not cheating but using their initiative to find the answer. If attitudes towards accessing technological support could be encouraged and we were able to alleviate the thought process of assistive technology as cheating, we may encourage
empowerment of knowledge; after all, how many times have you asked a certain website or voice activated app a question?

I felt the outcomes of the study would prove to indicate an increase in confidence, independent learning, curiosity and the capacity to explore within the prison classroom. I am pleased to say my hypothesis was supported with the results of this first research into the effectiveness of assistive technological approaches within the prison educational service.

**Introduction**

Nearly 3 in 10 people assessed in prison in 2015-16 reported that they had a learning disability or difficulty (Skills Funding Agency, 2016). Four-fifths of prisoners with learning disabilities or difficulties report having problems reading prison information, they report difficulties with expressing themselves and understanding certain words (Talbot, 2008). 2% of the general population has a learning disability in comparison to 7% within the criminal justice system (NHS England, 2016). The overwhelming concept when reading such figures is the high proportion of prisoners who have not been formally diagnosed with a learning disability or difficulty, the figures are based on self-identification. Consequently, understanding the block such disabilities can create when wishing to access all the information you are to agree and adhere to during your prison sentence, requires positive and proven approaches to teaching and learning. Additionally, rehabilitation encourages the need for purposeful activities such as education, which have been proven to cut re-offending behaviours.

There are a myriad of jobs available to the prisoner, however a certain level of education is required to enable a successful application for these roles. Consequently, assessments are undertaken to find out the level of education the applicant is currently situated at. It is during this process identification of learning difficulties or disabilities can be recognised and a programme of appropriate education, such as functional skills, can be commenced.

The study hypothesis: the use of assistive technology, in this instance the C-Pen ExamReader and ReaderPen, could be encouraging and supportive of learners within prisons to engage in active learning with guidance from peer mentors and tutors. Furthermore, independent learning, when education and learning can be interrupted with little notice, could be evidenced as a resource to be further explored and encouraged; to improve educational outcomes for prisoners.
Method

I approached HMP Channings Wood in the South West of England to request their participation in the study. I wished to consider the potential implications to a group of learners having access to assistive technology within their lessons; the C-Pen ExamReader and C-Pen ReaderPen. These pens were felt to overcome the potential restrictive nature prisoners may face in accessing restricted technology; technology readily available to learners outside the prison such as the internet, mobile phone apps; and the inappropriateness of programmes aimed at children identified with specific learning difficulties; such as dyslexia. HMP Channings Wood is a resettlement prison, with all men, under retirement age, being required to work. If the prisoner is underqualified for the identified role they wish to apply for they are required to improve their skills via an education programme (HM Prison and Probation Service, 2017).

The 2016 Ofsted report indicated HMP Channings Wood had a good range of education provision (HM’s Inspectorate of Prisons, 2017), identifying a good quality of teaching and learning. The prison was recognised for running good initiatives to promote reading and integration of literacy and numeracy within vocational training programmes. On approaching the prison, the concept and idea of supporting learners with assistive technology was met with interest and we quickly identified a key recognition of the Ofsted Report; HMP Channings Wood were recognised for having success in the development of confidence and I hoped the study would increase this asset and further promote independent learning.

Consent to partake in the study was sought from Gary Pavey, Head of Reducing Reoffending. Kevin and John were the tutors who engaged with the participant learners within the classroom environment. The tutor’s educational backgrounds included social inclusion projects within London, Youth Offending Team work, Traveller Community projects, Secondary education, Higher Education support, disabilities support within a University; together they have experience and confidence to teach within the prison service.

There were 14 male participants, ranging from 23 to 58 years of age. 5 of the participants were foreign nationals and therefore English is an additional language, for 4 of these participants their main difficulty was identified as pronunciation problems and a requirement to develop their vocabulary. 10 of the participants had been identified with: dyslexia, social and emotional problems, severe learning difficulties, physical disabilities with mental health needs and ADHD. All participants had left school with little or no formal qualifications. 3 of the participants were working at Entry Level 3, 4 at Entry Level 2, the remainder at Level 1.

HMP Channings Wood were provided with 4 C-Pen ExamReader and 4 C-Pen ReaderPen which were held centrally in the office of the Education Manager within the Education Centre of the prison. The tutors were given the
opportunity to meet with the study team to become confident and familiar with the pens before introducing them to their students within the classroom. Both pens are ‘reader pens’, meaning they ‘highlight’ a line of text or one word. When lifting the pen from the page it will begin to read out loud or via headphones the captured line of text or word. The ReaderPen, unlike the ExamReader, has a variety of extra facilities, including an audio recorder, a dictionary and the ability to capture a body of text to save to files. Both pens can read in a variety of languages but do not translate. The current languages supported are: English, French, Spanish, German and Italian.

Peer Mentors are prisoners who have qualifications and skills to offer support to low-level students within the classroom environment. The Peer Mentors were offered the opportunity to use the pens, to enable them to confidently offer advice and be familiar with the specifics of the pens should the participant learners ask questions.

The pens would be monitored and brought into the classroom environment by the participant tutors. Headphones were made available to the participant learners, they were encouraged to familiarise themselves with the pens and to spend time gaining confidence and skills to use the pen successfully.

A pre-study questionnaire was provided to enable an understanding of the type of learner the participant understood themselves to be. This can be found in the Appendices.

An outline of the participants age and identified learning/physical disabilities was supplied to the study team.

Tutor feedback analysis was provided, and an example of the feedback form can be found in the Appendices.

Unstructured interviews were undertaken with the tutors, at the mid-way point and at the end of the study, to gain insight to what was working, what had been identified as supportive or unhelpful, strategies to apply to the students to encourage positive outcomes and increase confidence alongside independent learning.
**Results**

Question 1: I am happy to be in the classroom.

Prison regimes and regulations can lead to difficulties when attempting to gain academic fulfilment or achieve positive outcomes. Lessons can be disrupted due to the amount of time spent in ‘lockdown’. Lockdowns may occur for a variety of reasons; serious incidents when the safety of staff and inmates require the prisoners to be held in their cells, other situations include scheduled training days, or unexpected events such as a shortage of staff; all lead to restrictions to the movement of prisoners. The consequences of a lockdown for the prisoner learner includes disruption and attainment difficulties; the prisoner requires time and careful guidance from the tutor to re-engage with learning. This may appear to suggest a lack of interest in education, however despite such potential setbacks, 86% of the participant learners wished to be in the classroom.

Question 11: It takes me a long time to learn a new skill.

In 2016 an Ofsted report had indicated HMP Channings Wood has a positive record of increasing confidence in their learners and I wished to consider the participants own perspective of this. The results were close, 36% for both those
recognising their confidence and those who were not confident. However, those who answered ‘unsure’, 28%, may be considered as lacking in confidence. In addition, the feedback analysis from participant tutors, remarked on increased confidence with all but 2 of the learners; initially one of the existing confident students became frustrated with the pen due to the dictionary facility; “he did not always understand the definitions”, however this participant learner was able to “read out loud in front of his peers, something which he was previously reluctant to do”. The tutors carefully consider the needs of their students and ensure confidence building is a focus within lessons.

The study had felt confidence could be linked to increased independent learning. Most participants, 75%, did show increased independent learning including developing strategies to enhance their learning skills:

Participant 6 “he developed a technique where he would only use it to read unfamiliar words instead of scanning whole sentences”.

Participant 8 “XX was less reliant on tutor and peer mentor for pronunciation and after a while, began to explore the dictionary function independently”.

Participant 3 “he was able to hear the correct pronunciation, which enabled him to develop his English language skills”.

25% showed a smaller increase of independent learning skills, the following was provided as evidence to consider why this area was less developed in these learners:

Participant 2 “he needed help to reset after each task although he did begin to show confidence towards the end of the session”.

The tutor also added the following consideration for this learner and was able to see a solution to the initial problems, the tutor stated the following:

“Participant 2 requires a longer period of time to gain confidence in using the pen and therefore the potential to be less reliant on others”

Furthermore, there was a small percentage of participants who were recognised as existing confident learners and therefore may not benefit from using the pen. Surprisingly this opened alternate concepts of learning which had not been considered; such as the development of comprehension during writing and speaking tasks.

Participant 10: “XX is a fairly independent learner so the pen offered only minimal gains but acted as a catalyst for him to explore and develop his vocabulary”
The study wished to gain insight to the participant’s understanding of their educational levels, the results indicate 21% assumed their skills were more advanced than pre-assessment evaluations indicated. 50% agreed they had difficulties with reading and writing and 29% were unsure of their capabilities.

Question 2: I find it hard to read and write?

![Participant Pie Chart]

Learners who assume to have greater capacity where compared with the evidence of their assessment, contradicting their perceived abilities; this can create challenges for the tutor. Participant 1 is a confident learner, and was working at Level 3, however undertaking a diagnostic assessment suggested he had significant gaps in his learning. His assumption of greater knowledge and understanding created frustrations for this learner when he wished to use the dictionary facility and was unable to understand the definitions. The tutor indicated a less complex dictionary would be beneficial:

“the dictionary function recited a lengthy definition that was not always in learner-friendly terminology.”

The dictionary was seen to be a very important function, particularly with those for whom English is a second language; the foreign national prisoner; however due to the complexities of defining words it caused Participant 7 to become confused and he failed to gain greater insight into the meaning of words, the tutor noted,

“a simplified definition would be more helpful for this learner”.

Alternatively, Participant 10 was able to utilise the current available dictionary function:
"he became adept at looking up complex words which in turn became evident in his written work".

The foreign national participants indicated difficulties with pronunciation and being able to talk to people. The language barrier is not only creating an obstruction with communication and understanding with their fellow inmates but factually creates a block to learning. A previous interview with students for whom English as an Additional Language (YouTube, 2017) indicated help with pronunciation and being able to ‘hear’ the English language with the use of a ReaderPen, enabled an easier learning style to be incorporated into the classroom and increased confidence. Using the pen for listening and pronunciation was recognised by the tutors as creating improvement for this group of participants:

“XX pronunciation has developed as a result of using the pen”

“XX was less reliant on tutor and peer mentor support for pronunciation”

“Participant 3 was able to hear the correct pronunciation, which enabled the learner to develop his English language skills.”

Interestingly, the feature of positive pronunciation was seen to be supportive of the English participants too:

“XX used the pen to check pronunciation, look up definitions and check accuracy of his reading… he suffers from ADHD and found the pen kept him more focused”.

“The text in Entry Level 1 reading tasks is concise, XX was able to scan specific words and learn the pronunciation”.

Finally, let us compare the intended assumed user of the ReaderPen, the dyslexic. I have learnt in this study other educational and physical difficulties can benefit from using the C-Pen ExamReader and ReaderPen alongside our dyslexic participant:

“The learner has Dyslexia and has low confidence levels when reading. The pen was a useful tool and he used it effectively to enhance his literacy skills. His confidence improved, and he read out loud to his peers"
Discussion

The courses at HMP Channings Wood are undertaken as a roll on and roll off provision, there are no fixed classes, as a result tutors need to adjust to new learners whilst supporting those who have been attending lessons for a longer period. In addition, attainment across the class can be quite challenging. Prisons are a transient population, often moving quickly to release or transfer with no indication as to when this may occur nor, for the tutors, an insight into how the continuation of education will proceed for the learner. Furthermore, the uncertainty of unplanned lockdowns can lead to the learners not having access to their lessons for long periods of time. Currently HMP Channings Wood offers 3 hours of education in the morning and 2 hours in the afternoon. Tutors explained if there have been periods of non-learning, due to lockdowns, this can impact on re-engagement when the learners return to the classroom.

It was therefore essential to hear the views of the tutors in how best to support the learners. At the mid-way point interview, the following identified strategies were discussed:

- **How best to support the learner**: use on individual words and not for whole sentences
- **Sentences to be in a format which was clearly defined, spaces between lines, larger font**
- **Focus on pronunciation**
- **A sense of purpose and support to direct the learners to focus on their own individual learning needs**
- **Dictionary function was proving to be popular but would benefit from both an easy and complex option.**

The foreign national students were recognised as having received a better education, but their limited English created a block for them engaging in learning and socialisation. The pens greatest asset appeared to be of help with pronunciation and guidance to understand and seek the meaning of words. Offering a C-Pen Reader to all foreign national students would greatly increase the confidence and learning wishes of these learners. Although motivated learners, the dictionary was potentially too complex due to language barriers, however educationally they can understand the more complex definitions.

The Peer Mentors, who were introduced to the pen, were able to understand their role; to support and guide the learners in using the pen. A further study to incorporate all Peer Mentors to be trained and guided in identifying the learner’s individual needs would enhance and encourage independent
learning for the student. Having the peer mentors readily available to learners, provides a secure base for them to return to when in difficulty.

Many of the participant learners were young and therefore are tech savvy, consequently they found the pens easy to use. All functions of the pen were discovered quickly and the ability to navigate and investigate was undertaken with confidence.

There is little, or no stigma attached to learning within the prison education centre at HMP Channings Wood.

One learner had a brain injury and he did require his peer mentor or tutor to be on hand to support him, this learner was seen to gain confidence and it was felt having the opportunity to engage further with him would have led to greater understanding of his learning needs, including retention of instruction. Gaining knowledge of the student with the use of assistive technology may create a positive environment for that student to explore their abilities further and enable the tutors to be guided by the needs of their student.

In our first interview, we noted the type of paper and presentation of the learning material was significant. Shiny paper proved to have some consistency issues, whereas matt paper worked 100%. Sentences that were too close caused some issues and therefore a larger font with greater spacing proved helpful to the learner.

Moving to the end of study interview, the tutors were presenting as confident with the strategies and needs of the student’s in relation to the use of the ReaderPen within class. They identified a group of learners who would benefit from having access to the pens; the practical skills groups. These groups are traditionally chosen by those with reading difficulties. Future studies should engage with prisoners undertaking practical skills courses where evidence supports positive outcomes for the hands-on elements contrasting to the challenges of the examinations.

Another group who benefited from the use of the ReaderPen were the foreign national learners. 12% of the prison population are foreign nationals (Allen and Watson, 2017) from 173 different countries. There is no capacity to teach these learners in their own language and therefore increasing understanding and teaching in English is paramount to educational success within prison. Identified positivity for foreign national learners is listening and hearing English spoken out loud and practicing pronunciation. The study proved listening is a critical aspect of learning for these students and we identified the C-Pen Reader as the right tool for this task.
Most learners did not use the headphones, however there was a clear positive use of the headphones for a student with ADHD. He was able to filter out all ambient noise and worked well independently. Furthermore, a disruptive learner when using the headphones spent 5 to 10 minutes of uninterrupted focus which his tutor had never witnessed from this student before. Further studies should encourage the use of headphones as part of the learning process to encourage independence and engagement.

Finally, I asked the tutors John and Kevin to identify the learners they felt would benefit from having access to the ReaderPen:

- Foreign national prisoners
- Those at entry level who usually turn to the Peer Mentors – the pen is not to replace peer mentors but to add value to increasing the confidence of the learner
- ADHD/Attention deficit disorders to help focus, making use of the pens with the headphones enables the learner to create a barrier to the outside world and concentrate on the task at hand.

John and Kevin identified the requirements of adhering to safety protocols and understanding the behaviours and needs of the learners. They identified the need for a toolkit suited to the needs of the learner including the use of assistive tech, they both strongly felt encouraged by the ReaderPen. Having access to the pens is easier than attempting to use a paper-based dictionary or awaiting the support of the tutor and/or peer mentor and gave the learner a clear focus and goal. This first study is encouraging and provides positive results not only for prisons but also for the learner in prison.
References


Skills Funding Agency (2016) OLASS English and maths assessments; participation 2015/16. London. SFA.


# Appendices

## Participant Questionnaire

**Name:**

| Q.1 I have chosen to come to these lessons as I feel they are important |
|--------------------------|-------------------|-------------------|
| Agree                    | Not sure           | Disagree          |

<table>
<thead>
<tr>
<th>Q.2 I find it hard to read and write</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
</tr>
<tr>
<td>Not sure</td>
</tr>
<tr>
<td>Disagree</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q.3 I can talk to people easily</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
</tr>
<tr>
<td>Not sure</td>
</tr>
<tr>
<td>Disagree</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q.4 I am willing to try new learning methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
</tr>
<tr>
<td>Not sure</td>
</tr>
<tr>
<td>Disagree</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q.5 When I was a child I found lessons boring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
</tr>
<tr>
<td>Not sure</td>
</tr>
<tr>
<td>Disagree</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q.6 As an adult I am a good listener</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
</tr>
<tr>
<td>Not sure</td>
</tr>
<tr>
<td>Disagree</td>
</tr>
<tr>
<td>Question</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Q.7 I think being able to read by myself will be important</td>
</tr>
<tr>
<td>Q.8 I didn’t like school as a child</td>
</tr>
<tr>
<td>Q.9 I pick up new things quickly</td>
</tr>
<tr>
<td>Q.10 I get easily distracted</td>
</tr>
<tr>
<td>Q.11 It takes me a long time to learn a new skill</td>
</tr>
<tr>
<td>Q.12 I will try my best</td>
</tr>
</tbody>
</table>

In a few words can you tell me what you find difficult in lessons and what is easy for you.
### REPORT FORM - *Please complete weekly/fortnightly*

**Participant Identity:**

<table>
<thead>
<tr>
<th>Details</th>
<th>Comment/yes/no</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Has student used the scanning pen during this week/fortnight?</em></td>
<td></td>
</tr>
<tr>
<td><em>Students abilities to use the scanning pen independently?</em></td>
<td></td>
</tr>
<tr>
<td><em>Has student displayed any new learning strategies?</em></td>
<td></td>
</tr>
<tr>
<td><em>Tutor’s comments:</em></td>
<td></td>
</tr>
</tbody>
</table>