DO'S & DON'TS OF VIRTUAL EDUCATION IN PRISON

People in prison have overwhelmingly been denied educational opportunities.

Contents

Introduction: What Should Virtual Education Behind Bars Look Like?

Before computers and the internet became commonplace, "virtual" meant "in essence, if not in reality." In the world of personal computers, it has come to mean "real things represented on a computer screen." During the crisis of COVID-19, the world has accelerated the incorporation of virtual technology into every aspect of education outside of prisons – at all levels. While we are unsure how this experiment with "almost-but-not-quite" education will ultimately turn out, it is clear that learning must continue. Unfortunately yet unsurprisingly, prisons have not looked to technology with the same urgency to ensure access to education during the crisis and beyond.

As the group most frequently disadvantaged by the intersection of class, race and social/cultural backgrounds, incarcerated students may be those most in need of raised aspirations and access to education. They are often the very people who were failed by educational institutions in the first place, making educational programs behind bars first and foremost a way of righting current and historical social wrongs. Increasing digital literacy and access to education for incarcerated people is nothing short of essential. We as a global community are failing them and our communities if we do not go to great lengths to provide this access.

Education cannot be considered an optional extra for prisons, yet education in prison is going to look quite differently for the foreseeable future. The big question is: how can education providers, prison staff, community organizations and learners in prison work together using virtual technology to create the best options during the pandemic and beyond?

In this document we examine: 1) What is virtual education behind bars? 2) What does it look like around the world? 3) What are the benefits and concerns? 4) What are some do's and don'ts that allow education in prisons to continue during this time and beyond?

This document is part of a series on technology and justice produced by *Incarceration Nations Network* (INN) and its global justice partners. We aim to provide a resource for practitioners and advocates worldwide on the use of education technology in prisons during the global pandemic. Of course, every jurisdiction is different and there is not a single "right" approach. However, based on research and the years of experience of INN partners, we aim to help global advocates and practitioners come together to find innovative solutions, despite the great obstacles.

1. What is Virtual Education Behind Bars?

E-learning is a broad term to describe the use of digital media in education. **Virtual** or **remote learning** is where the student and the educator, or information source, are not physically present in a classroom environment.

In many prisons internet connection is not allowed or is limited to whitelisted cites, therefore virtual education content is largely asynchronous.

Asynchronous content can be paired with some face-to-face learning, either in-person or via videoconferencing platforms, using **blended** or **flipped learning** models. We provide examples of several models in this document. Since the onset of COVID-19 however, in-person classes have been almost non-existent inside prisons and access to computer labs/ communal learning areas has been heavily restricted.

Virtual education for incarcerated people can include a wide range of programs and content, from basic literacy and numeracy; to introductory philosophy, poetry, and drawing; to accredited university and postgraduate degree programs. Prison-University partnerships make it possible in some prisons for prison learners to pursue a university degree and sometimes include a virtual education component. E-learning platforms are also used to deliver vocational skills training programs, employability support (i.e. job interview and resume preparation, etc.), and equally important personal growth & well-being course and content.

E-learning methods	
Asynchronous	Learning does not include real-time interaction; instead, content is available for users to access when it best suits their schedules. Common methods of asynchronous learning include self-guided lesson modules, pre-recorded video content, virtual libraries, lecture notes, and online discussion boards or social-media platforms.
Synchronous	Synchronous learning happens in real time. This means that you, your classmates, and your instructor interact in a specific virtual place at a set time.
Blended	A program that combines face-to-face classes with digital content for self-directed learning.
Flipped learning	Where learners work through digital content in their own time, outside of a classroom. Face-to-face time is then used to discuss problems and examples.

E-learning inside prisons can be delivered using a variety of technologies and platforms. The most basic arrangement is via use of secure intranet in computer labs/ learning centers /classrooms, which are common areas that incarcerated people are granted access to on a limited basis. On the other end of the spectrum, in-cell technology can be used to provide secure laptops issued to incarcerated people for personal use. We provide several examples further in the document.

While some prisons have long provided access to Digital Learning Platforms (DPLs) in common areas, these can be problematic. Access to learning centers in communal spaces is limited, systems are not always up and running, and staff shortages can mean incarcerated people cannot always be escorted or supervised. Among other problems, this leaves incarcerated students with little time to complete assignments or study independently and forces them to compete for access.

COVID-19 has exacerbated all of these problems. Simultaneously, incarcerated people are finding themselves cut-off from in-person visits and rehabilitative activities. Some are spending 23 hours a day, or more, in their cells.

A handful of companies (examples below) have developed in-cell devices and applications that provide formal education and vocational training off-line. Some prisons have been piloting them (usually for small numbers of security-cleared individuals). The technology exists and can be provided at relatively low cost, yet availability is still limited by prisons' individual authorization processes and budgets.

E-learning technology	
Communal computer centers	Many prisons have communal areas where fixed computers (sometimes laptops) are available for education under supervision.
DPL	Digital Learning Platform
VLE (Virtual Learning Environment)	A digital platform for managing and delivering learning materials. There are some Digital Learning Platforms (DLP) that can be included in a secure (offline) Virtual Learning Environment (VLE).
LCMS / LMS *(Learning Content Management System / Learning Management System)*	Software platform used to manage the digital learning: a data repository and delivery interface
LRS *(Learning Record Store)*	A digital place to store learning records. LRS means learning records can follow students' progress in secure environments and beyond.
In-cell digital technology	Laptops or tablets are issued to incarcerated people for use in their cells whilst ensuring 100% separation from the internet or any other devices. In some cases, printing and syncing can be done through a hub, installed in a location with supervised access.

2. What does virtual education behind bars look like around the world?

Virtual education in computer centers and classrooms

Many prisons around the world have begun implementing distance learning programs using digital platforms. In almost all cases these are delivered via secure intranet systems (offline) available in common areas (classrooms, libraries, computer labs and others). Students can

use e-learning platforms under supervision (sometimes together with classroom instruction) and most platforms host open-source educational materials with some high school, college and vocational courses available. See some examples below.

Virtual Campus (VC), provided by *Meganexus*, is now available for all prisons in **England and Wales**. VC provides access to educational resources (including audio-visual materials), interactive activities and computer-graded assignments. Some Open University courses are available in some prisons, enabling students to access their course materials in a digital format.

Elis e-learning platform is used in over 50 prisons in **Germany** that all connect to a central server that offers 160 different courses. There is access to preapproved web addresses and learners can request access to additional cites (using IDs and passwords). Elis is not used on its own, but as a resource within courses given by teachers in classrooms and libraries (6-12 students).

RACHEL (Remote Area Community Hotspot for Education & Learning) is currently used in prisons in 14 **US states**. It is a portable remote hotspot server which stores educational websites and makes that content available over a local (offline) connection. The central device emits a wireless signal that can connect up to fifty devices (including tablets, desktop computers or laptops). Once connected to RACHEL, the user can access offline versions of free educational websites including Wikipedia, Khan Academy, Ted Talks, and over 100 more interactive learning and career preparation pages. Content can be used independently or as a compliment to classroom instruction. Currently it is used mostly in prison libraries and classrooms.
See the **interface and content here**.

Video and audio conference options

Whether used together with digital learning platforms or as a stand-alone option, some educators are providing instruction directly via video or audio conferencing. This can be done through existing video conferencing equipment where it is already installed in the facility. In other cases, this equipment is being purchased as an emergency measure during COVID-19. For example, in New York State (USA) the Department of Corrections and Supervision (DOCCS) is working with college education providers to install video conferencing room kits in classrooms complete with TV screens, cameras, microphones and speakers ranging in cost from US $4,000-55,000. Another option is use of a PC-projector combination that is estimated at US$2,600. An even more affordable option is the use of a commercial speaker phone on a stand (estimated cost $700).

Prison-University partnerships may make it possible for prison-based students to study the same courses and often alongside students on the outside. In some cases - such as the Learning Together initiative (UK)[1] and others – a virtual education component is complimented by in-person classes.

However, accessing the communal areas where computers are located can be problematic generally and may be nearly impossible during the COVID-19 pandemic. The ability of any outside visitors, including educators, to enter prisons at this time is also severely restricted. **Listen to some of the educators who are working in prisons around the world speaking about the challenges they are facing during the pandemic, the opportunities they see, and innovative ways they have found to move forward**.

Click on the image below to hear from Heather Erwin, Director University of Iowa's Liberal Arts Behind Bars College and Prison Program (United States) *discussing the challenges to forging ahead with higher education programs in prison during COVID-19.*

Heather Erwin
University of Iowa's Liberal Arts Behind Bars
Director, College and Prison Program (USA)

Click on the image below to hear from Jennifer Coreas, Program Coordinator of Prevention and Insertion, CONTEXTOS (El Salvador) *discussing use of Zoom videoconferencing for delivering creative writing classes in a maximum-security gang prison in El Salvador.*

Jennifer Coreas
ConTextos (El Salvador)
Program Coordinator of Prevention and Insertion

In-cell technology

Although the use of secure, in-cell devices for virtual education content has been fairly limited, the COVID-19 pandemic has highlighted the need for a much broader use of this technology. The examples below show that the technology exists and can be used efficiently without security breaches.

***Coracle Inside* and the *Learning Together* Initiative (UK)** - In 2017-18, Coracle Inside and Learning Together piloted the introduction of non-networked chromebooks across three prison sites for university courses of criminology, law and philosophy and ethics. Chromebooks were issued for in-cell possession to all prison-based students who were selected to participate. Chromebooks were issued in possession so that students could make full use of them at times when they were locked in their rooms. Now, with expanded government funding, they are expanding to 20 UK prisons.

Click on the link below to watch a short video about the Coracle Inside technology

Socrates 360 *(UK, Australia, and USA)* - a secure platform for software applications, designed specifically for use in prisons (offline), for incarcerated people and prison officers alike. It is intended for use on locked down tablets in-cell, or on mobile devices. It is currently operational across 45 prisons in the UK and select prisons in Australia and the US. Generally, the App includes some of the following features:

- **Education** –partnering with *Open University* and *Anspear*, Socrates provides access to a range of education materials in-cell to supplement classroom learning.

- **Vocational training and preparation for employment** - The Socrates app has a range of careers advice material and opens doors to employment, exemplified by the Halford's prison program for women that provides training and education in-side the prison walls, which, if completed, can provide guaranteed employment when they come out.

- **Health Care** - Working with clients such as NHS and Care UK, Socrates offers advice and support for health problems, as well as services such as the ability to upload users' health passport, helping to ensure continuity of care.

- **Mental and physical well-being –** individuals inside prison can participate in approved programs on substance abuse, anger management and victimization. The App also offers a range of workout videos, fitness advice and training regimes, including LJ Flanders' Cell Workout.

Click on the link below to watch a short video about the Socrates 360 App

Securus Lantern *(USA)* is an interactive education platform, built to provide incarcerated individuals access to digital college courses. Through the platform, post-secondary programs have been implemented, in conjunction with over 10 universities countrywide, to more than a million incarcerated students.

Corrections-secure tablets are issued to incarcerated people and the platform draws content from a network of reputable academic providers. Incarcerated individuals also have access to GED prep courses, personal development content and thousands of free Khan Academy Lite educational videos.

Course content, assignments, quizzes, grades and instructor notes are provided through the LMS and made available on the tablets. Students then complete coursework on their tablets and submit for grading by syncing the device. Educators can manage their courses and correspond with students through an interactive messaging option. Some unique features include:

- **Communication** - Messaging between teachers and students through the JP6S tablets outside of the classroom
- **Announcements** - Instructors can send announcements to classes automatically through tablets
- **Assessment** - Multiple types of quizzes, many of which can be graded automatically
- **Feedback** - Teachers can add comments or give feedback when sending a grade to a student
- **Content updating** - Content can be adjusted on the fly/throughout the semester
- **Dedicated** - Tablets can be assigned to students

Click on the link *below to watch a short video about the Securus Lantern program*

[Making the Connection](#) **USQ (Australia) –** The Making the Connection program gives people in prisons across all eight correctional jurisdictions in Australia access to further education at University of Southern Queensland (USQ) through in-cell technology and distance learning. USQ prison-based learners use DELL education series laptops, enabling them to spend longer on assignments and fit studying alongside work, visits and other time out of their cells. Internet is inaccessible on these laptops, so Education Staff at correctional centers access course materials via a USQ portal and load the educational material onto the laptops for students. **Technology is just one piece of the puzzle; another significant step involved developing a relationship between prison and university staff, which fostered mutual understanding of the difficulties both groups were facing and helped to overcome barriers** (i.e. prison officers could feel confident in the security of the technology, and the university staff could understand some of the difficulties prisons might face in facilitating distance learning).

PrisonCloud (Belgium) - In 2016, Beveren Prison in Antwerp introduced PrisonCloud: a secure, in-cell platform with a fixed computer, monitor, keyboard and a headset. It allows incarcerated people to complete e-learning, watch films and TV, and have control over such aspects of prison life as food, medical appointments, and their prison finances. Certain pre-approved websites can also be accessed, and availability of online reading materials and a phone-call function mean that people can communicate and handle any changes or concerns regarding their case.

Other innovative approaches

[Remote tutors](#) (Sweden)- The Swedish Prison System uses the virtual learning platform NetCentre. Prison tutors provide general support in prisons where they are based and also specialized support on a particular subject or curriculum to prison-based students around the country remotely. Students and their remote tutors keep in touch through phone calls and NetCentre; where tutors can support and motivate learners as well as send them course notes, materials and assignments. There is also a physical Learning Centre at every prison where the majority of learning takes place, and which provides reading and writing support, basic adult education, university education and vocational training. It is open every day and incarcerated people can choose to study full-time or fit studying in around work.

Coding and simulated internet - [The Last Mile](#) (USA). The Last Mile (TLM) is a not-for-profit organization that runs offline coding programs in prisons in California, Indiana, Kansas and Oklahoma. It teaches different technological and digital communication skills and focuses on the employment options and opportunities for participants upon their release. *TLM Works* is the first-ever web development shop operating inside a US prison. Participants work on client-funded projects such as website development and applications, giving them a chance to create a portfolio of work. Accessing the internet is illegal in US prisons, but students at San Quentin constructed an infrastructure hosted on the prison's local server to simulate the internet. This means students can begin to learn how the internet works without having access to it.

[Click on the link](#) below to watch a short video about The Last Mile

Alfa Digital (Catalonia)[2] - The AlfaDigital program in Catalonia aims to develop creative abilities and provide cultural stimulation whilst also developing digital skills. It allows for different levels of digital access in different prisons. In some cases, through "Omina Points," incarcerated learners are able to access courses on creating web pages and other digital skills, and creative workshops including radio, video, photography and music production and development. In classrooms where internet can be accessed, there is always a member of staff present, and entry to classrooms is controlled. Access to different webpages is also monitored and controlled.

3. What are the benefits?

There is abundant literature pointing to the benefits of education, generally speaking, in prisons. Education can have major impact on well-being, future employment and earnings, and reduce one's likelihood of returning to prison nearly in half.[3] Education in prisons is an effective investment with significant returns in terms of public safety, a more qualified workforce and the betterment of communities.[4] Beyond the focus on employability and recidivism, there are is also

an inherent value of the learning process for personal development and empowerment. **But what are the added benefits of *virtual* education platforms?**

- **Digital skills and digital literacy** - Learning technology can create an additional sense of achievement and equip incarcerated people with skills for the outside world. Since digital technology is constantly changing, being isolated from these changes can present huge obstacles upon release. Virtual education programs can give students the opportunity to build digital skills necessary for everything from finding employment and housing, to accessing support networks when returning to the community. Importantly, such programs also increase digital literacy - the ability to find, evaluate and compose clear information through digital media. Not only do jobs increasingly demand such literacy, but it can empower people to become more informed, active members of contemporary society.

- **A gateway for engaging disenfranchised learners**. Considering that many people in prison start from a point of multiple disadvantages and may have had negative experiences in traditional classrooms, they may feel less confident stepping into a traditional classroom environment. With these incoming negative educational experiences, it is unsurprising that educational deficits in prisons are high, and successful engagement of people in education is low. In order to engage such disaffected learners, learning needs to be more exciting, fun and relevant, and the use of new technology has some potential in this regard. Asynchronous learning can allow students to take learning at their own pace, which can also aid students with learning disabilities. For example, students issued secure Chromebooks in the Learning-Together pilot in the UK described enhanced learning, with video and audio materials being particularly welcome, bringing the subject to life, increasing the accessibility of more difficult texts, and supporting the engagement of students with a broader range of learning styles and specific learning differences (especially dyslexia).[5]

- **On-demand and independent learning.** Access to secure devices and digital learning platforms from within prison cells can provide additional time and learning materials outside the classroom. This can allow learners to take advantage of more time to study, complete assignments and even access other content for entertainment and well-being. Learners can potentially have 24/7 access to some formative assessments - allowing them to get feedback when they want/need it rather than wait for a teacher to return assignments/tests. Diagnostic assessment can also direct the learner to areas of the course they need to revisit or even do not need to study due to their prior learning. Further, the development of independent learning skills is important for future education, employment, and wellbeing. Virtual education can give prison-based students the opportunity to develop independent learning strategies and decide themselves how, when and what to learn.

- **Technology can bring people together.** Creating a community and a shared experience around the use of technology can help strengthen relationships. Inside prisons, especially where in-cell devices are available, students have been found helping each other navigate platforms and troubleshooting, which can change power dynamics in the learning space in helpful ways. Technology and virtual education can also help build better relationships between prison staff and students. Accessing virtual platforms that are almost identical to those used by students outside can foster a sense of inclusion and make

accessing education after release easier. Some programs – such as the Learning Together program in the UK – allow incarcerated students to study alongside their peers on the outside. For some, the challenge of learning how to use the technology, especially in-cell devices, has prompted new conversations and connections with family members. For example, Coracle Inside and the Learning Together program tell of one mother who purchased the same Chromebook as her son so that they could learn together.

- **Improved mental and physical health.** Education in prison can generally help provide a sense of greater purpose whilst coping with prison life and allow incarcerated students to gain new skills to better manage life in prison and after release. Virtual education can be an extended source of positive escapism from prison life—a means of personal development and a reminder of normality and home. Some of the learning hubs and/or applications also provide activities and resources for mental and physical health (i.e. yoga, meditation, fitness activities, etc.).

- **Easier to track progress and make adjustments** – Collecting and storing data from learning activities, assignments and exams in Learning Management Systems (LMS) and Learning Records Stores (LRS) can allow universities and educators to follow the progress of students inside and outside after their release. This can help detect learning difficulties for specific individuals in real time so that needed support can be provided. Also, at an aggregate level it can provide information on how courses can be adjusted and better tailored to the needs of prison-based students.

4. What are the problematics?

- **Learners with multiple disadvantages can fare worse in virtual learning.** It is undoubtedly true that due to systemic inequality and racism, many people who enter the criminal justice system worldwide have poor or limited previous experiences of education. A large body of studies has come to mixed conclusions regarding the effectiveness of virtual learning compared to in-person learning[6]; unfortunately, none of these studies has focused on prison settings. Some, however, do indicate potential concerns. Firstly, performance gaps between key demographic groups already observed in face-to-face learning are exacerbated in virtual courses. Specifically, US studies find that males, Black students, and students with lower levels of academic preparation had significantly worse course persistence and grades in virtual learning than their counterparts in in-person classes.[7] The reason for some of these findings could likely be that in addition to being systematically disadvantaged in terms of the quality of early education, some students with less extensive exposure to technology or those who have not been taught skills in terms of time-management and self-directed learning may have more difficulty adapting to virtual learning.[8]

Several studies do find adapting to virtual learning to be particularly difficult for students with low pre-existing academic preparation and low academic performance.[9] For example, while there may be little difference in education outcomes between in-person and virtual classes for high performers, outcomes can be significantly worse for those with lower grades.[10] Even

blended models may be less effective for students who are less academically prepared, especially for pre-college preparation for community college courses.[11]

While these findings offer cautionary insights for the design and implementation of virtual learning, they certainly do not mean students inside cannot succeed in virtual education. In fact, the 4000 in-prison learners involved in programs at the University of Southern Queensland (USQ) in Australia generally have had a higher progression rate and better grades than students on the outside.[12]

- **Barriers to accessing technology in prisons**. Almost all undergraduate courses compel students to complete assignments requiring internet research, yet the information ecosystem within prisons is tightly constrained. Departments of correction prioritize the security of the facility and so limit platforms that could allow incarcerated individuals to access information that they consider potentially threatening to the safety of staff or other incarcerated people.[13] Moreover, previous research[14] has highlighted that these barriers to study are not always related to security concerns, but may be related to the ethos of individual prisons and the educational awareness of management teams. It should come as no surprise, therefore, that incarcerated people, with few exceptions, cannot access the internet, which is something traditional students take for granted.

    Notably, the secure Chromebooks developed by Coracle Inside for in-cell use (see more under "Examples") have generated zero security reports across any three of the pilot sites in the UK since the beginning of the program.

- **Loss of the "human element."** Nothing can replace in-person learning—especially in prison. Social interaction is a vital way to engage learners in critical thinking and higher-level learning.[15] Studies find that "social presence" – the ability to perceive others and identify as part of a group – can positively influence student participation and motivation;[16] course and instructor satisfaction;[17] and real and perceived learning[18]. Interaction with the educator and peers on the outside of the prison can be especially key for instigating individual transformation and aspiration for prison learners. Without the enrichment and reinforcement that stem from being a member of a learning community, students taking virtual education programs in prisons are socially and materially disadvantaged. Some of the most effective educational programming contains intensive small-group interaction and offers a learning community as an alternative to other communities within prisons, some of which may be destructive.[19]

    Direct interaction with teachers is also essential for building a relationship and establishing a climate of mutual respect, trust, collaboration. A good teacher does what the computer cannot, and is the embodiment of what is perhaps most central to education behind bars anywhere in the world: the recognition of prison-based students as *people*—as whole, complex social beings—and provide an element of empathetic humanity and social connectivity in a relatively inhospitable and isolated learning environment. The profound relationship between teachers and learners behind bars—which impacts how an incarcerated person carries him or herself, interacts with others, (re)builds bonds with families, sees him or herself in relation to the community and as a citizen—is vital and can never be replaced by any form of technology.

- **Loss of the participation of outside students.** Many programs— such as the Prison-to-College Pipeline movement and the Inside-Out program in the USA and the Learning Together program in the UK— involve outside students from campus coming to prison to learn alongside their incarcerated peers. This aspect of the program has vast impact on both sets of learners: changing the outside students' stereotypes about the incarcerated population and, for the inside students, creating a learning space that comes as close to a traditional classroom as possible while creating avenues for bond-building between inside and outside students. Virtual education programs that do not include an element of in-person participation from outside students represent a lost opportunity for both sets of students.

- **Gradual replacement of in-person education.** Distance and virtual instruction are increasingly supported by departments of corrections' (DOCs) due to their comfort with technology and the reduced burden they place on DOC staff. There is concern that this convenience could lead to the limiting or outright phasing out of in-person instruction, even if in-person programming is of much greater benefit to students.

5. Do's and Don'ts

1. **Don't deny incarcerated people access to education.** In the absence of in-person classes during COVID-19, virtual education options should be provided. National and sub-national strategies should be developed and implemented to ensure that there is a single, consistent, secure infrastructure for connecting devices and making apps available so that learners of all abilities can access educational content.

2. **Do use virtual education as a compliment, not replacement, to in-person classes.** For incarcerated students in particular, technology cannot replace good teaching; it can only support it. Ironically, it is the human element of e-learning technologies that is potentially the most powerful. Incarcerated participants in education programs described in this document frequently attribute their study success not to improved access to technology, but to improved access to and interaction with teachers, peer mentors and other students in a consistent, connected learning community. Thus far, increasing digitization has not been entirely successful in facilitating independent self-managing learners, rather incarcerated students will need increased support in terms of access to educators and resources (such as printed texts and other materials).

What is different about in-person classes?

-   DEVON SIMMONS, INN Global Ambassador and first graduate of the Prison-to-College-Pipeline

"Having in-person classes while incarcerated has impacted me significantly in regards to the ways I interact with the world. It was my first opportunity to be resocialized in many ways because **I hadn't had the opportunity to engage with people outside of the prison setting for 13 years. Being in the same space amongst individuals who had aspirations of learning in pursuit of becoming better human-beings was very encouraging and exposed me to what community is all about. This is very important in the context of prisons which aren't designed to build self-efficacy!**

I was fortunate to participate in learning exchanges where students from the campus outside would come to the prison and participate in a lecture with us incarcerated students monthly. This will forever be one of the highlights of my incarceration because the relationships we built set the tone for me having social support upon my release. Unbeknownst to myself at the time, these classes were a mutual learning space and very impactful to everyone involved (including correctional staff). Just to be able to see people's different physical attributes, dress attire or hear different voices, accents, pronunciations contributed to providing a piece of hope in pursuit of seeing the outside world one day again.

Education is paramount and simultaneously infectious! Virtual learning is important in the midst of this chaotic time in the world, particularly inside prisons. However, it cannot ever replace the opportunity to physically be in the presence of others which really illustrates the amalgamation between education and the humanities."

3. **Do aim to ramp up technological capacity of accredited, educational institutions ALREADY working with local incarcerated populations**. Prison education is a common good that is best delivered by in-person instruction undertaken by local colleges and universities and consortia with a track record in education. These institutions are best positioned to provide extended academic support and advising to students both inside and during re-entry. While COVID-19 has put pressure on existing educational institutions offering courses in prisons, the answer is not to bring in an outside organization or private companies. In the United States for example, some private prison firms have spent recent years repositioning themselves as providers of re-entry services. Virtual education may be a new area ripe for profiteering off incarcerated individuals and with significant risk of degrading the crucial educational opportunities offered to them.

4. **During the pandemic, do hope for the best** *(blended options)***, but plan for the worst** *(no in-person options)***.** During the COVID-19 pandemic, universities, educators, tech providers, corrections personnel and directly impacted individuals should come together to develop plans for education delivery considering the worst-case scenarios. It may be worse to jump back into entirely in-person classes, only to have prisons shutdown again weeks later disrupting any educational continuity. While plans should be made to move back to blended or flipped learning when it is safe to do so, it is important that a contingency plan be in place to guarantee some education options – even if only virtually and with print materials- in the absence of face-to-face interaction.

5. **Do move immediately to adopt in-cell technology.** In-cell devices should become the norm. If people in prison have e-learning platforms and course material in their cells, electronic reading material and pre-selected educational applications or restricted internet access, they can use their time to continue to work towards qualifications or assessments. This would improve well-being and mental health among incarcerated people while also contributing to their growth and helping them to prepare for release. It would also mean that if classes are cancelled, they could still be held remotely, or prison learners could watch other, pre-selected online lectures or seminars. When people cannot leave their cells, they can continue to work toward their goals.

6. **Do provide extra support to bridge the educational and digital divide.** Adaptation to remote learning can be a challenge for many, let alone those with complicated previous educational experiences. It is important to consider not only skills related to the technology, but also to ability for self-directed learning and time management, which are critical to success in distance education. Developing scaffolding, early warning systems, remote tutor schemes similar to Sweden's and/or peer support and study groups can help. Scaffolding can include incorporating materials, exercises and assignments into virtual courses that help to build digital and independent learning skills. Incorporating early warning systems could help identify and intervene with students who are having difficulty. For example, if a student fails to turn in an early ungraded

assignment, this could generate a warning for the instructor, who could contact the student (via phone, secure email or the e-learning platform). Access to remote tutors or self-study peer groups within the prison, along with virtual study skills workshops, could also be beneficial.

7. **Do find creative ways to create "social presence" and connection.**
It is critical to foster relationships and a strong learning community that prison-based students feel a part of, despite lack of physical proximity. Allowing prison-based students to interact with classmates and educators on the outside is crucial and yet exceedingly difficult in prisons in general, let alone during the pandemic. Wherever possible video conferencing technology, secure email communication and messaging through discussion forums should be prioritized. Contact with teachers, students outside or tutors via phone (and giving increased access to phone calls for this purpose) is also an option. As soon as lower risk of infection permits, peer study groups within prisons and access to space and time for such activities should be promoted.

8. **Do identify communication channels between educators and prison-based students.** Corrections departments, prison personnel, prison-based students and teachers should define the channels through which educators will maintain communication with students. It is especially important to define in the case of current or future lockdown scenarios in order to avoid situations where teachers are unable to communicate important information.

9. **Do build relationships between educators and prison staff.** Any new regime will require corrections officers' buy-in and demand that staff are in the know about all opportunities available so that they can support incarcerated learners. INN partners stress that investing in relationships with prison officers and other key personnel inside can make or break the success of virtual education initiatives behind bars.

10. **Do call for transparency and audits of virtual service providers.**
Private commercial interests, whether non-profit or profit-making, have recognized a huge potential market in virtual technologies and service provision in prisons. It's important that there be transparency not only about the cost of virtual technology (and who bears that cost), but also about the quality of goods and services provided.

11. **Design, support and fund evaluations.** Now is the time to collect data necessary for making informed decisions post-crisis. When implementing virtual education programs in prisons it is important to develop partnerships between corrections departments, universities, and academics to build in evaluations of such initiatives on the front end. Evaluation design and baseline data collection needs to happen at the start of programs in order for accurate, robust studies to determine impact on educational outcomes. While it may seem difficult to justify spending resources that could be used for service delivery (or any number of other existing needs) on evaluations, knowing what is impactful will help to allocate resources to the best possible programs and avoid spending on replication of ineffective ones.

[1] Learning Together is an educational initiative that aims to build transformative learning communities through bringing students from higher education and criminal justice organizations to learn together as a group face-to-face in a prison environment. Developed and led by the University of Cambridge since 2014, over 40 higher education and criminal justice institutions in England and Wales now collaborate as a network (the Learning Together Network), in conversation with international academic and criminal justice partners.

[2] https://www.epea.org/wp-content/uploads/Art-and-Culture-i-Prison-publication.pdf

[3] Rand Corporation, Education and Vocational Training in Prisons Reduces Recidivism, Improves Job Outlook, August 22, 2013, https://www.bja.gov/Publications/RAND_Correctional-Education-Meta-Analysis.pdf. [This Meta-analysis of several program evaluations in the United States finds those who participate in correctional education are 43 percent less likely to return to prison after release than those who do not.].

[4] The above mentioned Rand meta-analysis finds the American public saves $5 in reimprisonment costs for every $1 it spends on prison education.

[5] Learning Together: A case study https://www.coracleinside.com/article/learning-together-case-study

[6] A comparative database of over 300 such studies can be found on the website designed as a clearinghouse: https://detaresearch.org/research-support/no-significant-difference/ . One study (Nguyen, 2015) using the studies found on the website, observed that about 92% of all distance and online education studies find that distance and online education is at least as effective, if not better, than traditional education. About 3% of the studies compiled by the site show the reverse, that traditional face-to-face format is more effective, and about 4% show mixed findings. However, given the issues of selection bias that later studies pointed out and the lack of rigorous methodology of the earlier studies, it is difficult to say how meaningful these numbers really are. In terms of high standard meta-analyses, Means et al. (2010) found there is positive but modest significant difference in favor of online learning, and Lack (2013) concluded that there is not enough evidence one way or another.

[7] Xu, D. and Shanna Smith Jaggars (2014). Performance Gaps Between Online and Face-to-Face Courses: Differences Across Types of Students and Academic Subject Areas. The Journal of Higher Education. Volume 85 (5) 633-659.

[8] (Gladieux & Swail, 1999; Jun, 2005; Liu, Gomez, Khan, & Yen, 2007; Muse, 2003; Stewart, Bachman, & Johnson, 2010)

[9] Several studies find larger negative effects for students with lower levels of academic preparation (Figlio, Rush, & Yin, 2013; Xu & Jaggars, 2013; Bettinger, Fox, Loeb, & Taylor, 2017; Alpert, Couch, & Harmon, 2016).

[10] Figlio, D. N., Rush, M., & Yin, L. (2010). Is it live or is it internet? Experimental estimates of the effects of online instruction on student learning (NBER Working Paper No. 16089). Cambridge, MA: National Bureau of Economic Research. [Finds that while there was no difference in achievement between high-GPA students in face-to-face versus online courses, lower-GPA students did significantly worse in virtual courses]

[11] Kozakowski, Whitney (2019). Moving the classroom to the computer lab: Can online learning with in-person support improve outcomes in community colleges? Economics of Education Review 70,159–172. [Students taking blended, remedial college math courses were significantly less likely to pass their courses, to be enrolled in college by their second year and to earn a degree within 5 years, than students taking the same remedial course in in-person instruction].

[12] https://www.prisonerseducation.org.uk/2020/05/the-its-great-but-thats-not-enough-digital-technology-and-prison-university-partnerships/

[13] Some of the concerns of prison administrators include access to information that could be used to make weapons or prohibited substances, aid in escape, has the (perceived) potential to inflame tensions within the facility (often materials on race and criminal justice), or systems that allow for unmonitored communications.

[14] See Adams, A. & Pike, A. (2008a) 'Evaluating empowerment and control of HE e-learning in a secure environment', British Educational Research Association (BERA) conference, Edinburgh; Adams, A. & Pike, A. (2008b) 'Security issues within prison and health ODL programmes', 5th Pan Commonwealth Forum, London, 1317 July 2008; and Pike, Anne and Adams, Anne (2012). Digital exclusion or learning exclusion? An ethnographic study of adult male distance learners in English prisons. Research in Learning Technology, 20(4), article no. 18620.

[15] Garrison, D. R., & Akyol, Z. (2013). The Community of Inquiry theoretical framework. In M. G. Moore (Ed.), Handbook of distance education (pp. 104e119). New York, NY: Routledge.

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[17] Akyol, Z., & Garrison, D. R. (2008). The development of a community of inquiry over time in an online course: Understanding the progression and integration of social, cognitive and teaching presence. Journal of Asynchronous Learning Networks, 12(2-3), 3-23.;
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