Studies have consistently found that prisoners who undertake education while in prison are less likely to reoffend, and return to prison. However, in an environment where post-secondary education is increasingly being offered via online delivery, prisoners with no access to the internet are experiencing barriers to education offered by non-prison providers. This study examines the Australian prison environment, the education needs of prisoners, and their current access to education, information technology and the internet. Recent and future Australian and international developments in delivering online education to prisoners are examined.

Introduction
Studies have consistently found that prisoners who undertake education while in prison are less likely to reoffend, and return to prison (Coates, 2016; Farley & Pike, 2016; Davis, Bozick, Steele, Saunders & Miles, 2013). However, in an environment where post-secondary education is increasingly being offered via online delivery, prisoners with no access to the internet are experiencing barriers to education offered by non-prison providers. This study examines the Australian prison environment, the education needs of prisoners, and their current access to education, information technology and the internet. Recent and future international developments in delivering online education to prisoners are examined.

The Australian prison environment
Adult prisoners, aged over 18 years of age, are incarcerated in one of ninety-eight correctional facilities in Australia. As of 30 June 2016, there were 38,845 adults in our prisons, an eight per cent increase from the past twelve months (Australian Bureau of Statistics, 2016). The Australian prison system is comprised of eighty-five government-operated prisons, nine privately-operated prisons and four transition centres (Institute for Criminal Policy Research, 2015). The operation of each of these prisons is guided by a 2012 publication, Standard Guidelines for Corrections in Australia (referred to as the Guidelines), published by senior members of state and territory governments responsible for corrections, known as the Australian Correctional Administrators. The Guidelines advise individuals and companies who are responsible for the operation and management of Australian prisons on the broad outcomes and goals to be achieved within and by their prisons (Australian Correctional Administrators, 2012).

The Guidelines recognise the link between education and recidivism, stating that one of the guiding principles by which prisoners are managed, is that they should be actively engaged in making positive behaviour changes, and that education is one means of achieving this (Australian Correctional Administrators, 2012). The Guidelines indicate that education programs, including vocational education, should be made available to prisoners, and that prisoners undertaking full-time study should be remunerated equally to prisoners undertaking full-time work. The Guidelines make it clear that educating prisoners is important and supported by prisons. There is also a recognition that prisoners have some unique education needs.

Prisoners’ education needs
Some of the educational needs of Australian prisoners can be identified by a study of their educational attainment and literacy levels. The Australian Institute of Health and Welfare (2015) provides information about prisoners’ education levels. Thirty-two per cent of adults entering Australian prisons had completed only Year 9 studies or below. Only 16 per cent had completed Year 9 studies or below. Only 16 per cent had completed year 12 studies (Australian Institute of Health and Welfare, 2015). The Victorian Ombudsman (2014) identified that in Victorian prisons in 2013, 39.5 per cent of prisoners had literacy levels that required intensive support. At a national level, the National Centre for Vocational Education Research (Dawe, 2007) identified that 62 per cent of Australian prisoners had literacy levels that are classified as less than functional. The Victorian Ombudsman’s report (2014) states that education and skills training, along with work opportunities, are essential elements of the rehabilitation package that should be offered by prisons.

The link between education and recidivism is also well documented. A British study by Hopkins (2012) found that prisoners who had achieved a qualification whilst in prison were 15 per cent less likely to be reconvicted in the year after release than those who had gained no
services, the increasing emphasis on learning online and libraries will lend books and print journal articles to be coursework through the postal service. Some university courses through distance education and receive their some support from prison staff to do so, however, there are many barriers to succeeding in education offered outside the prison. Prisons in all states and territories state that they support distance education for prisoners, by providing access to education support staff (A future beyond the wall: improving post-release employment outcomes for people leaving prison ARC Linkage Project LP140100329, 2016). Although prisoner education is supported through the provision of classroom computers and a tolerance of computers within cells in some states and territories, the lack of easy access to computers and the internet for education, places barriers between prisoners and online educational opportunities. Although these barriers are significant, developments in tablet and cloud technology have created opportunities to reduce barriers to online education faced by prisoners.

An Australian IT-based solution
Farley and Pike (2016) describe the Making the Connection project established by the University of Southern Queensland, as one solution to reducing the barriers to education placed on prisoners, due to their lack of access to the internet and other IT-based tools. The project introduced notebook computers that have no internet connectivity, but have access to a server containing educational materials, via an offline collection of study modules. The project allows digital learning, without needing to provide internet access. Through this mechanism, training has been delivered at the diploma and associate degree level in the areas of Business and Commerce, Science, and the Arts. As of March, 2017,

Current access to education in Australian prisons
Prisoners can choose to enrol, or to not enrol, in education programs within prison. All Australian prisoners have their training needs assessed when entering the prison system (A future beyond the wall: improving post-release employment outcomes for people leaving prison ARC Linkage Project LP140100329, 2016), but prisoners do not have to undertake the training that is recommended to them. Some students are able to pay to enrol in university education training rooms during their lessons. These rooms are not accessible to prisoners outside of class hours. In the majority of Australian prisons, none of the computers described have access to the internet, but do offer basic word processing software. There are limited exceptions to these arrangements. For example, in the Alexander Maconochie Centre in the Australian Capital Territory, prisoners may visit the prison library to access computers and may send and receive emails from five approved addresses (personal communication, January 15, 2015). All email traffic is monitored. New South Wales, Western Australia and Tasmania allow limited and supervised access to the internet, either within a classroom, or on a one-on-one basis with a prison officer beside them (A future beyond the wall: improving post-release employment outcomes for people leaving prison ARC Linkage Project LP140100329, 2016).

The project introduced notebook computers that have no internet connectivity, but have access to a server containing educational materials, via an offline collection of study modules. The project allows digital learning, without needing to provide internet access. Through this mechanism, training has been delivered at the diploma and associate degree level in the areas of Business and Commerce, Science, and the Arts. As of March, 2017,

Current access to IT in Australian prisons
Access to information technology tools and services is highly restricted in Australian prisons. Prisons in New South Wales, Queensland and the Australian Capital Territory will allow prisoners to purchase desktop computers for their cells if they can demonstrate they need this for their education (A future beyond the wall: improving post-release employment outcomes for people leaving prison ARC Linkage Project LP140100329, 2016). Other prisoners can have access to PC computers within education training rooms during their lessons. These rooms are not accessible to prisoners outside of class hours. In the majority of Australian prisons, none of the computers described have access to the internet, but do offer basic word processing software. There are limited exceptions to these arrangements. For example, in the Alexander Maconochie Centre in the Australian Capital Territory, prisoners may visit the prison library to access computers and may send and receive emails from five approved addresses (personal communication, January 15, 2015). All email traffic is monitored. New South Wales, Western Australia and Tasmania allow limited and supervised access to the internet, either within a classroom, or on a one-on-one basis with a prison officer beside them (A future beyond the wall: improving post-release employment outcomes for people leaving prison ARC Linkage Project LP140100329, 2016).

Although prisoner education is supported through the provision of classroom computers and a tolerance of computers within cells in some states and territories, the lack of easy access to computers and the internet for education, places barriers between prisoners and online educational opportunities. Although these barriers are significant, developments in tablet and cloud technology have created opportunities to reduce barriers to online education faced by prisoners.

Current access to IT in Australian prisons
Access to information technology tools and services is highly restricted in Australian prisons. Prisons in New South Wales, Queensland and the Australian Capital Territory will allow prisoners to purchase desktop computers for their cells if they can demonstrate they need this for their education (A future beyond the wall: improving post-release employment outcomes for people leaving prison ARC Linkage Project LP140100329, 2016). Other prisoners can have access to PC computers within education training rooms during their lessons. These rooms are not accessible to prisoners outside of class hours. In the majority of Australian prisons, none of the computers described have access to the internet, but do offer basic word processing software. There are limited exceptions to these arrangements. For example, in the Alexander Maconochie Centre in the Australian Capital Territory, prisoners may visit the prison library to access computers and may send and receive emails from five approved addresses (personal communication, January 15, 2015). All email traffic is monitored. New South Wales, Western Australia and Tasmania allow limited and supervised access to the internet, either within a classroom, or on a one-on-one basis with a prison officer beside them (A future beyond the wall: improving post-release employment outcomes for people leaving prison ARC Linkage Project LP140100329, 2016).

Although prisoner education is supported through the provision of classroom computers and a tolerance of computers within cells in some states and territories, the lack of easy access to computers and the internet for education, places barriers between prisoners and online educational opportunities. Although these barriers are significant, developments in tablet and cloud technology have created opportunities to reduce barriers to online education faced by prisoners.

Current access to IT in Australian prisons
Access to information technology tools and services is highly restricted in Australian prisons. Prisons in New South Wales, Queensland and the Australian Capital Territory will allow prisoners to purchase desktop computers for their cells if they can demonstrate they need this for their education (A future beyond the wall: improving post-release employment outcomes for people leaving prison ARC Linkage Project LP140100329, 2016). Other prisoners can have access to PC computers within education training rooms during their lessons. These rooms are not accessible to prisoners outside of class hours. In the majority of Australian prisons, none of the computers described have access to the internet, but do offer basic word processing software. There are limited exceptions to these arrangements. For example, in the Alexander Maconochie Centre in the Australian Capital Territory, prisoners may visit the prison library to access computers and may send and receive emails from five approved addresses (personal communication, January 15, 2015). All email traffic is monitored. New South Wales, Western Australia and Tasmania allow limited and supervised access to the internet, either within a classroom, or on a one-on-one basis with a prison officer beside them (A future beyond the wall: improving post-release employment outcomes for people leaving prison ARC Linkage Project LP140100329, 2016).

Although prisoner education is supported through the provision of classroom computers and a tolerance of computers within cells in some states and territories, the lack of easy access to computers and the internet for education, places barriers between prisoners and online educational opportunities. Although these barriers are significant, developments in tablet and cloud technology have created opportunities to reduce barriers to online education faced by prisoners.
enable access to a database of games, recorded music environment and allow email and phone calls. They also have been designed for the prison tablets to 8,000 inmates (Mitchell, 2017). The tablets have been designed for the prison environment and allow email and phone calls. They also enable access to a database of games, recorded music and ebooks. A similar program has been introduced into the prison system in South Dakota (Hult, 2017). Here prisoners are assigned a PIN that they can use to ‘check out’ a tablet for 24 hours. The tablets can be taken into prisoners’ cells and provide access to music, ebooks and six websites. Links embedded within those sites are not active, so the user cannot move beyond the six sites. The tablets connect to a wireless internet service, but are only able to connect to the internet when they are within the grounds of the prison.

Having access to hardware, such as tablets and notebooks is also seen as valuable and educational, independent of the content they enable prisoners to access (Nabers, 2017). Many prisoners will have had limited or no exposure to electronic devices in their lives before prison. California correctional administrators have identified prisoners’ lack of familiarity with information technology as a barrier to gaining employment after prison. By providing prisoners with tablet technology that enables electronic messaging and access to games and music, they hope to develop the basic computer literacy skills prisoners will need to find work after their release (Nabers, 2017).

Upston (2017) describes a New Zealand initiative where educational content is stored on a prison intranet within ‘educational suites’, creating a secure online environment. The ‘suites’ can be accessed within prison classrooms, by a limited number of pre-approved prisoners at one time, providing them with content that supports their education and development of life skills. Twelve selected, educational websites are able to be accessed as a means of providing online learning opportunities.

The use of fixed screens on cell walls to deliver educational content has been investigated by Wayland Prison in Norfolk, England (Anon, 2016). Most prisoners at Wayland have a television in their cells where they have access to only one channel, produced by the prison. The Prison Channel currently delivers pre-programmed educational materials, but the prison plans to extend this idea with screens that will allow prisoners to Skype with external tutors and family members. Such an approach would solve a common problem within prisons, where many teaching hours are lost when prisoners are unable to attend classes. This can occur when the prison goes into lockdown, or other security measures are in place, and a lack of available prison officers to accompany prisoners from their cells to classrooms.

Despite the potential for such solutions to reduce barriers to education for prisoners, it should be noted that these services often come at a cost to the prisoner. The Colorado (Mitchell, 2017) and the South Dakota (Hult, 2017) examples mentioned earlier, both require prisoners to pay to gain access to the hardware, and also for the content they use. This is despite the fact that it is cheaper for prisons to provide access to external education opportunities, delivered online, than it is to educate prisoners in the prison class rooms (Sellers, 2016). The Australian prisons that allow prisoners to keep computers in their cells, require the prisoners to buy or rent them and any software required. Although prisoners do get paid for studying and may receive some money from family, the amount they receive from either source is very limited. Money earned needs to be used to buy items that are not supplied by the prison. Such items that need to be purchased include any additional food required, access to phone calls, and personal items such as newspapers, art or hobby materials and educational materials (Queensland Government, 2014). In addition, not all the money they earn in prison is made available to them. Prisoners in Victoria, for example, have 20 percent of their earnings withheld as savings to be used upon release (Victoria State Government, 2017b). Having to pay for access to hardware and content creates further barriers to participating in the educational opportunities delivered through these tools.

The future of prisoner education?
The use of virtual reality (VR) in education and training has the potential to place prisoners in immersive educational environments that would offer them tailored training opportunities. Bindi (2016) describes an American company that is developing VR technology for prisoner education. They plan to create VR learning environments where prisoners can learn how to perform car maintenance tasks, such as replacing batteries. Their product will include haptic feedback technology that enables the student to feel what they are holding, as well as see it. They also plan to develop VR scenarios, such as scenes of domestic violence, where they can be immersed to practice appropriate physical and emotional responses (Bindi, 2016).

Zoukis (2016) also discusses opportunities for prisoner education through the use of VR. He describes training through immersive experiences, where prisoners can be placed in virtual building sites, or kitchens and taught how
to operate machinery and tools. He also envisages the possibility of prisoners experiencing virtual ‘field trips’ to museums, art galleries and libraries. He makes the point that such educational experiences can be self-paced and would have benefits to prisoners who struggle with literacy, as the educational experience would be visual, rather than text-based.

Conclusion

The benefits to prisoners in being able to study online, from within their cells are many. Learning in this way does not preclude prisoners from undertaking paid work during the day, is not dependant on the availability of prison staff to move prisoners to and from classrooms, allows prisoners a greater number of choices of courses to study, and caters for prisoners who wish to move beyond the very basic in-house education options. The increasing use of online delivery of educational content to students, has the potential to benefit prisoners who cannot attend classes on campus. However, prisoners who have little or no access to the internet, information technology, or computer hardware, face barriers in accessing such educational opportunities, particularly those offered by institutions outside prisons. In an environment where it is recognised that improving educational outcomes is one of the keys to reducing recidivism, efforts must be made to reduce these barriers. IT-based projects underway, and in development, have the potential to reduce these barriers and bring educational opportunities to prisoners. However, caution must be taken to ensure new barriers are not placed between prisoners and education by restricting these opportunities to only those who can pay.

References


Contact author: Jane Garner, jane.garner@rmit.edu.au


Note: All published papers are refereed, having undergone a double-blind peer-review process.