DIGITAL TABLETS IN PRISONS AND JAILS --IS THERE EVIDENCE THAT THEY CAN HELP TO REDUCE RECIDIVISM?

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An important recent ingredient in efforts to integrate technology into the carceral system has been the use of personal digital devices with embedded software that offers the opportunity for communication, entertainment, reading, and, in some cases, education. The degree of deployment ranges from every prisoner having an individual device with embedded capability for search, learning modules, even administrative activities like filing a grievance, to tablets available for specific educational programs only, to the case where prisoners must use a shared device located in their general unit area.

Tablets would seem to be an almost perfect solution to several problems. They can meet the rigorous prison requirements prohibiting unsecured outside communication. For educational programming lesson–focused formats allow the learner to proceed gradually through a specific course and eventually navigate a complete curriculum. Perhaps the best example of this is the use of embedded lessons leading to the high school equivalency qualification, the General Education Development (GED).

But tablets in prisons have unique challenges, too, which can be separated into four categories. First, the institutional decision to employ tablets in jails is often determined by a single purpose or focus, like family visits, and not a broader inclusive vision which emphasizes correctional education. Second, there is often a serious lack of digital literacy on the part of the inmates, thereby lessening their ability to leverage the use of tablets. Online learning requires discipline, focus, and competence with digital technology. Third, there are numerous challenges associated with the general demographics of prisoners – below-average high school completion rates, addiction, and other medical problems. And fourth, in jails and prisons, it is not clear that teachers, mentors, and in-house trainers are able to offer the kind of triage for differential needs of inmates in the complicated implementation of online learning.

How can it be determined whether tablets really make a difference? The Risk Need Responsivity (RNR) classification system, long a standard, well-accepted approach to rationalizing and planning for new approaches in correctional education, would seem to be the ideal technique. Its purpose is to facilitate assigning individual inmates to appropriate programs based on risk factors that consider offending behavior. There is little indication that RNR approaches are being implemented with respect to tablets, even though they are widely used for other correctional education modalities. This paper will summarize the effect of these four challenges and also will offer general and specific recommendations that could be considered for implementation by Departments of Correction to leverage the considerable opportunity offered by tablet-based education.

Keywords: Prison tablet programs, correctional education, evidence-based studies, Risk Need Responsivity (RNR) classification system, digital literacy

Introduction—Can the introduction of digital tablets become a predictor variable for improved outcomes in carceral education?

For decades there has been extensive research indicating that educational experience while in prison is a good predictor of better outcomes afterward. The benchmark RAND Corporation study in 2013 [1] and many others since then have consistently agreed that the relationship between participation in educational programs and success outside of jail is solidly clear. A later meta-analysis examining 57 studies that used recidivism as a dependent variable and 21 that used employment clearly showed that recidivism is the superior outcome variable. [2] It is less clear which independent, or predictor variables are appropriate. Which characteristics of learning experiences while in confinement are most significant in predicting recidivism: face to face, group or individual interaction, vocational or academic learning, inhouse staff or external teachers, and, since the pandemic, tablet-based instruction? Also, post-release independent variables, notably the behavior of the parole officer, have proven to be significant predictors of recidivism. [3] In this paper, we describe the dramatic increase in the use of digital tablets in prisons, especially during the recent Covid-19 pandemic. The key question is whether this massive addition to the correctional education toolbox offers an opportunity for isolating an important predictor variable for examining recidivism.

Scope of the carceral system in the United States—Brief summary

Before examining the effect of the use of tablets in jails and prisons, it is helpful to review the scope of the carceral system in the United States. The Prison Policy Initiative's detailed study "Mass Incarceration: The Whole Pie 2020" provides some selected statistics. The total number of prisoners currently is about 2.3 million, the largest incarcerated population anywhere, constituting over 20 percent of the world's total. More than half of these prisoners are in almost 2000 state prisons; 226,000 in over 100 federal prisons; 630,000 in over 3000 county jails; plus tens of thousands in immigration detention facilities, Indian county jails, plus military prisons, civil confinement centers, and psychiatric hospitals.

While these numbers are striking, there are others that are far more significant in the context of the American workforce. In addition to the 2.3 million currently confined jails and prisons, another 4.9 million individuals are in the category of formerly incarcerated. In addition, 77 million Americans have a criminal record, and 113 million adults have an immediate family member who has been in prison or jail. Finally, each year approximately 700,000 persons are released into the community, and the majority of them return to jail in subsequent years. [4] These numbers indicate the vital importance of some possibly powerful intervention which might significantly improve educational results in confinement. Will the introduction of tablets turn out to be that silver bullet?

Might tablet use become the silver bullet—the long-awaited differentiator?

The extraordinary changes due to education technology worldwide, especially in the developed nations, have been reflected in major changes in the use of devices and courseware at all levels of the education process. In the U.S. incarceration system, by far the largest in the world, where education is understood to be the crucial element of reducing recidivism, no such revolution has occurred. Technological innovation in that sector has been very slow, and recidivism numbers have changed little over the past decade. [5]

But the advent of the COVID-19 pandemic may have been a catalyst in disguise because there has been a dramatic increase in the introduction of handheld devices for inmates. These tablets have many potential applications, from facilitating T.V.- like family visits, to learning modules to assisting in achieving qualifications like GED, connecting with reading and other educational sources, and, of course, games and other entertainment. The crucial question in any technology introduction of this type is always the same, "Will it make a difference?"

The extent of tablet deployment recently

Especially during the past two years, there has been a proliferation of tablet deployment in prisons and jails in the United States. Currently, hundreds of thousands are circulating in U.S. correctional facilities. Securus Technologies, the owner of JPay, announced its 300,000th active tablet in 2020. [6] Its competitor Global Tel-Link (GTL), already made available 200,000 tablets to prisons and jails. [7] Catalyzed by the COVID-19 pandemic, Texas is currently in the process of distributing tablets to nearly 118,000 prisoners. The move was initially prompted by the reduced opportunity for inmate face-to-face communication with families during the pandemic. The Texas tablets offer radio, music, and education selections, plus the ability to send and receive email under controlled conditions and even to file a grievance. [8] Each deployment, whether statewide or for more limited jurisdictions, has its own unique characteristics. For example, in June 2020, because of COVID-19, the Essex County Sheriff's Department in Massachusetts asked for bids for tablets that would eventually assist in video and email communication between prisoners and their families. The winning contractor, Securus, offered several inducements. First, the \$2.65 per call fee was eliminated, and in exchange for two free weekly phone calls, they agreed to deduct 2.5 cents per minute from its commission payments, making the rate about 12 cents per minute. The concept was that in addition to communication with family and friends, the devices could provide access to educational services, e-books, job searches, and rehabilitation. Movies, music, and games would be an extra charge. [9]

In Connecticut, the MacDougall-Walker Correctional Institution, as part of its contract with the tablet vendor, was given 1500 tablet computers to facilitate contact with family and friends during the pandemic. This is part of a statewide attempt to supply "agency approved" educational and programming materials to its 9,000 incarcerated individuals. [10] But "free" tablets have become major sources of revenue for vendors and, in some cases, for states and counties. For example, with existing implementations in 25 departments of correction across the country, Securus offered the tablets gratis but gained revenues from inmates purchasing contracts for additional applications. [8] Families of incarcerated individuals spend over \$3 billion on outside purchased goods and services like food, clothing, etc., and, more recently, tablet-associated costs. State governments get a portion of this amount also. For example, the Ohio state budget in 2017 showed \$1.3 million annually in commissions from J pay services. [11]

Because of security concerns, tablets are not directly connected to the internet or social media outlets and are protected with military-grade ruggedized cases explicitly designed to prevent inmates from tampering with, accessing, or damaging them. They are also customized with lockdown settings and download only approved applications to ensure that the devices connect to a secure network. [12] Tablet usage by inmates is contingent upon good conduct, so rule infractions can result in revocation of tablet privileges. In some implementations, tablet use is limited to a specific unit area, and the tablets are housed in secure locations in each unit. It should be added that some implementations use Securebook and Chromebook laptops instead of tablets, but some of the security flaws of laptops have discouraged wider deployment by state Departments of Correction. [13]

Tablets' primary use so far—communication, games, and profits

The primary motivation in many cases for the early introduction of tablets has not been education. Enabling prisoners to communicate with family and friends through email, often monitored and censored, and also video visits has often been the first use, especially during the COVID-19 pandemic. Although some services are "free," tablet providers have sometimes been blamed for predatory fees and costs associated with their use in prisons and jails. Here are some examples of pricing procedures in some localities at different times for different providers: each email costs 30 cents; video visits cost nearly \$10 for 30 minutes; in some facilities, a game like solitaire, usually free on a cell phone, costs up to \$7.99, and movie rentals and purchases range from \$2 to \$25 via JPay tablet. Its competitor, GTL, has charged 38

cents for an email, up to \$7.99 for 48-hour movie rentals, and \$24.99 for a monthly music subscription. [14]

Some state implementations are charged based on a per-minute fee, such as in West Virginia and Delaware, GTL charges for reading e-books, sending messages, or accessing music, movies, or games were \$0.05 per minute. In Vermont, a provider charges \$7.99 for a week of streaming music, 30-day access to a game center is \$5.99, whereas in Indiana, a 30-day subscription to "unlimited podcasts" costs \$9.99. [15] For inmates of some New York prisons, a single song can cost as much as \$2.50, and sending an email could \$0.35 (the fees could double if a photo or video is attached). [16]

In a positive development, in late 2021, Securus reduced the per-minute costs of phone calls from \$0.15 to \$0.13 and also claimed to have offered over 95 million free connections between prisoners and their families since the start of the Covid-19 pandemic. Further, the company has renegotiated a large number of contracts with many correctional agency partners and also has added options to reduce or eliminate government charges on correctional calls. [17]

Information about the efficacy of tablets in the prison system has one very abundant source – the vendors which offer the full range of services, including devices, connectivity, a wide range of applications in entertainment, education, gaming, and a wide variety of other online services. American Prison Data Systems (APDS) reported that their tablets are now deployed in hundreds of facilities in seventeen states that have accumulated over nine million hours of usage. They helped incarcerated learners at the facility and saw tablet users, on average, a 57% increase in GED pass rates over non-tablet users. [18] Another vendor, GTL, claimed that 1.2 million inmates used its services which delivered 4.1 billion telephone call minutes and also processed over \$1.1 billion in credit card transactions in 2020 across 2000 facilities with all fifty states plus Washington DC and Puerto Rico. [19] Securus states that it provides the most extensive digital education program in corrections, called "Lantern." To quote the company's advertising, "Lantern's powerful technology already made 7,500 videos available, over 170,000 Lantern students over 1,000,000 course enrollment and more than 14,000,000 videos downloaded since its inception." [20] It is important to note that Securus/JPay, GTL, ATLO, and Edumentum are generally classified as "for-profit" firms while EDOVO and ADPS are "public benefit." [13]

Coursera and Khan Academy as exemplars for successful online learning--could they eventually be used extensively in prisons?

There is abundant literature indicating that embedded learning systems, massive open online courses (MOOCs), and a wide variety of other modalities are being used worldwide to facilitate an increasing variety of vocational training, high school equivalency proficiency like GED, and all levels of education from K-12 through postsecondary education. [21] Specific learning modules are available even for kindergarten children and all other levels; for example, in the middle grades are a primary school, the famous Khan Academy modules are widely used globally to facilitate learning in mathematics, history, science, and social studies. [22] These lessons are downloaded to individually managed devices, often tablets or cell phones.

In postsecondary education, where doing a pandemic era, close to 90% of all classes were presented online, there were a large number which were asynchronous, meaning that there was no direct contact between instructor and student face-to-face; instead, numerous practices were employed to facilitate the interaction. Perhaps the most significant development on this front was the extensive participation worldwide in the offerings of Coursera, a firm which as of 2021, had over 82 million learners for all levels of instruction and hundreds of full-scale credit college programs. [23] Before the Covid-19 pandemic, more than one in three of the United States' 19 million college students were taking at least one course online, and since the pandemic, that number is drastically higher, with as many as 90% of all students in that category at the height of the pandemic. [21] The obvious question is whether any of this very dramatic and mostly successful changeover can be repeated for incarcerated individuals.

Obstacle: In spite of evidence of its importance, digital literacy is less emphasized

Outside the prison environment, it is normal to use a full range of cell phone-based applications constantly during the day for communication, entertainment, education, and all of the functions of daily life. But many prisoners have not been able to participate in this activity for the entire length of their stay. Therefore, one of the many considerations for carceral education must be facilitating the process of digital literacy. There is extensive evidence that digital literacy is a significant benefit to prisoners. A study in 2019 involving 23 semi-structured interviews with returning citizens in the Detroit area found that participants had significant gaps in digital literacy upon release and little understanding of the process of using mobile technology in seeking employment. [24] A study sponsored by the Lumina Foundation found a positive effect for the distribution of about 30,000 tablets in various locations using the Edovo system, a combination of educational and entertainment materials embedded in a tablet computer. Many examples of highly successful results were cited, as students gained digital literacy skills and applied them to learning tasks, especially GED studies. [25] Increasing digital literacy has the potential for improving results in confinement and afterward. A detailed study of 13 prisons in the U.K. over seven years which aimed to determine the effect of increased use of digital technology as a spur to improving the culture of prisons and also the self-management behavior of the individuals involved. Here is a summary from that study

"Prison disciplinary offenses were significantly reduced over a two-year period, and reoffending in the first year after release was reduced by 5.36% compared to a 0.78% reduction in comparison prisons. The prisoner survey and usage data suggested that prisoners felt much more in control of their lives in prison and much more confident in coping with technology in the outside world." [26]

Two similar studies, one in the Portland, Oregon, area and the other in New Orleans, showed similar results to the U.K. study, with prisoners showing significantly improved post-incarceration results after intensive data literacy training. [27, 28] Other research showed a significant reduction in suicide attempts, staff assaults, and inmate—on—inmate assaults after the introduction of tablets. [29] And a survey of 70 prison officials from six states indicated that those who work in prisons with higher access levels of technology are more likely to agree that technology positively contributes to prisoners' outcomes. [30] Another European study showed that many prisoners have poor digital skills and low motivation to use electronic services. It also listed many other problems that affect e-learning, such as fear of technology and innovation, the quality and use of teaching and learning support staff, and lack of quality interactive multimedia learning materials. [31]

Obstacle: Lower potential for inmates' success in digital learning activities

As described earlier, the average prisoner demographic has characteristics that may predict lower success with digital learning. An early 1990s study among 220 male prisoners in New York State found that seventy-nine percent of the total inmate population were high school dropouts. Their reasons for dropping out of school included a greater rate of grade retention, school transfers, misbehavior, and poor attendance and grades. The inmates also experienced less time in extracurricular activities and very little time with a school counselor during their time in school. [32] Most inmates blamed poor socioeconomic conditions and role models as significant reasons for dropping out of school and influenced their criminal activity. This school-to-prison pipeline still continues, and many incarcerated people are subject to punitive practices in schools and neighborhoods that funnel them out of school and into juvenile and criminal justice system involvement. [33] A United Nations study found that literacy is crucial to acquiring essential life skills. [34] This also applies to prisoners' basic reading and writing skills, the starting point for higher education and digital literacy. A PIAAC study found that many inmates rarely use numeracy skills in life or work during incarceration. And of those who earn a GED while incarcerated, only 10 percent go on to take any college coursework, and less than 1 percent achieve college

degrees.[35] As of 2018, 25 percent of incarcerated individuals lacked a high school or GED equivalent compared to only 13% of the general public. [36]

Obstacle: Performance of in-house instructors in adjusting to the use of digital devices

Since the typical model for in-house teaching activities was primarily face-to-face before the Covid-19 pandemic, many new procedures had to be instituted. Examples are: distributing completed coursework in boxes for review, changing course grading systems to pass/fail, adjusting learning objectives, etc. This resulted in a process very similar to correspondence courses and lacking tutoring and counseling support, in addition to having no face-to-face contact with other students. Participants do not have a sense of inclusivity or interpersonal relationships that are important in any learning activity, in addition, there is very little information about the effectiveness of the instructors as they had to innovate to present their material in different ways. A recent report by the Center for Law and Social Policy called "Lessons Learned from Prison Education Interruption during Pandemic" noted

"regular and substantive interaction" between student and instructor, and wraparound supports like online tutoring and counseling, can boost students' academic success. For most incarcerated students, the in-person components of education programs are even more important than the academics. [37]

A 2018 study in the *Journal of Correctional Education* made a similar point, emphasizing that many of the instructors in prisons and jails have experience in the K-12 environment but must learn new techniques, including digital techniques, and get very few professional development opportunities beyond those which they pay for themselves. [38]

Possible solution: Can evidence-based reentry principles be applied to the introduction of digital tablets?

For several decades the gold standard for evidence-based reentry principles has been the Risk – Need – Responsivity (RNR) model. It is a system for triaging prisoners in the context of applying proper emphasis to the best reentry strategy. Each inmate is considered first, in the context of programs needed based on a higher or lower risk of recidivism. Second, they are evaluated in the context of their criminogenic needs. Third, based on these assessments, they are provided appropriate interventions for their own individual learning style and personality. [39] A recent article indicated that despite some flaws in the RNR classification system, justice systems were still using it extensively for programming prisoners into reentry trajectories. [40] It would seem that digital tablets have a place in this classification model and could be included especially in the initial risk assessment process.

Summary: General findings and specific recommendations

Digital tablets have become part of the policy agenda for many jails and prisons. The following are general suggestions based on our review of the data. The introduction of a new digital device without a comprehensive plan for its broad-based integration into the carceral system across several levels—especially education—could impede successful outcomes. Some of the studies cited above indicate that under certain conditions, the introduction of tablets can lead to tangible improvement in important areas like inmate behavior, recidivism, job placement, feelings of self-worth, etc. But these studies are very preliminary and did not presume the kind of wholesale introduction of devices now occurring in the United States carceral system. Another general finding is that correctional authorities at federal and state levels need to be attentive to the type of contracts which are made with tablet service vendors, which in many cases can be exploitive of prisoners and their families. Also, extracting an additional commission for the prison itself seems questionable. The following specific recommendations aim to capitalize on the

potential benefits of digital tablets while avoiding some of the serious problems already being experienced.

First recommendation – digital literacy expansion

Digital literacy programs are still relatively rare. Some of the ones we have described, in spite of their success and replicability, have not been widely adopted. So the first of the recommendations we propose is that every tablet implementation in a jail or prison be accompanied by a fully-funded digital literacy program. It seems intuitively clear that improving digital literacy can have an almost universally positive effect, making it easier for inmates to take advantage of various educational and administrative programs that are available in prison, and facilitating reentry, a process that requires significant skills in navigating the various systems for financial aid, food aid, jobs, etc.

Second recommendation – leveraging the use of existing digital learning successes, especially Coursera and the Kahn Academy

If digital literacy programs were more broadly adopted, it would be possible to examine several other potential benefits achievable through the now existing presence of tablets in jails and prisons. A digitally literate person is far more likely to be comfortable in the use of some of the powerful embedded learning programs available in many institutions. That person could, in many cases, feel comfortable with vocational training programs of the type that Coursera specializes in, designed for the online learner, with excellent feedback and follow-up processes, greatly facilitated by mastery of some of the subtle skills required to interact with an online learning activity. Our second recommendation, then, is that all digitally literate and otherwise qualified prisoners be given the opportunity to participate in powerful, proven processes like those which are thriving in the Coursera and Khan Academy ecosystem, which together have over 80 million learners. Obviously, provisions for assuring appropriate security protections would have to be considered. Adding 2 million more from U.S. prisoners would to ecosystems like these would be a noble long term goal.

Third recommendation - routinizing use of tablets for important administrative linkages, external and internal

In the prison environment we visualize, where there is an extensive emphasis on digital literacy first, and then on integrating inmates into solid, proven, educational experiences for vocational and other topics, it becomes routine to add several tablet-based administrative programs which are already beginning to appear. Two specific examples are the filing of grievances and the application for various federal, state, and local benefits which are available to many incarcerated individuals once they are released. Imagine a prison system where inmates were digitally literate and taking full advantage of inhouse as well as external learning programs – the step toward routinely communicating through the administrative system, including grievances, medical issues, etc., is very short indeed. The 1500 prisoner Washington DC jail offers this capability, for example.[41] And why shouldn't a prisoner who is entitled to various benefits upon leaving jail, like food stamps, state or local subsidies, etc., be able to process the required forms, using the tablet as a basis for filing months before discharge?. Nearly all states allow this, and California is one of the few that has written it into law. [42]

Fourth recommendation-- insistence on additional evidence-based analysis in any further deployment of tablets in prisons

We have briefly noted the importance of evidence-based analysis using the example of the Risk – Need – Responsivity (RNR) model, one of many approaches to the rigorous analysis of various issues in the incarceration and post-incarceration cycle. Unfortunately, much of the data on the use of tablets in prisons so far is available primarily from vendors' advertisements, all of which are positive and

encouraging. This data source is not at all in keeping with the evidence-based analysis principles. We recommend that in the future, all decisions regarding the deployment and expansion of tablets be supported by some of the rigorous approaches now in use for evaluating other reentry issues. Without this insistence on a careful review of outcomes from sources other than vendors, there is the danger of inappropriate investment in unproven approaches.

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