viapath
TECHNOLOGIES

Bridging Tomorrow

Harnessing Technology to Enhance Juvenile Rehabilitation

Modern society requires technology skills to successfully advance; however, incarcerated juveniles are not restricted from opportunities for digital citizenship. Although juvenile justice facilities (JJFs) are tasked with the rehabilitation of juvenile delinquents, the current state of these facilities reveals antiquated methods of delivering community reintegration services.

Over the past decades, the number of incarcerated juveniles has reduced. However, there continues to be a substantial number of youth incarcerated annually. Specifically, according to the most recently available data, more than 24,000 youth were incarcerated on any given day in 2021 (Office of Juvenile Justice and Delinquency Prevention, 2021). Juvenile incarceration disrupts education, strains family ties, and increases the risk of reoffending. Furthermore, youth are not prepared for the digitally advanced society upon release. In turn, incarceration fosters social and emotional challenges and hinders future employment, negatively impacting long-term well-being. Efforts are needed to shift towards rehabilitation, community-based interventions, and addressing digital citizenship issues to ensure better outcomes for youth in the justice system.

Modernizing the operations of JJFs will advance the mission of providing services that develop youth as productive citizens in their communities. Embracing technology can improve educational outcomes, facilitate rehabilitation, and enhance job preparation. In turn, there are increasing chances of successful community reintegration and reducing recidivism rates among incarcerated youth. Additionally, it aligns with contemporary approaches that prioritize holistic development and the long-term well-being of juvenile offenders.

> Modernizing the operations of JJFs will advance the mission of providing services that develop youth as productive citizens in their communities

Navigating Resource Constraints and Outdated Rehabilitation Methods

Incarcerated youth are not afforded equivalent educational and vocational resources as their counterparts in the general population. Although research has identified that education and employment has a positive impact on reducing future reoffending (Andrews & Bonta, 2010; Andrews, Bonta, & Hoge, 1990; Givs, 2017), traditional approaches within JJFs often face limitations due to resource

constraints and outdated teaching methods. Differing from the general population, education and vocational learning is conducted through in-class instruction by an instructor with the use of pencil/pen and paper (Young, 2010). Furthermore, in 2015, many youths who were in solitary confinement were restricted from educational programs in its entirety (McCluskey, 2017).

Although the United States Department of Education (2017) identified that technology permits for a personalized learning experience, incarcerated youth are often grouped in a physical classroom with individuals on various academic levels rather than based on assessed levels (Young, 2010). The mixed traditional classrooms of JJFs present challenges for students to progress according to their skillset. According to a study that explored the lived experiences of incarcerated youth, respondents reported not being prepared to advance academically when returning to their home school upon release (Young, 2010).

The antiquated academic classroom dynamic is not the only concern that hinders the advancement of incarcerated youth. Staffing is also a major concern for JJFs. In a recent national survey, over 200 juvenile correctional and probation agencies reported experiencing a historical staffing crisis (Quattlebaum et al., 2023). In turn, rehabilitation services are impacted and the dangers of JJFs are increased. Specifically, according to 75% of survey respondents, inadequate staffing affects the quality of supervision, service availability, and agency adherence to best practices (Quattlebaum et al., 2023). Therefore, incarcerated youth develop negative behaviors, such as violence and aggression, to survive in the dangerous environments (McCuish et al., 2018). Furthermore, youth are not able to attend diversionary programs designed to reduce future reoffending upon release. Although less than 10% of survey respondents indicated a lack of strategy for their state to address the JJF staffing crises (Quattlebaum et al., 2023), recent research (Sullivan, 2018) identified modern technology as a feasible method to ensure continuity of education and rehabilitation services.

Juvenile Justice Efforts to Evolve Rehabilitative Services

Over the past decades, efforts have been implemented by the federal government to enhance education opportunities for incarcerated youth. For example, various legislation, such as the Individuals with Disabilities Act (IDEA), the No Child Left Behind Act (NCLBA), and the Correctional Education Package (CEP), focuses specifically on education to prepare youth for brighter futures. In 2014, the U.S. Department of Education and the U.S. Department

In a recent national survey, over 200 juvenile correctional and probation agencies reported experiencing a historical staffing crisis (Quattlebaum et al., 2023). In turn, rehabilitation services are impacted.

of Justice reported that less than half (47%) of incarcerated youth between the ages of 13 and 21 years of age earned high school course credits. Furthermore, only 8.2% of incarcerated youth were enrolled in a General Education Development (GED) program, and only 6.6% received a GED or obtained a high school diploma (U.S. Department of Education, 2014). Thus, a Key Policy Letter was issued to state departments of education and state juvenile justice agencies to address the educational challenges faced by current and previous incarcerated youth (U.S. Department of Education, 2014).

Although initiatives have been enacted to provide youth with a seamless educational experience, these are only opportunities for states (Sullivan, 2018). In other words, recognizing that improvements are needed, the federal government only offers states the incentives to improve education for youth. The final decision to take advantage of the incentives and implement modern approaches to address inadequate services remains at the state level.

In addition to financial resources, JJFs have attempted to enhance services and security for incarcerated youth through addressing staffing issues. Specifically, JJFs have undertaken initiatives to address staff shortages by implementing comprehensive recruitment and retention strategies. Focused on training and professional development, these efforts aim to enhance staff capabilities and job satisfaction. Notable examples include mentorship programs and educational incentives (Quattlebaum et al., 2023). These measures reflect a commitment to fortifying the workforce and improving the overall effectiveness of juvenile justice services.

Despite the efforts of JJFs to hire and retain adequate staffing, there continues to be an issue with turnover. Specifically, some states experience a 90% turnover rate of new officers in the first year (Prabhu, 2022). With retention being a major concern for JJFs, youth tend to experience similar instability during incarceration as pre-incarceration. Therefore, innovative approaches that will provide stability and a positive environment for incarcerated youth is necessary to prioritize rehabilitation and successful community reintegration rather than institutional instabilities.

Only 8.2% of incarcerated youth were enrolled in a General Education Development (GED) program, and only 6.6% received a GED or obtained a high school diploma (U.S. Department of Education, 2014).

Some states experience a 90% turnover rate of new officers in the first year (Prabhu, 2022).

Addressing Juvenile Reintegration Challenges to Bridge the Gap

Digital technology can significantly enhance JJFs by providing tailored educational programs, vocational training, and mental health resources. Incarcerated youth can access interactive learning modules, skill-building applications, and virtual counseling services. Additionally, incorporating digital tools enables real-time progress monitoring and data-driven assessments, facilitating personalized

rehabilitation plans. Such initiatives not only improve institutional operations but also better equip juveniles with the skills needed for successful community reintegration, fostering a more effective and forward-looking juvenile justice system.

Considering that JJFs experience challenges with conducting timely education and vocational assessments, the integration of digital technology will permit JJFs with immediate identification of incarcerated youth's skills levels. Additionally, the staffing crisis will not impede juvenile rehabilitation services with the use of e-learning platforms. Financial funds identified for the hiring and training of new staff that depart from JJFs within a short period of time can be reinvested for the long-term benefit of both incarcerated youth advancement and JJFs operations to accomplish the overall mission of successful community reintegration.

Recent research has identified that acquiring technology skills is beneficial for youth (U.S. Department of Education, 2017). Furthermore, these platforms provide a flexible and personalized learning experience for incarcerated youths, allowing them to progress at their own pace and cater to individual learning styles (Houchins et al., 2018). Considering that delinquent youth are at a greater risk for educational and employment failures than their counterparts, innovative approaches are necessary to reduce interruptions in rehabilitative services and quality of supervision. According to Carter (2019), youth with a history of delinquency have a 2% increase in the likelihood of being unemployed and a 3% decrease in occupational earnings. Therefore, it is vital for JJFs to provide incarcerated youth with digital access to gain adequate, effective, and efficient education and vocational skills to successfully reintegrate into society.

Barriers to Digital Technology for Incarcerated Juveniles

Security measures and institutional staff resistance hinder the adoption of digital technology in JJFs. Overcoming these barriers is essential to empower incarcerated youth with digital skills for successful community reintegration and positive societal contributions. Technological advancements, from online education to virtual counseling, have the potential to revolutionize the juvenile justice system. For incarcerated juveniles, access to technology facilitates educational and continuity, mental health support, and

Recent research has identified that acquiring technology skills is beneficial for youth (U.S. Department of Education, 2017).

According to Carter (2019), youth with a history of delinquency have a 2% increase in the likelihood of being unemployed and a 3% decrease in occupational earnings.

vocational skill development, enhancing their chances of successful rehabilitation and reintegration into society, ultimately contributing to reduced recidivism rates.

Implementing a secure and scalable technological framework is essential for the successful integration of digital technology into JJFs. This framework should cater to the diverse needs of both staff and juvenile offenders, ensuring seamless access to digital tools and resources. Accessibility considerations encompass the availability of devices, reliable internet connectivity, and user-friendly interfaces that facilitate the engagement of all stakeholders (Brosher, 2016).

Implementing digital technology in JJFs is a transformative process that may encounter resistance from staff members accustomed to traditional approaches. Staff members may express concerns about the unfamiliarity of digital tools, potential disruptions to established routines, and uncertainties regarding the effectiveness of new technologies. Addressing these concerns and fostering a positive attitude toward technological integration is crucial for overcoming staff resistance.

Transformative Impact of Tablet Technology in Juvenile Facilities

In response to the U.S. Depart of Education and U.S. Department of Justice's Key Policy Letter to provide incarcerated youth with equivalent education as the general public, the Madison Juvenile Correctional Facility initiated an educational experiment in 2014, equipping all female students with secure tablet computers (Brosher, 2016). The primary objective was to enhance educational experiences by addressing the digital divide and opportunities for the incarcerated juvenile female population. However, the tablets exceeded their classroom-oriented purpose. Specifically, these digital devices calmed the atmosphere, reduced grievances, and fostered increased engagement with literature.

The tablet initiative addressed the educational disparity faced by juvenile inmates in an era of web-based learning. To prevent misuse and offer controlled access to a private internet network, the tablets were encased to prevent misused. Teachers utilized the tablets to impart lessons dynamically, incorporating multimedia elements. Results indicate improved reading scores, and the tablets also served as tools for positive behavioral changes, offering a multifaceted impact encompassing education, mental health, and communication. The success prompted expansion of the program statewide, marking a shift in leveraging technology to enhance education, rehabilitation, and reentry in correctional facilities. The annual cost per tablet at Madison was an investment in bridging the educational gap and reducing recidivism rates. The tablets enabled incarcerated

> The tablet initiative addressed the educational disparity faced by juvenile inmates in an era of web-based learning. To prevent misuse and offer controlled access to a private internet network, the tablets were encased to prevent misused.

students to access the same educational materials as their counterparts outside the facility, ensuring seamless academic progress upon release and fostering a commitment to high school certification.

The transformative potential of digital technology in juvenile justice is promising. Thus, emphasizing e-learning, virtual classrooms, simulations, mentorship, and therapeutic interventions. Successfully implementing a robust technological infrastructure, addressing cybersecurity, and promoting innovation are crucial. Juvenile justice facilities, through best practices and supportive policies, can lead in tech-driven rehabilitation, continuously improving educational, vocational, and diversionary programs, and break the digital divide by adapting to emerging technologies. The collective commitment to leveraging digital tools fosters a rehabilitative and supportive environment for juvenile offenders.

About Us

ViaPath Technologies provides transformative technology and services tailored for juvenile justice facilities, incarcerated youth, their support systems, and correctional agencies to support juvenile community reintegration and disrupt the digital divide. With an extensive deployment of secure digital tablets, we offer advanced communication solutions, educational resources, and management tools. Our secure digital tablets host over 20,000 courses, covering education, employment, substance use, family needs, and more. Furthermore, they provide a secure communication channel for messaging and video visitations, fostering connections between incarcerated juveniles and their families.

ViaPath Technologies is headquartered in Falls Church, Virginia, with an employee presence throughout North America. To learn more, please visit viapath.com.

Sources Cited

Andrews, D. A., & Bonta, J. (2010). *The psychology of criminal conduct*. Routledge.

Andrews, D. A., Bonta, J., & Hoge, R. R. (1990). Classification for effective rehabilitation: Rediscovering psychology. *Criminal Justice and Behavior*, 17(1), 19–52.

Carter, A. (2019). The Consequences of Adolescent Delinquent Behavior for Adult Employment Outcomes. *Journal of Youth & Adolescence,* 48(1), 17–29.

Givs, M. S. (2017). An exploration of factors contributing to recidivism rates among offenders under community supervision (Doctoral dissertation). Retrieved from ProQuest Dissertations & Theses Global Database.

Houchins, D. E., Gagnon, J. C., Lane, H. B., Lambert, R. G., & McCray, E. D. (2018). The efficacy of a literacy intervention for incarcerated adolescents. *Residential Treatment for Children & Youth,* 35(1), 60-91.

McCluskey, M. (2017). The Education Problem in Juvenile Detention Centers. The Atlantic.

McCuish, E., Lussier, P., & Corrado, R. (2018). Incarceration as a turning point? The impact of custody experiences and identity change on community reentry. *Journal of Developmental and Life-Course Criminology,* 4(4), 427-448.

Office of Juvenile Justice and Delinquency Prevention. (2021). One day count of youth in residential placement facilities, 1997-2021.

Quattlebaum, M., Umpierre, M., Schweitzer, M., Dempsey, M., & Cunningham, V. (2023). Juvenile justice staffing crisis: Time to reimagine our approach. Juvenile Justice Information Exchange.

Sullivan, K. (2018). Education Systems in Juvenile Detention Centers. BYU Law Digital Commons.

Tolou-Shams, M., Bath, E., McPhee, J., Folk, J. B., Porche, M. V., & Fortuna, L. R. (2022). Juvenile justice, technology and family separation: A call to prioritize access to family-based telehealth treatment for justice-involved adolescents' mental health and well-being. *Frontiers in Digital Health,* 4, 867366.

U.S. Department of Education. (2014). Key policy letters signed by the education secretary or deputy secretary.

U.S. Department of Education. (2017). Reimagining the Role of Technology in Education:. Office of Educational Technology.

Brosher, B. (2016). Tablets Improve Reading Scores, Behavior At Indiana Juvenile Facility. WBAA.

Young, M. V., Phillips, R. S., & Nasir, N. S. (2010). Schooling in a Youth Prison. Journal of Correctional Education, 61(3), 203–222.