

# Improving Postsecondary Education in Virginia Prisons

Applied Policy Project Prepared for Resilience Education



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## DISCLAIMER

The author conducted this study as part of the program of professional education at the Frank Batten School of Leadership and Public Policy, University of Virginia. This paper is submitted in partial fulfillment of the course requirements for the Master of Public Policy degree. The judgments and conclusions are solely those of the author, and are not necessarily endorsed by the Batten School, by the University of Virginia, or by any other agency.

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## HONOR PLEDGE

On my honor as a student, I have neither given nor received unauthorized aid on this assignment.

A handwritten signature in black ink that reads "Rachel Walet". The signature is fluid and cursive, with "Rachel" on top and "Walet" below it, both starting with a capital letter.

Rachel Walet

May 2021

## ACRONYMS

ACLU – American Civil Liberties Union  
ADP – average daily population  
AY – academic year  
CBB – College Behind Bars  
CTE – career and technical education  
DBHDS – Virginia Department of Behavioral Health and Developmental Services  
DCC – Danville Community College  
DCE – Virginia Department of Correctional Education  
DOC – Department(s) of Corrections (general)  
DOJ – United States Department of Justice  
DPB – Virginia Department of Planning and Budget  
EHR – electronic health record  
ESI – Experimental Sites Initiative  
FAFSA – Free Application for Federal Student Aid  
FY – fiscal year  
GDP – gross domestic product  
GED – general educational development  
HEA – Higher Education Act of 1965  
IHE – institute of higher education  
IT – information technology  
ITU – VADOC's Information Technology Unit  
NMCD – New Mexico Corrections Department  
PSE – postsecondary education  
PVCC – Piedmont Virginia Community College  
RCC – Rappahannock Community College  
RFP – request for proposal  
SVCC – Southside Virginia Community College  
USDOE – United States Department of Education  
VADOC – Virginia Department of Corrections  
VDOE – Virginia Department of Education  
VDH – Virginia Department of Health  
VTC – video teleconference

## CLIENT OVERVIEW

Resilience Education is a non-profit organization that seeks to reduce recidivism by providing accessible, high-quality business education to incarcerated students. Started at the University of Virginia Darden School of Business in 2011 and continuing to Columbia Business School, Resilience Education's 200+ instructors have graduated over 700 students from Virginia and New York prisons. Their work has demonstrated impressive results thus far: 93% of their program graduates stay out of prison. Through emphasizing students' capability, bolstering their confidence, and building their connections, Resilience Education leverages the power of education to change the course of individuals' lives.

## EXECUTIVE SUMMARY

*Currently, too few of Virginia's eligible incarcerated students complete quality higher education programs while incarcerated, impacting their ability to successfully reintegrate into their communities upon release. Completing these programs, which including two-year degrees, four-year degrees, career and technical education, and college-level certificates, can serve as a life-changing accomplishment for individuals and a major cost-saving measure for corrections departments.*

Federal prisoner data collected under the First Step Act indicates as many as 71% of all prisoners possess a high school diploma, general educational development (GED) completion, or equivalent certificate before entering prison (Bureau of Justice Statistics, 2020). These individuals are prime candidates for postsecondary education (PSE) programming while incarcerated, especially following the December 2020 federal restoration of Pell Grant eligibility for all incarcerated students—a benefit that few incarcerated students have been able to receive since 1994 (Weissman, 2020). Unfortunately, data on each state's enrollment vs. completion rates for correctional PSE is either not collected or not comprehensively available (Crayton & Neusteter, 2008). Accordingly, understanding how Virginia stacks up nationally on this issue is difficult, but some federally collected data does provide an indication of the system's potential to improve. The Bureau of Justice Statistics' most recent state and federal correctional facility census, published in 2008, indicates that Virginia is underserving its incarcerated students (Staphan, 2008). As of 2005, less than 50% of Virginia's correctional facilities offered career and technical, or vocation, training, and only 39% offered college courses (Staphan, 2008). Compared to other states' correctional PSE systems for which enrollment data is available—such as California's, which has increased correctional PSE enrollment by over 200% in recent years (Smith & Digard, 2020)—Virginia certainly has room to grow its correctional PSE offering and completion rate.

A number of policy alternatives are available to improve Virginia's correctional PSE landscape, including investing in correctional technology support, creating a platform to better track incarcerated students' progress, and developing grants to create student support programs. Based on four evaluative criteria—cost-effectiveness, political feasibility, administrative feasibility, and equity—this analysis recommends Alternative #4: Student Support Program Grant. This alternative presents a feasible yet cost-effective opportunity for Virginia to lessen educational quality and opportunity gaps between incarcerated and non-incarcerated students.

## PROBLEM OVERVIEW

The following sections explore the many layers of correctional PSE, including why it's valuable and how this issue operates in Virginia.

### THE CASE FOR POSTSECONDARY EDUCATION (PSE) IN PRISONS

One must consider PSE's importance within the rapidly changing context of the United States labor market. The Bureau of Labor Statistics predicts that from 2016 to 2026, growth in jobs requiring postsecondary education (PSE) will outpace that of jobs not requiring PSE (Rolen, 2019). By 2020's end, projections indicate that 65% of all jobs in the United States economy will require PSE for entry (Carnevale et al., 2014). A large segment of the labor force is unable to keep up with these changing dynamics: the more than 2.3 million people currently incarcerated in the United States, the highest prison population in the world, both in absolute and per capita terms (Sawyer & Wagner, 2020). Less than 13% of the incarcerated population has completed PSE, compared to nearly 50% of the general population and 57% of the Virginia population (Harlow, 2003). Barring educational intervention while incarcerated, many of these individuals lack the necessary skills to successfully integrate into the workforce upon release.

Indeed, research has documented many positive impacts of access to PSE in prisons; nationally, if just 50% of the eligible prison population accessed PSE while incarcerated, better employment opportunities upon release would translate into over \$45 million in wage gains during the first year back in their communities and, looking forward, would save states about \$370 million annually in reincarceration spending due to lower recidivism rates (Oakford et al., 2019). Indeed, research estimates that participating in PSE while incarcerated lowers an individual's odds of recidivating by 48% (Martinez-Hill, 2021). Beyond direct benefits to inmates, economies, and state expenditures, correctional education programs have also been proven to stabilize often-chaotic prison environments by improving staff-inmate interactions, providing peer role models within incarcerated communities, and reducing disciplinary interactions (Cunningham, 2007). An educated prison is often a safer prison.

Considering 95% of incarcerated people eventually return to their communities (Burke, 2019), preparing incarcerated individuals for successful, gainful employment upon release is in government's best interest. The U.S. incarcerated population has been called one of the "most educationally disadvantaged" groups in the country (Crayton & Neusteter, 2008). In Virginia, outdated technology, funding access, and disparate course offerings across the state serve as some of the many barriers that incarcerated students face in accessing and completing PSE. Following the recent restoration of inmates' eligibility to receive federal grant aid, called Pell Grants, policymakers have even more resources at their disposal to make meaningful strides on this issue.

### CORRECTIONAL GOVERNANCE IN VIRGINIA

The organizational hierarchy of Virginia corrections and correctional education is displayed visually in **Figure 1.1**. In the Virginia state government, corrections—including just incarceration and

<sup>1</sup> Author-generated.

probation, as parole was abolished in 1995 (Olivo, 2020)—falls under the executive branch, specifically within the jurisdiction of the Secretary of Public Safety and Homeland Security (*Organization of Virginia State Government*, 2020). Correctional education did not always fall under VADOC's jurisdiction, however. Created in 1974 as an entity separate from VADOC, the Department of Correctional Education (DCE) used

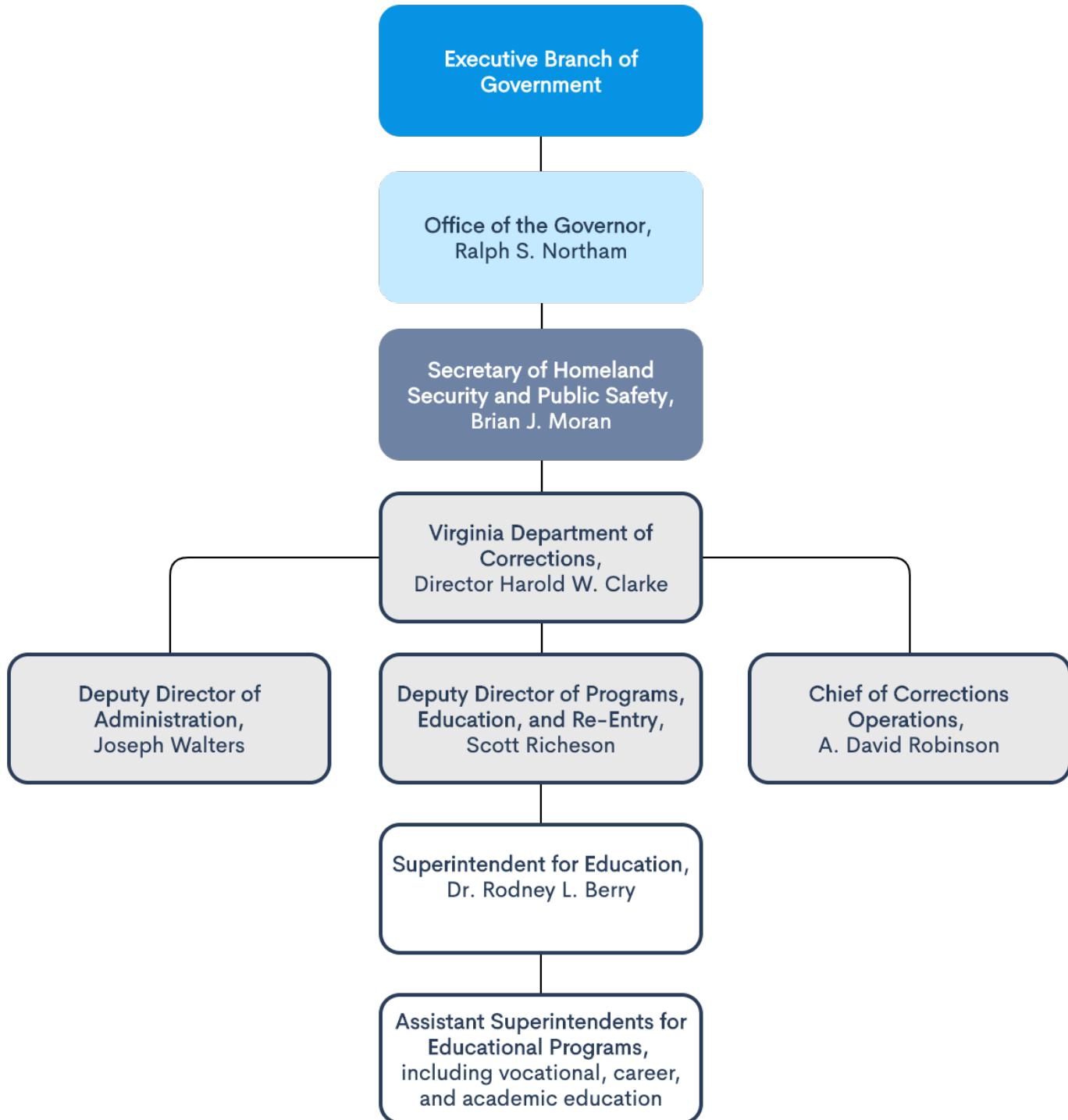


Figure 1: Governance Structure for Virginia Corrections, Correctional Education

to oversee and operate educational programs in Virginia prisons, housed under the Virginia Department of Education (VDOE) (Coffey, 1993). As of 2007, the DCE was still in charge of this mission (Cunningham, 2007), but has since been consolidated under VADOC, as reflected in the above organizational structure (J. R. Donnelly, personal communication, October 14, 2020). Accordingly, though the two agencies used to operate “in conjunction with, but independently of” one another (J. R. Donnelly, personal communication, October 14, 2020), their missions are now one and the same. This means that ultimately, VADOC will prioritize safety over education, as that is its main purpose. As demonstrated above, administrators focused on education still exist within VADOC, but an entire agency devoted to correctional education no longer exists (J. R. Donnelly, personal communication, October 14, 2020).

## VIRGINIA PRISON POPULATION PROFILE

VADOC issues monthly offender population reports indicating, for a given month and year, how many individuals are incarcerated and where. As of August 2020, the average daily population (ADP) in VADOC facilities was around 26,200 inmates, an about 12% decrease from August 2019's ADP (~28,800) (Research Unit, Statistical Analysis & Forecast Unit, 2020). This difference is largely due to COVID-19 related early releases, which totaled around 2,000 individuals as of October 2020 (ACLU of Virginia, 2020).

Thankfully, independent research fills in some of these gaps. Vera Institute of Justice conducted research on Virginia's incarceration trends from the 1970s to mid- to late-2010s, using data from both state governments and the U.S. Bureau of Justice Statistics (*Incarceration Trends in Virginia*, 2017). Vera's numbers indicate nearly 60,000 individuals were incarcerated in Virginia in 2015, compared to just 15,000 in 1983—a nearly 300% increase in the total incarcerated population. Driving this overall increase is a 235% increase in the prison population from 1983 to 2018. Vera notes that Virginia's highest prison admission rates come from rural counties, especially in the southwestern part of the state. The Prison Policy Initiative finds that Virginia incarcerates about 780 people per 100,000 individuals, a rate that outpaces the national average of about 700 per 100,000 (*Virginia Profile*, 2018).

When considering ways to improve outcomes for incarcerated students, it's important to understand who those individuals are. According to Vera's research, though 20% of the Virginia population was Black in 2015, Black individuals comprised over 50% of the state's incarcerated population (2017). Of all racial groups documented in Virginia prisons, only Black inmates comprise a share of the prison population that is disproportionate compared to their share of the state population. In 2017, Black Virginians were incarcerated at 4.2 times the rate of white Virginians (*Incarceration Trends in Virginia*, 2017). Separate analysis from The Sentencing Project found that Virginia incarcerates about 280 out of every 100,000 white Virginians, while incarcerating about 1,386 out of every 100,000 Black Virginians—which brings the incarceration rate disparity to nearly 5 times (Nellis, 2016). Correctional PSE represents a strong opportunity to provide opportunity and equity to incarcerated individuals, particularly those disproportionately impacted by incarceration and the justice system as a whole.

## WHO OFFERS HIGHER EDUCATION TO VIRGINIA'S INCARCERATED STUDENTS?

There are a handful of ways that Virginia's eligible incarcerated population can access higher education while in prison. The bulk of the higher education courses offered run through one of the four institutions with access to federal funding; Danville Community College (DCC), Rappahannock

Community College (RCC), Piedmont Virginia Community College (PVCC), and Southside Virginia Community College (SVCC). PVCC, RCC, and SVCC offer two-year associates degrees to inmates along with other certificate programs (Canzi, 2011). DCC, which only expanded into prison higher education in 2016 after gaining access to federal funding, allows students to take courses or participate in career and technical certificate programs (Anastaett, 2016). Beyond these IHEs, VADOC does play a role in educating incarcerated students. Most of VADOC's educational programming is targeted towards individuals who do not have a high school diploma or general education development (GED) equivalency credential (Research-Evaluation Unit, 2020). Some, however, is devoted towards career and technical education (CTE), which qualifies as PSE (Research-Evaluation Unit, 2020). Outside VADOC and Virginia community colleges, other programs are offered through third-party organizations. Resilience Education is a non-profit organization that has offered business education certificates to inmates in two Virginia correctional facilities since 2010 (Fairchild, 2014). All programs, from VADOC to community college to third-party, rely heavily on in-person instruction and operate with minimal, if any, technology in the classroom. Challenges with both establishing and leveraging technology inside Virginia prison classrooms will be discussed more in-depth in a later section.

## COSTS TO SOCIETY

To fully appreciate expanding access to PSE in Virginia prisons as a public policy problem, it's important to consider the cost burden this issue places on society, both directly and indirectly. A discussion of these realities is below.

### DIRECT COSTS

The direct cost to society of insufficient access to higher education in prison is related to incarceration costs. Indeed, a DOJ-sponsored study found that inmates who receive education while incarcerated—including postsecondary programs—have 43% lower odds of recidivating (Davis et. al, 2013). Understanding incarceration's cost burden on the state, whose budget is funded largely by taxpayers, is essential to quantify this problem's financial impact.

A commonly discussed fact is Virginia's seemingly low three-year recidivism rate, which is about 23.4% according to best estimates (Research-Evaluation Unit, 2020). Of the 43 states reporting data on the number of offenders who are re-incarcerated within three years of release from prison, Virginia's is the lowest (Virginia Department of Corrections, 2019). Policymakers and government officials use recidivism rates to gauge correctional systems' functionality and efficacy; therefore, one could consider having the lowest recidivism rate in the country as evidence of VADOC's astounding success. It's important to note, however, limitations in recidivism rate calculations. The rate only records "state responsible" inmates convicted of a felony with at least a year's sentence within three years of their release (Schwaner, 2019). It would not record those who are arrested for misdemeanors with less than a year's sentence, those sentenced to less than a year for probation violations, or any re-offending inmates who are arrested and convicted but not sentenced during the three-year period (Schwaner, 2019). Additionally, if any individual recidivates in a facility outside their original facility's data collection system—like local, city, or county jails

or facilities in a different state—Virginia’s recidivism rate will not capture them (Lichtenberger & Ogle, 2006).

Understanding the recidivism rate’s limitations, one can still utilize it to further quantify the direct cost to society of insufficient access to PSE in Virginia prisons. Virginia Compensation Board research indicates the average yearly operating cost per inmate was \$31,828 in FY2018, up about \$500 from FY2017 (Compensation Board, 2019). In February 2020—prior to COVID-19-related prison population declines (Heiss et al., 2020)—the ADP in VADOC facilities was 29,208 (Research-Evaluation Unit, 2020). The Bureau of Justice Statistics indicates that the average state prison release rate is about 33% of total inmates (*Reentry Trends in the U.S.*, 2020), meaning Virginia will release about 9,700 inmates this year. Using Virginia’s current recidivism rate, one can expect about 2,300 of these inmates to recidivate within three years. Based on Virginia’s current average yearly cost per inmate, this amounts to about \$71.3 million per year in future re-incarceration costs.

How much of this cost could be avoided if more robust PSE systems were in place in VADOC facilities? Using state government data of higher education access for eligible Virginia inmates from 2007; I will extrapolate to current circumstances. In 2007, though about 34% of Virginia’s prison population was eligible to receive higher education—they possessed a high school diploma or GED—about 95.6% of them did not have access to college while incarcerated (Cunningham, 2007). Recent estimates indicate postsecondary eligibility has since risen to 35.4% (Oakford et al., 2019), which amounts to about 814 of the 2,300 future recidivists released in 2020. Based on the 2007 access estimates, however, 777 of the 814 will go without PSE while incarcerated. Assuming the documented impact of access to correctional education on recidivism (-43%) applies to this group, about 334 of these 777 would not have recidivated if they had received higher education while incarcerated. This amounts to about \$10.6 million, roughly 15% of the projected \$71.3 million in future annual re-incarceration costs, providing a ballpark estimate for this policy issue’s direct cost to Virginia (assuming 100% participation in postsecondary programs). A number of assumptions are present in this analysis, but it gives some indication of the direct cost of limited access to PSE in Virginia prisons.

## ECONOMIC COSTS

Along with direct costs—mainly a function of incarceration costs—researchers have sought to place a number on the economic burden incarceration imposes on society. It is important to note that this burden is difficult to quantify, due to the multifaceted, varied nature of each individual and their family’s experience with incarceration. This analysis, however, is helpful to introduce an estimate for incarceration’s economic burden at the very least.

A working paper from researchers at Florida State University’s Institute for Justice Research and Development attempts to estimate the annual economic burden of incarceration in the United States (McLaughlin et al., 2016). Beyond correctional spending, which is frequently discussed as the “cost” of incarceration, they explore social costs incurred by incarcerated people themselves, along with those borne by their children, families, and communities. For example, these costs could be lost wages while in prison, higher mortality rates upon release, increased utilization of social programs, decreased property values, and higher infant mortality, among others (McLaughlin et al., 2016). As demonstrated in [Table 1](#) of

Appendix A, they assigned a dollar value to 23 different costs, which, combined with correctional costs, yield an aggregate burden of incarceration totaling \$1 trillion annually—approaching nearly 6% of U.S. gross domestic product (GDP). For context, this is about the same amount of U.S. GDP spent on *all* public education (Staff Reporter, 2019). They note that correctional spending comprises just about \$90 billion of this economic burden, indicating that for every dollar spent on corrections, about ten dollars of related social costs are generated. Based on available data and necessary assumptions, the direct costs analysis estimated that increased access to correctional PSE could reduce or eliminate about \$10.6 million in Virginia’s annual carceral spending. Thus, in the Commonwealth of Virginia, this preventable corrections spending generates roughly \$100.6 million per year in social costs, making the economic burden of incarceration that could be avoided over \$111 million per year. Individuals ill-prepared for self-sustainable life not only imposes costs on these individuals themselves but also on their families and surrounding communities, further necessitating government response to this public policy issue.

## FUNDING FOR HIGHER EDUCATION IN VIRGINIA PRISONS

Like many policy issues, offering PSE in prisons really comes down to the money: who is paying and how much. State corrections departments report that funding is the number one obstacle that exists for incarcerated students’ access to PSE (Hobby et al., 2019). Multiple funding streams are discussed below.

### FEDERAL LEVEL: 1960S TO 1990S

A major developmental milestone for correctional PSE came during President Lyndon B. Johnson’s administration, when Congress passed the Higher Education Act of 1965 (HEA) (Ubah, 2004). Included in this measure is Title IV, which established the first federal financial aid for inmates pursuing higher education (Ubah, 2004). This reflected a high point in the view of correctional practices that had been building up until that point (Matthews, 2015). In addition to loans, Pell Grants—nonrepayable, need-based federal assistance to finance higher education—are one major source of Title IV funding for incarcerated students (Matthews, 2015). Over time, inmate take-up of Pell Grants steadily increased both federally and in Virginia. During the 1979-1980 academic year (AY), research indicates about 11,000 state and federal prisoners received Pell Grants, and from 1988 to 1992, this number grew to about 25,000 per year (Dortch & James, 2019). In Virginia, the number of inmates receiving Pell Grants in the 1979-1980 AY was about 700 (Kusserow, 1982), and as of the 1993-1994 AY, this number was about 1,050 (Morza, 1994). Nationally, less than 1% of all Pell Grant recipients were incarcerated as of the 1993-1994 AY (Dortch & James, 2019).

This momentum, however, would not last forever. In 1974, Dr. Robert Martinson, a UC-Berkeley sociologist, issued a report declaring correctional rehabilitation programs ineffective (Matthews, 2015). The report, which discouraged federal investment in correctional education, landed on uniquely fertile ground; a number of external factors—namely, the Civil Rights Movement, Vietnam War, and Attica Prison Riots—strengthened distrust in the federal government was strong throughout this period (Matthews, 2015). During the administrations of Presidents Nixon, Ford, and Reagan throughout the 1970s and 1980s, criminal justice policy shifted to a “war on drugs” that would be “tough on crime,” instituting a number of policies aimed at penalization rather than rehabilitation (Cullen, 2018).

In 1994, this mindset extended to federal funding for PSE in prisons. The Congress under President Bill Clinton passed an important piece of legislation that eliminated inmates' Pell Grant eligibility (Ubah, 2004). The Violent Crime Control and Law Enforcement Act of 1994 prohibited any individuals incarcerated in state and federal prisons from receiving Pell Grants, consequently decreasing prisoners' access to and enrollment in PSE programs (Dortch & James, 2019). In addition to restricting federal aid, the 1994 legislation also motivated more than half of all states to ban inmates from receiving both need- and merit-based aid on the state level, decreasing access even further (Hobby et al., 2019). Indeed, a RAND Corporation study found that from 1991 to 2004, the share of state prison inmates enrolling in college coursework decreased from 14% to 7% (Davis et al., 2014).

John Donnelly, Vice President for Instruction and Student Services at Piedmont Virginia Community College (PVCC), an IHE that offers PSE programs to Virginia inmates, discussed the impact of this policy change on PSE's availability in Virginia prisons. Prior to 1994, institutions like PVCC were able to provide in-person educational programs to incarcerated students of a comparable quality to their other offerings outside prison settings. Once Pell Grant funding was taken away from inmates, however, PVCC and other IHEs offering services in prisons became dependent on private or philanthropic sources, which could often be inconsistent and more piecemeal compared to federal assistance (J.R. Donnelly, personal communication, October 14, 2020). He describes the process as one of "cobbling together those sources," one of which was the Sunshine Lady Foundation, founded in 1996 by Doris Buffet, sister of billionaire and Berkshire Hathaway CEO Warren Buffet, to "invest in organizations and programs dedicated to providing opportunities for the advancement of education, wellbeing, and new life choices for disadvantaged people," including incarcerated individuals (About Us – Sunshine Lady Foundation, 2021). Other philanthropic funding sources were available, he noted, but not on a comparable scale to Buffet's foundation. Indeed, the Laughing Gull Foundation, a "progressive family foundation rooted in the U.S. South," recently gave Southside Virginia Community College (SVCC) an \$87,000 grant for prison education programming (Staff Reporter, 2018). While this money will finance two years of tuition and books for program participants (Staff Reporter, 2018), it pales in comparison to the millions of dollars from Buffet's foundation.

Many correctional facilities are not fortunate to benefit from such large-scale philanthropic contributions. Broadly, IHEs' capacity to offer PSE in Virginia prisons significantly decreased post-1994. By 1997, research estimates that only eight college-in-prisons programs remained (Robinson & English, 2017). Though the Carl D. Perkins Career and Technical Education Act of 2006 instituted grants to states for career and technical education programs, restrictions prevent states from allocating more than 1% of all Perkins funds to prison education programs (Wilson et al., 2019). For context, VADOC received about \$3.6 million in federal grant money in FY2019, including Perkins CTE grants (Budget Office, 2019). It's unclear the exact amount of Perkins grant money the state received and spent on incarcerated students, but given the aforementioned restrictions, it's likely to be a very small amount. Thus, without Pell access, inmates' access to higher education took a significant hit.

## FEDERAL LEVEL: 2000S TO 2020

Then came the Second Chance Pell Experiment. As a part of the Obama Administration's "commitment to create a fairer, more effective criminal justice system, reduce recidivism, and combat the

impact of mass incarceration on communities,” a split from the former “tough on crime” mentality, the U.S. Department of Education (USDOE) sought to determine if re-expanding Pell Grants to incarcerated individuals would produce positive outcomes (Dortch & James, 2019). In July 2015, President Barack Obama announced the Second Chance Pell Pilot Program as an Experimental Sites Initiative (ESI) under the HEA (Robinson & English, 2017). ESI status allows the secretary of education to partner with select IHEs to experiment with innovative financial aid mechanisms—in this case, restoring Pell Grant eligibility for inmates served by these institutions (Robinson & English, 2017).

Four of Virginia’s 23 community colleges were eventually selected as experiment participants: two smaller schools, DCC and RCC, in the first award round, and two larger schools, PVCC and SVCC, in the second (*Virginia Community College System Regions*, 2018; Robinson & English, 2017; J.R. Donnelly, personal communication, October 14, 2020). The second award round came after Trump Administration Secretary of Education Betsy DeVos chose to expand the Second Chance Pell experiment to 67 additional IHEs in April 2020 (*Secretary DeVos Expands Second Chance Pell Experiment...*, 2020). Donnelly stated this second-round award notification came in May 2020, in the midst of the COVID-19 pandemic. Accordingly, PVCC has had trouble making use of the Second Chance Pell Funds, as in-person education has been largely unavailable during the pandemic, and experiment requirements prohibit correspondence program (Dortch & James, 2019), in which instructors and inmates communicate via mailed letters and assignments. Presently, Second Chance Pell IHEs in Virginia are trying to determine innovative solutions to this issue, so they can continue providing quality education for incarcerated students both during and beyond current pandemic conditions.

## FEDERAL LEVEL: 2021 AND MOVING FORWARD

Even before the Second Chance Pell experiment was initiated, various stakeholders called for a return to pre-1994 Pell Grant eligibility for incarcerated students. On December 21, 2020 this call was answered: Congress’s COVID-19 stimulus package ended the then 26-year ban on incarcerated students’ Pell Grant eligibility (Weissman, 2020). This legislation is a huge step forward for incarcerated students’ access to higher education programs and ability to complete them. One of Pell Grants’ main advantages is their status as an entitlement, making them invulnerable to budget cuts year-to-year (R. Delaney, personal communication, November 11, 2020). For Donnelly, PVCC, and other community colleges, Pell restoration is paramount to the future of PSE in the Virginia correctional system, as the grants can typically completely cover tuition and other related expenses—like books or necessary technology (J. R. Donnelly, personal communication, February 12, 2021). In the future, however, this could become more complicated. If other institutions with higher tuition—like state universities or private institutions—become involved in educating incarcerated students, the price tag could exceed the maximum annual Pell Grant award per student, currently set at just under \$6,5000 for the 2021-22 aid year (*Federal Pell Grants*, 2021). Thus, though this is a monumental moment for correctional education access, Pell restoration does not solve all current or future funding concerns for incarcerated students, opening the opportunity for states to increase funding available for these students.

Beyond restoring Pell Grant eligibility, the recent legislative changes also instituted other reforms that will hopefully cut down barriers for incarcerated students. The new legislation nullifies a 1998 provision that prevented any students with drug-related convictions—incarcerated or not—from accessing

federal aid (Weissman, 2020). Though this law was narrowed in 2006 to only affect current students, the question on the Free Application for Federal Student Aid (FAFSA), which all must complete to receive federal aid, led hundreds of students each year to lose out on federal aid due to misinterpretation of its applicability (Weissman, 2020; Dr. B. Custer, personal communication, February 10, 2020). Additionally, those serving life sentences are now eligible for Pell Grants, which was prohibited under previous law (J. R. Donnelly, personal communication, February 12, 2021).

USDOE is not responsible for implementing this policy change until July 1, 2023 (Burke, 2021), giving Donnelly and other stakeholders both in Virginia and across the nation two or so years to, in his words, “get it right” (J. R. Donnelly, personal communication, February 12, 2021). Though many within the field would like to see eligibility restored sooner than the legally mandated deadline, Donnelly believes it’s unlikely this change will occur significantly sooner (J. R. Donnelly, personal communication, February 12, 2021). Now, advocates are turning their focus to the educational programs offered within prisons. Dr. Bradley Custer, a Senior Policy Analyst at the Center for American Progress, notes that this expansion of federal money could raise concerns surrounding new programs’ quality and rigor (Dr. B. Custer, personal communication, February 10, 2020). Thankfully, the federal legislation does embrace some “guardrails” that advocates had identified as necessary to ensure quality if Pell was restored federally. Among these, and perhaps most importantly, the new law restricts for-profit institutions from operating programs within prisons (McCann et al., 2021). These institutions have proven to offer lower-quality educations to students, many of whom are often vulnerable to predatory financing practices (McCann et al., 2021). Custer shared this concern, cautioning against allowing those programs seeking to “earn a buck” off of incarcerated students to operate inside prisons (Dr. B. Custer, personal communication, February 10, 2020). Accordingly, the law only allows private and public nonprofit IHEs to petition to operate Pell Grant-financed programs within correctional systems (McCann et al., 2021). Beyond possessing nonprofit status, IHEs must also be approved by the state DOC or Federal Bureau of Prisons before operating inside prisons, facilitating program forethought and planning before launching into educating incarcerated students (McCann et al., 2021).

Donnelly notes that while these quality restrictions seem strong on paper—and could prove promising in practice—individuals and agencies that aren’t expressly familiar with the realities and “on-the-ground” challenges of educating incarcerated students might lack the proper standards and institutional knowledge to adequately evaluate new programs (J. R. Donnelly, personal communication, February 12, 2021). To this end, it’s vital that pre-existing approved providers, advocacy organizations, and currently and formerly incarcerated students have input into decision-making processes between now and July 2023.

#### STATE LEVEL: LIMITED RESOURCES AVAILABLE

At the state level, financial aid for incarcerated students is available, but obstacles to exist. A 2019 report from the Vera Institute for Justice provides a comprehensive overview of state-level financial aid available for incarcerated students seeking PSE (Hobby et al., 2019). In their analysis, the authors name Virginia as a state with no barriers to accessing state-level aid, meaning they found no statutory or regulatory provisions in Virginia law that prevent incarcerated students from applying for state financial aid. Ruth Delaney, one of the study’s co-authors, explained the status quo of Virginia’s state-level financial

aid for incarcerated students seeking PSE (R. Delaney, personal communication, November 11, 2020). Apart from federal funding and limited Perkins CTE grants, the state provides Virginia Commonwealth Award grants to undergraduate students in-need, whether incarcerated or not (State Council of Higher Education for Virginia, 2020). Delaney explained that following a calculation process factoring in each IHE's enrollment and students' level of need, the state grants each IHE a certain amount of Commonwealth Award money to dole out to those eligible. Though there are not any formal restrictions preventing IHEs from giving this money to incarcerated students, Delaney noted that, oftentimes, IHEs find they do not have enough resources to extend this state aid to incarcerated students over non-incarcerated students. Donnelly echoed this sentiment; though formal restrictions are absent, each IHE has discretion over whether or not to grant state aid money they receive to incarcerated students (J. R. Donnelly, personal communication, February 12, 2021). Accordingly, any state aid that Virginia inmates receive is often minimal.

## BARRIERS TO EXPANDING HIGHER EDUCATION IN VIRGINIA PRISONS

Even should broad-scale federal funding exist in the coming months or years for postsecondary correctional education, a number of barriers would still exist to scaling up quality programming in Virginia prisons. Significant barriers are explored below.

### TECHNOLOGY: ACCESS VS. SECURITY

Technology has revolutionized student learning and experience, especially within higher education. Outside prisons, students pursuing higher education increasingly utilize personal computers, internet access, and online classes to accomplish their educational goals (Kimball, 2017). The global education technology industry was worth about \$19 billion in 2019, expected to reach \$350 billion by 2025 (Li & Lalani, 2020). Due to the COVID-19 pandemic, more students are now participating in online education than ever (Miller, 2021).

Prisons and correctional facilities, however, are less able to easily pivot to online education. When considering the role of new innovations in prison education, an inherent tension arises: technology's educational benefit vs. its risk to facility security. Many state Departments of Corrections (DOC) have been hesitant to approve increased technology usage in educational programs (Burke, 2020). DOC information technology (IT) departments must determine the safety of proposed educational technology; often lacking expertise in this issue area, DOC IT staff support for these initiatives can be limited (Tanaka & Cooper, 2020). Consequently, security concerns often take precedence over educational benefit, and technology expansions are only approved if they help accomplish larger DOC goals unrelated to education (Tanaka & Cooper, 2020). As a result, many prison education systems were unprepared for the necessary shift to distance learning motivated by COVID-19.

Though the USDOE issued recommendations in 2015 advising state correctional departments on ways to increase technology use in prison education (Tolbert et al., 2015), each DOC has different rules surrounding educational programming (Tanaka & Cooper, 2020). Donnelly described technological levels in Virginia prisons compared to other states as limited. According to him, the status quo of Virginia's prison

technology appears to be one that largely does not leverage technology for educational instruction purposes:

“Depending on the state, some states are way ahead in...leveraging technology and have been way ahead, and some states aren’t. **Virginia is one that is not.** If there is technology in [Virginia] prisons, it is basic; it is probably for hearings and court appearances...if there’s an interactive video, it is for that reason and that reason only. And then there’s a kiosk model of email...and it allows [inmates], for a cost, to send emails...to people who [they] want to send emails to. Of course, these emails are reviewed, looked at, and there’s all sorts of security...Virginia, and most every sort of Department of Corrections is very much worried about security... [and Virginia’s] Department of Corrections has almost an obsessive view of [it]. **They are so scared of technology that they do not want to do anything, because they fear if [they] open that door just one little bit, everybody’s going to run through it**” (J. R. Donnelly, personal communication, October 14, 2020).

Donnelly’s assessment of VADOC is reflected in its mission statement, in which the agency self describes its purpose as “providing effective incarceration, supervision, and evidence-based re-entry services” for the Commonwealth of Virginia (*VADOC – About Us*, 2020). VADOC’s IT staff often cannot cope with the technological needs of over 40 correctional institutions (Resilience Education Staff, personal communication, September 21, 2020), indicating the lack of a robust network to support technological development. Ultimately, safety is VADOC’s top priority, creating organizational barriers to expanding educational technology, even if appropriate funding and staff were secured.

This reality impacts access to quality education—especially higher education—for Virginia’s incarcerated students. Technology offers potential solutions to problems with prison education. The number of inmates eligible for higher education often exceeds both the staffing capacity and physical space limitations available for prison education programs (Chappell & Shippen, 2013). Indeed, as previously noted, VADOC recognizes waitlists as a common reality for their CTE courses, which—along with a shortage of qualified staff members—impacts students’ ability to achieve completion (Research-Evaluation Unit, 2020). With technology, many of these challenges can be ameliorated. Prisons, however, have a uniquely challenging environment for educational technology, especially given the inherent tension between expanding inmates’ access to technology and facilities’ security. Nationally, research has shown that many states utilize computers to facilitate inmate instruction; in a survey of 46 state correctional directors, 41 reported the existence of a computer lab in at least one of their state’s facilities, 39 reported use of desktop computers among inmates, and 17 reported use of laptops (Davis et al., 2014). Despite this broad access to devices, however, internet access is limited. Over 70% of survey respondents reported that only instructors have access to classroom internet technology, and about 50% of the U.S. prison population does not have access to internet for educational purposes (Davis et al., 2014). Thus, incarcerated students’ capacity to conduct research and correspond with instructors virtually is either nonexistent or extremely limited.

Preliminary research has indicated that technology's presence in prison classrooms can have positive consequences for student learning. A study published in 2013 from RAND Corporation examined the role that computer-assisted learning, or technology in the classroom, had on correctional education's efficacy (Davis et al., 2013). They found that utilizing computers in correctional education programs had an effect of about 0.36 months of instruction for reading and about 3 months for mathematics; in plain terms, in the same amount of instruction time, inmates using computers picked up about 1-2 weeks more material in reading and about 3 months more material in math. Despite these preliminarily positive estimates of technology's impact, a 2014 report from RAND Corporation recommends further research into technology's impact to confirm and further refine these findings (Davis et al., 2014). Thus, leveraging technology inside Virginia prisons may not only improve inmate access to PSE but also improve that education's quality.

## EVIDENCE FROM THE LITERATURE: BENEFITS OF PSE IN PRISONS

As previously noted, researchers have not always agreed about correctional education's effectiveness in producing positive outcomes like better economic prospects upon release and, eventually, lower recidivism rates. Preceding the 1994 elimination of inmate Pell Grant eligibility was Lifton, Martinson, and Wilk's 1975 survey of rehabilitative programs in prisons from 1945-1967 (Ubah, 2004). Their survey examined prison rehabilitative programs' effectiveness and analyzed many studies demonstrating programs' ineffectiveness, ultimately concluding that "nothing worked" to reduce recidivism—despite citing positive outcomes in 48% of the programs they evaluated (Ubah, 2004). This survey became much of backbone of the movement to abolish federal correctional education assistance. Many scholars disagreed with this assessment—citing charges of bias and omitted information, among others—and future research would be critical for truly appreciating and evaluating inmates' access to education, particularly higher education. Indeed, a report from the National Institute of Justice indicates that this "nothing works" conclusion catalyzed a movement within academia to determine "what works," which has led to modern evidence that certain correctional interventions—like educational programming—are effective in reducing recidivism (Duwe, 2017).

In 2010, the federal government—specifically, the Department of Justice via the Bureau of Justice Assistance and the Department of Education via the Office of Vocational and Adult Education—awarded RAND Corporation a grant to "comprehensively examine the current state of correctional education" and determine which programs were effective (Davis et al., 2013). Their results, published in 2013, demonstrate encouraging evidence for the value of correctional education. Researchers conducted a meta-analysis of studies spanning from 1980 to 2011 on the relationship between correctional education participation and inmate outcomes. Overall, they found that correctional education programs decreased an inmate's odds of recidivating by 43%, which translates into a 13 percentage-point reduction in an inmate's recidivism risk. Their findings also demonstrate that correctional education increased an inmate's odds of obtaining employment by 13%, a figure that rose to 28% for those who participated in vocational training programs—similar to the technical education certificate programs offered by institutions like SVCC. From a cost perspective, their research concluded that correctional education is cost effective if it can reduce the three-year incarceration rate by 1.69 to 2.6 percentage points to break even. Given their estimate that correctional

education results in a 13 percentage-point reduction in reincarceration risk upon three years of release, their analysis points to a high likelihood that correctional education programs would be able to “break even” from a cost perspective.

This study represents some of the most rigorous, widespread national research on correctional education’s effectiveness that has been done to date. For this analysis, however, there are two important limitations. First, this study reviewed national studies and estimated national effects. While their results are promising, it does not specifically indicate evidence from the Commonwealth of Virginia. Secondly, this study examines the impact of all educational programming in prisons—from adult basic education and GED programs to vocational programs and PSE. Thus, this study provides robust evidence in support of correctional education *generally*, but it does not disentangle the benefits of PSE specifically. Nevertheless, it represents one of the most reliable indicators that correctional education is worthwhile in accomplishing its desired outcomes.

A study from the Vera Institute of Justice and the Georgetown Center on Poverty and Inequality published in 2019 remedies some of the RAND study’s limitations (Oakford et al., 2019). The study researches the impact of restoring federal Pell Grant eligibility to all inmates, providing state-by-state estimates in addition to national effects. Thus, this study isolates the impact of PSE specifically, while also understanding Virginia-specific effects. They find that about 35% of Virginia’s incarcerated population were potentially Pell-eligible in 2016, or about 13,400 individuals. Excluding those who were eligible to be released within one year—and thus likely unable to complete any meaningful PSE before release—this number drops to about 9,300. Another benefit of this study’s analysis is that it considers inmate take-up rate of offered services; even if PSE is widely available within a state’s prison system, it’s unlikely that 100% of all eligible inmates will participate. Overall, they find that PSE increases both employment rates and earnings for inmates who participate. Their Virginia estimates indicate that even if 50% of those eligible to receive higher education participate in PSE while incarcerated, employment rates would increase by about five percentage points for both men and women upon release, translating into about \$680,000 combined annual earnings during their first year of release. Combining these benefits with the assertion that PSE in prison is likely to reduce recidivism, they estimate that expanding Pell Grant access to all eligible Virginia inmates at a 50% take-up rate could provide the state about \$3.6 million in annual incarceration cost savings. Putting this figure in context, separate research has found that every dollar invested in correctional educational programming yielded a \$4-\$5 return from savings produced by reduced reincarceration costs (Robinson & English, 2017). Overall, Vera estimates that participating in college-in-prison programs reduces an individual’s likelihood of returning to prison by 48% (Martinez-Hill, 2021).

Though increase in employment may seem small, the authors note that putting employment growth in context is helpful to understand this figure (Oakford et al., 2019). During the economic expansion following the Great Recession, employment among prime-age men and women grew by about five percentage points, meaning that expanding PSE in Virginia prisons could grow released inmates’ employment prospects by margin similar to that of the most recent broad-scale economic expansion. Thus, this impact is significant. This study’s postsecondary- and state-specific estimates are helpful to refine the RAND Corporation’s study’s evidence, but this analysis is not without its limitations. Researchers use existing measurements of correctional education’s impact on outcomes like recidivism, meaning they do

not estimate state-specific recidivism reduction estimates due to PSE in prisons. Nevertheless, their research provides a recent, state-level understanding of the ways that PSE *specifically* can benefit inmates and prison system outcomes, indicating the study's value for this analysis.

## CRITERIA

I will evaluate each policy alternative across the following criteria: cost-effectiveness, political feasibility, administrative feasibility, and equity. These criteria were selected with the following goals in mind: increasing the number of individuals who complete PSE programs—including 2-year degrees, 4-year degrees, and transferrable credit-granting certificate programs—while incarcerated; ensuring incarcerated students' access to quality PSE programs; and improving Virginia's existing prison PSE baseline, especially leading up to and following federal Pell Grant expansion in July 2023. An explanation and operationalization of each criterion is below.

### COST-EFFECTIVENESS (40%)

Cost-effectiveness measures the ratio between a policy's total costs and its projected outcome.

$$\text{Cost Effectiveness} = \frac{\text{Present Value of Total Cost}_{2020-2029}}{\text{Total Number of Incarcerated PSE Graduates}_{2020-2029}}$$

In this case, this criterion examines each alternative's total costs over its projected increase in the number of individuals who complete a PSE program while incarcerated, relative to the status quo. Since this criterion utilizes the ratio between costs and projected outcome (a numerical value), a low cost-effectiveness ratio indicates a more desirable policy. The timeframe for cost-effectiveness analysis is 10 years—in this case, 2020-2029. To obtain the present value of future costs, all costs will be discounted at a rate of 3%, drawn from the Office of Management and Budget's guidelines (*Circular A-4*, 2003). Cost-effectiveness is weighted 40% in this analysis.

### POLITICAL FEASIBILITY (20%)

Political feasibility measures the likelihood that a given alternative could be implemented within the current political climate. As this analysis centers on improving Virginia's PSE offering in prisons, this criterion concerns the political climate within the Virginia state government, currently controlled by the Democratic Party. Important stakeholders for proposed alternatives include VADOC, Virginia state legislators, Governor Ralph Northam (D), incarcerated individuals, criminal justice advocacy organizations, and VDOE. Some relevant considerations for determining an alternative's political feasibility score are as follows:

- Does the policy require government involvement? To what extent?
- Is the policy possible under existing law/government agency mandates and regulations?
- Does the policy require new legislation? If so, how many regulations/individual bills?
- Is there relevant public opinion data available on this policy (or similar policies), and is it majority in favor of enacting this policy?

- Does bipartisan agreement exist on this policy and, if so, to what extent? (measured via tabulating the number of Virginia legislators who previously voted in favor of a similar or related policy, making note of their political affiliation)

As this is a qualitative criterion, each alternative will receive a score of 1 (high), 2 (medium), or 3 (low), with 1 being the most desirable and 3 being the least desirable. Political feasibility is weighted 20% in this analysis.

## ADMINISTRATIVE FEASIBILITY (15%)

Administrative feasibility measures the ability of a particular policy to be implemented. In simpler terms, this criterion evaluates where a given policy falls between two extremes: doing nothing at all (very high administrative feasibility) and doing something virtually impossible (very low administrative feasibility). As this analysis centers on improving Virginia's PSE offering in prisons, this criterion concerns the administrative capacity of relevant Virginia stakeholders, including VADOC, IHEs in Virginia, the Virginia state government, and VDOE. Some relevant considerations for determining an alternative's administrative feasibility score are as follows:

- How many distinct parties are involved in implementing this policy?
- Is more than one government agency involved in implementing this policy? (negatively penalized if so; bureaucratic inefficiency assumption)
- Does this policy require finding and hiring additional professionals? If so, how many?
- Does this policy build upon or go beyond existing systems? To what extent?
- How many months will this policy require for implementation? (less months more desirable)
- How many phases will this policy require? (ex. Hiring, research and development, data collection, materials procurement, roll-out, etc.; less phases more desirable)

As this is a qualitative criterion, each alternative will receive a score of 1 (high), 2 (medium), or 3 (low), with 1 being the most desirable and 3 being the least desirable. Administrative feasibility is weighted 15% in this analysis.

## EQUITY (25%)

An important consideration for many in the correctional education field is ensuring that incarcerated students have the same educational opportunities as non-incarcerated students (J. R. Donnelly, personal communication, October 14, 2020). Accordingly, equity in this analysis measures the extent to which a proposed alternative closes the educational quality gap between these two groups of students. Some relevant considerations for determining an alternative's equity score are as follows:

- Does this policy directly impact the quality of education that incarcerated students receive? If so, to what extent?
- Does this policy lessen the gap in educational quality between incarcerated and non-incarcerated students? If so, to what extent?

As this is a qualitative criterion, each alternative will receive a score of 1 (high), 2 (medium), or 3 (low), with 1 being the most desirable and 3 being the least desirable. Equity is weighted 25% in this analysis.

## POLICY ALTERNATIVES

The following alternatives offer steps forward for stakeholders looking to increase Virginia's capacity to educate and graduate incarcerated students participating in PSE programs.

### ALTERNATIVE #1: STATUS QUO

An option facing any policymaker on any issue is always maintaining the status quo. In this analysis, that involves "freezing" existing policy and assuming currently available eligibility, enrollment, and completion rates will stay the same, adjusting for projected population increases. A relatively accurate picture of Virginia's recent and current PSE enrollment comes from the most recent State Responsible Offender Demographic Profile report, published in 2019 (Statistical Analysis & Forecast Unit, 2020). The 2020 report is not yet available. As of 2019, 34,719 individuals were incarcerated within Virginia's correctional system. Of these individuals, 6,606 were enrolled in PSE programs. This accounts for college, vocational, and certificate PSE programs, in addition to the first-round Second Chance Pell enrollment boost (+163 students), which occurred from 2016-2019 (Delaney & Montagnet, 2020).

To capture the 2020 incarcerated student enrollment in PSE, I will use population estimates from the most recent Offender Population Forecast Report in place of the actual reported average daily population numbers, which have been impacted by COVID-19 release policies and may present an inaccurate baseline. Projections forecasted that the state-responsible offender population would be 36,991 in 2020 (*Report on the Offender Population Forecasts (FY2020 to FY2025)*, 2019). Applying the 2019 PSE enrollment rate ( $\frac{6,606}{34,719} * 100 = 19\%$ ) to the forecasted 2020 offender population count, I assume that 7,028 incarcerated students were enrolled in PSE in 2020. As previously noted, two additional IHEs were selected for second round of the Second Chance Pell experiment in 2020. I will assume that the second-round enrollment boost will be the same as that of the first round (+163 students), and I will split this boost across the years 2020-2022. Adding this boost, the number of incarcerated students enrolled in PSE in 2020 grows to 7,082.

To capture the completion rate of those 7,082 incarcerated students in 2020, I use data from the Vera Institute of Justice's analysis of the 2016 Second Chance Pell experiment. Their report indicates that of the incarcerated students who enrolled in Second Chance Pell from 2016-2019, about 26.2% of them completed their PSE program of choice (Delaney & Montagnet, 2020). I will assume this completion rate applies to all incarcerated students participating in PSE in 2020 as well; thus, the number of incarcerated students who graduated from a PSE program in 2020 is estimated as 1,855 individuals.

I also take into consideration the recent federal Pell Grant expansion into the status quo, though this policy will not be factored into the status quo projection until July 2023, its implementation deadline. The Vera Institute for Justice published a report in 2019 estimating the state-by-state impact of federally restoring Pell Grants (Oakford et al., 2019). Their analysis indicates that 35.4% of the Virginia state prison population was potentially Pell-eligible in 2016. I will use this share as a proxy estimate for the share of individuals who will be eligible to receive any form of PSE within the Virginia correctional system once Pell Grants are federally expanded. Based on available offender population forecasts, 37,720 individuals will be considered state-responsible offenders in 2023 (*Report on the Offender Population Forecasts (FY2020 to*

FY2025), 2019). Applying Vera's Pell-eligible estimate, this assumes 13,353 individuals will be Pell-eligible after July 1, 2023. To avoid double-counting existing and newly Pell-eligible students, I subtract out current enrollment levels from the newly Pell-eligible pool. Additionally, though this will be a dramatic increase in eligibility, freezing current policies does not assume a dramatic increase in offerings or program capacity. Thus, I will assume that, under the status quo, Virginia will only be able to provide services to 25% of the newly Pell-eligible incarcerated students from 2023 moving forward. This projection is reflected in year-by-year detail in the cost-effectiveness analysis that follows in the findings section.

## ALTERNATIVE #2: INFORMATION TECHNOLOGY PERSONNEL INVESTMENT

Though USDOE issued recommendations to state DOCs in 2015 to expand and invest in correctional facilities' technology, Virginia still lags behind other states in this area (Tanaka & Cooper, 2020; J. R. Donnelly, personal communication, October 14, 2020; Tolbert et al., 2015). Nationally, research has shown that many states utilize computers to facilitate inmate instruction; in a survey of 46 state correctional directors, 41 reported the existence of a computer lab in at least one of their state's facilities, 39 reported use of desktop computers among inmates, and 17 reported use of laptops (Davis et al., 2014). Despite this broad access to devices, however, internet access is limited. Over 70% of survey respondents reported that only instructors have access to classroom internet technology, and about 50% of the U.S. prison population does not have access to internet for educational purposes (Davis et al., 2014). When Pell Grants are ubiquitously available to all eligible inmates in or before July 2023, Virginia needs to have an adequate technological offering to support increased demand as new IHEs enter this field. This is especially important considering demand for postsecondary education has already exceeded supply even before Pell was federally restored (Research-Evaluation Unit, 2020).

Currently, VADOC has issued an RFP for a company to "install and maintain an IT network that would enable the DOC offenders to...[utilize] kiosks and tablets for services such as learning, training, scheduling, commissary ordering, banking, secured messaging, music, law library, and E-books" (*2020-2022 IT Strategic Plan*, 2020). The RFP seeks a private sector partner to receive a seven-year contract, totaling \$10.25 million, to provide these services for incarcerated individuals. VADOC's current IT Strategic Plan indicates that this RFP would require establishing an offender-specific secure network in 36 correctional facilities, separating inmate online activity from that of facility officials and staff (*2020-2022 IT Strategic Plan*, 2020).

This RFP will hopefully produce a much-needed investment in VADOC's available technology for incarcerated individuals, especially as relates to online and technology access for correctional education. However, current IT staff within the Virginia correctional system is insufficient to meet current IT needs. VADOC's IT Strategic Plan indicates the current Informational Technology Unit (ITU) staff is less than 45-full time individuals to support over 13,000 users and a multitude of services (*2020-2022 IT Strategic Plan*, 2020). The burden on the ITU will undoubtedly increase following this proposed contract's award and implementation. Accordingly, additional hiring is necessary to support future advancements and investments.

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## WHO

VADOC will oversee and implement a hiring process for additional, correctional-education focused ITU staff. Job opportunities are primarily facilitated by VADOC's human resources department. This hiring process would remain internal and not require outside agency involvement.

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## WHAT

In preparation for VADOC granting current IT/tablet RFP to a private sector partner, the department will hire additional ITU staff. This policy proposes the hiring of ITU staff specifically focused on supporting current and future online correctional education endeavors, especially as more IHEs enter Virginia's correctional PSE landscape following the July 2023 federal Pell Grant expansion.

Currently, four ITU staff comprise VADOC's Electronic Security team (*2020-2022 IT Strategic Plan*, 2020). Considering VADOC security concerns have been a historic barrier to expanding access to technology and online services for incarcerated students (J. R. Donnelly, personal communication, October 14, 2020), adding staff focused on correctional to the Electronic Security team is critical. VADOC's IT Strategic Report indicates that for each of its three Electronic Security regions, two staff would be an ideal minimum (*2020-2022 IT Strategic Plan*, 2020). This policy proposes hiring an additional correctional education-focused Electronic Security staff member for each of the three regions. I assume that these new staff will require a computer and a desk but not additional office space.

The report also indicates that two additional staff dedicated to Video Teleconference (VTC) technical support are necessary to serve its existing VTC needs (*2020-2022 IT Strategic Plan*, 2020) — primarily comprised of court services and some contact between incarcerated persons and friends or family (J. R. Donnelly, personal communication, October 14, 2020). As the IT/tablet RFP will hopefully allow incarcerated students to have at least some VTC contact for their educational pursuits in the future, education-specific VTC staff is needed. This policy proposes hiring an additional two correctional education-focused VTC support staff for the Virginia correctional system. I assume that these new staff will require a computer and a desk but not additional office space.

Finally, VADOC notes that oftentimes, IT professionals leave the department for other, more lucrative opportunities. The IT Strategic Plan notes,

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*"The VADOC investment in modernization has positioned it for further innovation and has provided IT staff with career enrichment by allowing them to move to more rewarding jobs supporting modern web-based applications. **IT staffing levels have not kept up with the increases in functionality and availability.** As such, the agency cannot provide continuous support for systems that require continuous availability"* (2020).

As a government entity, VADOC is bound to be at least somewhat less able to match private sector salary ranges for IT professionals. However, this policy proposes a 5% salary increase for all of the full-time existing ITU staff and proposed additional hires. Since the IT Strategic Plan indicates that VADOC has less than 45 full-time ITU staff but does not specify the exact number, this analysis will assume the unit

currently has 40 full-time ITU staff. Adding the proposed additional hires under this policy, the salary increase will apply to 45 professionals.

The goal of this policy is to ensure that all facilities are capable of supporting necessary technology for the future of PSE in the Virginia correctional system. This policy does *not* call on VADOC to provide actual devices for incarcerated students, lessening its financial burden. Indeed, John Donnelly from Piedmont Virginia Community College (PVCC) has indicated that moving forward, his institution plans to finance the cost of students' technology through Pell Grants by introducing a fee within their cost of services that covers a laptop for each student (J. R. Donnelly, personal communication, February 12, 2021). Thus, similar IHEs will also likely be able to cover devices for Pell students, meaning the state's role is to ensure adequate support for widespread, high-quality technology and online service access among Virginia's correctional population.

## WHEN

The salary increases should take effect at the beginning of FY2021, which begins on July 1, 2021. The hiring search and interview process should take place during FY2021, with all proposed additional staff hired and onboarded by the beginning of FY2022 on July 1, 2022. This will ensure all personnel changes have adequate time to be completed prior to federal Pell Grant expansion on July 1, 2023 and that new staff can develop position-specific plans and goals before the likely increase in incarcerated students seeking PSE under Pell expansion.

## WHERE

VADOC's facilities are split into three regions: Western, Central, and Eastern (*VADOC – Facilities & Offices*, 2021). The three new Electronic Safety staff members outlined in this policy proposal will be located at Augusta Correctional Center, Buckingham Correctional Center, and Greensville Correctional Center—the facilities that serve the largest number of incarcerated individuals in each respective region (Research Unit, Statistical Analysis & Forecast Unit, 2020). The two new VTC staff members will be located at the Eastern and Western regional offices.

## ALTERNATIVE #3: INTEGRATED ONLINE PLATFORM WORKGROUP

One of the major barriers to incarcerated students' ability to actually finish and graduate from their PSE program of choice is being transferred to another facility that does not offer the course(s) they need or falling behind in their coursework (Research-Evaluation Unit, 2020). Until December 2020, Second Chance Pell institutions provided the majority of PSE opportunities for Virginia's incarcerated students. Following Pell Grants' federal restoration, however, programs operating within prisons are likely to increase, as IHEs beyond those selected for the Second Chance Pell experiment can now leverage Pell funding. With this increase in offerings over the coming years comes a chance to increase recordkeeping and coordination among different IHEs operating in prisons.

Virginia has already established a precedent for similarly designed platforms. In the 2020-2022 budget, the Virginia state government approved the extension of "an interagency workgroup to oversee the development of a statewide integrated electronic health record (EHR) system," a group originally

created in 2018 (Virginia Acts of Assembly, 2020). This group involves several government agencies—including VADOC, Virginia Department of Planning and Budget (DPB), and Virginia Department of Health (VDH), and Virginia Department of Behavioral Health and Developmental Services (DBHDS), among others—along with the staffs of the House and Senate Appropriations and Senate Finance Committees. This group will be involved during all phases of the project, including planning, development, and implementation. This structure can be applied to increasing online data collection, sharing, and interoperability between different stakeholders within the field of correctional education.

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## WHO

Through reallocating existing state general fund appropriations and similar to the existing EHR workgroup, Virginia can create a new workgroup tasked with developing an integrated online platform to track the progress and involvement of all incarcerated students across all participating IHEs. Relevant agencies to be included in this new workgroup would be VADOC and VDOE, with support from General Assembly finance committees and DPB. Relevant members for the workgroup include A. David Robinson (VADOC, Chief of Corrections Operations), Zacc Allen (VADOC, Chief Information Officer), Tim Tillman (VDOE, Chief Information Security Officer), and Banci Tewolde (DPB, Associate Director, Public Safety) (*Virginia DPB - Organization and Divisions*, 2021).

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## WHAT

Much of the accrued knowledge developed to create such a system for Virginia health facilities can be applied to tracking incarcerated students. Similar to the mission of the EHR workgroup, this new workgroup would be tasked with developing an implementation timeline, cost estimates, and assessing other implementation challenges for a correctional education platform. Ultimately, this workgroup would create and oversee the implementation of the following: each IHE operating in prisons, whether existing or new to the field, would be required to upload their incarcerated students' basic information, release date, program of choice, and progress. This way, if individuals are transferred to another facility for whatever reason, an IHE in their area can receive detailed information on what this student has or has not completed towards their degree or certificate. The platform could also alert PSE administrators to students who are falling behind or coming up on release. Program administrators can also make note of students' particular strengths or challenges, providing more information for a different program administrator should the incarcerated student be transferred. This platform will serve as a mechanism to better catch incarcerated students who are “falling through the cracks,” ultimately pushing them more students across the finish line.

Beyond tracking incarcerated students, this platform could also be a resource-sharing method for program operators. John Donnelly has emphasized that there are unique challenges and realities to operating in prisons (J. R. Donnelly, personal communication, February 12, 2021), and institutions that enter this field over the coming months and years will lack knowledge of these circumstances, necessitating an integrated mechanism for sharing relevant best practices. Accordingly, this integrated platform can be a way for existing providers to share best practices or common challenges with new providers.

Cost estimates would ultimately be determined by the members of the workgroup, but similar EHR workgroup efforts yield an indication of the potential cost of digitizing incarcerated student educational data and establishing interoperability between VADOC, VDOE, and relevant IHE partners. The EHR workgroup provides the following four-year aggregate cost estimates to establish an integrated EHR system in Virginia: \$4,500,000 (VDH), \$61,964,786 (DBHDS), and \$5,201,940 (VADOC) (*Electronic Health Records Interagency Workgroup Interim Report*, 2018). Thus, the total program cost over four years of development and implementation is \$71,666,726—or \$17,916,682 across the three agencies per year. In the case of this policy's new correctional education-focused integrated online platform, VADOC and VDOE would each split 50% of the development and implementation costs over a four-year period, later dividing the platform maintenance costs between each agency and participating IHEs. This would take the form of a platform usage or licensing fee that IHEs would be required to pay to access the online system. Requirements for IHEs to use the system would be incorporated to the legislative rule changes surrounding this policy.

Cost-effectiveness analysis in the findings section will account for the differences in scale between an EHR system and the prosed correctional education online platform, also calculating the opportunity cost of workgroup members. It's assumed that workgroup members will utilize existing office space for meetings, meaning opportunity cost is the only workgroup cost factored into this analysis. Regarding scale, whereas the Virginia health system contained 377,100 employees as of 2018, VADOC employs about 12,000 (*Total Health Care Employment*, 2019; *VADOC – About Us*, 2021). Additionally, the Virginia health system theoretically must be able to digitize the health records of each of the state's 8.6 million residents. In contrast, the proposed online platform would serve the nearly 67,000 individuals that comprise the state's annual incarcerated population, adding about 11,980 new records per year (the average increase in new state responsible inmates calculated from FY-2014-FY2018) (*Research Unit, Statistical Analysis & Forecast Unit*, 2020). Administrators in all of the state's 144 IHEs would also utilize the platform—assuming all available IHEs get involved in correctional education in the coming years (*College Navigator – Virginia*, 2021). Thus, the proposed platform's scale is much less than that of the EHR system.

Beyond implementation and development, the costs of which will be split over 2021-2024, platform upkeep and operation would fall under existing VADOC and VDOE information technology responsibilities from 2025-2029. This would present platform maintenance and operation as the policy's only costs beyond implementation, which will be covered in more detail in the cost-effectiveness analysis.

Though this policy does not directly involve technological investment/advancement, it could be extremely beneficial in the future if a robust, synchronous or a synchronous online offering system becomes available. If an individual is transferred to a facility that does not offer their program of choice, this platform would note that and also note where they have moved. This would allow staff from their original IHE to begin coordinating a virtual learning experience with the staff from the student's new facility. Additionally, tracking graduation and participation through this platform would create a centralized data source for government and non-government stakeholders alike, providing better and easier to obtain figures relevant to overall evaluations.

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## WHEN

This workgroup would be authorized and appropriated during the current biennial budgetary cycle (2020-2022) or the next budgetary cycle (2022-2024). If occurring during a 2021 special session, this policy would be introduced as an amendment to the 2020 budget bill. If occurring during the 2022 session, this policy would be introduced as an adoption in the next biennial budget.

This platform development should ideally begin between now and July 2023, when Pell restoration will take effect. During this period, it's expected that many new IHEs will seek to introduce programs inside the Virginia correctional system. Establishing this platform in tandem with new IHEs entering the field will hopefully ensure coordination and cooperation during the impending scale-up phase. Estimated platform development and implementation time is a total of four years, based on the HER workgroup's estimates.

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## WHERE

Since the workgroup would enlist existing staff to develop the platform's implementation and cost plan, it does not require hiring any additional staff or constructing new office space. Additionally, since the eventual platform would provide virtual connection, minimal geographic specificity is needed. Training among relevant correctional facility individuals and IHE partners could be conducted through videos to eliminate the need for in-person meetings at the different facilities/work centers, but these costs are not factored into the program's cost-effectiveness analysis, as workgroup members will determine if such trainings are necessary.

### ALTERNATIVE #4: STUDENT SUPPORT PROGRAM GRANT

Numerous re-entry programs are available to incarcerated individuals in Virginia to help ease their transition post-release, including Virginia CARES (Community Action Re-Entry System), which offers pre-release programs in 15 state prisons and post-release programs in 43 Virginia localities (*History – VA CARES*, 2016). These programs, however, are not specific to education and really only focus on those individuals nearing the end of their sentences. Thus, unless they receive outside support from family members or friends, incarcerated students often lack support networks for their educational endeavors both while incarcerated and upon release. Additionally, research indicates that incarcerated students are more likely to have a learning disability than non-incarcerated students (Chappell & Shippen, 2013). These realities can pose challenges for program completion, especially if they are released before graduation. Developing support for incarcerated students while they are incarcerated that continues post-release would help combat these barriers and push more students across the finish line. Other states have experimented with this concept, including California, which has over 75 support programs for its incarcerated and formerly incarcerated students at different IHEs across the state (Murillo, 2021).

One unique program is College Behind Bars (CBB), run by Massachusetts non-profit, Partakers, Inc (*College Behind Bars*, 2012). Their model matches students with a volunteer mentor within the outside community, providing incarcerated students with a support system during their PSE involvement. Even better, these relationships often last after individuals are released, and the program touts an impressive

recidivism rate of 2%, compared to the Massachusetts statewide recidivism rate of 32%. Their volunteer base of about 400 individuals are able to serve men and women in five prisons throughout the state.

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## WHO

Under this policy, the state of Virginia will create an Incarcerated Student Support Grant to establish programs like CBB in the state of Virginia. Eligible applicants include any organization from the private sector interested in supporting incarcerated students pursuing PSE.

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## WHAT

VADOC states on its website that the agency “welcomes opportunities to collaborate and partner with organizations on projects which align with the agency’s mission and goals. We encourage established organizations and agencies to take advantage of grant opportunities as they become available and to contact us well in advance of anticipated opportunities” (*VADOC – Grants & Collaborations*, 2021). Accordingly, this policy requires VADOC to request funding from the state for a new Incarcerated Student Support Grant. Existing or new nonprofit organizations can apply to operate as liaison of sorts between an IHE and the incarcerated students they serve. These programs can assist with logistical challenges—like financial aid applications, acquiring necessary materials, or completing degree requirements—in addition to providing moral support and building relationships between those on the “inside” and those on the “outside.” VADOC would be responsible for including program requirements in the grant application, such as required weekly or monthly contacts between a mentor and a student, program duration, progress reporting, and communication with state officials.

The model that Partakers, Inc. uses currently requires a \$100,000 annual budget to serve incarcerated students in five facilities (*College Behind Bars*, 2012). This policy assumes that correctional education support services will be needed in all of VADOC’s approximately 40 correctional facilities. Thus, assuming each program can serve five facilities with \$100,000, this policy proposes the creation of eight \$100,000 grants (three-year contracts) for a total annual state investment of \$800,000. This policy assumes all eight grants will be applied for by and awarded to relevant third-party support program providers. This policy also assumes that each program awarded a grant will require a team of 400 volunteers—the size of the current Partakers, Inc. mentoring team—to serve incarcerated students in five facilities.

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## WHEN

State funding for the Incarcerated Student Support Grant should be requested during a special session of the current biennial budgetary cycle (2020-2022). This additional grant money would be introduced as an amendment to the 2020 budget bill. Upon approval of this funding request (assuming it is granted), VADOC must publicize the new grant and accept applications for the rest of FY2021. The pilot year of this grant program will begin on July 1, 2022 at the beginning of FY2022.

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## WHERE

For the program’s initial rollout, VADOC may have to award grants to programs in similar locations depending on application volume. However, as the program matures, VADOC should prioritize

funding programs in each of its three regions—Western, Central, and Eastern. The ultimate geographic goal of this policy is to have student support programs operating in every facility where incarcerated students are pursuing PSE.

## FINDINGS

The following section includes an evaluation of each policy alternative across the following criteria: cost-effectiveness, political feasibility, administrative feasibility, and equity. An outcomes matrix summarizing all alternatives' relative scores follows. I use this matrix to determine my ultimate recommended alternative, included at the end of this section.

### ALTERNATIVE #1: STATUS QUO

#### COST-EFFECTIVENESS

As indicated in the alternatives section, this analysis assumes that the current (2020) number of incarcerated graduates is 1,855 individuals. VADOC's available offender population projections (through FY2025) indicate that the department expects the incarcerated population to stay within +/-100 of 37,600 beginning in FY2022 and moving forward (*Report on the Offender Population Forecasts (FY2020 to FY2025)*, 2019). Accordingly, this analysis holds the incarcerated population number constant at 37,600 for 2022 and all years following. See **Table 1** in Appendix B for enrollment and completion projections for 2020-2030. Under the status quo, the total projected number of incarcerated PSE graduates from 2020-2030 is 23,817.

For FY2019, the enrolled Budget Bill allocated \$30,012,821 to VADOC for instructional services (*Item 386 (DOC) Instruction. HB1700 - Chapter 854*, 2019). Unfortunately, the budget does not distinguish between adult and juvenile CTE nor secondary and postsecondary adult instruction. Accordingly, to determine the share of this allocation devoted to PSE-seeking students, I will use FY2019 enrollment to calculate the share of students participating in PSE, then applying this share to the overall spending amount to determine the share of spending devoted to PSE. In FY2019, 14,945 incarcerated individuals were enrolled in an education program in Virginia (Statistical Analysis & Forecast Unit, 2020). Of these 14,945, 6,606 (44.2%) were enrolled in PSE programs. Thus, assuming equal expenditures per pupil, the share of the overall VADOC instructional allocation devoted to PSE in 2019 was \$13,265,667 (\$30,012,821 \* 0.442). Applying these same calculations to the allocation (\$30,248,045) for FY2020 (for which enrollment data is unavailable) (*Item 396 (DOC) Instruction. HB30 - Chapter 1289*, 2020), the share of share of the overall VADOC instructional allocation devoted to PSE in 2020 is estimated as \$13,369,636. Under the status quo, this analysis assumes this spending level will remain constant for future projections. All future costs' present value will be determined using the United States Office of Management and Budget's recommended 3% discount rate. See **Table 2** in Appendix B for PSE spending projections for 2020-2030. Under the status quo, the total present value of projected PSE spending by VADOC from 2020-2029 is \$92,121,068. Using the cost-effectiveness formula, the cost-effectiveness calculation for the status quo from 2020-2029 is as follows:

$$\text{Cost Effectiveness} = \frac{\$92,121,068}{23,817 \text{ graduates}}$$

Under the status quo, the cost-effectiveness ratio is about \$3,868 per incarcerated PSE graduate.

## POLITICAL FEASIBILITY

Considering this alternative does not require changing current policies, funding, or coordination, it does not present a strong likelihood for political resistance. However, national trends are certainly in favor of reforming correctional education—and PSE in particular—especially considering the bipartisan-supported federal restoration of all incarcerated students' Pell Grant eligibility. While maintaining the status quo is typically thought highly politically feasible on account of requiring no additional government or stakeholder action, current and future stakeholders' push for additional reforms and improvements to Virginia's correctional education system could create pressure for action, especially within the next two years. Accordingly, this alternative receives a score of 2 (medium) in political feasibility.

## ADMINISTRATIVE FEASIBILITY

Maintaining the status quo is perhaps the most administratively feasible option that exists for policymakers in any issue area. Indeed, this alternative does not require any additional coordination between agencies, any increased third-party involvement, nor any alterations or additions to existing systems. Accordingly, this alternative receives a score of 1 (high) in administrative feasibility.

## EQUITY

Currently, a gap certainly exists between the quality and availability of education for non-incarcerated students and incarcerated students. This alternative does not attempt to reduce this gap in any way. Accordingly, this alternative receives a score of 3 (low) in equity.

## ALTERNATIVE #2: INFORMATION TECHNOLOGY PERSONNEL INVESTMENT

### COST-EFFECTIVENESS

The New Mexico Corrections Department (NMCD) demonstrates advanced technology utilization and contains greater IT staff support than Virginia's status quo. For example, New Mexico has a robust IT support department and also allows incarcerated students to access a separate "lockdown" browser for their educational pursuits, which is one of the goals of Virginia's current IT RFP. Considering this policy is aimed at improving VADOC's ability to meaningfully integrate improvements resulting from the to-be-granted IT/tablet contract, this policy assumes greater technological capacity on the part of VADOC, assuming similarity between VADOC and NMCD. Accordingly, this policy's projected outcomes will be based on New Mexico's recent performance indicators, last reported after the first quarter of 2020 (*Performance Report Card, New Mexico Corrections Department, First Quarter, Fiscal Year 2020*, 2020). NMCD reports a 67% completion rate for its adult basic education programs as of 2020. As this includes secondary and postsecondary education, this completion rate will be relaxed to 33.5% (50% reduction) for this policy's projected outcomes. NMCD also reports that 76% of its incarcerated population were enrolled in a correctional education program as of 2020. This is about 33 percentage points higher than the share of Virginia's incarcerated population participating in any correctional education program (43%) (Statistical Analysis & Forecast Unit, 2020). Accordingly, this policy also assumes that Virginia will be capable of

enrolling 50% of the 2023 Pell Grant eligibility bump, compared to the status quo's 25%. See **Table 3** in Appendix B for enrollment and completion projections for 2020-2030. Under this policy, the total projected number of incarcerated PSE graduates from 2020-2030 is 34,584.

As discussed in the alternatives section, this policy involves hiring five new correctional education-devoted IT staff, in addition to establishing a 5% pay raise for all existing IT staff (45). Based on publicly available Virginia state employee salary data from 2020 (Hansen, 2020), I constructed a breakdown for the existing pay structure (number of employees and approximate salaries) within VADOC's ITU, as this information is not comprehensively available otherwise. See **Table 4** in Appendix B for VADOC's pay and position structure, both before and following the additional hires under this policy. The five additional staff will be hired at the IT Specialist I level, with starting salaries of \$68,250 (reflecting unit-wide 5% pay increase). VADOC staff are hired through the Virginia Department of Human Resource Management (DHRM) (VADOC – *Job Opportunities*, 2021), so I used available DHRM salary information to calculate the average salary within the middle salary band: \$78,595 (cost per work hour = \$37.80) (*Classified Salary Structure*, 2019). I assume an individual paid this salary inputs 15 hours of work per additional hire. Thus, the hiring search for all five additional hires has an opportunity cost of \$2,835 (15 hours \* 5 hires \* \$37.80). I also assume yearly benefits at 30% of the new hires' salaries and overhead costs of 40% of the new hires' salaries, based on market standards (Weltman, 2019).

During this time, a VADOC Procurement Officer (salary ~\$60,000) in each impacted facility (5) will purchase and oversee installment of desks and computers for each relevant new staff member (Hansen, 2020). This translates to two work hours per Procurement Officer (2 hours \* 5 Procurement Officers \* \$28.80), producing a total opportunity cost of \$288. Based on available mid-range market prices, cost of materials (desk, chair, computer) for new staff's equipment is assumed to be \$500, \$250, and \$600, respectively. Thus, the total cost of materials for new staff's equipment is \$6,750. See **Table 5** in Appendix B for a year-by-year breakdown of this policy's projected costs. The total present value of this IT personnel investment's projected costs from 2020-2030 is \$42,292,094. Using the cost-effectiveness formula, this policy's cost-effectiveness ratio relative to the status quo is:

$$\text{Cost Effectiveness} = \frac{\$92,121,068 + \$42,292,094}{31,158 \text{ graduates}}$$

Under this policy, the cost-effectiveness ratio is about \$4,314 per incarcerated PSE graduate.

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## POLITICAL FEASIBILITY

This policy requires Virginia state legislature involvement to reallocate existing general fund appropriations to support hiring additional VADOC ITU staff. Recently, many criminal justice reforms have been pushing their way through the Virginia General Assembly, mainly spearheaded by the Democratic majority and Governor Northam (Dashiell, 2021). However, the Senate Minority Leader, Thomas Norment Jr. (R), could be in favor of reforms creating more opportunities for incarcerated individuals, as he has recently sponsored a bill to increase expungement opportunities for those with misdemeanor or certain felony convictions (Police and Court Records; Expungement, 2020). Overall, the policy window for criminal justice reforms—such as increasing incarcerated students' access to technology for educational purposes—appears to be more open than in past years.

On the public opinion side, polling data indicates that 75% of Virginians believe the state's correctional system should focus more on rehabilitative efforts, including correctional education (Blumenthal, 2021). Additionally, 75% of Virginians believe that the correctional system costs the state too much money (Blumenthal, 2021). This last fact, however, could complicate this alternative's political feasibility. The IT Personnel Investment, while attempting to ultimately cut correctional costs via increased educational attainment and, therefore, lower recidivism, does require an up-front investment that some voters and state legislators may consider too costly. However, other government initiatives aimed at increasing broadband and technology availability throughout the state have been passed in recent budgets (Virginia Acts of Assembly, 2020), indicating that both popular and legislative support could extent to this alternative. Accordingly, balancing these up-front vs. downstream concerns but considering the more open policy window for criminal justice reform and IT investments, this alternative receives a 2 (medium) in political feasibility.

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## ADMINISTRATIVE FEASIBILITY

This policy does not require VADOC to coordinate with any additional government agencies. Additionally, it does not require any alterations or additions to existing operating procedures, as it will follow VADOC's existing hiring protocols and mechanism for authorizing pay increases. This policy does require hiring five additional professionals; however, these hires are in addition to other new hires requested in VADOC's 2020-2022 IT Strategic Plan. This policy requires 12 total months for implementation, but beyond this hiring search/interview process, it will not require any additional implementation steps. This policy only requires two phases: instituting 5% pay raises for existing ITU staff and beginning the search for new ITU staff (occurring simultaneously) and interviewing/hiring new ITU staff. As this policy assumes that existing orientation/training mechanisms within VADOC's ITU will successfully onboard new staff, this is not counted as an implementation phase of this policy. All things considered, this alternative receives a 1 (high) in administrative feasibility.

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## EQUITY

This policy aims to increase the accessibility and effectiveness of incarcerated students' access to quality internet and technology. As stated previously, this analysis assumes that IT investments will increase VADOC's enrollment capacity in addition to improving educational quality. Thus, while this program does not alter some aspects of the PSE gap between incarcerated and non-incarcerated students—like student support and inter-stakeholder cooperation—it does improve others; namely, incarcerated students' ability to access the classroom and produce quality work. Accordingly, this alternative receives a 2 (medium) in equity.

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## ALTERNATIVE #3: INTEGRATED ONLINE PLATFORM WORKGROUP

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## COST-EFFECTIVENESS

This policy aims to improve coordination across different correctional facilities, IHEs, and third-party stakeholders. California's integrated investment in streamlining its PSE efforts from 2015-2019 via its coordinated Renewing Communities Initiative represents a precedent for this kind of increased

coordination (Smith & Digard, 2020). Though their system does not exactly mirror the integrated online platform this policy calls for, it does somewhat capture how effective a more coordinated system could be in Virginia. Vera Institute of Justice's evaluation of Renewing Communities indicates that this effort increased facility-based enrollment numbers (the program also had community-based components, which will not be considered in this analysis) by over 200%. Obviously, this is an impressive figure, but given the rough match between this policy and California's, I translate this program's enrollment bump into Virginia being able to enroll 50% of its Pell-eligible population from 2023 moving forward, compared to 25% under the status quo. As this online platform would not be developed until after the federal Pell Grant restoration takes place in July 2023, this policy assumes the same level of enrollment without the Pell change (19%).

Vera's evaluation also indicates that 27% of the program's participants earned a PSE credential—whether degree or certificate—during this period. Though this does not account for participants who planned to continue their education and graduate after 2019, I assume that this policy increases the completion rate to 27%, up from the status quo's 26.2%. This likely artificially low completion rate accounts for some of the dissimilarities between Renewing Communities and this proposed integrated online platform. See [Table 6](#) in Appendix B for enrollment and completion projections for 2020-2030. Under this policy, the total projected number of incarcerated PSE graduates from 2020-2030 is 27,874.

This policy's projected costs will be based on the EHR workgroup's development and implementation cost estimates for their system. As indicated in the alternatives section, the EHR system's scale is considerably bigger than this online platform's scale would be. Thus, I will calculate a cost-per-user for the EHR system using available population and employment data for this year or the most recent available, then using VADOC new offender population, employment data, and IHE users (assumed at three users per IHE) to scale the costs down and project them over a ten-year period. See [Table 7](#) in Appendix B for the EHR project's estimated cost per user. This policy assumes that VADOC and VDOE will equally split the cost burden of the online platform's development and implementation. See [Table 8](#) in Appendix B for the integrated online platform's estimated total implementation and development cost, scaled down from the EHR project.

Workgroup members' opportunity cost will also be factored into this policy's cost estimates. I assume that each member will contribute 40 hours to the workgroup during 2020 (the base year in this analysis) to formulate the development and implementation plan, which will occur from 2021-2024. The workgroup's opportunity cost was calculated using members' publicly available salary data from 2020 (Hansen). See [Table 9](#) in Appendix B for a breakdown of the workgroup's opportunity cost. Following the workgroup's planning year and the platform's development and implementation, this analysis assumes that the platform's only costs will be website maintenance. Based on available market estimates, custom-designed online web applications can cost anywhere from \$300-2000+ per month (*How Much Should Website Maintenance Cost? 2020 Guide*, 2020). This analysis assumes that the integrated online platform would cost \$1,500 per month to maintain. See [Table 10](#) in Appendix B for a year-by-year breakdown of this policy's projected costs. The total present value of the integrated online platform's projected costs from 2020-2030 is \$2,875,415. Using the cost-effectiveness formula, this policy's cost-effectiveness ratio relative to the status quo is:

$$\text{Cost Effectiveness} = \frac{\$92,121,068 + \$2,875,415}{27,874 \text{ graduates}}$$

Under this policy, the cost-effectiveness ratio is about \$3,408 per incarcerated PSE graduate.

## POLITICAL FEASIBILITY

This alternative requires the Virginia state legislature to authorize the formation of an inter-agency workgroup focused on developing the online integrated platform to track incarcerated students and increase resource-sharing among relevant stakeholders. Since previous and similar workgroups have been established in recent budgets (i.e., EHR workgroup), the political precedent for this alternative certainly exists. However, VADOC and other state government officials have certainly been concerned about inmate data-sharing in the past. Indeed, in March 2021, Governor Northam signed into law data privacy legislation that makes Virginia the second state in the U.S. to do so (Zakrewski), indicating data privacy's high salience in the minds of state politicians. Sufficient security and data privacy concerns would need to be addressed in order to increase the likelihood that this alternative is funded adequately. A potential benefit for this policy's political feasibility is its ability to increase government efficiency. Pew Research Center data indicates that 75% of Republicans and 40% of Democrats believe the government is almost always wasteful and inefficient (Pew Research Center, 2015). Stakeholders' success in communicating this policy's ability to increase existing systems' efficiency will be critical to its political feasibility, but data-privacy related hurdles could complicate its success. Accordingly, this alternative receives a 2 (medium) in political feasibility.

## ADMINISTRATIVE FEASIBILITY

This alternative has a few components that will make administration and implementation more difficult. First, it does require authorization from the General Assembly to establish an inter-agency workgroup. Second, it requires coordination between three separate government agencies: VADOC, VDOE, and DPB. This analysis negatively penalizes alternatives that require inter-agency coordination. Third, this alternative will require a total of 60 months to plan, develop, and implement—a long administration timeline. These 60 months include three distinct phases (mentioned in the previous sentence), and platform maintenance emerges as an additional phase after the first five years. Accordingly, this policy receives a 3 (low) in administrative feasibility.

## EQUITY

This policy aims to increase stakeholders' ability to track incarcerated students' progress and share best practices/resources with new and existing program administrators and providers. Essentially, this platform will ideally improve existing work's efficacy. Thus, to some degree, this policy closes the gap between incarcerated and non-incarcerated students. This policy does not, however, give students additional resources or dramatically expanded access to correctional education. It will hopefully improve VADOC's utilization of existing resources for incarcerated students, but it does not call for allocation of any new resources. Accordingly, this alternative receives a 2 (medium) in equity.

## ALTERNATIVE #4: STUDENT SUPPORT PROGRAM GRANT

### COST-EFFECTIVENESS

This policy aims to increase education-focused support programs available to incarcerated students by establishing grant money for qualifying programs. This policy draws from the CBB model, a Massachusetts-based program run by Partakers, Inc. Though Partakers, Inc. does not provide any publicly available data for their participants' program completion rate, they do tout a participant recidivism rate of 2%, compared to the Massachusetts statewide recidivism rate of 32%. Considering PSE attainment has a demonstrated negative impact on recidivism, I assume that this program structure's dramatic reduction in recidivism represents an ability to increase participants' completion rates. Accordingly, this policy assumes a program completion rate of 52.4%, or twice the status quo completion rate (26.2%). This policy does not assume a change in Virginia's capacity to enroll more of the Pell-eligible incarcerated students following federal restoration and maintains the status Pell-eligible enrollment rate of 25%. See [Table 13](#) in Appendix B for enrollment and completion projections for 2020-2030. Under this policy, the total projected number of incarcerated PSE graduates from 2020-2030 is 47,633.

With an annual operating budget of \$100,00 and approximately 400 volunteer mentors, CBB's current operating capacity is five correctional facilities. Assuming similar reach among future support programs in Virginia, this policy establishes eight \$100,000 annual grants (three-year contracts) for qualifying programs in the state of Virginia—with the goal of establishing at least one education-focused student support program in each of the state's 40 correctional facilities. This policy also assumes each program will have a team of 400 volunteers, whose opportunity cost of participating will be calculated at a rate of two hours per week at an hourly wage of \$9.50, which will be Virginia's minimum wage as of July 2021 (Malveaux & Holdsworth, 2020).

According to VADOC's grant operating procedures, Tracey Jenkins, the department's Grant Administrator, is to oversee all grant applications and approvals (Jenkins, 2021). Accordingly, development of this grant will fall on Jenkins and relevant contacts—assumed to be 5 additional VADOC administrative staff at salaries of \$70,000—during 2020. Grant applications will be reviewed accepted during 2021, and the first set of grants will be administered in 2022. I assume 40 work hours during 2020 for Jenkins and the 5 administrative staff for grant development. I also assume 40 work hours during 2021 for Jenkins and the 5 administrative staff to review all applications and select award recipient programs. Grants will be three-year awards, with the opportunity for existing recipients to be renewed upon completion of their award. Thus, review opportunity costs will occur during years in which new applicants are selected (in this analysis, 2021 for the initial round, then 2024 and 2027 for renewal rounds). During non-review years, I assume that existing grant administration capacities are sufficient to oversee grant recipients, and I do not include separate costs for this oversight. See [Table 11](#) in Appendix B for a breakdown of the development and application/approval phases' opportunity cost. See [Table 12](#) in Appendix B for a year-by-year breakdown of this policy's projected costs. The total present value of the integrated online platform's projected costs from 2020-2030 is \$29,977,369. Using the cost-effectiveness formula, this policy's cost-effectiveness ratio relative to the status quo is:

$$\text{Cost Effectiveness} = \frac{\$92,121,068 + \$29,977,369}{47,633 \text{ graduates}}$$

Under this policy, the cost-effectiveness ratio is about \$2,564 per incarcerated PSE graduate.

## POLITICAL FEASIBILITY

This policy requires additional appropriations from the General Assembly to establish a new VADOC grant program. Precedent for this certainly exists within the Virginia government, as there are over 750 separate grants for non-profits currently available (*Virginia Nonprofits and Municipalities Grants*, 2021). However, political differences certainly play into which money goes where for whom. John Donnelly indicated as much, stating that funding prioritization disagreements often result in incarcerated students not receiving state aid for which they are eligible; the money simply goes elsewhere (J. R. Donnelly, personal communication, February 12, 2021). Such could be the case with the Student Support Grant Program; legislators may not be keen to authorize \$800,000 annually for this program. Indeed, House Minority Leader Todd Gilbert (R) has previously criticized Governor Northam's proposed budget amendments related to education spending, stating his attempts amount to "...throwing money at the same old line items and hoping they solve problems he won't even acknowledge..." ("Statement of House Republican Leader Todd Gilbert on Governor Northam's Proposed Budget Amendments," 2020). However, much of the program's cost does fall on volunteer mentors, alleviating the brunt of this policy's cost burden from the state government and/or VADOC. Additionally, given that state Republicans have felt recent Democratic criminal justice reform proposals have been "egregious" and "soft on crime" (Oliver, 2021), this policy option could present an attractive option for Republican state legislators, as it does not relax any existing criminal justice policies. Accordingly, this policy receives a 2 (medium) in political feasibility.

## ADMINISTRATIVE FEASIBILITY

This policy does not require inter-agency cooperation between VADOC and other government offices. However, it does require a considerable amount of oversight and coordination with the grant's eight program recipients. Additionally, this policy assumes that eight separate programs are capable of finding, instructing, and maintaining volunteer teams of 400 each—or 3,200 in total. This policy also requires three distinct phases: grant development, grant application review/award (occurring every three years), and grant recipient oversight. The total implementation timeline of this policy is only moderate, however, at 24 months (one year for grant development and one year for first-cycle application review/award). One benefit for this alternative's administrative feasibility is that it falls under the existing VADOC Grant Administrator and support staff's responsibility, not necessitating additional hires for neither development nor implementation. Accordingly, this policy receives a 2 (medium) in administrative feasibility.

## EQUITY

This policy creates incarcerated student-specific mentoring support teams geared at encouraging more PSE participants to complete their programs of choice. Similar to advisors or counselors that non-incarcerated PSE students would receive through their IHE, this alternative certainly makes progress in

closing the gap between incarcerated and non-incarcerated students. Additionally, by increasing the completion rate among incarcerated PSE participants, this policy *de facto* increases access to education for these students. Though it does not address educational programs' quality, it does attempt to improve students' experience. Accordingly, this policy receives a 1 (high) in equity.

## OUTCOMES MATRIX<sup>2</sup>

	<b>Cost-Effectiveness (40%)</b>	<b>Political Feasibility (20%)</b>	<b>Administrative Feasibility (15%)</b>	<b>Equity (25%)</b>	<b>Weighted Total</b>
<b>1: Status Quo</b>	\$3,868 per PSE graduate	2 (medium)	1 (high)	3 (low)	<b>1548.5</b>
<b>2: IT Personnel Investment</b>	\$4,314 per PSE graduate	2 (medium)	1 (high)	2 (medium)	<b>1726.7</b>
<b>3: Integrated Online Platform</b>	\$3,408 per PSE graduate	2 (medium)	3 (low)	2 (medium)	<b>1364.6</b>
<b>4: Student Support Grant</b>	\$2,564 per PSE graduate	2 (medium)	2 (medium)	1 (high)	<b>1026.6</b>

## RECOMMENDATION

After evaluating all alternatives across relevant criteria, I recommend Alternative #4: Student Support Grant Program. This alternative is the most cost-effective option relative to the status quo and scores the highest across all alternatives on equity, the most heavily weighted criterion outside of cost-effectiveness. Additionally, it possesses both medium administrative and political feasibility, balancing better between these hurdles than Alternative #3. Overall, this analysis considers Alternative #4 as the most ideal policy option to cost-effectively improve incarcerated students' access to PSE and likelihood of completing their program of choice.

## IMPLEMENTATION

To advance the Student Support Grant Program, the first step is securing additional appropriations from the General Assembly by offering an amendment to the 2020-2022 budget bill during a special session in 2021. To persuade legislators that this program is worthwhile, stakeholders—including VADOC, VDOE, current administrators from IHEs operating in prisons (especially the Second Chance Pell sites), and

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<sup>2</sup> Note: A lower weighted total indicates a better (or more ideal) policy. Since low cost-effectiveness is ideal, coded the qualitative criteria as high = 1, medium = 2, and 3 = low to find a weighted total for all alternatives across these criteria.

incarcerated students—must leverage available analyses of similar programs. As mentioned previously, Partakers, Inc. CBB data is promising but limited. Outlining this program’s model and the Massachusetts government’s willingness to embrace it can serve as a first orienting step. Beyond this, utilizing more rigorous analyses and presenting evidence of why these programs deserve funding can be a more persuasive step. In 2019, RAND Corporation issued a report evaluating a similar program in North Carolina (Davis & Tolbert, 2019). Their report includes best practices for program administrators and demonstrated evidence of student support programs’ success.

Assuming funds are secured, the next major implementation step is ensuring that VADOC’s grant administration team produces grant requirements that establish adequate, evidence-based benchmarks for qualified applicants. As a state that’s seen remarkably successful scale-up of its correctional PSE offerings over the past 5-7 years, California has established an Institutional Effectiveness Partnership Initiative that brings together technical recommendations, professional development, and other best practices from participating IHEs for programs supporting incarcerated students (*Institutional Effectiveness Partnership Initiative*, 2021). During the grant development phase, grant administrators should consult with these resources and existing correctional PSE operators in Virginia to understand the existing gaps in their offerings and where mentoring support could fill in.

One potential implementation challenge is a lack of quality grant applicants. To ameliorate this risk, VADOC should reach out to existing correctional PSE programs to tap their available contacts and networks. These IHEs can be essential in not only getting the word out that this new grant program exists but also in targeting potential applicants. Grant administrators should understand the potential for some of the program’s grants to go unfilled during the first award cycle. To account for this, the program’s appropriation can include flexible award timelines for the first cycle. That is, some first-cycle student support grants could be awarded on a rolling basis as quality applications come in from 2022-2024.

Student Support Grant Program advocates should also push for an evidence-collecting requirement among all grant recipients. This way, real-time data can be collected during each cycle to evaluate different programs’ effectiveness. Oftentimes, interventions are implemented without a true consideration of their impact. Accordingly, programs should serve randomly assigned incarcerated PSE students, drawn from the available pool of students in a particular facility. This will enable a true “treatment and control” evaluation of all participating programs, giving VADOC necessary information to inform future awards and potential contract renewals.

Overall, implementing this support program involves active advocacy and evidence-based practices. Input from existing IHEs about their inability to meet all eligible incarcerated students’ needs, especially after federal Pell Grant restoration increases student demand for PSE. Legislators and stakeholders alike must anticipate that this program could take the entire first award cycle to work out necessary kinks and determine best practices. This option, however, presents a cost-effective mechanism to support impending federal aid increases. Taken together, this grant program and federal Pell Grants present a powerful opportunity to transform Virginia’s correctional PSE landscape, reduce state correctional spending in the long run, and advance incarcerated students’ opportunities and outcomes post-release.

## CONCLUDING TAKEAWAYS

Correctional education as a whole has had a long, sometimes tumultuous, journey in terms of public support, funding, quality, and availability. At present, the federal government has demonstrated through Pell Grant restoration its willingness to reckon with and remove barriers to education for incarcerated students. Given this incredible policy change, state stakeholders must ensure Virginia's system is adequately robust to take full advantage of impending federal funding. Correctional PSE is a common-sense policy topic—more education, more opportunity, less recidivism, less correctional spending. However, this issue also signals values: the extent to which a state offers correctional PSE reflects the strength of its belief in individuals' right to education. Expanding Virginia's incarcerated students' ability to improve their outcomes offers an opportunity to lessen incarceration's deleterious impact on individuals and their communities.

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## APPENDIX A: INDIRECT COSTS TO SOCIETY

TABLE 1: ANNUAL ECONOMIC BURDEN OF U.S. INCARCERATION (MC LAUGHLIN ET AL., 2016)

Responsible Party	Cost	\$ (Billions)
Incarcerated persons	Reduction in lifetime earnings of incarcerated persons	230.0
	Lost wages while incarcerated	70.5
	Higher mortality rate of formerly incarcerated persons	62.6
	Nonfatal injuries to incarcerated persons	28.0
	Fatal injuries to incarcerated persons	1.7
<b>SUBTOTAL</b>		<b>392.6</b>
Families, children, and communities	Criminogenic nature of prison	285.8
	Increased criminality of children of incarcerated parents	130.6
	Children's education level and subsequent wages as an adult	30.0
	Marginal excess burden	17.8
	Divorce	17.7
	Decreased property values	11.0
	Adverse health effects	10.2
	Reduced marriage	9.0
	Child welfare	5.3
	Interest on criminal justice debt	5.0
	Reentry programs, nonprofits, movement to end mass incarceration	2.9
	Homelessness of formerly incarcerated persons	2.2
	Infant mortality	1.2
	Children rendered homeless by parental incarceration	0.9
	Visitation costs	0.8
	Moving costs	0.5
	Eviction costs	0.2
<b>Subtotal</b>		<b>531.0</b>
Federal & state governments	Corrections spending	91.1
<b>Subtotal</b>		<b>91.1</b>
<b>Total</b>		<b>1,014.7</b>

## APPENDIX B: FINDINGS CALCULATIONS

TABLE 1: STATUS QUO, INCARCERATED STUDENT ENROLLMENT AND COMPLETION PROJECTIONS, 2020-2030

Year	Incarcerated Population #	Pell-Eligible Bump After Federal Restoration	Pell Enrollment Capacity (25% of newly eligible)	Enrollment w/o Pell Change (19% rate)	Enrollment w/ Pell Change	Completion Numbers (26.2% rate)
2020	36991	0	0	7082	7082	1856
2021	37287	0	0	7139	7139	1870
2022	37600	0	0	7198	7198	1886
2023	37600	13310.4	1541.6	7144	8686	2276
2024	37600	13310.4	1541.6	7144	8686	2276
2025	37600	13310.4	1541.6	7144	8686	2276
2026	37600	13310.4	1541.6	7144	8686	2276
2027	37600	13310.4	1541.6	7144	8686	2276
2028	37600	13310.4	1541.6	7144	8686	2276
2029	37600	13310.4	1541.6	7144	8686	2276
2030	37600	13310.4	1541.6	7144	8686	2276

<b>Total Graduates</b>	<b>23,817</b>
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TABLE 2: STATUS QUO, VADOC PSE SPENDING PROJECTIONS, 2020-2030

<b>Year</b>	<b>Present Value of VADOC Spending on PSE (\$)</b>
2020	13,369,636
2021	12,980,229
2022	12,235,111
2023	11,196,860
2024	9,948,265
2025	8,581,461
2026	7,186,838
2027	5,843,557
2028	4,612,958
2029	3,535,448
2030	2,630,705
<b>Total Spending</b>	<b>92,121,068</b>

TABLE 3: IT PERSONNEL INVESTMENT, INCARCERATED STUDENT ENROLLMENT AND COMPLETION PROJECTIONS, 2020-2030

Year	Incarcerated Population #	Pell-Eligible Bump After Federal Restoration	Pell Enrollment Capacity (50% of newly eligible)	Enrollment w/o Pell Change (19% rate)	Enrollment w/ Pell Change	Completion Numbers (33.5% rate)
2020	36991	0	0	7082	7082	2373
2021	37287	0	0	7139	7139	2391
2022	37600	0	0	7198	7198	2411
2023	37600	13310.4	3083.2	7144	10227	3426
2024	37600	13310.4	3083.2	7144	10227	3426
2025	37600	13310.4	3083.2	7144	10227	3426
2026	37600	13310.4	3083.2	7144	10227	3426
2027	37600	13310.4	3083.2	7144	10227	3426
2028	37600	13310.4	3083.2	7144	10227	3426
2029	37600	13310.4	3083.2	7144	10227	3426
2030	37600	13310.4	3083.2	7144	10227	3426

<b>Total Graduates</b>	<b>34,584</b>
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TABLE 4: INFORMATION TECHNOLOGY UNIT PERSONNEL AND PAY STRUCTURE BEFORE AND AFTER NEW HIRES

Before New Hires						
Role	Number	Current Salary (\$)	Salary after %5 Pay Raise (\$)	Total Spending Before Pay Raise (\$)	Total Spending After Pay Raise (\$)	Pay Raise Amount (\$)
IT Manager	5	110,000	115,500	550,000	577,500	27,500
IT Specialist III	10	95,000	99,750	950,000	997,500	47,500
IT Specialist II	10	85,000	89,250	850,000	892,500	42,500
IT Specialist II	10	75,000	78,750	750,000	787,500	37,500
IT Specialist I	5	65,000	68,250	325,000	341,250	16,250
<b>Total</b>	<b>40</b>			<b>3,425,000</b>	<b>3,596,250</b>	<b>171,250</b>
After New Hires						
Role	Number	Current Salary (\$)	Salary after %5 Pay Raise (\$)	Total Spending Before Pay Raise (\$)	Total Spending After Pay Raise (\$)	Pay Raise Amount (\$)
IT Manager	5	110,000	115,500	550,000	577,500	27,500
IT Specialist III	10	95,000	99,750	950,000	997,500	47,500
IT Specialist II	10	85,000	89,250	850,000	892,500	42,500
IT Specialist II	10	75,000	78,750	750,000	787,500	37,500
IT Specialist I	10	65,000	68,250	650,000	682,500	32,500
<b>Total</b>	<b>45</b>			<b>3,750,000</b>	<b>3,937,500</b>	<b>187,500</b>

TABLE 5: IT PERSONNEL INVESTMENT, COST PROJECTIONS, 2020-2030

Year	Spending Category	Actual VADOC Spending on IT Personnel Investment (\$)	Present Value of VADOC Spending on IT Personnel Investment (\$)
2020	total	3,425,000	3,425,000
	<i>existing</i>	3,425,000	
2021	total	3,606,123	3,501,090
	<i>existing</i>	3,425,000	
	<i>5% pay raise</i>	171,250	
	<i>hiring search</i>	2,835	
	<i>procurement opportunity cost</i>	288	
	<i>desks, chairs, and computers for new staff</i>	6,750	
2022	total	4,186,248	3,945,940
	<i>existing</i>	3,606,123	3,399,117
	<i>new IT hires (5 at \$68,250)</i>	341,250	321,661
	<i>new IT hires' overhead costs (40% of salary)</i>	136,500	
	<i>new IT hires' benefits (30% of salary)</i>	102,375	
2023	total	4,186,248	3,831,010
2024	total	4,186,248	3,719,427
2025	total	4,186,248	3,611,094
2026	total	4,186,248	3,505,917
2027	total	4,186,248	3,403,803
2028	total	4,186,248	3,304,663
2029	total	4,186,248	3,208,411
2030	total	4,186,248	3,114,962
<b>Total Spending</b>		<b>44,707,355</b>	<b>42,292,094</b>

TABLE 6: INTEGRATED ONLINE PLATFORM, INCARCERATED STUDENT ENROLLMENT AND COMPLETION PROJECTIONS, 2020-2030

Year	Incarcerated Population #	Pell-Eligible Bump After Federal Restoration	Pell Enrollment Capacity (50% of newly eligible)	Enrollment w/o Pell Change (19% rate)	Enrollment w/ Pell Change	Completion Numbers (27% rate)
2020	36991	0	0	7082	7082	1912
2021	37287	0	0	7139	7139	1927
2022	37600	0	0	7198	7198	1943
2023	37600	13310.4	3083.2	7144	10227	2761
2024	37600	13310.4	3083.2	7144	10227	2761
2025	37600	13310.4	3083.2	7144	10227	2761
2026	37600	13310.4	3083.2	7144	10227	2761
2027	37600	13310.4	3083.2	7144	10227	2761
2028	37600	13310.4	3083.2	7144	10227	2761
2029	37600	13310.4	3083.2	7144	10227	2761
2030	37600	13310.4	3083.2	7144	10227	2761
						<b>Total Graduates</b>
						<b>27,874</b>

TABLE 7: EHR PROGRAM ESTIMATED COST PER USER

Agency	Cost Responsibility (%)	Cost Responsibility (\\$)	Total Cost (\\$)	Total Patients Served	Total Health Workers Utilized	Total Users
VDH	33	4,500,000				
DBHDS	33	61,964,786				
VADOC	33	5,201,940	71,666,726	8,600,000	377,100	8,977,100
				Total Cost Per User (\$)	7.98	

TABLE 8: INTEGRATED ONLINE PLATFORM, ESTIMATED IMPLEMENTATION AND DEVELOPMENT COST

Agency	Cost Responsibility (%)	EHR Project's Cost Per User (\$)	Total Inmates Served (2020)	New Inmate Records Per Year	IHE Users	Total Users, 2020-2029
VADOC	50					
VDOE	50	8	67,000	11,980	432	187,232
						<b>Total Cost Per Agency (\$)</b>
						<b>1,494,726</b>
						<b>Total Development and Implementation Cost (\$)</b>
						<b>2,989,452</b>

TABLE 9: INTEGRATED ONLINE PLATFORM, WORKGROUP OPPORTUNITY COST

Workgroup Member	Cost Per Work Hour (\$, Salary/50 weeks/40 hours)	Work Hours Per Workgroup Member
A. David Robinson (VADOC, Chief of Corrections Operations)	80	40
Zacc Allen (VADOC, Chief Information Officer)	71	40
Tim Tillman (VDOE, Chief Information Security Officer)	55	40
Banci Tewolde (DPB, Associate Director, Public Safety)	63	40
<b>Total Opportunity Cost (\$)</b>		<b>10,757</b>

TABLE 10: INTEGRATED ONLINE PLATFORM, COST PROJECTIONS, 2020-2030

Year	Spending Category	Actual VADOC Spending on Integrated Online Platform (\$)	Present Value of VADOC Spending on IT Personnel Investment (\$)
2020	total	10,757	10,757
	<i>workgroup opportunity cost</i>	10,757	
2021	total	747,363	725,595
	<i>implementation and development - year 1</i>	747,363	
2022	total	747,363	704,461
	<i>implementation and development - year 2</i>	747,363	
2023	total	747,363	683,943
	<i>implementation and development - year 3</i>	747,363	
2024	total	747,363	664,022
	<i>implementation and development - year 4</i>	747,363	
2025	total	18,000	15,527
	<i>annual website maintenance</i>	18,000	
2026	total	18,000	15,075
	<i>annual website maintenance</i>	18,000	
2027	total	18,000	14,636
	<i>annual website maintenance</i>	18,000	
2028	total	18,000	14,209
	<i>annual website maintenance</i>	18,000	
2029	total	18,000	13,796
	<i>annual website maintenance</i>	18,000	
2030	total	18,000	13,394
	<i>annual website maintenance</i>	18,000	
<b>Total Spending</b>		<b>3,090,209</b>	<b>2,875,415</b>

TABLE 11: STUDENT SUPPORT GRANT, DEVELOPMENT/REVIEW OPPORTUNITY COST

	<b>Cost Per Work Hour (\$, Salary/50 weeks/40 hours)</b>	<b>Work Hours Per Workgroup Member</b>
<i>Grant Development</i>		
Tracey Jenkins (VADOC Grant Administrator)	38	40
5 administrative staff (VADOC, general)	34	200
<i>Grant Application Review</i>		
Tracey Jenkins (VADOC Grant Administrator)	38	40
5 administrative staff (VADOC, general)	34	200
<b>Total Development Opportunity Cost (\$)</b>	8,259	
<b>Total Review Opportunity Cost (\$)</b>	8,259	

TABLE 12: STUDENT SUPPORT GRANT, COST PROJECTIONS, 2020-2030

Year	Spending Category	Actual VADOC Spending on Student Support Grant (\$)	Present Value of VADOC Spending on Student Support Grant (\$)
2020	total	8,259	8,259
	<i>development opportunity cost</i>	8,259	
2021	total	8,259	8,018
	<i>grant application review cycle 1 opportunity cost</i>	8,259	
2022	total	3,961,600	3,734,188
	<i>grant awards - cycle 1, year 1</i>	800,000	
	<i>program volunteers' opportunity cost</i>	3,161,600	
2023	total	3,961,600	3,625,425
	<i>grant awards - cycle 1, year 2</i>	800,000	
	<i>program volunteers' opportunity cost</i>	3,161,600	
2024	total	3,969,859	3,527,168
	<i>grant application review cycle 2 opportunity cost</i>	8,259	
	<i>grant awards - cycle 1, year 3</i>	800,000	
	<i>program volunteers' opportunity cost</i>	3,161,600	
2025	total	3,961,600	3,417,311
	<i>grant awards - cycle 2, year 1</i>	800,000	
	<i>program volunteers' opportunity cost</i>	3,161,600	
2026	total	3,961,600	3,317,778
	<i>grant awards - cycle 2, year 2</i>	800,000	
	<i>program volunteers' opportunity cost</i>	3,161,600	
2027	total	3,969,859	3,227,859
	<i>grant application review cycle 3 opportunity cost</i>	8,259	
	<i>grant awards - cycle 2, year 3</i>	800,000	
	<i>program volunteers' opportunity cost</i>	3,161,600	
2028	total	3,961,600	3,127,324
	<i>grant awards - cycle 3, year 1</i>	800,000	
	<i>program volunteers' opportunity cost</i>	3,161,600	

2029	total	3,961,600	3,036,237
	<i>grant awards - cycle 3, year 2</i>	800,000	
	<i>program volunteers' opportunity cost</i>	3,161,600	
2030	total	3,961,600	2,947,802
	<i>grant awards - cycle 3, year 2</i>	800,000	
	<i>program volunteers' opportunity cost</i>	3,161,600	
<b>Total Spending</b>		<b>31,725,836</b>	<b>29,977,369</b>

TABLE 13: STUDENT SUPPORT GRANT, INCARCERATED STUDENT ENROLLMENT AND COMPLETION PROJECTIONS, 2020-2030

Year	Incarcerated Population #	Pell-Eligible Bump After Federal Restoration	Pell Enrollment Capacity (25% of newly eligible)	Enrollment w/o Pell Change (19% rate)	Enrollment w/ Pell Change	Completion Numbers (52.4% rate)
2020	36991	0	0	7082	7082	3711
2021	37287	0	0	7139	7139	3741
2022	37600	0	0	7198	7198	3772
2023	37600	13310.4	1541.6	7144	8686	4551
2024	37600	13310.4	1541.6	7144	8686	4551
2025	37600	13310.4	1541.6	7144	8686	4551
2026	37600	13310.4	1541.6	7144	8686	4551
2027	37600	13310.4	1541.6	7144	8686	4551
2028	37600	13310.4	1541.6	7144	8686	4551
2029	37600	13310.4	1541.6	7144	8686	4551
2030	37600	13310.4	1541.6	7144	8686	4551
<b>Total Graduates</b>						<b>47,633</b>