

CALIFORNIA LEGISLATURE

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AGENDA

March 10, 2015
10:00 a.m. - 12:00 p.m.
State Capitol, Room 3191

Effective Inmate Education: Issues and Opportunities

I. Welcoming Remarks and Introductions (5 minutes)

II. Expert Discussion of Inmate Educational Programming (60 minutes)

Rebecca Silbert, Executive Director, Chief Justice Earl Warren Institute on Law & Social Policy, UC Berkeley School of Law

Debbie Mukamal, Executive Director, Stanford Criminal Justice Center, Stanford Law School

Robert Bozick, Ph.D., Sociologist at the RAND Corporation

Doug Wood, Program Officer, FORD Foundation

III. Implementation of SB 1391 (40 minutes)

Millicent Tidwell, Director of the California Department of Corrections and Rehabilitation Division of Rehabilitative Programs

Brant Choate Ed.D., Superintendent, Office of Correctional Education, California Department of Corrections and Rehabilitation Division of Rehabilitative Programs

Vincent Stewart, Vice Chancellor of Governmental Relations, California Community Colleges Chancellor's Office

Pamela Walker, Ed.D., Vice Chancellor of Academic Affairs, California Community Colleges Chancellor's Office

VI. Public Comment (15 minutes)

Senate Bill 1391 (Hancock)

Statutes of 2014

Senate Bill No. 1391

CHAPTER 695

An act to amend Section 84810.5 of, and to add Section 84810.7 to, the Education Code, relating to community colleges.

[Approved by Governor September 27, 2014. Filed with
Secretary of State September 27, 2014.]

LEGISLATIVE COUNSEVS DIGEST

SB 1391, Hancock. Community colleges: inmate education programs: computation of apportionments.

Existing law establishes the California Community Colleges under the administration of the Board of Governors of the California Community Colleges. Existing law requires the board of governors to appoint a chief executive officer, to be known as the Chancellor of the California Community Colleges.

Existing law provides that, notwithstanding open course provisions in statute or regulations of the board of governors, the governing board of a community college district that provides classes for inmates of certain facilities may include the units of full-time equivalent students generated in those classes for purposes of state apportionments.

This bill would instead waive the open course provisions in statute or regulations of the board of governors for any governing board of a community college district for classes the district provides to inmates of those facilities and state correctional facilities, and would authorize the board of governors to include the units of full-time equivalent students generated in those classes for purposes of state apportionments.

Existing law provides for the method of computing apportionments for purposes of these inmate education programs.

This bill would make revisions to that method of computation.

The bill would prohibit a community college district from claiming, for purposes of apportionments for these inmate education programs, any class for which a district receives full compensation for its direct education costs for the conduct of the class from any public or private agency, individual, or group of individuals, or any class offered pursuant to a contract or instructional agreement entered into between the district and a public or private agency, individual, or group of individuals that has received from another source full compensation for the costs the district incurs under that contract or instructional agreement, as prescribed.

This bill would require the Department of Corrections and Rehabilitation and the Office of the Chancellor of the California Community Colleges, on or before March 1, 2015, to enter into an interagency agreement to expand access to community college courses that lead to degrees or certificates that

result in enhanced workforce skills or transfer to a 4-year university. This bill would require that courses for inmates in a state correctional facility developed as a result of this agreement supplement, but not duplicate or supplant, any adult education course opportunities offered at that facility by the Office of Correctional Education of the Department of Corrections and Rehabilitation. This bill would require the department, in collaboration with the Office of the Chancellor of the California Community Colleges, to develop metrics for evaluations of the efficacy and success of the programs developed through the interagency agreement, conduct the evaluations, and, on or before July 31, 2018, report findings from the evaluations to the Legislature and the Governor.

The people of the State of California do enact as follows:

SECTION 1. Section 84810.5 of the Education Code is amended to read:
84810.5. (a) (1) Open course provisions in statute or regulations of the board of governors shall be waived for any governing board of a community college district for classes the district provides to inmates of any city, county, or city and county jail, road camp, farm for adults, or state or federal correctional facility. This section does not authorize the waiver of open course provisions in any context or situation other than those that are specifically authorized by this section. Subject to limitations set forth in subdivision (b), the board of governors may include the units of full-time equivalent students (FTES) generated in those classes for purposes of state apportionments.

(2) The attendance hours generated by credit courses shall be funded at the marginal credit rate determined pursuant to paragraph (2) of subdivision (d) of Section 84750.5. The attendance hours generated by noncredit courses shall be funded at the noncredit rate pursuant to paragraph (3) of subdivision (d) of Section 84750.5. The attendance hours generated by instruction in career development and college preparation shall be funded at the rate determined pursuant to paragraph (4) of subdivision (d) of Section 84750.5.

(b) (1) A community college district shall not claim, for purposes of state apportionments under this section, any class to which either of the following applies:

(A) The district receives full compensation for its direct education costs for the conduct of the class from any public or private agency, individual, or group of individuals.

(B) The district has a contract or instructional agreement, or both, for the conduct of the class with a public or private agency, individual, or group of individuals that has received from another source full compensation for the costs the district incurs under that contract or instructional agreement.

(2) In reporting a claim for apportionment to the Chancellor of the California Community Colleges under this section, the district shall report any partial compensation it receives from the sources described in subparagraphs (A) and (B) of paragraph (1) during the period for which the

claim is made. The chancellor shall subtract the amount of any partial compensation received from the total apportionment to be paid.

(c) This section does not provide a source of funds to shift, supplant, or reduce the costs incurred by the Department of Corrections and Rehabilitation in providing inmate education programs.

SEC. 2. Section 84810.7 is added to the Education Code, to read:

84810.7. (a) On or before March 1, 2015, the Department of Corrections and Rehabilitation and the Office of the Chancellor of the California Community Colleges shall enter into an interagency agreement to expand access to community college courses that lead to degrees or certificates that result in enhanced workforce skills or transfer to a four-year university. The courses for inmates in a state correctional facility developed as a result of this agreement will serve to supplement, but not duplicate or supplant, any adult education course opportunities offered at that facility by the Office of Correctional Education of the Department of Corrections and Rehabilitation.

(b) The Department of Corrections and Rehabilitation, in collaboration with the Office of the Chancellor of the California Community Colleges, shall develop metrics for evaluations of the efficacy and success of the programs developed through the interagency agreement established pursuant to this section, conduct the evaluations, and report findings from the evaluations to the Legislature and the Governor on or before July 31, 2018.

(c) (1) The requirement for submitting a report imposed under subdivision (b) is inoperative on July 31, 2022, pursuant to Section 10231.5 of the Government Code.

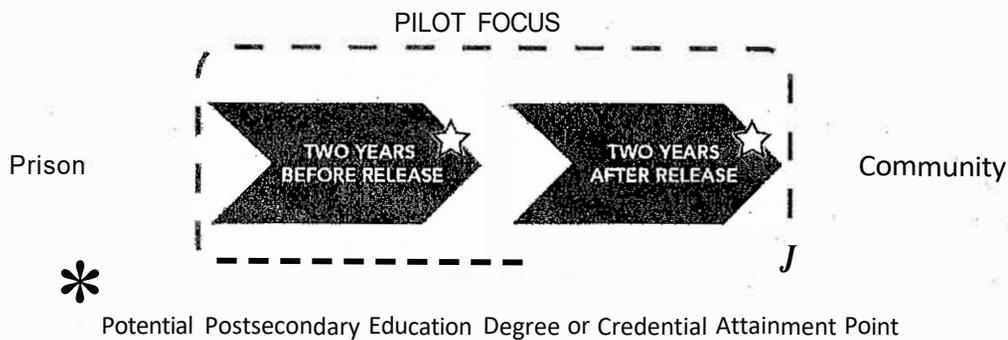
(2) A report to be submitted pursuant to subdivision (b) shall be submitted in compliance with Section 9795 of the Government Code.

Pathways from Prison to Postsecondary Education Project

Published by VERA Institute of Justice

Pathways from Prison to Postsecondary Education Project

Pathways from Prison to Postsecondary Education is a five-year national initiative to increase educational attainment and employment opportunities for incarcerated and formerly incarcerated individuals by supporting an expansion of educational opportunities in prison, seamless entry into higher education post-incarceration, and reentry services that promote individual success in the community. This effort involves partnerships between colleges, prison and parole officials, and community and business leaders in selected states to make access to postsecondary education in prison and immediately after a reality. The aim of Pathways is to transform lives as well as build stronger families and communities.



Note: This pilot focus graphic refers to Michigan and North Carolina; New Jersey's only time-to-release criteria is adequate in-prison time remaining to complete a half semester.

Goals of the Initiative

- > Increase postsecondary educational attainment among the incarcerated and formerly incarcerated population.
- > Increase employability and earnings among formerly incarcerated people as a means of disrupting the cycle of inter-generational poverty.
- > Reduce recidivism and improve the quality of life in neighborhoods disproportionately affected by crime and incarceration.
- > Build an evidence-based case that creates momentum for systems change and spurs national replication and long-term public investment.

States Selected to Participate

- > New Jersey: 6 prisons, 7 colleges and universities
- > North Carolina: 6 prisons, 6 community colleges
- > Michigan: 2 prisons, 2 colleges

Key Features

- > Funded by five leading foundations - the Ford Foundation, the Sunshine Lady Foundation, the Open Society Foundations, the WK Kellogg Foundation, and the Bill & Melinda Gates Foundation. The project also engages local and regional funders in participating states.
- > Selected states receive at least \$1 million in incentive funding and must provide a 25% match.
- > The Vera Institute of Justice, the national intermediary, provides technical assistance and supports a cross-site learning community.
- > In-prison and post-release postsecondary education provided by accredited local colleges and universities.
- > Vocational, developmental, GED, and college readiness courses and academic support services.
- > Male and Female participants with state-specific eligibility criteria.
- > An emphasis on the attainment of postsecondary education credentials and degrees.
- > Alignment of courses, degrees, and certification programs with local labor market trends.
- > Expanded use of technology solutions for in-prison academic services.
- > Transfer of college credits from prison to colleges in the community.
- > Partnerships with local employers.
- > Parole supervision practices that support pursuit of postsecondary educational opportunities.
- > Mentoring, tutoring, and reentry support services.
- > Comprehensive and coordinated in-prison and community-based case planning.
- > Third-party evaluation provided by the RAND Corporation, in partnership with RTI, with a focus on implementation (replicability and scale), outcomes (postsecondary enrollment and persistence, credential attainment, employment), and impact (recidivism).
- > A cost-benefit analysis conducted by Vera's Cost-Benefit Analysis Unit.
- > A national project advisory board that includes leaders in higher education, corrections, philanthropy, workforce development, and reentry services.

Highlights of Michigan's Pathways from Prison to Postsecondary Education Program

Higher Education Institutions (2): Jackson College and Kalamazoo Valley Community College.

Prisons (2): Macomb Correctional Facility and Parnall Correctional Facility.

Pilot Communities: Pontiac and Kalamazoo.

Eligibility: Individuals must be nearing two years of release from prison, intending to return to one of the pilot communities, and have a high school diploma or equivalency.

Key Program Components:

- > Shared housing units for program participants.
- > A four-week assessment phase including:
 - Power Path - a computer-based assessment that identifies learning challenges, helps determine intervention strategies, and teaches organizational skills to students.
 - Compass - an adaptive college placement test that evaluates core skill levels.
 - Labor Ready Assessment - an evaluation of job readiness behaviors.
 - Burning Glass - a software program that provides information about prospective employment in chosen areas specific to precise geographic locations, industries, or occupations.
- > A College Readiness Plan to be developed for each student with the student's input. The plan will identify how courses taken in prison will fit into the student's overall college plan.
- > Digital Literacy and Keyboarding - a course leading to a Microsoft-issued certificate of completion.
- > Supervised computer lab with dedicated time for Pathways students.
- > Study Skills and Structured Study Hall Time - single-session workshops and weekly one-hour facilitated study sessions with additional study hall time available in library or through an available classroom.
- > Course Placement (based on assessments) including:
 - College Courses - At least four different college courses per year that are transferable from community colleges to baccalaureate colleges and universities.
 - Vocational Courses leading to state or national certifications in auto mechanics or building trades, potentially leading to college-approved credits toward degree attainment post-release.
- > Academic interventions lead by Michigan Department of Corrections program staff for students who need remedial assistance.
- > Student Success Workshops that help students complete/submit college applications and familiarize participants with services provided by the college.
- > Employment Counselors who develop highly specific, individualized reentry plans to assist with employment, housing, health, and other areas of need.
- > Pre- and post-release workshops on family reintegration, substance abuse, veterans' benefits, and cognitive skills training.
- > Counseling and mentoring to assist students with successful transition to the education community.
- > A trained parole agent familiar with the Pathways project assigned to each participant.
- > Partnership with Michigan Works! and other community-based organizations focused on employment and related support services.

Highlights of New Jersey's Pathways from Prison to Postsecondary Education Program

Higher Education Institutions (7): Drew University, Princeton University, and Rutgers University (Newark, New Brunswick, and Camden campuses); The College of New Jersey; Mercer County Community College, Essex County Community College, and Raritan Valley Community College. These institutions form the New Jersey Scholarship and Transformative Education in Prisons Consortium (NJ-STEP).

Prisons (6): Albert C Wagner Youth Correctional Facility, Edna Mahan Correctional Facility for Women, Mountainview Youth Correctional Facility, Garden State Youth Correctional Facility, East Jersey State Prison, Northern State Prison,

Pilot Communities: Essex County (Newark), Camden County (Camden), Middlesex County (New Brunswick).

Eligibility: High school diploma or equivalency and adequate in-prison time remaining to complete a full semester

Key Program Components:

- > A statewide vision that every person in prison who qualifies for college will have the opportunity to earn college credits toward a degree while incarcerated and will obtain support for post-release continuation, with every prison connected to a community college and four-year college or university.
- > In-prison courses to match what students will need to matriculate in college degree programs,
- > Credits transferable throughout the prison system and consortium colleges in accordance with NJ Transfer and the Lampitt Law, which are agreements between all two-year community colleges that every course taken at one is transferable to any other in the state and two-year degrees are transferable in their entirety to four-year public colleges and universities.
- > Higher education institutions as primary employers of students (e.g. work-study, student employees in contracted services,)
- > Academic Counselors stationed at each correctional facility to provide guidance toward degree attainment
- > Campus-based reentry counselors to assist with the college enrollment process and other services.
- > Course offerings leading to an Associate of Arts or Bachelor of Art's degree,
- > Combined courses with people currently incarcerated and civilian students.
- > Student Advisory Boards comprised of NJ-STEP students at each facility,
- > Mandatory training for all instructional personnel led by the Student Advisory Boards inside the facilities.
- > Minimal disruptions of student academic participation through the use of academic holds.
- > Tutoring by NJ-STEP volunteers, community partners, and inside students.
- > Formerly incarcerated persons provide mentoring and lead pre-release workshops inside prison facilities and with incoming NJ-STEP students at college campuses.
- > A pre-release meeting and transition planning with an NJ-STEP Admissions Officer in order to continue college degree work upon release.
- > Post-release reentry services including financial literacy, workforce development, legal services, and individual/group counseling,
- > Case Planning - automated risk/needs/strengths assessment updated before release as part of a parole plan,
- > County-based reentry councils.

Highlights of North Carolina's Pathways from Prison to Postsecondary Education Program

Higher Education Institutions (6): Asheville-Buncombe Technical, Stanly, Pamlico, Pitt, Mayland, and Central Piedmont.

Prisons (6): Swannanoa Correctional Center for Women, Buncombe Correctional Center, Avery Mitchell Correctional Institution, Mountain View Correctional Institution, Albemarle Correctional Institution, and Pamlico Correctional Institution.

Pilot Communities: Greenville (Pitt County), Charlotte (Mecklenburg County), and Asheville (Buncombe County).

Eligibility: Individuals nearing two years of release from prison, intending to return to one of the pilot communities, and who have a high school diploma or equivalency.

Key Program Components:

- > A partnership with NC Department of Commerce, Division of Workforce Solutions, the Post Release Supervision and Parole Commission, and the North Carolina Community College System.
- > Shared housing within the same dormitory or wing of a dormitory for Pathways students.
- > Structured study hall time, tutoring and career advising services.
- > Courses leading to an Associate of Applied Science degree program, with the built-in opportunity to earn a certificate in computer information technology, business administration, entrepreneurship, or simulated gaming after 12 credit hours.
- > Access to computer labs with controlled wireless Internet access and other a-learning opportunities to facilitate academic learning.
- > Incentives provided for in-prison academic course progress, persistence and completion.
- > Success teams composed of a prison case manager, Local Reentry Council (LRC) staff, Department of Public Safety (DPS) staff including Rehabilitative Programs and Services and Community Supervision, a representative from the community college, and other volunteers. The Success team assists students throughout incarceration and reentry transition from prison to community by helping them develop a transition and educational plan, identify an appropriate academic path, monitor their progress, and provide any other necessary support.
- > Success Coaches - community college staff trained by the North Carolina Employment and Training (NC E&T) project in the areas of human resource development, continuing education, and student support services. The Success Coach meets Pathways student prior to release and serves as the student's point of contact on the college campus, providing counseling, mentoring, and other services to facilitate retention, completion, and employment.
- > Pathways Navigators - a navigator serves as an advocate and mentor for Pathways participants and helps them connect with services that are available in the community and at the community college. Pathways Navigators are primarily formerly incarcerated individuals who have successfully attended college and transitioned back into the community.
- > Local Reentry Councils (LRC) in the pilot communities assist participants in finding solutions to barriers to persistence including job placement, housing, transportation, and child care. The LRCs foster relationships with partner organizations including local businesses, health providers, nonprofits, legal, educational and governmental agencies. The LRC is also responsible for raising awareness and advocating for offender/formerly incarcerated issues to the community and its leaders.

Research Brief: How Effective is Correctional Education?

Describes work done by RAND Justice, Infrastructure, and Environment and documented in "Evaluating the Effectiveness of Correctional Education: *A Meta-Analysis of Programs that Provide Education to Incarcerated Adults*," by Lois M. Davis, Robert Boznick, Jennifer L. Steele, Jessica Saunders, and Jeremy N.V. Miles.

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Research Brief

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How Effective Is Correctional Education?

The Results of a Meta-Analysis

Each year, more than 700,000 incarcerated individuals leave federal and state prisons; within three years of release, 40 percent will have committed new crimes or violated the terms of their release and be reincarcerated. One strategy to counter such recidivism is to provide education to inmates while incarcerated so that they have the knowledge, training, and skills to support a successful return to their communities.

With funding from the Second Chance Act of 2007 (Public Law 110-199), the Bureau of Justice Assistance, U.S. Department of Justice, awarded RAND a cooperative agreement in 2010 to examine the current state of correctional education for incarcerated adults and juveniles and where it is headed, which correctional education programs are effective, and how effective programs can be implemented across different settings. One key part of this effort was a comprehensive literature review and meta-analysis of both published and unpublished studies released between 1980 and 2011 to synthesize the findings from many studies about how effective correctional education programs are in helping to reduce recidivism and improve postrelease employment outcomes for incarcerated adults in state prisons. We focused largely on recidivism, because it is the outcome most often assessed in the literature. We also compared the direct costs of correctional education with those of reincarceration to place the recidivism findings into a broader context.

The quality of the studies' research designs were rated using the Maryland Scientific Methods Scale, where Level 1 is the least rigorous (e.g., a study with no comparison group) and Level 5 is the most rigorous (a well-executed randomized controlled trial with low attrition). All told, 50 studies for recidivism and 18 studies for employment (those rated Level 2 or above) were included in the meta-analysis; for the highest quality standards (Levels 4 and 5), there were only seven studies for recidivism and one study for employment.

How Effective Is Correctional Education in Reducing Recidivism and Increasing Postrelease Employment?

The higher-quality research studies (Levels 4 and 5) indicate that, on average, inmates who participated in correctional education programs had 43 percent lower odds of recidivating than inmates who did not. These results are consistent even when

Key findings:

- Correctional education improves the chances that inmates released from prison will not return and may improve their chances of postrelease employment.
- Cost analysis suggests that correctional education programs can be cost-effective when it comes to recidivism.
- Going forward, there is still a need to understand what is inside the "black box" of effective programs, such as curriculum, dosage, or quality.
- Four areas are critical in building the evidence base: (1) applying stronger research designs, (2) measuring program dosage, (3) identifying program characteristics, and (4) examining more proximal indicators of program efficacy, such as changes in motivation, literacy gains, developing skills needed by local employers, and attaining academic degrees and industry-recognized certificates.

the lower-quality studies are included. This translates to a reduction in the risk of recidivating of 13 percentage points for those who participated in correctional education programs versus those who did not.

Because most state prison inmates have not completed high school, high school/General Education Development (GED) programs are the most common approach in the studies we examined. When we focus only on studies that examined such programs relative to no correctional education, inmates who participated in high school/GED programs had a 30 percent lower odds of recidivating than inmates who did not. In general, studies that included adult basic education (ABE), high school/GED, postsecondary education, and/or vocational training programs showed a reduction in recidivism.

In looking at postrelease employment, we found—using 18 studies spanning Levels 2–5—that the odds of obtaining employment postrelease among inmates who participated in correctional education (either academic or vocational programs) were 13 percent higher than the odds for those who did not. But only one of the 18 studies had a high-quality research design.

One might expect vocational training programs to be more adept than academic education programs at imparting labor market skills, awarding industry-recognized credentials, or connecting individuals with prospective employers. And, indeed, individuals who participated in vocational training programs had odds of obtaining postrelease employment that were 28 percent higher than individuals who had not participated in such programs.

Is Correctional Education Cost-Effective?

Although correctional education is effective, is it cost-effective? Focusing on recidivism and using a hypothetical pool of 100 inmates, the *direct costs* of correctional education programs and of incarceration itself (and a three-year reincarceration rate, we estimate that the direct costs of providing education to inmates range from \$140,000 to \$174,400 for the 100 inmates (or \$1,400 to \$1,744 per inmate). The three-year reincarceration costs for those who did not receive correctional education are between \$2.94 million and \$3.25 million, versus \$2.07 million and \$2.28 million for those who did. Reincarceration costs are thus \$870,000 to \$970,000 less for those who receive correctional education. Thus, *the direct costs of providing correctional education are cost-effective compared with the direct costs of reincarceration*. Because the analysis accounts only for direct costs, and not for such things as the financial and emotional costs to crime victims and costs to the criminal justice system as a whole, this is a conservative estimate of the broader benefit correctional education could yield.

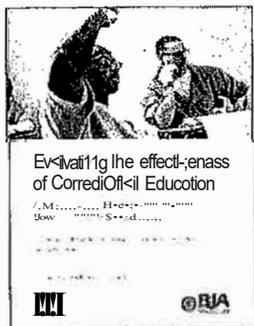
What Are the Implications Going Forward?

Our study shows that correctional education improves the chances that inmates released from prison will not return to prison and may improve released inmates' chances of postrelease employment. Our findings are consistent, regardless of whether we restrict our analysis to only the higher-quality studies or include studies across the spectrum of

research design quality. Further, our cost analysis suggests that correctional education programs can be highly cost-effective when it comes to recidivism. And compared with other types of rehabilitative services provided within prisons, correctional education is an intervention that can affect almost every offender.

That said, our analysis highlighted a continuing need to understand what is inside the "black box" of effective programs, such as curriculum, dosage, or quality. To inform policy and funding decisions at the state and federal levels, policymakers need additional information and a better understanding of how these programs work (and of what does not work). Also, the evidence base in this area should continue to be built.

One option for building the evidence base is for state and federal policymakers and foundations to invest in well-designed evaluations of correctional education programs. Also, researchers and program evaluators need to strive to implement rigorous research designs to examine questions related to potential selection bias and program dosage and to also measure more proximal outcomes, such as changes in motivation, literacy gains, developing skills needed by local employers, and attaining academic degrees and industry-recognized certificates. Funding grants and guidelines can help further the field by requiring the use of more rigorous research designs. Such funding would also enable correctional educators to partner with researchers and evaluators to undertake rigorous and comprehensive evaluations of their programs. Last, a study registry of correctional education evaluations that included study details (e.g., information about the program and intervention, the evaluation design, characteristics of the treatment and comparison groups, and outcomes measures used) would help states making strategic decisions on whether and how to recalibrate programs to adjust to changes in funding and changes in the prisoner population.



This research brief describes work done by RAND Justice, Infrastructure, Environment and documented in *Evaluating the Effectiveness of Correctional Education: A Meta-Analysis of Programs That Provide Education to Incarcerated Adults*, by Lois M. Davis, Robert Bozick, Jennifer L. Steele, Jessica Saunders, and Jeremy N. V. Miles, RR-266-BJA, 2013 (available at http://www.rand.org/pubs/research_reports/RR266.html). The RAND Corporation is a nonprofit research institution that helps improve policy and decisionmaking through research and analysis. RAND's publications do not necessarily reflect the opinions of its research clients and sponsors. RAND® is a registered trademark. © RAND 2013

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***How Effective is Correctional Education,
and Where Do We Go From Here? The
Results of a Comprehensive Evaluation
(Research Brief and Summary)***

Lois M. Davis, Jennifer L. Steele, Robert Boznick, Malcolm V. Williams, Susan Turner, Jeremy N.V. Miles, Jessica Saunders, Paul S. Steinberg

Published by RAND Corporation; entire report can be found at
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Correctional Education in the United States

How Effective Is It, and How Can We Move the Field Forward?

More than 2 million adults are incarcerated in U.S. prisons, and each year more than 700,000 leave federal and state prisons and return to communities. Unfortunately, within three years, 40 percent will be reincarcerated. One reason is that ex-offenders often lack the knowledge, training, and skills to support a successful return to their communities. Trying to reduce such high recidivism rates is partly why states devote resources to educating and training individuals in prison. Also the education that juvenile offenders receive in the justice system is intended to help them earn diplomas, find jobs, and avoid future criminal behavior.

This raises the question of how effective and cost-effective correctional education (CE) is for improving these individuals' postrelease outcomes. The question is even more salient now, given the challenging funding environment that states and localities face from the 2008 recession and its aftermath. With funding from the Second Chance Act of 2007, the U.S. Department of Justice's Bureau of Justice Assistance (BJA) asked RAND to help answer this question as part of a comprehensive examination of the current state of CE for incarcerated adults and juveniles.

To do so, we systematically reviewed CE programs for incarcerated adults and juveniles. The study included a meta-analysis of CE's effects on the postrelease recidivism and employment rates of incarcerated adults, as well as a synthesis of evidence on CE programs for juveniles. And to put the recidivism findings for adults in context, the study also compared the direct costs of CE for adults with those of reincarceration. In addition, it included a nationwide survey of state CE directors to examine how CE is provided today and what impact the recession has had on states. Finally, researchers drew on the comprehensive evaluation results as a whole to examine current and emerging trends in CE and to identify strategies that may strengthen the field moving forward.

Correctional Education for Adults Is Both Effective and Cost-Effective

To answer the question of whether CE is effective, we reviewed all studies that evaluated CE programs that were released between 1980 and 2011. To synthesize the findings from multiple studies, we conducted a meta-analysis to assess

Key findings:

- Correctional education (CE) improves the chances that adult inmates released from prison will not return and may improve their chances of postrelease employment.
- Adult CE programs can be cost-effective when it comes to recidivism, yielding about five dollars on average in cost savings for each dollar spent.
- Several of the evaluated CE programs for incarcerated juveniles show promise; the field is ripe for larger-scale randomized trials.
- The 2008 recession and aftermath substantially decreased medium and large states' CE budgets between fiscal years 2009 and 2012, leading to a contraction of academic program capacity and the number of students in these programs.
- The role of computer technology in CE is growing in importance; the use of computers is common in CE programs, but access to live (or simulated) Internet by inmate students and the use of Internet-based instruction is limited.
- Of those states that said they were planning to implement the new 2014 General Education Development exam, nearly half are concerned about the impact of implementing it in 2014, and most were concerned about the length of time needed to prepare adult inmates to take the exam.
- Many concrete steps can be taken to move the field forward, including research aimed at understanding what makes specific CE programs more effective than others and efforts to improve the quality of the evidence base.

how effective CE programs are in helping to reduce recidivism and improve postrelease employment. We first rated the quality or rigor of the studies' research designs using the Maryland Scientific Methods Scale, where Level 1 is the least rigorous design (e.g., a study with no comparison group) and Level 5 is the most rigorous one (a well-executed randomized controlled trial with low attrition). All told, 50 studies for



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recidivism and 18 studies for postrelease employment (those rated Level 2 or above) were included; for the highest-quality designs (Levels 4 and 5), there were only seven studies for recidivism and one for employment.

Based on the higher-quality research studies (Levels 4 and 5), we found that, on average, *inmates who participated in CE programs had a 43 percent lower odds of recidivating than inmates who did not.* These results are consistent even when the lower-quality studies are included. This translates to a 13-14 percentage-point reduction in the risk of recidivating for those who participated in CE programs versus those who did not. In general, studies with adult basic education, high

a three-year reincarceration rate. We found that the *direct costs of reincarceration were/hrgreater than the direct costs of providing CE.* For the pool of 100 inmates, providing CE led to three-year cost savings of \$870,000 to \$970,000 for those 100 inmates alone. This means that *every dollar spent on CE programs returns about five dollars on average in cost savings given reductions in reincarceration.* Looked at another way, to be cost-effective-or break even-a CE program would need to reduce the three-year reincarceration rate by between 1.9 and 2.6 percentage points. Given that we found a 13-percentage-point reduction in the risk of reincarceration three years following release, CE programs are clearly cost-effective. Also, such results are likely conservative, because they do not include the *indirect costs* of reincarceration.

Several Evaluated Correctional Education Programs for Incarcerated Juveniles Show Promise

Unlike adult offenders, juvenile offenders have a right to a public education, which means that all interventions for incarcerated youth must include a CE component. Thus, the question is not whether to provide education services for juveniles in correctional facilities, but which types of programs are most effective. We conducted a systematic review and research-synthesis of juvenile academic or vocational/CTE CE programs provided in a correctional facility setting, regardless of jurisdiction. We found that interventions, methods, and outcomes of interest varied a great deal across the systematic review, with the studied interventions falling

CE for adult inmates leads to a 13-percentage-point reduction in their risk of recidivating.

school/General Education Development (GED), postsecondary education, and/or vocational/career technical education (CTE) training programs all showed a reduction in recidivism.

In looking at postrelease employment, we found (in using the 18 studies) that *the odds of obtaining employment post-release among inmates who participated in CE (either academic or vocational program,) were 13 percent higher than for those who did not.* But because only one study had a high-quality research design, the findings are only suggestive about whether CE is effective in improving postrelease employment outcomes.

And *CE is cost-effective.* We conducted a basic cost comparison using a hypothetical pool of 100 inmates, the direct costs of CE programs and of incarceration itself, and

into one of six categories: Corrective Reading (a commercially packaged curriculum), computer-assisted instruction (comprising three other packaged reading interventions), personalized instruction, other remedial instruction, vocational education, and GED completion.

Using the same quality scale we used for the adult meta-analysis, we identified 18 studies that used eligible methods (in this case, comparison-group studies or well-executed single-case design). Given the small number of studies in each category, we cannot easily extrapolate the effects of differential dosages or implementation approaches. But given the broader research literature on each of the interventions examined, *two interventions showed particular promise: Read 180 (for the outcome of reading improvement) and a personal-*

ized and intensive approach piloted at the Avon Park Youth Academy in Florida (on the outcomes of diploma completion and postrelease employment). Both are supported by a large and rigorous study in a juvenile correctional setting, and Read 180's effectiveness is also substantiated by several large and well-executed studies outside of correctional facilities. We also found evidence for two other packaged interventions and for vocational education/CTE and GED, but the underlying studies were too small to warrant generalization or were subject to selection bias. Given our systematic review of the literature on education provided to juveniles in institutional settings, we believe that *the field is ripe for large-scale randomized trials.*

reductions (10 percent and 8 percent decreases, respectively). Medium and large states in general reported larger reductions in capacity and in the number of teachers and students than small states. *Vocational training programs seemed to have fared better* in these areas, and there seems to be a growing emphasis across states on providing vocational education programming that will lead to industry or nationally recognized certificates.

Two key trends affecting CE are the growing role of information technology and the implementation of the new 2014 GED exam. Twenty-four states reported offering Microsoft Office certification as part of their vocational education/CTE programs, *reflecting the importance of computing skills for today's job market. But the role of computers in CE is a*

The 2008 recession significantly reduced CE spending across states.

State Correctional Education Directors Describe Pressures on CE Programs

In our early research on CE, we heard that the 2008 recession and its aftermath had a substantial effect on CE programs for incarcerated adults, but we had no systematic data on its impact or on how the landscape of adult CE is changing. So, in June 2011, we fielded a web-based survey to state CE directors to help fill this critical void. We present the results overall and then compare differences between small, medium, and large states. Using data on states' adult prison populations in 2012, we classified states by size: small states (up to 24,999 inmates), medium states (25,000-49,999), and large states (50,000 or more). The overall response rate was 46 out of 50 states, or 92 percent.

States vary in the types of CE programs offered. Most states offer adult basic education, GED courses, and vocational education/CTE programs, and most reported having special education courses. But only 32 of the 46 states offered adult secondary and postsecondary education, with smaller states less likely to do so. Postsecondary education classes are primarily paid for by individual inmates or their families.

The 2008 recession led to an overall decrease of 6 percent, on average, in states' CE budgets between fiscal years 2009 and 2012. The largest impact was felt by medium and large states (on average a 20 percent and 10 percent decrease, respectively).

Thus, the capacity of academic education programs contracted: 20 states reduced the number of course offerings, and the number of academic teachers who were employees decreased by 24 percent on average. Also, *the overall number of adult students in academic programs decreased on average by 4 percent;* however, medium and large states reported greater

mixed story. Although the use of computers for instructional purposes is common—39 states use desktops for CE, and 17 states use *laptops-internet access and use of internet-based instruction is limited.* In 30 states, only teachers and vocational instructors have access to live Internet technology; in 26 states, adult students do not have any access to Internet technology (simulated or live).

The GED is the main way inmates earn high school equivalency diplomas and GED completion is often a prerequisite for vocational training programs. The new 2014 GED exam not only represents a more rigorous test but also relies on computer-based testing—a profound change to states' CE programs. *Thirty-one states plan to implement the 2014 GED exam, and all but two of the states expressed concerns about the new exam and computer-based testing.* Nineteen states were concerned about their teachers being adequately prepared to reach the new GED exam, and 24 were concerned about the time it may take to prepare students for the more rigorous exam. Fourteen states expected that the new GED exam and the use of computer-based testing may have a negative effect on the number of adult inmates prepared to take it, and 16 expected a negative effect on GED completion rates. Medium and large states, in particular, expected to encounter challenges in implementing the new GED exam and computer-based testing.

Concrete Steps Can Provide Opportunities to Move the Field Forward

Given the study's findings, the debate should no longer be about whether CE is or is not effective or cost-effective for incarcerated adults. But the available literature provides

less certainty on the effectiveness of CE for incarcerated juveniles—some practices are clearly promising, but the knowledge base is thin. Still, the debate should now focus on *identifying the gaps in our knowledge and opportunities to move the field forward*. Because of limitations in the quality of the evidence base) we are unable to get inside the "black box" to answer questions about what dosage is associated with effective programs or what models of instruction and curriculum

delivery are most effective in a correctional environment—for either adult or juvenile CE. Answers to such questions are critical to inform policy discussions about trade-offs and modifications to CE programs in a resource-constrained environment.

This table offers recommendations to move the CE field forward, in particular for improving the evidence base and improving CE for adults and juveniles.

Recommendations to Move the Correctional Education Field Forward

Improving the Evidence Base

- Conduct research focused on what does and does not work in CE (e.g., dosage, instructional types, curriculum delivery)
- Leverage federal and state grant mechanisms to encourage
 - Stronger research designs to help establish a causal relationship between CE participation and successful outcomes for adults and juveniles
 - Better measurement of program dosage
 - More detailed identification of program characteristics to help policymakers identify promising or evidence-based programs that could be replicated in other settings and specific exemplary programs
 - Further examination of more proximal indicators of program efficacy to help better understand how CE helps shape the way adults and juveniles reintegrate into the community
- Establish a study registry of CE evaluations and research to inform policy and programmatic decisionmaking

Improving Correctional Education for Adults

- Focus research efforts at the federal and state levels on evaluations of different educational instructional models, of innovative strategies to implement information technology in the classroom and enhance instruction, and of instructional quality in CE settings
- Assess and monitor the impact of the 2014 GED exam and computer-based testing on CE implementation and outcomes, and consider technical assistance to help educators teach the more rigorous content in the new GED
- Given the shifting needs of the 21st century workforce, consider a summit at the state and federal levels with private industry about what opportunities are available to former inmates and what skills will be needed in the future

Improving Correctional Education for Juveniles

- Develop large-scale randomized trials and rigorous evaluations of natural experiments and encourage partnerships between educators, correctional systems, and researchers



This research brief describes work done by RAND Justice, Infrastructure, and Environment and documented in *How Effective is Correctional Education and Where Do We Go from Here? The Results of a Comprehensive Evaluation*, by Lois M. Davis, Jennifer L. Steele, Robert Bozick, Malcolm V. Williams, Susan Turner, Jeremy N. V. Miles, Jessica Saunders, and Paul S. Steinberg, RR-564-BJA, 2014 (available at http://www.rand.org/pubs/research_reports/RR564.html). The RAND Corporation is a nonprofit research institution that helps improve policy and decisionmaking through research and analysis. RAND's publications do not necessarily reflect the opinions of its research clients and sponsors. RAND® is a registered trademark. © RAND 2014

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How Effective Is Correctional Education, and Where Do We Go from Here?

The Results of a Comprehensive Evaluation

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Summary

Introduction

Each year, more than 700,000 incarcerated individuals leave federal and state prisons; within three years of release, 40 percent will have committed new crimes or violated the terms of their release and be reincarcerated. Although a number of factors impede the ability of ex-offenders to successfully reintegrate into communities and, thus, affect recidivism rates, one key factor is that many ex-offenders do not have the knowledge, training, and skills to support a successful return to their communities. Research, for example, shows that ex-offenders, on average, are less educated than the general population: 37 percent of individuals in state prisons had attained less than a high school education in 2004, compared with 19 percent of the general U.S. population age 16 and over; 16.5 percent of state prisoners had just a high school diploma, compared with 26 percent of the general population; and 14.4 percent of state prison inmates had at least some postsecondary education, compared with 51 percent of the general U.S. adult population. Moreover, literacy levels for the prison population also tend to be lower than that of the general U.S. population.

This lower level of educational attainment represents a significant challenge for ex-offenders returning to local communities, because it impedes their ability to find employment. A lack of vocational skills and a steady history of employment also have an impact, with research showing that incarceration impacts unemployment and earnings in a number of ways, including higher unemployment rates for ex-offenders and lower hourly wages when they are employed. Also, individuals being released to the community face a very different set of job market needs than ever before, given the growing role of computer technology and the need for at least basic computer skills.

Given these gaps in educational attainment and vocational skills and the impact they have on ex-offenders, one strategy is to provide education to inmates while they are incarcerated, so that they have the skills to support a successful return to their communities. Historically, support for educational programs within correctional settings has waxed and waned over time as the nation's philosophy of punishment has shifted from rehabilitation to crime control.

Although there is general consensus today that education is an important component of rehabilitation, the question remains: How effective is it in helping to reduce recidivism and improve postrelease employment outcomes? The question is especially salient as the nation as a whole and states in particular have struggled with the need to make spending cuts to all social programs due to the recession of 2008 and its long aftermath. With funding from the Second Chance Act of 2007 (Pub. L. 110-199), the U.S. Justice Department's Bureau of Justice Assistance awarded RAND a cooperative agreement in 2010 to comprehensively examine the current state of correctional education for incarcerated adults and juveniles, where it is headed,

which correctional education programs are effective, and how effective programs can be implemented across different settings.

The study was designed to address the following key questions of importance to the field of correctional education:

1. What is known about the effectiveness of correctional education programs for incarcerated adults?
2. What is known about the effectiveness of correctional education programs for juvenile offenders?
3. What does the current landscape of correctional education look like in the United States, and what are some emerging issues and trends to consider?
4. What recommendations emerge from the study for the U.S. Department of Justice and other federal departments to further the field of correctional education, and where are there gaps in our knowledge? What promising practices, if any, emerge from this review and evaluation?

To address these questions, we used a mixed-methods approach. This report first presents a summary of the prior systematic literature review and meta-analysis of adult correctional education programs (Davis et al., 2013), which included studies completed between 1980 and 2011. It then presents two new sections: a systematic literature review of primary studies of correctional education programs for juveniles and a nationwide web-based survey of state correctional education directors. We conclude with a set of recommendations for moving the field forward.

For purposes of our study, we defined *correctional education for incarcerated adults* as including the following:

- Adult basic education: basic skills instruction in arithmetic, reading, writing, and, if needed, English as a second language (ESL)
- Adult secondary education: instruction to complete high school or prepare for a certificate of high school equivalency, such as the General Education Development (GED) certificate
- Vocational education or career technical education (CTE): training in general employment skills and in skills for specific jobs or industries
- Postsecondary education: college-level instruction that enables an individual to earn college credit that may be applied toward a two- or four-year postsecondary degree.

To meet our definition of correctional education, the program had to be administered at least partly within a correctional facility. Programs that also included a postrelease transition component remained eligible as long as part of the program was administered in a correctional setting.

For the juvenile program systematic review, we define *incarcerated youth* as individuals under age 21 who are legally assigned to correctional facilities as a result of arrest, detainment for court proceedings, adjudication by a juvenile court, or conviction in an adult criminal court (Office of Juvenile Justice and Delinquency Prevention, 2013). We define *correctional education* as any academic or vocational education/CTE program provided within the correctional facility setting, regardless of jurisdiction. As with our adult review, we permitted eligible

interventions for juveniles to include an aftercare (postrelease) component, but the interventions had to be delivered primarily in the correctional facility.

How Effective Are Correctional Education Programs for Incarcerated Adults?

In terms of the effectiveness of correctional education programs for incarcerated adults, early reviews in this area found inconclusive evidence to support their efficacy—a finding that contributed to the popular belief that “nothing works” in prisoner rehabilitation; however, this conclusion may have been premature, given that appropriate analytic techniques had not been developed. More recent reviews, using meta-analysis techniques, question the conclusions of the earlier work, finding evidence of a relationship between correctional education program participation before release and lower odds of recidivating after release (Wilson, Gallagher, and MacKenzie, 2000; MacKenzie, 2006; Aos, Miller, and Drake, 2006). However, the most recent meta-analyses (Aos, Miller, and Drake, 2006; MacKenzie, 2006) did not consider employment outcomes; thus, whether program participation is associated with postrelease success in the labor market remained unclear.

These earlier reviews provide the context for the current systematic review and meta-analysis. Our systematic review scanned the universe of potential documents to compile all available empirical research studies that examine the effect of correctional education programs on the three outcomes of interest—recidivism, postrelease employment, and reading and math scores. This search yielded 1,112 documents, of which 267 were identified as primary empirical studies. To be in our meta-analysis, the study needed to meet three eligibility criteria: (1) evaluate an eligible intervention, defined here as an educational program administered in a jail or prison in the United States published (or released) between January 1, 1980, and December 31, 2011; (2) measure the effectiveness of the program using an *eligible outcome measure*, which for our meta-analysis included recidivism, postrelease employment, and achievement test scores; and (3) have an *eligible research design*, which, for our purposes, is one where there is a treatment group comprising inmates who participated in or completed the correctional education program and a comparison group of inmates who did not.

Of the 267 primary empirical studies, 58 met all three eligibility criteria.¹ With respect to recidivism, based on the higher-quality research studies, we found that, on average, *inmates who participated in correctional education programs had a 43 percent lower odds of recidivating than inmates who did not*, thus indicating that correctional education is an effective strategy for reducing recidivism.² This estimate is based only on nine effect sizes from studies that met higher levels of rigor (i.e., earned 4s or 5s on the Maryland Scientific Methods Scale), but the results were very similar even when the lower-quality studies were included in the analysis. *This translates to a reduction in the risk of recidivating of 13 percentage points* for those who participated in correctional education programs versus those who did not.

¹ Our recidivism analysis is based on 71 effect sizes; from 50 studies, our employment analysis is based on 22 effect sizes from 18 studies, and our test score analysis is based on nine effect sizes from four studies.

² We define recidivism a number of ways in the individual studies reviewed, including reoffending, rearrest, reconviction, reincarceration, technical parole violation, and “successful completion of parole. In our pool of 50 studies that had recidivism outcomes, the majority used reincarceration as the outcome measure (n = 34).

When aggregating across 18 studies that used employment as an outcome, we found that *the odds of obtaining employment postrelease among inmates who participated in correctional education (either academic or vocational/CTE programs) were 13 percent higher than the odds for those who did not.* However, the findings are only suggestive about whether correctional education is an effective strategy in improving postrelease employment outcomes because only one of the 18 studies was of higher quality (level 4 or higher), thus limiting our ability to make a more definitive statement.

When aggregating across four studies that used achievement test scores as an outcome, we found that *learning gains in both reading and math among inmates exposed to computer-assisted instruction were similar to learning gains made by inmates taught through traditional (face-to-face) instruction methods.*³

Although doing a formal cost-effectiveness analysis was beyond the scope of this study, we wanted to provide some context for what the meta-analysis findings mean. Focusing on the outcome of recidivism and using a hypothetical pool of 100 inmates, we compared the direct costs of correctional education programs and of incarceration itself. We found that *the direct costs of reincarceration were far greater than the direct costs of providing correctional education.* More specifically, for a correctional education program to be cost-effective or breakeven, we estimated that it would need to reduce the three-year reincarceration rate by between 1.9 percentage points and 2.6 percentage points. Given that our findings indicate that participation in correctional education programs is associated with a 13-percentage-point reduction in the risk of reincarceration three years following release, *correctional education programs appear to far exceed the breakeven point in reducing the risk of reincarceration.* We also note that the results are likely to be conservative, because they do not include the indirect costs of reincarceration.

How Effective Are Correctional Education Programs for Juvenile Offenders?

When it comes to assessing correctional education programs for juvenile offenders, we face a fundamental difference between juvenile and adult correctional policy: Juveniles in the United States have a right to a public education. Therefore, all programs for incarcerated youth include an educational component. This means that the question facing policymakers is not *whether* to provide education services for juveniles in correctional facilities, but *which types of programs are most effective.* The meta-analytic approach in our adult analysis included many types of correctional education, each of which was compared with a no-correctional-education scenario. However, that approach is less well suited to studying the effectiveness of juvenile correctional education programs, because correctional education programs are typically present in all juvenile facilities. Instead, our approach to synthesizing research on juvenile correctional education was to undertake a systematic review, in which we screened and evaluated articles using the same criteria as we used in our adult meta-analysis. But rather than aggregating estimated effect sizes across studies that are testing widely different hypotheses for treatment versus comparison groups, we focus on describing the balance of evidence favoring the *types of interventions* examined in the literature we reviewed.

Together, the document search process resulted in 1,150 citations for title-and-abstract screening, which, in turn, led to 157 manuscripts eligible for full-text screening. Of those,

³ Three of the four studies, representing small effect sizes, were of higher quality.

18 studies were deemed eligible for the systematic review by having met three criteria: (1) be an *eligible intervention*, defined as any academic or vocational education/CTE intervention program, with an *eligible population*, defined as consisting primarily of individuals age 20 or below, in an *eligible setting*, defined as any facility regardless of jurisdiction (i.e., local, state) to which juveniles are confined because of arrest, court proceedings, or adjudication/conviction; (2) use *eligible outcome measures*, defined as any measure of recidivism (e.g., rearrest, reconviction, or reincarceration), postrelease employment, academic attainment (e.g., GED or high school completion), and academic performance (e.g., test scores in reading and mathematics); and (3) have an *eligible research design*. This includes a *comparison-group design* in which a group of incarcerated juveniles who received an intervention is compared with a group of incarcerated juveniles who did not, or who received a different version of the treatment. We also included a class of approaches called *single-case designs*, which involve systematically introducing an intervention with one or a few students in an effort to demonstrate causal effects on outcomes such as participant behavior or learning. These studies typically include a large number of pre- and post-intervention outcome measurements, allowing students to function as their own controls. Because these designs usually focus on only a handful of participants, they typically preclude traditional hypothesis testing. This means that their findings cannot be generalized to a larger, hypothetical population of interest.

Our systematic review reveals great heterogeneity in terms of interventions, methods, and outcomes of interest. Among the 18 eligible studies we identified (16 comparison-group studies and two well-executed single-case design ones), we classified the interventions into six categories—Corrective Reading (a commercially packaged curriculum), computer-assisted instruction, personalized instruction, other remedial education, vocational education, and GED completion. Studies in the first two categories focused on packaged and branded reading interventions (Corrective Reading, Read 180, Fast ForWord, and TUNE in to READING) and focused on reading performance as the dependent variables of interest. Studies in the latter three categories focused on a broader set of outcomes, including not only reading and mathematics performance but also measures such as diploma completion, postrelease employment, and postrelease recidivism.

Given the small number of studies in each category, we cannot easily extrapolate the effects of differential dosages or implementation approaches. However, taken in conjunction with the broader research literature on each of the interventions examined, our systematic review does identify *two interventions that show particular promise: Read 180 (for reading improvement) and Florida's Avon Park Youth Academy (for diploma completion and postrelease employment)*. Both of these interventions are supported by a large and rigorous study within juvenile correctional settings, and the effectiveness of Read 180 is further substantiated by several large and well-executed studies outside of correctional facilities. Beyond these compelling studies, we find that evidence for two other packaged interventions, Corrective Reading and TUNE in to Reading, is positive, but the underlying studies are too small to warrant generalization. Evidence concerning vocational education/CTE and GED completion is also positive, but the underlying research designs are vulnerable to selection bias. This limits the quality of conclusions that can be drawn about these programs.

What Is the Current Correctional Education Landscape and What Trends Are Important?

When we began the correctional education study, we recognized early on that the 2008 recession had a substantial effect on the field of correctional education, with many states reporting cuts in funding for programs and changes to their delivery models for educating incarcerated adults. This means that today correctional education in the United States likely looks very different from correctional education during the time that many of the studies in the meta-analysis and adult systematic review were undertaken. Understanding these differences helps us to put our review results in context and provides the basis for forward-looking policy recommendations.

In July 2013, we fielded the RAND Correctional Education Survey to help fill a critical void in our understanding of the organization and delivery of academic and vocational education/CTE to incarcerated adults. This web-based survey of correctional education directors in all 50 states provides us with insights into how states dealt with the recession of 2008, how correctional education is currently provided to incarcerated adults in the United States, what technology is being used, and how states fund correctional education. We also gathered information on preparations for the new 2014 GED exam. We classified the size of state by the adult prison population in 2012 and considered small states to have an adult prison population in the range 1-24,999; medium states, in the range 25,000-49,999; and large states, 50,000 or more adult prisoners. The overall response rate was 46 out of 50 states, or 92 percent. Of these 46, 42 completed the entire questionnaire, and four provided only partial responses to the survey. Forty of the respondents had responsibility for both adult correctional education and vocational training in their state; five respondents for academic education only; and one respondent for vocational training only.

Variation in Correctional Education Programming Across the States

In 2013, most states offered adult basic education, GED courses, and vocational education/CTE programs, and most reported having special education courses available. Higher-level educational programming such as adult secondary education and postsecondary education was offered in 32 of the states, although smaller states were less likely to do so. Postsecondary education courses today in 28 states are primarily paid for by the individual inmate or by family finances; in 16 states, state funding is used to cover the costs of postsecondary education, and 12 states reported using college or university funds.

Participation in correctional education programs is mandatory in 24 states for adult inmates without a high school diploma or GED, and in 15 states it is mandatory for adults below a certain grade level, with smaller states less likely to require mandatory participation.

An emerging trend is a growing emphasis on providing vocational education/CTE programming that will lead to industry or nationally recognized certifications. Smaller states were more likely to emphasize vocational education/CTE training for state prisoners than medium-sized or large states.

Impact of the 2008 Recession

The effect of the 2008 recession was an overall 6 percent decrease on average in states' correctional education budgets between fiscal years (FYs) 2009 and 2012. The largest impact on budgets was felt by medium-sized and large states (on average, a 20 percent and 10 percent

decrease, respectively). Overall, the mean dollars spent per student for correctional education was \$3,479 in FY2009, compared with \$3,370 in FY2012—this represented a 5 percent decrease on average in the dollars spent per student.

The result was a contraction in the capacity of academic education programs and an overall decrease of 4 percent on average in the number of adult students who participated in these programs, with medium-sized and large states experiencing somewhat larger decreases (10 percent and 8 percent, respectively, compared with a 1 percent decrease for small states). In addition, 20 states reduced the number of course offerings for academic programs during this time period.

The effect of the staffing and capacity cost-cutting measures on teachers for academic programs was particularly felt in medium-sized and large states. Overall, there was, on average, a 4 percent decrease in the number of academic teachers who were employees. The largest decrease occurred in medium-sized and large states (on average, 44 percent and 20 percent, respectively, compared with a 5 percent decrease for small states).

Vocational education/CTE programs seemed to have fared somewhat better during the recession than academic programs in terms of reductions in the number of students enrolled in vocational education/CTE programs and in the number of instructors. On average, there was a 1 percent increase in the number of students enrolled in vocational/CTE programs between FYs 2009 and 2012. However, this appears to be largely driven by an increase, on average, of 7 percent within the smaller states. In comparison, the medium-sized and large states experienced a reduction in the number of students in vocational education/CTE programs, on average, of 4 percent and 11 percent, respectively. There also appears to have been a modest expansion of vocational education/CTE programs in small and medium-sized states during this time period, as evidenced by a modest increase between FYs 2009 and 2012 in the number of vocational education/CTE instructors who were employees (on average 8 percent and 24 percent, respectively for small and medium-sized states). Still, 38 percent of small states and 50 percent of medium-sized states reported that they had reduced the number of course offerings for vocational education/CTE programs in response to budget cuts.

Use of Information Technology

One of the major trends that will shape the future of work in the 21st century is the growing role of information technology in society, with technological change resulting in an increased demand for a skilled workforce (Karoely, 2013). Further, distance learning and online instruction are growing trends in the United States, with increasingly more educational courses being offered online by either colleges or virtual high schools. Computer-assisted instruction is also appealing in offering the opportunity to tailor instruction and coursework to the needs of the individual student.

The importance of computing skills for today's job market is recognized by state correctional education directors, as reflected by the fact that 24 states reported offering a Microsoft Office certification as part of their vocational education/CTE programs. However, our survey results indicate that the role of computer technology in correctional education is a mixed story. We found that the use of computers for instructional purposes is common, with 39 states reporting the use of desktop computers (either standalone or networked) and 17 states reporting the use of laptops. However, access to the Internet and the use of internet-based instruction (one-way or interactive) is reported to be limited in states' correctional facilities. Thirty states reported that only teachers and instructors have access to live Internet technology. In 26 states,

inmate students lack access to any Internet technology, and in only 16 states do inmate students have access to simulated Internet programs. In terms of instructional methods that use some type of technology, only ten states reported that they had closed-circuit television, and only a few states reported using it to provide one-way or interactive video/satellite instruction.

Readiness for the 2014 GED Exam and Computer-Based Testing

The GED is the predominant way that inmates earn their high school equivalency diplomas (Harlow, 2003), and GED completion is often a prerequisite for many vocational training programs. The 2014 GED exam not only represents a more rigorous test, being aligned with the Common Core State Standards (CSS), but will also rely on a new test delivery model—namely, computer-based testing to replace the old paper-and-pencil exam (Lockwood et al., 2013). This represents a profound change to states and one that presents some key challenges.

GED completion rates were seen as an important outcome indicator to track by 40 states that took part in our survey. Yet, of the 31 states planning to implement the 2014 GED exam, 14 states expected that the more rigorous GED exam and the use of computer-based testing may have a negative effect on the number of adult inmates who will be prepared to take the new exam, and 16 states expected a negative effect on GED completion rates. This was particularly true for the medium-sized and large states.

All but two of the 31 states planning to implement the 2014 GED exam expressed concerns about the new exam and computer-based testing. Nineteen states were concerned about their teachers being adequately prepared to teach the new GED exam, and 24 of the states were concerned about the length of time it may take to prepare students for the more rigorous exam. In addition, 12 of the states reported concerns that limited access to computers may preclude some students from taking the new GED exam. Also, responding directors in 14 of the states reported concerns that their teachers may not be adequately prepared to implement computer-based testing. Other concerns expressed were the cost to the individual student and the cost of the new GED exam to their institutions, with some states considering the adoption of alternative high school equivalency exams. In general, smaller states expressed fewer concerns; however, our survey results suggest that states with the majority of the prison population (i.e., medium-sized and large states) expect to encounter a number of challenges in implementing the new GED exam and test delivery system.

What Are Some Key Recommendations for Moving Forward?

This study's key finding is that correctional education is effective in reducing recidivism for incarcerated adults and that there is some evidence that it also is effective, especially vocational education/CTE programs, in improving individuals' likelihood of postrelease employment. Also, our cost analysis showed that correctional education is highly cost-effective for incarcerated adults: For every dollar spent on correctional education, five dollars are saved on three-year reincarceration costs. But the available literature provides less certainty on the effectiveness of correctional education for incarcerated juveniles; some practices are clearly promising, but the knowledge base is thin. Still, the debate should no longer be about *whether* correctional education is effective or cost-effective; rather, the debate should focus on *where the gaps in our knowledge are and opportunities to move the field forward*.

We offer some recommendations and next steps that are drawn from our evaluation results; while this report is to the U.S. Attorney General, these recommendations will also be of interest to other federal departments and agencies focused on reentry. These recommendations are intended to provide a roadmap for building on the gains made to date in educating incarcerated individuals to improve their chances of success upon release and reentry into local communities.

Correctional Education for Adults

Our survey results provide solid evidence about the dramatic impact the 2008 recession had on correctional education in the United States. The recession and its long aftermath led to a reduction in correctional education spending and a decrease in the number of incarcerated adults who participate in these programs. This raises the question of whether the trade-offs we are making in terms of cost savings today with reductions in educational programming are worthwhile, considering the future costs of reincarceration and the effect that such lost opportunities may have on individuals' chances of finding employment and being successful in reintegrating back into society. State corrections directors want to know how they can modify their models of education to trim their budgets while still maintaining the effectiveness of their programs. The results of our meta-analysis (Davis et al., 2013) show that correctional education programs are dramatically effective in reducing recidivism, and there is some evidence of improvements to postrelease employment outcomes. We also showed that correctional education programs are highly cost-effective for incarcerated adults. But because of limitations in quality of the evidence base, we cannot answer the other critical questions needed to inform discussions about modifications to educational programming in a resource-constrained environment. We concur with MacKenzie's (2008) assessment that we still are unable to get at what is inside the "black box" of what works in correctional education, to answer such questions as:

- What dosage is associated with effective programs, and how does it vary for different types of academic programs and students?
- What models of instruction and curriculum delivery (e.g., one-on-one, traditional classroom lectures, computer-based learning) are most effective in a correctional environment?
- Who benefits most from different types of correctional education programs?
- What principles from adult education and learning may be applicable to correctional education?

Thus, we recommend the following to help address these concerns:

- Focus research and evaluation efforts at the federal and state levels to address these questions so that policymakers and state correctional education directors can make informed trade-offs in budget discussions.
- Have federal and state governments and philanthropy fund (1) evaluations of programs that illustrate different educational instructional models, with the goal of getting inside the black box; (2) evaluations of programs that are trying innovative strategies to implement technology and leverage distance learning in the classroom; and (3) an analysis of what lessons from the larger literature on adult education may be applied to correctional education.

- Have the federal government monitor and assess the impact of the new GED and computer-based testing on correctional education implementation and outcomes. Consider opportunities to provide technical assistance to states in helping educators teach the material for the more-rigorous content in the new GED. In juvenile correctional settings, technical assistance for implementing the new Common Core State Standards, which have influenced the move toward a more-rigorous GED, is also likely to be needed.
- Conduct new research on instructional quality in correctional education settings, and on ways to leverage computer technology to enhance instruction in correctional settings.
- Given the changes in the U.S. economy and the shifting needs of the 21st century workforce, conduct an assessment at the federal and state levels about what such changes mean for the criminal justice-involved population. Consider a summit at the state and federal levels with private industry about what opportunities are available to formerly incarcerated individuals and what skills will be needed in the future.

Correctional Education for Juveniles

Based on our systematic review of the literature on education provided to juveniles in institutional settings, we believe that the field is ripe for larger-scale randomized trials. Two of the studies we reviewed, Loadman et al.'s (2011) Read 180 study and the National Council on Crime and Delinquency's (2009) Avon Park study, suggest that such studies, though challenging to undertake, are feasible. The literature is also ripe for rigorous evaluations of natural experiments, such as Aizer and Doyle's (2013) study of the effects of juvenile incarceration using naturally occurring random assignment to harsh judges. Studies that take advantage of rigorous causal methods in juvenile settings can shed much-needed light on what works in these settings. Several of the smaller randomized trials we include in our review have noted the difficulties of high student turnover in correctional facilities and of simply gaining permission to undertake research in these facilities (Shippen et al., 2012; Calderone et al., 2009). As such, **we recommend that the focus be on developing larger-scale randomized trials and rigorous evaluations of natural experiments.** Such research efforts will clearly take time to develop and execute. They will ideally be realized through long-term partnerships between researchers and correctional facilities. Because such partnerships take time to establish, there may also be a federal role in galvanizing them. The U.S. Department of Education Institute of Education Science's recent grant program for supporting research partnerships between school systems and researchers offers one potential model. Informed by such partnerships, facilities can make increasingly evidence-based decisions that not only improve their students' prospects but also reduce the social incidence of crime and delinquency.

Improving the Evidence Base

In our meta-analytic report (Davis et al., 2013), we laid out a number of recommendations to improve the evidence base for adult correctional education. Those recommendations also pertain to juvenile correctional education and merit summarizing here. **We recommend that the federal and state governments and philanthropy invest in well-designed evaluations of correctional education programs and use funding and grant mechanisms to encourage improvements in four areas to further develop the evidence base for correctional education:**

- **Apply stronger research designs** to help establish a causal relationship between correctional education participation and successful outcomes for inmates to help rule out the possibility of selection bias. In this context, identifying the appropriate comparison groups is important, as is establishing a study registry to help sort out the different effect sizes found across studies.
- **Measure program dosage** to help put the findings from individual studies in their proper contexts. "The lack of dosage information means that there is little to no empirical evidence that can help inform policymakers on "how much" correctional education is necessary to produce a change in the desired outcomes.
- **Identify program characteristics** to help policymakers identify promising or evidence-based programs that could be potentially replicated in other settings and specific exemplary programs.
- **Examine more proximal indicators of program efficacy** to help better refine the process through which correctional education helps shape how former inmates re-integrate into the community. "This includes understanding how improving the skills and abilities of inmates (i.e., "human capital" in economics parlance) could, in turn, improve inmates' chances of continuing education/training upon release and then finding gainful employment.

In addition, a study registry of correctional education evaluations would further aid in developing the evidence base in this field to help inform policy and programmatic decisionmaking.

Implications of Broader Trends in Corrections for Correctional Education

Several trends in the field of adult and juvenile corrections have important implications for correctional education that merit further consideration. First, *many states are undertaking measures to reduce the size of their state prison population using a variety of means*. "This includes both "front-end" strategies—such as reducing prison admissions, diverting offenders to county—rather than state-level institutions, or changing felonies to misdemeanors—and "back-end" strategies—such as reducing sentence lengths through earned credits or good time and revocations for probationers and parolees. All these changes in the correctional landscape have implications for how we think about providing academic education and vocational education/CTE to incarcerated adults. For example, there is California's Public Safety Realignment, where county jails now have some inmates serving sentences of two, three, or more years instead of the typical length of stay of two to three months. However, county jails are not set up to provide rehabilitative services over the long term, including academic programs and vocational/CTE programs. The result of various states and localities implementing strategies to keep low-level offenders at the local level is that, in some instances, we may end up with a two-tiered system of education where, ironically, more serious offenders who serve their sentence in state prison may have better access to correctional education programs than low-level offenders who serve their sentences in county jails. Such policy changes also raise other questions: Are there differences in access to academic education and vocational education/CTE programs depending on the setting where one serves one's sentence? Are there differences in educational and employment outcomes for offenders who serve their time at the local level compared with offenders serving their sentence in state prison systems?

Second, *a long-term trend in the field of juvenile corrections is to keep youth in the community in as many places as possible instead of placing them in correctional institutions, and to keep them at the local versus the state level.* Our systematic review focused on what works with incarcerated youth in part because the broader literature on educational interventions for juvenile offenders outside of correctional facilities is even more nebulous. An important direction for future research is to identify interventions that improve juveniles' educational, employment, and recidivism outcomes in less-restrictive settings, such as alternative schools or traditional schools. To guide policy improvements, stronger federal reporting requirements about local correctional education practices could help facilitate improved state and local comparisons of program effects. Whether collected federally or privately, a central repository of such information (e.g., staffing levels and expertise, curriculum used, hours of instruction provided, types of programs offered) would provide a valuable tool to policymakers and researchers alike.

We recommend that policymakers seek to assess and understand the implications of these trends in the field of corrections with respect to their impact on correctional education,

Concluding Thoughts

There are more than 2 million adults incarcerated in the United States. This study demonstrates that education programs can help adults get back on their feet upon release from prison and help juveniles involved with the juvenile justice system to continue with their education. Education programs are also highly cost-effective in helping to reduce recidivism. States will continue to operate in a reduced budget environment for the near future. The findings and recommendations we present here are intended to ensure that, moving forward, we understand how best to leverage academic education and vocational education/CTE programs to improve the reentry outcomes of incarcerated adults and juveniles.