Nondegree Credentials in Correctional Education

Status, Challenges, and Benefits

Prepared for the
U.S. Department of Education
Office of Career, Technical, and Adult Education

NATIONAL CENTER FOR INNOVATION
IN CAREER AND TECHNICAL EDUCATION

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July 2016

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### ABBREVIATIONS

<table>
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<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>ABE</td>
<td>adult basic education</td>
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<tr>
<td>ASE</td>
<td>adult secondary education</td>
</tr>
<tr>
<td>CPR</td>
<td>cardiopulmonary resuscitation</td>
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<tr>
<td>CTE</td>
<td>career and technical education</td>
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<tr>
<td>EEOC</td>
<td>Equal Employment Opportunity Commission</td>
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<tr>
<td>FBP</td>
<td>Federal Bonding Program</td>
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<tr>
<td>FCRA</td>
<td>Fair Credit Reporting Act</td>
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<tr>
<td>GED</td>
<td>General Educational Development</td>
</tr>
<tr>
<td>GEMEnA</td>
<td>Interagency Working Group on Expanded Measures of Enrollment and Attainment</td>
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<tr>
<td>HIRE</td>
<td>Hoosier Initiative for Re-Entry, Indiana Department of Workforce Development</td>
</tr>
<tr>
<td>HVAC</td>
<td>heating, ventilation, and air conditioning</td>
</tr>
<tr>
<td>NCCER</td>
<td>National Center for Construction Education and Research</td>
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<tr>
<td>NCICTE</td>
<td>National Center for Innovation in Career and Technical Education</td>
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<tr>
<td>O*NET</td>
<td>Occupational Information Network</td>
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<tr>
<td>OCTAE</td>
<td>Office of Career, Technical, and Adult Education</td>
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<tr>
<td>SIPP</td>
<td>Survey of Income and Program Participation</td>
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<tr>
<td>WOTC</td>
<td>Work Opportunity Tax Credit</td>
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EXECUTIVE SUMMARY

Providing incarcerated adults with education and training programs can improve their chances of obtaining a job after release and lower their recidivism rates (Davis et al. 2014). These programs include career and technical education (CTE) programs, or vocational training, which the U.S. Department of Justice, Bureau of Justice Statistics, defines as “special programs designed to train participants for a job” (Harlow 2003, p. 4). CTE programs typically help incarcerated adults earn one of the following nondegree credentials:

- **Certification**: A credential awarded by a certification body based on an individual demonstrating through an examination process that he or she has acquired the designated knowledge, skills, and abilities to perform a specific job. Certification is a time-limited credential that is renewed through a recertification process.

- **License**: A credential awarded by a government agency that constitutes legal authority to do a specific job. Licenses are based on some combination of degree or certificate attainment, certifications, assessments, or work experience; are time-limited; and must be renewed periodically.

- **Educational certificate**: A credential awarded for life by a training provider or educational institution based on completion of all requirements for a program of study, including coursework and test or other performance evaluations. Certificates, as an academic award, are not time limited and do not need to be renewed. Most educational certificates are awarded at the subbaccalaureate level, but a small number are awarded after the completion of a postsecondary degree. Certificates of attendance or participation are not in the definitional scope for educational certificates (U.S. Department of Education n.d.).

To gain a better understanding of the status, challenges, and benefits of offering programs that prepare individuals for nondegree credentials in prisons, researchers with the National Center for Innovation in Career and Technical Education (NCICTE) conducted a literature review and carried out telephone interviews with state correctional education administrators in eight states (Indiana, Kansas, Maryland, Michigan, North Carolina, Ohio, Oregon, and Vermont) and employers and employment placement specialists that work with formerly incarcerated individuals. The following is a summary of the key study findings:

---

1 Correctional institutions commonly use the term vocational training or vocational education to describe job training or CTE programs.
• **Program need:** The need for correctional education programs, including those that lead to nondegree credentials, is great. Although 40 percent of incarcerated adults lack a high school diploma, by some estimates less than one-quarter of adults incarcerated in federal and state correctional institutions participate in adult secondary education programs. Far fewer participate in postsecondary education and training programs before release (Crayton and Neusteter 2008; Harlow 2003).

• **Program outcomes:** A number of studies have been conducted to determine the post-release outcomes of correctional education. Only a few of these studies focus on the outcomes of nondegree credential programs. Of those that do make a distinction between the different types of education programs offered in prisons, CTE programs were shown to have a more positive effect on recidivism rates and prison costs than other education programs, such as adult basic education (Aos, Miller, and Drake 2006; MacKenzie 2006; Wilson, Gallagher, and MacKenzie 2000).

• **Program enrollment:** According to the states interviewed for the study, incarcerated adults who participate in nondegree credential programs typically must meet several eligibility requirements related to their educational attainment and correctional status. They are also perceived to be more motivated and mature than those who do not enroll. Their motivation may be influenced by various incentive structures (e.g., time off sentence) that some state departments of corrections offer.

• **Program persistence and completion:** Motivation and maturity positively affect student persistence in and completion of a correctional education program. A student's prior educational level is also a factor, as are a range of environmental conditions that can positively or negatively affect persistence and completion, such as being removed from a program because of facility transfer.

• **Program offerings:** Across the states interviewed for the study, the most common correctional education programs that lead to nondegree credentials are in the construction trades and those required for in-demand jobs (e.g., heating, ventilation, and air conditioning; welding; and automotive repair). The most common programs among the female population vary because of capacity issues but include custodial service, computer technician, cosmetology, and culinary arts.

• **Program cost:** The diversity among programs that lead to nondegree credentials offered in prison and variations in how states calculate program costs make it difficult to provide a general range for the cost of administering programs. States typically pay for programs, though, using department of corrections budgets with some supplemental funding coming from CTE state grants, adult education state grants, and vocational rehabilitation grants.
• **Program fidelity and quality**: All of the states interviewed for the study regularly review their nondegree credential programs to ensure they are current and meet accreditation standards by national certification organizations or state licensing boards. They also reported that their programs typically articulate with community college programs.

• **Facility obstacles**: Correctional facilities face a number of obstacles with offering programs leading to a nondegree credential, including competing demands for students’ time, class disruptions, facility transfers, technology and other resource restrictions, space limitations, and recruitment of qualified teachers. These challenges are common across most correctional education programs, however, and are not specific to CTE programs.

• **Student obstacles**: Incarcerated students face a number of challenges with persisting in and completing programs and earning a credential, including personal obstacles (e.g., low educational skills when entering the program and poor study skills), institutional obstacles (e.g., competing demands for student’s time and class disruptions), and post-release obstacles (e.g., lack of articulation agreements with community colleges and lack of employment assistance and other support services).

• **Economic value of program**: The employers and employment specialists interviewed for the study have anecdotal evidence indicating that nondegree credentials help formerly incarcerated individuals find employment.

With employers and employment placement specialists having only anecdotal evidence about the economic value of nondegree credential programs, more research is needed on how these programs affect employment, wages, and job stability after release. Also, which programs have the most impact on post-release outcomes, and why? More information is also needed on promising practices and the costs of these programs. Specifically, how are states addressing the challenges facing incarcerated students and facilities offering nondegree credential programs, and can these approaches be replicated in other facilities and states? What are the costs of education and training programs that lead to educational certificates, professional certifications, and licenses? Are the costs for these programs recouped through post-release outcomes such as lower recidivism rates? With this additional information, state departments of corrections will be in a better position to maintain and increase funding for their programs. They also will have the guidance they need to improve their programs that lead to nondegree credentials so that their students are well prepared to obtain a long-term, living-wage job after release and successfully transition out of the criminal justice system.
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INTRODUCTION

Nearly 2.3 million adults are incarcerated in our nation’s prisons and jails. Incarcerated adults are, on average, less educated than the general population (MacKenzie 2006). They also often lack job skills and a steady employment history (Petersilia 2003; Western, Kling, and Weiman 2001), which, combined with the stigma of their felony convictions, creates significant barriers to reentering the labor market when they are released (Pager 2003; Travis 2005).

Providing incarcerated adults with education and training programs not only improves their chances of obtaining a job after release but also lowers their recidivism rates (Davis et al. 2014). Although most states offer these programs to their incarcerated population, participation has declined over the last few decades (Crayton and Neusteter 2008; U.S. Department of Education 2012). For example, according to the most recent statistics available, the percentage of adults incarcerated in state prisons who participated in vocational programs dropped from 32 percent in 1997 to 27 percent in 2004. During that same time period, the state prison population grew nearly 10 percent, from 1,131,581 in 1997 to 1,244,311 in 2004 (Gilliard and Beck 1998; Harrison and Beck 2005).

Career and technical education (CTE), or vocational training, which the U.S. Department of Justice, Bureau of Justice Statistics, defines as “special programs designed to train participants for a job” (Harlow 2003, p. 4), typically help incarcerated adults earn a nondegree credential, such as an industry-recognized credential, state and local government issued occupational license, or educational certificate (see “Methodology,” below, for a definition of these nondegree credentials). Once released from prison, these adults are more likely to earn a higher salary than those who did not earn a nondegree credential (Ewert and Kominski 2014). However, more information is needed on these programs to assess their cost effectiveness and long-term outcomes.

This report is designed to document information currently available on programs that prepare individuals for nondegree credentials in adult corrections facilities. It provides descriptions of

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1 The definition of recidivism varies depending on the outcome measure used. Common outcome measures include reoffending, rearrest, reconviction, reincarceration, and technical parole violation. The majority of the studies included in Davis et al. 2014 used reincarceration as the outcome measure.
2 Correctional institutions commonly use the term “vocational training” or “vocational education” to describe job training or CTE programs.
3 Although the U.S. Department of Justice, Bureau of Justice Statistics’ definition of vocational programs does not delineate the type of credentials awarded to incarcerated students who complete these programs, the states interviewed for this study indicated that prison-based vocational programs typically result in nondegree credentials.
(1) the study methodology and a rationale for education and training programs in prisons; (2) the study findings, including the types of nondegree credential programs currently available to incarcerated individuals and the benefits and challenges of offering programs that lead to these credentials in a correctional environment; and (3) a research agenda for future studies.

**METHODOLOGY**

This report focuses on nondegree credentials, which the federal Interagency Working Group on Expanded Measures of Enrollment and Attainment (GEMEnA) defines as follows:

1. **Certification:** A credential awarded by a certification body based on an individual demonstrating through an examination process that he or she has acquired the designated knowledge, skills, and abilities to perform a specific job. Certification is a time-limited credential that is renewed through a recertification process.

2. **License:** A credential awarded by a government agency that constitutes legal authority to do a specific job. Licenses are based on some combination of degree or certificate attainment, certifications, assessments, or work experience; are time-limited; and must be renewed periodically.

3. **Educational certificate:** A credential awarded by an educational institution based on completion of all requirements for a program of study, including coursework and test or other performance evaluations. Certificates are typically awarded for life (like a degree). Certificates of attendance or participation in a short-term training (e.g., one day) are not in the definitional scope for educational certificates (U.S. Department of Education n.d.).

To gain a better understanding of the status, challenges, and benefits of offering programs that prepare individuals for nondegree credentials in prisons, researchers with the National Center for Innovation in Career and Technical Education (NCICTE) conducted a study to answer the following research questions:

- What data on programs that prepare individuals for nondegree credentials are collected at the state and federal levels?
- Who enrolls in nondegree credential programs and earns a credential?
- What types of credentials are most commonly awarded?
- What are the costs of administering nondegree credential programs in prison?
• How is program fidelity and quality assured within and across prisons?
• What obstacles do prisons face when offering programs that prepare individuals for nondegree credentials?
• What obstacles do incarcerated individuals face with obtaining nondegree credentials?
• What is the economic value of nondegree credentials, and do some credentials have more economic value than others?

The study consisted of a literature review and one to two telephone interviews with state correctional education administrators, employers, and employment placement specialists that work with formerly incarcerated individuals. NCICTE researchers first conducted the literature review to document existing research on nondegree credentials. The review also informed the development of the telephone interview protocols (see appendixes A and B). The interview protocols were tailored for prison administrators, employers, and employment placement specialists, and were designed to address gaps identified by the literature review. NCICTE researchers interviewed state correctional education directors or vocational program coordinators in eight states: Indiana, Kansas, Maryland, Michigan, North Carolina, Ohio, Oregon, and Vermont (see appendix C for a brief overview of the incarcerated population and vocational education programs in each state). These states were selected based on recommendations from the U.S. Department of Education’s Office of Career, Technical, and Adult Education (OCTAE). They also were selected because they have well-established prison-based programs that prepare individuals for nondegree credentials. Participating states were then asked to recommend employers or employment placement organizations that have successfully worked with formerly incarcerated adults. These include the following:

• **Indiana Department of Workforce Development, Hoosier Initiative for Re-Entry:** A state workforce development program that provides employability skills training, job placement services, and ongoing support to individuals entering the labor market after incarceration.

• **Kansas Departments of Corrections and Commerce:** Departments that share the salary of an alternative employment specialist who provides assessment, counseling, and employment placement support to the state’s corrections population.

• **Maico Industries, Inc., Kansas:** A manufacturer specializing in sign structures, traffic light poles, and rigid frame fabrication.
• **Michigan Economic Development Corporation, Community Ventures**: A public–private partnership that helps unemployed individuals pursue career opportunities in the state’s most distressed urban areas.

• **Vehicles for Change, Maryland**: A nonprofit organization that provides automotive training programs and discounted automobiles to individuals with financial challenges to help them achieve economic and personal independence.
RATIONALE FOR EDUCATION AND JOB TRAINING IN CORRECTIONAL INSTITUTIONS

THE NEED FOR PROGRAMS

According to the U.S. Bureau of Justice Statistics, nearly 2.3 million adults were incarcerated in prisons and jails at the end of 2011, accounting for approximately 1 percent of the U.S. adult population. Combined with the 4.8 million adults on probation or parole, approximately 3 percent of the U.S. adult population was under some form of correctional supervision in 2011. In fact, as exhibit 1 shows, between 1980 and 2012, the rate at which individuals were placed under correctional supervision grew at all levels. The prison population grew by nearly 450 percent, probation by 350 percent, parole by 380 percent, and jail by 400 percent (Glaze and Herberman 2013).

![Exhibit 1: Correctional supervision rates per 100,000: 1980 – 2012](chart)

Statistics also show that the correctional population is less educated than the general public, with approximately 40 percent of incarcerated adults lacking a high school credential, compared with...
less than 15 percent of the general public. Only 12 percent of incarcerated adults had completed some form of postsecondary education, compared with 48 percent of the general public (Harlow 2003). Exhibit 2 provides U.S. Bureau of Justice Statistics estimates of education levels for the incarcerated, those on probation, and the general public. Although these statistics are from 1997 (the most recent data available), they help to illustrate the strong association between less education and higher rates of arrest, conviction, and recidivism (Aaltonen et al. 2013).

Exhibit 2: Percentage distribution of the correctional population and general public, by level of educational attainment: 1997

<table>
<thead>
<tr>
<th>Educational attainment</th>
<th>Total incarcerated</th>
<th>State prison inmates</th>
<th>Federal prison inmates</th>
<th>Jail inmates</th>
<th>Probationers</th>
<th>General public</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than high school diploma</td>
<td>41.3</td>
<td>39.7</td>
<td>26.5</td>
<td>46.5</td>
<td>30.6</td>
<td>18.4</td>
</tr>
<tr>
<td>GED</td>
<td>23.4</td>
<td>28.5</td>
<td>22.7</td>
<td>14.1</td>
<td>11.0</td>
<td>—</td>
</tr>
<tr>
<td>High school diploma</td>
<td>22.6</td>
<td>20.5</td>
<td>27.0</td>
<td>25.9</td>
<td>34.8</td>
<td>33.2</td>
</tr>
<tr>
<td>Postsecondary education</td>
<td>12.7</td>
<td>11.4</td>
<td>23.9</td>
<td>13.5</td>
<td>23.6</td>
<td>48.4</td>
</tr>
</tbody>
</table>

NOTE: “—” indicates data not available. Percentages in each column total 100 percent. GED = General Educational Development.


Criminologists have long held that education is an important correlate of crime prevention. Individuals who participate in higher education are more likely to have positive, supportive peers (Akers and Sellers 2009); higher impulse control (Gottfredson and Hirschi 1990); and improved problem-solving abilities (Andrews and Bonta 2006). Education is recognized as an important life-course alternative to incarceration in that it prepares students for labor market advancement (Laub and Sampson 2003). Research also consistently demonstrates that low academic skills, underemployment, and a criminal lifestyle are interrelated (Laub and Sampson 2003; Western 2006).

For incarcerated individuals, education and job training that lead to a degree or other credential also have been documented to improve post-release outcomes. Although correctional education does not address all of the obstacles facing these individuals, a growing body of research shows that these programs improve recidivism and employment rates, increase wages, and are cost effective (see exhibit 3 for a summary of the research). In fact, criminologists have found that the positive effect of education and job training programs on a formerly incarcerated individual’s employment opportunities is critical to successful reentry. Improving the employment opportunities of formerly incarcerated individuals increases their ability to earn a living wage and engage in more prosocial behavior (Harley 1996; Laub, Nagin, and Sampson 1998; LeBlanc and Ratnoffsky 1991; Sampson and Laub 1993; Uggen 2000; Western 2006). As described by La Vigne and colleagues (2008):
employment provides former prisoners with a consistent source of funding for necessary food, shelter, clothing, transportation, and other basic amenities. It also increases feelings of self-efficacy and self-sufficiency, building confidence in released prisoners that they can support themselves without needing to resort to criminal activities or reliance on family members or “handouts,” and providing a new social network that supports positive behaviors and serves as a protective factor against future criminal activity (pp. 15–16).

THE PROGRAMS AVAILABLE

To address the need and demand for education and training programs in prisons, states have long provided adults with a variety of education programs, including adult basic education (ABE), adult secondary education (ASE), secondary CTE (nondegree training programs), postsecondary CTE, and other forms of postsecondary education. Because of budget cuts, however, the availability of these programs has decreased as the prison population has grown (Crayton and Neusteter 2008; Nally et al. 2012). In 2004 (the most recent national data available), only 27 percent of formerly incarcerated state prisoners indicated that they had participated in a vocational or job training program; and 31 percent indicated that they had participated in an educational program, including 19 percent in ASE programs and 7 percent in postsecondary education programs (Crayton and Neusteter 2008; Harlow 2003).

- Education and job training programs in state prisons are typically supported by a mix of funding streams, including federal, state, and private sources (U.S. Department of Education 2009). The most common funding sources include federal grants to states (e.g., the Adult Education and Family Literacy Act; the Carl D. Perkins Career and Technical Education Act; vocational rehabilitation services; and Title I, Part D of the Elementary and Secondary Education Act, Prevention and Intervention Programs for Children and Youth who are Neglected, Delinquent, or At-Risk);

- state appropriations for correctional institutions;

- student tuition and fees, which are primarily used for postsecondary education programming; and

- one-time competitive grants, such as the Promoting Reentry Success through Continuity of Educational Opportunities initiative funded by the Second Chance Act and administered by the U.S. Department of Justice.
STATUS, BENEFITS, AND CHALLENGES OF NONDEGREE CREDENTIALS

The literature review and the phone interviews conducted for this study (see appendixes A and B for interview protocols) revealed a growing interest in and support for nondegree credentials. Led by GEMEnA, the federal government is beginning to collect more data on the demographics and employment outcomes of individuals in the general population who earn these credentials (Bielick et al. 2013). Specific to the corrections population, there is a growing body of evidence that supports the benefits of correctional education leading to a degree or other credential. Also, employers and employment placement specialists who work with formerly incarcerated individuals report that nondegree credentials hold value in the labor market. Nondegree credentials signify that the individual not only has the appropriate job skills but is also motivated. The following sections describe the specific findings from the study.4

WHAT DATA ARE COLLECTED ON NONDEGREE CREDENTIALS?

Until recently, most educational attainment research — whether on the corrections population or the general population — has focused on high school diplomas, associate degrees, bachelor’s degrees, and advanced degrees. To address this gap, GEMEnA was established to develop and pilot a set of measures about educational certificates, professional certifications, and licenses for inclusion in federal surveys and to encourage more research in this area. The first and only study thus far to include the GEMEnA measures is the U.S. Census Bureau’s Household Economic Study, Measuring Alternative Educational Credentials: 2012 (Ewert and Kominski 2014). This study did not include the corrections population but, when combined with labor market research and other studies, it provides some context for understanding credential earners and the benefits and challenges of offering nondegree credential programs, as described in the later sections of this report.

State correctional education programs also collect limited data on nondegree credentials. Common data elements include programs offered, enrollment, attendance, completion, and credentials earned. Most data are collected to meet reporting requirements for various state and

4 Unless a citation is provided, the information provided in the following sections comes from the phone interviews conducted for this study.
federal funding streams. Each funding stream, however, typically requests different information and uses different definitions for the same data element. For example, some funding sources may define program completion as completing the coursework, whereas others may require the incarcerated student to have earned a credential in order to be recorded as having completed the program. Moreover, several of the funding streams used to support correctional education, such as federal grants to states under the Adult Education and Family Literacy Act and Carl D. Perkins Career and Technical Education Act, have reporting requirements (e.g., program completion, transition to or within postsecondary education, and attainment of employment) that are difficult to meet because of the corrections environment. For example, incarcerated students may be unable to complete an educational program because they have been transferred to another facility that does not offer the program. It is also very difficult to collect post-release data on formerly incarcerated individuals, especially employment and postsecondary education outcomes, due to privacy regulations and difficulty tracking individuals once they are released from community supervision (U.S. Department of Education 2011).

Despite these challenges, a number of studies have been conducted to determine the post-release outcomes of correctional education programs (see exhibit 3). Only a few of these studies focus on the outcomes of programs that prepare individuals for nondegree credentials. Of the three studies that do make a distinction between the different types of education programs offered in prisons, vocational education or job training programs were shown to have a more positive effect on recidivism rates and prison costs than other education programs, such as ABE (Aos, Miller, and Drake 2006; MacKenzie 2006; Wilson, Gallagher, and MacKenzie 2000).
### Exhibit 3: Key findings from research studies assessing the post-release outcomes of correctional education programs

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<thead>
<tr>
<th>Research study</th>
<th>Key findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>“A Meta-Analysis of Corrections-Based Education, Vocation, and Work Programs for Adult Offenders.” (Wilson, David B., Catherine A. Gallagher, and Doris L. MacKenzie. 2000. <em>Journal of Research in Crime and Delinquency</em> 37 (4): 347–68)</td>
<td>The researchers reviewed 33 independent experimental and quasi-experimental evaluations of prison-based education, vocation, and work programs in multiple states and prisons and found that participants had lower recidivism rates than nonparticipants. Despite many of the studies having weak methodological designs, the meta-analysis showed that correctional program participants had 11 percent lower recidivism rates and higher employment rates than nonparticipants, with better outcomes for education programs than for work programs.</td>
</tr>
<tr>
<td>Education Reduces Crime: Three-State Recidivism Study (Steurer, Stephen J., Linda G. Smith, and Alice Tracy. 2003. Lanham, MD: Correctional Education Association)</td>
<td>The researchers conducted a recidivism study in three states (Maryland, Minnesota, and Ohio) to measure the ways in which correctional education programs are associated with recidivism and employment outcomes. The study did not make a distinction, however, between the different types of correctional education programs. In two of the three states (Minnesota and Ohio), the correctional education participants had statistically lower rearrest, reconviction, and reincarceration rates than did the nonparticipants. Similar findings were observed in the third state (Maryland), but the differences between the groups were nonsignificant. The researchers found significant wage differences between the participants and nonparticipants, with education participants earning, on average, higher annual wages than nonparticipants.</td>
</tr>
<tr>
<td>Correctional Education as a Crime Control Program (Bazos, Audrey, and Jessica Hausman. 2004. Los Angeles: UCLA School of Public Policy and Social Research, Department of Policy Studies)</td>
<td>The researchers integrated the findings from the <em>Three-State Recidivism Study</em> and cost estimates for a per-crime reduction by Spelman (1994) to compare the cost savings of prison expansion versus prison-based education programs. They found that a $1 million investment in correctional education programs prevents 600 crimes, while a similar investment in prison expansion prevents 350 crimes. The authors estimated that these cost savings from correctional education programs would net a $600,000 savings (e.g., about $23,000 for annual incarceration costs). This study, however, was not able to distinguish the cost savings between different types of education programs because state budget information was available only for the overall costs of correctional education and not for specific programs.</td>
</tr>
<tr>
<td>Evidence-Based Adult Corrections Programs: What Works and What Does Not (Aos, Steve, Marna Miller, and Elizabeth Drake. 2006. Olympia, WA: Washington State Institute for Public Policy)</td>
<td>The researchers conducted a series of meta-analyses of several correctional programs that included prison-based education programs. They found a nearly 7 percent reduction in recidivism for academic program participation and an even higher percent reduction (9 percent) for vocational program participation. The researchers estimated that the recidivism reductions attributed to vocational training in prison, general education in prison, correctional industries in prison, and employment and job training in the community were associated with savings of $20,714, $17,636, $13,961, and $6,351, respectively. The findings are close to the estimated cost savings on a per-crime basis reduction for the prison-based programs, which lends further plausibility to the cost-savings potential of prison-based education programs.</td>
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</table>
Exhibit 3: Key findings from research studies assessing the post-release outcomes of correctional education programs — continued

<table>
<thead>
<tr>
<th>Research study</th>
<th>Key findings</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>What Works in Corrections: Reducing the Criminal Activities of Offenders and Delinquents</em> (MacKenzie, Doris Layton. 2006. New York: Cambridge University Press)</td>
<td>The researcher reviewed over 1,000 studies to assess the post-release outcomes of rehabilitation programs (e.g., education, life skills, employment, and cognitive behavioral programs) offered to both incarcerated adults and juveniles in a variety of correctional settings. The meta-analysis documented that education in prison reduced post-release recidivism by 16 percent for academic program participants and 24 percent for vocational program participants.</td>
</tr>
<tr>
<td>“An Evaluation of the Effect of Correctional Education Programs on Post-Release Recidivism and Employment: An Empirical Study in Indiana.” (Nally, John M., Susan Lockwood, Katie Knutson, and Taiping Ho. 2012. <em>Journal of Correctional Education</em> 63 (1): 69–89)</td>
<td>To evaluate post-release recidivism, the researchers compared 1,077 inmates who were exposed to a variety of correctional education programs while incarcerated in Indiana with a comparison group of 1,078 inmates who were not exposed to any education programs. They found that the treatment participants were less likely than the comparison group to recidivate after their release from prison. The treatment group had a 30 percent failure rate, and the comparison group had a 68 percent failure rate. The researchers did not distinguish between different types of education programs.</td>
</tr>
<tr>
<td><em>How Effective Is Correctional Education, and Where Do We Go from Here?</em> (Davis, Lois M., Jennifer L. Steele, Robert Bozick, Malcolm V. Williams, Susan Turner, Jeremy N.V. Miles, Jessica Saunders, and Paul S. Steinberg. 2014. Santa Monica, CA: RAND Corporation; and Washington, DC: U.S. Department of Justice, Bureau of Justice Assistance.)</td>
<td>The researchers reported the results of a recent meta-analysis using recidivism, post-release employment, and reading and mathematics achievement scores as the outcomes of interest. Inmates who participated in correctional education programs — regardless of the type of program — had a 36 percent lower rate of recidivism than nonparticipants, and, when analysis was restricted to only the most rigorous of studies (n = 7), this effect improved to a 43 percent lower rate. Post-release employment was 13 percent higher among program participants and 48 percent higher among program participants in the most rigorous studies (n = 1). Given these post-release outcomes, the researchers estimated that, for every dollar spent on correctional education, there is a $5 savings in reincarceration costs.</td>
</tr>
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</table>

**WHO ENROLLS IN NONDEGREE CREDENTIAL PROGRAMS AND EARN A CREDENTIAL?**

As in the general population, a number of variables affect who enrolls in education and job training programs and earns a credential while incarcerated. Enrollment is affected by program access, eligibility requirements, student characteristics, and participation incentives. Student characteristics also affect whether the student completes the program and earns a credential. The corrections environment is also a factor.
**Program enrollment**

According to the state correctional education administrators interviewed for this study, most programs that prepare individuals for nondegree credentials have waiting lists and eligibility requirements. For nondegree credential programs, entrance requirements are usually aligned with the entry-level requirements of the local workforce to ensure that participants can be employed following program completion and their release. The specific eligibility requirements may vary by program, but applicants for nondegree credential programs are typically expected to

- have a high school credential,
- meet certain reading and mathematics level requirements;
- have no major disciplinary infractions within a given time frame (e.g., within six months of enrollment); and
- be within a few years of release in order to have time to complete the program prior to release.

As noted by a state prison occupational program coordinator interviewed for this study, “We don’t want [to enroll] someone with 4 years to go [to release] since the trade is going to change. We are trying to get people ready for reentry and reemployment.” At the same time, program administrators only want to enroll individuals who have enough time on their sentence to complete the program. The applicants’ custody level or offense category may be an eligibility factor also because some programs use equipment (e.g., welding and barbering) that could create safety concerns. Custody levels also dictate where the individual is housed, and not all nondegree credential programs are offered in all facilities.

The interviewed states reported that individuals typically learn about the program offerings when they are first admitted into the corrections system or facility, through facility broadcasts on prison-based televisions, and through newsletters and brochures (see WorkIndiana’s Hospitality Staff Certification brochure in appendix D). They also reported that many students find out about programs through word of mouth. Some students also are encouraged to participate by case managers or counselors, who may use skill assessments or job interest surveys, such as the U.S. Department of Labor’s Occupational Information Network (O*NET) worker assessment used by Kansas and North Carolina, to identify suitable programs that would help the individual prepare for release. Several of the states noted, however, that they are unable to offer this level of education and employment counseling because of staff and funding limitations.
When asked to describe the typical student who enrolls in programs that lead to nondegree credentials while incarcerated, all of the state administrators noted that motivation and maturity are the biggest factors. These students are more focused on life after release than on what is occurring in their correctional facility. They also typically are in their 20s or early 30s. None of the states noticed other demographic trends (e.g., race or ethnicity) in their student populations.

Despite motivation being such an important factor, most of the states interviewed for the study offer students participation incentives. For example, incarcerated students in Maryland are awarded 10 days off their sentence for every month they participate in a program. Ohio offers students one day off their sentence per month of program participation. Depending on the program, incarcerated students in Indiana can earn 90 days off their sentence or six hours of postsecondary education credit for program completion. Similarly, students in Kansas receive 60 days off their sentence for program completion.5 Some facilities in Kansas also provide incentives to motivate students to pursue college coursework, including nondegree and degree-bearing programs, by offering scholarship funding for postsecondary education to incarcerated students who receive a high score on their high school equivalency test. These incentives are primarily designed to counterbalance disincentives to program participation that may exist, such as a student not being able to work as many hours, if at all, in prison-based jobs that provide wages.

**Program persistence and completion**

As with enrollment, motivation and maturity affect whether or not a student persists and completes a program and earns a credential. Prior educational level also is factor; some of the states reported that those who had higher reading and mathematics levels when entering the program were more likely to be successful. As will be described in more detail in the section, “What Obstacles Do Students Seeking Nondegree Credentials Face?” below, a range of environmental factors also may affect persistence and completion, including students being removed from the program because of facility transfers or serious disciplinary infractions (particularly when the misconduct occurred in the classroom).

The states interviewed for the study did not report any other demographic characteristics typical of program completers and credential earners. The U.S. Census Bureau’s 2014 study (Ewert and Kominski 2014), however, identified a number of characteristics common among the 25 percent of adults in the general population who hold a nondegree credential. For example, minorities and immigrants are less likely to be credentialed. The study found that 24 percent of non-Hispanic whites held professional certifications or licenses in 2012, compared with Asians (19 percent),

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5 The Kansas Legislature passed HB 2051, which extended program credit from 60 to 90 days. Although the statute went into effect July 1, 2015, expected implementation is January 1, 2016.
blacks (18 percent), and Hispanics (13 percent). Twenty-two percent of native-born adults held nondegree credentials, compared with foreign-born adults (15 percent). The study also showed that men are less likely to hold a credential than women, except among the population of men and women with only a high school credential or less. Fifty-one percent of women held professional certifications or licenses, compared with 43 percent of men. Among adults with a high school degree or less, 15 percent of men and 9 percent of women held professional certifications or licenses.

The U.S. Census Bureau study also found that 46.3 million of the general population with a nondegree credential hold a professional certificate or license, approximately 19.1 million have an educational certificate, and some hold more than one type of nondegree credential. Individuals with a professional degree were the most likely to have earned a nondegree credential, followed by master’s degree, doctorate degree, associate degree, and bachelor’s degree holders (see exhibit 4). However, approximately 11.2 million adults with a nondegree credential have only earned a high school degree or less.

<table>
<thead>
<tr>
<th>Educational level</th>
<th>Percent with no nondegree credential</th>
<th>Percent with professional certification/license</th>
<th>Percent with educational certificate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than high school</td>
<td>94</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>High school completion</td>
<td>83</td>
<td>14</td>
<td>6</td>
</tr>
<tr>
<td>Some college</td>
<td>77</td>
<td>19</td>
<td>10</td>
</tr>
<tr>
<td>Associate degree</td>
<td>64</td>
<td>30</td>
<td>17</td>
</tr>
<tr>
<td>Bachelor’s degree</td>
<td>67</td>
<td>30</td>
<td>10</td>
</tr>
<tr>
<td>Master’s degree</td>
<td>67</td>
<td>53</td>
<td>45</td>
</tr>
<tr>
<td>Professional degree</td>
<td>68</td>
<td>32</td>
<td>14</td>
</tr>
<tr>
<td>Doctorate degree</td>
<td>59</td>
<td>39</td>
<td>11</td>
</tr>
</tbody>
</table>

NOTE: Columns do not sum to 100 because individuals may hold more than one credential.
WHAT TYPES OF NONDEGREE CREDENTIALS ARE MOST COMMONLY AWARDED?

Across the states interviewed, the most common programs that lead to nondegree credentials for incarcerated males are in the construction trades (see exhibit 5 for a complete list of programs offered in the study states). The most common programs among the female population vary because of capacity issues (e.g., the size of the female population can make it difficult to meet the class size requirements for some of the programs) but include custodial service, computer technician, cosmetology, and culinary arts. The states reported that students are most interested in enrolling in programs that lead to in-demand jobs. These programs include heating, ventilation, and air conditioning (HVAC); welding; and automotive repair. Some of the program administrators also thought the quality and likability of the instructor may affect the popularity of a program.

Although all of the study states maintain a record of their nondegree credential program offerings, most of them do not track these programs by award type (i.e., educational certificates, industry-recognized credentials, and licenses). The states that are able to identify this information (Indiana, Ohio, and Vermont) tend to offer programs leading to a mix of nondegree credentials, with programs leading to certificates and certifications being more common than those leading to licenses.

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6 According to the study states, the decision about which programs to offer tends to have more to do with the request of a particular facility than it does with gender. Only one state, North Carolina, has based recent program offering decisions on gender according to an initial review of one year’s worth of data that looked at high school diploma and equivalency completion rates by gender.
### Exhibit 5: Nondegree credential programs in study states, by program focus: 2015

<table>
<thead>
<tr>
<th>Program focus</th>
<th>Indiana</th>
<th>Kansas</th>
<th>Maryland</th>
<th>Michigan</th>
<th>North Carolina</th>
<th>Ohio</th>
<th>Oregon</th>
<th>Vermont</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative assistance</td>
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<td>✔️</td>
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<td>✔️</td>
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<td></td>
<td>✔️</td>
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<tr>
<td>and executive support</td>
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<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
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<td></td>
<td>✔️</td>
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<tr>
<td>Aerobic and fitness</td>
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<td></td>
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<td>Animal training</td>
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<tr>
<td>Automotive</td>
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<tr>
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<tr>
<td>Barbering</td>
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<td>Coal mining</td>
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<tr>
<td>Commercial driving</td>
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<td>✔️</td>
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<tr>
<td>Truck driver (heavy and tractor-trailer)</td>
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<td>✔️</td>
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<tr>
<td>Truck driver (light and tractor-trailer)</td>
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<td>Computing</td>
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<td>Plumbing</td>
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<td>Culinary arts (food handler and manager)</td>
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<td>Customer service and technical support</td>
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<td>Fabric and carpet cleaning</td>
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<tr>
<td>Graphic design, printing, and drafting</td>
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<td>✔️</td>
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### Exhibit 5: Nondegree credential programs in study states, by program focus: 2015—Continued

<table>
<thead>
<tr>
<th>Programs focus</th>
<th>Indiana</th>
<th>Kansas</th>
<th>Maryland</th>
<th>Michigan</th>
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<th>Vermont</th>
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<tr>
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<td>Dispensing optician and optical technician</td>
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<tr>
<td>First aid and CPR</td>
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<td>Medical coding and billing</td>
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<td>Medical technician</td>
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<td>Phlebotomy technician</td>
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<tr>
<td>Forklift driving</td>
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<tr>
<td>Laborers and material movers</td>
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<tr>
<td>Machine trades</td>
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<tr>
<td>Power equipment</td>
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<td>Production technician</td>
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<td></td>
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<tr>
<td>Small equipment</td>
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<tr>
<td>Regulated refrigerants</td>
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<tr>
<td>Roofing and inspection</td>
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<tr>
<td>Wildland fire fighting</td>
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<td>✅</td>
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</table>

* According to the study states, program offerings vary each semester. Therefore, this exhibit provides a snapshot of what is typically available. At least two of the study states also offer programs leading to employability or work readiness credentials. NOTE: CPR = cardiopulmonary resuscitation; HVAC = heating, ventilation, and air conditioning.

The length of nondegree credential programs also varies across and within states. A major reason for this variation is the program’s curriculum. In Indiana, for example, some short-term certificate programs can take under 2 months to complete, whereas other programs that involve apprenticeships can last 4 to 5 years. All of Vermont’s nondegree credential programs, on the other hand, are divided into 3-month modules designed to promote persistence. After the modules are completed, the student is given the opportunity to intern and then work in Vermont’s Offender Work Program. Students in Vermont also can take assessments to get credit for prior work experience.

Program length may be affected by the schedule of instructors or other activities at the facility, according to some of the states interviewed. They also reported using different types of providers. Half of the states interviewed for this study use a combination of department of corrections and community college staff. The exceptions are Michigan and Vermont, which use only department of corrections staff; Kansas, which uses instructors from multiple providers, including secondary and postsecondary institutions; and Maryland, which uses staff from the Department of Labor, Licensing, and Regulation and community colleges.
Regardless of who provides the services, the states use the same criteria when selecting programs. First, the cost and infrastructure requirements of the program are reviewed, given the limited resources available. The facility needs to have the capacity to offer the program. For example, Michigan would like to offer truck driving in its facilities but does not have the space needed for such a program. All of the states also use labor market research to identify programs that will prepare students for in-demand jobs in industries willing to hire individuals with a criminal history. Some of the states also reported selecting programs that train individuals for prison-based jobs (e.g., culinary arts, custodial services, and horticulture).

The most common fields of study for nondegree credential holders in the general population — education services, health care, and social assistance — are different from those offered in correctional facilities (Ewert and Kominski 2014). Reasons for these differences most likely include the fact that correctional facilities cannot offer the same programs as those offered in the general population due to capacity and security issues, and individuals with a criminal history may not be able to obtain the same types of employment as those in the general population. The industry focus of the credential is significant, given that some fields of study yield higher labor market returns than others. A study of educational certificates, for example, showed that certificates in nursing and allied health care, technology, construction trades, and mechanic and repair trades produced the highest economic returns, whereas certificates in service occupations and the humanities yielded lower returns (Bosworth 2010).

**WHAT ARE THE COSTS OF ADMINISTERING THESE PROGRAMS?**

The diversity among the programs that lead to nondegree credentials offered in prison makes it difficult to determine the cost of administering these programs. States also differ in how they calculate program cost. As a result, the states provided wide-ranging cost estimates for their nondegree credential programs. Some programs cost as little as $800 per student, whereas other programs may exceed $20,000 per student. These costs include both the costs of offering programming and obtaining the credential, as most of the study states report that they cover exam and licensing fees. All study states indicated that some nondegree credential programs, such as those that offer non-degree credentials in welding and automotive repair, are more expensive to administer than some other education and training programming in the facilities, such as programs in business and administration. Some of the factors that contribute to these increased costs of these programs include the need to purchase specialized equipment and supplies and instructor salaries for longer program lengths. This is consistent with national research that finds that career and technical education (CTE) in general tends to be more expensive to provide than other programming (U.S. Department of Education 2014).
Program costs are typically covered by department of corrections’ budgets. States also reported using CTE state grants primarily for equipment upgrades; adult education state grants for preparing students to take the high school equivalency test (which is required for some nondegree credential programs); and vocational rehabilitation grant funding for education and job training, counseling, and assessments. Some students also use personal resources to cover program tuition.

The majority of the states interviewed reported significant budget cuts to their correctional education programs, particularly postsecondary education, over the last few decades. They have experienced fewer cuts in recent years and, in some cases, have been able to restore funding, because they can point to a growing body of evidence documenting that correctional education lowers recidivism rates and saves taxpayer dollars (Davis et al. 2014). The interviewed states have had the most success with restoring job training programs because they can more easily make the case that these programs will lead to employment after release. Some study states also have been able to augment their funds with one-time grants (e.g., the U.S. Department of Education’s Promoting Reentry Success through Continuity of Educational Opportunities, the Vera Institute of Justice’s Pathways from Prison to Postsecondary Education, and Jobs for the Future’s Accelerating Opportunity) and using volunteer and inmate tutors. Employers sometimes donate used equipment to the facilities. These additional resources have made it possible to keep the costs down for the states.

HOW ARE THE FIDELITY AND QUALITY OF PROGRAMS THAT RESULT IN NONDEGREE CREDENTIALS ASSURED?

All of the states interviewed regularly review their programs to ensure they are current and meet accreditation standards by national certification organizations or state licensing boards, such as

- The National Center for Construction Education and Research (NCCER) for construction trades (e.g., masonry, plumbing, electrical, welding, and landscaping) certifications;
- The National Institute for Automotive Service Excellence for a variety of certifications (e.g., auto maintenance and light repair, engine machinist, and alternate fuels);
- The National Restaurant Association for ServSafe food handler and manager certifications; and
- state licensing boards for barbering, cosmetology, and horticulture.
Most of the states said their programs articulate with community-based programs, although this is particularly challenging to maintain in states that do not have statewide articulation agreements. In Michigan, for example, articulation agreements need to be established with each higher education institution in communities where the students will reside after incarceration. However, while the curriculum may not articulate with curricula offered by community-based education providers, employers still consider the educational certificate that the student while incarcerated a legitimate credential.

As it is with the general population, though, the process for assuring the fidelity and quality of programs that result in credentials offered to the prison population is decentralized. There is no one governing body for all accrediting agencies. A number of international, national, and regional accrediting organizations establish the standards for certification-granting agencies (Carnevale and Desrochers 2001). These include the American National Standards Institute, the Institute for Credentialing Excellence, and the International Accreditation Services, as well as more specialized organizations. These accrediting organizations oversee the development and use of voluntary standards and assessments. In general, they operate independently from one another and from the federal government. There are also numerous organizations that accredit education and training programs leading to nondegree credentials. These range from national and regional organizations to more industry-specific organizations. Although the U.S. Department of Education has created a list of “reliable authorities” for determining the quality of education and training provided, there is no uniform approach to developing accreditation standards and processes across these organizations (U.S. Department of Education 2010).

WHAT OBSTACLES DO PRISONS FACE WHEN OFFERING PROGRAMS THAT LEAD TO NONDEGREE CREDENTIALS?

Correctional facilities face a number of obstacles when offering programs that lead to nondegree credentials. In general, operating education and training programs within a correctional environment creates some of the biggest challenges, including the following:

- **Competing demands for students’ time.** Particularly near the end of an individual’s sentence, they are expected to take a number of programs (e.g., employment readiness instruction and substance abuse treatment) in preparation for release. These programs are typically prioritized over education.

- **Class disruptions.** Students may be placed in segregation for several weeks because of disciplinary infractions. Although the student may be well behaved in the
classroom, they may not be able to avoid conflict in the facility’s living quarters. They may struggle with drug addiction, mental health disorders, or other issues that can pull them out of class for a few days to several weeks. Classes also can be disrupted due to prison lockdowns.

- **Facility transfers.** Students may be transferred to other facilities that do not offer the same program. Transfers typically happen when the individual’s custody is lowered (e.g., the individual is moved from a medium to minimum security facility) but can happen for other reasons as well.

Challenges specific to offering nondegree credential programs include the following:

- **Online assessments.** A growing number of entities that award nondegree credentials are transitioning to an online platform for their assessments, but most correctional facilities do not provide their students with Internet access (exceptions include Ohio). Several of the states interviewed for the study, however, have made arrangements with test providers to continue using paper-and-pencil tests, but these arrangements are not a long-term solution. States that have not been able to make other arrangements have had to drop the program or no longer offer the assessment, which means the student will not have the opportunity to earn the credential while incarcerated.

- **Space limitations.** In most facilities, there is limited space for programs, particularly those that require large equipment. Also, education programs often have to compete with other prison-based programs (e.g., religious studies and life skill courses) that require classroom space.

- **Resource restrictions.** The start-up costs for many programs that lead to nondegree credentials are high, as are the costs for maintaining equipment and updating textbooks. Also, the interviewed states reported that assessment costs are increasing, and at least one state reported dropping a program because it could no longer afford the assessment.

- **Recruitment of qualified teachers.** The states interviewed for the study noted that it can be challenging to find qualified teachers, particularly for prisons located in rural areas of the state. Many industry professionals, for example, may have the technical skills to teach a program that leads to a nondegree credential program but do not have the necessary teacher certification. Obtaining this certification can be time consuming and expensive. One state reported that the salary for correctional education instructors is not competitive with other teaching or industry positions.
In addition to the challenges of working in a corrections environment, helping students plan for their release also can be difficult. Although the interviewed states agreed that program enrollment should be closely tied to the individuals’ reentry plans, some admitted that providing reentry counseling and planning can be challenging due to limited staff capacity, unavailability of programs, and lack of motivation among those incarcerated. That being said, students are typically encouraged to connect with community-based education and workforce providers after release. And, in some cases, students are permitted to begin searching and applying for jobs in the last few months of their incarceration. In Maryland, for example, incarcerated individuals are able to develop a profile in the Maryland Workforce Exchange, an online job search and workforce service system. However, because of privacy regulations and the nature of the corrections population, the study states reported that it is difficult to track students after release and determine whether or not the nondegree credential programs have assisted them with obtaining a long-term, living-wage job.

WHAT OBSTACLES DO STUDENTS PURSUING NONDEGREE CREDENTIALS FACE?

Incarcerated students face a number of challenges with persisting in and completing programs and earning a credential. These challenges fall into three categories: personal, institutional, and post-release.

**Personal obstacles**

Many incarcerated students do not have strong educational backgrounds when entering prison-based programs because they may have dropped out of high school, have low reading and mathematics assessment scores, and lack strong study skills. Some may also struggle with drug addiction and mental health issues that affect their classroom performance. Some may enroll in the program with unreasonable career expectations, while others may lack motivation. However, as noted by the superintendent of the Ohio Central School System, “The thing we find is that after 6 months of being dragged to school, only 2 percent are removed from the program and only 8 percent quit without completing something. That 6 months is where they learn what they can learn.” An alternative workforce specialist in Kansas agrees; she believes these programs help participants develop a realistic vision of what they can achieve. She described this process as follows: “We have many offenders ask if they can go to college when they are released and we’ll ask them ‘why not?’ It seems they believe postsecondary education is not an option for them. Once they realize it can be and they have the ability to do it as evidenced by program completion, they get engaged pretty quickly.”
Institutional obstacles

Many of the same environmental issues that make it challenging for facilities to offer education and training in general nondegree programs also create obstacles for incarcerated students. For example, competing demands on students’ time, especially near the end of their sentence, can make it difficult for them to complete the program before release. Students also struggle with class disruptions, whether caused by their own actions or the actions of others. If their custody level changes, they may be transferred to another facility that does not offer the same program. Many students also do not receive education and career counseling that may help them choose the program most appropriate for their skill level, career interests, and jobs available in their release community. Although the states interviewed for this study believe these services would benefit their students, they reported that budget and staff limitations make it difficult to do so.

Post-release obstacles

Without a comprehensive reentry plan that reinforces the students’ education and career goals, many students experience frustration and failure after release. Some programs, such as Oregon’s CTE programs, do not provide college credit and are not articulated with programs in the community. Students unable to complete the program prior to release will most likely need to repeat the program. Students may think their credential will be enough for them to find employment, but many still need employment placement and other support services after release.

Navigating the large number of local ordinances and state and federal laws prohibiting the hiring of convicted felons also can be challenging. The federal government and other organizations, however, are working to reduce these restrictions (see exhibit 6). The National Institute of Justice also has funded an online National Inventory of the Collateral Consequences of Conviction to help educate and inform the public of the wide range of federal and state codes that restrict the rights of persons with a criminal history not just in terms of their employment but in their ability to access government benefits, contracts, loans, and grants; obtain housing; or earn a nondegree credential, among other restrictions. For example, a search of Indiana’s codes and regulations that automatically prohibit a person convicted of a felony from obtaining an occupational license or certification yields a list of 159 entries, including a real estate appraiser license; funeral service license; coal mine certificate of competence; and athletic trainer’s license. Nor can these individuals be hired as a veterinary technician, clinical social worker, dental hygienist, chiropractor, or real estate school instructor. As noted by the National Inventory website,

While collateral consequences have been a familiar feature of the American justice system since colonial times, they have become more important and

7 For more information on the National Inventory of the Collateral Consequences of Conviction, see http://www.abacollateralconsequences.org.
problematic in the past 20 years for three reasons: they are more numerous and more severe, they affect more people, and they are harder to avoid or mitigate. As a result, millions of Americans are consigned to a kind of legal limbo because at one point in their past they committed a crime.

### Exhibit 6: Initiatives addressing occupational bans for persons with a criminal history

**Federal Bonding Program (FBP):** The FBP, established by the U.S. Department of Labor in 1966, insures employers that hire at-risk individuals (including ex-offenders) and protects them against any potential dishonest or criminal activity at the workplace. The insurance is free to employers, covers the first 6 months of employment, and acts as a hiring incentive by guaranteeing the honesty of job seekers.

For more information on FBP, see [http://www.bonds4jobs.com/index.html](http://www.bonds4jobs.com/index.html).

**Work Opportunity Tax Credit (WOTC):** The WOTC is a federal tax credit for employers that hire individuals from certain at-risk categories, including individuals with criminal backgrounds. Credit amounts are calculated on first-year wages paid to each new at-risk employee hired according to the number of hours worked (e.g., 25 percent for employees working at least 120 hours, or $1,500; or 40 percent for employees working at least 400 hours, or $2,400).


**Equal Employment Opportunity Commission:** The federal government provides protection for job seekers under the Equal Employment Opportunity Commission’s (EEOC) guidance on the use of arrest and conviction records and the Fair Credit Reporting Act (FCRA), which outlines guidelines for the use of criminal background checks. The EEOC’s guidance maintains that employers cannot discriminate against individuals with criminal backgrounds in the hiring process and should consider the nature and timing of the offense and evidence of rehabilitation. FCRA requires that job applicants grant permission for their background checks to be run and understand how the information from such checks will be used.

For more information on the EEOC guidance, see [http://www.eeoc.gov/laws/practices/inquiries_arrest_conviction.cfm](http://www.eeoc.gov/laws/practices/inquiries_arrest_conviction.cfm).


**Campaigns to Promote Fair Hiring Policies:** Legal and human rights organizations are increasingly promoting the adoption of fair chance hiring policies to ensure that employers make decisions based on an applicant’s qualifications and not their criminal backgrounds. These policies advocate for

- differentiating between arrest and conviction records;
- running criminal history background checks later in the hiring process;
- avoiding discrimination based on criminal backgrounds; and
- integrating federal guidance on hiring individuals with criminal backgrounds and requesting background and credit reports.

To help students address these reentry obstacles, some states have established employment placement organizations that specialize in populations with a criminal history. The Hoosier Initiative for Re-Entry (HIRE), for example, is a collaborative effort with the Indiana Department of Workforce Development, the Department of Corrections, local facilities, and local businesses to train and employ individuals who have been convicted of a felony. HIRE provides clients with career assessments, employability skills training, job placement, and ongoing coaching and support for at least a year after placement. HIRE also works to develop career plans for its clients. The director described the HIRE approach as the ABCs of job placement:

- **Any** job that will get the client back into the workforce;
- **Better** job to build a resume with work history beyond temporary agencies; and
- **Career** in which they can continue to grow their experience and work skills to be a long-term, reliable employee that will benefit the employer.

HIRE also works directly with employers and encourages them to use the FBP and WOTC when hiring a person with a criminal history (see exhibit 6). The director says her staff is very up front with employers. “We have found that as long as you are open and honest with an employer and find out what their hot buttons are with hiring our clientele, they are usually open to the idea of giving the clients a chance [to interview] as long as they are not mandated to hire them.”

Another notable initiative is Michigan Economic Development Corporation’s Community Ventures program, which pairs an employer who has successfully hired individuals with a criminal history or other disconnected populations with employers who are reluctant to hire such individuals. It also connects these individuals to success coaches, job retention services, and peer-to-peer mentors.

Other state examples include Maryland’s partnership with Vehicles for Change, which provides automotive training programs and discounted automobiles to individuals with financial challenges, including individuals recently released from prison, to help them achieve economic and personal independence. The Kansas Department of Corrections’ private industries program encourages and supports strong partnerships between its facilities and employers. This program allows employers to open a workshop on prison grounds and hire incarcerated individuals. These employers also often hire the individuals when they are released. For example, Maico Industries, Inc., a manufacturer in Kansas, has a shop located near a prison that is staffed by inmates earning normal wages. If these individuals are willing to stay in the area, Maico also hires them after release and makes accommodations for them as they transition out of community supervision (e.g., a room is available at Maico for their employees to meet with probation officers during the work day, which prevents employees from having to miss work in order to meet their probation requirements).
WHAT IS THE ECONOMIC VALUE OF NONDEGREE CREDENTIALS?

The employers and employment specialists interviewed for the study agree that nondegree credentials help formerly incarcerated individuals find employment. These credentials provide evidence that the individual has the skills and motivation needed for the job. They are also particularly important in industries that require credentials, such as the construction trades. Hiring individuals who already have credentials helps lower employers’ training costs.

Most of the states’ views are based on anecdotal evidence because it is difficult for them to track post-release employment outcomes. A study conducted using Indiana data, however, found that the higher an individual’s education, the less likely he or she is to be unemployed or recidivate after release (Nally et al. 2012). Similarly, a study examining post-release outcomes of General Educational Development (GED) and vocational education students incarcerated in Kansas’s state prisons found that vocational training increased the likelihood of consistent, living-wage employment (Lichtenberger 2014).

Data from the U.S. Census Bureau’s 2014 study (Ewert and Kominski 2014) of the general population also provides some evidence as to the value of nondegree credentials in the labor market. The authors found that credential holders were more likely to be working full time and, among those with less than a bachelor’s degree, were more likely to earn higher wages than individuals without a nondegree credential. The median monthly earnings for someone with a professional certification or license was $4,167, compared with $3,433 for someone with an educational certificate, $3,920 for someone with both types of credentials, and $3,110 for someone without any nondegree credential. The study concluded that for adults with a bachelor’s degree or lower, nondegree credentials generally result in an earnings premium.

Another study found that short-term certificates are economically valuable and cost effective, because more than half of the programs take 2 years or less to complete and can result in higher wage gains than 2- and 4-year degrees (Carnevale, Rose, and Hanson 2012). However, as noted by Carnevale, Strohl, and Smith (2009), the economic value of postsecondary education has less to do with the degree obtained and more to do with “what you take, where you go, and what occupation or industry you enter” (p. 22). In other words, the level of the credential is less important than its industry focus and who provides it.

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8 See the What Data Are Collected on Nondegree Credentials? section of this report for the reasons states are unable to effectively track students post-release.
Although nondegree credentials are, on average, economically valuable, their value varies by an individual’s gender and race within the general population (see exhibit 7). In 2010, male nondegree credential holders earned 27 percent more than men with only a high school diploma, whereas female nondegree credential holders earned only 16 percent more than women with only a high school diploma. This gender gap can be partially explained, though, by the different types of nondegree credentials men and women generally earn. For example, men are dominant in electronics and aviation, fields with higher wages than female-dominant professions such as cosmetology. A similar gap exists among different racial categories. Hispanics’ wages, for example, increase the most when they earn a nondegree certificate, whereas African American nondegree certificate holders experience the smallest upturn in salary (Carnevale, Rose, and Hanson 2012).

Exhibit 7: Median earnings of high school-educated workers and certificate holders by race and gender in the nonincarcerated population, and percentage difference in wages of certificate holders versus noncertificate holders, by gender and race/ethnicity: 2008

<table>
<thead>
<tr>
<th>Gender and race/ethnicity</th>
<th>Median earnings of high school educated worker</th>
<th>Median earnings of certificate holder</th>
<th>Percent difference in wages of certificate holders vs. noncertificate holders</th>
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<tr>
<td>All</td>
<td>$24,020</td>
<td>$27,864</td>
<td>16</td>
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<tr>
<td>White</td>
<td>$26,011</td>
<td>$29,653</td>
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</tr>
<tr>
<td>African American</td>
<td>$22,421</td>
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<tr>
<td>Asian and other</td>
<td>$22,160</td>
<td>$26,592</td>
<td>20</td>
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<tr>
<td>Hispanic</td>
<td>$19,086</td>
<td>$26,911</td>
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</tr>
<tr>
<td>Men</td>
<td>$34,796</td>
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<tr>
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<td>Hispanic</td>
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</tbody>
</table>


Despite the uneven labor market value of nondegree credentials, some of these awards can serve as a “stepping stone” to a college degree. According to Carnevale, Rose, and Hanson (2012), of the working adults who had both an educational certificate and a college degree in 2010, two-thirds of them earned their certificate first. The authors also noted that “certificates are piecemeal, attainable, bite-sized educational awards that can add substantially to postsecondary completion” for the 36 million adults who are documented as only attending some college.
CONCLUSION

This study documented a critical need to provide incarcerated adults with the education and job training needed to obtain living wage employment upon release. CTE programs hold particular promise because they help students further their education and earn nondegree credentials, which serve as an important signal to employers that these individuals have the technical skills and motivation to perform well in a job. CTE programs have been documented to improve post-release outcomes and lower recidivism rates. However, more research is needed to fully understand the status, benefits, and challenges of these programs. The ability to conduct this research is hampered by the lack of data collected at the national level that would allow researchers to compare the outcomes of different vocational programs within and across states and with nondegree credentials holders with no criminal history.

To address this research gap, future studies should closely examine nondegree programs in a small number of states with robust nondegree credential programs and the ability to collect necessary data to answer important research questions, including the following:

- How are programs addressing the obstacles prisons currently face with offering programs that lead to nondegree credentials?
- How are programs addressing the personal, institutional, and post-release obstacles that affect incarcerated students’ ability to persist in and complete a nondegree credential program and obtain a living-wage job?
- What are the specific costs of programs that lead to nondegree credentials and how do they vary by credential type? Are the costs of these programs recouped through post-release outcomes such as lower recidivism rates?
- How do programs that lead to nondegree credentials affect employment, wages, and job stability after release? Which programs have the most impact on post-release outcomes, and why?
- How do the employment, wages, and job stability outcomes of nondegree programs compare to facility-based academic postsecondary programs?
- How do the employment outcomes of nondegree credential holders with a criminal history compare to nondegree credential holders with no criminal history?
With this additional information, state departments of corrections will be in a better position to maintain and increase funding for their programs as well as direct resources to programs with the greatest impact on post-release outcomes. They also will have the guidance they need to improve programs that lead to nondegree credentials so that their students are well-prepared to obtain a long-term, living wage job after release and successfully transition out of the criminal justice system.
REFERENCES


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APPENDIX A. INTERVIEW PROTOCOLS FOR STATE CORRECTIONAL EDUCATION ADMINISTRATORS
Alternative Credentials in Prison: Interview Protocols for State Correctional Education Administrators

January 30, 2015

Introduction
With funding from the U.S. Department of Education, Office of Career, Technical, and Adult Education (OCTAE), we are conducting a study to assess the benefits and challenges of providing incarcerated individuals with CTE or vocational programs leading to an alternative credential.¹ Alternative credentials include (1) certifications—a time-limited credential awarded by a certification body, (2) licenses—a time-limited credential awarded by a licensing agency, and (3) educational certificates—a credential awarded for life (like a degree) by a training provider or educational institution. We first conducted a literature review to document the types of information currently available on alternative credential programs. We are now conducting phone interviews with correctional education directors and employers or employment placement organizations that work with the formerly incarcerated. The information we collect from these interviews, along with the literature review findings, will be summarized in a final report to be disseminated through OCTAE’s National Center for Innovation in Career and Technical Education.

Interviewee Information
Interviewee Name:
Official Title of Interviewee:
Department of Corrections (DOC) State:
Years in DOC:
Years in Current Position:

Program Overview: We will start by asking some basic questions about the alternative credential programs offered in your state prisons.

1. Please tell me about the credentialing programs offered in your prisons.
   - What types of programs are offered?
   - What are the most common industry focus areas?
   - What is the average length of these programs?
   - How long have you been offering them?
   - If your state contracts with private facilities, are these programs offered there as well?
   - Which programs are the most popular among inmates?

¹ The term “alternative credentials” was used in the interviews, but the synonymous term “nondegree credential” is used in the paper because this latter term is preferred by the U.S. Department of Education.
Can you send us a list of your state’s programs and the number of people served by these programs in the most recent program year available?

2. Who is the provider of these programs?
   - DOC staff?
   - Community colleges or four-year universities?
   - Others (e.g., private industry)?

3. How are these programs funded?
   - With state and/or federal funds?
   - Carl Perkins funds?
   - DOC funds?
   - Foundation or industrial investment?
   - Other funds?

4. How were these programs selected?
   - Do program options differ across your state prisons? If so, do they differ by institution, population characteristics, or by potential employment options related to the geographical areas in your state?
   - Are the programs reviewed to ensure they prepare inmates for jobs that would not bar a person with a criminal record? If so, what resources are used to determine this?

Program Eligibility: Now we will ask some questions related to inmate access and eligibility to these programs.

5. What are the eligibility requirements for the programs with the highest enrollment (e.g., education level, length of prison sentence, disciplinary status, and anticipated time to release)?
   - Do the inmates need a high school diploma/GED?
   - Are inmates with certain offense categories prohibited from participating?
   - Do inmates need to be nearing their sentence completion? If so, what are the timing requirements related to their release date?
   - Do institutional infractions prohibit eligibility? And, how long may the program eligibility be prohibited?

6. What processes are involved for an inmate to gain access to a program that leads to an alternative credential?
   - How do inmates learn about these programs?
   - Do they receive college and career counseling before enrolling?
   - Are there waiting lists for any of the alternative credential programs? If so, which ones?
   - Are inmates provided with any incentives for participating in the program (e.g., good time credits)?

7. How does program eligibility relate to an inmate’s reentry plan, if at all?
   a. Are the education and career goals of inmates assessed at intake?
b. Are the assessment results used to develop a reentry plan?
c. Are reentry plans modified depending the inmates’ performance in an alternative credential program?

**Student Demographics:** We also would like to learn more about the types of students who enroll in and complete these programs.

8. Do you have a general inmate profile for those inmates participating in alternative credential programs?
   - How would you characterize participants?
   - What is their average grade level completed?
   - What is their average age?
   - Do participants differ demographically from non-participants? If so, how?

9. Do you have a general inmate profile for those that complete the alternative credential program and earn a credential?
   - What percentage of your inmates complete the program? Earn an alternative credential?
   - How would you characterize completers (e.g., age, grade level completed, etc.)?
   - Do completers differ from non-completers? If so, how?

10. What obstacles do inmates face with persisting in and completing these programs?
    - If an inmate is unable to complete the program, will their courses articulate with outside training providers?
    - If an inmate is unable to complete the program before release, is the program included in his/her reentry plan?
    - Is a referral made to the outside program provider?
    - If there is no referral to an outside program provider, what are the reasons for not being able to make the referral?

**Challenges, Costs, and Quality:** We would like to now talk about the challenges, costs, and quality of your state’s alternative credentials programs.

11. What challenges do prisons face when offering programs that culminate in an alternative credential?
    - Are inmates denied entry into programs due to resource restrictions?
    - Any other challenges with resources (e.g., monetary, staffing, equipment, technology)?
    - Any challenges with assessments?
    - Any challenges with transferring credits when inmates move to another facility or are released?
    - Any challenges with the alternative credential being recognized and accepted by employers?
    - Any other challenges?
    - What strategies are used to address these challenges?
12. What is the average cost per inmate with offering these programs in prison?
   - How are test administration and program costs financed?
   - Do you measure if costs are recouped from improved outcomes? If so, how?

13. What alternative credential program data do you record?
   - What data on alternative credential programs (e.g., program offerings, student enrollment and completion, credentials attained, post-release outcomes, etc.) are collected at the facility and state levels?
   - Are these data used to make future programming decisions?
   - Are these data stored on electronic databases?
   - Are these data used for program improvement purposes?

14. Are your programs and the corresponding credentials offered at your institutions accredited by a national or regional accrediting organization?
   - If so, what accrediting agencies are consulted?
   - How often do you review your programs to determine if they are accredited?
   - How is program fidelity and quality assured within each prison and across your state prison system?

**Labor Market Value of Credential:** We are going to conclude the interview by asking you about the labor market value of alternative credentials.

15. Do you find that certain types of alternative credentials are more or less important to employers?
   - Are there specific industries in which alternative credentials are more or less beneficial? If so, which ones?
   - Have you noticed a shift in the importance of certain credentials?
   - Do you work with potential employers to determine the types of skills and credentials they expect of their entering workers?
   - Do you refer inmates who have earned a credential to employers for job placement? Do you provide students with any other job placement services?
   - What roles, if any, do employers play in developing, administering, or assessing your programs?

16. How do you determine the labor market value of the credentials you offer?
   - Do some credentials (among those observed) hold relatively greater weight with employers or the labor market than others?
   - Do you find that certain credentials result in better pay or increased rates of employment?
   - Do you notice that program completers have higher employment rates than non-completers?

17. What other outcomes have you noticed among program completers?
   a. Fewer misconducts?
   b. Greater educational gains in other programs?
   c. Transitions to other educational or vocational programs?
   d. Other outcomes?
APPENDIX B. INTERVIEW PROTOCOLS FOR EMPLOYERS AND EMPLOYMENT PLACEMENT SPECIALISTS
Alternative Credentials in Prison: Interview Protocols for Employers and Employment Placement Specialists

January 30, 2015

Introduction
With funding from the U.S. Department of Education, Office of Career, Technical, and Adult Education (OCTAE), we are conducting a study to assess the benefits and challenges of providing incarcerated individuals with CTE or vocational programs leading to an alternative credential.¹ Alternative credentials include (1) certifications—a time-limited credential awarded by a certification body, (2) licenses—a time-limited credential awarded by a licensing agency, and (3) educational certificates—a credential awarded for life (like a degree) by a training provider or educational institution. We first conducted a literature review to document the types of information currently available on alternative credential programs. We are now conducting phone interviews with correctional education directors and employers or employment placement organizations that work with the formerly incarcerated. The information we collect from these interviews, along with the literature review findings, will be summarized in a final report to be disseminated through OCTAE’s National Center for Innovation in Career and Technical Education.

Interviewee Information
Employer or Employer Placement Organization Name:
Labor Market Sector:
Interviewee Name:
Years in Current Position:

Overview of Work with Individuals who were Formerly Incarcerated: We will start by asking some basic questions about your work with individuals with a criminal record.

1. How long has your organization worked with individuals who were formerly incarcerated?
   - Employers:
     o How long have you been hiring such individuals?
     o Approximately how many have you hired?
     o What has your experience been with your employees who were formerly incarcerated compared to those who were not?
     o Are there advantages to hiring individuals who were formerly incarcerated? If so, what are those advantages?

¹ The term “alternative credentials” was used in the interviews, but the synonymous term “nondegree credential” is used in the paper because this latter term is preferred by the U.S. Department of Education.
How do you address any challenges to employing individuals who were formally incarcerated?

- Placement Organizations:
  - How long have you been providing job placement services for individuals who were formally incarcerated?
  - What types of employers are most likely to hire individuals who were formerly incarcerated? Why?
  - How do you demonstrate to employers the benefits of hiring individuals who were formerly incarcerated?
    - Do you face more challenges finding employment for individuals based on certain characteristics (e.g., age, criminal record, length of sentence)?
  - On average, are individuals who were formerly incarcerated most often placed in short- or long-term employment?
  - What type of assistance do you provide individuals who were formally incarcerated?
    - Do you provide any workforce readiness training?
    - Do you provide post-placement assistance? If so, what type of assistance is provided?
    - Do you provide other training or support services?
  - What types of challenges have you faced with securing employment for individuals who were formerly incarcerated?
    - How have you addressed those challenges?

2. What skills and credentials do you look for when hiring and placing an individual who was formally incarcerated?
   - Educational attainment?
   - Alternative credential?
   - Work experience?

Labor Market Value of Credential: We now would like to ask you about the labor market value of alternative credentials.

3. Do you find that certain types of alternative credentials are more or less important?

4. How do alternative credentials compare to other postsecondary degrees when hiring and/or placing an individual who was formally incarcerated?

5. Do you find a difference between formerly incarcerated individuals with an alternative credential versus those without one?

6. Does the possession of alternative credentials impact your decision for hiring when choosing between an individual who has been incarcerated, and an individual who has never been incarcerated?
APPENDIX C. STATE SUMMARY INFORMATION

The following state summaries provide an overview of the incarcerated population and participation in correctional education for the states interviewed for this report. The summaries are based on publicly available data or data provided by states. In some cases, the data are not available. Please note that this information is not intended for cross-state analysis due to differences in how states define and collect data for nondegree credential programs provided in correctional institutions.
The following information for Indiana is based on 2014 data.

**Incarcerated population**

- Number of incarcerated individuals: 27,673
  - 90.4 percent were male and 9.6 percent female
- Number of correctional facilities: 18

**Participation in education and training programs**

- Number of adults enrolled in correctional education: 7,835
  - Number of adults enrolled in nondegree credential programs: 2,499
  - Number of enrolled adults who completed nondegree credential programs: 1,969
- Number of nondegree credentials awarded
  - educational certificates — 2,055
  - industry-certifications — 239
  - licenses — 38

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9 “Completion” is defined as the attainment of a nondegree credential or high school equivalency credential.
The following information for Kansas is based on 2014 data.

_Incarcerated population_

- Number of incarcerated individuals: 9,612
  - 92.3 percent were male and 7.7 percent female
- Number of adult correctional facilities: 8
- Educational levels of incarcerated individuals
  - grades 0 – 11: 44.4 percent
  - high school equivalency: 29.9 percent
  - high school graduates: 15.7 percent
  - some college: 7.8 percent
  - unknown: 2.2 percent

_Participation in education and training programs_

- Number of adults enrolled in correctional education: 1,792
  - Number of adults enrolled in nondegree credential programs: 1,083
  - Number of enrolled adults who completed nondegree credential programs: 805\(^\text{10}\)
  - Nondegree credential attainment rate: 90 percent of program completers earned a nondegree credential.

\(^{10}\text{ In Kansas, program completion does not equate to credential attainment.}\)
MARYLAND

The following information for Maryland is based on 2014 data.

Incarcerated population

- Number of incarcerated individuals: 22,767
- Number of adult correctional facilities: 24

Participation in education and training programs

- Number of adults enrolled in correctional education: 11,631
  - Number of adults enrolled in nondegree credential programs: 1,960
  - Number of enrolled adults who completed nondegree credential programs: 990
    - Architectural Computer Aided Design Drafting: 11
    - Automotive Body Repair: 27
    - Automotive Maintenance and Inspection: 125
    - Building Maintenance: 13
    - Business Office Management: 29
    - Commercial Roofing: 31
    - Fabric and Carpet Cleaning: 31
    - Furniture Upholstery: 30
    - Graphic Arts and Design: 90
    - Introduction to Word and Excel: 48
    - Office Technology: 145
    - Pre-Apprenticeship Carpentry: 82
    - Pre-Apprenticeship Facilities Maintenance: 26
    - Pre-Apprenticeship HVAC/R: 36
    - Pre-Apprenticeship Electrical Wiring: 25
    - Pre-Apprenticeship Masonry: 58
    - Pre-Apprenticeship Plumbing: 23
    - Pre-Apprenticeship Sheet Metal: 19
    - Pre-Apprenticeship Welding: 23
    - Print Communications: 20
    - Small Engine Maintenance and Repair: 27
    - Warehouse and Distribution: 48
    - Woodworking and Finish Carpentry: 23
- Number of enrolled adults who were certified: 437
The following information for North Carolina is based on 2014 data.

Incarcerated population

- Number of incarcerated individuals: 37,591
- Number of correctional facilities: 56

Participation in education and training programs

- Number of adults enrolled in correctional education: 9,976 (does not include enrollment in nondegree credential programs)
  - Number of adults enrolled in nondegree credential programs: 16,226
  - Number of nondegree credentials awarded: 3,322
The following information for Ohio is based on 2014 data.

**Incarcerated population**

- Number of incarcerated individuals: 50,420
- Number of adult correctional facilities: 27

**Participation in education and training programs**

- Number of adults enrolled in correctional education: 35,156
  - Number of adults enrolled in nondegree credential programs: 10,362
  - Number of enrolled adults who completed nondegree credential programs: 7,873
  - Number of nondegree credentials awarded: 15,502
The following information for Oregon is based on 2015 data.

**Incarcerated population**

- Number of incarcerated individuals: 14,705
- Number of correctional facilities: 14
- Educational levels of incarcerated individuals
  - Grades 0 – 11: 24 percent
  - High school equivalency: 47.4 percent
  - High school graduates: 25.9 percent
  - Some college: 2.79 percent

**Participation in education and training programs**

- Number of adults enrolled in correctional education: 1,774
  - Number of adults enrolled in nondegree credential programs: 172
  - Nondegree credential program completion rate: 75 percent
  - Number of nondegree credentials awarded: All program participants earn some type of industry-recognized credential, except for those enrolled in automotive training because the state is no longer able to offer the online certification exam. Career and technical education (CTE) participants also earn a certificate of completion from the local community college.
The following information for Vermont is based on fiscal year 2014 data.

**Incarcerated population**

- Number of incarcerated individuals: 2,111
  - 92.4 percent were male and 7.6 percent female
- Number of adult correctional facilities: 7 (includes 6 male facilities and 1 female facility)

**Participation in education and training programs**

- Number of adults enrolled in correctional education: 1,242
  - Number of adults enrolled in nondegree credential programs: 335
  - Number of nondegree credentials awarded:
    - educational certificates—52
    - industry-certifications—281
APPENDIX D. WORKINDIANA HOSPITALITY STAFF CERTIFICATION BROCHURE
Hospitality Staff Certification (START)

START (Skills, Tasks, and Results Training) is a training and certification program for entry level positions within the hospitality industry. Common hospitality businesses that recognize the START certification are hotels and casinos. START training covers the basics of 12 different front-line positions. These 12 positions fall into one of two divisions: the rooms division or the food and beverage division.

The rooms division includes: front desk representative, bell services representative, PBX operator, reservationist, and public space cleaner. These positions can include tasks such as assisting guests with their rooms and reservations, operating a phone and switchboard system, greeting guests, transporting luggage, and cleaning guest rooms.

The food and beverage division includes: kitchen staff, kitchen steward, room service attendant, restaurant server, banquet set-up employee, banquet server, and bus person. These positions can include tasks such as preparing, serving, or delivering food, keeping the kitchen orderly and clean and assisting where needed, setting up for banquets, and/or cleaning tables.

People who work in hospitality, more than anything, are to do their best to make their customer’s visit as enjoyable as possible. Because many hospitality businesses are continually open, employees within this field could work at any time; both part-time and full-time positions are possible. Usually, there are 8-hour shift rotations, allowing someone to always be working, and 40-hour weeks. Weekend and holiday shifts may be required.

### Indiana Wage Information

<table>
<thead>
<tr>
<th></th>
<th>Hourly Wage (Entry)</th>
<th>Hourly Wage (Median)</th>
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<tbody>
<tr>
<td>Hotel, Motel, and Resort Desk Clerks</td>
<td>$7.69</td>
<td>$8.80</td>
</tr>
<tr>
<td>Maids and Housekeeping Cleaners</td>
<td>$7.67</td>
<td>$8.89</td>
</tr>
<tr>
<td>Food and Beverage Serving Workers</td>
<td>$7.67</td>
<td>$8.88</td>
</tr>
<tr>
<td>Maintenance and Repair Workers, General</td>
<td>$10.39</td>
<td>$17.32</td>
</tr>
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### Job Outlook in Indiana

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<thead>
<tr>
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<th>Long Term</th>
<th>Short Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hotel, Motel, and Resort Desk Clerks</td>
<td>10.6 % (increase)</td>
<td>4.0 % (increase)</td>
</tr>
<tr>
<td>Maids and Housekeeping Cleaners</td>
<td>9.6 % (increase)</td>
<td>1.8 % (increase)</td>
</tr>
<tr>
<td>Food and Beverage Serving Workers</td>
<td>11.9 % (increase)</td>
<td>3.9 % (increase)</td>
</tr>
<tr>
<td>Maintenance and Repair Workers, General</td>
<td>13.5 % (increase)</td>
<td>2.3 % (increase)</td>
</tr>
</tbody>
</table>

*Data collected from hoosierdata.in.gov*
How can YOU get involved?

- Know your students’/clients’ interests and career goals
- Affirm the value of the skills/hobbies students demonstrate both in and outside of the classroom
- Infuse your classroom culture and/or meetings with career-minded activities
- Provide time to make connections between the material learned in adult education or workshops and students’ daily lives/career aspirations
- Know the basic job descriptions and training requirements of in-demand occupations in your area
- Know which WorkINdiana programs are available in your region
- Know the processes for referring students to postsecondary or on-the-job training
- Post resources where students can find more information about further education/training and careers

### Important Qualities

**Interpersonal skills** – must get along with co-workers, customers, and superiors and be polite and friendly

**Stamina** – must be able to stand for long periods of time without getting tired

**Communication skills** – must be able to listen to, relay, and clearly explain information

**Detail-oriented** – must be able to notice and pay attention to detail

**People skills** – must be polite, attentive, and able to work with others

**Time management** – must be able to effectively manage the time of oneself and others

### Certification and Advancement

START training curriculum and certification are issued by the American Hotel & Lodging Educational Institute (AH&LEI). It is the only certification of its kind that is supported by the American Hotel & Lodging Association (AH&LA), as well as over 10,000 hotel owners. The training focuses on the applicable knowledge and skills students need to begin pursuing a career in the hospitality industry. Finishing the course makes students eligible to take the START certification exam. Individuals who pass this exam with a score of 70% will be START-certified through AH&LEI.

Built into the START certification framework are continued opportunities for advancement. Any individual with a START certification who enters employment in the hospitality industry and holds that position for 90 days can take a test for AH&LEI’s next level certification, Hospitality Skills Certification (HSC), at no cost. This certification can be earned in one of four different areas: front desk representative, guestroom attendant, maintenance employee, or restaurant server.

One or both of these certifications puts job seekers ahead of those who aren’t certified and could help lead to a long-term career in the hospitality industry. Another certification individuals can earn is the Guest Service Gold certification, which is also through AH&LEI. The goal of the Guest Service Gold program is to motivate hospitality employees to take guest service to the next level. Further advancement is possible for workers who acquire more experience and/or more training. One to five years of experience in hospitality can provide the opportunity for managerial positions.

A related post-secondary degree program will create opportunities for even greater advancement. The Council on Hotel, Restaurant, and Institutional Education (CHRIE) provides a list of colleges which have been accredited by the Accreditation Commission for Programs in Hospitality Administration (ACPHA). Those interested in exploring these post-secondary options to build upon their existing hospitality certification and experience can find this list at http://www.chrie.org/about/accreditation/acpha-accredited-institutions/index.aspx.

### Skills and Knowledge

**Technical**

- **Guest Service Operations**
  - knowledge of computers, software, and administrative and clerical procedures
- **Building Maintenance**
  - be able to test, install, operate, maintain, and repair machines and equipment
- **Cleaning Services**
  - knowledge of strategic planning and resource allocation
- **Food and Beverage Services**
  - knowledge of marketing

**English Language Arts**

- comprehend written and verbal communication
- Be able to ask questions

**Math**

- problem solve by using mathematical skills
- knowledge of arithmetic can be helpful

**Important Qualities**

- Interpersonal skills – must get along with co-workers, customers, and superiors and be polite and friendly
- Stamina – must be able to stand for long periods of time without getting tired
- Communication skills – must be able to listen to, relay, and clearly explain information
- Detail-oriented – must be able to notice and pay attention to detail
- People skills – must be polite, attentive, and able to work with others
- Time management – must be able to effectively manage the time of oneself and others

**Skills and Knowledge**

- Technical
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    - be able to test, install, operate, maintain, and repair machines and equipment
  - Cleaning Services
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  - Food and Beverage Services
    - knowledge of marketing
- English Language Arts
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- Math
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  - knowledge of arithmetic can be helpful

**Sources and Further Information:**

- www.hoosierdata.in.gov
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*Last Revised Dec. 3rd, 2013*
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