



*THE EFFECTIVENESS OF CORRECTIONAL PROGRAMS
IN THE FEDERAL BUREAU OF PRISONS:
A SYSTEMATIC EVIDENCE-BASED
REVIEW OF RESEARCH (2000-2022)*

CHAPTER 2 – EDUCATION PROGRAMS

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EDUCATION PROGRAMS

In this chapter, we review prison-based education programs. The Federal Bureau of Prisons (BOP) offers five First Step Act (FSA) approved programs in this category, all of which are classified by the BOP as Evidence-Based Recidivism Reduction (EBRR) Programs. We begin by describing the BOP's education programs, to include the assessment of needs addressed by the programs. We then describe our study identification procedures, provide a review of evaluations conducted both inside and outside of the BOP, compare BOP programs to evaluated programs in other jurisdictions, and offer an assessment of the effectiveness of each BOP education program based on our review. We then conclude this chapter with recommendations for future education programming initiatives.

2.1 Overview of Education Needs and Programs

The Education Services Branch (ESB) in the Reentry Services Division (RSD) is responsible for supporting the delivery of education programs. Education departments in the BOP offer both educational and vocational training programs. Per policy, all education department programs must include a written curriculum with measurable behavioral objectives and periodic reviews to ensure relevance and effectiveness, assessment of students' progress, and clear criteria for program completion (ESB, 2002).

In the institutions, most education programs are staffed by teachers. In the BOP, teachers must possess either a bachelor's degree including supervised student teaching, a bachelor's degree with a full academic year of professional teaching experience, or a teacher certification or licensure. Teachers are required to devote at least 50% of their 40-hour week to direct instruction (ESB, 2002). Policy also calls for most institutions to include a special education teacher in their staffing complement to serve special learning needs individuals. In the BOP, special education teachers must have at least 24 semester hours of special education coursework and either one year of relevant teaching experience or a master's degree in education.

All teachers are also required to complete 48 hours of BOP-sponsored continuing education training every 3 years. This training includes a mix of professional development activities consistent with their work assignments and reviews of relevant BOP policies and procedures. In addition, the Supervisor of Education is required to observe each teacher in the classroom at least annually to review their performance (ESB, 2002).

Education programs may also be supported with volunteers and contractors.

2.1.1 Identifying Education Needs

Within 90 days of their initial designation to a BOP institution, incarcerated individuals are assessed via the Test of Adult Basic Education (TABE) or the Comprehensive Adult Student Assessments System (CASAS) (BOP, 2022). The TABE assesses three core subject areas: reading, mathematics, and language, using mature, life- and work-related situations. There are five overlapping levels in the TABE: literacy, easy, medium, difficult, and advanced, and each core subject area includes content relevant to grade levels K-12 (TABE, n.d.). This assessment is conducted to identify the individual's educational needs and educational level.

As an alternative to the TABE, the CASAS is administered to non-English speaking incarcerated individuals. Per *Program Statement 5350.24 English-as-a-Second Language Program*, individuals are referred for further evaluation via the CASAS if they meet one of three criteria: an inability to complete the education interview form in English, an inability to comprehend Admission and Orientation lectures conducted in English, and/or an inability to read and understand information at their Initial Classification (ESB, 1997). The CASAS is administered to further screen for program admission, to evaluate progress in the program, and to ensure competency at the 8th grade level. In addition to assessing reading comprehension, mathematics, and writing skills, the CASAS also evaluates listening and speaking skills for English language learners (CASAS, n.d.). Results of the CASAS are reported on a numerical scale, and the scale is divided into five levels, A-E. To bypass enrollment in the English-as-a-Second-Language Program, individuals must perform at Level C (Advanced English Language Learner) or above (ESB, 1997). A summary of TABE and CASAS assessment data is not publicly available; however, such a summary would offer a more precise understanding of the educational needs of federally incarcerated individuals. According to the BOP's most recent needs assessment report, 35% of the incarcerated population presents with an education need. Also of note, for approximately 11% of the incarcerated population, English is not their first language.

2.1.2 Identifying Dyslexia Needs

In addition to a general assessment of educational needs, the First Step Act (FSA) requires the BOP to implement a dyslexia screening program and to offer relevant programs for incarcerated individuals identified through this screening program. Consistent with this requirement, targeted assessment procedures are in place to identify individuals with this specific educational need. *Program Statement 5200.06 Management of Inmates with Disabilities* outlines a two-step process to identify individuals with dyslexia, in addition to the assessment methods noted above (WSPB, 2019).

In the first step, education staff complete the Screening Checklist for Dyslexia (SCD), reviewing historical information related to learning disorders, processing skills, and perceptual problems. When a threshold score is met on the SCD, or if additional information suggesting dyslexia is present, the second step is initiated, with a qualified, trained staff member administering the Woodcock-Johnson Tests of Achievement and Oral Language, two components of the broad-scope Woodcock-Johnson IV assessment system. The Woodcock-Johnson Tests of Achievement evaluations four broad academic domains: reading, written language, mathematics, and academic knowledge (Houghton Mifflin Harcourt, 2014). The Woodcock-Johnson Tests of Oral Language is a diagnostic supplement to the Woodcock-Johnson Tests of Achievement, allowing for a more complete evaluation of specific learning disabilities. This assessment addresses oral language, broad oral language, oral expression, listening comprehension, phonetic coding, speed of lexical access, and vocabulary (Houghton Mifflin Harcourt, 2014).

The results are then forwarded to the Supervisor of Education to determine if “the propensity for dyslexia exists” (WSPB, 2019). Per the BOP’s most recent needs assessment report, less than 1% of the population presents with dyslexia as a need (BOP, 2022). Specific findings related to the two-step need identification process are not publicly available; however, additional information could lend support to the low level of need noted in this area. For example, a summary of SCD results, notation of the number of individuals referred for further evaluation, a summary of Woodcock-Johnson Tests of Achievement and Oral Language results, and notation of the number of individuals referred to the Supervisor of Education for review would be informative.

2.2 Education Program Descriptions

Five FSA-approved programs are primarily educational in nature - the Barton Reading and Spelling System, Hooked on Phonics, Bureau Literacy, Post-Secondary Education, and English-as-a-Second Language Programs. Each education program is aimed at advancing an individual’s educational attainment to a higher grade or functional level. These programs serve different target populations with unique educational needs.

The below table outlines key features of the BOP’s five education programs, including the target population, needs addressed, and program dosage. In addition, the table notes the number of institutions offering the program and the number of individuals participating in the program at the close of FY 2023. Lastly, the table provides an estimate of the percentage of the target population served by the program to date. Specifically, this estimate compares the total number of program participants and graduates in custody to the total number of individuals in custody with a potential need for such a program. This estimate represents an educated guess, as we did not have access to data allowing for perfect one-to-one comparisons of needs and programs. Following the table, each education program is described in detail.

Education Programs

Program	Target Population	Need(s)	Dosage	Institutions at FY23 End	Participants at FY23 End	Estimated % of Target Population Served Since 1/15/20
Barton Reading & Spelling System Program (EBRR)	Individuals with dyslexia	Dyslexia	500 hours	85	198	27.04% of individuals with dyslexia
Hooked On Phonics Program (EBRR)	Individuals with reading skills <= to the 2 nd grade level	Education	500 hours	54	98	.49% of individuals with an education need
Bureau Literacy Program (EBRR)	Individuals without a high school diploma or certificate	Education	240 hours	122	11,504	40.35% of individuals without a high school diploma or certificate
Post-Secondary Education Program (EBRR)	Individuals with a high school diploma or certificate and a need for marketable skills	Work	500 hours	23	1,040	1.25% of individuals with a work need
English-as-a-Second Language Program (EBRR)	Individuals with English language fluency below the 8 th grade level	Education, Work	500 hours	107	1,816	19.86% of individuals with English-as-a-Second language

2.2.1 The Barton Reading and Spelling System Program

The Barton Reading and Spelling System Program is classified by the BOP as an EBRR Program (BOP, 2022). The stated goal of the program is to improve the reading, spelling, and writing skills of individuals with dyslexia, the target population for this program. Per Education Services staff, the program was implemented in the BOP in March 2022, replacing the Hooked on Phonics Program (see below) as the BOP's primary approach to addressing the dyslexia need. Education Services staff also noted as of October 2022, all institutions were required to have completed staff training for the program and implemented the program if any individuals with an identified dyslexia need were at the institution.

The Barton Reading and Spelling System Program was developed in 1999 by Susan Barton, an educator with a special interest in dyslexia and founder of Bright Solutions for Dyslexia, the publisher of the program. The program is "an Orton-Gillingham influenced, scientific-based, evidence-driven, multi-sensory, direct, explicit, structured, sequential, one-to-one tutoring

system” to address dyslexia in adults (BOP, 2022). The program relies primarily on an individualized, 1:1 instruction method; however, the program can also be delivered in small groups of up to three students. The Barton Reading and Spelling System website describes the program as follows: “instructional delivery is explicit and systematic with scaffolding and coordinated instructional routines for phonemic awareness, phonics, and advanced word analysis” and in this context “each sound/symbol correspondence is explicitly taught, practiced and then reviewed during the next several lessons while additional sound/symbol correspondences are introduced” (Barton Reading and Spelling System, 2021).

The program includes ten levels, and each level is accompanied by a tutor manual, reproduceable student pages, color coded letter tiles, reinforcement games, pre- and post-tests, and tutor training DVDs. The ten levels address the following topics: (1) phonemic awareness, (2) consonants and short vowels, (3) closed and unit syllables, (4) syllable division and vowel teams, (5) prefixes and suffixes, (6) six reasons for silent-E, (7) vowel-R syllables, (8) advanced vowel teams, (9) influences of foreign languages, and (10) Greek words and Latin roots (Barton Reading and Spelling System, 2021). Most students begin with Level 1, and a post-test accompanying Level 1 identifies the next appropriate instructional level. Levels 3-10 require approximately 3-5 months of instruction per level and levels 1-2 require less time, with the total program completed in an estimated 2-3 years. Of note, in refining the target population for this program, the BOP’s internal website notes individuals who can pass the initial screening within the Barton Reading and Spelling System are most appropriate for the program. If an individual cannot pass the screening, the Hooked on Phonics Program is noted to be a more suitable program to address their early learning English language challenges (BOP, n.d.).

Per the BOP’s FSA Approved Programs Guide, the Barton Reading and Spelling System Program requires approximately 500 hours to complete (BOP, 2022). Per the program developer, when offered as a 1:1 intervention, the program requires two instructional hours/week. The BOP’s internal website directs teachers to provide 45-60 minute tutoring sessions 2-3 times per week (BOP, n.d.). When offered in a small group setting, five instructional hours/week are required to ensure individual success (Barton Reading and Spelling System, 2021). The BOP’s internal website directs teachers to provide 90-120 minute sessions when two individuals are tutored and 135-180 minute sessions when three individuals are tutored (BOP, n.d.). Formal training is required to facilitate the program and training materials are included with the program, i.e., tutor training DVDs for each level, as well as the guidance in each tutor manual. Approximately five hours of tutor training is provided for each level of the program. A program fidelity checklist is also available on the Barton Reading and Spelling System website.

The Barton Reading and Spelling System Program is not explicitly referenced in BOP policies. Therefore, there is no policy mandate for institutions to offer this program and address an

identified dyslexia need; however, ESB staff noted guidance has been provided to the institutions to do so. Successful completion of the program is based on mastery of the material in each level, i.e., a score of 95% better on each level's post-test. The BOP's internal website notes successful completion of the course ensures individuals "understand the basic skills involved in word decoding and phonetic awareness as well as develop additional basic reading, writing, and spelling skills, which leads to greater comprehension of the English language" (BOP, n.d.). Anticipated outcomes for the program are a reduction in the symptoms of dyslexia, as well as the acquisition of reading and spelling skills and a reduction in the risk of recidivism.

In the BOP's FSA Approved Programs Guide, the Barton Reading and Spelling System Program is described as available at all institutions; however, at the close of FY 2023 the program was offered at 85 institutions (BOP, 2023). In calendar year 2021, no individuals participated in or completed the program; it appears this program was implemented in calendar year 2022 (BJS, 2022). At the close of FY 2023, there were 198 individuals participating in the program, up from 55 individuals participating in the program at the close of FY 2022 (BOP 2022; BOP, 2023). At present, 27.04% of the BOP population with a dyslexia need either (1) are enrolled in the program or (2) have completed the program since implementation of the FSA (BOP, 2023). (To date, one individual in BOP custody has completed the program.) In response to a June 2023 inquiry, Education Services staff reported 282 individuals were on a waiting list for the program. As noted above, this program is resource intensive, with a teacher-to-student ratio of 1:1 or 1:3, which may account for the relatively low participation numbers.

2.2.2 Hooked on Phonics Program

The Hooked on Phonics Program is classified by the BOP as an EBRR Program (BOP, 2022). The stated goal of the program is to support the development of basic reading skills, the target population for this program being incarcerated individuals who lack the basic reading skills required to participate fully in the Bureau Literacy Program. The Hooked on Phonics Program is provided to individuals who score below the second grade reading level on the TABE or CASAS. Of note, individuals with dyslexia are not referred to this program; they are referred to the Barton Reading and Spelling System Program. The specific need addressed in the program is education. Per the BOP's most recent need assessment report, 32% of the population presents with an educational need; however, the percentage of individuals requiring intervention at this level is likely much smaller (BOP, 2022). In refining the target population for this program, the BOP's internal website notes the program is most beneficial for individuals who have an IQ of 70 or lower, limited English speaking skills or comprehension at a minimum second grade level, an expressive or receptive language disorder, and/or are unable to pass the Barton Reading and Spelling System's student screening despite repeated attempts and assistance from the program

tutor (BOP, n.d.). As noted above, additional summary information related to TABE and CASAS results would provide a more granular view of educational needs in this area.

Originally developed in the 1980s, the Hooked on Phonics Program is a “proven, expert-designed early language readiness reading program” using “systematic phonics instruction through scaffolding of simple sentences and paragraphs to teach letter-sound correlations for reading purposes” (BOP, 2022). In simple terms, the program is a multisensory intervention to assist early readers with recognizing the relationship between letters and sounds. Curriculum materials are available on the Hooked on Phonics website and these materials include instructional DVDs. Originally designed for grades K-2, the curriculum is also applicable for adults whose command of the English language is below the second grade level. There is not an adult-specific curriculum. The program consists of eight levels, with multiple lessons per level. Lessons cover concepts for early emergent readers (pre-K) through early fluent readers (second grade). The program “introduces simple and compound words as well as two syllable words to support corresponding decoding skills, reading, word recognition, and spelling” (BOP, n.d.). Per the BOP’s FSA Approved Programs Guide, the Hooked on Phonics Program requires approximately 500 hours to complete (BOP, 2022).

The Hooked on Phonics Program is not explicitly referenced in BOP policies. Consequently, institutions are afforded latitude, in that they may choose not to implement this specific program. The standard for successful completion of the program is linked to the ability to “understand the basic skills involved in word decoding and phonetic awareness as well as develop additional basic reading and comprehension skills” (BOP, n.d.). To reach this objective, there are criteria in place for completing each level in the Hooked on Phonics Program, i.e., level-based examinations. Anticipated outcomes for the program are an acquisition of basic reading skills and a reduction in the risk of recidivism.

In the BOP’s FSA Approved Programs Guide, the Hooked on Phonics Program is described as available at all institutions; however, at the close of FY 2023 the program was offered at 54 institutions (BOP, 2023). In calendar year 2021, 155 individuals were enrolled in the program and 37 individuals completed the program (BJS, 2022). At the close of FY 2023, there were 98 individuals participating in the program, down from 218 individuals participating in the program at the close of FY 2022 (BOP, 2022; BOP, 2023). This decrease is likely associated with the BOP’s shift to use of the Barton Reading and Spelling System Program for individuals with dyslexia. At present, .49% of the BOP population with an education need either (1) are enrolled in the program or (2) have completed the program since implementation of the FSA (BOP, 2023). It is not clear whether there is a waiting list for this program, nor is it clear how many individuals accurately require this level of programming.

2.2.3 Bureau Literacy Program

The Bureau Literacy Program is classified by the BOP as an EBRR Program (BOP, 2022). The stated goals of the program are to foster the acquisition of foundational knowledge and skills in reading, math, and written expression and to prepare students to obtain a Graduate Education Development (GED) credential (ESB, 2003). Consequently, the target population for this program is incarcerated individuals without a high school diploma, GED certificate, High School Equivalency Test (HiSET) certificate, or Test Assessing Secondary Completion (TASC) certificate. Individuals are placed in the program if a verified high school diploma or GED, HiSET, or TASC certificate is not included in their available records. Program participation is required for these individuals. To fulfill this requirement, individuals must complete a minimum of 240 instructional hours in the program or attain a GED certificate. Failure to do so may impact an individual's institutional job assignment and the vesting of good conduct time. Some individuals are exempt from this requirement, e.g., deportable immigrants, individuals in pre-trial status, individuals with significant emotional, mental, or physical impediments. The specific need addressed in the program is education (BOP, 2022). Per the BOP's most recent Fact Sheet, 35% of the population currently presents with this specific education need (BOP, 2022). Of note, an additional 10% of the current population obtained a GED credential while in BOP custody, i.e., via the Bureau Literacy Program.

The Bureau Literacy Program consists of an adult basic education to accommodate all academic levels (BOP, 2022). The program's GED-based curriculum, Reading Through Language Arts and Mathematical Reasoning, was designed to align with College and Career Readiness Standards for Adult Education and the GED Testing Service High Impact Indicators (BOP, n.d.). The curriculum was developed by the BOP's Education Branch in partnership with a select group of teachers in the institutions. The core curriculum is maintained on the BOP's internal website, Sallyport. The curriculum outlines specific skills and concepts and provides strategies, resources, and activities for teachers to incorporate into their instruction. Specifically, the curriculum identifies a series of educational standards, cites objectives associated with each standard, and notes what the learner should know, understand, and be able to do once they achieve each objective. The curriculum includes a series of suggested class activities and resources, with hyperlinks to download the referenced materials. The curriculum also references to pages from Steck-Vaughn GED preparation materials, a population preparation resource from educational publisher Houghton Mifflin available in all institutions. Per policy, the Bureau Literacy Program is conducted Monday-Friday, for a minimum of 90-minutes per day (Education Branch, 2003). Per the FSA Approved Programs Guide, the program requires approximately 240 hours to complete (BOP, 2022).

The Bureau Literacy Program is referenced primarily in *Program Statement 5350.28 Literacy Program (GED Standard)* (ESB, 2003). This policy details the purpose, target population, and admission and enrollment procedures of the program in considerable detail (Education Branch, 2003). Relevant Program Review Guidelines, which serve as fidelity measures for the Bureau Literacy Program, are drawn from this policy, as well as from *Program Statement 5300.21 Education, Training, and Leisure Time Program Standards*. Successful completion of the program is based on attainment of a GED certificate. As noted above, required participation in the program may be waived after 240 instructional hours; however, an individual is not considered to have successfully completed the program without obtaining a GED certificate. Anticipated outcomes for the program are an acquisition of reading, math, and written expression skills, a GED certificate, and a reduction in the risk of recidivism.

In the BOP's FSA Approved Programs Guide, the program is described as available at all institutions. This availability is supported by policy requirements outlined in *Program Statement 5350.28 Literacy Program (GED Standard)* and applicable federal regulations contained in this policy (ESB, 2003). In calendar year 2021, 11,402 individuals were enrolled in the program and 2,005 individuals completed the program (BJS, 2022). At the close of FY 2023, there were 11,504 individuals participating in the program, down from 13,187 individuals participating in the program at the close of FY 2022 (BOP, 2022; BOP 2023). At present, 40.35% of the BOP population with an education need either (1) are enrolled in the program or (2) have completed the program since implementation of the FSA (BOP, 2023). It is not clear whether there is a waiting list for this program; however, the most recent BOP Fact Sheet also indicates approximately 26% of individuals in need of a GED certificate are currently enrolled in the Bureau Literacy Program (BOP, 2023).

2.2.4 Post-Secondary Education Program

The Post-Secondary Education Program is classified by the BOP as an EBRR Program (BOP, 2022). The stated goal of the program is to enhance marketable skills via the acquisition of a college degree or certificate. The target population for this program is incarcerated individuals with a high school diploma or GED certificate and a work need. Work needs are assessed via a review of the individual's employment background, which is described further in the below description of vocational programs.

The Post-Secondary Education Program seeks to bring a college learning environment into the institutions, via classes provided by credentialed instructors from the local community. The program consists of college level courses leading to an occupationally oriented college degree (i.e., associate or bachelor's degree) or an adult occupational education certificate. Of note, based on feedback from Education Services staff, it appears there is some overlap between this

program and the Certification Course Training Program, which may also include coursework at the college level. Degree programs include, but are not limited to, hospitality management, business administration and management, accounting, bookkeeping, office management, advanced microcomputer operations, and horticulture. Consistent with community standards for post-secondary education, the program is delivered via lectures, group discussions, readings, examinations, and written assignments. The program is provided by a college or university, through a contract with the local institution. Programming hours vary based on the affiliated college or university's teaching schedule and the college degree/certificate sought by the individual, with 500 hours of programming credit noted as the maximum earnable amount in the BOP's FSA Approved Programs Guide (BOP, 2022).

The program is described in BOP policy, in *Program Statement 5354.03 Postsecondary Education Programs for Inmates* (ESB, 2003). This policy addresses the administration, focus, funding, and general standards of the program. In addition, per *Program Statement 5300.21 Education, Training and Leisure Time Program Standards*, the program is staffed by appropriately credentialed contractors from accredited colleges and universities (ESB, 2002). These contractors have the education and experience required to teach at the post-secondary level. Relevant Program Review Guidelines which serve as fidelity measures for the Post-Secondary Education Program are drawn from these policies. Successful completion of the program is based on the receipt of passing grades in individual courses leading to the awarding of a college/university degree or certificate. Anticipated outcomes for the program are an acquisition of marketable skills and a reduction in the risk of recidivism.

In the BOP's FSA Approved Programs Guide, the Post-Secondary Education Program is listed as available at 16 institutions: FCI Bennettsville, SC; FCI Beaumont Low, TX; FCI Beaumont Medium, TX MDC Brooklyn, NY; FPC Bryan, TX; FCI Cumberland, MD; FCI Dublin, CA; FCI Englewood, CO; FCI Gilmer, WV; FCC Lompoc, CA; FCI Milan, MI; FCI Ray Brook, NY; FCI Williamsburg, VA; FCI Waseca, MN; FPC Yankton, SD; and FCI Yazoo City, MS; however, at the close of FY 2023 the program did not appear to be offered at FCI Cumberland, MD or FPC Yankton, SD (BOP, 2022). The program did appear to be offered at 10 additional sites - USP Atlanta, GA; USP Atwater, CA; USP Big Sandy, WV; FCI Danbury, CT; FCI Fort Dix, NJ; FCI Herlong, CA; FCI McKean, PA; FCI Talladega, AL; and FCI Victorville I and II, CA - for a total of 24 institutions offering the program. In calendar year 2021, 338 individuals were enrolled in the program and 32 individuals completed the program (BJS, 2022). At the close of FY 2023, there were 1,040 individuals participating in the program, up from 587 individuals participating in the program at the close of FY 2022 (BOP, 2022; BOP, 2023). At present, 1.25% of the BOP population with a work need either (1) are enrolled in the program or (2) have completed the program since implementation of the FSA (BOP, 2023). It is not clear whether there is a waiting list for this program.

2.2.5 English-as-a-Second Language Program

The English-as-a-Second Language Program is classified by the BOP as an EBRR Program. The program is an English language literacy course for non-native speakers (BOP, 2022). The stated goal of the program is to facilitate the acquisition of English language fluency at the 8th grade level or above. Consequently, the target population for this program is incarcerated individuals with limited English language fluency. As noted above, the CASAS is administered to screen for program admission, to evaluate progress in the program, and to ensure competency at the 8th grade level. The program is required for individuals lacking English language fluency at the 8th grade level. To fulfill the program participation requirement, individuals must complete a minimum of 240 instructional hours in the program or demonstrate English language fluency at the 8th grade level on the CASAS. Failure to do so may impact an individual's institutional job assignment and the vesting of good conduct time. Some individuals are exempt from this requirement, e.g., deportable immigrants, individuals in pre-trial status, individuals with significant emotional, mental, or physical impediments. The specific needs addressed in the program are education and work (BOP, 2022). As noted above, a summary of CASAS results would provide additional information about the percentage of individuals requiring this specific educational intervention. A 2021 Bureau of Justice Statistics report noted for 13% of federally incarcerated individuals, English is their second language; however, the report does not indicate how many of these individuals are fluent in English (BJS, 2021).

In the English-as-a-Second Language Program, “students receive individual attention from their teachers as part of differentiated learning classroom models driven by individual learning needs” (BOP, 2022). Cultural and social contexts in the community are considered in instruction, with instruction based on students' English ability, interests, and needs. Specifically, the curriculum addresses the following English language skills: grammar, reading, comprehension, writing, and vocabulary. Curriculum resources are maintained on the BOP's internal website, Sallyport. Standardized English-as-a-Second Language lesson plans and worksheets across five educational levels are included on the website (BOP, n.d.). A level addresses specific themes, and includes listening/speaking, reading/writing, and functions/workplace skills, along with course activities to practice these skills. In addition, the BOP's internal website includes continuing education opportunities for teachers of English-as-a-Second language through ESL-Pro, English Language Learner University, and the LINCS Resource collection (BOP, n.d.). These resources include English Language Proficiency Standards for Adult Education. In the BOP, the English-as-a-Second Language Program is conducted Monday through Friday, for a minimum of two hours/day (ESB, 1997). In the FSA Approved Programs Guide, the BOP estimates the program requires approximately 500 hours to complete (BOP, 2022). The program has a dedicated instructor, either a BOP teacher, or a contractor or volunteer with the necessary instructional skills.

The English-as-a-Second Language Program is referenced primarily in *Program Statement 5350.24 English-as-a-Second Language Program* (ESB, 1997). This policy details the program's purpose, target population, and admission and enrollment in considerable detail. Relevant Program Review Guidelines which serve as fidelity measures for the English-as-a-Second Language Program are drawn from this policy, as well as from *Program Statement 5300.21 Education, Training, and Leisure Time Program Standards*. Successful completion of the program is based on attaining minimum CASAS scores. Specifically, individuals must obtain a minimum score of 225 on the CASAS Level C Reading Certificate Test and a minimum score of 215 on the CASAS Level B or C Listing Comprehension test to successfully complete the program. As noted above, required participation in the program may be waived after 240 instructional hours; however, an individual is not considered to have successfully completed the program without the requisite CASAS scores. The anticipated outcome for the program is the acquisition of English language skills at or beyond the 8th grade level.

In the BOP's FSA Approved Programs Guide, the program is described as available at all institutions. This availability is supported by policy requirements outlined in *Program Statement 5350.24 English-as-a-Second Language Program* and applicable federal regulations contained in this policy (Education Branch, 1997). However, at the close FY 2023, 15 institutions did not appear to be offering the program. In calendar year 2021, 1,521 individuals were enrolled in the program and 542 individuals completed the program (BJS, 2022). At the close of FY 2023, 1,816 individuals were participating in the program, up slightly from 1,726 individuals participating in the program at the close of FY 2022 (BOP, 2022; BOP, 2023). At present, 19.86% of the BOP population with English as a second language either (1) are enrolled in the program or (2) have completed the program since implementation of the FSA (BOP, 2023). It is not clear whether there is a waiting list for this program.

2.3 Study Identification Procedures

To create our study database, we first examined all published meta-analyses and systematic reviews of prison-based education programs published during our review period (2000-present). These reviews typically also included several other program types under the broad grouping of prison work, education, and vocational programs. Eight meta-analyses and systematic reviews were identified (see Appendix [Table 2A](#) for an overview). As noted in Chapter 1, a strong argument can be made that evaluations of prison education programs operating in the 1990's and earlier are not relevant today, because of changes over time in program design components and incarcerated populations. Our review of these meta-analyses and systematic reviews did reveal several studies conducted since 2000; we included these studies in our review.

The next step in our study identification process was to determine whether these meta-analyses and systematic reviews perhaps missed relevant evaluations due to the search procedures employed; or excluded them from their review due to their study inclusion criteria. To address this issue, we conducted a systematic search of the following electronic databases for the period from 2000-2022:

- PsycINFO
- National Criminal Justice Reference Service Abstracts
- Education Abstracts [returns the same as British Education Index]
- Criminal Justice Abstracts
- Education Research Complete

We used the following specific terms for our systematic search of electronic databases:

(inmates OR prisoners OR offenders Or incarceration) AND educat* AND recidivism

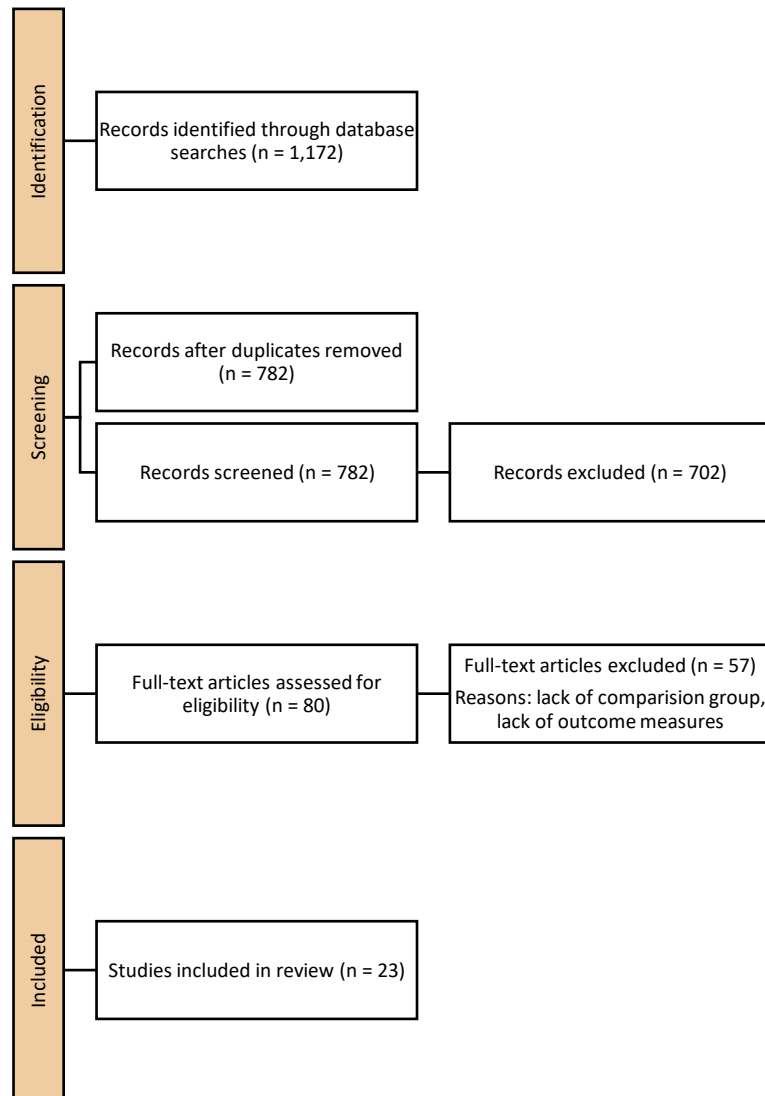
This search initially yielded 1,172 hits, with an initial list of 782 studies once duplicate articles across the databases were removed. Visual inspection of the titles and abstracts by the research team further reduced the number of potential studies, with 80 titles identified by the research team as requiring in-depth review. Specifically, we focused on studies that included one of the outcomes measures described in Chapter 1 (i.e., recidivism reduction, misconduct reduction, improved institutional adjustment, skills acquisition) and identified a control group for comparison.¹

The majority of the 80 studies we examined in-depth did not meet our review criteria and were excluded. Based on our review of the studies included in the eight meta-analyses and systematic reviews highlighted in Appendix [Table 2A](#), along with the results of our search of electronic databases, we identified 23 evaluations of prison-based education programs for the period 2000 to 2022 that meet our review criteria (see Appendix [Table 2B](#) for an overview of each study). These evaluations can be further broken down into two groups: general evaluations of all types

¹ Some programs initially ranked by the research team as meeting minimum quality standards were later found to include a non-equivalent comparison group. We discuss this issue in our findings section.

of prison education programs; and specific evaluations of one program type.² We highlight this distinction in the following review.

Flowchart of Study Identification Procedures



² See Ellison (2019) for a discussion of general vs. specific evaluations of education programs. General evaluations typically identify a cohort of releasees and compare participants in any education programs to non-participants. Specific evaluations focus on the impact of a single type of prison education program on program participants, compared to a comparison group that did not participate in that specific program.

2.4 Evaluations of Education Programs in the BOP

In the following section, we review the body of recent research (2000-2022) assessing a full range of prison education initiatives. We begin by documenting the lack of available BOP education program evaluations, while identifying new, ongoing, and proposed evaluations of BOP education programs. We then examine a full range of evaluations of education programs operating in state prisons around the USA, as well as a small number of relevant international studies of similar programs in other countries. For those programs operating outside of BOP that we have designated as effective, we have attempted to provide a preliminary assessment of the comparability of these programs to current BOP programs. We conclude our examination of prison education programs by offering recommendations regarding the need for ongoing fidelity assessment and outcome evaluation.

In a perfect world, our assessment of the effectiveness of the current portfolio of BOP's prison education programs would be based on evaluations of these programs. Unfortunately, this is not the case here. To the best of our knowledge, none of BOP's education programs³ have been formally evaluated during the period under review (2000-present). However, according to a report provided by the BOP's Office of Research and Evaluation (ORE), the BOP does have plans to evaluate four of its education programs in the near future: the Bureau Literacy and Post-Secondary Education Programs in FY 2025 and the Barton Reading and Spelling System and Hooked on Phonics Programs in FY 2026. There is no plan in place to evaluate the English-as-a-Second Language Program. In the absence of current evaluation research on education programs operated by the BOP, we have conducted a systematic review of the evaluation research on the effectiveness of education programs operating outside of BOP. Assuming these programs are similar in design and implementation to the BOP education programs, it is possible to assess the likely impact of BOP's programs based on this body of research. To be clear, the effects of BOP education programs are currently unknown, because the necessary evaluation research has not been completed. However, FSA legislation did specify that programs that are *likely* to reduce recidivism or have other positive outcomes can be identified as evidence-based programming.

³ We have identified an occupational education program operated by BOP that has been evaluated (Breyer, 2022). It is included in our review of research on vocational training.

2.5 Evaluations of Education Programs Outside BOP

A challenge in presenting a summary of research findings that can be used to classify specific programs as evidence-based is that the research evidence may conflate the presentation of findings from participation in – and/or completion of – several education programs into a single group of *any* educational program participants⁴. Several of the educational program evaluations included here only present overall–or general–program findings. While researchers may have had valid reasons for combining these participants into a single study group, these studies do not provide the definitive evidence of a *specific* program’s impact on the outcomes of interest here: evidence of improvement in designated educational need areas, improved in-prison behavior, and positive post-release outcomes (e.g., more employment, lower recidivism).

We begin our review by looking closely at the results of GED, high school, and Adult Basic Education (ABE) program evaluations (see Appendix [Table 2B](#)). Our review includes 16 evaluations covering at least one of these prison education programs. There are 14 GED program evaluations, 5 ABE evaluations, and 2 high school program evaluations. These 16 evaluations are comprised of one level 4 evaluation, 6 level 3 evaluations, 5 level 2 evaluations, and 4 level 1 evaluations. Examination of the level 3 and above studies offers strong support for the classification of prison GED programs as evidence-based. The findings for both ABE programs and high school programs were not as clear-cut, and we cannot classify either program as evidence based. Two level 3 or above evaluations reported findings for ABE program participants (Cho & Tyler, 2010; Fizer, 2020). One of these studies included participants in ABE and other education programs; they reported negative overall findings for post-release wages and recidivism (Cho & Tyler, 2010). The other ABE study was a small, randomized control trial examining the impact of using trained peer tutors in ABE classrooms on student outcomes, using a pre-post skill testing exam. There were also two evaluations that looked at the provision of high school education in prison (Batiuk, 2005; Duwe and Clark, 2014). Batiuk (2005) found no effect for obtaining a high school education while in prison on post-release recidivism, while Duwe and Clark (2014) only presented results for comparison between a group of participants who earned a high school diploma or a GED while in prison and a matched comparison group that came into prison without these credentials and did not earn one before exiting. Researchers reported no impact on

⁴ A review of the findings from recent meta-analyses confirms this assessment. For a detailed summary of the findings from meta-analyses of education programs, see Appendix [Table 2A](#).

recidivism, but a positive impact on employment: “post-release employment data show that 60% of offenders who earned secondary degrees in prison found employment within the first 2 years compared with 50% in the comparison group” (p. 468).

Next, we examined the results of literacy program evaluations. Six evaluations fall into the literacy program category: Cho and Tyler (2010), Walk et al. (2021), Courtney (2009), Steurer, Smith and Tracy (2001), Fabelo (2002), and Hull et al. (2000). Details on the location, design quality, sample, and key findings for each of these evaluations are provided in Appendix [Table 2B](#). Two of the six studies are classified as level 3 quasi-experimental studies; the remaining four studies did not apply adequate statistical controls for differences between treatment and control groups and were classified as level 2 or level 1 studies. One of the two level 3 evaluations, Cho and Tyler’s (2010) evaluation, presented general results for a number of different education programs operated by the Florida Department of Corrections, including adult basic education and other educational services, such as literacy classes and cognitive life skills classes. No program-specific details were provided. Researchers found no evidence that education program participation or completion was related to either positive employment or recidivism outcomes post-release. The other level 3 study was Walk et al.’s (2021) evaluation of literacy programs operating in Israel’s prisons. Researchers found that participants in literacy programs targeting incarcerated individuals at 6th, 8th, 10th, and 12th grade reading levels had significantly better employment outcomes than individuals that did not participate in these programs. Participants in the 8th and 12th grade-level programs also had lower recidivism rates than non-participants. These findings from Israel are encouraging, but they may not be comparable to literacy programs currently operating in BOP facilities.

Both level 2 studies reported overall findings across programs. Courtney’s (2009) evaluation of Arizona’s prison education programs linked combined educational program participation to reduced levels of prison misconduct, while Steurer et al.’s (2001) multistate evaluation (Maryland, Minnesota, and Ohio) found that educational program participants had lower recidivism rates and better employment outcomes 3 years post-release than non-participants. The Courtney (2009) evaluation did report that GED program participants had lower misconduct rates than participants in either functional literacy or work-based education. Finally, the two level 1 studies (Fabelo, 2001; Hull et al., 2000) also reported positive general recidivism reduction findings for participants in academic programs. Overall, the results of our literacy program evaluation review are positive. While literacy programs do not yet meet our classification criteria for an effective, evidence-based program, it can be classified as a ***promising*** strategy, with one program-specific level 3 study reporting positive results, and several lower-level studies also reporting positive findings. As we noted earlier, the second level 3 study (Cho & Tyler, 2010) did

not present results for literacy classes, lumping them into a broad adult basic education group, which does not allow a direct assessment of the literacy program.

We also reviewed eight evaluations of prison post-secondary education programs, including 5 level 3 evaluations and 3 level 2 evaluations (see Appendix [Table 2B](#)). All five level 3 evaluations found positive effects of post-secondary education on post-release recidivism outcomes. However, the results for employment outcomes were not positive in the only level 3 study that measured post-release employment outcomes (Duwe & Clark, 2014). Additional research is needed on why improvements in post-education while in prison do not appear to be linked to improvement in employment prospects. This unanswered question notwithstanding, the evidence we reviewed that measured the recidivism reduction effects of post-secondary education programs supports the designation of this education program as an **effective** evidence-based program.

Finally, we identified one prison-based reading instruction program evaluation that appears similar to BOP's Hooked on Phonics and Barton Reading and Spelling System Programs (see Appendix [Table 2B](#)). Robinson (2018) conducted a small (n=41) randomized control trial at a prison in an unnamed midwestern state and found that incarcerated individuals who received instruction in the Pure and Complete Phonics (PCP) program had improved reading scores (using three measures of reading) that were higher than the scores for a control group of incarcerated individuals who received the standard reading curriculum. While these results do provide support for the BOP's Hooked on Phonics and Barton Reading and Spelling System Programs, a more comprehensive evaluation of the programs is needed before any assessment of the programs can be made. At this point, the effectiveness of this type of reading program is **unknown**.

2.6 Education Program Comparability Assessment

Our review of prison education programs operating in state corrections systems across the United States, along with one education program in Israel, has classified the following two education programs as evidence-based: GED-based literacy programs and post-secondary education programs. Every meta-analysis and systematic review of education programs we reviewed (see Appendix [Table 2A](#)) supports this classification. The question we now raise and attempt to answer here: Do these prison education programs look like the BOP programs we described at the outset?

This is a difficult question to definitively answer because the program evaluations we reviewed do not provide much detail on these programs. However, based on our preliminary review, BOP appears to be on firm ground in the classification of the Bureau Literacy Program (i.e., the BOP's GED program) and the Post-Secondary Education Program as evidence based programming.

The Bureau Literacy Program, which focuses on increasing literacy and preparing individuals for the GED examination, shares several features with the referenced GED-based literacy programs, to include use of the TABE to assess educational needs/level and mandated educational programming for individuals who lack a high school diploma or GED certificate. In the BOP, mandated programming requirements meet or extend requirements referenced in the research. For example, the BOP requires individuals to complete a minimum of 240 hours in the Bureau Literacy Program, whereas the state of Florida requires 150 hours of programming. In addition, curriculum for the Bureau Literacy Program is standardized, and quality assurance measures are in place to support consistency across institutions. While the Bureau Literacy Program does appear comparable to the programs found to be evidence based in our review, a noteworthy caveat exists. A 2011 report from the American Council on Education and GED Testing Service found GED pass rates in the BOP were lower than in most state correctional systems (Patterson, 2011). Specifically, the BOP's GED completion rate was 68.3%, below the national average of 75.1%. Only six state correctional systems obtained lower pass rates – Alabama, Georgia, Michigan, Mississippi, Rhode Island, and Utah. This report pre-dated significant revisions to the GED in 2014.

The BOP's Post-Secondary Education Program also appears comparable to programs described in the research. As with post-secondary education programs referenced in our review, the BOP's Post-Secondary Education Program is offered in partnership with local colleges and universities, taught by certified instructors/faculty, consistent with community-based standards, and aimed at obtaining an associate or bachelor's degree. Degree programs offered in the BOP also focus on the acquisition of marketable skills.

However, other components of BOP's education program are not on as firm empirical ground. We found no evidence to support the classification of three other BOP education programs - Barton Reading and Spelling System, Hooked on Phonics, and English-as-a-Second Language Programs - as impacting recidivism reduction. Until evaluations of these BOP programs - or even evaluations of programs similar to these three BOP education programs - are conducted and available for review, they should not be designated as evidence-based programs with respect to recidivism reduction. However, we do find evidence to suggest the Barton Reading and Spelling System and Hooked on Phonics Programs may be promising programs in terms of their impact on reading skills, an intermediate outcome measure. Since these specific programs were not the subject of evaluations, this assessment is tentative at best.

2.7 Education Program Recommendations

In addition to conducting a review of the evaluation research and offering an assessment of whether specific programs should be designated as either EBRR or PA Programs, the Global

Corrections Group is tasked with “informing future First Step Act program updates/revisions”. To this end, we offer the following recommendations.

Three BOP education programs could benefit from enhanced transparency regarding referral procedures and program admission criteria. Aggregated data related to the results of each step in the screening process for the Barton Reading and Spelling System Program would aid in demonstrating the program is offered to all individuals in need of this type of programming. It would also provide greater clarity related to each step in the screening process, i.e., the role of the Supervisor of Education’s in the final screening step. Similarly, aggregated TABE data would aid in demonstrating all applicable individuals are offered the Hooked on Phonics Program. Finally, aggregated CASAS data would demonstrate all individuals who lack English language fluency are offered the English-as-a-Second Language Program.

The issue of access to programs is raised in part due to the limited availability/enrollment in some education programs, i.e., the Barton Reading and Spelling System and Hooked on Phonics Programs. While these programs have yet to be proven effective, it is likely there are individuals at all BOP institutions with a need for these very basic literacy skills. Once these programs are evaluated, incorporating them into policy is one way to ensure broader availability. In addition, according to the most recent FSA Annual Report, the BOP has taken significant steps to increase availability by allocating an additional 23 positions for Special Education Teachers (Office of the Attorney General, 2023).

The BOP has policies related to the Bureau Literacy and English-as-a-Second Language Programs; however, these policies do not mandate the use of a standardized curriculum. If these policies are updated to clearly mandate use of the standardized curriculum, then program review guidelines used in operational and program reviews can be updated to address the use of the required curriculum. These updates should include incorporating the Barton Reading and Spelling System and Hooked on Phonics Programs into the applicable policy.

All the BOP education programs referenced above have immediate outcome measures which can inform program fidelity, i.e., individuals must successfully pass examinations to proceed through and complete the program. There are two additional fidelity measures at the BOP’s disposal; however, it is not clear whether these measures are fully utilized. First, as noted above, if policy is updated to clearly mandate use of the standardized curriculum, then program review guidelines used in operational and program reviews could be updated to include fidelity measures specific to the curriculum. Second, since current policy requires Supervisors of Education to observe teachers in the classroom at least annually, program fidelity checklists could be incorporated into these observations.

The BOP has plans to evaluate the Bureau Literacy and Post-Secondary Education Programs. Independent evaluations of these programs will ensure classification of these programs as evidence based is merited. If the BOP believes the Barton Reading and Spelling System, Hooked on Phonics, and English-as-a-Second Language Programs may in fact be effective in reducing recidivism, it will be necessary to demonstrate this effectiveness through an independent evaluation. Given the relatively small number of individuals who participate in these programs, evaluating the programs may be challenging.

2.8 Summary of Results

All five education programs examined in this report are currently classified by BOP as EBRR Programs. Based on our review of the evaluation research conducted on these programs published between 2000 and 2022, we find support for classifying two of these programs as EBRR Programs: Bureau Literacy and the Post-Secondary Education Programs. It is important to recognize that these rankings are not based on evaluations of BOP's own programs; that body of evaluation research simply does not exist. Instead, the rankings are based on our review of evaluations of programs operating in state corrections systems across the United States, and/or in another country's correctional system. While these programs do appear to be comparable to the BOP programs based on our comparability review, it is recommended that each of these BOP programs be evaluated. We understand that BOP has plans to evaluate these programs in the future; but at present, there are no ongoing evaluations of these programs.

We found classification of the following three programs as EBRR Programs is not fully supported at this time: Barton Reading and Spelling System, Hooked on Phonics, and English-as-a-Second Language Programs. However, we did find promising effects on reading skills for the Barton Reading and Spelling System and Hooked on Phonics Programs, such that the BOP might *provisionally* classify these programs as EBRR Programs. A provisional classification is necessary as neither BOP programs nor comparable programs operating at the state level have been fully evaluated. Until additional evaluations of these programs are conducted, and a body of quality evaluation research is available for review, the classification should remain provisional. With respect to the English-as-a-Second Language Program, at this time, there is no evidence to support classifying this program as an EBRR Program.

The table below provides a summary of the results of our research review.

The Effectiveness of Prison-Based Education Programs

Summary of Program Ratings

BOP Program	Status of BOP Evaluations	Evidence Rating: BOP Evaluations	Evidence Rating: Outside Evaluations - Intermediate Outcomes	Evidence Rating: Outside Evaluations - Post-Release Outcomes	Comparability Assessment
Barton Reading and Spelling System Program (EBRR)	Evaluation Planned for FY 2026	Unknown	Promising effects on reading skills Unknown effects on misconduct	Unknown	Somewhat Comparable
Hooked on Phonics Program (EBRR)	Evaluation Planned for FY 2026	Unknown	Promising effects on reading skills Unknown effects on misconduct	Unknown	Somewhat Comparable
Bureau Literacy Program (EBRR)	Evaluation Planned for FY 2025	Unknown	Effective in education outcomes for GED, ABE, and HS. Effective in misconduct reduction for GED. Unknown effects on misconduct for ABE and HS	Promising effects on recidivism reduction for GED Unknown effects on recidivism reduction for ABE and HS	Comparable
Post-Secondary Education Program (EBRR)	Evaluation Planned for FY 2025	Unknown	Effective for improvement in education level Unknown effects on in-prison behavior	Effective for recidivism reduction Unknown effects for employment post-release	Very Comparable

English as a Second Language Program (EBRR)	No Evaluation Planned	Unknown	Unknown	Unknown	N/A
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APPENDICES

Table 2A: Summary of Meta-Analyses and Systematic Reviews of the Effectiveness of Prison-Based Education Programs

Study (Year)	Program Type	Review Period	Review Criteria	Number of Studies	Key Findings
1) Aos et al. (2006) Systematic Review	Basic adult education (BAE)	1970-2005 (2 studies 2000 and later)	Level 3 or higher	14 studies: 7 Basic Adult Education (BAE)	BAE: 5.1% RIR (reduction in recidivism) Note: recidivism rates for treatment vs. control groups were not provided; see individual studies
2) Wilson et al. (2000) Meta-Analysis	Education, vocational training, & prison work programs	1975-1998 (No studies 2000 and later)	Level 2 or higher	33 unique studies, but 53 comparisons: 14 Adult Basic Education and GED 13 post-secondary education 5 multi-component programs	Initial positive results for each program type are likely due to noncomparability of treatment and control groups. Overall effects difficult to identify due to poor quality of the research (only 6 studies level 3 and above).
3) Bozick et al. (2018) Meta-Analysis	Correctional Education programs, including adult basic education and vocational programs, GED programs, and post-secondary education programs	1980-2017 (24 recidivism studies 2000 and later; 6 level 4 or 5 studies)	Level 2 and above (11 studies with recidivism outcomes were level 4 or 5; 3 with employment outcomes were level 4)	57 studies with recidivism outcomes; 21 studies with employment outcomes	Focusing on level 4 and 5 studies only: Individuals participating in correctional education programs were 28% less likely to recidivate when compared with individuals who did not participate in correctional education programs. No difference in employment outcomes.

		2000 and later)			
4) Ellison et al. (2017) Rapid Evidence Assessment	Adult Basic Education (ABE), General Education Diploma (GED) attainment, post-secondary education and/or vocational education	1995-2015 (15 studies 2000 and later)	Level 2 and above; no level 5 studies)	28 studies; 9 studies covered a range of educational programs, while 16 examined only 1 program type; only 18 studies used in meta- analysis	5 studies reported employment outcomes: Those who have engaged in prison education are 24 percent more likely to find employment than those who have not. 18 reported recidivism outcomes: All studies favor education, meaning delivering education in prison settings has a positive impact of recidivism when compared to the outcomes of a comparison or control group (odds ratio 0.64).
5) Jensen & Reed (2008) Systematic Review	Adult Basic Education (ABE), General Education Diploma (GED) attainment, post-secondary education, vocational education, and life skills	1995-2003 (2 studies 2000 and later)	Level 3 and above (review included both individual research reviews and previous meta-analyses)	6 studies of correctional education included but 4 were meta-analyses. 4 studies level 3 or above studies of post-secondary education.	Correctional education: Five of six studies (4 meta-analyses) that correctional education is effective in reducing recidivism. Post-secondary education: All 4 studies found individuals who participated in post-secondary education while in prison were substantially less likely to recidivate. Life skills programs: Insufficient research to determine effects.
6) Davis et al. (2013) Meta-Analysis	Correctional Education programs: ABE programs, high school/GED programs, postsecondary education programs, and vocational education programs	1980-2011 (13 studies 2000 and later)	Level 2 and above: 24 level 2 studies, 20 level 3 studies, 5 level 4 studies, and 2 level 5 studies	51 studies report recidivism outcomes; 18 studies report employment outcomes	Recidivism outcomes: Participation in a correctional education program—regardless of the type of program—is associated with a reduction in recidivism. The odds of recidivating among individuals receiving correctional education are 64 percent of the odds of recidivating among individuals not receiving correctional education. Education outcomes: On average, the odds of obtaining employment post-release among individuals receiving correctional education are 13 percent higher than the odds of obtaining employment post-release among individuals not receiving correctional education. Both academic and vocationally focused

					programs may be equally effective at preparing individuals for the labor market following release.
7) Hall (2015) Systematic Review	Correctional Education: high school diploma, a GED, vocational and technical training certificates, and college degrees	1995-2010 (9 studies 2000+)	Level 2 and above	10 studies	All forms of correctional education reduce recidivism; college education during incarceration has the greatest impact on recidivism.
8) Mackenzie (2006) Meta-Analysis	Correctional Education Programs: 6 Adult Basic Education (ABE), 3 GED, 5 combined ABE/GED, and 13 Post-secondary education (PSE) <i>Note:</i> Life Skills programs also reviewed, but not included here.	1975-2005 (3 studies 2000+)	Level 2 or higher	27 studies (13 level 3 or higher)	Overall findings when all programs grouped together and including level 2 and above studies: Program participants recidivated at a rate of 41 percent relative to a base recidivism rate of 50 percent for the comparison group. PSE programs had the greatest recidivism reduction effect (37% vs 50%). However, when analyses were conducted with only the 13 level 3 and above studies, the results were inconclusive.

Table 2B: An Overview of Prison-Based Education Program Evaluation Research (2000-2022)

Author(s)	Program Under Review (Jurisdiction)	Research Design & Sample Size	Quality Ranking: Low (1) – High (5)	Key Findings
1) Fizer (2020)	Trained Peer Tutors in Adult Basic Education (ABE) program and GED (Arizona: Red Rock Correctional Center [RRCC], a medium custody private prison operated by CoreCivic)	RCT design randomly assigned 70 incarcerated individuals to treatment and control groups: there were 2 treatment groups: 1 ABE class with tutor(n=15), and 1 GED class with tutor(n=20); and 2 control groups (1 control group of ABE [n=15] and 1 control group of GED [n=20]). <i>Note: “A total of six tutors were involved, and through a process of a rotation process based on subject expertise, the treatment classes were provided five trained tutors to assist the instructor, which served as the intervention. All tutors completed a 27-hour tutor training program developed locally by the education staff and focused on instructional skills and communication.” (24)</i>	4 – RCT research design used for a small, 90-day pilot study. Small sample size is a limitation, but qualitative interviews with participants in both groups provided insights to support the pilot test quantitative results presented.	The study was conducted in one medium security prison and presented preliminary evidence that tutors in the classroom provide more support for learning than computer-based support. According to the author: “This study found that a group of ABE students who had exposure to the use of trained peer tutors for up to 90 days performed better on a post-skills exam (TABE) than those ABE students who did not have tutors assigned to assist in their learning process. The difference in the mean score values between these groups on the TABE was statistically significant ($p = .03$). This difference was not found with the GED control and treatment groups. The distinct difference between the ABE and GED classes, besides their academic functioning levels, was that the students in both the control and treatment GED classes all had access to a computerized learning program that was set to each student’s skill level.” (30)
2) Robinson (2018)	Orton-Gillingham Reading Instruction: Pure and Complete Phonics (PCP)	RCT Design with random assignment to treatment (21 program participants) and control (20 comparison group participants received	4 – RCT design, but study had very small sample (n=41), with inequality noted despite random assignment between these 2	Improvement in reading linked to PCP program: “Inmates who received instruction in the PCP methodology did considerably better on three measures of reading than those who received the institution’s standard reading curriculum.” (68)

	program (5 hrs. per week for 15 weeks) (Unidentified Midwestern State)	standard curriculum. Total sample (n=41). Pre-test post - test comparison of learning outcomes. Participants had fifth grade or lower scores on the Test of Adult Basic Education, and instruction was implemented for 15 weeks, 5 days a week for one hour a day by certified teachers.	groups in pre-test measures of reading assessment.	
3) Batiuk (2005)	Post-secondary education, GED, Vocational education, high school (Ohio)	Quasi-experiment: 1989-1992 release cohort (n=972): 30% (n=288) no educational programming; compared to 70% (n= 680) in one of 4 education programs.	3 – Non-equivalent comparison groups, but statistical controls for selected background characteristics, including age, gender, race, offense type, prior education, and criminal history.	College class participation has the solely significant negative effect on recidivism when compared to the other three programs measured. Participation in post-secondary education programs reduces the recidivism hazard rate by some 62 percent in comparison to the non-education group.
4) Cho & Tyler (2010)	Adult Basic Education (ABE) and other educational services, including literacy classes and cognitive life skills classes (Florida)	Quasi-experiment: 1994-1999 release cohort included 5,172 males who participated in ABE and 7,666 in mates who did not participate. Groups compared using labor market outcomes (earnings and employment) and return to prison rates (3-year follow-up).	3 – Non-equivalent comparison group, but statistical controls to adjust for observed differences between groups.	No evidence that ABE participation or completion is effective in increasing one's quarterly earnings or employment probability following prison release. No statistically significant difference in return to prison rates for ABE vs non-ABE groups. However, for individuals participating in the work release program the odds of returning to prison within 3 years are only 0.74 times as high as the odds of returning to prison for non-participants. For prison industry it was .77; and for vocational programs .85 the odds.
5) Clark & Duwe (2015)	Life skills program: Power of People (PoP)	Retrospective quasi-experimental design: 887 men who participated in PoP program compared with a matched group of 887 non-	3 – Well-designed study with propensity score matching using LSI-R, and other covariates. However, LSI-R data were missing for 7% of the PoP	Overall results do not support the PoP program: "PoP participants show a higher rate of rearrest and reconviction compared with the matched comparison group. PoP participants and the matched comparison group have the same rate

	10-week prison-based self-development life-skills program (Minnesota)	<p>participants, using PSM. Both the treatment and comparison groups were released from Minnesota state facilities between February 2006 and June 2011. 1-year recidivism follow-up.</p> <p><i>Note:</i> Recidivism, the outcome variable in this study, is measured four different ways: (1) rearrest, (2) felony reconviction, (3) reincarceration for a new felony offense, and (4) revocation for a technical violation of supervised release.</p>	participants and 32% of the non-participant pool; these individuals were dropped from the analysis.	<p>of reincarceration (18%) and supervision revocation (38%).” (396)</p> <p>The researchers also noted: “PoP did not have a significant effect on recidivism, but several of the other variables included in the analyses did. Being male, a racial or ethnic minority, having more prior supervision failures and felony convictions, a higher LSI-R score, and being committed from the Minneapolis/St. Paul metropolitan area were all significantly associated with a positive increase in the hazard for all or most of the four recidivism outcomes.” (397)</p>
6) Duwe & Clark (2014)	Secondary (GED or high school diploma) education and post-secondary education programs (associate degrees and diplomas/certificates from career/technical programs) (Minnesota)	Retrospective Quasi-experimental matched group design: Propensity score matching used to compare 693 individuals who earned a degree while incarcerated to a matched sample of 5,267 individuals with no post-secondary degree. Data from a cohort of 9,394 individuals released from prison between January 2007 and December 2008.	3 – Well-designed study with appropriate statistical controls for known differences between groups.	Post-secondary education Results: “Earning a post-secondary degree in prison significantly decreased the risk of reoffending, lowering the hazard by 14% for rearrest, 16% for reconviction, and 24% for new offense reincarceration” (469). However, obtaining a post-secondary degree did not significantly increase the odds of post-release employment. Secondary degree results: earning a secondary degree had no impact on the 4 recidivism measures, but it increased “the chances of securing employment within the first 2 years after release from prison by 59%.” (471)
7) Kim & Clark (2013)	Prison-based college education program; post-secondary education	Quasi-experimental design using propensity score matching. Prison release cohort from 2005-2008. 340	3 – Well-designed study using PSM to identify a comparison group. Researchers note the following: “excluded are	Recidivism rates within three years after release were lower for college program completers (9.4%) than a PSM -derived comparison group (17.1%). They also report that “earning a college

	(New York)	individuals who earned a college degree were compared to a matched group of non-completers. Sample: "After constructing a matched dataset through PSM, the final sample size of this study became 680 including 340 offenders who earned a one-year college certificate or higher degree while incarcerated and their matching counterparts." (198)	offenders who did not have a high-school diploma (HSD) or a High School Equivalency (HSE) status at admission and did not earn such a diploma while incarcerated because they are academic pre-requisites for admission into the prison-based college education program. Lastly, those who held a valid one-year college certificate or higher college degree at admission are excluded because the purpose of this study is to understand how prison-based college education attainment can help prisoners maintain a law-abiding life once released." (198)	degree in prison decreases the risk of recidivism (re-arrest) by nearly 50 percent while holding other covariates constant." (202)
8) Pompoco et al. (2017)	Prison Education Programs: GED, Vocational Training / apprenticeship programs, and college classes (Ohio)	Quasi-experimental design with Propensity Score Matching (PSM) used to study the impact of 1-year educational programming on 1-year post-program prison misconduct among male individuals with a minimum of 2 years in prison; and separate analyses of programming impact of 3-year post release return-to-prison rates using different selection criteria. Sample size for each program: GED (6,612: 3,308 in GED program and 3,308 in control); Vocational/apprenticeship	3 – Well-designed study overall, but differences in the sample used to test misconduct and recidivism effects make a summary of study findings difficult, and limitations in the data available for PSM. <i>Note:</i> Apprenticeship programs and vocational programs were combined in a single group, which may have masked the effects of one of these program types.	Reported findings: "Inmates who earned GEDs or completed college classes were less likely than nonprogram inmates to engage in violence during incarceration, whereas completing vocational training and apprenticeship programs had no such effect on any type of inmate misconduct examined. On the other hand, completing vocational training and apprenticeship programs, GEDs, or college classes at any point during incarceration coincided with lower rates of prison returns within 3 years after release. None of these benefits accrued to inmates who started but did not complete these programs/classes." (515)

		programs (1,731: 849 in Vocational/ apprenticeship program and 849 in control). College classes: 1,856 (928 in college classes; 928 in matched control group).		
9) Roessger et al. (2021)	GED and Vocational programs (Arkansas)	Retrospective quasi-experimental study. Cohort of individuals released from Arkansas prison between 2005 and 2013 (n=32,174) who entered prison without a GED or high school diploma were included in the recidivism analyses; a different cohort was used for the post-release employment analyses (2008-2016; n=40,667). Within both data sets, individuals who completed either a GED or a vocational training program were compared on these two outcomes with individuals who did not complete these programs.	3 – Adequate research design with identified nonequivalent comparison group differences examined as moderators. Two demographic variables were identified as significant moderators: age and race (see p.24-25). In addition, individuals who participated in GED and Voc. Ed. Programs were included in the comparison group along with nonparticipants. Researchers also examined the impact of multiple program completion.	Completion of GED or Vocational programs was found to significantly reduce recidivism (reincarceration) risk: “Among inmates without high school diplomas and GEDs at intake, those completing GED programs had a 4% lower three-year recidivism rate than those not completing, and those completing VOC programs had a 10% lower three-year recidivism rate than those not completing” (34). Significant improvement in employment post-release was found for GED completers, but vocational program completers did not show these gains. However, these overall findings changed when age and race were included as moderators. Both sentencing variables and participation/completion of other prison programs moderated the effects of GED and Voc. Ed. Programs with a significant effect on recidivism and employment outcomes included anger management: “Completers of both GED and anger management programs had a 33.3% lower relative probability of recidivating within six months, a 30.8% lower relative probability of recidivating within a year, and a 22.7% lower relative probability of recidivating within three years” (32). Substance abuse education: “completers of both GED and substance abuse education programs had a 35.0% lower relative probability of recidivating within six months, a 31.9% lower relative probability of recidivating within a year, and a 24.1% lower relative probability of recidivating within three years”

				(32). Four other programs—when combined with GED—had an impact: thinking errors, parenting, stress management, and principle application.
10) Walk et al. (2021)	Correctional Education: “(1) a class for illiterate individuals acquiring basic reading skills; (2) a class for 6th grade level education teaching basic Hebrew and mathematics; (3) a class for 8th grade level education, where participants must pass the Israeli Ministry of Education’s tests for 8th grade (equivalent to ABE); (4) a class for 10th grade level education teaching mathematics, reading comprehension, computer skills, and geography; (5) a class for 12th grade level education teaching reading comprehension, creative writing, civil studies, computer skills, and geography, where	Retrospective quasi-experimental design. Cohort of 37,231 male individuals who were released from Israel prisons during a nine-year period from 2004 to 2012. Individuals who participated in educational programs (n=8444, or 23% of cohort) were compared to a comparison group who did not participate on two outcome measures, post-release employment (and months of employment) during the 1 st year after release, and recidivism (rearrest, reincarceration within 3 years). Sample sizes for the five education programs varied: 12 th grade: 526 participants vs 349 comparison group; 10 th grade: n=435 vs 244; 8 th grade: n=2580 vs. 677; 6 th grade: n=2,536 vs. 270.	3 – Adequately designed quasi-experiment with propensity score matching. However, the cohort was released from prison over a long period of time, which introduces variable time at risk as a confounding factor. In addition, the researchers report that individuals who did not provide information on their prior education level were excluded from the study. No data were provided on the size of this group. Differences between the size of the program cohorts and their corresponding comparison groups were noted.	Researchers found that “the four educational correction programs we analyzed demonstrated two patterns of effect – participants in the 12th grade and 8th grade programs showed significantly better outcomes than non-participants in both recidivism and employment, whereas participants in the 10th grade and 6th grade programs only showed significantly better employment outcomes.” (6)

	<p>participants must pass internal and external examinations formulated by the Israeli Ministry of Education (equivalent to GED as well as some exit exams).” (5)</p> <p>(Israel Prison Service)</p>			
<p>11) Winterfield et al. (2009)</p>	<p>Post-Secondary Education (PSE) program</p> <p>(3 state study: Indiana, Massachusetts, and New Mexico)</p>	<p>Quasi-experimental design: PSE participants compared to non-PSE participants in 3 states 1-year post-release recidivism:</p> <ul style="list-style-type: none"> -Indiana (328 PSE vs. 1,078 non-PSE) -Massachusetts (133 PSE vs. 185 non-PSE) -New Mexico (353 PSE vs 1,329 non-PSE) <p>Two of the states (Massachusetts and New Mexico) used new arrest (or technical violation) as their outcome of interest, while Indiana focused on return to prison (for either a new crime or technical violation).</p>	<p>3 – Well-designed study using propensity score matching (PSM) techniques, but evidence of non-equivalent groups identified by researchers. The researchers noted the lack of program (fidelity) data as a limitation. They offered the following: “It is likely that important variations exist between institutions in terms of program structure, organization, and other potentially important factors that may affect the strength of the relationship between PSE and recidivism.”</p>	<p>The authors concluded that “the results of the quantitative study provide mixed results in terms of PSE’s impact on post-release recidivism. In two states, PSE was associated with a decrease in recidivism, while in a third it was associated with an increase. However, only one of these effects—a decrease in recidivism—was statistically significant.” (13) Researchers note the following: “The reduction in recidivism risk attributable to PSE for Indiana (-3.40%) and Massachusetts (-14.19%) were similar to those shown in the simple group comparison (Indiana: -2.85%; Massachusetts: -13.9%). The impact of PSE on recidivism for the New Mexico sample was much stronger (-24.61%) than the difference between the PSE and non-PSE groups (New Mexico: -5.54%). The difference in results suggests that key differences in recidivism risk (excepting PSE or non-PSE status) remained despite attempts to balance the groups.</p>

12) Zgoba et al. (2008)	GED program (New Jersey)	Quasi-experimental design: 1999-2000 release cohort used; compared recidivism outcomes of 250 GED program completers with a matched comparison group of 153 non-GED participants.	3 – Well-designed study with groups matched by demographics and criminal history. However, the authors do not provide details on the types of crimes included in the “any re-arrest” recidivism measure, or why different follow-up periods were used. In addition, no details were provided on the decision to ignore the subgroups of GED program participants who failed the GED exam, including how many times a participant can take the exam while in the GED program.	“Sixty-four percent of non-GED participants recidivated once released, compared with 51% of GED participants” (381). They also note that “leaving prison with at least the equivalent of a high school diploma significantly improves the chances that one will not recidivate, even after considering the other risk predictors in offender research. Other factors that help to mitigate recidivism rates include race (e.g., white), serving a shorter sentence, age at arrest (e.g., older as opposed to younger), violent offense charges, and being married at the time of one’s arrest.” (382)
13) Brewster & Sharp (2002)	GED and Vocational education programs (Oklahoma)	Quasi-experiment: 1991-1994 release cohort GED analyses: (n=5,752 individuals who entered prison without a GED). GED completers (n=1,044) compared to no GED (n=4,708) Voc. Ed analyses: 805 completers vs 11,008 no Voc. Ed	2 – Non-equivalent comparison groups used for both analyses, control variables were used to ensure that demographic (age, race, marital status), offense, and release variables were held constant.	After controlling for known differences between groups, it was found that GED program completion has more of a recidivism reduction effect for both men and women than voc. Ed program completion. <i>Note:</i> 5,752 entered the Department of Corrections without a high school education. Among these individuals, only 1,044 (18.2%) completed a GED program while under the supervision of the Oklahoma Department of Corrections. Only 6.8% or 805 of the 11,813 individuals released between 1991 and 1994 completed a vocational education program while incarcerated.

14) Burke & Vivian (2001)	Post-secondary education program (Massachusetts)	Quasi-experiment: 32 PSE completers compared to a matched sample of 32 non-PSE participants; 5-year recidivism follow-up.	2 – Control group matched by demographic profile and criminal history; small sample size.	“An inmate who completes at least one college course while incarcerated at HCCC is 21.9% less likely to recidivate to our facility 5 years after release, than a comparable inmate who does not avail herself or himself of such courses. Taking college courses in and of itself makes almost a 22 percent difference in the likelihood of re-incarceration five years following release.” (162)
15) Courtney (2019)	Prison Education Programs: Functional Literacy, work-based education, and GED (Arizona)	Quasi-experimental pretest-posttest design: Participants in 3 education programs compared to a matched sample of non-participants in these programs. Total sample size across programs was 348 (87 participants and 29 non-participants in each program).	2 – Non-equivalent control group with no controls for possible differences by key demographics or criminal history. Differences noted for conviction offense type, and custody level. Small sample size for control groups	When combined, participation in prison education programs was found to reduce misconduct. Participants in GED had significantly higher reductions in misconduct than participants in either functional literacy or work-based education.
16) Nally et al. (2012)	Correctional Education programs: GED and Post-secondary education (Indiana)	Retrospective quasi-experimental design: 1,077 individuals released from prison between 2002 and 2009 who had participated in federally funded educational programming (type not specified) were compared to a matched comparison group of 1,078 individuals released in 2005 who did not participate in federally funded educational program. Both employment and	2 – Weak research design with non-equivalent control group due to inadequate matching procedures). Matching criteria included only 3 variables: “race of offender, education level of offender, and whether or not the offender had received the federal funding for his/her education.” (73) In addition, the comparison group time at risk post-release 2005, is different than the study group, released between 2002 and 2009.	Overall finding: “An offender who has not attended correctional education programs during incarceration is approximately 3.7 times more likely to become a recidivist offender after release from IDOC custody, while compared with an offender who has participated in correctional education programs during incarceration.” (79) They also reported high unemployment rates for both groups (but more employed in study group after 1 year in study group (47% vs 28%) and noted higher income for employed education program participants. The researchers did not present findings for individuals by type of education program; only overall education

		recidivism post-release were tracked.		program participation examined. However, they do note that 81.8% of the study group had a GED, 15.9% participated in post-secondary education programs, and 2.3% participated in high school or GED programs but did not complete program prior to release.
17) Smith (2005)	Prison Education programs: ABE, GED, ESL, and vocational programs (Pennsylvania)	Quasi-experimental design: Release cohort of 1,566 incarcerated individuals, with comparisons of 1-year recidivism outcomes for education program participants (total n=1,123) and non-participants in educational programs (n=443).	2 – Weak research design relying on a non-equivalent comparison group.	Findings for rearrest: Correctional education participants had lower rates of recidivism (23.6%) compared to the non-participants (29.4%). Differences were not statistically significant. For rearrest by education program type: Participation in multiple education programs (program stacking) resulted in the lowest recidivism rate for rearrest (21.8%) followed by participation in basic education (26.1%), vocational education (27.9%), and GED (31.3%). For legally employed by education program type: Participation in multiple education programs showed the highest rates of employment (56.4%) followed by GED (53.1%), basic education (52.9%) and vocational classes (50.7%).
18) Steurer, Smith, & Tracy (2001)	Prison Education programs: ABE, GED, and other programs (3 State study: Maryland, Minnesota, and Ohio)	Quasi-experimental design: 1997-1998 release cohorts across 3 states. Post-release recidivism for 1,373 program participants compared to 1,797 non-participants in educational programs. Employment status and criminal behavior tracked for three years post release. Sample size varied by state ("Maryland - 275 (31.1%) participants and 610 (68.9%) non-participants; Minnesota - 574 (54.6%) participants and	2 – Weak research design employed, with significant differences noted by age and race between tx and control groups; extent of educational program involvement was not known; these data not collected. No matching procedures were used to increase the comparability of the two groups, and as a result, education program participants and non-participants were found to be significantly different regarding two key demographic variables:	It was reported that "inmates who participated in education programs while incarcerated showed lower rates of recidivism after three years. For each state the three measures of recidivism, re-arrest, re-conviction, and re-incarceration were significantly lower. The employment data shows that in every year, for the three years that the study participants were followed, the wages reported to the state labor departments were higher for the education participants compared to the non-participants." (8)

		477 (45.4%) non-participants; and Ohio 524 (42.5%) participants and 710 (57.5%) non-participants)" (15-16).	age and race. Participants and non-participants also varied significantly in their respective employment and criminal histories prior to incarceration. In addition, the instant offense resulting in the most recent incarceration varied significantly. The educational backgrounds of participants and non-participants in prison education programs also varied significantly. These differences between the treatment and control groups make comparisons between these two groups difficult. It should also be noted that data were not available on the length of time participants were in education programming. This is a major design limitation.	
19) Torre & Fine (2005)	Post-Secondary Education in prison (New York)	Quasi-experimental design: 4-year follow-up study compared recidivism of women released from prison between 1985 and 1995 who participated in the college program (n=274) vs women who did not participate (n=2,031).	2 – Weak research design with non-equivalent comparison group. A larger % of violent individuals participated in the college group than the comparison group.	The researchers reported that "women who participated in college while in prison had a 7.7% return-to-custody rate. In contrast, 29.9% of the 2,031 female offenders released between 1985 and 1995, who did not participate in college while in prison, were returned to custody, within 36 months." (579)
20) Gordon & Weldon (2003)	GED and Vocational Education programs (West Virginia)	Quasi-experimental design, with 3 comparisons of 3 groups: voc. Ed. Only (n=169), GED plus Voc. Ed. (n=24), and nonparticipants in both (n=196). The study	1 – Poorly designed comparative study with non-equivalent groups and no statistical controls; small sample size for one group.	Both GED and Voc. Ed. Program participants had lower recidivism rates than non-participants in these programs. Vocational completers had a recidivism rate of 8.75%, individuals who participated in both GED and vocational training reported a recidivism of 6.71%, and non-

		included individuals who were released within a two-year period (1999-2000) from the Huttonsville Correctional Center.		educational participants had a recidivism rate of 26%.
21) Fabelo (2002)	Prison Education programs: academic literacy /GED, vocational, and life skills training programs (Texas)	Retrospective non-experimental design: Cohort of 32,020 individuals released from prison for the first time in 1997-1998. Individuals eligible for educational programs (n=23,822 who participated in educational programs (n=11,866) were tested to assess the link between in-prison educational gains and post-release recidivism (re-incarceration within 2 years of release). Separate subgroup analyses conducted to measure the link between employment gains and in-prison educational achievement.	1 – Weak research design with no control group. Different cohorts used to examine educational achievement while in prison, employment post-release, and recidivism.	Researchers found that “Inmates with the highest education are more likely upon release to obtain employment, earn higher wages and have lower recidivism. Educational achievement in prison was associated with an 11% decrease in the two-year recidivism rate of inmates (16% recidivism rate for achievers compared to 1 8% for those who did not achieve).” (109)
22) Hull et al. (2000)	Adult Basic Education (ABE), GED, prison work programs, literacy programs, and vocational training (Virginia)	Retrospective Quasi-experimental design: a 1979-1994 cohort of 3000 individuals (male and female) released from Virginia prisons. 4 comparisons: 469 academic program participants who did not complete program; 319 vocational program participants who did not	1 – Poorly designed study utilizing non-equivalent groups. Missing data problems; employment data for only a small number of individuals in sample (347/3000).	Academic and vocation program completers had significantly lower reincarceration rates (19.1% and 21.3%) than individuals who enrolled but did not complete these programs (37.3%; 38.2%), and individuals that had no educational programming (49.1%).

		complete program; 451 academic program completers; 456 vocational program completers; and a comparison group with no educational involvement (n=1,307). Outcomes included employment post-release and re-incarceration.		
23) Nuttall, Hollman, & Staley (2003)	GED Program (New York)	Quasi-experimental design used to compare employment and recidivism outcomes across 3 groups: Individuals who earned a GED in prison (n=2,330); individuals who did not earn a GED (n=9,419); and individuals admitted to DOC with a degree (n=4,868). Sample: 1996 prison release cohort (n=16,617).	1 – Poorly designed study with no attempt to control for differences across comparison groups.	The 3-year return-to-prison rate for GED completers was 32% vs. 37% for individuals who did not earn a GED while incarcerated, and 32.3% for individuals who entered prison with a GED. The difference between the first 2 groups was larger when individuals under 21 were examined separately.