

Literacy Behind Bars: Results From the 2003 National Assessment of Adult Literacy Prison Survey

Executive Summary

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The 2003 National Assessment of Adult Literacy (NAAL) assessed the English literacy of incarcerated adults for the first time since 1992. The assessment was administered to approximately 1,200 inmates (ages 16 and older) in state and federal prisons, as well as to approximately 18,000 adults (ages 16 and older) living in households. The prison sample is representative of the 1,380,000 adults in prison and the household sample is representative of the 221,020,000 adults in households in 2003.¹ The 2003 adult literacy assessment covered the same content as the 1992 National Adult Literacy Survey, and both assessments used the same definition of literacy:

Using printed and written information to function in society, to achieve one's goals, and to develop one's knowledge and potential.

Unlike indirect measures of literacy, which rely on self-reports and other subjective evaluations, the assessment measured literacy directly through tasks completed by adults. These tasks represent a range of literacy activities that adults are likely to face in their daily lives. Prison inmates were asked to complete the same tasks as adults living in households.

Three types of literacy were measured by the assessment on 0- to 500-point scales:

1. *Prose literacy.* The knowledge and skills needed to search, comprehend, and use information from continuous texts. Prose examples include editorials, news stories, brochures, and instructional materials.

2. *Document literacy.* The knowledge and skills needed to search, comprehend, and use information from noncontinuous texts. Document examples include job applications, payroll forms, transportation schedules, maps, tables, and drug or food labels.

3. *Quantitative literacy.* The knowledge and skills needed to identify and perform computations using numbers that are embedded in printed materials. Examples include balancing a checkbook, computing a tip, completing an order form, or determining the amount of interest on a loan from an advertisement.

This report presents the findings from the 2003 prison adult literacy assessment. The report includes analyses that compare the literacy of the U.S. prison population in 2003 with the literacy of the U.S. prison population in 1992. It also includes analyses that compare the literacy of the prison and household populations in 2003. The analyses in this report use standard *t* tests to determine statistical significance. Statistical significance is reported at $p < .05$.

Literacy Levels

The Committee on Performance Levels for Adult Literacy, appointed by the National Research Council's Board on Testing and Assessment (BOTA), recommended a set of performance levels for the prose, document, and quantitative scales. Drawing on their recommendations, the U.S. Department of Education decided to report the assessment results by using four literacy levels for these scales:

Below Basic, Basic, Intermediate, and Proficient.

Below Basic indicates that an adult has no more than the most simple and concrete literacy skills. *Basic* indicates that an adult has the skills necessary to perform simple and everyday literacy activities. *Intermediate* indicates that an adult has the skills necessary to perform moderately challenging literacy activities. *Proficient* indicates that an adult has the skills necessary to perform more complex and challenging literacy activities.

BOTA's Committee on Performance Levels for Adult Literacy also recommended reporting the 2003 results by using a separate category: nonliterate in English. Adults were considered to be nonliterate in English if they were unable to complete a minimum number of simple literacy questions or if they were unable to communicate in English or Spanish.

Adults who were classified as nonliterate in English because they could not complete a minimum number of simple literacy questions were generally able to complete the background questionnaire, which was administered orally in either English or Spanish; for reporting purposes, they were included in the *Below Basic* literacy level. Adults who were classified as nonliterate in English because they were unable to communicate in either English or Spanish could not complete the background questionnaire; they are not included in the analyses in this report, which rely on background data. Adults who could not be tested because of a cognitive or mental disability are also not in-

cluded in the analyses in this report, but in the absence of any information about their literacy abilities, they are not considered to be nonliterate in English.

Changes in the Prison Population and Prisoners' Literacy Between 1992 and 2003

The rate of incarceration in federal and state prisons in the United States increased from 332 per 100,000 in 1992 to 487 per 100,000 in 2003. (These figures do not include jails.) The prison population was larger, older, and somewhat better educated in 2003 than in 1992. The parents of prison inmates were also better educated in 2003 than in 1992.

- The average prose and quantitative literacy of the prison population was higher in 2003 than in 1992. In 2003, some 3 percent of the prison population was considered to be nonliterate in English (figure 2-1).²
- Average prose, document, and quantitative literacy was higher for Black³ prison inmates in 2003 than in 1992, and average quantitative literacy increased for Hispanic⁴ inmates. In 2003, White inmates had higher average prose, document, and quantitative literacy than Black and Hispanic inmates. Black prison inmates had higher average document literacy than Hispanic inmates (figure 2-3).
- In 2003, prison inmates' average prose and quantitative literacy was higher with each increasing level of education. For example, inmates with less than a high school education had lower average prose and quantitative literacy than inmates with some high school (figure 2-5).
- The average prose and quantitative literacy of incarcer-

ated men increased between 1992 and 2003 (figure 2-7).

- Average prose, document, and quantitative literacy increased between 1992 and 2003 for prison inmates in the 25 to 39 age group. In 2003, incarcerated adults who were 40 years old or older had lower average prose and document literacy than incarcerated adults who were 25 to 39 years old (figure 2-9).
- Average prose and quantitative literacy increased between 1992 and 2003 for prison inmates who spoke only English before starting school (figure 2-11).

Comparing the Prison and Household Populations

In 2003, a higher percentage of prison inmates than adults living in households were male, Black, and Hispanic, and a higher percentage had been diagnosed with a learning disability. A lower percentage of prison inmates than adults living in households were ages 40 or older, and a lower percentage spoke a language other than English as children.

- Prison inmates had lower average prose, document, and quantitative literacy than adults living in households (figure 3-1).
- Incarcerated White adults had lower average prose literacy than White adults living in households. Incarcerated Black and Hispanic adults had higher average prose literacy than Black and Hispanic adults in households (figure 3-3).
- Black inmates who had been in prison for a shorter period of time (incarcerated in 2002 or later) had prose literacy that was not statistically significantly different from that of Black adults living in households, whereas Black

inmates who had been incarcerated since before 2002 had higher average prose literacy than Black adults living in households (figure 3-3 and table 3-3).⁵

- In general, either prison inmates had lower average prose, document, and quantitative literacy than adults living in households with the same level of highest educational attainment or there was no statistically significant difference between the two groups. The exception was that among adults without any high school education, prison inmates had higher average literacy on all three scales than adults living in households (figure 3-5).
- Both male and female prison inmates had lower average literacy on all three scales than adults of the same gender living in households (figure 3-9).
- In every age group examined (16 to 24, 25 to 39, and 40 or older), incarcerated adults had lower average prose, document, and quantitative literacy than adults in the same age group living in households (figure 3-11).
- Among adults who spoke only English before starting school, those who were incarcerated had lower average prose, document, and quantitative literacy than those who lived in households (figure 3-13).
- Among adults whose parents were high school graduates or attained postsecondary education, prison inmates had lower average prose, document, and quantitative literacy than those adults who lived in households whose parents had the same level of highest educational attainment (figure 3-15).

Education and Job Training in Prison

Educational and vocational training programs are an important component of prisons' rehabilitative purpose. In general, inmates who participated in prison education and training programs had higher average literacy than inmates who did not.

- Forty-three percent of prison inmates had obtained a high school diploma or a high school equivalency certificate before the start of their current incarceration. An additional 19 percent of prison inmates had earned their high school equivalency certificate during their current incarceration, and 5 percent were enrolled in academic classes that might eventually lead to a high school equivalency certificate (figure 4-1).
- Prison inmates with a high school diploma or a high school equivalency certificate had higher average prose, document, and quantitative literacy than prison inmates with lower levels of education. Inmates who earned their high school equivalency certificate during their current incarceration had higher average quantitative literacy than prison inmates who entered prison with a high school diploma or a high school equivalency certificate (figure 4-3).
- Twenty-nine percent of prison inmates had participated in some sort of vocational training. However, more inmates reported being on waiting lists for these programs than were enrolled (figures 4-5 and 4-6).
- Prison inmates who had participated in vocational training had higher average prose, document, and quantitative literacy than prison inmates who had not participated in

any sort of vocational training program during their current incarceration (figure 4-9).

- Prison inmates who had received either information technology (IT) certification or some other type of certification recognized by a licensing board or an industry or professional association had higher average prose, document, and quantitative literacy than prison inmates who did not have the same type of certification. However, prison inmates who had received either type of certification had lower average levels of prose, document, and quantitative literacy than adults in the household population with similar certifications (figure 4-12).

Work and Literacy Experiences in Prison

The relationship between literacy and participation in prison activities is complex. Inmates who enter prison with higher literacy may be more likely to engage in some activities, such as using the library and computers, reading, or even getting certain work assignments. Participating in any of these activities may help inmates improve their literacy. In general, there was a relationship between literacy and participation in activities in prison, such that inmates who participated in activities that required some reading or writing had average literacy that was either higher than or not measurably different from the average literacy of inmates who did not participate in these activities.

- In 2003, some 68 percent of prison inmates had a work assignment. Prison inmates with work assignments had higher average prose and quantitative literacy than inmates who did not have work assignments (figure 5-1).

- A higher percentage of inmates with *Proficient* and *Intermediate* prose literacy than prison inmates with *Below Basic* prose literacy had prison work assignments that required writing every day (figure 5-6).
- A higher percentage of inmates with *Basic*, *Intermediate*, and *Proficient* prose literacy than with *Below Basic* prose literacy used the library. Moreover, prison inmates who used the prison library had higher average prose literacy than prison inmates who never used the library (figure 5-9).
- Prison inmates who used a computer for word processing or for using a CD-ROM had higher average document and quantitative literacy than inmates who never used a computer for these things (figure 5-10).
- A higher percentage of prison inmates with *Proficient* than with *Below Basic* or *Basic* quantitative literacy used a spreadsheet program (figure 5-13).
- Prison inmates who read newspapers and magazines, books, or letters and notes had higher average prose and document literacy than prison inmates who never read, regardless of the frequency with which they read. Additionally, a higher percentage of inmates with *Basic* or *Intermediate* than with *Below Basic* prose literacy read newspapers and magazines, books, and letters and notes every day (figures 5-14 and 5-15).

Criminal History and Current Offense

On average, prison sentences were longer in 2003 than in 1992. In both 1992 and 2003, the commission of a violent crime was the most common reason adults were incarcerated. There was a slight decline between 1992 and 2003 in the percentage

of inmates who were imprisoned because of property crimes.

Literacy is perhaps of most concern for inmates who are nearing their expected date of release because they will need to find jobs outside of prison. In 2003, some 62 percent of inmates expected to be released within 2 years.

- Average prose, document, and quantitative literacy was higher in 2003 than in 1992 for prison inmates who expected to be incarcerated for 10 years or longer (figure 6-3).
- In 2003, there were no statistically significant differences in average prose, document, and quantitative literacy between inmates who expected to be released within the next 2 years and inmates with longer amounts of time remaining on their sentences. However, between 1992 and 2003, the percentage of inmates who expected to be re-

leased within the next 2 years and had *Below Basic* prose and quantitative literacy did decrease (figures 6-5 and 6-6).

- In 2003, average prose and quantitative literacy was higher among inmates who had previously been sentenced to both probation and incarceration, and average document literacy was higher among inmates who had previously been sentenced to probation only, than for inmates with the same criminal histories in 1992 (figure 6-7).

This Executive Summary was reprinted from: Greenberg, E., Dunleavy, E., and Kutner, M. (2007). *Literacy Behind Bars: Results From the 2003 National Assessment of Adult Literacy Prison Survey* (NCES 2007 473). U.S. Department of Education. Washington, DC: National Center for Education Statistics. This document is in the public domain.

Endnotes

- 1 Household data collection was conducted from March 2003 through February 2004; prison data collection was conducted from March through July 2004. Following the precedent set with the 1992 adult literacy assessment, for which data collection also extended into a second year and all prison data collection was conducted during the second year (1993), this assessment is referred to as the 2003 NAAL throughout this report.
- 2 The design of the 1992 assessment did not allow the estimation of the size of the population nonliterate in English.
- 3 Black includes African American.
- 4 All adults of Hispanic origin are classified as Hispanic, regardless of race. Hispanic includes Latino.
- 5 The sample size for Hispanic inmates did not allow the separate estimation of literacy by length of incarceration.