



## **NATIONAL ASSESSMENT OF ADULT LITERACY AND THE MASSACHUSETTS STATE ASSESSMENT OF ADULT LITERACY**

### **SECTION 1: BACKGROUND ON NAAL/SAAL**

#### **National Assessment of Adult Literacy (NAAL)**

- The National Assessment of Adult Literacy (NAAL) is a national literacy assessment sponsored by the National Center for Education Statistics (NCES) of the United States Department of Education.
- NAAL measures the English literacy of America's adults for the first time since the 1992 National Adult Literacy Survey (NALS).
- The NAAL was administered to a representative sample of adults age 16 and older residing in households or prisons in 2003 and early 2004.

#### **State Assessment of Adult Literacy (SAAL)**

- The State Assessment of Adult Literacy (SAAL) is a state literacy assessment conducted in conjunction with the NAAL.
- Massachusetts, Kentucky, Maryland, Missouri, New York and Oklahoma participated in the 2003 SAAL.
- The SAAL for Massachusetts includes results from 1,022 sampled adults residing in households only. For comparison purposes between the NAAL and the SAAL, only results from adults residing in households were used.

#### **The NAAL/SAAL 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.”

### **Results are reported on 3 literacy scales**

- ***Prose Literacy:*** The knowledge and skills needed to perform prose tasks, i.e., to search, comprehend and use information from continuous texts such as newspaper articles, editorials, brochures and instructional materials.
- ***Document Literacy:*** The knowledge and skills needed to perform document tasks, i.e., to search, comprehend and use information from non-continuous texts in various formats such as job applications, payroll forms, bus schedules, maps, and drug and food labels.
- ***Quantitative Literacy:*** The knowledge and skills required to perform quantitative literacy tasks, i.e., to identify and perform computations using numbers embedded in print materials such as balancing a checkbook, figuring out a tip, or determining the amount of interest on a loan.

### **Results for each type of literacy are reported using the following 4 levels**

- ***Below Basic:***
  - Indicates no more than the most simple and concrete literacy skills
  - Ex: able to add the amounts on a bank deposit slip, able to find out what a patient is allowed to drink before a medical test
- ***Basic:***
  - Indicates skills necessary to perform simple and everyday literacy activities
  - Ex: using a TV guide to find out what programs are on at a specific time, comparing ticket prices for two events
- ***Intermediate:***
  - Indicates skills necessary to perform moderately challenging literacy activities
  - Ex: consulting reference materials to determine which foods contain a particular vitamin, identifying a specific location on a map, calculating the total cost of an order from a catalog
- ***Proficient:***
  - Indicates skills necessary to perform more complex and challenging literacy activities
  - Ex: comparing viewpoints in two editorials, computing and comparing the cost per ounce of food items, interpreting a table about blood pressure, age and physical activity

### **Specifics about the NAAL questions and scores**

- Respondents were required to actually demonstrate that they understood the meaning of information found in the texts they were asked to read by answering open-ended not multiple choice questions.

- The literacy tasks were taken from actual texts and documents, which were either used in their original format or reproduced for the assessment.
- Respondents who completed the assessment attempted approximately 40 literacy tasks in about 50 minutes.
- Based on the answers provided and the points assigned for each correct answer, a respondent would be scored at a proficiency level (below basic, basic, intermediate, proficient) for each type of literacy scale being assessed (prose, document, quantitative).
- Standard errors associated with sampling estimates apply and are provided in the appendix to the report.

## **SECTION 2: SAAL FINDINGS**

### **Massachusetts Adults at Below Basic and Basic Levels on 3 literacy scales**

- ***Prose literacy:*** 32% of Massachusetts adults were at Below Basic and Basic
- ***Document literacy:*** 26% were at Below Basic and Basic
- ***Quantitative literacy:*** 46% were at Below Basic and Basic

### **Massachusetts Adults at Below Basic Skill Level Suffer in the Labor Market**

- Among Massachusetts adults with Below Basic scores in quantitative literacy:
  - 53% are not in the labor force and an additional 5% were unemployed
  - 22% were employed part-time
  - 20% were employed full-time
- Across prose, document and quantitative literacy, the majority of Massachusetts adults with Below Basic literacy were not in the labor force.

### **Whites in Massachusetts at Higher Average Prose, Document and Quantitative Levels than Blacks and Hispanics**

- The average literacy of Whites in Massachusetts was significantly higher than that of the nation with 21% Proficient compared to 17%, and 27% at Below Basic or Basic compared to 32% in the nation.
- For Blacks:
  - Prose literacy: 25% Below Basic and 44% Basic (total 69% at 2 lowest levels)
  - Document literacy: 25% Below Basic and 36% Basic (total 61% at 2 lowest levels)
  - Quantitative literacy: 44% Below Basic and 34% Basic (78% at 2 lowest levels)
    - Note: Nationally, the basic skills performance of Blacks has

improved significantly. There is not a statistically significant difference in the performance of Blacks in Massachusetts compared to their national counterparts. Although this group is doing better than a decade ago, the gap in performance with Whites in Massachusetts remains troublingly high.

- For Hispanics:
  - Prose literacy: 46% Below Basic and 26% Basic (72% at 2 lowest levels)
  - Document literacy: 43% Below Basic and 20% Basic (63% at 2 lowest levels)
  - Quantitative literacy: 56% Below Basic and 26% Basic (82% at 2 lowest levels)
    - Note: Nationally, the skills performance of Hispanics decreased since the NALS report in 1992. In 2003, there is not a statistically significant difference between NAAL and SAAL results.

### **Gender Gap in Quantitative Literacy**

- As in the nation, Massachusetts men scored higher in quantitative literacy.
  - 25% were Proficient compared to 16% of the women
  - 11% were Below Basic compared to 20% of the women
  - 28% were Basic compared to 33% of the women

### **Non-High School Graduates Had Lowest Literacy Scores**

- Across the 3 literacy scales (Prose, Document, Quantitative), adults who did not complete high school had the lowest scores.
  - Note: The sample size was too small to estimate the literacy levels of adults who completed their education after earning a GED.
- Of adults without a high school diploma:
  - Prose literacy: 48% were Below Basic (compared to 53% and 29% were Basic (77% in 2 lowest levels)
  - Document literacy: 43% were Below Basic and 18% were Basic (61% in 2 lowest levels)
  - Quantitative literacy: 55% were Below Basic and 26% were Basic (81% in 2 lowest levels)
- High school graduates performed significantly better than non-graduates:
  - Prose literacy: 53% of graduates were Intermediate compared to 29% of non-graduates
  - Document literacy: 59% of graduates were Intermediate compared to 30%
  - Quantitative literacy: 31% of graduates were Intermediate compared to 13%

### **Adults Who Spoke Only English Before Starting School Scored Higher**

- Of Massachusetts adults who spoke only English before starting school, 21% were Proficient compared to 15% in the nation, and 9% were Below Basic compared to 18% in the nation.

- 48% of adults who lived in non-English speaking homes before starting school scored at Below Basic.

### **Youngest Adults Scored Higher in Quantitative Literacy**

- Of 16-18 year olds in Massachusetts, 20% scored Proficient in quantitative literacy compared to 6% nationally with 45% at Below Basic or Basic compared to 66% in the nation.

## **SECTION 3: COMPARISON OF NAAL/SAAL FINDINGS**

### **Overall, Adult Literacy in Massachusetts Higher than Adult Literacy in the Nation**

- ***Prose literacy:***
  - In Massachusetts, 9% were Below Basic, 23% were Basic, 49% were Intermediate and 19% were Proficient.
  - In the USA, 14% were Below Basic, 29% were Basic, 44% were Intermediate and 13% were Proficient.
- ***Document literacy:***
  - In Massachusetts, 8% were Below Basic, 18% were Basic, 57% were Intermediate, and 17% were Proficient.
  - In the USA, 12% were Below Basic, 22% were Basic, 53% were Intermediate, and 13% were Proficient.
- ***Quantitative literacy:***
  - In Massachusetts, 15% were Below Basic, 31% were Basic, 34% were Intermediate and 20% were Proficient.
  - In the USA, 21% were Below Basic, 33% were Basic, 33% were Intermediate and 14% were Proficient.