## SREB

## Literacy and Numeracy Levels for Careers

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## Percentage of Adults in SREB States with Low Literacy Skills



## Low Literacy Skills Among Adults

Approximately one out of every five U.S. adults (21\%) have low literacy skills

## 43 million U.S. adults

Across the SREB states
LA, MS, and TX are among five states nationwide that have the lowest literacy rates in the U.S.

Median low literacy rate is $22.15 \%$ or Approximately 23.7 million adults

| Program Type | Of those who COMPLETED the program <br> AVG 3-year Reconviction Rate | Of those who ENROLLED in the program but did not complete <br> $\frac{\text { AVG 3-year Reconviction Rate }}{\text { 2009-2016 Releases }}$ <br> 2009-2016 Release |
| :---: | :---: | :---: |
| Post Secondary | 1\% | 35\% |
| Animal Programs | 2\% | 26\% |
| BRAILLE | 4\% | 12\% |
| Diesel Mechanics | 11\% | 25\% |
| Carpentry Woodworking | 13\% | 23\% |
| Horticulture | 14\% | 21\% |
| Welding | 14\% | 24\% |
| Plumbing | 14\% | 22\% |
| Computer Technology-Customer Service | 22\% | 26\% |
| ALL OJT COMBINED (Not limited to the specific programs listed above) | 16\% | 21\% |

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TREATMENT EFFECTS FROM PROGRAMS
Three-Year Felony Reconviction Rates for Program Completions vs. General Population

Career Preparedness Projections
Reading and Mathematics Demands of Careers

## Career Preparedness Study Overview

Goal: Analyze the West Virginia General Summative Assessment (WVGSA) performance of middle school students and project their anticipated preparedness for the entry-level reading and math demands for each of 33 careers.

- Study conducted in partnership with MetaMetrics (the developer of the Lexile and Quantile scales).

- Data from the Spring 2022 WVGSA administration were used.


## Lexile and Quantile Fundamentals

Lexile ${ }^{\circledR}$ Framework for Reading

- Places text complexity and student comprehension level on the same scale.



## Lexile and Quantile Fundamentals (cont.)

## Quantile ${ }^{\circledR}$ Framework for Mathematics

- Places mathematical skills and concepts and student math performance on the same scale.



## Lexile and Quantile Linkage to WVGSA

- The Lexile Framework has been linked with the West Virginia General Summative Assessment (WVGSA) for English Language Arts in Grades 3-8, and the Quantile Framework has been linked with the WVGSA for mathematics in Grades 3-8.
- As part of the WVGSA reports, students and their families receive a Lexile measure for ELA and a Quantile measure for mathematics.


## Example: $8^{\text {th }}$ Grade Student

| Subject Area | WVGSA Score | Translates to | Lexile/Quantile Measure |
| :--- | :---: | :---: | :---: |
| English Language Arts | 656 | $\rightarrow$ | $1170 L$ |
| Mathematics | 587 | $\rightarrow$ | $1088 Q$ |

## Entry-Level Reading and Math Demands

- Example:



## Entry-Level Reading and Math Demands

- Example:

Industry: Architecture \& Construction
Career: Carpenter


## Sample Lexile Growth Projection

- Assuming we have a student who received a 1035 L in the $6^{\text {th }}$ Grade on the ELA assessment of the WVGSA in Spring 2022:


Student's Grade-Level

## Questions for Discussion (1 of 3)

- How does this approach look similar or different than other data that you use to guide and make policy decisions?


## Benefits for Students and Schools

- Students may be encouraged to explore careers that they previously have not considered.
- Allows for discussion of middle school assessment results to focus on anticipated preparedness for the reading and math demands of specific careers.
- Allows for existing assessment data to be used without additional testing burden.
- The results are indicative that students may be more prepared for the reading and math demands of certain careers than what is reflected in WVGSA proficiency results.


## Questions for Discussion (2 of 3)

- How would this information help different audiences?
- Higher education
- Employer and business community
- Policy makers
- State Departments of Education
- School districts


## Questions for Discussion (3 of 3)

- Why is it important to understand the reading and math demands of different careers?
- How can this type of data be used in conjunction with other career-related data points?

Thank you!

