## The Woodcock-Johnson Relative Proficiency Index (RPI)

The Relative Performance Index answers the question "How far from average proficiency is a person's performance?"

With any test, the test items do not increase in difficulty in exactly equal intervals. From item to item, the increase in difficulty can vary. There can be a subset of items within a test that represent a period of rapid growth in a specific skill (e.g., basic reading) that increases in large increments at young ages but at slower rates at adolescent ages. Because the range of performance can vary so greatly, the distance between scores can be hidden by standard deviations and standard scores. The RPI considers the performance of the individual relative to the median performance for the age or grade comparison group.

Unlike other types of test scores, the RPI is a criterion-referenced score that can be used to compare the student to the expected proficiency for the student's age or grade. The RPI can be useful when assessing students at young ages wherein the standard scores do not have enough range to fully represent how the student is performing in comparison to others. The RPI is useful when comparing test score data to classroom measures of student proficiency. The RPI may be more sensitive to growth and changes in student performance than norm-referenced standard scores.

RELATIVE PROFICIENCY INDEXES (RPI) show the examinee's level of proficiency (accuracy, speed, or whatever is measured by the test) at the level at which peers are $90 \%$ proficient. An RPI of 90/90 would mean that, at the difficulty level at which peers were $90 \%$ proficient, the examinee was also $90 \%$ proficient. An RPI of $95 / 90$ would indicate that the examinee was $95 \%$ proficient at the same level at which peers were only $90 \%$ proficient. An RPI of $75 / 90$ would mean that the examinee was only $75 \%$ proficient at the same difficulty level at which peers were $90 \%$ proficient.

| RPI | Proficiency Age- or Grade-Level Tasks |  |
| :--- | :--- | :--- |
| Age- or Grade-Level Tasks will be: |  |  |
| 100/90 | Very Advanced |  |
| $98 / 90$ to $100 / 90$ | Advanced | Extremely Easy |
| $95 / 90$ to $98 / 90$ | Average to Advanced | Very Easy |
| $82 / 90$ to $95 / 90$ | Average | Easy |
| $67 / 90$ to $82 / 90$ | Limited to Average | Manageable |
| $24 / 90$ to $67 / 90$ | Limited | Difficult |
| $3 / 90$ to $24 / 90$ | Very Limited | Very Difficult |
| $0 / 90$ to $3 / 90$ | Extremely Limited | Extremely Difficult |
|  |  | Nearly Impossible |

Adapted from Jaffe, L. E. (2009). Development, interpretation, and application of the W score and the relative proficiency index (Woodcock-Johnson III Assessment Service Bulletin No. 11). Rolling Meadows, IL: Riverside Publishing. http://www.riverpub.com/products/wjllIComplete/pdf/WJ3_ASB_11.pdf.

## How to Interpret the RPI

The following are examples of statements that might be used to describe an individual's RPIs (Mather \& Jaffe, 2016, p. 19). Specific wordings will vary depending on the achievement area or cognitive ability being addressed and the level of the RPI.

Kara's Written Language score fell within the Low to Low Average ranges (SS 77-83), with a grade equivalent of early grade 3. Her RPI of 75/90 indicates that when average grade peers are $90 \%$ successful on written language tasks, Kara will be $75 \%$ successful.

Although Nicholas's standard score on the Mathematics Reasoning cluster was within the Average range for seventh-grade students, his RPI (45/90) indicated that he will have considerably more difficulty than most of his grade peers in math problem-solving.

Sheila's standard scores on both Reading and Mathematics are in the Low range compared to other fifth graders. Her proficiency in reading (RPI 9/90) is markedly lower than her proficiency in mathematics (42/90).

From Mather, N. and Jaffee, L.E. (2016) Woodcock-Johnson IV: Reports, Recommendations, and Strategies. NJ: John Wiley \& Sons.

