# Information Provided by the Qualitative Reading Inventory-5

#### Finding Reading Levels

Identifying Reading Levels
The Independent Level
The Instructional Level
The Frustration Level
Level Variety

Determining Reader Strengths and Needs

Documenting Growth and Change

# Questions Regarding the Validity and Reliability of *QRI-5*

Inter-Scorer Reliability
Alternate-Form Reliability
Reliability of Diagnostic Judgments
Concurrent Validity

Construct Validity
Classification Validity

#### FINDING READING LEVELS

The *Qualitative Reading Inventory-5* can be used to provide appropriate information in three areas:

- 1. To identify a student's instructional level
- 2. To determine areas of reading in which the student is having difficulty
- 3. To document growth based on a type of instructional program or intervention

# Identifying Reading Levels

When used to determine a student's reading levels, the *QRI-5* can help find the levels at which a student can read independently, read with instructional guidance, and read with frustration. The *QRI-5* can also be used to determine if a student's reading levels are below his or her chronological grade level.

# The Independent Level

This is the level at which a student can read successfully without assistance. Oral reading should be fluent and free from behaviors such as finger pointing and overt signs of tension. The student's accuracy in word recognition while reading orally should be 98% or higher. Silent reading should also be free from finger pointing. For both oral and silent reading, comprehension should be excellent. The reader should be able to answer 90% or more of the questions correctly.

An examiner should choose materials written at this level for the student's free-reading pleasure or for tasks that the reader is expected to perform independently. It is also wise to choose materials at an independent level for reading-strategy instruction or fluency practice. This allows the reader to learn and practice a strategy on relatively easy text before transferring to more challenging material.

### The Instructional

This is the level at which a student can read with assistance from a teacher. Both oral and silent reading should be free from behaviors that often indicate serious difficulty, such as finger pointing or tension. Although oral reading may be less fluent at this level than at the independent level, it should retain some sense of rhythm and expression. The examiner should use a criterion of 95% accuracy when counting only those miscues that changed the meaning of the passage. Our pilot data revealed that 95% Acceptable Accuracy best predicts comprehension at the instructional level. The examiner who is counting all miscues should use a criterion of 90% accuracy, and the student should correctly answer 70% of the questions asked.

Materials written at this level should be chosen for reading and content-area instruction. This placement assumes that the teacher will introduce words and concepts that are likely to be unfamiliar to the readers. She or he presents the identification and meaning of these concepts and provides appropriate background knowledge necessary for understanding the material. Obviously, when students are placed at the instructional level, the teacher should not say, "Read Chapter 5 and we'll have a test tomorrow."

A student's instructional level, once determined, can be compared to the student's chronological grade placement. Is it below the level of materials that are appropriate for that grade level? Such information will allow the examiner to estimate the severity of a reading problem. Assessment specialists once believed that a student had a reading problem if there was a substantial difference between expectancy level or reading potential and instructional level with familiar material. Expectancy level or reading potential was generally based on IQ; however, this practice has been seriously questioned (Aaron, 1997). The reauthorization of the Individuals with Disabilities Education Act (2004) conceptualizes reading problems in terms of lack of response to instruction and it may be more appropriate to talk of serious reading problems in terms of a discrepancy between the student's reading level and his or her chronological grade level. Spache (1981) described severe reading problems as follows: The problem is severe if a first, second, or third grader is a year or more behind or if a fourth, fifth, or sixth grader is two or more years behind. For students in seventh grade and above, a severe problem means three or more years behind their grade level.

#### The Frustration Level

At this level, the student is completely unable to read the material with adequate word identification or comprehension. Signs of difficulty and tension are evident. Oral reading lacks fluency and expression; a word-for-word, halting style is common. Accuracy of word recognition is less than 90%, and less than 70% of the questions are answered correctly. Teachers should avoid materials at this level.

#### **Level Variety**

Although once common, it is now simplistic to talk about a single independent, instructional, or frustration level for an individual. The act of reading is highly complex and contextual. When students possess extensive prior knowledge about a topic, they can read and comprehend at a higher level than when dealing with unfamiliar material. This is well illustrated by the difficulty that mature readers often have with an income tax form or the language of an insurance policy. Text structure also affects a student's reading ability. The diverse structure and concept density of expository material makes it more difficult to comprehend than narrative text. Whether a student reads orally or silently can affect comprehension, depending on the age of the student. Younger, less-fluent readers generally do better in oral reading, whereas older readers are often constrained by the performance aspect of oral reading, and their comprehension suffers accordingly. The variety of passages in the *Qualitative Reading Inventory-5* allows the examiner to evaluate the effects of background knowledge, text structure, and reading mode on the independent, instructional, and frustration levels of the reader. It is not inconceivable that a single reader may have different levels for familiar and unfamiliar text, for narrative and expository material, and for oral and silent reading modes. The presence or absence of pictures may affect performance. Levels may also vary depending on whether the examiner is assessing comprehension with or without look-backs. A student may be at a frustration level for answering questions without referring to the text but may achieve an instructional level when allowed to utilize the look-back strategy.

Which reading level is most important? Given the constraints of time, few examiners would be able to determine all possible reading levels that a student might have. Based on individual purposes and needs, each examiner will have to choose which reading level to isolate for a given student. Which level best estimates the overall reading ability of the student? Determination of the familiar narrative reading level seems most essential. Because reading familiar narrative text is generally easier than dealing with expository and unfamiliar material, the familiar narrative level probably represents a reader's best effort. However, in unfamiliar, concept-dense, and lengthy texts, the level attained after look-backs may represent the reader's best effort.

#### DETERMINING READER STRENGTHS AND NEEDS

Another purpose of the *QRI-5* is to indicate the conditions under which a student would perform successfully or unsuccessfully in reading. For most readers with serious problems, strengths and needs in reading are evident. The *QRI-5* is designed to identify these strengths and needs by providing more information about why a student is not reading well.

Table 3.1 lists questions that the *QRI-5* is designed to answer. The table also provides suggestions for intervention strategies.

#### DOCUMENTING GROWTH AND CHANGE

The *QRI-5* can be used to assess a student's growth in the level of materials that he or she can read with at least 90% accuracy, 95% acceptable accuracy, and 70% comprehension. That is, the *QRI-5* can be used to determine a change in the student's instructional reading level as long as the pre-test and post-test use the same genre. Beginning readers are more often exposed to narrative text, and the differences in their comprehension of narrative and expository text are apparent. Students reading at pre-primer, primer, first grade, and second grade levels reliably comprehend narrative text better than expository texts (Leslie & Caldwell, 1989). Students above those reading levels reliably retell stories better than exposition. It is recommended that when materials are used to judge growth or change in a student's reading level, the same genre should be used at pre-test and post-test.

A number of published studies have used the *QRI* to document growth in reading based on a type of instructional program or intervention. These studies are found in the References and are marked with an asterisk.

#### Table 3.1

#### Determining Reader Strengths and Needs and Providing Intervention

<b>Student Strengths</b>			
and Needs as			
Indicated by OPLE			

#### **Suggested Intervention Strategies\***

5 Suggested Intervention Strategies*	
Chapter 4: Phonological Awareness	<ul> <li>Sample lesson: Rhyming</li> <li>Sample lesson: Onset-rime awareness</li> <li>Elkonin boxes</li> <li>Sample lesson connecting letters and sounds</li> </ul>
Chapter 5: Word Identification Instruction: Phonics and More	<ul> <li>Guidelines for exemplary phonics instruction</li> <li>Teaching consonant sounds using shared reading</li> <li>Teaching vowel sounds: Using spelling patterns to read by analogy</li> <li>Cross-checking</li> <li>Teaching high-frequency words by sight</li> <li>Practicing sight words in isolation</li> <li>Word cards and word sorts</li> <li>Guided reading</li> </ul>
Chapter 6: Word Identification Instruction: Fluency	<ul> <li>General principles for developing fluency</li> <li>Reading aloud to students</li> <li>Fostering wide reading</li> <li>Providing modeling: Assisted reading; echo reading; paired reading; partner reading; structured repeated reading</li> <li>Performance reading: Choral reading; reader's theater; radio reading</li> <li>Lesson procedures for developing fluency: Fluency development lesson; supported oral reading; fluency-oriented reading instruction</li> </ul>
Chapter 7: Prior Knowledge and Concept Development	<ul><li>Determining critical concepts</li><li>Building a knowledge base</li></ul>
Chapter 12: General Interactive Strategies	<ul> <li>Directed reading-thinking activity</li> <li>Visual imagery</li> <li>KWL</li> <li>Reciprocal teaching</li> <li>Thinking aloud</li> <li>Discussion cards</li> </ul>
Chapter 8: Vocabulary Learning	<ul> <li>General principles for developing vocabulary learning</li> <li>Personalizing word learning</li> <li>Clustering word learning</li> <li>Building words</li> <li>Comparing word meaning</li> </ul>
Chapter 11: Comprehension Instruction: Answering Questions	<ul> <li>General principles for helping students to answer questions</li> <li>Question-answer relationships</li> <li>Content-free questions</li> </ul>
Chapter 12: Comprehension Instruction: General Interactive Strategies	Thinking aloud
	Chapter 4: Phonological Awareness  Chapter 5: Word Identification Instruction: Phonics and More  Chapter 6: Word Identification Instruction: Fluency  Chapter 7: Prior Knowledge and Concept Development  Chapter 12: General Interactive Strategies  Chapter 8: Vocabulary Learning  Chapter 11: Comprehension Instruction: Answering Questions  Chapter 12: Comprehension Instruction: General

continued

#### Table 3.1

(continued)

# Student Strengths and Needs as Indicated by *QRI-5*

#### 5 Suggested Intervention Strategies\*

organize recall?	Chapter 9: Comprehension Instruction: Retelling Narrative Text	<ul> <li>General principles for developing narrative retelling</li> <li>The importance of modeling</li> </ul>
	Chapter 10: Comprehension Instruction: Expository Retelling	<ul> <li>General principles for developing effective expository retellings</li> <li>Expository expectation grid</li> <li>Expository idea map</li> <li>Main idea map</li> </ul>

<sup>\*</sup>From Caldwell, J. S., & Leslie, L. (2009). Intervention strategies to follow informal reading inventory assessment: So what do I do now? Boston: Allyn & Bacon.

#### QUESTIONS REGARDING THE VALIDITY AND RELIABILITY OF QRI-5

Because *QRI-5* is an informal assessment instrument, questions may arise about the validity and reliability of the information provided. Although Chapter 15 addresses these issues in detail, a few comments are appropriate at this point.

#### Inter-Scorer Reliability

The *QRI-5* results are scored by different individuals. Analysis of prior-knowledge scores, oral reading miscues, and answers to comprehension questions all require judgment on the part of the examiner. Therefore, inter-scorer reliability becomes an issue. Can two independent examiners score the same answers in the same way? We believe that they can if they are trained using *QRI-5* guidelines. On prior knowledge scores of over 300 concepts, the agreement reached between two independent scorers was 98% (*QRI-3*, p. 436). Agreement between independent examiners on identifying oral reading miscues and miscues that change meaning was 99%. Finally, the reliability of scoring answers to comprehensions questions was 98% for both explicit and implicit items (Leslie & Caldwell, 1989).

#### Alternate-Form Reliability

This measure is used to determine the consistency with which an instructional level would be the same if two passages of the same genre were used. We examined the reliability of comprehension scores on two passages at the same readability level by asking how close the two scores were to the instructional-level cutoff score of 70%. The degree of consistency in comprehension scores on two passages of the same readability was always above .80, and 75% were above .90. Over 70% of the time the same instructional level would be obtained independent of the passage chosen, as long as the same genre was used. It should be noted, however, that some of the pre-primer passages include pictures and others do not. For the beginning reader, one cannot assume that the same instructional level would be obtained if pictured and non-pictured passages are compared, because beginning readers rely heavily on picture clues.

#### Reliability of Diagnostic Judgments

Two judges independently scored data from 108 children to determine the reliability of diagnostic judgments. The following data were available for all students: current grade placement, percent accuracy on word lists, percent oral reading accuracy on all passages

read orally, and comprehension on all passages read. Judgments were made within type of text (i.e., narrative or expository). The judges classified the students' difficulties in reading as "word recognition" or "comprehension" within text types. The judges agreed on the diagnostic category of the students' abilities 87% of the time.

#### **Concurrent Validity**

What is the relationship between two scores on assessments that are given close to each other in time? For example, how do scores on the QRI compare to scores on normreferenced achievement tests? Correlations between the two measures were all positive and statistically significant. Section 15 presents data illustrating that scores on the QRI are correlated with standardized norm-referenced tests to a significant degree. Positive correlations between the QRI and measures such as the Wisconsin Knowledge and Concepts Evaluation, the Iowa Test of Basic Skills, the Woodcock Reading Test, and the Measures of Academic Progress were all positive and statistically significant.

#### **Construct Validity**

Construct validity is determined by correlations between various types of data. We examined correlations between word identification on the word lists, oral reading accuracy on passages, semantic acceptability of oral reading miscues, and reading rate (in words per minute). For students with instructional reading levels at or below second grade, these variables were highly correlated. Word identification in a story was also significantly correlated with comprehension through the first grade instructional reading level. Beyond first grade there appear to be factors other than word identification at work, such as prior knowledge and text structure. That is, students could read a passage accurately enough to meet the oral reading accuracy criteria for instructional reading level but not meet the criteria for comprehension.

#### **Classification Validity**

We analyzed whether the comprehension scores of students whose word-list score were higher or lower than their instructional reading levels (good word identifiers vs. poor word identifiers) could be predicted by similar or different variables. The comprehension scores of good word identifiers with second and third grade instructional levels were predicted by text type (narrative vs. expository). The comprehension scores of good word identifiers with fourth through sixth grade instructional levels were predicted by prior-knowledge scores. Therefore, there appears to be developmental and individual differences in the factors that influence students' comprehension scores.