

CHAPTER 9

Informal Reading Inventories

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Common Core State Standards	
Key Ideas and Details	<i>RL.5.3</i> Compare and contrast two or more characters, settings, or events in a story or drama, drawing on specific details in the text (e.g., how characters interact).
Craft and Structure	<i>RL.5.6</i> Describe how a narrator's or speaker's point of view influences how events are described.
Integration of Knowledge and Ideas	<i>RL.5.9</i> Compare and contrast stories in the same genre (e.g., mysteries and adventure stories) on their approaches to similar themes and topics.
Range of Reading and Level of Text Complexity	<i>RL.5.10</i> By the end of the year, read and comprehend literature, including stories, dramas, and poetry, at the high end of the grades 4–5 text complexity band independently and proficiently.

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FOCUS QUESTIONS

1. How have you assessed student reading in the past? Have you tried administering an informal reading inventory (IRI)?
2. What can IRIs tell you about reading?
3. How do I administer an IRI? What do I do with the results?
4. How do I complete an IRI with my English language learners or students with special needs?

Words in Action

Looking Into the Administration of an IRI

Joyce, a fourth-grade teacher, is sitting at a table in the corner of her classroom next to Fred, an energetic 10-year-old who has low self-esteem in regard to academics and has joyfully proclaimed, "I hate reading!" more than once to his peers. Joyce is right-handed, so she has asked Fred to sit on her left—she doesn't want the materials she writes on to distract him from his reading. Joyce has decided to administer the informal reading inventory (IRI) herself because Fred is very leery of testing situations. He has never met the literacy coach recently hired by the school, and Joyce feels that sitting with an unfamiliar person or going out of the classroom to a new space may increase his anxiety and influence his performance. She has, however, consulted with the coach and taken her advice regarding the selection of an IRI that provides an assortment of narrative and expository materials with increasing complexity, and presents comprehension questions that go beyond recall of factual information. Joyce also likes that the IRI provides an easy way to record the order in which the reader retells parts of a passage (she has never been able to write fast enough when she tries to do this on her own).

Joyce has been using IRIs for 3 years. She usually has four or five students in her room who she feels will benefit from the information that surfaces from this kind of assessment. Joyce has decided to focus today on Fred's oral reading skills. She has chosen not to time his reading because she wants him to focus on trying to understand the text—not simply rush through it to beat the clock. She will start with a series of word lists and then move on to a graded set of expository passages with a few questions for each.

The other 23 students in Joyce's classroom are engaged in work at their table groups throughout the room. That activity is being facilitated by a college student who is assisting Joyce two mornings a week prior to his semester of student teaching. Her students have become accustomed to working in small groups while she meets with an individual learner. Joyce feels that the combination of independent and shared work in reading and writing that her students enjoy is a result of the study group that the primary and intermediate teachers at Joyce's school decided to do last year. The group, meeting once a week after school, focused on the Daily Five approach to balanced literacy instruction (Boushey & Moser, 2006).

This scenario is continued at the end of the chapter. After reading the chapter, you will understand how Joyce is able to best support Fred using the results of his IRI.

Reading Is the Active Construction of Meaning From Text



Reading is a dynamic process where familiarity with print, attention to graphics, activation of background knowledge, degree of interest, status of language development, and many other factors interact. Without making meaning, the process is incomplete.

Reading is the active construction of meaning from text. This statement has its roots in the work of Louise Rosenblatt, Ken Goodman, Yetta Goodman, Frank Smith, P. David Pearson, Stephen Krashen, Irene Fountas, Gay Su Pinnell, Richard Allington, and many others. The key here is that meaning is constructed by an active reader from “text.” Text is more than print—think of the wordless picture book *Tuesday* by David Wiesner (1991) or the graphic novel *Maus* by Art Spiegelman (1986). In addition, reading is more than decoding letters into sound or “barking at print,” as the title of an article by Jay Samuels (2007) reminds us. Reading goes beyond words correct per minute, and the depth of a reader’s understanding is rarely explored by a multiple-choice test.

Here’s the dilemma: We can never “see” anyone read. We can watch as eyes move across a page. We can listen when words on a list are voiced in isolation or when sentences from a magazine article are delivered in context. We can peer at a screen that displays a brain’s electric activity or marvel as “nonsense words” are spoken aloud. We can ask what a reader remembers from a story, and we can grade the results of a test on Chapter 3 in a science book. But how do we know when someone is reading? How can we get a sense of the internal process of constructing meaning? We need concrete evidence. We need something that teachers, and readers themselves, can use to assist the development of reading abilities.

Informal Reading Inventories

Informal reading inventories (IRIs) provide tangible records of performance and action. A passage that is marked with symbols to identify particular miscues allows us to see how often a reader has gone back into the text to repeat a phrase or to correct a word that didn’t fit during oral reading. The answers to a series of thoughtful questions asked one-on-one in a conversational setting can give us a sense of what is remembered after a passage is read silently. A written account of what a reader says when asked to retell a story or to reflect on the key points of a scientific theory can help us understand how a reader organizes new information.

IRIs can also help teachers move beyond a limited focus on the mechanical aspects of reading by providing time to have a one-on-one conversation about text. Especially when

we revisit IRI data with readers, we can entertain the notion that the reader becomes part of the text through the action of reading. As German philosopher Hans-Georg Gadamer put it (1960/1989):

Not just occasionally but always, the meaning of a text goes beyond its author. That is why understanding is not merely a reproductive but always a productive activity as well. . . . All reading involves application so that a person reading a text is himself [sic] part of the meaning he apprehends. He belongs to the text that he is reading. (pp. 296, 340)

Description of IRIs

As a teacher, I ask myself, “What is an effective way to determine how well my students read?” First, it’s necessary to unpack the question. By “effective way,” do I mean quick, accurate, or useful? By “read,” do I mean make inferences, identify digraphs, or understand vocabulary? Then my practical concerns come to the surface: How many students can I assess at one time? What will I have them read (part of a fiction book, passages from a textbook, word lists)? Should I listen to them read aloud or watch them read silently? Is it important to record how fast they move through the text? How do I find out if their comprehension score is influenced by prior knowledge or distorted by the tension of testing?

Making Connections

New educators often wonder about the usefulness of IRIs. After reading the following section, compile a list of what the results of an IRI can tell you. Share this with a classmate and outline lessons to best support a student performing below grade level.

IRIs (pronounced eye-are-eyes) are designed to help educators address these questions. Whether they are commercially produced or teacher made, IRIs provide multiple ways to explore literacy development. Their “informal” nature allows educators to deviate from tightly structured testing protocols and enables them to select approaches that may uncover specific information. For example, a teacher may choose to ask a student to engage in silent reading of expository text followed by retelling activities. Or the teacher may ask for oral reading of a series of passages with greater and greater complexity to monitor automaticity (automatic word recognition) or to focus on **prosody** (reading with expression). The person administering the IRI uses a coding system such as the Oral Reading Key (see Table 9.1) to mark miscues (deviations from print) and observable reading behaviors so that colleagues—and readers—can examine evidence of performance and growth.

As you can see from Table 9.1, there are many codes to use when scoring an IRI. Be sure to become familiar with them and practice scoring a few IRIs before giving your first official one. Being able to score an IRI fluently can result in an accurate “snapshot” assessment of that student’s abilities.

Table 9.1 Oral Reading Key

Oral Reading Key

During the administration of an informal reading inventory (IRI) or when listening to a learner who is reading other materials aloud, the following symbols can be used on your own copy of the text. Upon completion of the reading, mark "1" or "1/2" near the errors. The point value draws attention to significant miscues (deviations from print which alter meaning).

A. Count as 1 error if the miscue alters the meaning of the text; 1/2 error if not:

- | | | |
|------------------------|--|---|
| 1. Addition | Write the word above a caret. | the ^{big} brown dog walked. 1 |
| 2. Omission | Circle the word or word part. | the brown dog walked. 1/2 |
| 3. Substitution | Write what the student says; draw a line through the text. | the brown ^{big} dog walked. 1 |

When scoring substitutions, determine if the miscue was contextually appropriate or inappropriate, a nonsense word, a mispronunciation, or a reversal. Count proper nouns as 1/2 error. If the miscue is made with the same word over and over, count it only once.

B. Count as 1/2 error:

- | | | |
|---|--|----------------------------------|
| 1. Punctuation ignored or misinterpreted | Circle the punctuation mark; write anything added above a caret. | the brown dog walked. 1/2 |
| 2. Repetition | Underline the word or word part. | <u>the brown</u> dog walked. 1/2 |

Only count if two or more words are repeated. Mark a single word, but don't count it as an error.

C. Count as 1 error:

- | | | |
|--------------------------------------|---|---------------------------|
| 1. Omission of an entire line | Circle the line. | the brown dog walked. 1 |
| 2. Assistance, prompt | Put parentheses around a word supplied. | the (brown) dog walked. 1 |

If the word supplied by the examiner after an uncomfortable pause is a proper noun, count as 1/2 error. If the miscue is made with the same word over and over, count it only once.

D. Do not count as errors:

- | | | |
|---|--|---|
| 1. Self-correction | Place a check near the correction. | the brown dog ^{dog} walked. |
| 2. Hesitation, pause | Draw two vertical lines before the word. | the brown dog walked. |
| 3. Cultural, regional, or social dialect | Write what the student says; add "D." | da ^D brown dog walked. |
| 4. Finger pointing | Write "FP" in margin with "started" or "stopped." | FP started |
| 5. Noteworthy behaviors | Write marginal notes about fidgeting, possible vision problems, signs of tension, etc. | shook leg while reading |

Note: A version of this coding sheet first appeared in Ackland (1994).

IRIs are administered with one student at a time and, depending on the choice of content and procedures, may take from 10 to 45 minutes to complete. Key components can be selected to gather information about a student's vocabulary, decoding abilities, **oral reading fluency**, **self-monitoring strategies**, **silent reading proficiency**, and **comprehension**. The results are often used to identify reading levels, select instructional material, highlight progress, and pinpoint reading skills and strategies that need additional work. IRIs can be helpful in many grades. They are most commonly used with readers who have difficulty reading the material that is presented in their classrooms.

Nearly 20 IRIs produced by major publishers are available, some of which have had more than nine editions over the years (see Table 9.2). Generally, each published IRI includes a series of graded word lists, followed by passages of increasing difficulty, greater length, and smaller font size for oral and/or silent reading. The materials usually start at the preprimer (use a short *i* sound in *primer*) level and can go up into high school grades or beyond. Several different sets of passages (called “alternate forms”) are often provided for each level, along with a variety of narrative and expository types of text. Some IRIs include simple graphic illustrations for passages below second grade. IRIs also present techniques for determining comprehension through questions or retelling activities. Reviews comparing format, approaches, and measures of reliability and validity of selected IRIs can be found in professional journals (e.g., Nilsson, 2008). Suggestions are also available if teachers want to create their own IRIs for particular instructional purposes (e.g., Provost, Lambert, & Babkie, 2010).

Table 9.2 IRIs From Major Publishers

Title	Author	Publishing Company
<i>The Critical Reading Inventory: Assessing Students' Reading and Thinking</i> (2nd ed., 2008)	M. D. Applegate, K. B. Quinn, and A. J. Applegate	Upper Saddle River, NJ: Pearson
<i>Bader Reading and Language Inventory</i> (7th ed., 2013)	L. A. Bader and D. L. Pearce	Upper Saddle River, NJ: Pearson
<i>Adolescent Literacy Inventory, Grades 6–12</i> (2011)	W. G. Brozo and P. P. Afflerbach	Boston, MA: Pearson
<i>Comprehensive Reading Inventory: Measuring Reading Development in Regular and Special Education Classrooms</i> (2007)	R. B. Cooter, E. S. Flynt, and K. S. Cooter	Upper Saddle River, NJ: Pearson
<i>English–Español Reading Inventory for the Classroom</i> (1999)	E. S. Flynt and R. B. Cooter	Upper Saddle River, NJ: Prentice Hall
<i>Reading Inventory for the Classroom</i> (5th ed., 2004)	E. S. Flynt and R. B. Cooter	Upper Saddle River, NJ: Prentice Hall
<i>Retrospective Miscue Analysis: Revaluing Readers and Reading</i> (1996)	Y. M. Goodman and A. M. Marek	Katonah, NY: Richard C. Owen
<i>Reading Miscue Inventory: From Evaluation to Instruction</i> (2nd ed., 2005)	Y. M. Goodman, D. J. Watson, and C. L. Burke	Katonah, NY: Richard C. Owen

Title	Author	Publishing Company
<i>Basic Reading Inventory</i> (10th ed., 2012)	J. L. Johns	Dubuque, IA: Kendall/Hunt
<i>Qualitative Reading Inventory</i> (2011)	L. Leslie and J. S. Caldwell	Boston, MA: Allyn & Bacon
<i>Informal Reading–Thinking Inventory</i> (1995)	A. V. Manzo, U. C. Manzo, and M. C. McKenna	Belmont, CA: Wadsworth/Thomson
<i>Informal Reading Inventory: Preprimer to Twelfth Grade</i> (7th ed., 2007)	B. D. Roe and P. C. Burns	Boston, MA: Houghton Mifflin
<i>Ekwall/Shanker Reading Inventory</i> (5th ed., 2009)	J. L. Shanker and W. A. Cockrum	Boston, MA: Allyn & Bacon
<i>The Stieglitz Informal Reading Inventory: Assessing Reading Behaviors From Emergent to Advanced Levels</i> (2nd ed., 1997)	E. L. Stieglitz	Needham Heights, MA: Allyn & Bacon
<i>Classroom Assessment of Reading Processes</i> (2nd ed., 2000)	R. Swearingen and D. Allen	Boston, MA: Houghton Mifflin
<i>Classroom Reading Inventory</i> (12th ed., 2012)	W. H. Wheelock and C. J. Campbell	New York: McGraw-Hill
<i>Analytical Reading Inventory</i> (9th ed.)	M. L. Woods and A. J. Moe	Boston, MA: Allyn Bacon

Some Purposes for Using IRIs

Teachers can use IRIs to gather data that will help them address a wide variety of questions, such as the following:

- “How do I get an idea of the student’s ability to read different types of materials (such as expository or narrative)?”
- “What reading strategies are being used?”
- “How might this student perform in a one-on-one testing environment compared with a standardized test given to a group?”
- “How can I communicate with the student and the student’s family regarding individual progress in reading?”
- “What books, magazines, and websites might challenge this student during assisted reading, and which ones might provide encouragement during independent reading?”

Scott Paris and Robert Carpenter (2003) draw attention to the fact that “teachers can use informal reading inventory data immediately to alter their teaching so that students are not drilled on skills already mastered or neglected on skills that are a struggle” (p. 580).

The discussion highlights outlined in Table 9.3 were generated by elementary teachers who participated in a series of workshops related to IRIs, facilitated by their school’s reading specialist (Ackland, 1994, pp. 133–134).

Table 9.3 Discussion Highlights: IRI Workshops Conducted With Teachers**A. Reasons for Giving an IRI**

1. Form of assessment to check for comprehension, vocabulary in isolation and context, oral miscues, reading rate, fluency
2. Useful in understanding an inconsistency between a standardized reading test result and the child's classroom performance
3. Better informs teacher about skills, approaches, and strategies child currently uses in the reading process; codifies specific strengths and weaknesses; specifics make the process more manageable for the teacher to understand and to identify appropriate strategies to teach or reinforce
4. Helps teacher determine reading level, assign appropriate materials, and design an individualized reading program
5. Allows screening to find out if a reading problem exists; can be used for program eligibility determinations and to write goals
6. Helps teacher find out about the child's attitude toward reading and own interpretation of what is read; may indicate how the reader thinks while reading
7. Gives a comparison between a child's oral response to questions and silent written answers
8. Gives time alone with a child (one-on-one)
9. Encourages a process approach rather than an end-product approach; more of a real reading situation than the contrived setting for paper-and-pencil tests; can be kept in context of classroom materials, subject matter, and approaches
10. Helps teacher see different levels in one class; indicates that children may be higher in one area but having difficulty in another
11. Gives something tangible to help communicate with parents regarding a child's reading ability
12. Can inform teacher about a child's background knowledge and interests
13. Can raise questions in the teacher's mind about types of text, reasons for reading, and strategies for both reading and teaching

B. Concerns About the Design of IRIs

1. Due to readability formulas, passage reading levels may be inaccurate.
2. Is there gender or culture bias in the passages? How is background knowledge accounted for?
3. Comprehension is difficult to assess using any procedure (including questions and oral retelling); what is "comprehension"?
4. How well does it tap word-attack, phonics, and decoding skills?
5. Parents or teachers may misinterpret the results (this is just one piece of assessment; the level of understanding may vary).

C. Concerns About the Administration of IRIs

1. How do we ensure interrater reliability? (One rater may say the child answered the question correctly; another wouldn't.)
2. Are instructions written clearly enough so that it can be given by anyone?
3. The task may cause mistakes (psychological response to the pressure of taking a test).
4. Time-consuming for either teacher or reading specialist (especially if tape-recorded).
5. Tester variability (knowledge/experience with procedures, whether or not prompting is used, etc.) needs to be accounted for.
6. How much does rapport between examiner and student influence results?
7. How do we account for time of day and whether it's a good day or a bad day to test?
8. Is this best used as one part of a battery of instruments? What is the goal, purpose for using this IRI with this student? If a commercial IRI is used, does it "carry more weight" than observations and portfolios?
9. Does readministration demonstrate progress or mastery over time? How often should it be given so that patterns can emerge? Are there enough forms available?

Guidelines for Giving an IRI to a Student

Each commercial IRI gives detailed directions for administration. Here are some general guidelines for teachers and other educators:

- *Determine what you intend to explore.* For example, you may want to know more about
 1. strategies the student uses to read challenging material orally without practice,
 2. recognition of high-frequency sight words,
 3. familiarity with word beginnings and endings,
 4. comprehension of key components of a brief narrative story, or
 5. the ability to return to expository text after silent reading to find segments that supply answers to specific questions.
- *Gather the testing materials.* It is important to have the following items: a "student copy" of word lists and passages or portions of books the student will read; a "teacher copy" of the same materials (in an identical format but with larger spacing between lines) on which the teacher will make a record of what has been read; an audio-recording device, if necessary; and a stopwatch or other timing device, if desired. For each passage, the teacher needs a set of comprehension questions and/or a copy of a retelling framework listing key ideas. A summary chart is necessary for use after the IRI to assemble results.

- *Ensure your readiness to administer the IRI.* Some IRIs include disks or give access to websites where teachers can see educators administering the assessments to students. These also provide opportunities to practice coding oral reading by marking miscues on a teacher copy of the text being read aloud. Different commercial IRIs present particular ways to mark reading behaviors such as substitutions, omissions, repetitions, and self-corrections. Any system with which you are familiar can be used, as long as you can look at the markings on the text in the future and understand what the reader did. Until you are very experienced, it is vital to make an audio recording so the coding can be done later if necessary. Additional practice and training (especially with colleagues from your school) can be very helpful to determine how to interpret and communicate the information that comes to the surface during the use of a commercial or teacher-made IRI.
- *Find a comfortable setting and be ready to establish rapport with the reader.* Be alert to any interference that may skew the results. Find a place that will be free from distractions. Do what you can to put the student at ease.
- *Remember that this is an opportunity for assessment, not instruction.* Think of this as a snapshot of what the student does when reading. Resist the urge to respond to what might look like “teachable moments.” You can revisit those moments if you choose to show the results to the reader at a future time.
- *Consider the implications of the data.* After giving an IRI, you can count **oral reading miscues** to get an accuracy score and look at responses to questions to estimate comprehension. Keep in mind that using these scores to identify a student’s reading levels (independent, instructional, frustration) is based on many assumptions regarding, for instance, the connection between oral and silent reading behaviors (see Halladay, 2012). Ask yourself: What do the data imply about the way this particular student reads material similar to the passages in this IRI? Published IRIs provide recommendations for analyzing miscues to pinpoint challenges readers face. As Ken Goodman (1973) said many years ago, miscues are “windows on the reading process.” Readers can look at their own miscues—as suggested in *Retrospective Miscue Analysis* by Yetta Goodman and Ann Marek (1996)—or can listen to themselves reading if you give them access to audio recordings. Data from IRIs can also be shared with a student’s family to cast light on academic progress and with colleagues to provide evidence for the selection of instructional approaches.

Reading Levels: Independent, Instructional, and Frustration

Teachers use summary forms provided in published IRIs to tabulate percentage scores for the data to indicate how accurately the student read and comprehended the material presented in each of the graded passages. This provides a general idea of the grade level at which students can read text independently, a range of grade levels at which they can read with instructional assistance, and the grade level at which the material will probably frustrate the reader.

The concept of reading levels is generally attributed to Emmett A. Betts and his early role in the development of IRIs (Cramer, 1980; Johns & Lunn, 1994). In his textbook, published in 1946, Betts identified and described the characteristics of four different levels: basal (later renamed “independent”), instructional, frustration, and capacity (later renamed “listening capacity”). The listening capacity level was purported to be the highest level of material a student could comprehend while listening to it read aloud. Betts

proposed that an appraisal of a reader's performance in terms of these levels could provide valuable information to both the teacher and the student (1946, p. 438).

Based on a reader's performance during an IRI, Betts proposed the following criteria:

Independent level: at least 99% oral accuracy with at least 90% comprehension

Instructional level: at least 95% oral accuracy with at least 75% comprehension

Frustration level: less than 90% oral accuracy with less than 50% comprehension

He supported the criteria for the instructional level with reference to an unpublished dissertation by his student Patsy A. Killgallon (1942/1983). Killgallon's study looked at the reading performance of 41 fourth-grade students.

Over the years, several studies have been undertaken to refine the criteria (see overviews in Ackland, 1994, and Halladay, 2012). As Johns and Magliari (1989) pointed out, the Betts criteria were developed on the basis of counting all miscues as errors. Their study indicated that these criteria may be too stringent for primary-grade students; however, "if teachers decide to count only miscues that affect the meaning of a passage, the word-recognition criterion should generally meet or exceed 95% for all students" (p. 131). Pikulski and Shanahan (1982, p. 102) caution against counting only the significant miscues, believing that this procedure could inflate scores and result in inaccurate placement of students for reading materials. In response to the debate, Johnston and Allington (1983) stated that there will never be a clear-cut percentage of accuracy, asking, to illustrate the problem, "How sharp is a unicorn's horn?"

Often overlooked is that the Betts criteria were based at least in part on oral rereading of material that had already been read silently (Betts, 1946, p. 456). Powell and Dunkeld (1971, pp. 638–639) draw attention to this procedure. Betts did recommend using oral reading at sight to get a quick appraisal of the independent level (p. 457), but when listing the principles of systematic observation through the administration of an IRI, he stated that "silent reading should *precede* oral reading" (p. 456). In contrast, published IRIs continue to use the process of oral reading at sight. This practice is supported by Johnson, Kress, and Pikulski (1987): "Oral reading at sight seems justifiable for diagnostic purposes since it reveals as fully as possible the difficulties a child encounters when reading" (p. 45).

During a conversation with Betts, Johns (1991) asked why, considering his emphasis on reading behaviors, he established the numerical criteria for reading levels. Betts replied: "I'm sorry I did!" (p. 493).

Halladay (2012) has suggested that we revisit the reading levels framework. For instance, she points out that "students can be emotionally frustrated by difficult texts. However, they can also be highly motivated by these texts, depending on factors such as interest, prior knowledge, and social considerations" (p. 60).

We may think it's desirable to proclaim that a student reads at the third-grade level and that more challenging material should not be provided. But Schön (1983) prompts us, as reflective practitioners, to move beyond the "comforting certainty of expertise" (p. 301). Fountas and Pinnell (2001, p. 228) clearly indicate that there is an overlap in the grades connected to the leveled texts they mark with the letters A to Z. Like the graded passages in published IRIs, these proponents of guided reading encourage teachers to view the gradient as "a continuum of progress" for readers (p. 228).

Interpreting IRIs

Vygotsky's Zone of Proximal Development: An Instructional Range for Reading

Pikulski's (1990) definition of instructional level—"the optimal level of text difficulty for stimulating student growth in reading when that student is working with the support, guidance, and instruction of a teacher" (p. 516)—is remarkably similar to Vygotsky's (1930–1935/1978) definition of the **zone of proximal development** (ZPD)—"the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (p. 86).

Instead of attempting to specify an instructional "level," let's consider a zone or "range" similar to the ZPD. The instructional range can be envisioned as the space on a column above a mark for the level of independent performance and below a mark for the level of frustration. When instructional activities are directed toward the upper end of this range—the upper end of the ZPD—the learner is encouraged, with support, to move higher on the column. As this happens, the level of independent performance moves upward as well. There are probably several ranges for each student, especially when we consider the importance of a learner's interest and prior knowledge. A book about dinosaurs that is at the tenth-grade level may be within a fifth grader's instructional range if she is interested in dinosaurs. The same child may have difficulty reading an adventure story about talking mice that is classified as a fourth-grade text if she doesn't think mice should be personified.

IRI results that indicate an instructional range, together with the findings of other informal assessments such as running records (Clay, 1985), observations, and attitude surveys, can be vital components in a movement toward authentic assessment. One school district in Ohio moved away from a requirement that teachers give time-consuming IRIs to all their students when it was determined that a 3-minute Multidimensional Fluency Scale helped them identify proficiency in four areas—expression and volume, phrasing, smoothness, and pace (Rasinski, Ackland, Fawcett, & Lems, 2011, p. 23)—yet the teachers know they still have IRIs as an option to obtain more detailed information if needed.

James Wertz (1985) tells us that "Vygotsky (1930–35/1978, 1934/1986) introduced the notion of the zone of proximal development in an effort to deal with two practical problems in educational psychology: the assessment of children's intellectual abilities and the evaluation of instructional practices" (p. 67). It is curious that IRI literature rarely refers to Vygotsky. One exception is an article by Katherine Stahl (2012) in which she states, "Consistent with Vygotsky's concept of the zone of proximal development, children can work independently at low levels of difficulty but can still work productively with tasks at a higher level of difficulty by increasing the amount of support" (p. 48).

Oral Reading: Coding, Counting, and Analyzing Miscues

The determination of oral reading accuracy depends on what kinds of reading behaviors are counted as errors. There has been interest for many years in the distinctions among different kinds of miscues and their relation to three cueing systems: grapho-phonetic, syntactic, and semantic (Goodman, 1969). Some miscues can be identified as significant because they alter the meaning of the text and may affect comprehension. But others, such as repetitions, self-corrections, slight omissions, or contextually appropriate substitutions, may actually indicate that a student is interacting with a text to make

meaning. In addition, some miscues, such as dialect variations, may have no impact on the reader's understanding. The debate continues, because some authors feel that word recognition is the basis for building effective reading abilities (McKenna & Picard, 2006).

In an attempt to decrease the amount of examiner subjectivity in counting errors, the authors of two books (Harris & Sipay, 1990, pp. 227–228; Richek, List, & Lerner, 1989, p. 96) have proposed the following:

A serious or major miscue should be counted as one error.

A minor miscue should be counted as one-half error.

Self-corrections, hesitations, disregard for punctuation, and dialect variations should be marked but not counted.

However, this solution is not as straightforward as it may seem. There is no consensus concerning what constitutes major and minor miscues, and there is a plethora of ways to mark oral reading behaviors. This variety makes it difficult to compare performances on different commercial IRIs and to decipher what the reader actually did. For instance, if a *P* is marked near a word, it may indicate either a partial mispronunciation or a word prompted by the examiner. In addition, some marks are so cumbersome that they can't be made spontaneously while a student is reading, requiring the teacher to wait until the IRI is over and then listen to an audio recording of the passage. It is hoped that the Oral Reading Key (see Table 9.1) will serve as an effective way to code oral reading consistently and to give guidelines for distinguishing insignificant miscues from errors.

Making Connections

Whether you decide to use commercial IRIs or your own generated IRIs, consistency in scoring is important. This is especially true if you plan to give IRIs regularly to track student literacy growth. Any change in scoring can influence your findings and affect the support you provide your students.

One advantage of using a published IRI is that the directions and summary sheets assist teachers in the interpretation of the data from oral reading. How many miscues are substitutions? How often does the student need to repeat words to construct meaning? What is the frequency of difficulty with the initial portion of words compared with the final portions? As with other features of IRIs, once the data are collected, there are many ways teachers can put them to productive use for the learners.

Students Can Use IRIs to Inform Their Own Efforts to Grow as Readers

If there is to be a shift from what Frank Smith (1992) calls the “official view of learning,” in which learning is difficult work, to an “informal view” (renamed by Smith in 1998 as the “classical view”), in which learning is envisioned as a continuous, social process, then

IRIs can play a part. Readers can be invited to explore the reading process by developing an explicit awareness of the challenges they face and the joys they will encounter.

IRIs and English Language Learners

Continuing assessments are extremely important for English language learners (ELLs). Standardized tests in English rarely reflect ELLs' abilities or content knowledge. Using informal assessments, teachers can target ELLs' specific problem areas, adapt instruction, and intervene earlier. IRIs can provide a more informed picture of ELLs' abilities, skills, and ongoing progress. The No Child Left Behind legislation requires detailed evidence of the progress of ELLs. Records from informal assessments make it easier when questions of grading, program placement, and special services arise (Colorín Colorado, 2007a).

As with all students, the instructional goal is for ELLs to meet or exceed grade-level expectations in curriculum goals and objectives. Table 9.4 provides effective tips for and benefits of using IRIs with ELLs.

Table 9.4 Using IRIs With ELLs

Here are a few things to keep in mind:

- A student's L1 (first language) abilities in reading can be explored by a teacher who is proficient in that language. Word lists, passages, and questions in the L1 can be used. Sharing data from a first-language IRI can draw a student's attention to what he or she does in the L1 to make sense of text. The student can then be encouraged to apply those strategies to reading in the target language—English.
- The one-on-one nature of the IRI procedures allows a monolingual English teacher to establish a comfortable and friendly setting for an assessment of English reading abilities.
- Thanks to the "informal" aspects of IRIs, it is possible to move freely between words in isolation (word lists) and various forms of connected text (passages). Word lists can be developed and passages found or composed that focus on particular onsets and rimes (word families), letter combinations, sight words (words that can't easily be decoded phonetically), high-frequency words, or specific vocabulary. The coding system for oral reading used during the IRI can then allow a teacher to test what has been taught in the classroom and can uncover particular L1 sounds and pronunciations that don't transfer into English.
- Some IRIs have illustrations that accompany the lower-level passages. These graphic representations may provide information that will assist students in their decoding of printed words. For older ELLs who may feel demeaned by the juvenile nature of the drawings and stories at these levels, consider finding high-interest picture books (including informational text with photographs) that can be used in a cycle of instruction and assessment.
- Audio recordings of comprehension activities can provide rich data about a student's ability to understand text and convey information in English. There is no dependence on writing skills when the questions, answers, and retellings are delivered orally.
- Some ELLs are adding English as a third or fourth language. Others may speak a language other than English at home or in the community but may have very limited literacy skills in that language. Gather information about the linguistic background of the unique individual who is expanding his or her literacy repertoire.

IRIs and Students With Special Needs

As stated earlier in the chapter, IRIs are designed to identify a student's reading needs. Performance on an IRI will help determine the instructional level and the amount and kind of support that may be beneficial for an individual. This is essential for students with special needs who may require directed emphasis in areas such as word recognition, vocabulary development, reading strategies, and comprehension techniques. The results of an IRI can highlight a student's strengths and weaknesses to inform instruction.

As with ELLs, IRIs are detailed records of student progress and can be used to assist with program placement and special services. Table 9.5 details how using IRIs with students with special needs is beneficial to instructional and program planning.

Table 9.5 Using IRIs With Students Identified With Special Needs (Special Education)

- Assessments using IRIs can be very valuable for children with special needs. Based on the data collected, targeted instructional strategies can be developed. These can be listed in a student's Individualized Education Program (IEP).
- Progress in areas such as oral reading accuracy and ability to comprehend narrative stories can be documented by examination of specific evidence from IRIs given at multiple times throughout the school year. However, educators need to be careful not to chart growth with numerical scores for accuracy and comprehension. The informal nature of the protocols for administering IRIs, coupled with the fact that there may be limited reliability in terms of content and level distinctions between the passages in different IRIs, makes comparisons problematic.
- Before administering an IRI with a child who is receiving special education services, it can be useful to know the particular characteristics and goals that have been identified within his or her IEP.
- Consultation with teachers and care providers who are familiar with a child's personality, emotional well-being, academic attitudes, and physical abilities can help a reading specialist or literacy coach determine effective ways to develop rapport that will improve the likelihood of a productive IRI experience.

Scenario Conclusion

Looking Into the Administration of an IRI

Preparation

On the table in front of her, Joyce has her teacher copies of the material she wants Fred to read. A week ago, she made a full set of photocopies of the word lists, reading passages, comprehension questions, and retelling frameworks ranging from first to sixth grade. She

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will replenish the set for the student she works with next week by making new copies of what she uses today with Fred. She knows full well that the materials don't necessarily identify the expectations of each grade level, but she also knows that they are clearly more complex from one level to the next.

Joyce hands the IRI manual to Fred. "This is an IRI," she tells him. "You saw me do one of these with Lashon last week."

"Yeah, she said it was kind of fun. I figured I'd get a turn."

Joyce lets him know that he will be reading a few lists of words and some short passages that she has marked in the manual with sticky notes. She explains that the purpose of the IRI is to help her understand what he does when he is reading. She requests that he try to do his very best work.

Joyce places her cell phone on the table. "I'm going to use this to record your reading. Shall we see what you sound like?"

She asks him to say his name and give the date, and then she plays it back to make sure the device is working. She has a digital recorder nearby as a backup in case her preferred technology lets her down.

Word Lists

Joyce opens the manual to the first sticky note. It is a first-grade word list—a list she has selected as a starting point because she is sure that Fred will be able to read all the words correctly. She plans to use these word lists to help her decide where to start the oral reading of passages. After turning on the cell phone recorder, she picks up her pen with her right hand and gets ready to mark the teacher copy of the list in front of her. She points with her left hand to the first word on the list in front of Fred and says, "Please start here and continue reading down the column."

As Fred says each word aloud correctly, Joyce marks a plus sign next to the word on her teacher copy. When he reads the first five words without difficulty, she asks him to move on to the next column (the second-grade list). Fred pauses for a moment when he encounters the fourth word on the list. Joyce makes two vertical marks near that word (the symbol she uses for hesitation) and decides to have him continue reading the entire column of 20 words. When he completes the list, she sees that he read all the words without error. She asks Fred to move to the next column. He reads a few words on the third-grade list inaccurately, so she marks what he said next to those words and continues to put plus signs next to the others. She wants him to get used to the fact that she is always writing as he reads.

Passages

"OK, let's move on to reading some short passages," Joyce says when Fred is obviously stumped by the eighth word on the third-grade list. There is no need to have him struggle to read any more words in isolation at this time. She knows that a word recognition task (it would be word "identification" if she asked for meanings) is not the purpose of this assessment. She determines that Fred should start with the second-grade passage because that is the highest-level word list that he read with 100% accuracy. She wants him to have very little difficulty during his first encounter with connected text.

Joyce finds the second-grade passage in her photocopies and puts the word lists and lower-level passages at the bottom of her materials. The target passage is now on top. She turns her pile over so Fred doesn't see the passage before she is ready to record his reading performance.

Joyce reaches over and opens the IRI manual to the second-grade passage. She is happy that this published IRI uses a code to indicate the level of the passage (there is no need for Fred to know the grade level for the selection). Joyce puts a blank piece of paper over the passage but allows Fred to see the title. Joyce says, "The title of this passage is 'Rocks and Stones.' It's about the different kinds of rocks and stones that someone could find in the mountains. Tell me a few things you already know about rocks and stones."

Joyce has recently learned, thanks to the literacy coach, that some authors of IRIs suggest that the teacher engage the student in a brief discussion before oral reading. Joyce has decided to do this to set the scene for Fred, because she knows that during this assessment he will be compelled to read several passages in quick succession. Joyce also realizes that a student may know so much about the topic of the passage that he or she could answer the comprehension questions correctly even before reading the passage—ah, the joys of testing. In those cases, she has switched to one of the alternate passages that is at the same grade level as the one she had intended to use. If the passage she wanted Fred to read were about, for instance, automobile engines, she would move to an alternate; after having him in class for the past 2 months, she knows that he could write a passage on that topic.

Fred tells Joyce a few things about rocks and stones. Joyce thanks him, turns over her photocopies, picks up her pen, and looks to make sure her cell phone is still recording.

"I'd like you to read the passage out loud. When you've finished, I will ask you a few questions about what you've read. OK?" After a nod from Fred, Joyce uncovers the passage.

Coding Oral Reading

As Fred begins to read aloud, Joyce moves her pen beneath the words on her copy of the text. She's happy that she has practiced the technique for marking miscues with one of her fellow fourth-grade teachers, Jose. They've decided to use what they call the ORK (the Oral Reading Key in Table 9.1) whenever they code oral reading. It allows them to create a record that can be commonly understood among teachers who wish to share results of their students' efforts. When a student substitutes a different word for what is in print, a quick line can be drawn through the word in the text and the substituted word written in the space above. When a student omits a word, the teacher circles it. If the student then self-corrects by saying the right word, all the teacher needs to do is place a check mark above the word to indicate the correction. Some IRIs direct teachers to circle substitutions and draw a line through omissions, so Joyce is happy to use one coding system, regardless of which published IRI she selects for a student. There are also times when she uses the ORK to do a quick assessment of oral reading performance by simply marking on a photocopied page of a book that a student has selected from the library. Joyce has become proficient at marking miscues as they arise—rarely does she have to take the time to go back through audio recordings.

As expected, Fred is able to read the second-grade passage successfully. Joyce uses her pen only once—to draw a line under one word that Fred repeats. Joyce decides to ask him only 3 of the 10 questions about that passage. When he answers them all correctly, she moves to more complex text.

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Joyce introduces the third-grade passage in the same way as the previous passage. She marks two substitutions that Fred makes and is happy to place a check mark over the second when Fred corrects what he said the first time he looked at the word. She makes a mental note to remember to show this to him after the IRI is over—his ability to self-correct means that he is monitoring his own reading. Perhaps Fred and the other students in the room have been influenced by the times during shared reading in small groups when Joyce has pointed to the small sign she made for the classroom wall that prompts a reader to ask, “Am I making sense?”

Comprehension

Joyce continues to mark a few other miscues as Fred reads. She then asks him all 10 questions provided by the IRI. It is such a time-saver to have these questions at her disposal.

The same process is repeated for the fourth-grade passage. As they move into the fifth-grade material, Fred is showing signs of his frustration. Joyce jots “started fidgeting” near a word on the third line—a word he may never have encountered before. After multiple miscues during his reading, Fred moves on to the comprehension questions. When Joyce asks Question 4, identified as “Inference” on her sheet, Fred says, “I have no idea what the answer is.” Joyce decides that she doesn’t need to continue. The “informal” aspect of IRIs indicates that she can determine it is in the best interest of this learner to stop here.

“Well, that’s enough for today,” Joyce says. “Oh, before you go, I’d like to show you something.” Joyce flips through her papers and finds the passage where she made a check mark above a substituted word. “Look what you did here. This shows that you corrected what you said at first.”

“Yeah, it didn’t make sense when I read it.”

Joyce smiles. “That’s what readers do. They make sense.”

Key Terms

comprehension (reading)

informal reading inventories

oral reading fluency

oral reading miscues

prosody

self-monitoring strategies

silent reading proficiency

zone of proximal development

Website Resources

- *Informal Reading Inventory*, Steve Rutledge (1998)

This website takes the reader step-by-step through an IRI assessment. It begins with tips and suggestions for preparing reading materials, determining books’ levels, creating questions, giving the assessment, scoring, and interpreting the results. For more information, go to lrs.ed.uiuc.edu/students/srutledg/iri.html.

- **Informal Reading Inventory Video**

This YouTube video shows a literacy coach describing her analysis of an IRI given to a Grade 2 student. She reviews the results of the word list and passage reading, and she shares how the errors indicate where the student is lacking in knowledge and what activities she does to remediate. To see the video, go to www.youtube.com/watch?v=dq6MdQ035-c.

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