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## *Patterns of Reading Difficulty*

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## General Patterns

THE INFORMAL READING INVENTORY (IRI) has a long and proud tradition in helping educators identify the strengths and needs of struggling readers. Educators observe how accurately and fluently students identify words when reading orally or silently. Using informal reading inventory guidelines, educators determine a student's independent, instructional, or frustration reading levels and decide if the student is reading below his or her chronological grade level. They listen to the student's retelling, ask different types of questions, and use responses as indicators of comprehension. Educators obtain much information from an informal reading inventory, and this information must be distilled into a plan for effective instruction. What an educator learns about a student from an informal reading inventory should translate into objectives for the intervention that will follow.

Admittedly, there are numerous other instruments for assessing reading: standardized measures of word identification and comprehension, tests of early literacy skills, developmental spelling inventories, and observational checklists, to name just a few. We agree that they offer valuable insights into a student's performance, but examining them is not the purpose of this book. We have chosen instead to focus specifically on the informal reading inventory. First, it is an instrument that has proven itself over time. Second, it offers multiple perspectives on a student's performance. Third, its format closely parallels the format of authentic reading as students read passages, retell what they have read, and answer questions.

Reading is an extremely complex process, and the information obtained from an informal reading inventory can be similarly complex. You may have data from a variety of sources on a variety of levels: word lists, passage readings, and miscue analysis. For each passage, you may have access to a prior knowledge score, a word identification score, an estimation of reading rate, a measure of retelling, and a comprehension score based on answers to questions. Where should you focus your attention? What patterns of performance offer guidelines for effective instruction?

Each reader represents an individual pattern of strengths and needs; however, we can identify general patterns as a beginning point for instruction. Reading difficulties tend to fall into three areas. Some readers are challenged by word identification. They may not understand that letters represent sounds in a systematic way; they may experience difficulty in recognizing consistent patterns within this system. Other readers may be able to accurately decode but do so at a very slow and effortful rate. Still others may do well with short words but falter when faced with the multisyllabic words so often found in upper-level text. Lack of efficient word identification can seriously interfere with comprehension.

A second pattern involves readers who are challenged by fluency; that is, they do not have a large store of automatically recognized sight words. They may be relatively accurate decoders, but they often apply decoding strategies to words that they should know without overtly matching letters and sounds. They may experience difficulty with irregular words, or words that do not fit letter-sound patterns. As a result, they read slowly and, because they are primarily concerned with accurately identifying words, their comprehension often falters.

Readers who are primarily challenged by comprehension represent a third pattern of reading difficulties. They may be able to fluently identify words, but they lack workable strategies for comprehending and remembering what they read. They may lack a strong vocabulary base and be unable to assign meanings to a wide array of spoken words. These readers often do not understand that reading is a highly interactive process; they expect comprehension to just happen as a result of saying the words.

We suggest that these three general patterns provide the focus for planning balanced intervention instruction. In every lesson, some attention should be paid to word study,

fluency development or maintenance, and comprehension, even though one area may be stressed more than the others. In the past, we tended to emphasize a student's weakness to the exclusion of other elements of reading. For example, it was quite common for a struggling reader to receive instruction only in phonics and to never actually read a book. As a result, many students equated the reading process with saying words as opposed to making meaning.

Once instruction begins, the educator soon becomes acquainted with the specific strengths and needs of each student and makes necessary adjustments. In a way, it is much like tending a garden. All plants need certain things in common: soil, water, sun, and fertilizer. Within these requirements, each plant has different needs. Some grow well in sandy soil, and others do not; some thrive in dry soil, and others need constant moisture; some do well in bright sunlight, and others prefer shade. In planning a garden, the wise gardener understands the importance of soil, water, sun, and fertilizer, but also provides for the different needs of each plant. In reading intervention, the educator understands the importance of a balanced approach to instruction that focuses on word recognition, fluency, and comprehension and includes all as part of the intervention framework.

The intervention programs that we will discuss in Chapter 3 focus on all three components. Students are taught to pronounce words, but they also read and reread motivating text. They may sort words and pictures according to sound patterns, but they also talk and write about what they read. They may work with word cards or letter and sound drills, but they are also exposed to reading as an activity for making meaning. We encourage you to provide a well-rounded and balanced sequence of activities that foster reading as an activity to be valued and, within this framework, to provide individualized instruction for each reader.

The informal reading inventory can offer suggestions for the framework of the intervention instruction. A student who shows strength in word identification but experiences difficulties in comprehension needs a greater focus on reading for meaning. A student who has little understanding of letter–sound relationships may need a structure with a strong emphasis on letter and sound identification or strategies for decoding words. A student who displays a slow and deliberate reading rate may need more activities that focus on developing fluency.

Information from an informal reading inventory can also suggest the type of activities to include when reading for meaning, engaging in word study, or developing fluency. For example, a student whose miscues always begin with the same letters or sounds as in the original word may need activities that focus on vowel sounds or vowel patterns. A student who does well when answering questions but whose retelling is disorganized and sparse may profit from attention to text structure.

Information gleaned from an informal reading inventory can also offer valuable suggestions for choosing the most appropriate materials for the instructional session. The informal reading inventory identifies the student's reading level, which is important to know for selecting materials that he or she can read successfully. Results of an informal reading inventory can also suggest the type of text that should be emphasized. Students who are challenged by word identification need selections on familiar topics. A student who primarily experiences difficulty when reading expository text needs a focus on exposition.

Although a student's performance on the informal reading inventory can indicate how to balance activities in word identification, fluency, and comprehension, it can also offer ideas about the format and timing of the intervention to follow. For example, will the format be a pull-out model or an in-class model? Often, the resources of the school or district dictate the format. Similarly, school or district resources may determine the timing of the intervention—how long and how often it occurs. However, results of the informal reading inventory can offer suggestions. An older student reading at a very low level might require a more individualized approach in a pull-out format conducted over a long period of time. A student who is only slightly behind his or her peers might do quite well as a member of a small in-class support group.

It is not our purpose in this chapter to instruct the reader on how to administer and score an informal reading inventory. All informal reading inventories come with detailed instructions. We assume that you are already familiar with the informal reading inventory process or you would not have purchased this book. Perhaps you use an IRI or are in the process of learning how to do so. We intend in this chapter to focus on general areas of information that can be identified from an informal inventory and used to describe a student's performance. However, we intend to go further in this book and show you how to use what you learn to inform the content and structure of the intervention.



## *Defining a Student's Reading Level*

HOW DO YOU BEGIN TO MAKE SENSE of all the information from an informal reading inventory? You may have only one or two IRI passages to use; you may have several. Where do you begin? The first piece of information that you should identify is the student's instructional reading level—that is, the level at which *both* word identification and comprehension fall within the instructional or independent ranges. Often after reading a passage, a student will exhibit an instructional level for word identification and a frustration level for comprehension, or vice versa. That is not a true instructional level. Move down until you have the level at which both are within either the instructional or the independent range (Leslie & Caldwell, 2011). Choosing an instructional reading level based only on word identification or comprehension can seriously inflate a reading level and camouflage an area of need.

Begin by examining passages that represent the student's best performance. This gives a more realistic and fair picture of the reader's strengths and needs. After all, if we are being evaluated on our performance, don't we want it to be under circumstances that allow us the best chance of demonstrating our ability? For most readers, this occurs in narrative text on familiar topics.

But what if there is no instructional reading level? What if the student reaches the frustration level in preprimer text? We could certainly call the student who is unable to recognize words at the lowest level a nonreader. However, we should delve a little further and estimate the student's listening level. In other words, what level of text can the student understand when it is read to him or her? If word recognition is not a concern, what level of comprehension can the student attain? Estimating a student's listening level allows us to determine if the student is challenged by word recognition, basic comprehension, or both. A student who exhibits a frustration level in preprimer text but has a listening comprehension level of first grade is much different from one who cannot recognize words or comprehend preprimer text.



## *Reading Level: An Indicator of Problem Severity*

WE SUGGEST THAT YOUR FIRST PIECE OF INFORMATION, and perhaps the most important, is the student's instructional reading level compared to his or her chronological grade level. Knowing this allows you to estimate the severity of the problem. In other words, how extensive is the gap between the student's reading level as determined by the informal reading inventory and his or her grade placement?

The severity of the reading problem is signaled by the gap between what the student can read and what the student should read given his or her grade level. According to Spache (1981), if a first-, second-, or third-grader is a year or more behind, the problem is severe;

if a fourth-, fifth-, or sixth-grader is two or more years behind, the problem is severe; for students in seventh grade and above, a severe problem means three or more years behind. It is important that educators have some idea of the severity of the problem. More severe problems indicate a more extensive program of intervention and may require individual instruction over a longer period of time. English language learners often show a gap between their listening level and their reading level. They may possess skills in conversational English but be unable to recognize printed English words. It is important to differentiate between the two. While instruction in reading should begin at an instructional reading level, the level of materials for teacher read-alouds should be higher as we discussed in Chapter 1.



### ***Reading Level: An Indicator of Word Identification Proficiency***

KNOWING THE STUDENT'S INSTRUCTIONAL READING LEVEL also suggests a focus for instruction in word identification. Although it is important to provide a balanced assortment of activities that center on reading for meaning, word study, and fluency development, the emphasis you place on each can be determined from the student's reading level. To understand this, it is important to have a sense of how readers learn to identify words.

Readers move through different stages of word learning on their journey to proficient reading (Ehri, 1991; Gough & Juel, 1991; Spear-Swerling & Sternberg, 1996). The first stage of reading words is called the *logographic stage*, at which children identify words much as they identify pictures. They use visual cues as opposed to matching letters and sounds. For example, they can identify the word *stop*, but only if enclosed in the familiar red sign. They can identify *McDonald's* but only in the presence of the familiar golden arches. They may correctly identify *monkey* because it has a tail on the end (y) just like the animal. However, when they meet *turkey* or *funny*, they call them *monkey* also because of the distinctive tail. Logographic readers generally have not mastered letter names and sounds, and that is why they do not use them as aids to word identification. Logographic readers are not true readers; we might call them prereaders. They may or may not understand that the black squiggles on the page stand for meaning, but they do not understand that letters represent sounds in a meaningful and systematic way. As a result, they cannot independently read preprimer text and their miscues often involve wild guesses that bear little resemblance to the original word.

The next stage of word learning is the *alphabetic stage*. A child's first awareness of the alphabet is called the stage of phonetic cue recoding (Ehri, 1991). Students begin to associate some of the letters they see with the sounds they hear. Ehri differentiates between the logographic stage and the phonetic cue recoding stage in this way: The logographic reader will see *yellow* and remember it because of "two sticks" in the middle; the phonetic cue recoding reader will associate the two *ls* with the sound of the letter and use this to remember the word. In this stage, readers begin to match letters and sounds, but in an incomplete way. They often focus on the beginnings and ends of words and therefore confuse words such as *boat*, *boot*, and *beat*. Their decoding of unfamiliar words is inaccurate because they use only partial letter and sound cues and because they rely heavily on pictures and context to help them pronounce words and understand what they read. They read connected text very slowly, often in a laborious word-by-word manner. Readers at the preprimer, primer, and first-grade levels are often in this stage. They have a small store of known words that they have learned through some partial sound associations, and when they meet unknown words they attempt to utilize letter sounds. Readers in this stage often "pass" on a word; that is, because they know that letters make specific sounds and because they do not know the letters and sounds in a particular word, they do not even attempt pronunciation.

As readers move further into the alphabetic stage, they begin to use a variety of sound and spelling patterns to recognize words, but they are not automatic in doing so.

Spear-Swerling and Sternberg (1996) call this the stage of *controlled word recognition*. Students become less dependent on pictures and are more able to pronounce words in word lists or on word cards. However, word pronunciation is still a labor-intensive process, and reading is often slow and effortful as indicated by a very slow reading rate. Students reading at a second-grade level often fall into the stage of controlled word recognition.

At some point, word pronunciation becomes almost effortless. Students recognize common familiar words automatically without sounding out, and they are able to decode unfamiliar words accurately and rapidly. They begin to recognize and employ letter patterns as pronunciation clues. For example, the reader who knows *lamp* uses knowledge of consonant sounds and the vowel pattern *amp* to pronounce *stamp*, *cramp*, and *damp*. At this point, according to Gough and Juel (1991), word pronunciation becomes almost effortless. The reading rate of students in this stage begins to increase and, because readers are paying less attention to decoding, their oral reading becomes more expressive. This is the stage of *automatic word recognition*, a typical stage for some second graders and for normally achieving third graders. Gradually, as students read more difficult and complex text, they begin to acquire strategies for pronouncing longer words such as *lysogenic* and *revolution*.

These stages of word learning are not discrete. A reader in one stage does not identify all words in the same manner. The stage simply indicates the strategy that the reader primarily uses. For example, a reader may decode the majority of unfamiliar words (controlled word recognition), have a store of automatically recognized sight words (automatic word recognition), and still rely on visual cues for other words (logographic). What do you do when you meet an unfamiliar word? Although you are a proficient adult reader functioning primarily in the stage of automatic word recognition, you probably revert to letter-sound matching and sound it out. Even though the stages are not discrete, they provide a useful point of reference for noting patterns in struggling readers and pointing out instructional strategies for moving the student to the next stage.

When efficient word identification is in place, students can turn their attention to strategies for more advanced comprehension such as identifying important information, identifying word meanings from the context of the passage, synthesizing information, and removing comprehension roadblocks. Spear-Swerling and Sternberg (1996) call this stage *strategic reading*.

If we use these stages as a rough estimate of the strategies used by students at different reading levels, we can note the following general patterns in word identification.

### **Below Preprimer Instructional Level**

Students at this level may exhibit very different understandings of the reading process. Some may not recognize any purpose for reading; others may lack basic print concepts and may not know how to hold a book upright and turn the pages in a sequential fashion. Many students at this level are logographic readers who do not understand that letters stand for sounds and that words represent meaning. These prereaders may not know the letter names or the sounds the letters represent, or that several and different sounds make up a word (*phonemic awareness*). The student may not understand that we read from left to right and that words are defined by the spaces between them. Because few informal reading inventories contain tasks that assess these components, it is important that the focus of intervention be to determine exactly what the student does or does not know and to provide experiences to move him or her to the next stage of word identification.

### **Instructional Level in Preprimer, Primer, and First-Grade Texts**

The student has entered the alphabetic stage and is attempting to match letters and sounds but is not successful in doing so. Word study for students at these levels should focus on letter and sound patterns and strategies for applying them to unfamiliar words. A miscue analysis can help you to determine if intervention should begin with a focus on consonant patterns

or on vowel patterns. Instruction should also focus on developing fluency. Students need to develop a store of automatically recognized words. They can then use the letter patterns in these words to decode unfamiliar words. In addition, students need to automatically identify irregular words that do not follow a predictable pattern, such as *the*, *was*, *who*, and *thought*.

### **Instructional Level in Second-Grade Text**

The student is beginning to use letter and sound patterns with more efficiency but is probably still working hard to decode unfamiliar words. Intervention should focus on helping the child move to greater automaticity through continued work with letter and sound patterns and through a fluency emphasis on developing an extensive sight vocabulary.

### **Instructional Level in Third-Grade Text**

The student has achieved some control over matching letters and sounds and probably has a relatively large sight vocabulary. However, he or she needs to become more automatic in recognizing familiar words and in decoding unfamiliar ones. Because words tend to get longer and more complex in third-grade text and above, intervention should focus on strategies for pronouncing longer words. At this level, it is also important to move the child to effective and fluent silent reading.

### **Instructional Level in Fourth-Grade Text and Above**

The student has an understanding of the letter and sound system of our language and is using this effectively for the most part. However, students whose reading levels are beyond third grade often need additional help in managing long words and understanding how prefixes, suffixes, and roots help both pronunciation and meaning.



## ***Reading Level: An Indicator of Comprehension Proficiency***

COMPREHENSION DOES NOT DEVELOP IN STAGES as word identification does; however, knowing the student's instructional reading level can suggest a focus for instruction. To understand this, it is important to realize how text varies at the different levels. In informal reading inventories, text levels are generally determined by readability formulas that basically measure word and sentence length—more difficult text has longer sentences, longer words, and more infrequent or unfamiliar words. But there are other differences that can affect comprehension. Selections written at the preprimer through third-grade levels are generally about familiar topics such as class trips, pets, friends, and games. The text at these levels also contains many pictures. Even expository text, often regarded as text that teaches, normally focuses on familiar topics such as seasons, food, and animals. The student already knows something about the content of these selections, and that makes the selections easier to comprehend. However, as we move into text at a fourth-grade level and above, more unfamiliar topics appear, such as narratives about unknown people in unfamiliar situations and expository selections about relatively new topics such as lasers and star life cycles. For all of us, topic familiarity affects our comprehension: We do better when we read about known topics. This is why it is important to determine a student's instructional level in familiar text, which represents a student's best performance. Many informal reading inventories have prereading measures to determine the student's familiarity with the topic and content of the selection. You often see a pattern in which a reader seems relatively familiar with a topic yet demonstrates poor comprehension. This student needs to use what she or he

knows about the topic as an active aid to comprehension. Most readers beyond a third-grade level need instruction in comprehending and remembering unfamiliar text.

We can measure comprehension in several ways, and a student may perform differently in each. The number of questions that a student can answer successfully is the determinant of instructional level. There are two ways to evaluate this ability: One is to ask the student to answer questions without looking back in the text; the other is to allow the reader to look back to locate missing answers and correct erroneous ones. Both suggest possible patterns for intervention. Allowing a student to look back distinguishes between memory and understanding. If the student cannot answer a question, is it because he or she did not understand while reading or because he or she understood but forgot? If the student can locate that answer during the look-back procedure, you can assume that understanding is in place and forgetting is the culprit.

A student who cannot answer questions or improve performance when allowed to look back has a more serious comprehension problem than the one who can successfully engage in the look-back strategy. We strongly suggest that an instructional level for comprehension should represent a combination of questions answered with and without look-backs. Unfortunately, not all informal reading inventories offer this option. The use of look-backs represents the student's best performance and is more like what good readers do when they read. Think about reading a newspaper editorial. If someone asks you a specific question about its contents, don't you often look back to verify the answer you intend to give or even perhaps in order to find it? If your student cannot effectively use the look-back strategy, you need to focus on this in your intervention.

If students cannot answer questions, you may want to determine if there is any pattern to the types of questions. Most informal reading inventories offer different question types. Does the student primarily miss factual, literal, or explicit questions? Do most errors occur in inferential or implicit questions? A pattern could suggest a focus for intervention. Chapter 11 focuses on the structure of questions and different strategies for helping students answer them successfully.

Some informal reading inventories assess retelling as well. We suggest that a student's retelling offers different information from answers to questions, and both are important. A retelling suggests the extent and structure of a student's memory. That is, does the student remember in a complete and coherent fashion, or is the retelling confused, incomplete, and inaccurate? If the student is unable to retell in a relatively complete and coherent manner, intervention may need to focus on elements of text structure that the reader can use as a framework for retelling. We will discuss activities for developing the skill of retelling in Chapters 9 and 10.

Is there a difference between the student's instructional level in narrative text as opposed to expository text? Often narrative performance is higher. If the student is above a third-grade level and expository text comprehension is problematic, he or she may need intervention that focuses on exposition. Even if the student did not read any expository selections, you may well consider focusing on expository text during the intervention sessions. There is a heavy focus on narrative text in elementary school, and even proficient readers are often ill equipped to deal successfully with expository selections. In Chapter 9, we focus on narrative text. Chapter 10 is devoted to expository text.



## *Designing the Intervention Focus*

IT IS VERY EASY TO GET BOGGED DOWN with all the information that you may have from an informal reading inventory. To design an effective intervention, you need to focus on broad patterns of reading performance. First, consider the severity of the problem. How extensive is the gap between the student's actual reading level and his or her chronological

grade level? What does this tell you about the format, timing, and structure of the intervention session?

What is the student's approximate stage of word identification? Is she or he a logographic reader or a reader just entering the alphabetic stage? Perhaps your student is most comfortable in the controlled reading stage or the stage of automatic word recognition. Identifying these broad patterns points to the focus of your intervention. Of course, your intervention will offer a balanced array of activities emphasizing reading for meaning, word study, and fluency development, but within this balance you will emphasize the area or areas that best fit the pattern exhibited by the student.

What about patterns of comprehension? Is there a difference between a student's ability to answer questions and his or her ability to retell? Does the student effectively use prior knowledge to comprehend? Is the student equally comfortable in narrative and expository text, or do the results on the informal reading inventory suggest that one receives greater focus?

Table 2.1 offers some general guidelines regarding patterns of reading performance and how these suggest different emphases in a balanced program of intervention. Future chapters will develop this in more detail.



TABLE 2.1 Patterns for Intervention Focus

Student Reading Level	Word Study	Fluency Development	Reading for Meaning
Below preprimer	XX Letter names; letter sounds	X Beginning sight vocabulary	XX Concepts about print; familiar text
Preprimer through first grade	XX Letter-sound patterns; decoding strategies	XX Basic sight vocabulary	X Familiar text
Second grade	XX Letter-sound patterns; decoding strategies	XX Sight vocabulary extension	X Familiar text
Third grade	X Multisyllabic words	XX Sight vocabulary; transition to silent reading	XX Use of prior knowledge; retelling strategies; question- answering strategies; general comprehension strategies; beginning focus on unfamiliar text and exposition
Fourth grade and above	X Multisyllabic words; prefixes, suffixes, roots	X Increase and/or maintain silent reading rate	XX Use of prior knowledge; retelling strategies; question- answering strategies; general comprehension and study strategies; focus on unfamiliar text and exposition

Key: XX suggests a strong intervention focus.



## Summary

THIS CHAPTER ADDRESSES GENERAL PATTERNS of reading performance that can be revealed by an informal reading inventory. Perhaps the most important information is identification of a student's reading level. This allows you to compare the student's instructional reading and chronological grade levels, which in turn suggest how severe the reading problem may be. We recommend that the instructional level be defined as the level at which both word recognition and comprehension fall within the instructional or independent range.

The student's level of word identification suggests which stage of word learning best describes his or her decoding strategies: logographic, alphabetic, controlled word recognition, or automatic word recognition. The student's comprehension level is determined by his or her ability to answer questions after reading a passage. We strongly suggest that, after answering questions, students be allowed to look back in the text to correct errors or locate missing information. A more realistic reading level is determined from a combination of questions answered with and without look-backs. Comprehension level should always be evaluated in terms of a student's prior knowledge and the structure of the text, that is, narrative as opposed to expository.



## References and Recommended Readings

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