

## Reading Considerations

It is important to determine the desired literacy target for the particular student for a specified amount of time. Literacy can be divided into three main types:

- Emergent Literacy- beginning literacy, prereading skills
- Conventional Literacy- typical, formal academic literacy
- Functional Literacy- words used in the environment and everyday living situations.

Young students are often working on the emergent literacy level in which they are learning beginning literacy skills. Students with physical disabilities who are on an academic curriculum will typically be taught conventional literacy. Functional literacy is usual taught to individuals who cannot master conventional literacy, but will be taught to read and write print that they need in a particular environment.

### **Literacy Assessment Instruments**

Students with physical disabilities (especially if they have severe speech impairments) are often behind in reading and writing skills. It is helpful to know where the student is functioning. Although the best way to determine a student's reading level is to have the student actually read (using a standardized test or informal reading measure), tests are available when the student is unable to speak understandably. If a student has a reliable yes/no or can make a selection (by pointing, touching, eye gazing, or some other means) this student can be assessed using literacy tests that are constructed with a multiple choice format.

Although not a comprehensive list, the following tests utilize a multiple-choice format and cover the range of pre-literacy skills, reading, comprehension, spelling, and vocabulary knowledge. The tests are as follows:

#### ***Metropolitan Reading Readiness Test***

*Harcourt Brace & Co. , 1-800-211-8378 , [www.hbem.com](http://www.hbem.com)*

This test covers a range of pre-literacy skills including visual discrimination, beginning consonants, sound-letter correspondence, and story comprehension. The test is easy to administer as well as score. It is presented in a format that most children will find entertaining and is designed for students in pre-K through first grade. Although this test assesses critical pre-literacy skills that students need in order to succeed in reading, it is not recommended to use with older students due to the juvenile appearance of the test.

### ***Gates-MacGinitie Reading Tests***

*Riverside Publishing Company, 1-800-323-9540 , [www.riverpub.com](http://www.riverpub.com)*

This test is designed to measure literacy concepts, reading instruction, relational concepts, oral language concepts, letter and letter-sound correspondence, initial consonants, and consonant clusters, final consonants, vowels, use of sentence context, vocabulary and comprehension. The test is available for pre-readers up through grade twelve. Administration is very simple, as a script is provided for the teacher. The test provides information on the student's raw score, percentile rank, normal curve equivalent, and stanine. In order to determine how well a student scored, the teacher has only to find the raw score (number correct) and utilize a chart that provides a conversion to percentile rank, normal curve equivalent and stanine. The appearance of even the prereading assessment is not overly juvenile; thus, this test becomes an appropriate measure to use with students who are functioning on a literacy level below that of their chronological age.

### ***Stanford Diagnostic Reading Test***

*Harcourt Brace & Co., 1-800-232-1223, [www.hbem.com](http://www.hbem.com)*

This test is designed to measure phonetic analysis, vocabulary and comprehension of students in first grade through grade twelve. Administration is quite simple due to the script provided for the examiner. The types of scores that can be determined through the administration of this test include content-reference scores, raw scores, progress indicators, scaled scores, norm-referenced scores, percentile ranks, and stanines. The examiner has only to determine the raw score. The other scores are pre-calculated and presented on a chart based upon the raw score. The examiner's manual includes a section for determining appropriate level of instruction based upon the student's score. The format of the test contains black and white pictures and words and is also appropriate for students whose literacy level is below that of their chronological age.

### ***Peabody Picture Vocabulary Test (PPVT-III)***

*AGS Publishers, 1-800-328-2560, [www.agsnet.com](http://www.agsnet.com)*

This test is designed to measure vocabulary knowledge of students in elementary school. A script is provided, making administration quite simple. Scoring, however, is more involved in this particular test. In order to accurately score the test, the student's exact chronological age is determined and once this information is obtained, a standard score can be obtained from the raw score. It is at this time that the examiner must be careful to locate the chronological age correctly in the norms booklet and match it with the student's raw score to determine the appropriate standard score. Due to the black and white presentation of the pictures used, and the easel format of the test itself (the test opens up to form an easel with the teacher's script on one side and the student's choices on another), this test is appropriate for students whose literacy level is below that of their cognitive age.

## ***Peabody Individualized Achievement Test-Revised (PIAT-R)***

*AGS Publishers, 1-800-328-2560, [www.agsnet.com](http://www.agsnet.com)*

This assessment is an achievement test designed to measure academic achievement of students ages 5 to 22. Although the test contains subtests that measure general information, reading comprehension, written expression, mathematics, and spelling; only the reading comprehension and spelling subtests are appropriate for the purpose of assessing literacy skills in students with physical and health impairments. A script is provided for the examiner to use during administration of the test. By using the student's raw score, the examiner can easily determine grade equivalence, standard score by age or grade, percentile rank, standard score, and normal curve equivalent. Due to the presentation of the test items and easel format of the test, it is appropriate for use with students whose literacy level is below that of their cognitive level.

### Summary

All of the tests described can be modified to meet the needs of individual students. For a student who requires that the test be presented in a yes/no format, the examiner can read the script and then touch the choices, asking the student to respond with "yes" when the examiner points to the student's desired selection. For students who can direct select by pointing or touching, the actual test protocol may be used. In this case, students would simply point to or touch the desired selection. For students who eye gaze, the pictures, letters, or word maybe copied, cut out, and placed on an E-tran board (i.e., clear, rectangular board with a hole cut in the middle that allows the teacher to look directly through the hole in the middle of the board to see which answer the student is looking towards).

It may be necessary for the examiner to enlarge the test protocol for students with visual or physical impairments. Some students may need enlarged pictures or text in order to see the information clearly. For students with motor impairments, enlarged pictures or text maybe necessary to give the student a larger target to select. Regardless of the size of the materials, the examiner should take care to see that the student and the materials are placed in a manner that is appropriate for the student.

When administering any of these tests to students with physical impairments, it is important to keep in mind that they may score lower than expected due to experiential deficits. For example, if a student is expected to select a picture that depicts a circus, and he or she has never seen a circus, the answer given may be based on the lack of experience with a circus. While this should not deter a teacher from administering a particular test to a student, the teacher should keep in mind that an experiential error is not the same as a literacy error. Overall, administering one of the tests described above will provide the teacher with valuable information regarding the literacy abilities of the student. This information can then be used to determine appropriate curricula, level, and pace of instruction.

## Accessing Reading Material

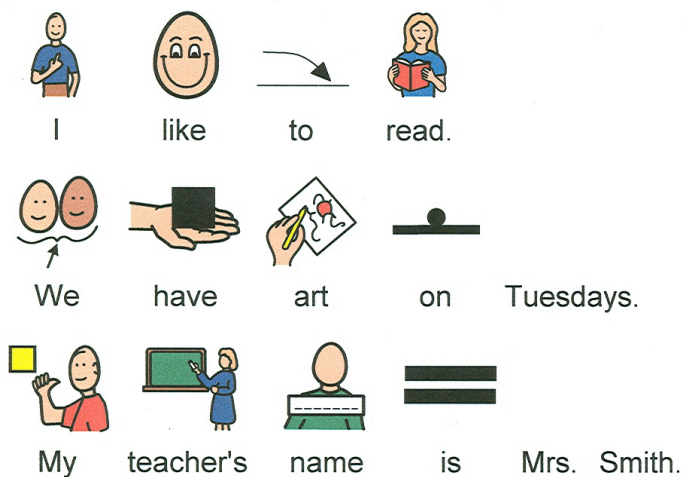
*Manipulating & Modifying Books.* Some students with physical disabilities will have difficulty holding a book. Books can be placed on stands, or placed in clipboard or binder, making them easier to hold.

When a student is unable to turn the pages of a book, page fluffers may be placed between the pages. Page fluffers consist of any material that can go between the pages to help separate the pages from each other to make turning easier. Examples of page fluffers include paperclips, small squares of Velcro (smooth side only), or other material that will cling to the page and separate the pages (such as weather stripping purchased from a local hardware store).

In some cases, the student may not be able to manipulate the book at all. Books may be scanned into a computer for easy access. The student can usually control the pages by a click of a mouse or switch. Also, books that are scanned into the computer may be accessed by software that reads the print aloud. Software is also available that allows highlighting, notetaking, and provides definitions of words (e.g., Kurzweil 2000 or WYNN).

Some students may also have difficulty seeing the print. Some teachers will retype the print in a larger font and glue it back into the book. If the books is scanned into the computer, many software programs will enlarge the text and provide higher contrast if needed.

For student needing symbol support, teachers may use such programs as Writing with Symbols (available through Mayer Johnson at [www.mayer-johnson.com](http://www.mayer-johnson.com)). The text is retyped with the symbols added and attached to the book over the existing print. In some cases, the teacher may make a separate book with symbol support. A sentence may look like this:



*Following a Line of Print.* Beginning readers often use their fingers to point to the print as they read along so that they do not lose their place. If the student needs the print to be pointed to (i.e., can not follow a line of print by vision alone or loses his/her place), the teacher may either scan the book into a computer and have the computer highlight the print as the student reads or they may use the Color Line Prompting Strategy. An example of the Color Line Prompting Strategy is as follows:

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### ***Color Line Prompting Strategy***

Can the student follow a line of print?

Does he or she get lost between words or between lines?

One solution for these problems is the color line prompting strategy.




When beginning to read, students will often point with their fingers to the words they are reading to help them keep their place. Students who are unable to do this due to their physical disabilities should be provided modifications. Initially, the teacher may point to each word as it is being read. Although this may work some of the time, other strategies are needed that will allow the student to be more independent and provide the teacher with freedom to move about.

One of the most common strategies is to scan the reading material into the computer and use software that highlights each sentence or word as the student reads. Most of these programs also have voice output that can be turned off to allow the student to read without assistance.

In some situations, it may be impractical to scan the book or use the computer. Another strategy is the color line prompting strategy. This strategy is based on the premise that by pairing the print with colored lines under each line of print, students can maintain their place by pairing the word or line they are reading with the colors.

To use this strategy, the teacher takes a clear plastic sheet of transparency paper and places it over the book the student is reading. The teacher then draws one-inch colored lines on the transparency paper that would fit under each line of print in the book. As illustrated in the example, each word does not require its own color. This allows the transparency paper to be placed over various pages of the book, provided that it fits under the lines of print. Usually, no specific instruction is needed when using this strategy, except to explain to the students that the colors should help them keep their place when they read. Students have easily been able to make this transition from someone's finger pointing to the words to following along with colored lines under the words.



*Using color lines for word placement:*

The boy then turned and saw his friend holding his puppy. He was  
  
so happy that his lost puppy was found. Tears began to swell in his  
  
eyes. He now knew how much the puppy meant to him and how he  
  
would always take good care of him.





Eventually, the teacher will want to gradually remove the lines. The first step to fading the colored line is to eliminate every other line. In this way the students uses the colored line under the words for the first line of print, and the same colored line on top of the words for the second line of print. One colored line serves every two lines. After gaining competency, the line may be further faded by elongating each color to about two inches. Later, each color is elongated to about three inches. Over time, half of the sentence may have one color and the other half another color. For example, the first two lines of print may have half green and half blue between them.



*Fading to using one color line of every two lines of print:*

The boy then turned and saw his friend holding his puppy. He was  
  
so happy that his lost puppy was found. Tears began to swell in his  
  
eyes. He now knew how much the puppy meant to him and how he  
  
would always take good care of him.

*Fading the color line:*


The boy then turned and saw his friend holding his puppy. He was  
  
so happy that his lost puppy was found. Tears began to swell in his  
  
eyes. He now knew how much the puppy meant to him and how he  
  
would always take good care of him.

*Further fading the colored line:*


The boy then turned and saw his friend holding his puppy. He was  
  
so happy that his lost puppy was found. Tears began to swell in his  
eyes. He now knew how much the puppy meant to him and how he  
  
would always take good care of him.

As the readers mature, they may no longer have the problem of losing their place on the line, but they may have trouble finding the correct line after completing the end of a line of print. To help the student, a color line is no longer used between the lines, but a vertical colored line may be used down the side of the written lines. The student pairs the line he or she is reading with the color in front of the line, and then moves to the next line that has a different color in front of it. Over time, the color line may be faded when the student's competency has increased. The colored vertical line may be faded by elongating the vertical line so that the first two lines have a blue mark, for example, and the next two lines have a red mark (or by eliminating the color line to every other line).

*Using color lines for line placement:*

 The boy then turned and saw his friend holding his puppy. He was  
so happy that his lost puppy was found. Tears began to swell in his  
eyes. He now knew how much the puppy meant to him and how he  
would always take good care of him.

*Fading the color lines for line placement:*

 The boy then turned and saw his friend holding his puppy. He was  
so happy that his lost puppy was found. Tears began to swell in his  
eyes. He now knew how much the puppy meant to him and how he  
would always take good care of him.

Eventually, the length of the color will be increased until there is only one color; then the line is removed. This Color Line Prompting Strategy has been used successfully with dozens of students with severe speech and physical impairments who have successfully moved from a teacher pointing to each word, to students using a color line prompt, to requiring no prompt at all.