Comprehensive Reading Assessment Grade 2

User Information	
Name:	Doe, John
Date of Birth:	19-May-04
Current Grade in School:	2nd
Grade in School at Evaluation:	2nd
Evaluation Date:	11-Oct-11

Background Information

The identification of learning difficulties involves the examination of two kinds of evidence. The first source of evidence is a childhood history that may contain events or characteristics that have been shown to be related to the subsequent development of learning problems. The second source of evidence is the administration of cognitive and psychological tests that provide indicators of whether a learning difficulty is present. Neither source of evidence by itself is conclusive. However, in combination the developmental history and the testing results provide a basis for determining the source of an individual's learning problems. This report contains information about both of these sources of evidence.

Reading Difficulties

Reading difficulties have a number of causes. Some children have difficulty learning to read because they have not had early experiences that lead to an understanding of what reading is about (a way of deriving meaning from text). These children when they are young also often lack

knowledge of letters, and a sense that letters make sounds that map onto the spoken language they have already acquired. These children are often identified in kindergarten or first grade by school personnel and can catch up with their peers in reading skill with appropriate school-based interventions. An intervention is any special instructional activity that is designed to strengthen a weak academic skill.

Other children have difficulties that appear to be brain based. This means that the source of their difficulties is probably inherited and it means that their reading difficulties are much more difficult to eliminate with regular educational interventions. Children that have this second kind of difficulty are often diagnosed as having a specific **reading disability** or **dyslexia**. The report to follow provides an evaluation of John's general reading skills and discusses the reasons why or why not John might have a specific reading disability.

Specific Reading Disabilities

Specific reading difficulties are primarily caused by difficulties in processing the component sounds of oral language. For example, a young student who has difficulty in processing the component sounds of language would have difficulty telling if two words rhymed or started with the same sound. The technical term for this difficulty is difficulty in processing phonological information. A phoneme is the smallest segment of sound making up a word so phonological information consists of the individual sounds that make up words. This difficulty creates problems in learning to read because a student with phonological processing problems has difficulties attaching speech sounds to letters and letter combinations. If a beginning reader cannot attach sounds to letters, they cannot use sounding out procedures to identify words, and this greatly slows down the acquisition of reading skills. For example, a beginning reader who has difficulty in attaching speech sounds to letters and letter combinations would have difficulty attaching the sound "cuh" to the letter "c" in the word "cat" and would have even greater difficulty in sounding out the entire word and then repeating the sounds rapidly so that the word could be identified.

Background on Educational and Cognitive Assessment

Students with a specific reading disability display deficiencies in reading performance that are not matched by deficiencies in other types of cognitive functioning. For example, reading disabled students can recognize letters and numbers with no more difficulty than an average student. However, the word recognition performance of a disabled reader is typically slower and/or less accurate than the word recognition performance of a normal reader. There are other reading tasks as well that differentiate between disabled and non-disabled readers. For instance, disabled readers have considerable difficulty pronouncing non-words such as "plok", "sistend" and so on. Disabled readers are also poorer than normal readers at activating the meaning of words and they have difficulty comprehending written sentences and paragraphs. However, their listening comprehension is equivalent to that of their classmates and they often excel at activities such as science and mathematics.

The cognitive assessments we describe in this report take advantage of known deficiencies in the reading performance of disabled readers. Some of the tasks John completed, which are described in some detail below, are ones that have not been shown to produce differences between reading

disabled and non-disabled readers. Others do show differences between disabled and non-disabled readers. In combination, performance on the two types of tasks provides an indication of the likelihood that a student has a specific reading disability.

Reading Success Lab Tests

Our assessment efforts involve measuring academic performance using Sentence Verification Tests (SVT) of listening and reading comprehension, and computer-based assessments of reading competencies. All of these assessment procedures were developed and validated at the Laboratory for the Assessment and Training of Academic Skills at the University of Massachusetts, Amherst.

Listening Comprehension and Reading Comprehension Assessments. The computer-based listening comprehension tests are administered by having the student listen to a recorded passage and then respond to a series of verbally presented test sentences that are designed to measure how well the student has understood the passage. After completing the listening part of the assessment, the student completes a reading test that is parallel in difficulty with the listening test.

The relationship between reading and listening performance is of particular interest in the assessments. For instance, children with specific reading disabilities often comprehend a text much better if they listen to it than they do if they read the text. In contrast, children with Attentional Disorders (ADD-sometimes accompanied by hyperactivity) sometimes have much higher reading performance than listening performance. The reason for this difference is that some ADD students seem unable to maintain focus on an oral message that they have a single opportunity to grasp. This contrasts to reading where they have the opportunity to re-read information that was not initially comprehended.

Basic Reading Assessments. The Reading Success Lab Assessment Software that John used for this reading evaluation presents students with a series of reading tasks and then collects both time (speed of performance) and accuracy (percent of task items completed correctly) data when the tasks are being performed.

The measurement of both the speed and accuracy of performance is a unique aspect of the RSL system for the purpose of identifying reading difficulties. Typical assessment procedures only measure the accuracy of reading performance. The measurement of speed of performance not only makes the RSL system a powerful procedure for identifying learning difficulties, it also makes it an excellent procedure for measuring educational progress associated with attempts to improve a student's reading performance.

Administration of an RSL task involves presenting a reading stimulus on the computer screen and the student then responds to the stimulus thereby recording the speed of response. When the stimulus first appears a clock is started in the computer and the clock stops when the student makes a response. This timing process is accurate to a small fraction of a second. After the

response, the accuracy of the response is recorded. John completes at least 20 trials for each task and the RSL program automatically converts the data into statistical units (means and standard deviations). Accuracy and response time scores can subsequently be combined to yield a single index (speed and accuracy) of performance, and this index can then be converted into a percentile score using RSL norms for a student's grade level. Typically a microphone is used to detect a response but a SPACEBAR press coinciding with the spoken response may be used instead.

A percentile score is a measure of how results compare to the results for others the same age on the same task. The percentile score ranges in value from 1 [lowest] to 99 [highest]. For example a percentile score of 89 means that the score is as good as or better than 89% of people the same age. A person who is exactly average will be in the 50th percentile.

John completed versions of our assessment instruments that are appropriate for elementary/middle school students. A description and discussion of the tasks that John completed is listed below.

Simple response time: This task involves presenting *** or +++ on the computer screen whereupon the student responds **star** or **plus**. Simple response time assessment provides an index of general cognitive processing efficiency, and is useful in identifying other problems such as vision difficulties.

Students with a specific reading disability perform at about the same level on this task as do normal students. The task is useful, however, for picking up students who may have a visual difficulty or who may have a more global learning problem like mental retardation.

Letter recognition: This is an assessment of the speed and accuracy of letter recognition. It involves presenting an upper or lower case letter on the computer screen and having the student say the name of the letter. For example, the student might see the letter "B" on the computer screen and then respond with the name of the letter.

Again, this is a task that typically does not differentiate between disabled and non-disabled readers. There are occasional students who do have letter recognition problems but these are rarely seen beyond the first grade. It should be mentioned that there is a common belief that students with dyslexia "see" text differently than normal readers. For example, one might hear that they see letters backward or they read from right to left rather than from left to right. These beliefs are myths. Letter reversals are no more prevalent in a dyslexic population than they are in a population of normal readers. Dyslexia is a sound processing problem, not a visual processing problem.

Oral detection of initial phoneme and ending phoneme: Earlier in this report it was mentioned that students who develop reading difficulties often have relatively poor phonological awareness skills. Phonological awareness can be measured by determining if the child can decompose spoken words into constituent sounds. There are a variety of phonological awareness tasks but the ones used in this assessment battery involve examining the ability to hear when two words start with the same sound, and to hear when two words end with the same sound.

Most children, even reading disabled children, have mastered these phonological awareness skills by the time they have reached second grade. Therefore good performance on these tasks does not rule out the presence of a reading disability. However, poor performance on these phonological awareness tasks is a strong indicator of a reading disability.

Word recognition: This is an assessment of a student's speed and accuracy in identifying words that are of average difficulty. The task involves presenting a word on the screen and having the student say the name of the word.

Poor word recognition is the most common characteristic of a reader with a specific reading disability. Students with a reading disability (dyslexia)are almost always slow at word recognition and they are sometimes inaccurate as well.

Sentence Understanding: In this task two sentences appear on the screen. The second sentence, is either an exact copy of the first, a paraphrase of the first, almost the same as the first but with a different meaning than the first, or unrelated to the first. The student determines whether the two sentences mean the same thing by clicking either the **Same** or **Different** on-screen button as appropriate. As with the two comprehension tasks, this task uses the **Sentence Verification Technique [SVT]**.

Disabled students generally perform more poorly on this task than do non-disabled readers.

Questionnaire Interpretation

Early Childhood Factors that are Related to Specific Reading Difficulties: Individuals with learning difficulties often have a childhood history that has a number of characteristics that are predictive of subsequent problems. No single characteristic predicts the subsequent development of a reading difficulty with certainty, but the presence of several factors that are known to be related to a specific reading difficulty provide evidence that a specific reading disability might be present.

Information was collected about a number of developmental characteristics that have been shown to be related to the subsequent development of reading disabilities. The first of these is whether or not there appeared to be delays in language acquisition. Individuals with reading disabilities frequently had language learning difficulties as young children. John did not exhibit delays in learning to speak as a child.

The next question that was asked was whether or not John exhibited persistent articulation difficulties as a young child. Articulation difficulties are difficulties in correctly pronouncing words. Typically children with articulation difficulties not only have difficulty pronouncing words correctly; they also have difficulty hearing the fact that they are mispronouncing words. Again, persistent articulation difficulties have been shown to be related to the subsequent development of reading disabilities. John did not have persistent articulation difficulties as a young child.

The question about articulation difficulties was followed by a question about whether or not John received speech therapy as a young child. Persistent articulation difficulties are sometimes severe enough to warrant the attention of a speech therapist. Articulation difficulties severe enough to warrant speech therapy services are especially predictive of the development of reading difficulties. John did not receive speech therapy services as a young child.

The next question asked whether or not John had ever tried to learn pig latin as a child, and if so, whether or not he was successful. Learning pig latin requires a considerable amount of phonological processing skill and individuals who develop reading difficulties typically have a great deal of difficulty learning it. The reason is that pig latin involves taking the beginning sound of a word and moving it to the end of the word and then attaching the sound "ay" to the word. So, for example, the word "can" becomes "ancay". Individuals who develop dyslexia cannot manipulate the phonology (sounds) of words and thus have difficulty learning pig latin. It was indicated that John did not attempt to learn pig latin.

The next question asked whether or not John had experienced excessive ear infections as a young child. Children who experience delays in speech acquisition and have articulation disorders often do have phonological processing problems that are subsequently associated with reading difficulties. However, sometimes the origin of these difficulties is associated with frequent and severe ear infections. Severe and/or excessive ear infections may explain why speech delays or articulation difficulties develop. If they develop because of ear infections, it is unlikely that the child will have a specific reading disability. The response to the question about ear infections indicated that he did not have excessive ear infections as a child.

Family Background Factors that are Related to Specific Reading Difficulties: The next set of questions asked about the John's family background. Learning difficulties appear to have a genetic component and children with reading difficulties often have close relatives who also have reading difficulties. The first question was whether or not John had siblings. It was indicated that John does not have siblings.

The next questions asked whether any close relative was known or suspected as having a learning disability. It was indicated that there were no such close relatives.

Educational History: John displayed no evidence of learning difficulties as a young child. In addition, he has never completed a formal diagnostic procedure and has never had an IEP (Individualized Education Plan) during his academic history.

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Assessment Test Results

Prior to interpreting the testing results it should be noted that percentile scores are based on a restricted norm sample and this should be taken into account when interpreting them. However, they provide a good baseline against which future academic progress can be measured. The profile of performance derived from the percentile scores is stable and research has shown that

the profiles are good indicators of learning difficulties. The data listed in table and graph below show John's performance on the RSL reading tasks used it this evaluation.

	Task	Speed (sec)	Accuracy (%)	Percentile (%)
1	Reaction Time	1.02	100.0	70.0
2	Letter Naming	1.00	95.0	40.0
3	Initial Phoneme	2.05	90.0	85.0
4	Final Phoneme	1.21	100.0	99.0
5	Grade 2 Word Naming	1.35	89.5	47.0
6	Grade 2 Sentences	4.99	83.3	88.0
7	Grade 2 Listening Comprehension	1.00	81.8	73.0
8	Grade 2 Reading Comprehension	3.12	82.5	75.0
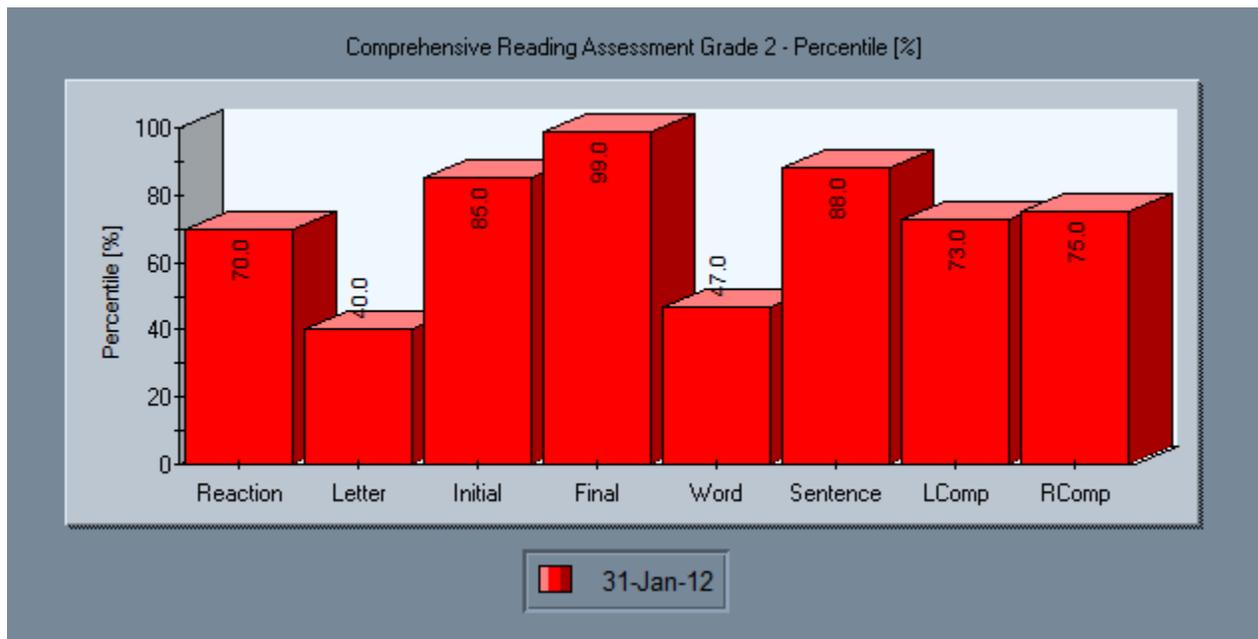
Listening and reading comprehension: The relationship between reading and listening performance is of particular interest in the assessments as children with specific reading disabilities often have much higher listening comprehension performance than reading comprehension performance. A child with a specific reading disability will often have difficulty comprehending information when read, but have little difficulty comprehending similar information when listened to. John's listening comprehension performance is at the 73rd percentile while his reading comprehension is at the 75th percentile.

Basic reading performance: Individuals with a specific reading disability typically exhibit a profile of performance with a distinct pattern. Such a reader typically will score in the average to above average range on the simple reaction and the letter naming tasks, and have difficulty on the remaining tasks. The reason for this pattern of performance is related to the underlying causes of a specific reading disability. Reading disabilities are caused by difficulties in attaching speech sounds to letters and letter combinations. The inability to attach sounds to letters makes it difficult for a reader to identify words by sounding them out, and this in turn causes delays in learning to read. It is important to note that current research indicates that reading disabilities

have nothing to do with visual processing. This means that individuals with dyslexia (specific reading disability) typically have little difficulty with a task that primarily involves visual processing such as the simple response task and the letter recognition task. They do, however, have difficulty in reading tasks that involve attaching sounds to letter patterns. In short, they have difficulty on the Word Recognition, Sentence Understanding, and Reading Comprehension tasks. In addition by 2nd grade most children, even reading disabled children, perform well on the two phonological awareness tasks so poor performance on these is a strong indicator of a reading disability.

Analysis of the pattern of performance is a very powerful tool for identifying a variety of other reading problems [if any] that range from a general poor reading skill to inconsistent reading due to attention deficit problems. The particulars of John's pattern of performance will be discussed later in the section titled **Assessment Test Interpretation**.

John's performance on the Simple Response task is at the 70th percentile and his performance on the Letter Recognition task is at the 40th percentile. John performed at the 85th percentile on the Initial Phoneme task, at the 99th percentile on the Final Phoneme task, at the 47th percentile on the Word Recognition task, and at the 88th percentile on the Sentence Understanding task.

Assessment Test Interpretation

John's overall pattern of performance on the questionnaire and the Reading Success Lab [RSL] assessment tasks is similar to the pattern commonly seen in individuals who are fair to good readers. Individuals who are fair to good readers generally do not have a pattern of childhood and educational characteristics that students who develop a reading disability have. Signals for the possible development of a reading disability are speech acquisition difficulties at an early age that can delay learning to speak and difficulties in learning to pronounce words (articulation difficulties). In addition, individuals with a reading disability often display early problems that trigger formal evaluations that are conducted either by a school-based evaluation team or by private diagnosticians. These evaluations often result in the development of an Individualized Education Plan (IEP) that describes the provision of specialized services that are designed to improve reading performance. Another indicator that is often seen in a student with a reading disability is the presence of learning difficulties in the immediate family. Some fair to good readers may have some of the characteristics mentioned above, but in general, they do not.

Early Childhood History: John did not have any of the characteristics that signal the possible development of a reading disability. He did not experience speech delays, did not have articulation difficulties, did not have speech therapy, and did not have difficulty learning pig latin.

Educational History: John's educational history has none of the characteristics that signal the possible development of a reading disability. He had no formal evaluation or IEP.

Family History: Individuals with learning disabilities often have close relatives who have learning problems and John's questionnaire information indicated that John has no close relatives who have have learning difficulties.

Reading Success Lab Tests: John pattern of performance on the RSL assessment tests is also consistent with the pattern of performance seen in individuals who are fair to good readers. Fair to good readers display a very characteristic pattern of performance on these tests. Specifically, they generally perform in the average or above range on all of the RSL tests. John's profile of test performance generally fits this pattern of average or above performance on all of the tests. He scored at the 70th percentile on the Reaction task. He scored at the 40th percentile on the Letter task. He scored at the 85th percentile on the Beginning Phoneme task. He scored at the 99th percentile on the Ending Phoneme task. He scored at the 47th percentile on the Word task. He scored at the 88th percentile on the Sentence Understanding task. He scored at the 73rd percentile on the Listening Comprehension task. He scored at the 75th percentile on the Reading Comprehension task.

John's overall pattern of performance on the entire evaluation is similar to the profile seen for an individual who is a average or good reader.

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Intervention Plan

John does not display any signs of reading problems in this assessment but often times parents and student's themselves want to boost reading performance. There are two ways to do this. One is to build the efficiency of word recognition skills, and the second is to broaden the range of material that a student can read easily and with good comprehension.

Building word recognition skills means increasing the number of words that a student can recognize effortlessly and without thought. Words that can be recognized effortlessly and without thought are words that that student can recognize "automatically". The logic behind building automatic word recognition skills is based on the idea that words that are recognized by thinking about them makes reading a laborious process. This can cause increasingly greater difficulties as a student moves into junior and senior high school where the reading load in subject matter areas such as science, math and social studies greatly increases. If word recognition for a large number of words can be made "automatic", then reading will be easier and a student will be more likely to keep up with peers as reading load increases. A reader with a large sight vocabulary will be able to instantly identify words without having to sound out the words. Instant word recognition by sight greatly increases reading fluency and reading comprehension.

The RSL Skill Builder Module has proven to be effective in improving the automaticity of word recognition skills. The Skill Builder provides practice on words that are sorted into grade levels. Practice consists of rapid naming of sets of words and the Skill Builder program then plots the results of a practice session in terms of the speed and accuracy with which a student named the

words. After one set of words is mastered to automaticity, the program presents the student with another set of words, and practice continues.

Based on John's performance results and background information, we would recommend starting John with the Grade 3 Words intervention sets. With the Skill Builder Interventions it is best to err on the side of the set being too easy as opposed to too hard, as we want to build in success from the start. If this recommended level seems too difficult, try one grade lower. Also, there is a set of intervention materials available that do not refer to explicit grade levels.

It should be noted that in practicing and mastering sets of words, the student is not merely adding words to his/her sight vocabulary. The student is also learning how to decode new words. The research shows that not only is the student getting faster recognizing the words practiced, but also he/she is also getting faster recognizing words that are not practiced. This improvement in skill of decoding unfamiliar words is extremely important because it enables the student to recognize a word when reading a passage rather that simply skipping over an unrecognized word.

An important aspect of this practice as students get older is the improvement of word identification and word meaning ability in content areas. The Laboratory for the Assessment and Training of Academic Skills (LATAS) at the University of Massachusetts has had considerable success with an exercise that is designed to develop rapid and effortless word identification and word meaning ability in content areas (e.g., science, social science). The process begins with textbooks that are going to be used in future courses. The student with a reading difficulty is asked at the beginning of the summer to bring in the textbooks they are going to use next year. The glossary words in the texts are then copied into the RSL system so they can become part of the Skill Builder exercises. Five times a week the student sits down and names about 160 of the words as fast as possible while trying to maintain accuracy. The Skill Builder program records the time required to name the average word in seconds and plots the performance on a graph. Over repeated practice sessions the line on the graph will level off and the student then moves to the next set of words and repeats the process. When all of the words have been mastered the task is repeated, but this time the student says anything that comes to mind that indicates he/she knows the meaning of the word. This might mean providing a synonym or antonym, or providing a context word. For instance, if the word was "electricity", the student might say "light bulb".

Completing this activity for all of the words in a textbook glossary allows the student to enter the reading and study process having already mastered the technical vocabulary that will be encountered in the book. This, in turn, will make the process of reading and understanding the text much easier.

The RSL Skill Builder program contains many words from subject matter textbooks taken from junior and senior high textbooks in science, social studies and mathematics. The Skill Builder program also allows a parent or teacher (or even the student himself or herself) to enter their own words from their own textbooks as practice materials.

Another important component of improving general reading skills is practice at reading. Children who read get better at reading, and children who do not read make little progress. In many cases

the key to getting a child involved in reading is to find out what he or she is interested in reading about. For example, we worked with a child who had little interest as a 3rd grade student in reading until he discovered the Goose Bumps mystery series and then he devoured every one he could find, and that led to an interest in reading other kinds of books. The philosophy is to provide them with whatever they are interested in (within reason of course) and let them hone their reading skills on that content. If they find that reading is not difficult that may lead to an interest in reading other kinds of content, and that in turn might lead to less difficulty in reading textbooks and other academic material.

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Next Steps

Next Steps For Educators: The section of this report labeled **Assessment Test Interpretation** summarizes the test results. If this summary indicates a pattern commonly seen in individuals with learning difficulties in all areas of cognitive functioning, with inconsistent reading, or with a specific reading disability, then an appropriate intervention plan is needed.

If inconsistent reading or a reading disability is indicated, the following steps are recommended:

1. Conduct further assessments, if necessary, to confirm these test results and further pinpoint the specific reading disability.

2. Share with the reader and the reader's family the results of the assessments. Given the hereditary nature of dyslexia it's quite possible that other family members may have similar difficulties.

3. Develop an implementation plan for the reader consistent with the recommendations in the **Intervention Plan** section of this report and with any subsequent assessment that is conducted.

As described in this report, an intervention strategy that trains the reader to rapidly and accurately identify words may have greater long-term success than a phonics-based system alone.

Next Steps For Parents: As described in this report, the Reading Success Lab assessment test identifies a variety of cognitive difficulties and reading difficulties. Your child's school is also likely to have assessment testing available.

1. Use this assessment report when discussing your child's situation with the school. The results indicated on this assessment report may make it easier to obtain additional testing and subsequent resources to assist your child. If your child's school will not schedule your child for additional testing or services, consider obtaining another full diagnostic assessment from a local private diagnostician recommended by the school. This additional testing would then give you two independent assessments on your child that you can share with the school.

2. Consider direct involvement in assisting your child if a specific reading disability is indicated. The school may recommend skill-building exercises you can do with your child at home. In addition, Skill Builder modules are available for working with your child at home in addition to the assistance your child is getting at school.

3. Consider obtaining assessments for other family members (child and adult). Reading disabilities are often hereditary and with proper assessment they can be identified and intervention initiated. Skill-building exercises can be just as helpful for adults as for a child.

4. Consider periodic reassessment for your child to track progress that is being made with the intervention plan.

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Additional Resources

Additional information is available for many topics relating to this report on the Reading Success Lab website. Listed below are links to the Reading Success Lab site where you can more information on specific topics. You will need an internet connection to access these.

Additional information on this assessment test, dyslexia, periodic reassessment, and intervention strategies is available at our home page at:

http://www.readingsuccesslab.com/

Additional information on testing can be found at:

Detailed Testing Information

Additional information on building reading fluency with Skill Builder rapid word identification exercises is available at:

Skill Builder Fluency Exercises

Additional information on developmental aspects of learning to read is available at:

Developmental Aspects of Reading

Additional information on dyslexia is available at:

Dyslexia Information

Additional information on what is fact and fiction about dyslexia is available at:

Dyslexia Fact or Fiction

Additional information about Reading Success Lab is available at: