

# Protocol for Accommodations in Reading



Developed by Denise DeCoste, Ed.D.  
and Linda Bastiani Wilson, MA

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#### Citations:

Bibliographic Citation: DeCoste, Denise, and Linda B. Wilson. Protocol for Accommodations in Reading. 1st Edition. 2/2012. Volo: Don Johnston Incorporated, 2012. eBook. [www.donjohnston.com/par](http://www.donjohnston.com/par)

In Text Citation: DeCoste and Wilson

#### Published by:

Don Johnston Incorporated

26799 West Commerce Drive

Volo, IL 60073

800.999.4660

[www.donjohnston.com](http://www.donjohnston.com)

Available at [www.donjohnston.com/par](http://www.donjohnston.com/par)

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## Introduction

In 1955, Don Johnston looked forward to starting school—he couldn’t wait. But he quickly struck a wall when it came to reading and this caused a vicious cycle of failure, grade after grade. I recently heard the same story from a girl from Virginia named Nichelle. Nichelle started school with the same passion for learning as Don, but by the time she was a freshman in high school, she was stuck in a failure cycle and felt hopeless. For Don, it was his 8th grade teacher, Mrs. Tedesco, who made the difference. She rekindled the flame that had long burnt out by teaching him to believe in himself. Nichelle was fortunate to grow up in a different time. She went to her teacher to ask if there were any technology tools available to help her read. Thankfully, her teacher responded quickly and called in the district’s assistive technology specialists. In that same year Nichelle went from failing to mostly A’s, and she went from feeling despair to confidence. What a happy ending! Yet, how many students with the same struggles as Nichelle don’t think to ask for technology (they don’t know what they don’t know)? How many students like Don never get a teacher like Mrs. Tedesco?

The field of Assistive Technology is filled with passionate people who diagnose and help accommodate learning disabilities. So why do students still fall through the cracks? Research shows that IEP teams are not good at determining the best accommodations for a student. Research also tells us that using data makes IEP teams more effective. In a world of data-driven decision-making, it’s critical that tools exist for IEP teams to make the right decisions when it comes to accommodations.

Surprisingly, there were no clear guides to doing this until Denise DeCoste, Ed.D., and Linda Bastiani Wilson, MA, Ed., created PAR, a framework that helps a member of an IEP team choose a reading accommodation for a student based on empirical data from that particular student. The authors understand the need to build local capacity and have used this tool to support their work in their school district. They share our company’s passion to systematize the accommodations process based on what works best. We are so passionate about this that we’re publishing and distributing it as a free download. I encourage you to use this tool to initiate a systematic process for recommending reading accommodations in your classroom, school, and district. This will give students like Nichelle the best shot of getting the right accommodations before it’s too late.

Ruth Ziolkowski, OTR, MBA

President

Don Johnston Incorporated

# **Rationale For the Consideration of Effective Reading Accommodations**





## Rationale For the Consideration of Effective Reading Accommodations

### Introduction

The Protocol for Accommodations in Reading (PAR) is a formative assessment tool that can be used with any student that is struggling with reading. It is intended to help educators make informed decisions about reading accommodations. Research suggests that while testing accommodations provide a positive effect for students with disabilities when compared to students without disabilities, there is a need to make accommodation decisions case by case, based on student characteristics, not disability classification. Furthermore, evidence-based evaluations are needed prior to making decisions about accessible instructional materials and assessment adaptations. In order for this to occur, a systematic process that is suited to school-based settings is necessary. The Protocol for Accommodations in Reading was developed in response to this need.

The manual begins with a review of the literature on reading accommodations, which sets the stage for the need for a reading accommodations protocol. This manual also includes detailed instructions on how to administer the protocol. Case studies are described at the end of the manual.

### Accommodations and Public Policy

No Child Left Behind and IDEA regulations have elevated the use of standardized assessments to measure the progress of all students. Test scores influence key decisions regarding placement, graduation and school effectiveness. With over 6 million students with disabilities nationally, accountability through testing is imperative, but only if we can ensure that students' test performance is a valid and reliable measure of knowledge, skills and abilities. IDEA regulations (34 CFR 300.138) mandate that the state must have on file information to demonstrate that "children with disabilities are included in general state and district-wide assessment programs, with appropriate accommodations, and modifications in administration, where necessary."

The legal requirement notwithstanding, there are research-based reasons that underlie this regulation. The majority of students with learning disabilities have reading disabilities and there is evidence that students do not outgrow such disabilities. (Shaywitz, 2003) Even as older students with learning disabilities read more accurately with more automaticity, they are likely to remain slow readers and will benefit from extra time accommodations (Gregg, Mather, & Shaywitz, 2001). Accommodation policies, however, differ across states. A 2011 National Center on Educational Outcomes (NCEO) Brief indicated that the percentage of students with disabilities using reading accommodations varies widely across Race to the Top Consortia groups on statewide reading tests, ranging from 1 % to 90 %.

Educators and policy makers are highly aware of the importance of tracking the academic progress of students with disabilities and want students to have an equal opportunity to demonstrate their knowledge (McKevitt & Elliot, 2003). Accountability for all students is important. If students with disabilities are not included in accountability measures, then resources and services may not be made available (Bolt & Thurlow, 2011). Presently, however, standard tests at state and district levels are not created with disabilities in mind, nor are they validated in advance on students with disabilities. Accommodations are typically put in after-the-fact to level the playing field. Accommodations are defined as "changes to materials and procedures that do not change the construct being measured" (Thurlow, Lazarus, & Christensen, 2008). There is a great deal of interest now in whether test results using accommodations are indeed valid measures—whether they provide a leveling effect, an undue advantage or have little to no effect at all.

Accommodations are intended to enable students to participate more fully in instruction, not just assessments. Accommodations should be documented on the student's IEP or 504 Plan and should be based upon individual student needs and not upon a category of disability, academic level, program setting, or on availability. Accommodations are meant to be based upon evidence, not just belief. It is not sufficient merely to assign accommodations without an understanding of the student's strengths and needs. According to Hehir (2008), teachers and parents need to make carefully chosen accommodation decisions. "There is evidence that accommodation decisions for students with disabilities are not done as thoughtfully as they could.... and further, the wrong accommodations may actually depress performance for some disabled students."

Bolt and Thurlow (2011) emphasize the important work of special educators to ensure instructional access to accommodations, to promote advocacy skills among students with disabilities, and to help students understand the types of accommodations that help them learn.

"As higher stakes are being attached to student scores on statewide assessments, it is likely that more and more students will be offered testing accommodations in an attempt to increase student performance. To ensure that resources are used wisely, it is important that accommodations are provided only to those students who are determined to need them based on documented benefits. At the same time, it is important to ensure that students have access to necessary accommodations in both instruction and testing."

(Bolt & Thurlow, 2011. p. 26).

### **Prevalence of Reading Difficulties**

Based on the data from the 2011 National Assessment of Educational Progress, there is still a sizeable percentage of students reading below basic levels, which is defined as scores below the 25th percentile — 33 % of 4th graders and 24 % of 8th graders are reading below basic levels. And there is still a sizeable achievement gap for Black and Hispanic students. Among the 4th graders who scored below basic, 35 % were Hispanic, 25 % were Black, 74 % were eligible for free or reduced meals, and 24 % were English language learners. Among the 8th graders who scored below basic, 32 % were Hispanic, 26 % were Black, 67 % were eligible for free or reduced meals, and only 8 % of these students read for fun nearly every day.

While some students have reading delays, others have reading disabilities that are neurobiological. As a result of advances in brain imaging, dyslexia has been rendered a visible disability (Shaywitz & Shaywitz, 2007). Dyslexia is defined as a "specific learning disability" that is neurobiological in origin. It is characterized by difficulties with accurate and/or fluent word recognition and poor spelling and decoding abilities. These difficulties typically result from a deficit in the phonological component of language that is often unexpected in relation to other cognitive abilities and the provision of effective classroom instruction." (Lyon, Shaywitz, & Shaywitz, 2003, p. 2). According to estimates, 75-90 % of students with learning disabilities have reading disabilities, and as stated previously, there is strong evidence that students do not completely outgrow reading disabilities (Shaywitz, 2003). As students progress through school, there is a shift from learning how to read to being expected to read in order to learn content. As this shift occurs, accommodations grow in importance for students with reading disabilities.

## Research On Reading Accommodations

### Read Aloud Conditions

Studies examining read-aloud strategies predate concerns about accommodation. Studies in the 1970s and 1980s looked at the use of audiocassette recordings as a way to increase access to print and support young or struggling readers. Early studies of reading while listening (RWL) demonstrated that audio taped books increased access to print and resulted in reading gains for elementary students reading below grade level (Schneeberg & Mattelman, 1973; Carbo, 1978). Shany and Biemiller's (1995) study on RWL confirmed that books on tape improved reading rates and comprehension in 3rd and 4th grade students who were poor readers, resulting in doubling the amount of material read, while O'Day's (2002) research demonstrated increases in word recognition, comprehension and vocabulary in 5th grade students. Repeated readings combined with RWL also have been found to increase 3rd grade students' reading speed and accuracy (Rasinski, 1990).

D'Alonzo and Zucker (1982) determined that short-term comprehension of content improved with the use of audio recordings for high school students with learning disabilities. Similarly, Boyle, Rosenberg, Connelly, Washburn, Brinckerhoff and Banerjee (2003) found that audio textbooks in a history class improved content area assessments for secondary students with mild disabilities, particularly when combined with organizing strategies. Another study focused on the benefits of RWL for middle school students with reading and emotional disabilities and found that the benefits were higher compared to silent reading (Hale, Skinner, Winn, Oliver, Allin, & Molloy (2005).

There are a few theories as to why RWL is effective. One theory is that students spend fewer cognitive resources on decoding and more resources on understanding the content (LaBerge, & Samuels, 1974), while another possible explanation is that, because the text is read faster than the student is able to read on his own, he can better retain and synthesize the content (Bresnitz, 1987). McMahon (1983) established that children as early as first grade were able to integrate visual and auditory information effectively when books were read aloud, and indicated that adult readers should read aloud at a rate that is higher than students' oral reading rates. Lionetti's research (2004) confirmed that reading aloud at the student's oral rate emphasized word recognition accuracy at the expense of comprehension, and he indicated that it was effective to set the speed of reading 23 % over the student' oral rate.

Because of federal regulations that require all students to be assessed in reading and math, current studies have shifted to examining read aloud accommodations for purposes of assessment. Studies differ on whether the read aloud condition provides a differential boost for students with disabilities. Cook, Eignor, Steinberg, Sawaki and Cline (2009) found that the read aloud condition had a positive effect for 4th grade students with learning disabilities during reading comprehension assessments and on English Language Arts assessments (Cook, Eignor, Sawaki, Steinberg & Cline, 2010). However, studies by McKeivitt and Elliot (2003) as well as Kosciolk and Ysseldyke (2000) found no difference in performance gains.

Read aloud accommodations are under the microscope on high stakes, large-scale assessments. Tindel, Heath, Hollenbeck, Almond and Harniss (1998) studied the effects of accommodations in Oregon's state assessment program and found that read aloud presentation of math items had a positive effect for students with learning disabilities. Johnson, Kimball and Brown (2001) examined accommodated test scores for 4th and 7th graders in the state of Washington and found

that more accommodations were provided to 4th graders compared to 7th graders, that special education students with accommodations performed better than students in special education who did not receive accommodations, and that there was no undue advantage compared to general education students. Huynh and Barton (2006) conducted a large scale archival study of a 10th grade reading exit exam and determined that read aloud conditions using adult readers and audiotapes leveled the playing field for students with disabilities. A more recent study of statewide assessments on reading and math across a three-year period by Bolt and Thurlow (2011) found that read aloud accommodations had a positive impact on student performance for 4th graders, but not for 8th graders, and that the benefit was greatest on test items classified as difficult to read.

### **Text Readers**

Studies of read aloud conditions are prevalent in the literature compared to studies of text readers. Early studies on the benefits of text to speech (TTS) tended to focus on using the computer to learn to read words. In a review of experimental studies focusing on phonological skills and word recognition in young students and poor readers, MacArthur, Ferretti, Okolo, & Cavalier (2001) reported that many studies supported the efficacy of computer-assisted instruction to improve phonological awareness and decoding skills. Olsen and Wise (1992) as well as Van Daal and Reitsma (1993) found that computer-based speech feedback led to improvement in word identification in students with reading disabilities. However, for students with severe reading difficulties, speech feedback could not overcome deficits in phonological awareness.

Studies on the impact of text to speech also look at the effects on reading comprehension. Elkind, Cohen and Murray (1993) reported increases in comprehension in middle school students who used text-to-speech software. Higgins and Raskind (1997) and Elkind (1998) reported that text reader software enhanced reading speed and comprehension in post secondary students with reading disabilities who had good receptive language and that the students who read the slowest or read standard text with poor comprehension benefitted the most. In 2005, Dolan, Hall, Banerjee, Chun and Strangemen conducted a pilot study and examined text-to-speech software accommodations with ten high schools students with learning disabilities taking history and civics tests. Students were able to listen to reading passages, test questions, and answer choices. Overall results were not statistically significant compared to paper and pencil versions, however, item analysis indicated that there was a markedly better performance for students who were considered low average readers when using text readers to read passages longer than 100 words. Students reported that computers with TTS were easier to use, and students preferred features that allowed them to be independent.

Studies of text readers have also examined the benefits of study tools. MacArthur and Haynes (1995) designed digital textbooks with speech output, glossaries, highlighting of main ideas and supplementary explanations and found that high school students scored significantly higher on chapter tests than students who used computerized text without enhancements. However, in a 3-year study of the use of digital basal readers with enhancements in Kindergarten through 3rd grade, results were mixed (Boone and Higgins 1993). Hecker, Burns, Elkind, Elkind and Katz (2002) used text reader software (Kurzweil) with study tools with postsecondary students with attention disorders. Results indicated that the students were less distractible, read with less fatigue for longer periods of time, and completed assignments in less time. In a study that used Read and Write Gold software with secondary students with reading levels one to four levels below average, the use of text-to-speech with study tools resulted in improvements in comprehension and spelling (Lange, McPhillips, Mulhern & Wylie, 2006).

## Accommodations

In principle, accommodations should lead to greater score improvements for students with disabilities compared to students without disabilities. There should be a differential boost, but it should not provide an undue advantage (Hehir, 2008; Sireci, 2008). Accommodations should be allowed to get the student beyond the barrier of secondary or irrelevant constructs. However, as Hehir (2008, p. 140) states, “the issue is not just the accommodations students should receive during the high stakes test but rather the important role well-thought out accommodations play in the entire education process.”

In the context of the school environment, accommodation decisions still need to be made on a case by case basis. “The absence of clear research evidence means that opinion and expert judgment are the primary basis for decisions about which accommodations are allowable and which, if used, invalidate test scores” (Thurlow, Lazarus, Thompson, & Robey, 2002). At the school level, there are two major concerns: 1) testing drives accommodation decisions, not instruction, such that students may not be getting ample use of accommodations instructionally, and 2) accommodation decisions are not systematically considered for testing and are instead merely checked from a list of options. Thurlow, Elliot and Ysseldyke (2007) believe that consideration should not begin with a district or state approved list. Instead, accommodations should begin with an understanding of the student’s needs. Elliot (2007, p. 5) asserts that to effectively select and use accommodations, educators need to have the following knowledge:

- Knowledge of the student’s abilities and disabilities
- Knowledge about the student’s instructional accommodations
- Knowledge about the state’s or district’s testing guidelines
- Familiarity with the test’s item content and format
- An understanding of the concept of validity and what it means to invalidate a test score
- Knowledge of any previous accommodations successfully used with the student

The methodologies of studies on reading accommodations vary, which may account for the lack of clear empirical evidence on the benefits of reading accommodations, which then leads to a lack of clear direction for teachers. Studies differ on the type of study (group studies, vs. single subject design), the size of the population, the age of students, the achievement level of students, the type of reading disability, the degree of documented reading disability, and the types of reading tests used as measures. Some studies are archival studies that examine high stakes assessments, where it is difficult to know on what basis accommodations were assigned to students.

Comparing the scores of students with accommodations to those without presumes that the accommodations were assigned based on objective evidence. Many studies appear to make the assumption that the accommodations matched each student’s needs. In addition, most studies do not control for how often accommodations are used on a daily basis leading up to the assessment. A student’s achievement across content areas is another factor. Accommodations alone do not guarantee improved performance. A student using a read aloud accommodation may be able to participate in a math test, but may not have actually acquired the skills being tested. While group studies are important, Bolt and Thurlow (2011) suggest that case-by-case studies may be better able to identify individual students who benefit from accommodations when compared to group studies. The authors affirm that currently there is no research on the accuracy with which students can determine the accommodations that are beneficial for them.



According to Bolt and Thurlow (2011, p. 26) “some researchers have begun to question whether it might simply be more efficient for test developers to consider the needs of students with disabilities during the initial stages of test development rather than trying to accommodate their needs after they have developed and applied standardized test administration procedures.” According to these authors, using principles of universal design, test developers need to consider the needs of all students from the onset of test development and standardization, and consider making options available for all students. This would likely benefit under-identified students, as well as those with documented disabilities.

### **The Need For A Systematic Process For Reading Accommodation Decisions**

Much is said in the literature about which accommodations demonstrate valid increases in performance, but there is insufficient guidance on how educators can determine which accommodations work for which students. Typically, the local IEP team makes decisions regarding accommodations. In some instances, the benefit of a given accommodation may be obvious, for example, when a student who cannot decode is clearly able to convey comprehension of the text when an adult reads aloud or when a text reader is used. However, at other times, these decisions are quickly considered judgments and are not evidence-based. “It appears in some instances educators approach the decisions about accommodations as they do a menu, checking off what might be desirable without giving each item careful thought. This behavior is reinforced by many states and local districts that provide lists of approved accommodations” (Hehir, 2008, p. 140). Research by Erickson and Thurlow (1996) found that IEP teams made decisions in idiosyncratic ways, with vague decision-making rules that often focused on superficial barriers. In a study of 200 4th and 5th graders, Fuchs and Fuchs (2001) found that teacher decisions did not correspond well to those students who benefitted from the accommodation. The authors found that while 65 % to 93 % of students were assigned accommodations, only 40 % of the students benefitted, and that students who got accommodations were disproportionately African American and receiving free and reduced priced meals. Shriner and Destefano (2003) reviewed the accommodation practices in three school districts and found wide variation in the provision of testing accommodations, which reduced the overall comparability and usefulness of test scores. Fletcher, Francis, Caldwell, Kalinowski, Omalley, Young, Copeland, Mehta, and Vaugn (2009) examined the effects of bundled accommodation packages on high stakes testing for middle school students with learning disabilities and concluded that “All too often in practice accommodations are applied just because they are on a list of acceptable accommodations and the students have been identified with a disability,” (p 462).

The research on teachers’ perceptions of accommodations suggests the potential for bias against accommodations, based on the belief that accommodations might provide an unfair advantage to the student with a disability. In a 3-year meta-analysis of accommodation-related research across 50 states, Cox, Herner, Demczyk, & Nieberding (2006, p. 350) found that “educators have tended to think of accommodations narrowly, as adjustments to the assessment process rather than as specific teaching strategies designed to minimize the effects of a student’s disability and to maximize a student’s ability to learn.” The authors also reported that teachers perceived accommodations which altered the test format (e.g., extended time, read aloud, rewording questions, reduced test items per page) that were typically provided to students with learning disabilities as invalid, whereas accommodations where the response format was altered for students with sensory impairments were perceived to be equitable. Hehir (2008) asserts that there is a perception in education that disabilities must be overcome and that there is “an

ingrained prejudice against performing activities in ways that might be more efficient for disabled people but that are different from how nondisabled perform them” (p. 18).

The accuracy of accommodated test scores may ultimately depend upon matching accommodations to student characteristics, not disability status. Selecting fair accommodations may depend upon individual diagnostics (Cawthon, Etching, Patel, Potvin, & Trundt, 2009; Cox et al., 2006; Fuchs, Fuchs, Eaton, Hamlett, Brinkley, and Crouch, 2000). Assessment accommodations should be “chosen on the basis of the individual student’s needs and should generally be consistent with the accommodations provided during instruction” (Dolan, Hall, Banerjee, Chun & Strangemen, 2005, p 6). Using accommodations as part of daily instruction will ensure that students have ample experience prior to testing. If accommodations are not provided regularly during instruction, then students will not be proficient in using them at the time of testing. Furthermore, instructional use of accommodations provides teachers with important diagnostic information about the ideal conditions for using them and allows teachers to instruct students in the effective use of tools and strategies.

Advances in readily available technology have made it possible for students with significant reading disabilities to access text. Text reader technology can help some students surmount barriers imposed by decoding and fluency difficulties. The question remains, however, at what point in time and under what circumstances are accommodations effective for a given student?





# **A Protocol For Accommodations in Reading: The PAR Process**



## A Protocol For Accommodations in Reading: The PAR Process

Considering the heterogeneity of students with disabilities, and in the absence of a valid universal screening tool that could be administered to all students to delineate their most effective methods for reading and processing text, educators need a systematic process for making individualized instructional reading accommodation decisions well in advance of testing. DeCoste and Wilson have developed a protocol for making evidence-based decisions on reading accommodations. Their intent was to develop a process that school teams could use to delineate which reading accommodations work for individual students in situations where the benefit of one method over another is unclear. Their goal was to build the capacity of educators to make informed reading accommodation decisions that can guide instruction as well as testing. Much like the development of the Written Productivity Profile (DeCoste, 2005) which provides a process for making decisions about writing supports, PAR is intended to help educators make more objective decisions about reading supports.

The intent of PAR is not to test reading ability or identify reading interventions, but to examine the effectiveness of reading accommodations to help a student access the curriculum. PAR is not a diagnostic reading assessment tool, but a protocol to help teachers make informed decisions on accommodated reading strategies to support instruction in the general education curriculum.

**Figure 1** shows the three basic steps of the PAR process. They can be described as follows.

### 1. Student Oral Reading

The student first reads aloud a reading passage at his or her documented independent reading level to serve as a baseline and to gauge reading speed. The teacher takes note of fluency and reading speed. Comprehension questions are verbally presented by the adult and scored accordingly. A [Likert scale](#) is used to rate the student's feelings about reading aloud.

### 2. Adult Reader

To determine the effectiveness of the adult read-aloud accommodation, the adult reads a passage aloud at the student's grade level while the student follows on a paper copy of the passage. Again, comprehension questions are verbally presented by the adult and scored accordingly. A [Likert scale](#) is used to survey the student's feelings about having an adult read aloud.

### 3. Text Reader

To examine the effectiveness of using text-to-speech accommodations, the student uses the text reader available at his or her school (e.g., Read:OutLoud, Read and Write Gold, Kurzweil) to read an equivalent passage at the student's grade level. It is preferable to use a text reader that is familiar to the student. The text-to-speech rate should be set approximately 20 % higher than the student's oral reading rate. Then the student is given an opportunity to increase or decrease the rate of text-to-speech, as well as an opportunity to increase or decrease font size. Again, comprehension questions are presented verbally and scored accordingly. A [Likert scale](#) is used to rate the student's feelings about the use of a text reader.

### Optional Conditions:

Once the three basic steps above have been completed, the evaluator may want to consider additional options to further gauge the student's successful use of accommodations. More information on this can be found in the section (page 19) on Administration under Evaluator Instructions.

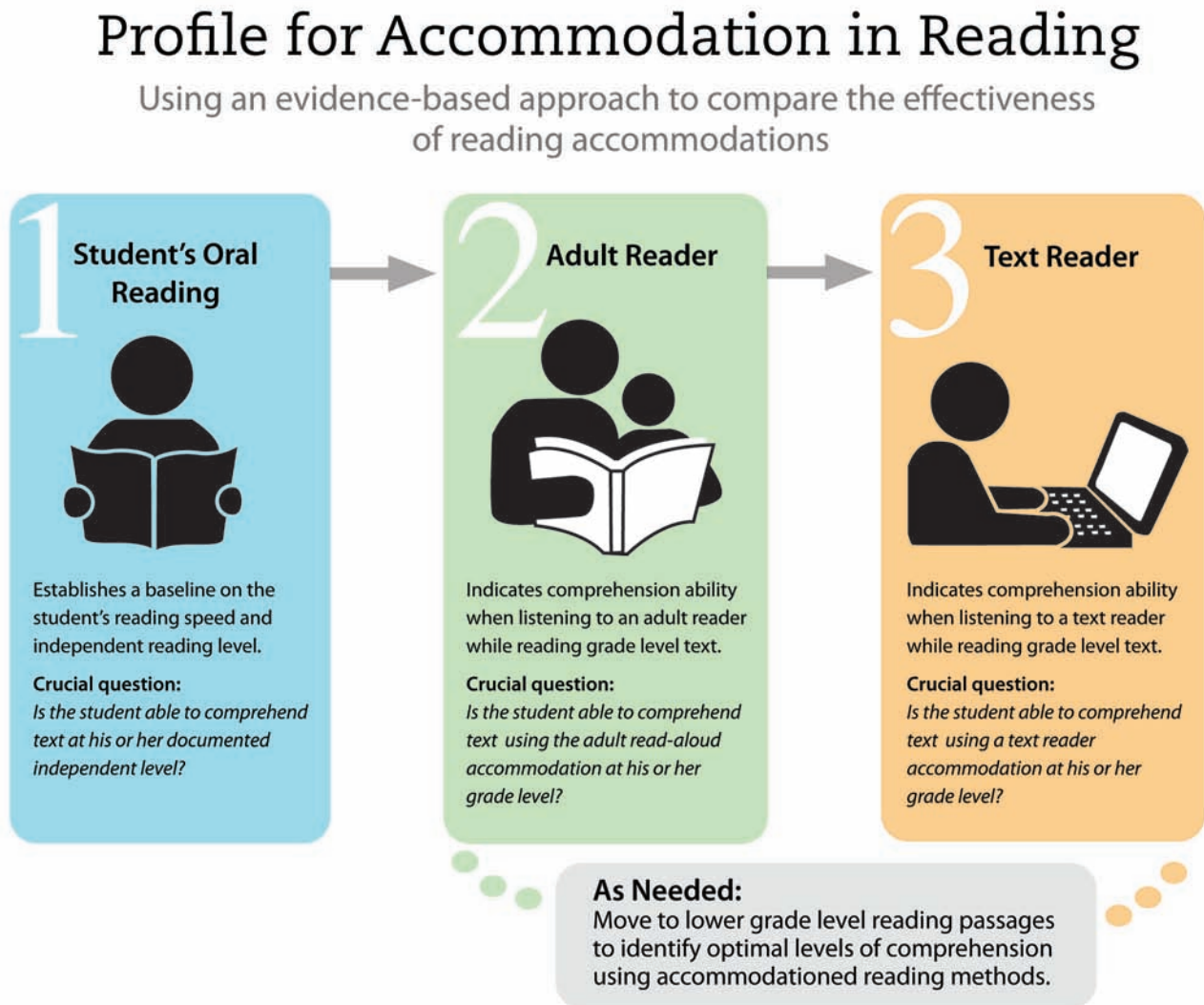


Figure 1: The three basic steps to develop a reading accommodations profile.

## Which students are appropriate for the PAR Process?

As stated previously, the PAR evolved out of a need to outline a formative assessment process that school teams could use to delineate which reading accommodations worked for individual students in situations where the benefit of one method over another was unclear. In some situations, the need for reading accommodations is evident and staff can proceed to develop a plan to provide accessible instructional materials (AIM). For example, in the case of students who are blind\* or severely visually impaired, reading accommodations are clearly imperative and an AIM plan is essential. In cases of severe dyslexia, when a student can comprehend but not decode even basic or high frequency words, reading accommodations and an AIM plan may already be in place. In these situations, the PAR process may not be necessary. (For more information on AIM, go to <http://aim.cast.org/learn/accessiblemedia/allaboutaim>.)

*\*It should be noted that the PAR was designed more for high incidence disabilities, and was not designed for use with blind or deaf students where special accommodations such as Braille or sign language are necessary.*

In some situations, the need for accommodations or the type of accommodations that are most suitable may be unclear to school teams. In such situations, using the PAR process may be useful to document reading accommodation needs. PAR can also be a useful tool as part of the Response to Intervention (RtI) assessment process. For example, for students in tier two or three reading interventions who are still below grade level and intervention is not projected to get students to grade level, then the PAR process would help to identify appropriate accommodation strategies. The PAR process is suitable for students with documented disabilities, and for general education students struggling with reading, including students who are English language learners. The Action Signs listed below outline additional situations that may lead to the PAR process.

### Action Signs

Use these Action Signs to identify students who might be in need of accessible instructional materials. Then use the PAR to gain insight into the students' needs and gather documentation for data-driven decisions about reading accommodations. Action signs include, but are not limited to the following:

- Students who struggle to decode or read with fluency, but demonstrate the ability to comprehend at a significantly higher level when an adult reads aloud.
- Students in reading interventions who are struggling to keep up in content level classes.
- Students who do well in class except when they need to read and respond to written material.
- Students who read fluently, but lack comprehension.
- Students who have been successful in class using only an adult reader accommodation.

### Who should administer the PAR?

- As the name suggests, the PAR is simply a protocol for making decisions about reading accommodations. Assistive technology specialists, resource teachers and reading specialists using an expert model of direct service delivery can administer the PAR to targeted students. However, if you are using a capacity-building model of service delivery and have a high number of students that may be served by the PAR, then consider training school teams to use the protocol.
- The High Incidence Accessible Technology Team (HIAT) of Montgomery County Public Schools in Maryland (<http://www.montgomeryschoolsmd.org/departments/hiat/>) provides webinars on reading accommodations and the PAR process to staff in their district. Participants can then contact the HIAT Team to request training on the use of PAR. The HIAT Team provides a notebook that includes the PAR manual and the passages and scoring forms organized by grade level. The passages are also provided digitally on a flash drive by grade level. HIAT staff provides guidance by phone or in person. Once school staff members have completed the PAR, they can call or meet with HIAT staff to discuss the results. This process promotes ownership of reading accommodation decisions at the school level.
- Again, PAR is not a standardized test, but a process to help make more evidenced-based decisions about reading accommodations. Therefore, all educators who need to delineate reading accommodations can use it. It should be understood that the information can help school teams make concrete plans for students with persistent reading difficulties who need support comprehending reading content at the highest possible level of challenge. Accommodations, when used appropriately, help students surmount organic barriers, allowing them to access information and experience the pleasure of reading text. While no student should be denied needed reading instruction, likewise, no student should be denied independent access to reading content. Periodic reevaluation using PAR can confirm whether the student is still in need of the assigned accommodations. The PAR process has been designed to help address the question: For which student, for what purpose and at what point in time.

### Reading Passages and Comprehension Questions

PAR has been developed to evaluate students' comprehension under three reading conditions. Passages of appropriate length have been developed for elementary, middle and high school grade levels. For each grade level there are expository and narrative passages on a variety of topics. To assess reading comprehension across fiction and nonfiction genres, narrative passages that tell a story and expository passages that present information are provided. It is important to choose topics that spark student interest and tap into a student's background and experience. Additionally, for the Text Reader condition, there is a Text Reader Practice passage to use with the student to help establish reading speed and font size preferences.

Passages and comprehension questions were professionally developed specifically for PAR. The passages were scored for readability at mid-grade level using Flesh-Kincaid formulas. Grade level passages were written to be similar to materials students encounter in the classroom environment. All of the passages were written by a freelance writer who creates grade-level writing for both basal textbook publishers and supplemental publishers. Comprehension questions were written to be considerate, less complex, in an effort to minimize comprehension errors due to question complexity.

Four types of comprehension questions follow each passage. These include: main idea, fact, vocabulary, and inferential questions. The main topic question looks at whether the student can identify the main theme of the passage. Fact questions are based on literal or explicit comprehension. Vocabulary questions are based on understanding word meaning in context. Inferential questions are based on the ability to reason and use background experience. Analysis of comprehension by question type provides information for teachers to plan effective instruction to maximize a student's growth in the ability to derive meaning from text.

Table 1 presents an example of reading passages at the 3rd grade level. It indicates the reading genre, the number of words in each passage, the number of comprehension questions provided, and the Flesh-Kincaid level of readability. The main topic and the targeted vocabulary words for each passage are also listed.

Grade 3						
Title	Genre	Word Count	# Question	F-K Level	Topic	Vocabulary
Make Them Laugh	Expository	100	8	3.5	clowns	clumsy
People and Their Pets	Expository	100	8	3.4	people and pets	routine
Frogs and Toads	Expository	100	8	3.5	frogs and toads	predators

Table 1: *Example* Reading Inventory Graded and Leveled Passages

## Prior to Administering the PAR

### 1. Gather background information about the student

Prior to administering PAR, it is important to obtain background information from the team on the student's documented reading level and to establish how often reading accommodations have been used by the student. The PAR Background Data form for capturing this information is provided on [page 43](#).

PAR Background Data			
Student:	Grade:	Date:	
School:	Student ID:	ELL:	Y N
Primary disability:			
Reading accommodations on IEP:			
Reading interventions currently in use:		Frequency:	
Current Levels and Assessments			
Date	Assessment	Score	
	Educational testing (Reading subtests)		
	Psychological Testing:		
	Verbal		
	Performance		
	Memory		
	Other		
Experience with Accommodations			
Type	Frequency – per month/week/day	Comments	
Verbatim Adult Reader			
Text Reader e.g. (Read Out Loud, Kurzweil, Read Write Gold)			
Audio Books			

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### 2. Prepare materials

Print out reading passages and scoring forms for the grade levels chosen. Passages and scoring forms can be found at [www.donjohnston.com/par](http://www.donjohnston.com/par). Select the appropriate reading passages that will likely engage the student's interest. It is best to select all narrative or all expository passages so that you are comparing similar types of reading tasks.

- Select a passage for the student to read orally at the student's independent level
- Select another passage at the student's grade level for the Adult Reader condition
- Select another passage at the same grade level as above for the Text Reader condition

*NOTE: It is useful to print out all the reading passages and scoring forms and compile them in a notebook so that passages are at hand if additional readings are needed.*

- ☐ Computer or laptop with text reader software, charger, mouse
- ☐ Digital files of all reading passages loaded on the computer or on a flash drive, including a Text Reader Practice passage
- ☐ Timer
- ☐ Evaluator instructions
- ☐ Likert graphic

1	2	3	4
I really did NOT like it.	I did not like it much.	I liked it a little.	I really liked it.

Likert Graphic (see [page 47](#))



### 3. Arrange a location

Pre-arrange a quiet space to administer the PAR. Allocate about 15 minutes per reading passage. The PAR can be administered across all three conditions in about 45 minutes, or in two to three short sessions.

### Administering the PAR

General administration of the PAR follows this sequence, with noted exceptions:

CONDITION	ACTION	EVALUATOR INSTRUCTIONS
<b>Student's Oral Reading</b>	Student reads a passage out loud independently at the assessed independent reading level.	<p>Use a reading passage at the student's independent level.</p> <p>Time the student's oral reading speed to obtain a word per minute reading rate. This helps you set a reading speed that is comfortable for the student under the text reader condition.</p> <p><b>Exceptions:</b></p> <p>If oral reading level is below 2nd grade, or if reading is exceptionally slow or arduous, then skip this condition.</p>
<b>Adult Reader</b>	The adult reads a passage to the student at the student's current grade level.	<p>Use a reading passage at the student's grade level to determine the effectiveness of this accommodation.</p> <p><b>Exceptions:</b></p> <p>If you are sure that the student will not comprehend at grade level, then use a lower grade level passage. In general, guess high, not low, unless you know that the student is likely to become frustrated with the process if asked to read passages that are too challenging.</p>
<b>Text Reader</b>	Student uses a text reader to read a passage at the student's current grade level.	<p>Set the word-per-minute rate 20% higher than the student's oral reading rate. Use the Text Reader Practice passage to allow the student to adjust speed and font size.</p> <p>Use a passage at the same grade level as the Adult Reader condition to determine if a text reader can be an effective alternative.</p>

## Notes to those administering the PAR:

- Because the focus of the PAR is primarily on the use of reading accommodations for instruction, the reading passage should not be removed from view when asking comprehension questions. Evaluators should note whether students refer to the text to help them locate information.
- After reading each passage, students are asked to rate whether they like or dislike each reading modality using a 4-point Likert scale. It is important that students understand that they are rating the methodology and not the content of the reading passage.
- At the conclusion of the session, students are asked to state which overall method(s) they preferred.

## Optional Conditions

Optional conditions can be added to test for different comprehension levels or different combinations of strategies.

OPTION	CONSIDERATIONS	PURPOSE
<b>Student's Oral Reading at a lower grade level</b>	If the student does not pass the comprehension portion for the initial <b>Student's Oral Reading</b> passage, you may want to go down a grade level.	To document a baseline independent reading level.
<b>Adult Reader at a lower grade level</b>	If the student does not perform in the top quartile on the grade-level comprehension portion of the <b>Adult Reader</b> condition, repeat the process at a lower grade level.	To determine comprehension levels using Adult Reader accommodations.  To see if using an Adult Reader is effective at reduced reading levels.
<b>Text Reader at a lower grade level</b>	If the student does not perform in the top quartile on the grade-level comprehension portion of the <b>Text Reader</b> condition, you may want to repeat the process at a lower grade level.	To determine comprehension levels using a Text Reader.  To see if using a Text Reader is effective at reduced reading levels.
<b>Repeated reading with Text reader or Adult reader</b>	If the student appears not to have good recall of the story or has known memory deficits, then have the student reread the passage again and answer the comprehension questions again.	To see if rereading is a useful strategy.
<b>Front-load questions using the Text Reader or Adult Reader</b>	If the student does not do well with comprehension questions using an Adult Reader or a Text Reader, then provide the questions in advance and have the student reread the passage again to answer each question.	To see if setting the stage for reading is a useful strategy to help the student read for information.

## Optional Conditions continued

OPTION	CONSIDERATIONS	PURPOSE
<b>Compare expository text to narrative text</b>	<p>You may find that a different condition works better for different types of text. Compare accommodations using narrative and expository text.</p> <p>Show the student how to use the electronic highlighters prior to reading expository passages with a Text Reader.</p>	<p>To compare text genres across accommodation conditions.</p> <p>To see if the Text Reader is better for expository text when study tools can be accessed.</p>
<b>Recorded passages</b>	<p>If the student does well with an Adult Reader on grade-level passages, but does not do well with the Text Reader, you may want to try books on tape or digital audio recordings with the student. The student should be reading while listening using either method.</p>	<p>To gauge the appropriateness of audio recordings which would decrease dependence on a human reader.</p>

## Evaluator Instructions

	Examiner	To Student
<b>1</b>	Locate a quiet space at the school, arrange materials, e.g., laptop, charger, mouse, timer, pen, passages (including a Text Reader Practice passage) and scoring sheets.	
<b>2</b>	Tell the student:	<p><i>"Today we're going find out the ways that you like to read.</i></p> <p><i>First you're going to read, then I'm going to read to you, then you're going to read using the computer ."</i></p>
<b>3</b>	<p>Be prepared to note the following:</p> <p>Reading strategies, expression, anxiety, frustration, refusals, attitude, persistence, self-monitoring strategies, background knowledge and overall engagement.</p>	

## A. STUDENT ORAL READING AT THE independent READING LEVEL

This step establishes a reading baseline. Skip this step if independent reading level is below 2nd grade or if decoding is laborious.

	Examiner	To Student
<b>1</b>	<p>Use a passage at the student's independent level.</p> <p>Give the student a copy of the paper text.</p> <p>IMPORTANT: Use a timer to obtain a reading speed (Circle the last word read at the end of one minute and calculate the number of words read per minute.)</p> <p>Before reading, cover the passage and read the title.</p> <p>Have the student read and predict what it might be about.</p> <p>Indicate the # of words at the one minute mark.</p> <p>Typical word per minute target rates at the beginning, middle and end of a school year:</p> <p>Grade 2: 50-70-90</p> <p>Grade 3: 70-90-110</p> <p>Grade 4: 95-110-125</p> <p>Grade 5: 110-125-140</p> <p>Grade 6: 125-140-150</p> <p>Grade 7: 125-140-150</p> <p>Grade 8: 130-140-150</p> <p>The student should finish reading the passage. You may want to note misread words, substitutions, and word omissions.</p>	<p><i>"What do you think this story will be about?"</i></p> <p><i>"Now read this out loud. I'll ask you some questions when you're done. "</i></p>
<b>2</b>	<p>Use the Likert graphic to ask the student how they liked this type of reading. Be sure the student is NOT responding to the content of the passage.</p>	<p><i>"Tell me how you liked reading to yourself."</i></p>
<b>3</b>	<p>Do NOT take away the paper text.</p> <p>Ask the comprehension questions.</p> <p>Stop after 3 incorrect responses or if frustration is clearly evident.</p> <p style="text-align: right;">You can prompt --&gt;</p> <p>Responses similar in meaning to the printed answer should be scored as correct. Half credit is allowed when answers are close to the acceptable response, but are vague or incomplete.</p>	<p><i>"What else? Explain that further."</i></p> <p><i>"That's right but what did it say in the passage?"</i> (Student uses experience instead of information)</p> <p><i>"I want to know what you think."</i> (Student has difficulty with inferential questions)</p>

**B. ADULT READER AT THE STUDENT'S GRADE LEVEL**

Or best estimate of highest comprehension level.

	<b>Examiner</b>	<b>To Student</b>
<b>1</b>	<p>Before reading, cover the passage and read the title. Have the student read and predict what it might be about.</p> <p>Give the student a copy of the paper text .</p> <p>Read the passage at a rate that is a bit faster (approximately 20% faster) than the student's oral reading rate.</p>	<p><i>"What do you think this story will be about?"</i></p> <p><i>"Now I'm going to read you a passage. You can ask me about a word you don't know. You can tell me to slow down or speed up. You want it to be just right for you. I'll ask you some questions when I'm done reading."</i></p>
<b>2</b>	<p>Use the Likert graphic to ask the student how they liked this type of reading. Be sure the student is NOT responding to the content of the passage.</p>	<p><i>"Tell me how you liked having someone read to you out loud."</i></p>
<b>3</b>	<p>Do NOT take away the paper text.</p> <p>Ask the comprehension questions.</p> <p>Stop after 3 incorrect responses or if frustration is clearly evident.</p> <p style="text-align: right;">You can prompt --&gt;</p> <p>Responses similar in meaning to the printed answer should be scored as correct. Half credit is allowed when answers are close to the acceptable response, but are vague or incomplete.</p>	<p><i>"What else? Explain that further."</i></p> <p><i>"That's right but what did it say in the passage?"</i> (Student uses experience instead of information)</p> <p><i>"I want to know what you think."</i> (Student has difficulty with inferential questions)</p>

## C. TEXT READER AT THE STUDENT'S GRADE LEVEL

Or best estimate of highest comprehension level.

	Examiner	To Student
<b>1</b>	<p>Open the Text Reader Practice passage.</p> <p>Open and minimize the grade level passage you've targeted for use with this student</p> <p>Using the Text Reader Practice passage, set the text reader to a speed that corresponds to the student's oral reading rate plus 20%. Demonstrate the text reader and the options to change voice and speed.</p>	<p><i>Now, we'll read a practice passage using the Text Reader. You can make the print bigger or smaller using these arrows. Let's figure out what size is best for you. You want it just right for you."</i></p> <p><i>"You can slow down or speed up the reading here. Tell me if this is just right for you."</i></p> <p><i>"You can look up a word by clicking on the dictionary."</i></p>
<b>2</b>	<p>Open the Text Reader with the appropriate passage. Be sure the speed and font size are set to the student's preferences.</p> <p>Before reading, cover the passage on the screen and read the title. Have student read and predict what it might be about.</p>	<p><i>"Now you will read a passage on the computer.</i></p> <p><i>"What do you think this story is about?"</i></p> <p><i>"I'll ask you some questions when you're done reading. You can start and stop the reading by clicking here."</i></p>
<b>3</b>	<p>Use the Likert graphic to ask the student how he/she liked this type of reading. Be sure the student is NOT responding to the content of the passage.</p>	<p><i>"Tell me how you liked having the computer read to you."</i></p>
<b>4</b>	<p>Leave the text version on the screen.</p> <p>Ask the comprehension questions.</p> <p>Stop after 3 incorrect responses or if frustration is clearly evident.</p> <p style="text-align: right;">You can prompt --&gt;</p> <p>Responses similar in meaning to the printed answer should be scored as correct. Half credit is allowed when answers are close to the acceptable response but are vague or incomplete.</p>	<p><i>"What else? Explain that further."</i></p> <p><i>"That's right but what did it say in the passage?" (Student uses experience instead of information)</i></p> <p><i>"I want to know what you think." (Student has difficulty with inferential questions)</i></p>

## At the conclusion of the session

	Examiner	To Student
<b>1</b>	Ask the student which type of reading he/she liked best. ___ Reading by yourself ___ Adult reader ___ Text reader	<i>"Which type of reading did you like best?"</i>  <i>Reading by yourself, having an adult read to you, or using the computer?"</i>

## Scoring the PAR

PAR has been designed to help gauge a student's current success with reading accommodations. Students that show good comprehension with any of the reading accommodations can use these accommodations for instructional and testing purposes. Poor comprehension rates using a given accommodation may indicate that the student has not had enough experience with the accommodation to use it for testing purposes, and therefore, additional instruction and opportunities to use the accommodation are needed. The PAR can then be administered again to evaluate the efficacy of the accommodation.

After the student has read the passage, the evaluator verbally asks each of the comprehension questions. Students are not expected to read the comprehension questions. To gauge a student's ability to use rereading strategies to locate information, as well as factor out memory issues, students are allowed to refer back to the text. Students answer the questions verbally. Half credit is allowed if the student gives a partial or incomplete answer. It is best if the evaluator writes the student's answers verbatim and then scores them later.

The PAR Scoring Form allows the evaluator to record the results for each reading condition, record Likert scores, and document observations. Each graded reading passage is accompanied by a set of comprehension questions that address four areas of comprehension: main idea, fact, vocabulary, and inferential thinking. It is useful to note whether the student appears to be guessing, or inventing answers. The Reading Passage Scoring Form also allows the examiner to analyze the type of comprehension questions that are answered correctly and incorrectly. Some students may not be able to read sufficiently to answer factual questions accurately, but may be able to use reasoning or background information to respond to inferential questions. Other students may demonstrate the reverse, in that they can answer factual questions, but seem perplexed by inferential questions. Some students may be able to answer questions, but will not have grasped the main themes of the passage. Some will struggle with vocabulary. The Reading Passage Scoring Form provides a way for the evaluator to note the type of questions that are answered correctly and incorrectly and then compare this pattern to the student's responses to other passages and can be found at [www.donjohnston.com/par](http://www.donjohnston.com/par).

**Student:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Passage:** A Hurricane Plan **Narrative:** Level: 5.5  
 Every May, the Wilson family prepares for hurricane season. They haven't experienced a hurricane in decades, but just in case, they'll be ready. Unless they're ordered to evacuate, they'll seek shelter in their basement.

Dad filed important household documents in a box with a list of emergency numbers, medical records, cash, credit cards, and keys. He'd relieved that we have hurricane insurance. The evacuation map is in the car; the gas tank is full. Mom changed the batteries in our weather radio and flashlight. We organized the first aid kit and a supply of water and food. We packed cereals, paper plates and cups. Dad checked on the camp stove, pots, and food. We heaped up blankets, pillows, and paper products. I put extra dog supplies in Skipper's carrier. Greg gathered up some toys, books, and games.

"Excellent!" Dad declared. "The Wilsons don't worry about hurricanes; we prepare for them."

**Oral Reading** (one in condition 1 only. Student's oral reading.) **8 Words at 1 Minute**  
 Misread Words/ Omissions/ Substitutions

Question	Answered	Correct	Score
1. What is this story about?			
2. How long has it been since the Wilson family experienced a hurricane?			
3. In case of a hurricane, where does the Wilson's plan to find shelter?			
4. What are the flashlights and weather radio used for?			
5. Why would the car's gas tank full and why was the map in the glove compartment?			
6. What does the word "evacuation" mean?			
7. What is the lesson to be learned from this story?			
8. What does the word "evacuation" mean?			
9. The act of removing people due to a threat.			

**Total** (one in condition 1 only)  
 Green: 7-8 Correct  
 Yellow: 5-6 Correct  
 Red: 3-4 Correct

**Types**  
 1. Incorrect  
 2. Incorrect  
 3. Incorrect  
 4. Correct

**Time how you liked reading to yourself?**  
 1. How you liked having someone read to you out loud?  
 2. How you liked having the computer read to you?

1. 2. 3. 4.

## Protocol for Accommodations in Reading (PAR)

Upon completion of the PAR process, once the passages have been read and questions answered across all conditions, the evaluator should complete the PAR Administration Results Form. Using this form, the evaluator records the results across all conditions, including additional conditions as deemed necessary. Evaluators should also use this form to summarize overall impressions, record recommendations and provide opinions on what should be included on the student's IEP.

Recommendations can include, but are not limited to the following:

- Reading conditions that currently are effective
- Reading conditions that are not effective at that time
- Student preferences
- Strategies that support reading conditions
- Strategies to move students toward alternative accommodations that promote reading independence
- Recommendations for making accommodations and school resources available
- Recommendations for procuring accessible instructional materials to support reading conditions (AIM process)
- Professional development for staff on reading accommodations
- Strategies for home, as appropriate, such as links to free text reader software and how to access digital and audio texts

The PAR Administration Results form (page 45-46) also includes a table to color code the results across reading conditions. This format provides an easy to understand visual display of the student's performance across each of the reading conditions. It is particularly useful in meetings when you want an efficient way to show PAR results. Examples of this format can be seen in the next section of this manual and in the Case Studies beginning on page 31. In the left Grade Level column, circle or place an asterisk beside the student's documented independent reading level that corresponds to the information obtained on the PAR Background Data Form (page 43).

<b>FAR Administration Results</b>				
<b>Student:</b>	<b>ID#</b>	<b>Date:</b>		
<b>Grade:</b>	<b>School:</b>			
<b>Demonstrator:</b>	<b>Test Location:</b>			
<b>Passage's Oral Reading</b>				
<b>Passage:</b>	<b>Grade Level:</b>	<b>WPM:</b>		
Number of items correct:	Literal Rating:	- Green (1 point quartile) - Yellow - Red (Lower quartile)		
<b>Adult Reader</b>				
<b>Passage:</b>	<b>Grade Level:</b>			
Number of items correct:	Literal Rating:	- Green (1 point quartile) - Yellow - Red (Lower quartile)		
<b>Text Reader</b>				
<b>Passage:</b>	<b>Grade Level:</b>	<b>WPM:</b>		
Number of items correct:	Literal Rating:	- Green (1 point quartile) - Yellow - Red (Lower quartile)		
<b>Additional Method:</b> _____				
<b>Passage:</b>	<b>Grade Level:</b>	<b>WPM:</b>		
Number of items correct:	Literal Rating:	- Green (1 point quartile) - Yellow - Red (Lower quartile)		

Using color to represent comprehension proficiency in this field tracks student status and places them on required discipline intervention mapping sheet.

Student's Oral Reading	Adult Reader	Text Reader	Other:	Difficult

yes

selected method of reading

by yourself

with

or

audio

agustatt

☐ Able to predict based on titles  
☒ Demonstrated background knowledge  
☐ Followed text as listened  
☐ Asked for word definitions  
☐ Used text reader dictionary  
☐ Self-monitoring, self correcting  
☐ Previous  
☐ Anxiety or frustration  
☐ Refusal  
☐ Dismissibility  
☐ Other:

## Exploratory Results of the PAR

Our experiences thus far have been consistent with the premise that students with disabilities are not homogeneous and that a protocol for screening reading accommodations is highly useful. During the 2009 and 2010 school years, the PAR process was used to screen reading accommodations for 18 students, using passages from The Basic Reading Inventory (Jerry L. Johns, 2008), with permission from Kendall Hunt Publishing. These exploratory field tests demonstrated that the PAR is able to provide objective data that leads to more informed



discussions on assistive technology consideration for students with reading deficits. Figures 2 through 4 show the results for three individual students.

- The asterisk in the Grade Level column indicates the student's documented independent reading level prior to the administration of the PAR based on school reports
- Green indicates comprehension scores in the top quartile
- Yellow indicates comprehension scores in the middle 2 quartiles
- Red indicates comprehension in the bottom quartile

In some instances, the results showed that a text reader allowed the student to achieve grade level reading independence as shown in Figure 2. In other instances, the results indicated that students needed adjusted content to ensure comprehension as shown in Figure 3. As shown in Figure 4, some students performed best with an adult reader as this was the accommodation with which they had the most experience. The latter finding led to useful discussions on how best to introduce assistive technology that would move students toward reading independence, such as a trial with a text reader or additional screening to see if human recorded audio texts would be useful from Learning Ally (formerly Recording for the Blind & Dyslexic) and Bookshare. Results of the PAR led to useful team discussions about which accommodations appeared to help students the most and whether they might need more instruction or practice with some accommodations before using them for testing.

Grade Level	Oral Read by Student	Adult Read with Text	Text Reader
11			
10			
9			
8			
7			
6*			
5			
4			

Figure 2. 11th grader

Grade Level	Oral Read by Student	Adult Read with Text	Text Reader	Silent Read by Student
11				
10				
9				
8				
7				
6				
5				
4*				
3				

Figure 3. 8th grader


Grade Level	Oral Read by Student	Adult Read with Text	Text Reader
11			
10			
9			
8			
7			
6			
5*			
4			


Figure 4. 7th grader

KEY

The asterisk in the Grade Level column indicates the student's documented independent reading level prior to the administration of the PAR based on school reports.

**Green** =  and indicates comprehension scores in the top quartile.

**Yellow** =  and indicates comprehension scores in the middle 2 quartiles.

**Red** =  and indicates comprehension in the bottom quartile.

The results of the PAR comprehension scores were also looked at in light of the data from the student's Likert scores. More often, the student's preference matched his or her best accommodated reading modality. At times, however, a student would express a different view and this provided an opportunity to discuss options with the student and family. It was important to make sure that the student was indicating his or her preference for the modality and not the content of the passage.

For a more complete description of students' PAR results, refer to the Case Studies beginning on [page 31](#) of this manual.

## Key Points Regarding Reading Accommodations

### Making Accommodation Decisions:

- Be aware of available research on the effectiveness of reading accommodations
- Document reading disabilities based on standardized data
- Assemble background information on a student's use of reading accommodations (frequency, effectiveness, training, etc.)
- Evaluate the effectiveness of reading accommodations using evidence-based data
- Recommend accommodations based on student needs
- Document recommendations on the IEP or 504 Plan

### Planning for the Use of Accommodations

- Make sure your school teams are clear on accommodation best practices
- Plan how and when the student will learn to use each new accommodation
- Plan for the use of accommodations instructionally
- Determine how accommodations will be used in testing situations
- Be certain there is ample time for the student to learn to use accommodations before an assessment takes place
- Document the use of accommodations across academic classes (Teachers can note accommodations in their gradebooks)
- Periodically re-evaluate the student's use of accommodations

## Concluding Comments

The PAR is a procedural protocol to assess the effectiveness of reading accommodations. The focus of the PAR is the use of accommodations to support instruction, not just for testing. According to Hehir (2008, p. 140), "The decisions concerning test accommodations should flow from instructional accommodations and be relatively straight forward. Waiting until test time to determine accommodations based on a list is indicative of a far greater problem in the child's total educational program." Simply checking off possible accommodations from a list suggests that we are just complying with the law, instead of ensuring the best strategies for students with disabilities. PAR can support the RtI assessment process and can be used to help formulate plans to provide AIM.

Even with more universally designed assessments, it is likely that there will still be a need to identify and document accommodation decisions for students on an individual basis. Decisions regarding accommodations should be considered carefully to provide access to the curriculum. Testing using accommodations is only as good as the instruction that precedes it. As stated in the conclusion of the National Center on Educational Outcomes Synthesis Report (Thompson, Johnstone, & Thurlow, 2002), "While universally designed assessments can make tests more equitable, producing results that are more valid for all students, they cannot replace instructional opportunity." As educators, our role is to focus on the careful consideration of accommodations combined with good instruction, because our job is to maximize every student's ability to read to learn.

# Case Studies





## Case Study #1

### 5th grade student with learning disabilities: Damon

#### Background information:

Damon has documented learning disabilities paired with high scores on cognitive testing. His parents were very concerned about his self-esteem because he took a long time to complete class work, and therefore did not perform to his potential.

When asked if he would like to use the computer to help him read, Damon said he felt that he was doing fine with reading in school. Damon had used WordQ software in the past. His parents shared that he can learn to use new tools and strategies, but needed time to practice with them, and he tended to stick with a familiar strategy, even when it was not needed or effective. With this in mind, we decided to administer the PAR protocol to evaluate Kurzweil and WordQ text readers (both were available at his school) to see if there was a difference in ease of use for Damon.

Damon was currently reading grade-level material in class and performing adequately, so he was given all passages in the PAR on the 5th grade level.

#### PAR Results:


- Damon was able to comprehend a 5th grade passage when he read it himself and when it was read by two text-to-speech software programs.
- When reading the passage aloud, Damon took a very long time to read the 100 word passage independently.
- He misread 13 words and read 6 more words with the incorrect ending (e.g. jumping instead of jumped). Two other words were read correctly, but only after he sounded them out slowly, letter-by-letter.
- Damon only missed one and a half questions on the passage he read independently. However, he had to look back at the text to answer each question. He also did not entirely grasp the gist of the story.
- When using a text reader to read the other two passages, Damon read through the passages quickly, got all of the answers correct, and gave his answers without hesitation.
- Damon said he liked reading on his own and reading with both text readers equally well.
- Damon had no trouble navigating text reader programs.


Grade Level	Oral Read by Student	Text Reader (Kurzweil)	Text Reader (WordQ)
9			
8			
7			
6			
5*	6.5 correct out of 8	8/8	8/8
4			
3			

#### KEY

The asterisk in the Grade Level column indicates the student's documented independent reading level prior to the administration of the PAR based on school reports.

**Green** =  and indicates comprehension scores in the top quartile.

**Yellow** =  and indicates comprehension scores in the middle 2 quartiles.

**Red** =  and indicates comprehension in the bottom quartile.

Student: Damon

Grade: 5

### **Recommendations:**

Completing the PAR gave insight and provided documentation on several important characteristics of Damon's reading needs:

- Damon was fully capable of interacting with grade-level material and did not need any modifications to the reading content.
- Even when Damon misread many words, he was able to piece together the meaning of what he was reading. However, when the need to decode unfamiliar words was minimized through the use of a text reader, his ability to work quickly with written material was greatly improved. Therefore, he should be provided with a text reader whenever time is a factor and when there are a high number of unfamiliar words or difficult terms.
- Even though Damon was able to read independently in class, it is likely that as the length and complexity of the reading material increases as he progresses to higher grades, so too will his need to use text-to-speech. He should be given plenty of practice with text-to-speech software so that he can use it proficiently for tests, for complex reading assignments, including reading web-based materials that have unfamiliar or complex words.

Using the supporting data from the PAR, the above recommendations were documented on Damon's IEP.

### **Case Study #2**

#### **7th grade student with learning disabilities: Rachel**

##### **Background information:**

Rachel is a 7th grade student who has relied for many years on adult readers for in-class and homework assignments. Rachel had limited exposure and little experience using a text reader. PAR was administered in order to document her current reading accommodation needs, and in particular, to determine her ability to use a text reader to read more independently.

Standardized reading tests indicated that Rachel was reading at a 5th grade independent reading level, so the student read-aloud condition began with a passage at the 5th grade level. Thereafter, passages at her current grade level were used to gauge the effectiveness of the adult read-aloud and text reader accommodations. To further check her ability to use a text reader at easier readability levels, a 5th grade passage was used.

##### **PAR Results:**

- When reading aloud using a 5th grade level passage, Rachel was able to answer comprehension questions correctly at her indicated independent level.
- When the adult read to her using a 7th grade level reading passage, Rachel was able to answer comprehension questions with similar accuracy.
- When a text reader was used at the 7th grade level, Rachel performed poorly on comprehension questions. When using the text reader, she seemed distracted by the on-screen features of the software, stopping the reading to change the font size or speed.


- When Rachel used a text reader to read a passage at the 5th grade level, again, she performed poorly on comprehension questions.
- Rachel is very social and enjoys interacting with adult readers. Rachel expressed her preference for having an adult read to her.


Grade Level	Oral Read by Student	Adult Read with Text	Text Reader	Other
9				
8				
7				
6				
5*				
4				
3				

KEY

The asterisk in the Grade Level column indicates the student's documented independent reading level prior to the administration of the PAR based on school reports.

**Green** =  and indicates comprehension scores in the top quartile.

**Yellow** =  and indicates comprehension scores in the middle 2 quartiles.

**Red** =  and indicates comprehension in the bottom quartile.

Student: Rachel      Grade: 7

### Summary and Recommendations:

Completing the PAR gave insight and provided documentation on several important characteristics of Rachel's reading needs:

- PAR reinforced that Rachel is able to read independently with comprehension at the 5th grade level.
- Rachel listened as the adult read and then was able to answer questions about what was read at her grade level.
- Rachel had little experience with a text reader and did not process what was read in order to answer questions about the text at her grade level, nor at her independent level. She was unfamiliar with the software features and this served as a distraction.
- Rachel is highly dependent upon adult interaction and has difficulty deriving meaning from grade level text independently.

Using the supporting data from the PAR, the following recommendations were made:

- Use modified content at a 5th grade level for independent reading.
- Continue to use an adult reader for more complex reading material.
- Introduce Rachel to a text reader and use this 2-3 times per week to build her ability to use technology to read independently. Initially use digital material that is of high interest and geared to her independent reading level. Check comprehension verbally but gradually insert comprehension questions into the text reader.
- Use strategies to positively reinforce her gains in independent reading.

## Case Study #3

### 7th grade student with high functioning autism: Joseph

#### Background information:

Joseph is a 7th grade student with high functioning autism. He was fully included in all academic classes. Testing indicated that Joseph was reading on grade level. He used text readers, adult readers, and books on tape at school and at home. He had regular experiences with adult readers (2-4 times per week), text readers (1-3 times per month) and audiobooks (1-3 times per month).

At a periodic IEP review meeting, the family requested that reading accommodations be allowed for use at school for instruction and for testing, even though he was reading on grade level. PAR was administered in order to document the extent of his need for reading accommodations.

Grade level passages were used across all reading conditions.


#### PAR Results:


- Using a passage at the 7th grade level of readability, Joseph read fluently with few errors. However, he demonstrated difficulty answering comprehension questions at this level.
- When using an adult read-to accommodation, Joseph listened while following along with the text. He answered comprehension questions with relative ease.
- When using a text reader, Joseph appeared to be familiar with text reader features. He was able to answer comprehension questions with ease at a 7th grade level of readability.
- Using a Likert scale, he indicated that he preferred using a text reader or an adult reader rather than reading silently or aloud on his own. The student reported that he liked reading on the computer best because “it motivates me, I remember stuff better,” and “I can’t remember as much when I read by myself.”


Grade Level	Oral Read by Student	Adult Read with Text	Text Reader	Silent Read by Student	Other
11					
10					
9					
8					
7*					
6					
5					
4					
3					

KEY

The asterisk in the Grade Level column indicates the student's documented independent reading level prior to the administration of the PAR based on school reports.

**Green** =  and indicates comprehension scores in the top quartile.

**Yellow** =  and indicates comprehension scores in the middle 2 quartiles.

**Red** =  and indicates comprehension in the bottom quartile.

Student: Joseph

Grade: 7



## Summary and Recommendations:

Completing the PAR gave insight and provided documentation on several important characteristics of Joseph's reading needs:

- Joseph was able to read fluently at his grade level, but was not able to answer all comprehension questions. It is not unusual that some students with autism can read fluently, and yet, not be able to fully process what they read.
- When reading while listening to an adult reader, Joseph appeared to keep pace with the adult reader and was able to answer grade-level comprehension questions successfully.
- It was evident that Joseph was familiar with text reader software. He was able to successfully answer grade level comprehension questions.
- Joseph was able to articulate that he remembered more when using a text reader or adult reader

Using the supporting data from the PAR, the following recommendations were made:

- Joseph should have access to a text reader when reading assignments are longer than a few paragraphs or are complex, requiring more memory for facts and details. Text readers allow him to read and reread autonomously in order to fully understand the text. They give him more control of his reading.
- A copy of the text should be used in conjunction with the use of an audiobook.
- Joseph's teachers should be given opportunities to master the following:
  - o How to access digital, academic text
  - o Where to store digital text for Joseph to access at school and at home
- Given comprehension issues that are not atypical in students with autism, and given evidence that the student derives more from text when accommodations are provided, it is recommended that Joseph be allowed to use reading accommodation to support instruction and for testing.

## Case Study #4

### 8th Grade Student with Learning Disabilities and ADHD: Roberto

#### Background information:

Roberto is an 8th grade student with learning disabilities and significant ADHD. He was fully included in most academic classes with paraprofessional support. Testing indicated that Roberto was reading independently at a 4th grade level. Comprehension deficits were noted on his IEP. He had limited text reader experience and relied more often on adult support to help him with organization and reading grade level material. PAR was administered in order to explore the use of accommodations that would rely less on adult support.

PAR was administered across two sessions. In the first session, based on reading test results, the student was given a grade 4 passage to read-aloud. Thereafter, passages at his 8th grade level were administered using the adult read aloud condition and then the text-reader condition. Given his low scores on both grade level passages, a second session was scheduled in order to find the range at which he was more successful using accommodations. During the second session, the adult read aloud was presented at his independent reading level and then increased to the 6th grade reading level. The text reader condition was administered at the 6th grade level. One additional condition was added to determine Roberto's ability to read silently at his independent reading level.


#### PAR Results:


- Using a passage at his documented independent reading level, Roberto demonstrated that he was able to read fluently and comprehend the text at his documented 4th grade independent level.
- With the adult reader accommodation, Roberto was able to read with comprehension at the 4th grade level and at the 6th grade level, but not at his current grade level.
- Using a text reader, Roberto was proficient on the computer, but was somewhat distracted by the many features on-screen. He was unable to comprehend text at his current 8th grade level, and had only some success at a lower 6th grade level.
- To gauge Roberto's ability to read modified material silently on his own, a 4th grade passage was presented. His performance was indicative of his reliance on adults.


Grade Level	Oral Read by Student	Adult Read with Text	Text Reader	Silent Read by Student	Other
11					
10					
9					
8					
7*					
6					
5					
4*					
3					

**KEY**

The asterisk in the Grade Level column indicates the student's documented independent reading level prior to the administration of the PAR based on school reports.

**Green** =  and indicates comprehension scores in the top quartile.

**Yellow** =  and indicates comprehension scores in the middle 2 quartiles.

**Red** =  and indicates comprehension in the bottom quartile.

Student Roberto: Grade: 8

## Summary and Recommendations:

Completing the PAR gave insight and provided documentation on several important characteristics of Roberto's reading needs:

- Roberto's overall pattern of success suggested the need for modified reading material when he reads aloud to an adult and when an adult reads to him. The pattern also documented his dependence on adult support, likely related to his difficulties with attention and self-monitoring.
- When reading silently at a reduced level of readability, he may be able to successfully read short segments when the adult sets the purpose of the reading in advance. For example, "Read this paragraph to find out..."
- When expected to read for information, modified text is needed. For example, for assignments requiring research, Roberto should be directed to website links that provide leveled reading materials (e.g., Encyclopedia Britannica, Sirs Discoverer, both available at his school). Gradually, he should transition from read aloud conditions to learning to use the speech output features of these online sites. He will likely need adult support to gather and organize information.
- To gradually learn to use technology to read more independently at school and at home, Roberto will need brief but regular exposure to a text reader. Again, begin with short segments on topics that are of interest to him, at an appropriate level of readability, and set the purpose of reading in advance.
- Strategies to positively reinforce independent reading with comprehension should be established.

## Case Study #5

### 10th Grade Student with Reading and Emotional Disabilities: Kyle

#### Background information:

Kyle is a 10th grade student who spent part of his day in supported classes for students with emotional disabilities. He was fully included in some academic classes. Reading was a primary disability as well, and various test scores indicated that he was reading at a 5th to 6th grade level. Kyle was comfortable using computers at school and at home. He had some experience with text readers, however, he was not using them on a regular basis at school. PAR was administered in order to make decisions about reading accommodations at school.

The student read-aloud condition began with a passage at the 6th grade level. Thereafter, passages at his current grade level were used to gauge the effectiveness of adult read aloud and text reader accommodations.


## PAR Results:


- Using a passage at the 6th grade level of readability, Kyle read slowly with some errors. He struggled to answer comprehension questions at this level.
- When using an adult reader accommodation, Kyle listened while following along with the text. He answered comprehension questions with ease.
- When using a text reader, Kyle had no difficulty navigating the software features, and selected a reading speed that was significantly faster than his oral reading speed. He was able to answer comprehension questions with ease.


Grade Level	Oral Read by Student	Adult Read with Text	Text Reader	Other
10				
9				
8				
7				
6*				
5*				
4				
3				

**KEY**  

The asterisk in the Grade Level column indicates the student's documented independent reading level prior to the administration of the PAR based on school reports.

**Green** =  and indicates comprehension scores in the top quartile.

**Yellow** =  and indicates comprehension scores in the middle 2 quartiles.

**Red** =  and indicates comprehension in the bottom quartile.

Student: Kyle Grade: 10

## Summary and Recommendations:

Completing the PAR gave insight and provided documentation on several important characteristics of Kyle's reading needs:

- Kyle had significant difficulty with a reading passage at the level at which his current testing indicated reading success. Reading fluency was poor and this may have contributed to his difficulties with comprehension questions.
- When reading while listening to an adult reader, Kyle appeared to keep pace with the adult reader and was able to answer grade-level comprehension questions successfully.
- Kyle was proficient with a computer and readily understood how to adjust the reading speed and font size. He chose a speed that was faster than his personal read aloud speed and was able to answer grade-level comprehension questions successfully.
- Using the Likert scale, Kyle indicated that he preferred to use a text reader.
- Given his emotional disabilities, opportunities to successfully read grade level materials using accommodations may likely boost his academic self-confidence. Struggling to fluently read academic materials at reduced grade levels is not suitable, given his age-appropriate level of comprehension using accommodations.

Using the supporting data from the PAR, the following recommendations were made:

- Kyle should have access to digital reading materials at his academic grade level to use with a text reader on a daily basis.
- Kyle's teachers should be given opportunities to master the following:
  - o How to access digital, grade-level text
  - o The basics of text reader software
  - o Where to store digital text for Kyle to access
  - o How to send digital text to home to support homework
- Kyle should receive training as needed on how to upload digital text to text readers at school and to free text readers that he can use at home.



# Appendix





**PAR Background Data**

<b>Student:</b>	<b>Grade:</b>	<b>Sex: M/F</b>	<b>Date:</b>		
School:	Student ID:	ELL	Y	N	
Primary disability:					
Reading accommodations on IEP:					
Reading interventions currently in use:				Frequency:	

**Current Levels and Assessments**

Date	Assessment	Score
	<b>Educational testing (Reading subtests)</b>	
	<b>Psychological Testing</b> Verbal Performance Memory	
	<b>Other</b>	

**Experience with Accommodations**

Type	Frequency – per month/week/day	Comments
Verbatim Adult Reader		
Text Reader e.g. (Read:OutLoud, Kurzweil, Read Write Gold)		
Audio Books		



**PAR Administration Results**

<b>Student:</b>		<b>ID:</b>	<b>Date:</b>
Grade:	Sex: M F	School:	
Examiner:		Test Location:	

**Student's Oral Reading**

<b>Passage:</b>	<b>Grade Level:</b>	<b>WPM:</b>
Number of items correct:	Likert Rating:	__ Green (Upper quartile) __ Yellow __ Red (Lower quartile)

**Adult Reader**

<b>Passage:</b>	<b>Grade Level:</b>	
Number of items correct:	Likert Rating:	__ Green (Upper quartile) __ Yellow __ Red (Lower quartile)

**Text Reader**

<b>Passage:</b>	<b>Grade Level:</b>	<b>WPM:</b>
		<b>Font Size:</b>
Number of items correct:	Likert Rating:	__ Green (Upper quartile) __ Yellow __ Red (Lower quartile)

**Additional Method:** \_\_\_\_\_

<b>Passage:</b>	<b>Grade Level:</b>	<b>WPM:</b>
Number of items correct:	Likert Rating:	__ Green (Upper quartile) __ Yellow __ Red (Lower quartile)

## Protocol for Accommodations in Reading (PAR)

*Fill in the chart using colors to represent comprehension proficiency. See PAR manual for more information.*

Grade Level	Student's Oral Reading	Adult Reader	Text Reader	Other:	Other:
10					
9					
8					
7					
6					
5					
4					
3					
2					
1					

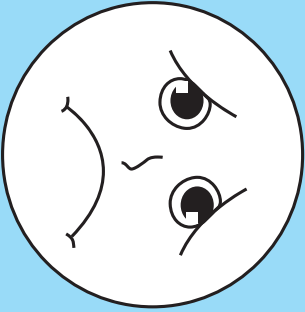
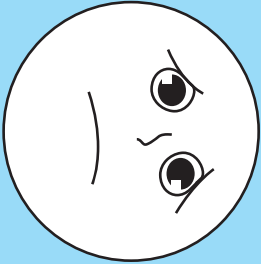


### Additional Observations:

<p>Student's preferred method of reading:</p> <p><input type="checkbox"/> Reading by yourself</p> <p><input type="checkbox"/> Adult reader</p> <p><input type="checkbox"/> Computer</p> <p><input type="checkbox"/> Other</p> <p>Overall attitude:</p> <p>Overall engagement:</p>	<p><input type="checkbox"/> Able to predict based on titles</p> <p><input type="checkbox"/> Demonstrated background knowledge</p> <p><input type="checkbox"/> Followed text as listened</p> <p><input type="checkbox"/> Asked for word definitions</p> <p><input type="checkbox"/> Used text reader dictionary</p> <p><input type="checkbox"/> Anxiety or frustration</p> <p><input type="checkbox"/> Refusals</p> <p><input type="checkbox"/> Persistence</p> <p><input type="checkbox"/> Self-monitoring, self correcting</p> <p><input type="checkbox"/> Distractibility</p> <p><input type="checkbox"/> Other:</p>
---	--

Recommendations:

Recommendations for Student's IEP/504 Plan:

**Likert Graphic**

<p>1</p>  <p>I really did NOT like it.</p>	<p>2</p>  <p>I did not like it much.</p>	<p>3</p>  <p>I liked it a little.</p>	<p>4</p>  <p>I really liked it.</p>
--	--	---	---



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