Life Journey Through Autism: A Parent's Guide to Assessment

by



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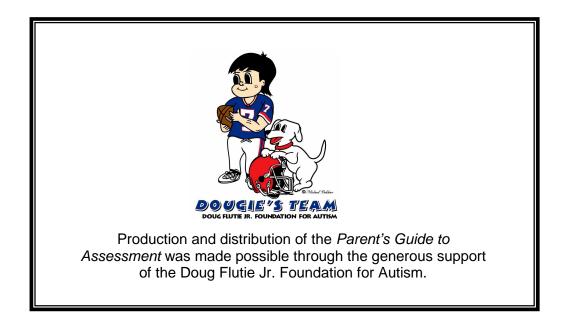
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May 2008

Dear Readers,

You are holding *A Parent's Guide to Assessment*, the fifth and latest volume in the *Life Journey Through Autism* series published by the Organization for Autism Research (OAR). The series began with *A Parent's Guide to Research* in 2003, and the intervening years have brought *An Educator's Guide to Autism, An Educator's Guide to Asperger Syndrome*, and *A Guide for Transition to Adulthood.* The purpose of the *Life Journey Through Autism* series is to provide parents of children and adults with an autism spectrum disorder and the many professionals who serve persons with autism in schools, clinics, the workplace, and the community with reliable information in as accessible a format as possible.

As the father of two, now adult, children with autism, my experience is that very little comes easily when it comes to parenting a child on the spectrum. That was certainly the case 20 years ago. Autism was still considered a rare disorder and finding any information, accurate or not, was difficult. Today, with all the advances in technology, it seems that parents of young children on the spectrum have the opposite problem—too much information—with no reliable way to filter out the good from the not so good.

Autism and the assessment process, especially early on, can be daunting. That is where OAR, the *Life Journey Through Autism* series, and this new resource, *A Parent's Guide to Assessment,* come in. Understanding the assessment process is a lot like learning to be a parent. Unless you have been through it before, you learn as you go. Thankfully, that works most of the time in parenting a typical child. Learning after the fact, however, is not a formula for success when it comes to helping a child with autism. Proper assessment drives effective early intervention. When understood beforehand, assessment becomes a multi-purpose tool that works to help you shape a life of possibilities for your child.

Assessments, regardless of purpose, are often complex, time consuming, and rife with unfamiliar jargon and acronyms. Worse yet, because they often identify your child's deficits, both the process and the results can be stressful and disheartening. If you understand the "why" behind any assessment, the strengths and limitations of the various instruments, and the key role you play in the process, you will be able to use assessment proactively on behalf of your child. The understanding that follows will allow you to filter out the good from the bad, the relevant from the irrelevant, and the useful from the futile and leave you with good, relevant, and useful information about your child and the confidence to use it to your child's best benefit.

I want to thank all those responsible for this new guide, starting with our friends and colleagues at the Southwest Autism Research & Resource Center, for their eagerness to again partner with OAR. I would also like to thank The Doug Flutie, Jr. Foundation for Autism, for both underwriting this project and for their previous support of OAR. Finally, I am pleased to recognize our long-time partners in this series, Danya International, and thank the many parents, professionals, and adults on the spectrum who provided comments and feedback that helped shape the content of this guide.

As I read through A Parent's Guide to Assessment, I wished it had been around 20 years ago. Here's hoping that it will be more timely and useful for your child and you.

Sincerely,

James M. Sack Chairman



Southwest Autism Research & Resource Center

May 2008

Dear Readers,

It is a privilege to continue our collaboration with the Organization for Autism Research (OAR) and produce this guide, *Life Journey Through Autism: A Parent's Guide to Assessment*. At the Southwest Autism Research & Resource Center (SARRC), we strive to empower parents with accurate information so they can make the best decisions for their child. This guide is an important component of parent empowerment as it provides tools to navigate the often-confusing world of assessments.

SARRC was founded in 1997 to help children and their parents with the complicated day-to-day issues associated with autism. We provide education, training, and support for parents and other relatives, and over time, we have developed intervention services for children with autism, including at-home habilitation and an integrated preschool. We also have created multiple training programs for autism professionals, including diagnosticians, interventionists, teachers, and physicians.

It is critical that children are assessed and diagnosed at the earliest age possible, which opens the door for important early-intervention services. Assessment tools, when properly utilized, can diagnose children earlier, measure progress through intervention, and help tailor treatment plans for each individual child. While there are exceptional tools designed to measure the multiple components of autism, there is a lack of qualified professionals to conduct the assessments and even fewer who are qualified or can take the time to explain results to parents.

We hope you find this reference guide to be a valuable source of information and that it advances our collective goal of empowering parents with timely and quality information.

Thank you for taking the time to read and utilize this guide. Working together, we can improve the quality of life today for all individuals with autism and build a better and healthier future for them, their families, and our communities.

Sincerely,

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Lisa Glow President & CEO

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THE DOUG FLUTIE, JR. FOUNDATION FOR AUTISM, INC.



May 2008

Dear Parents,

The Doug Flutie, Jr. Foundation is committed to educating parents and providing resources for families coping with the challenges of raising a child with an autism spectrum disorder. This commitment led our foundation to support this publication, *A Parent's Guide to Assessment*. Its purpose is to provide parents, caregivers, and professionals with a tool to help them understand the assessment process and improve the quality of life for those with autism.

Our son Dougie was diagnosed with autism at the age of 3. As a result, we started the Flutie Foundation 10 years ago to give parents a place to turn when they are in need of support. Our family is fortunate to have the resources to provide our son with the educational opportunities, special equipment, and tools necessary, but realize that there are thousands of families who struggle every day to pay for similar services.

As parents of a child with severe autism, we also know the overwhelming responsibilities required to make sure a child is getting all of the services he or she needs to make progress and live a rewarding life. Thus, it is important to educate yourself as much as possible and talk to other parents going through the same challenges.

It is our desire that this guide will be useful in your search for answers and help you achieve the goals your child deserves. It also helps to stay positive and remember there is always hope.

Sincerely,

Doug + Lawie Hutie

Doug and Laurie Flutie

ACKNOWLEDGMENTS

This publication is a product of the collaborative effort between the Organization for Autism Research (OAR), the Southwest Autism Research & Resource Center (SARCC), and Danya International, Inc. (Danya), with support from The Doug Flutie, Jr. Foundation (Flutie Foundation). OAR, SARCC, and the Flutie Foundation are dedicated to providing practical information to those living with the challenges of autism—individuals, families, and educators and other professionals. Danya is a health communications company committed to shaping healthier futures for children, families, and communities around the world through the creative use of technology and research.

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OAR would like to offer a special thank you to Scientific Council Member Suzanne Letso for authoring the section of this guide titled "Evaluation for Educational Placement."



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TABLE OF CONTENTS

	<u>Page</u>
INTRODUCTION	1
CHAPTER 1: DEFINING ASSESSMENT What is Assessment? The Assessment Process Why is Assessment Important?	3 3
CHAPTER 2: PURPOSES OF ASSESSMENTS Initial Assessment for Diagnosis Re-evaluation Assessment of Specific Skills or Characteristics Conclusion References	7
CHAPTER 3: OVERVIEW OF ASSESSMENT TYPES. Diagnosis Cognitive Assessment. Speech and Language Assessment. Adaptive Behavior Assessment. Social Functioning. Academic Assessment. Functional Behavioral Assessment Occupational Therapy/Physical Therapy Assessment Social-Emotional Assessment. Educational Placement Evaluations	
CHAPTER 4: ASSESSMENT PROCESS Referral Process Who Conducts Assessments Who Conducts What Type of Assessment? What Happens During an Assessment? Limitations of Assessment. A Final Word of Advice	
RESOURCES/APPENDICES Appendix A: Overview of Assessment Terms Appendix B: Questions to Ask Before and After an Assessment Appendix C: How to Prepare for an Assessment Appendix D: Frequently Used Standardized Assessments Appendix E: Evaluation Review Chart Appendix F: Resources for Parents	

INTRODUCTION

Autism presents parents with many challenges and a seemingly endless series of difficult questions. One of the first challenges becomes crystal clear immediately after your child's diagnosis. "Ready or not, you are your child's number one advocate for life." As you immerse yourself in everything "autism," you and the autism professionals advising you are also trying to peer into your child's world to understand the person, potential, and social and communication obstacles autism has placed in his or her life path. This task of understanding takes you into the domain of "assessment," which too often initially raises more anxiety than hope.

After your child's diagnosis, he or she is likely to undergo a series of formal and informal assessments for the rest of his or her life. A parade of autism experts and specialists will examine and analyze the results, and tell you about your child's abilities, strengths, and deficits. Until you come to understand the purpose, goals, and functions of the various assessments, you run the risk of being an observer instead of a key participant in these critical evaluations of your child.

Assessments are intended to provide information about your child in such areas as:

- Strengths and skill deficits
- Specific problem areas and/or needs
- Performance in relation to others
- Performance in relation to set standards or goals
- Effectiveness of instruction and/or intervention for your child
- Eligibility for services

The formal assessment process can be a daunting experience for parents. In explaining the results, the professionals who conduct assessments tend to use technical language and focus more on "deficit performance," that is, what your child cannot do. Rarely do they explain outcomes in layman's terms or articulate the findings and recommendations in a way that would allow you to set goals for your child. This can often overwhelm and dishearten even the strongest parents.

A Parent's Guide to Assessment is intended to remove the mystery surrounding assessment, provide you with a practical understanding of the assessment process, equip you as a parent with the knowledge and confidence to become a key participant in the process, and help you learn to use assessment outcomes to improve services and interventions for your child. The information contained in this guide, however, has utility for everyone engaged in supporting individuals with an autism spectrum disorder (ASD) in their efforts to develop higher skills and attain greater degrees of personal competency. The topics covered in this guide include:

- Definition, purposes, and uses of assessment
- Strengths and weaknesses of the assessment process
- Types of assessments and what each tool measures
- Finding the right assessment professional
- Translating the language of assessment into your child's life plan

Assessments can play an important role in the life of your child by periodically evaluating his or her strengths and challenges, and providing information on how to address these areas. It is a complex and multifaceted process conducted by many individuals with expertise on ASDs and other areas of functioning that impact your child at school, home, and in their world.

This guide begins with a general overview of what assessment is, how the process is supposed to work, and why it is important. It then describes the types of assessments that you and your child may encounter, the purposes of each, and the different skills and abilities that various instruments assess, including cognitive abilities, speech and language skills, and social functioning. It progresses to describe the assessment process, the people who conduct the assessments, and what happens during an actual assessment. Finally, the guide will suggest ways in which you can use assessment results to improve the services your child receives. Throughout this guide, you will find useful examples and definitions (a glossary of all the underlined terms is included in Appendix A: Overview of Assessment Terms) that, ultimately, will turn assessment into a tool that can help you and your child now and for the rest of your lives.

Effective, accurate, appropriate, and timely assessment is integral to your child's growth and development. By understanding assessment and using the information presented in this guide, you will be able to more actively advocate for the appropriate resources and services necessary for your child to succeed.

"There is no assessment that can measure your child's spirit, will, or how much he is loved or valued. It is up to me, as his Mom, to keep my WHOLE son in mind. It helps sometimes if I bring a picture of him with me to meetings where he is being discussed."

- Parent of adolescent with autism

CHAPTER 1: DEFINING ASSESSMENT

What is Assessment?

Assessment is a comprehensive process used to determine your child's strengths and challenges in multiple areas or types of abilities. Assessment involves gathering specific information about your child to inform the treatment and services that your child receives. There are multiple assessment instruments and methods. As you will learn in this guide, different types of assessments measure different things. Which assessment[s] will be used will be based on the questions that need to be answered about your child. These questions may include:

- Is there something wrong with my child's development?
- Is the current diagnosis or absence of diagnosis accurate?
- For what services are my son or daughter, eligible and which ones are most appropriate?
- What should be included in my child's Individualized Educational Program (IEP)?
- What might be the most effective teaching or behavior support strategies?
- How should my child's progress be measured?

What is an IEP?

An Individualized Educational Program, or IEP, is a written, legal contract that identifies the nature and extent of special education intervention strategies and related services to be provided by your child's school district. Under the Individuals with Disabilities Education Act (IDEA 2004), an IEP is required by law for all children with disabilities, including children with autism spectrum disorders. The IEP sets forth your child's educational program for the coming year in objective and measurable detail. Both formal and informal assessments play a major role in the development, monitoring, and revision of the IEP on an ongoing basis.

The Assessment Process

The assessment process begins with one of the questions mentioned above. Sometimes, it is the parents asking out of concern for perceived developmental or social issues; other times, it might be teachers or medical professionals who raise questions that lead to assessment. Once the assessment decision is reached, the process should involve a multidisciplinary team of professionals to obtain the most accurate and complete picture of your child's functioning. The assessment team may include:

- Parents
- Psychologists
- Pediatricians

- Psychiatrists
- Neurologists
- Behavior analysts
- Speech and language pathologists
- General and special education teachers
- Occupational and physical therapists
- Other experts who may work with your child, including other family members

To be most effective, assessment must be a collaborative process between these professionals and you, the parent. The ultimate goal of any assessment is to provide you and the professionals working with your child the specific information they and you require to guide intervention and instructional planning for your child.

Accurate assessment depends on a variety of factors, including:

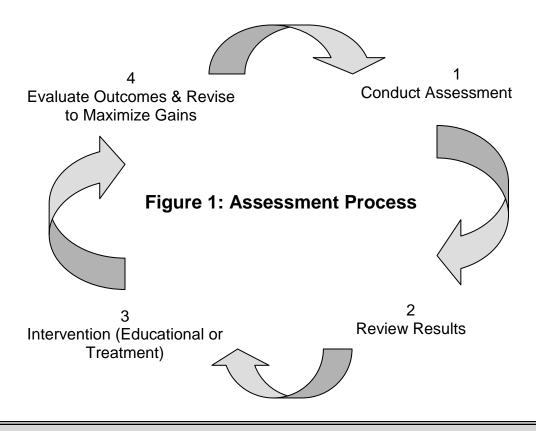
- A clearly defined goal for the assessment
- The experience of the professionals conducting the assessment
- The appropriateness of the assessment instruments
- The active participation by the child with ASD and his or her parents
- The interpretation of the results by parents, teachers, and other support personnel working with your child

Assessment Tip

Throughout any assessment, the parent plays a central role in the process. Your input, insights, and observations about your child, as well as your advocacy on his or her behalf, help to ensure an effective and beneficial process. Do not hesitate to ask questions or to ensure that the information you provided is fully considered in the process. If you are unsure about your role or the process, consider bringing a parent advocate with you to help guide you through the process at least for the initial meetings. By being an informed and active participant in the assessment process, you will help ensure that the results are both accurate and relevant to your child's particular needs. Appendices B and C provide a list of questions for you to ask before and after the assessment, as well as tips to help you prepare.

After the initial diagnostic assessment, it is most useful to think of assessment as a continuous process, as illustrated in **Figure 1**. First, an assessment will be conducted to provide initial information about your child's current abilities. The professionals who completed the assessment will then review the results with you and, together, you will decide on the most critical skill areas in need of improvement or refinement. You and the involved professionals will then discuss expectations for skill growth and develop an individualized educational or behavioral intervention. After a predetermined period, you and the relevant professionals will review the intervention and determine to what extent it has helped your son or daughter, whether the goals were achieved, or whether the

intervention should be revised to maximize skill gains. Another assessment may then be conducted to determine how to revise the intervention. The purpose of this ongoing assessment process is to strengthen your child's skills in multiple areas of functioning.



Key Terms

The terms "assessment," "evaluate," and "measure" appear throughout this guide. These terms have multiple definitions in general use. Within this guide, however, the definitions of these words are more specific.

Assess	Assessment	The process of using instruments (surveys, interviews, questionnaires) or, in some cases, direct observation, to obtain information about a child's performance and behavioral strengths and challenges to inform educational and intervention decision making.
	Evaluate:	To compare the outcomes (or results) of an assessment relative to other children, to a predefined expectation, or to previous outcomes for an individual child.
1		

Measure: An instrument used during an assessment (like a survey, interview, or questionnaire).

Why Is Assessment Important?

There are many benefits to assessment. Assessment can inform you and others about your child's level of functioning across skill areas, giving information on his or her capabilities and challenges. This information will then help to customize treatments and interventions for your child. Over time, assessments can help you and those who support your child evaluate his or her progress and set new goals for school and home.

a

Assessment can also provide information about your child's ongoing learning and behavior to educational professionals, who can then better develop, monitor, and evaluate academic and behavioral interventions that have been implemented.

In addition, an assessment provides valuable information that can be used to assist your child's IEP team in developing the IEP and identifying appropriate support services. Assessment should identify present levels of performance across a number of skill areas, as well as highlight strengths and identify specific areas of concern that can be incorporated into the IEP. By using the results of an assessment, appropriate interventions and necessary services can be identified based on your child's specific needs, abilities, and interests.

Benefits of an Assessment

An assessment offers an important insight into your child's abilities and helps measure his/her strengths and weaknesses. More specifically, it helps you and your child's teachers, IEP team, and other caregivers by:

- Measuring the level of functioning across skill areas
- Providing comparative information on your child's performance
- Evaluating your child's progress at home and school
- Setting outcome-oriented goals for your child
- Suggesting objectives to be included in your child's IEP
- Guiding the planning and development of interventions for your child
- Communicating measurable results to professionals working with your child in terms they can best understand
- Determining your child's strengths and challenges in a variety of skill areas

"Our assessments provided information that was critical to developing an IEP that addressed the unique needs of our son. We were able to develop meaningful and measurable objectives and have mechanisms in place to track his progress. We were also able to establish accommodations that would allow him to be productive and comfortable in the classroom."

- Parent of young child with autism

CHAPTER 2: PURPOSES OF ASSESSMENTS

As discussed in the previous section, the first step in the assessment process is to determine the purpose of the assessment, which in many cases will depend on the individual or agency requesting the assessment (e.g., physician, parent, educator, speech pathologist). For example, an assessment may be for diagnostic purposes, or it may be to evaluate the effect of a new academic intervention. While there are guidelines that determine which assessments best apply in certain instances, no standard list of measures exists that must always be used. Often, the characteristics of the child with ASD guide the selection of appropriate measures. This section provides an overview of the varied purposes of assessments that may be done with your child with ASD.

Initial Assessment for Diagnosis

You may have already been through the initial assessment for diagnosis and obtained a diagnosis on the autism spectrum for your son or daughter. If you have already been through a diagnostic assessment, you know that it involves a detailed process that can Remember: These assessments are not done all at once. The examples and information provided in this guide highlight various types of assessments that may be done over a period of several months or even years.

provide a lot of information about your child and his or her abilities. In that way the diagnosis or, more importantly, what the diagnosis means for your son or daughter in particular, should form the <u>baseline</u> from which all future assessments should be evaluated. It is important to find that baseline because it helps you and the professionals who work with your child determine what educational, behavioral, or social goals may be most appropriate for your child. Interventions are then designed to help your child progress in the areas that were assessed. Later assessments will measure their skills and abilities, and compare them to the baseline results. While the information in this section should be of interest to all parents, it should be of particular interest and benefit for those just beginning the assessment for diagnosis process.

If you have not already been through it, a formal diagnostic assessment is the first type of assessment the majority of families and children will encounter. This first step can often be overwhelming for you and your child because it requires a large amount of time and a number of interactions with many professionals who each require a significant amount of information from and about your family.

Assessment Tip

The professionals performing assessments need to fully understand your child and his or her abilities to make the most informed and appropriate recommendations about your child's ongoing treatment needs. Thus, it is important that you do not minimize or exaggerate your child's skills or abilities. By providing as complete and honest a picture of your child as possible, you will give the professionals conducting the assessments the best chance to provide the most relevant and accurate recommendations.

Based on guidelines developed by the American Academy of Neurology and the Child Neurology Society (Filipek, et al., 2000), if a child is suspected of having an ASD, he or she will be referred to receive a diagnostic assessment. To receive a diagnosis of ASD, an individual must meet the criteria set forth by the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR; American Psychiatric Association [APA], 2000). A diagnostic assessment usually happens in a clinic or doctor's office and is conducted by a psychologist, psychiatrist, neurologist, or other specifically trained professional.

A diagnostic assessment can involve a variety of measures and clinical methods to assess your child's general skills and abilities, but it should also include a standardized diagnostic measure, such as the Autism Diagnostic Observation Schedule (ADOS) (Lord, et al., 2000) and/or the Autism Diagnostic Interview, Revised (ADI-R) (Le Couteur, et al., 2003). The initial interview often includes:

- Interviews with you, your child, and those who work with your child (e.g., teachers, paraprofessionals)
- Observations of your child's behavior conducted in different settings performing a variety of tasks
- Measures for intelligence, speech and language abilities, motor skills, sensory processing, and emotional or behavioral difficulties

The initial assessment is a complex and comprehensive process that yields a large amount of information about your child across skill areas and settings to assist in diagnosis and intervention planning.

Initial Diagnostic Assessment Example

Rob and Allison were concerned that their 2.5-year-old son, Cooper, had stopped talking and responding to his name. As a result, they brought him to the State Child Development and Study Center for an initial assessment. Cooper was evaluated by Dr. Link, a psychologist. Dr. Link conducted an extensive background interview about Cooper and his family. In addition to administering the ADOS and the ADI-R, other assessment procedures were used to observe Cooper's behavior on the playground, in the classroom, and with family members and school officials. Cooper's language, intellectual functioning, adaptive behavior, and neuropsychological functioning were also assessed. Based on the information generated from the interviews and the results of the ADOS, ADI-R, and other assessments, Cooper was diagnosed with an autism spectrum disorder. Rob and Allison began working with the professionals to develop an early intervention plan for him, to be implemented as soon as possible.

Re-Evaluation

As described earlier, assessment is a continuous process. The initial diagnostic assessment is not a one-test, fixed result for life. Think of it as an important first snapshot of your child at a specific point in time. As your child develops, subsequent assessments that evaluate and monitor his or her progress will constitute additional snapshots and help

form a more complete "picture" of your child's particular strengths, challenges, and progress. These are re-evaluation assessments. Typically, re-evaluation assessments are more targeted to specific challenges, deficits, or skill sets than they are toward issues related to diagnosis. Thus, they are not as all-encompassing as the initial diagnostic assessment. Nonetheless, re-evaluation assessments generally employ the same comprehensive, multidisciplinary approach.

For children with ASDs, continued monitoring of his or her progress is essential. Small changes in your child's developmental level can impact his or her behavior. Re-evaluation helps you and your child's treatment team better understand your child's current level of functioning, review and revise goals, and consider the effects of current or new interventions.

Re-evaluation assessment is not optional for most children with ASDs. In all likelihood, your child's special education IEP review process will require it. Re-evaluations for special education programming are typically conducted every 3 years, but they can be conducted sooner on the recommendation of parents or your child's educational staff or IEP team.

Independent of the re-evaluation process, which often occurs after several years, ongoing monitoring should be conducted to ensure your child is making progress on his or her goals. Further, this information is then used to represent an individual's "present level of performance" in the IEP in years when a full re-evaluation has not been completed.

Re-Evaluation Assessment Example

Andy is about to complete the third grade. His initial diagnostic assessment occurred when he was in kindergarten. He was diagnosed at that time with Asperger syndrome. Educational and behavioral programming was developed for him. His parents and teachers have seen great strides in his communication, mathematics, and daily living skills. He and his family agree that it is time to re-evaluate his functioning to better understand and identify the educational programming and support services he requires. Andy's parents, collaborating with his IEP team, identify the particular areas that need assessment and how, and by whom, they will be assessed. The IEP team (including Andy's parents) reviews the new assessment results. The assessment results document that Andy has not only progressed well in mathematics and language skills, but has also made progress in the area of social competence, regularly interacting with his classmates. New goals are developed to enrich his academic, social, and adaptive skills, taking into consideration his current strengths, weaknesses, and interests.

Assessment of Specific Skills or Characteristics

In addition to the initial assessment and re-evaluation assessments, other types of assessments are designed to measure specific skills or types of behaviors. These assessments may be scheduled on a regular, recurring basis or only occasionally, as needed, to examine a specific issue. These can include assessments of:

- Speech and language abilities
- Daily or independent living skills

- Psychological or emotional well-being
- Social skills

The need and frequency is something determined by you, your child's school, or other professionals (such as behavioral specialists or occupational therapists) who are working with your child. These assessments are conducted to answer a specific question and may only focus on one area of functioning, such as reading comprehension, social or communication competence, or daily functioning activities (like using scissors or riding the bus independently). For example, a child with ASD may enter a new general education classroom for language arts enrichment. Although the initial assessment provides a comprehensive look at the child's abilities in relation to other children in the nation or the state, the teacher may want to find out how the child can perform with the language curriculum that is currently being used in the classroom.

Conclusion

Assessment is a continuous process that is comprehensive and often complex. It generally involves a number of different professionals working with you and your child, sometimes for extended periods of time. Different types of assessments exist to evaluate your child's strengths and challenges in a variety of settings. The information from these assessments serves to inform the development of individualized goals and interventions for your child. Assessments can give you, and the professionals working with your child, detailed information regarding your child's level of functioning, needs, and progress. By regularly monitoring your child in this way, you can effectively evaluate and track his or her developing skills and, in conjunction with your child's treatment team, formulate goals and intervention strategies that best match your child's needs. The next section will provide you with information on which areas of functioning in children with ASD are most frequently identified for regular assessment.

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CHAPTER 3: OVERVIEW OF ASSESSMENT TYPES

This section provides an overview of the skills and abilities that are most frequently evaluated. An evaluation in any of these areas could take place during an initial diagnostic

assessment, a re-evaluation, or an assessment of specific skills.

Diagnosis

Remember: Underlined words are defined in Appendix A: Overview of Assessment Terms, starting on page 27.

A diagnostic assessment for ASD is a comprehensive, multidimensional process. Various types of assessment tools will be used, including standardized measures, interviews, checklists, and direct observations, to give an accurate diagnosis of your child.

At the beginning of the diagnostic assessment process, you will be asked to provide a developmental history of your child. This history will review your child's communication skills, social skills, and behavioral development. Often, to document this information, the professional conducting the assessment will use standardized measures developed to assist with the diagnosis of ASD, such as a semi-structured interview or self-report measure. The answers to some of the questions asked may be a bit difficult to recall so having ready access to calendars, journals, e-mails, photos, or videos can help provide as accurate a history as possible. With your permission, the professional will often review information from medical or educational records to consider additional medical and psychiatric issues that may be affecting your child.

In addition to using standardized interviews and self-report measures in the diagnostic assessment, a professional may informally observe your child in several settings, such as the classroom, play area, or lunchroom. It is essential that the professional get to know your child and

Autism Diagnostic Observation Schedule

Sometimes referred to as the "gold standard" in assessment for diagnosis, the Autism Diagnostic Observation Schedule (ADOS) (Lord, et al., 2000) is a standardized measure that uses a combination of structured and unstructured activities to assess the following areas: communication, social interaction, play, imagination, and stereotyped behaviors and restricted interests. This measure uses four different modules that are each individually designed for a particular developmental age and language ability level. Module 1 is used with children who do not consistently use phrase speech. Module 2 is used with those who use phrase speech but are not verbally fluent. Module 3 is used with fluent children, and Module 4 is used with fluent adults. The one group that ADOS does not address is nonverbal adolescents and adults.

interact with him or her to understand your child's capabilities and to effectively and accurately provide a diagnosis.

"During the diagnostic process, it is important that parents don't 'sugar coat' things because the resulting diagnosis will be used to determine not only the type of services that may be provided, but also the amount, or intensity, of treatment provided. A misdiagnosis can easily result in the loss of a year or more of intervention and that is an outcome that benefits no one."

- Parent of young adolescent with autism

Other aspects to consider during a diagnostic assessment include your child's cognitive abilities, language skills, and adaptive behavior. Cognitive abilities are assessed by looking at your child's cognitive strengths in areas such as attention, memory, and problem solving, which will help to plan for your child's educational and service needs (see the Cognitive Assessment section below for more details). Language skills are assessed through a variety of techniques, as discussed in the Speech and Language Assessment section of this guide (see page 13). The methods used to assess adaptive behavior are described in the Adaptive Behavior Assessment section (see page 14). Lastly, as part of the initial evaluation for diagnosis, a thorough medical examination should be completed to ensure an accurate diagnosis.

A professional or team of professionals with experience diagnosing and developing interventions should conduct the diagnostic assessment for children with ASDs. Professionals may include a developmental pediatrician, pediatric neurologist, child psychologist, or child psychiatrist. In addition, speech and language pathologists, occupational therapists, and physical therapists may be part of the assessment. After completing the comprehensive diagnostic assessment process, the professional will review the collected information and make a judgment on the diagnosis based on the classification system outlined in the DSM-IV-TR.

Cognitive Assessment

Because cognitive abilities affect your child's social, psychological, and developmental world and deficits in this area are often prevalent in children with ASDs, an accurate cognitive assessment is important and often revealing in terms of your child's particular areas of strength or difficulty. A thorough cognitive assessment consists of a series of tasks designed to evaluate a wide range of your child's abilities, including:

- Attention/Concentration
- Memory
- Problem solving
- Verbal skills

The results of a cognitive assessment can provide you and your child's teachers and related support personnel with some of the information needed to better understand your child's current capabilities. It is important to keep in mind that many commonly used IQ tests may not be appropriate or accurate for children with ASDs because they have not been proven <u>reliable</u> or <u>valid</u> for this population. Because IQ tests are <u>standardized</u>, the manner in which they are administered is critical. Variations to strict procedure may cause the results to be inaccurate or invalid. In addition, the social interaction and communication problems that many children with ASDs display can influence the accuracy of the results. For example, while a child with Asperger syndrome may have an above-average IQ, his heavy reliance on social gesturing and unfamiliarity with social norms can create difficulties in testing situations and give inaccurate assessment results. Further, standardized tests do not take into account learning differences or preferences. Many children with ASD are reportedly more visual than auditory learners. Given these difficulties, it is sometimes helpful to view the outcomes of cognitive assessment as <u>basals</u>, rather than maximals. In other words, the results may represent the worst your child can do under difficult conditions, rather than the best your child can do under ideal conditions.

To decrease the heavy reliance on communication and social skills (specifically receptive language, expressive language, and auditory processing) in test instructions, a small group of cognitive assessments exists that require little to no verbal instructions or responses on the part of the child. These assessments are called tests of <u>nonverbal intelligence</u>. For children with little to no verbal responding abilities, these tests can be helpful. It is important to note one potential drawback: During the administration of these tests, children are still required to attend to the test administrator and demonstrate some basic social skills (e.g., motor imitation), which may be a challenge for some younger children with ASDs.

The cognitive assessment, like other forms of assessment, is a complex and comprehensive process. Multiple areas of functioning will be evaluated to provide you with an understanding of your child's cognitive capabilities. It is important to have a professional who is knowledgeable about ASD and experienced in a variety of cognitive assessments to conduct the tests administered to your child. Typically, cognitive tests are only administered and interpreted by psychologists or psychometricians.

Speech and Language Assessment

Central to a diagnosis of an ASD are deficits in: (1) verbal and nonverbal communication, and (2) social interaction. Although a speech language pathologist (SLP) cannot diagnose a child with ASD, he or she does play a significant role in the diagnostic process and educational planning of your child's speech and language skills. Generally, an SLP evaluates *how* your child communicates with words, gestures, and symbols. A speech and language assessment also looks at your child's ability to understand language, initiate and use language, and communicate with others. Ideally, the results of a speech and language assessment are used to develop interventions to increase your child's ability to communicate.

A speech and language skills assessment will usually involve observing your child interacting with others in a variety of contexts, such as at home or in school. An SLP may observe you and your child together and work directly with your child on a variety of tasks.

Depending on your child's verbal language skills, some standardized tests may be appropriate. For a nonverbal child, however, more direct observations should be done to assess speech and language.

Given the challenges children with ASDs have in understanding and communicating with others, a speech and language assessment is key to determining how to support and guide your child. Like other areas of assessment, a comprehensive speech and language assessment will yield specific information to assist with the development of educational planning.

Adaptive Behavior Assessment

An adaptive behavior assessment looks at "real-life" skills, such as caring for self or independent functioning. Personal skills, home-related skills, and community living skills are assessed. Adaptive behavior skills often vary, depending on the age of the child. For example, in young children, certain self-help skills would include dressing, eating, and toileting. For older children, it would include skills like selecting and caring for appropriate clothing, and eating without parental supervision in the cafeteria and at restaurants. An adaptive behavior assessment gives you and the professionals working with your child information regarding (1) the extent to which your child can function independently; (2) the level of direct supervision they might require; and (3) specific areas of deficit that should be targeted for improvement.

Adaptive behavior refers to age-appropriate typical performance of daily activities based on social standards and expectations (Sparrow, Balla, & Cicchetti, 1984). Unlike their typical peers, children with ASDs do not learn well by simply watching and imitating others. Thus, they often have challenges in the area of adaptive behavior, which tend to become more apparent as your child gets older. The adaptive behavior assessment will examine your child's range of adaptive behavior skills and help identify areas that will require more direct and intensive instruction. The information from an adaptive behavior assessment can help you and the professionals who work with your child set goals for both school and home, during treatment planning and map out a course to promote your child's greatest degree of independence across environments.

Unlike traditional assessments or standardized tests, adaptive behavior assessments rely primarily on information provided by someone who is familiar with your child's performance in real-life settings, typically either you or a teacher. Adaptive behavior is examined in this indirect manner because the assessment considers performance over time and in real-life situations that do not lend themselves to practical observation. Adaptive behavior assessments are often administered within a structured or semistructured interview format (i.e., the evaluator asks you a series of questions) or as a selfreport measure (i.e., you answer the questions on your own).

Social Functioning

Social functioning is a common area of assessment for children with ASDs as they typically display a wide variety of deficits and challenges in social functioning that, similar to adaptive behavior skills, may become more evident as they grow older. Usually, a social functioning assessment will be conducted as part of an adaptive behavior assessment or a speech and language assessment, but it can sometimes be completed as a separate assessment.

It is important to understand, however, that to assess the many factors associated with social functioning, it is helpful to employ several measurement approaches as opposed to only one. For example, rating scales can be effective in identifying specific social behavior excesses and deficits, but they do not address context variables, such as with whom your son or daughter is interacting or where the interaction is taking place. Conversely, behavioral observation may not identify the full range of social behavior necessary for programming in all areas that are important to the individual. Therefore, to best assess social functioning, a multi-modal approach involving rating scales, behavioral observation, and functional assessment offers the most complete picture of your child.

Academic Assessment

Sometimes social and behavioral aspects of autism in the school setting overshadow the primary reason children go to school—to learn. Academic functioning or academic achievement assessment refers to the skills your child has learned through direct instruction, independent study, or life experience. In addition to highlighting *how* your child learns, an assessment of academic functioning will tell you *what* your child has learned. Achievement tests are designed to assess proficiency in various learned skills, such as reading, math, spelling, writing, vocabulary, or subject-specific knowledge like science and social studies. This information can then be used to inform educational instruction, planning, and monitoring of your child's progress in an academic environment.

The purpose of an academic assessment is to determine your child's strengths and deficits in relation to his or her educational setting. This assessment can include both <u>formal</u> and <u>informal assessment methods</u>. A formal academic assessment usually involves having your child take <u>norm-referenced</u>, <u>standardized</u> tests. These types of tests allow professionals to compare your child's performance to other, same-age children; assess your child's individual academic levels; and begin planning individually determined academic interventions. School-wide, state academic tests are examples of formal academic assessments. There are no formal, norm-referenced assessments designed specifically for children with ASD.

Informal academic assessment then becomes the tool for looking at how your child learns in a nonstandardized way. It may include interviews, reviews of your child's school records, or a curriculum-based assessment—small, focused assessments of specific topic areas or abilities (e.g., a classroom test or quiz). Unlike formal assessment, informal assessment is more flexible to administer and can be changed to accommodate different learners. While the person using an informal assessment must be skilled, this type of assessment can be created to meet the needs of your child. Informal assessments are typically conducted by certified special or regular education teachers, as well as other classroom- or school-based educational specialists. Informal academic assessment is needed to receive ongoing information about your child's progress in an academic setting.

Curriculum-Based Assessment

In a curriculum-based assessment (CBA), the assessment items are developed from your child's own school curriculum; thus, it evaluates specifically what your child has learned using his or her own school programs. CBAs are useful to track whether your child is learning at school, and to determine his or her progress in learning the school's materials. This assessment only looks at whether your child knows the information taught or can perform a skill following instruction; it does not assess how your child approaches a task. Of particular note: a CBA cannot be used as a basis for determining your child's diagnosis or eligibility for services.

The ultimate goal of an academic assessment is to determine your child's learning strengths and weaknesses, and what educational methods are most appropriate for your child. Academic assessment results can then be used to develop educational plans and inform his or her IEP. These assessments also help to evaluate how well a particular intervention has worked in a school setting. Academic assessments should be administered on a regular basis to provide up-to-date information on how well your child is doing educationally, and what other challenges may need to be addressed.

Academic Assessment Example

At the beginning of fourth grade, Zach's IEP will need to be updated. To evaluate his progress in school and set new goals, an educational specialist conducts an academic assessment. In addition to re-administering the Wechsler Individualized Achievement Test, his teachers develop a curriculum-based assessment encompassing the skills and lessons taught previously to Zach. The assessment focuses on Zach's abilities in reading, math, and written language. The results reveal that Zach is at the same level as his classmates in math; however, his reading comprehension skills are below average. Thus, Zach's IEP is updated to include additional goals and proposed interventions to target his reading comprehension skills.

Functional Behavioral Assessment

If your son or daughter engages in challenging (e.g., aggressive) or inappropriate (e.g., screaming) behavior, a functional behavior assessment (FBA) may be called for. An FBA gathers a significant amount of information about a child's specific behavior or group of behaviors. As such, the central purpose of an FBA is to determine the function or

purpose of this challenging or unwanted behavior. Once the function of the behavior is determined, trained behavior specialists working with other professionals and family members can develop interventions to decrease the occurrence of these challenging behaviors and increase the number of more appropriate or adaptive behaviors.

During an FBA, the professional conducting the assessment directly observes your child at different times and in different settings over a period of time. During these observations, he or she systematically records information on the environment, the actual behavior, and what your child achieved as a result of the behavior. The results of an FBA allow professionals to identify the challenging behavior and the circumstances leading up to the behavior, and then to create a <u>behavior intervention plan</u> for your child that has specific goals and methods for changing challenging behaviors. An FBA is a comprehensive process that may involve interviews, records review, rating scales, direct observation, and data collection and analysis. Whatever indirect measures are used (i.e., interview, records review, or rating scale), a comprehensive FBA should always include direct observation and data collection and analysis.

Functional Behavioral Assessment Example

To inform the development of Jake's IEP, his school recommends a functional behavioral assessment (FBA). A behavior analyst first completes several questionnaires and behavior rating scales with Jake's teacher and parents, while also reviewing his school records. Then, this evaluator observes Jake in several environments at school (classroom, cafeteria, recess) to assess any challenging behaviors or situations. When the evaluator observes challenging behaviors, he collects data on any number of factors preceding the behavior, as well as the apparent consequences of the behavior (e.g., removed from the area). The evaluator then summarizes the results of the FBA in a comprehensive document that is used to guide the development of a behavior intervention plan.

Occupational Therapy/Physical Therapy Assessment

Children with autism often have difficulties with motor skills, such as hand/eye coordination, which are important for daily life. Occupational therapy (OT) and physical therapy (PT) assessments are used to help identify skill deficits that have a direct and negative impact on your child's ability to function independently in his or her daily routines. The goals of OT and PT generally focus on increasing physical strength and improving visual perceptual skills (e.g., the ability to recognize and identify shapes, objects, and colors), fine and gross motor skills (e.g., handwriting, jumping, and skipping), sensory modulation (processing information from the environment more effectively), and cognition (understanding the steps involved to complete a specific task).

An OT and/or PT assessment looks at your child's skills in the areas showcased in the box on the next page. Both standardized and nonstandardized assessment tools, as well as parent interviews and direct observation of your child, will be used to assess his or her performance.

Areas Evaluated During OT and/or PT Assessment

<u>Fine Motor Skills</u>: movement and dexterity of the small muscles in the hands and fingers <u>Gross Motor Skills</u>: movement of the large muscles in the arms and legs <u>Visual Motor Skills</u>: movement based on the perception of visual information <u>Oral Motor Skills</u>: movement of muscles in the mouth, lips, tongue, and jaw, including sucking, biting, chewing, and licking <u>Self-Care Skills</u>: daily dressing, feeding, and toilet tasks <u>Motor Planning Skills</u>: ability to plan, implement, and sequence motor tasks <u>Sensory Deficits/Excesses</u>: ability to interpret and organize various sensory experiences, including sight, sound, smell, touch, movement, body awareness, and the pull of gravity

The results from an OT and/or PT assessment can help you and your child's teacher implement individualized strategies to promote greater levels of independence and structure the environment to both minimize sensory distracters or challenges and increase individual tolerance to such distracters. OT and/or PT assessments can also help you and your child's teachers develop strategies to develop your child's skills at home, offer suggestions on how to break down a task into manageable steps for your child, and facilitate transitions from home to school while developing your child's skills.

Social-Emotional Assessment

At different times in their lives, children with ASDs may experience emotional difficulties in the form of anxiety and other mood disorders, such as depression or bipolar disorder. For that reason, the assessment process may include measures of social-emotional well-being. This type of assessment can add valuable information in support of an FBA and the subsequent development of an appropriate behavior support plan. Such assessments are most helpful when they target specific symptomatology (symptoms or difficulties that they experience).

For example, if the school psychologist suspects clinical depression, she could work to assess changes in sleep patterns or appetite, along with measures of changes in affect/mood or increased lethargy (tiredness), to either rule in or out a mood disorder. Particularly for individuals who may not have the language capabilities and are unable to accurately self-report, such a direct assessment of student behavior may be very useful and appropriate.

Educational Placement Evaluations

A distinct, yet critically important, type of assessment is the educational placement evaluation. An educational placement evaluation is the process by which you and your child's IEP team work to determine the extent to which a particular educational program is likely to be effective for your child. The educational placement evaluation looks at the chain of events that begins with the identification of a student's unique strengths and areas of need, and ends with an informed opinion on the potential of the IEP, as implemented by the program, to address your child's unique educational and behavioral needs.

There are a variety of reasons why an educational placement evaluation might be conducted. Many school programs conduct periodic self-evaluations to ensure that their program is operating in accordance with their own educational guidelines or to evaluate the appropriateness of a placement for a particular student. In some instances, specific evaluation procedures are required by outside state or funding agencies. As part of a placement evaluation, you will generally observe classrooms, review data or progress notes, and evaluate the "fit" between your child's needs and the school program in preparation for a Placement Team meeting.

In the event of a disagreement between you and your school district, a hearing officer may be called on to evaluate the appropriateness of a school program for your child. In each of these situations, it is often helpful to have an independent expert conduct a thorough assessment of your child's unique needs in relation to both the child's IEP and the actual implementation of that IEP.

In some respects, an educational placement is similar to a diagnostic evaluation. Evaluations should be conducted by experienced professionals working in the field of autism treatment and could include those with professional training in a variety of disciplines, including psychology, behavior analysis, and special education at the master's or doctoral level. Evaluators should not only be knowledgeable practitioners in the field of autism education, but also have training and experience that would qualify them as experts in program design and implementation. In particular, evaluators should have experience that is relevant to your child.

For example, those who work primarily in an academic setting may not have the clinical expertise to provide a detailed description of educational protocols, or those working primarily with adults may not be best suited to assess a very young child. Similarly, those with experience with young children may not be ideal evaluators of a program for a young adult. Because there are currently no state or national standards to regulate the administration of this kind of evaluation, it is important to learn about an evaluator's credentials, check references, and request sample reports before engaging the services of an evaluator.

Once the evaluator has gathered all of the information and conducted his own direct observations of your child, he prepares a report. The report generally summarizes what specific activities the evaluator has conducted, key information provided by those interviewed, and results of any additional testing conducted. It also offers specific educational recommendations that describe if and how the educational environment and educational programming is, or is not, appropriate to meet the needs of your son or daughter. Should the evaluator identify areas where your child's needs are not being met, then he should offer further specific recommendations about how, when, where, and by whom different educational strategies should be implemented to help the parents and educational team make an effective change. Although written reports are helpful, evaluators will often meet with parents and/or have a dialogue with school personnel to ensure that everyone understands what the findings and recommendations are, and how to make meaningful changes to instructional settings to help the child achieve greater success.

References

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CHAPTER 4: ASSESSMENT PROCESS

We have covered a significant amount of information about what types of assessments may be conducted and the purpose of each assessment. This section will cover the process or the steps that you and your family will take from the initial referral for a diagnosis through to the assessment.

Referral Process

The referral process can differ from one family to the next, and the referral can come from a number of sources. You may approach your family physician out of concern for your child. Conversely, your pediatrician may approach you and your family regarding developmental concerns and recommend that your child receive an assessment. Finally, the school may recommend that your child be evaluated due to concerns about his or her behavior or rate of educational progress.

As the parent of a child with ASD, you do not need to be reminded that the responsibility is often on you. If you have significant concerns about your child's development or progress, do not wait for a professional to second your concerns. Follow your instincts and actively seek a referral for a diagnostic assessment.

During the referral process, be sure you understand the reason behind the referral and, in particular, what questions you expect to have answered about your child as a result of the assessment. At this point, one of the most important preliminary steps you can take is to ensure the individual conducting the assessment has experience working with and assessing children with ASDs. This will facilitate accurate and reliable assessment results.

If you are interested in finding professionals on your own to obtain an assessment of your child, you can begin by soliciting recommendations from your pediatrician, neurologist, other involved professionals, or other parents of children with ASDs. In addition, many autism-related Web sites offer searchable databases of professionals in your area.

"Whenever an assessment is done, parents need to make certain that clinicians are aware of previous testing that has recently been done. Some tests are not valid if repeated within a specified time frame. This is particularly true with outside or independent evaluations completed during the 12 months prior to a school-based re-evaluation."

- Parent of child with autism

Who Conducts Assessments

Only qualified professionals with experience working with children with ASDs should conduct assessments with your child. The purpose of the assessment will determine what type of professional will conduct it. For example, a neurological assessment would be conducted by a trained pediatric neurologist or psychiatrist and should not be done by

professionals without qualifications or experience doing a neurological assessment. The next section provides more information on who should conduct particular types of assessments.

When you receive a referral for an assessment, it is important for you to learn about the professional's expertise and credentials. Be sure to check references and research them to learn about his or her level of experience and manner in working with children with ASDs. You want to find the most appropriate professional to work with you and your child. By researching this additional information, you will be more confident in your decision.

Who Conducts What Type of Assessment?

Different professionals perform different types of assessments. Again, the "who" depends on the specific referral question, as well as the individual's expertise. The chart below provides a general picture of which professionals conduct which assessments. *This is an illustration only, not an all-inclusive list.*

Assessment Type	Who Can Conduct
Diagnostic	 Developmental pediatrician Psychologist Psychiatrist Neurologist
Cognitive	 Neurologist Psychologist Psychiatrist
Speech and Language	 Speech and language pathologist
Adaptive Behavior	 Psychologist Behavior Analyst Clinical Social Worker
Social Functioning	PsychologistPsychiatrist
Academic Functioning	 School district evaluator Psychologist Special education teacher
OT and/or PT	Occupational therapistPhysical therapist
Functional Behavior	PsychologistBehavior analyst
Emotional/Psychological	PsychologistPsychiatrist

What Happens During an Assessment?

What occurs during an assessment depends on the type of assessment being completed. Initially, there may be an interview with you, the parent. Sometimes, a single member of the evaluation team will interview you; other times, each member of the team may wish to speak with you. The interviews will generally focus on your child's developmental and medical history in addition to family medical history and day-to-day functioning. Depending on the professional and the primary focus of the assessment, the interview may extend to other topics (e.g., current social skills).

As part of the assessment, the evaluation team may ask you and your child to complete some tasks together. At other times the team may ask you to complete some standardized measures and/or checklists designed to give the professional additional, often necessary, information. These checklists and measures frequently relate to your child's adaptive behavior, emotional status, or social functioning. In addition, the team may ask you to provide a release for medical records or records from a previous school.

Assessments vary in length. Some may take a few hours; others may last a few days, depending on the complexity and amount of information being gathered. After the assessment is complete, the professional will create a written report of the results and observations from the assessment. **Clinical assessments should include a discussion of treatment recommendations relevant to the assessment outcomes.**

Once the evaluation team's report is written, the team should meet with you to review the assessment results and recommendations. If a meeting does not occur, then it is your responsibility to ask for one. At this meeting you will have the opportunity to ask questions and get any clarifications you feel necessary. A specific goal of this meeting should be for you to receive both accurate assessment results and, equally important, information on the next steps and services for your child based on the assessment.

If the assessment was specifically completed as part of the IEP process, the review may occur in the context of an IEP meeting. No matter what the setting, take the time to understand the assessment results and how they relate to your child's development. Feel free to ask each member of the IEP or assessment team to clarify any information that you do not understand. The team, with your input, then must decide what the educational and behavioral goals will be and the most appropriate interventions and services to support your child and your family.

Assessment Tip

Ask to receive the report for any assessment before any meetings with the evaluation or IEP teams. In this way, you will have time to review the information beforehand, prepare for the meeting, and formulate questions. It is also important to keep a record of your child's assessment results to monitor his or her progress. Please make several photocopies of the Evaluation Review Chart (see Appendix F) and write in your child's assessment results after each assessment. You can use the document to monitor their development in various skill areas.

Limitations of Assessment

Assessment is a means of gathering specific information about your child's functioning across different domains. It is not without its limitations. Assessment can be a subjective process, the outcome of which is contingent on the skill of the individual conducting the assessment, the measures used, and their interpretation.

Assessment captures your child's functioning at a specific point in time. Because children with ASDs do grow and change over time, it is important to have re-evaluations completed at periodic intervals (usually a minimum of 3 years). Remember to keep copies of previous assessments to gauge your child's progress over time. See Appendix E for an Evaluation Review Chart to help record and keep track of assessments and their results.

Each type of assessment measure has its own strengths and weaknesses. Therefore, assessment results need to be interpreted with some caution, taking into account the specific type of measure used, its potential limitations, and the implications for the results.

Given that assessment results tend to highlight particular areas of deficit, they can be somewhat difficult or disheartening to hear. It is important to realize that this snapshot of your child represents only current status and not future potential. From a very practical point of view, assessment results are best understood as basal scores (the worst your child could do under unfavorable conditions) and not as maximal scores (the best your child could do under ideal circumstances). So if the scores on a particular assessment are discouraging, you can ask for a reassessment. If the score on reassessment remains discouraging, then you should view the score as the baseline from which your child can move beyond and acquire additional skills, increased competencies, and greater levels of independence.

A Final Word of Advice

Assessment for whatever purpose results in a "snapshot" of your child's strengths, deficits, challenges, and abilities at a given point in time. As such, assessment results can provide valuable information regarding the development of both long-term goals and short-term objectives for your child. These goals and objectives can both build on your child's documented strengths or target specific areas of deficit in need of more direct intervention. It is important to work closely and collaboratively with all of the professionals who work with your child. Collaboration should begin with the assessment process and extend throughout your child's academic career to ensure that you help shape the goals and expectations for your child and his or her future.

RESOURCES/APPENDICES

Appendix A: Overview of Assessment Terms

Throughout any assessment process, you will receive detailed information and reports about your child with ASD. The results of the assessment will be summarized for you and will include details and/or terms that may seem confusing or difficult to understand. There are a variety of terms related to the assessment process that will be useful for you to know to fully understand the information about your child, why the assessment was done, and what you can do with the results of the assessment.

This section provides definitions of some of those words and phrases common in assessment terminology, and it explains why these terms are important and/or how they are used in the assessment process. Please keep in mind that these terms may not apply in all assessments. Nonetheless, it will be useful for you to have a general overview and understanding of the common assessment terminology.

Assessment Term	Definition	Description
Auditory Processing	The way information that is heard is understood.	A child with ASD may have difficulty learning from hearing lectures in school; children with ASD are often more visual learners.
Age Equivalents	The score that represents the achievement level of an average child at a corresponding chronological age in a norm group. Age equivalents should not be used for making diagnostic or placement decisions.	Research shows that children who are 8 years, 2 months old earn an average score of 27 on a particular measure. Therefore, any child who earns a score of 27 correct items on that same measure will have a score that is equivalent to a child aged 8 years, 2 months.
Basal	A technique for decreasing testing time, limiting frustration, and increasing the proportion of appropriate-level items taken by the student. Most tests designed for individuals with a wide range of ages or abilities have rules for assuming items below a certain point would have been passed had they been given.	Basals are defined by rules such as the lowest five consecutive passes, the highest six consecutive passes, or the lowest block of all items passed or passing all of the items at a particular age level. Basal rules sometimes can inflate the scores of certain learning disabled students, who may hit and miss erratically, or who may have wider than usual ranges of strengths and weaknesses.
Baseline	Information gathered at an initial assessment to measure any changes after an intervention. A baseline assessment occurs prior to any instruction or intervention.	Your child may be given a social functioning assessment and then reevaluated a year later. The first assessment will serve as a baseline to compare his progress on the second assessment.
Behavior Intervention Plan	A written document with strategies to help a child in a school environment.	Following a Functional Behavior Assessment, a professional may write a behavior intervention plan to help teachers implement new strategies in the classroom.

Assessment Term	Definition	Description
Criterion- Referenced Assessment	An assessment that measures what a child is able to do or the skills that he or she has, not in comparison to the performance of other children.	Predetermined performance levels are set for criterion-referenced assessments. This type of assessment can be used to tell professionals if your child has learned what he is expected to learn. For example, the Brigance Inventory is a criterion-referenced assessment that evaluates aspects of child development, such as self-help, knowledge, and comprehension; speech and language; and pre- academics. It is flexible and adaptable to use, and provides patterns of a child's strengths and challenges that can be used for intervention planning.
Expressive Language	Communicating using spoken words, gestures, or signing,as well as communication through pictures and writing.	A speech and language assessment should always evaluate a child's ability to express thoughts and feelings using various types of communication.
Formal Assessment	Administering norm-referenced standardized tests that are useful to identify global strengths and concerns.	The Wechsler Individualized Achievement Test is an achievement assessment that would be used as part of a formal assessment. It measures reading, math, language, and writing; scores from this assessment are compared to norms.
Formative Evaluation	Gathering information about the implementation of an intervention or program. A formative evaluation can help guide the development of interventions and assess ways to improve these interventions.	If a child with ASD has begun a new educational intervention at school, a formative evaluation of this program, which would include the process of the intervention, the child's accomplishments, and problems during implementation, would be interpreted to make improvements to the intervention.
Grade Equivalents	A grade equivalent is the grade level that corresponds to a particular score obtained from a norm-referenced test. It is often reported based on grade level and month in grade. Grade equivalents should not be used for making diagnostic or placement decisions.	A score of 4-3 represents the performance level of a student in the fourth grade in the third month of the school year, but it does not represent the level of expertise that a child possesses in a topic.
Informal Assessment	Nonstandardized forms of assessment that can look at how a child learns; there is flexibility in their administration.	Assessment procedures, such as interviews, observations, and collecting academic records, are examples of informal assessment.
Informant	The person completing a questionnaire or participating in an interview.	There may be multiple informants in an assessment, including parents, teachers, and the child.
Instrument or Measure	These terms are used interchangeably to indicate tools used in the assessment, such as a questionnaire or semi- structured interview.	Any type of test, checklist, or interview that is used during an assessment with your child is considered an instrument or measure.

Assessment Term	Definition	Description
Internal Consistency	All items in a questionnaire or assess- ment tool measure the same concept or characteristic that they are intended to measure.	The Autism Diagnostic Interview- Revised, a parent interview that looks for symptoms of autism in children, has good internal consistency; it assesses specific characteristics that may lead to an ASD diagnosis.
Inter-Rater Reliability	A statistical method used to determine if different raters/observers give consistent reports of the same behavior.	The Autism Diagnostic Observation Schedule, a semi-structured assessment, has excellent inter-rater reliability; if two different certified professionals use it and they achieve similar results.
Mean	The average score; all scores from a measure are added and divided by the total number of scores.	Your child's score on a test may be reported along with the mean to provide a comparison to others.
Nonverbal Intelligence	A measure of intelligence that does not involve spoken language.	A child with ASD may not be able to communicate well, which may result in lower scores on an IQ test. However, assessments of nonverbal intelligence, which emphasize spatial skills and gestures, may reveal he has a higher IQ.
Norm-Referenced Assessment	A standardized test or assessment that compares a child's performance to the performance of peers the same age. This type of assessment can tell you how your child compares to other children the same age or in his or her grade.	During the development of norm- referenced assessments, a large representative group of children take the test, and their scores are then used to determine the "norms." Then, when other individual children take the test, their score is compared to the norms. However, some tests may not have been "normed" with children with ASD.
Norms	A comparison score that is used to indicate "normal" performance on an assessment.	As discussed in norm-referenced assessment, the use of norms provides professionals with comparison scores to children of the same age.
Percentile or Percentile Rank	The percentage of scores that falls at or below a particular score.	If your child scores in the 85 th percentile on a test, his score was better than 85 percent of other children who took the test. A percentile is different than a percentage; a score of 85% indicates that he correctly answered 85% of the questions correctly.
Psychometric Properties	The statistical properties that evaluate the adequacy of an instrument, measure, or assessment.	Psychometric properties may include terms like reliability, validity, and internal consistency.
Receptive Language	The ability to understand spoken and written language or gestures.	Children with ASD may have difficulty with standardized tests that require the instructions to be given verbally because they may have trouble with receptive language.

Assessment Term	Definition	Description
Reliable	A reliable assessment tool provides con- sistent or similar results every time it is given.	When a diagnostic assessment tool is used with your child, you want it to be reliable so that if it was given again, the same results would be obtained.
Scales or Subscales	A questionnaire or measure used in an assessment may be divided into different areas or scales/subscales that it evaluates.	The Asperger Syndrome Diagnostic Scale is divided into five subscales: language, social, maladaptive behavior, cognitive, and sensorimotor.
Self-Report Measure	An instrument that is completed by an individual; the questions are answered based on the views, feelings, or experiences of the individual.	A measure of depression must be completed by the person suspected of being depressed, thus the term self- report.
Semi-Structured Interview	Standardized interviews that are developed for assessment. Semi- structured refers to the fact that the administrator of the interview follows the interview format but can be more open and ask more questions. There are questions that the administrator must ask; however, he or she has flexibility in their order and can ask more detailed questions to obtain more information. The interview can flow more like a conversation.	The Autism Diagnostic Interview- Revised is an example of a semi- structured interview that clinicians use with parents during a diagnostic assessment.
Standardized	An assessment developed by experts that is administered according to specific guidelines. The assessment must be used specifically as it was designed, or the results are not valid.	A standardized test may be an intelligence test, academic test, or personality test. These tests need to be given in a specific manner for the results to be accurate.
Standard Deviation	A standard unit of measure that pinpoints more exactly how far a standard score falls from the mean (average score). This unit of measure is frequently used in IQ testing.	If a child earned a standard score of 70 in mathematics that would indicate the child's mathematics ability is 2 standard deviations below the mean, which indicates that the child's math abilities are below average.
Standard Scores	A score that provides information about how a child has performed using a predetermined unit of measurement. The score is obtained from the mean and the standard deviation. Just as a mile is a standard unit of measure for distance, the standard score is a specific unit of measure in assessments. See glossary for explanation about mean and standard deviation.	Intelligence tests often have a mean score (or average) of 100 and a standard deviation of 15. If a child has a standard score of 85, the score is 1 standard deviation below the mean (the average score).
Structured Interview	This can also be called a standardized interview. The questions are asked in the exact same order every time. Questions are asked exactly as they appear in the interview.	The Parent Interview for Autism is an example of a structured interview. The administrator must follow the interview exactly and cannot deviate from the questions.

Assessment Term	Definition	Description
Summative Evaluation	A type of evaluation that looks at the outcomes of a program or intervention. A summative evaluation reports the final results of a program.	A summative evaluation may be conducted after a program has been done with a child with ASD to look at his or her areas of improvement and outcomes from the program.
Validity	An assessment is valid if it measures what it was designed to measure.	If a clinician wants to assess cognitive functioning in your child with ASD, it's important that the measures used truly assess cognitive functioning, and not another skill, such as social functioning.

Appendix B: Questions to Ask Before and After an Assessment

BEFORE

What type of assessment will be done?

What kinds of information will this assessment provide?

What is the time requirement for this assessment?

What will my child be asked to do?

What is the goal of this assessment?

Will I receive a written report based on this assessment? If so, when?

Will the report contain treatment recommendations?

AFTER

What are the results of the assessment?

How do these results impact my child?

How can we use these results to improve the services my child receives?

When should this assessment be redone?

How can I use the results of this assessment to help my child at home?

Are the clinicians available, should I have any questions or need a follow-up assessment?

Appendix C: How to Prepare for an Assessment

This page provides suggestions to help you and your child prepare for assessments.

- Look into the experience of the professional conducting the assessment; research his or her credentials and experience working with children with ASD.
- Be sure to understand what type of assessment will be done.
- Find out the length of time required for the assessment. You may need to arrange for childcare.
- Explain the assessment to your child. It is important to explain to him or her what will happen, how long it will take, and what he or she will need to do.
- Have your child's medical and school records organized and with you. This way, you can refer to them as needed during the assessment.
- Review your child's IEP before the assessment.
- Review the appropriate sections in this guide prior to the assessment.
- Develop a list of questions to ask the professional prior to the assessment.
- Bring paper and pencil to take notes during the assessment.

Appendix D: Frequently Used Standardized Assessments

Cognitive Ability Tests

Intelligence Quotient (IQ)

DAS-pre/DAS-sch—Differential Ability Scales–Preschool Version/School-Age Version

The DAS provides information on areas of strengths and weaknesses for a variety of cognitive abilities, including verbal and visual working memory, immediate and delayed recall, visual recognition and matching, processing and naming speed, phonological processing, and understanding of basic number concepts. The preschool version is meant for children between the ages of 2.5 and 6. The school-age version is for children between the ages of 6 and 18 (The Psychological Corporation; Elliot, 2007).

K-ABC II—Kaufman Assessment Battery for Children, 2nd Edition

The K-ABC II measures cognitive ability of children ages 3–18. Scales in this battery include Simultaneous/Gv, Sequential/Gsm, Planning/Gf, Learning/GIr, and Knowledge/Gc. Each scale consists of several subtests that are administered based on age group (AGS; Kaufman, A. S., & Kaufman, N. L., 2006).

SB-IV/SB-V—Stanford-Binet Intelligence Scale, 4th Edition/5th Edition

The SB-IV/SB-V is a standardized measure that assesses intelligence and cognitive abilities in children and adults ages 2–23. The Stanford-Binet scale is intended to measure intelligence across four areas: verbal reasoning, quantitative reasoning, abstract/visual reasoning, and short-term memory. The Stanford-Binet may be a good choice for individuals with autism because it has a lower floor (a greater number of items meant for a lower developmental age). It also includes more nonverbal options and subtests that measure memory (Riverside Publishing Co.; Roid, 2003).

<u>WPPSI-R/WPPSI-III—Wechsler Preschool & Primary Scales of Intelligence-Revised,</u> <u>3rd Edition; WISC-III/WISC IV—Wechsler Intelligence Scale for Children, 3rd</u> <u>Edition/ 4th Edition; WAIS-R/WAIS-III—Wechsler Adult Intelligence Scale-Revised,</u> <u>3rd Edition</u>

The Wechsler Intelligence Scales are a widely used series of standardized tests for evaluating cognitive abilities and intellectual abilities in children and adults. The intelligence tests are broken down into a variety of subtests, measuring verbal and performance abilities. The verbal scales measure general knowledge, language, reasoning, and memory skills, while the performance scales measure spatial, sequencing, and problem-solving skills. The WAIS-R /WAIS-III is designed for adults ages 16–74 (The Psychological Corporation; Weschler, 1997). For persons 7–16 years, the WISC-III and WISC-IV are used (The Psychological Corporation; Weschler, 2003).

The WPPSI-R and WPPSI-III are used for children 2.5–7 years old (The Psychological Corporation; Weschler, 2002).

Nonverbal IQ

CTONI—Comprehensive Test of Nonverbal Intelligence

The CTONI measures the nonverbal reasoning skills of individuals between ages 6 and 18. This test consists of six subtests that involve viewing pictures and completing analogies, categorizations, and sequences by pointing at the response (PRO-ED, Inc.; Hammill, Pearson, & Wiederholt, 1997).

Leiter/Leiter-R—Leiter International Performance Scale/Revised

The Leiter/Leiter-R is a nonverbal measure of intelligence intended for children ages 2–20. The scale is broken down into two batteries of subtests: Visualization and Reasoning, and Attention and Memory (Stoelting Publishing Co.; Roid & Miller, 1997).

TONI-R/TONI-3—Test of Nonverbal Intelligence-Revised/3rd Edition

The TONI-R/TONI-3 is a norm-referenced measure of intelligence, aptitude, abstract reasoning, and problem solving that is used without language. Instructions are pantomimed. While this measure does not require verbal responding, it may be confusing for individuals with autism to understand pantomimed directions given their difficulty understanding nonverbal communication (PRO-ED, Inc.; Brown, Sherbenou, & Johnsen, 1997).

UNIT—Universal Nonverbal Intelligence Test

The UNIT assesses general intelligence in children ages 5–17 years in a nonverbal format. This test is available in an Abbreviated Battery, Standard Battery, or Extended Battery version and may contain up to five scales measuring memory and reasoning (Riverside Publishing Co.; Bracken & McCallum, 1998).

Developmental Measures

BSID-II/BSID-III—Bayley Scales of Infant Development, 2nd Edition/3rd Edition

The BSID-II/BSID-III scales measure the mental and motor development, and test the behavior of infants from 1–42 months of age. This measure is used to describe the developmental functioning of infants and to assist in diagnosis and treatment planning for infants with developmental delays or disabilities (Harcourt Assessment, Inc.; Bayley, 2005).

PEP-3—Psychoeducational Profile, 3rd Edition

The PEP-3 is a test designed to assess communication skills and behaviors of children with autism and communicative disabilities. The PEP-3 is designed to use with children between the developmental age of 6 months and 7 years. The test involves a performance section, during which time the child is observed during play and his or her behaviors are evaluated. The PEP-3 examines a child's communication skills (cognitive verbal/preverbal, expressive language, receptive language), motor skills (fine motor, gross motor, visual-motor imitation), and maladaptive behaviors (affective expression, social reciprocity, characteristic motor behaviors, and characteristic verbal behaviors). In addition to including a performance section, the PEP-3 involves a Caregiver Report; the child's parent or caregiver evaluates the child's developmental level as compared to typical children. The PEP-3 is often used to aid educational programming for young children with disabilities and to help plan older children's IEPs (PRO-ED, Inc.; Schopler, Lansing, Reichler, & Marcus, 2004).

Autism-Specific Measures

Autism Screening Tests

CARS—Childhood Autism Rating Scale

The CARS is a 15-item observation tool used to characterize behaviors in children older than age 2. Based on observation of the child, their behaviors are rated on a 4-point scale according to how much the behavior deviates from normal development. The overall rating of behaviors categorizes the child as nonautistic, mild-moderately autistic, or severely autistic (Western Psychological Services; Schopler, Reichler, & Ro, 2006).

GADS—Gilliam Asperger's Disorder Scale

The GADS is a scale designed to differentiate children with Asperger syndrome from children with autism and other behavioral disorders between the ages of 3 and 22. This scale consists of 32 items that describe specific, observable behavior and 8 additional items for parents to provide a developmental history of the child (PRO-ED; Gilliam, 2006).

GARS/GARS-2—Gilliam Autism Rating Scale/2nd Edition

The GARS/GARS-2 is used to help identify and diagnose autism in children and young adults ages 3–22. It can be completed by a parent, teacher, or professional who knows your child well. It can also be used to estimate the severity of the disorder. The GARS/GARS-2 is based on DSM-IV criteria and has four subtests: stereotyped behaviors, communication, social interaction, and developmental disturbances (PRO-ED, Inc.; Gilliam, 1995; 2006).

M-CHAT—Modified Checklist for Autism in Toddlers

The M-CHAT is designed to screen for autism in toddlers. A parent can complete the items independently as it does not require clinician observation. Positive results suggest a high risk for autism. This checklist should be used only to determine whether further diagnostic testing for autism is warranted; it should not be used to obtain a formal diagnosis (*Journal of Autism and Developmental Disorders*; Robins, Fein, & Barton, 1999).

SRS—Social Responsiveness Scale

The SRS is a 65-item questionnaire completed by a parent or teacher to assess a child's ability to engage in typical reciprocal social interactions. A deficit in this ability is characteristic of pervasive developmental disorders. The parent or teacher answers questions about observed aspects of a child's reciprocal social behaviors on a scale from "0" (never true) to "3" (almost always true). The SRS includes items that serve to determine a child's social awareness, social information processing, capacity for reciprocal social responses, social anxiety/avoidance, and characteristic autistic preoccupations/traits (Western Psychological Services; Constantino, 2002).

STAT—Screening Tool for Autism in 2-Year-Olds

The STAT is an early identification tool to screen for autism in children between 24 and 36 months of age. This screening tool consists of 12 items that assess different aspects of behavior involving playing, requesting, directing attention, and motor imitation (Stone, Coonrod, & Ousley, 1997).

Autism Diagnostic Tests

ADI-R—Autism Diagnostic Interview, Revised

The ADI-R is a semi-structured interview for caregivers used to obtain information about a child's early development and current functioning. The interview includes five sections: opening questions, communication, social development and play, repetitive and restricted behavior, and general behavior problems. The responses concerning the child's behavior are coded using a scale from 0 to 3, with "0" being absence of behavior and "3" representing extreme severity (Western Psychological Services; Lord, Rutter, & Le Couteur, 2003).

ADOS—Autism Diagnostic Observation Schedule

The ADOS is a standardized measure that uses a combination of structured and unstructured activities to assess the following areas: communication, social interaction, play, imagination, and stereotyped behaviors and restricted interests. This measure uses four different modules that are each individually designed for a particular developmental age and language ability level. Module 1 is used with children who do not consistently use phrase speech. Module 2 is used with those who use phrase speech but are not verbally fluent. Module 3 is used with fluent children, and Module 4 is used with fluent adults. The one group that ADOS does not address is nonverbal adolescents and adults (Western Psychological Services; Lord, Rutter, DiLavore, & Risi, 1999).

ASDS—Asperger Syndrome Diagnostic Scale

The ASDS is designed to identify Asperger syndrome in children ages 5–18. It can be completed by anyone familiar with your child, such as a parent, other family member, or teacher. This scale is based on the DSM-IV criteria and is made up of five subscales: language, social, maladaptive behavior, cognitive, and sensorimotor (PRO-ED, Inc.; Myles, Bock, & Simpson, 1998).

Speech and Language Tests

Receptive/Expressive Vocabulary

EVT-2—Expressive Vocabulary Test, 2nd Edition

The EVT-2 is a 190-item test used to assess the expressive vocabulary and word retrieval skills of children over 2.5 years of age and adults. The EVT-2 involves the test-giver presenting a picture to the test-taker and prompting the test-taker to provide a one-word label to describe the picture, answer a question about the picture, or provide a synonym for the item in the picture. The EVT-2 is used for various reasons, such as detecting language impairment, assessing word retrieval skills, or examining knowledge of English among non-native English speakers (AGS; Williams, 1997).

EOWPVT—Expressive One-Word Picture Vocabulary Test

The EOWPVT is a test for 2- to 18-year-olds that assesses a child's English vocabulary. An examiner shows pictures to the child, who is prompted to name objects, actions, etc., in the illustrations. Increasingly difficult items are presented as the test proceeds; when the child cannot name many items in a row, the test is ended. The test usually lasts between 15 and 20 minutes. The EOWPVT provides information about speech defects, learning disorders, English fluency, auditory processing, and auditory-visual-verbal association abilities. The EOWPVT is often used as a screening tool for preschool and kindergarten readiness (Academic Therapy Publications; Brownell, 2000).

PPVT-III/PPVT-IV—Peabody Picture Vocabulary Test, 3rd Edition/4th Edition

The PPVT-III/PPVT-IV is a measure of receptive vocabulary for standard English and a screening test of verbal ability. It is designed for individuals ages 2.5 to over 90 (AGS; Dunn, L. M., & Dunn, D. M., 1997; Dunn, L. M., & Dunn, D. M., 2007).

Language Batteries

CASL—Comprehensive Assessment of Spoken Language

The CASL is a 15-test oral measure used with children and young adults ages 3–21 to examine their knowledge of and ability to process oral language. The CASL is used by speech pathologists, psychologists, and other professionals to measure a person's language comprehension, expression, and retrieval. These aspects of language are examined in four categories: lexical/semantic (knowledge of words and ability to use words and phrases), syntactic (understanding and use of grammar), supralinguistic (understanding of complex language in which meaning cannot be found through grammatical information), and pragmatic (ability to consider context and use socially-appropriate language) (AGS; Carrow-Woolfolk, 1999).

CELF-4—Clinical Evaluation of Language Fundamentals, 4th Edition

The CELF-4 is a screening tool used to diagnose language disorders in students ages 5–21. The test is used to establish if a language disorder exists, the nature of the disorder, behaviors associated with the disorder, and the effect of the disorder on classroom functioning (The Psychological Corporation; Semel, Wiig, & Secord, 2003).

<u>CELF-Pre-2—Clinical Evaluation of Language Fundamentals-Preschool, 2nd</u> <u>Edition</u>

The CELF-Pre-2 (The Psychological Corporation; Semel, Wiig, & Secord, 2004) is a screening tool used to identify and diagnose language and communication disorders in children ages 3–6. The test is used not only to identify a language disorder, but also to define the disorder in terms of aspects/domains affected, modalities affected, and strengths and needs. The CELF-Pre-2 examines the following aspects of language: form (syntax, morphology, phonology), content (e.g., knowledge of vocabulary), and use (knowledge of the rules of oral language, pragmatics).

OWLS—Oral and Written Language Scales

The OWLS is a measure of receptive and expressive (both oral and written) language for children and young adults ages 3–21 years (5–21 years for written expression). It is used to help determine delays or disorders in language. It can also be used to compare reading achievement abilities in other areas with listening comprehension, oral expression, and written expression, which this measure assesses (AGS; Carrow-Woolfolk, 1996).

PLS-4—Preschool Language Scale, 4th Edition

The PLS-4 (The Psychological Corporation; Zimmerman, Steiner, & Pond, 2002) is a test used to examine the language skills of children from birth to age 6. The PLS-4 includes tasks that assess preverbal behaviors, as well as tasks that measure linguistic skills in terms of semantics, morphology, syntax, integrative language skills, and

preliteracy skills. The PLS-4 is frequently used in medical, clinical, and research environments to test children's auditory comprehension and expressive communication skills.

TOLD-P:3/ TOLD-I:3—Test of Language Development, 3rd Edition, Primary/ Intermediate

The TOLD-P is used to assess children's (ages 4 to 8) receptive and expressive spoken language abilities in the areas of semantics, syntax, and phonology (PRO-Ed; Hammill & Newcomer, 1996).

The TOLD-I:3 is intended for children ages 8 to 12 and is designed to measure their receptive and expressive language. It is used to assess a child's understanding and meaningful use of spoken words, as well as different aspects of grammar (PRO-Ed; Hammill & Newcomer, 2007).

Pragmatics

CCC-2—Children's Communication Checklist, 2nd Edition

The CCC-2 is a 70-item questionnaire completed about a 4- to 16-year-old by his or her caregiver. The purpose of the CCC-2 is to screen for communication problems and language impairment in children and to identify children who may need to undergo further assessment for an ASD. The CCC-2 examines the following 10 aspects of a child's communication style: speech, syntax, semantics, coherence, inappropriate initiation, stereotyped language, use of context, nonverbal communication, social relationships, and interests (Harcourt Assessment, Inc.; Bishop, 1998).

TOPL—Test of Pragmatic Language

The TOPL is a comprehensive test used to assess pragmatic language skills of children ages 5–13. The test measures a child's ability to use language socially to achieve goals. The definition of pragmatic language depends not only on the language that is used, but also on the *context* and *purpose* underlying the utterance. The TOPL includes 44 items and is administered by an examiner who displays a picture to a student along with a verbal prompt. The child then responds to the social dilemma depicted in the picture. The TOPL test elicits information about six aspects of pragmatic language: physical setting, audience, topic, purpose, visual-gestural cues, and abstraction (PRO-ED; Phelps-Terasaki & Phelps-Gunn, 1992).

Adaptive Behavior

VABS—Vineland Adaptive Behavior Scale

The VABS is a measure of personal and social skills for infants and children from birth to age 18. It comes in three editions, two of which are completed by the examiner after conducting an interview with someone who knows your child well; the other is filled out by a teacher or paraprofessional. All versions of the VABS measure five domains: Communication, Daily Living Skills, Socialization, Motor Skills, and Maladaptive Behavior (AGS; Sparrow, Balla, & Cicchetti,1984).

Social Skills

SRS—Social Responsiveness Scale

The SRS measures the severity of autism spectrum symptoms, specifically social impairment in children from 4–18 years of age. This scale includes 65 items that assess social awareness, social information processing, capacity for reciprocal social communication, social anxiety/avoidance, and autistic preoccupations and traits (Western Psychological Services; Constantino & Gruber, 2005).

SSRS—Social Skills Rating System

The SSRS consists of a series of surveys that are used to obtain information on the social behaviors of children and adolescents from teachers, parents, and the students themselves. There is a Social Skills Scale that can be used to measure positive social behaviors (e.g., cooperation, empathy, responsibility), a Problem Behaviors Scale to measure behaviors that can interfere with the development of positive social skills (aggression, anxiety, fidgeting, etc.), and an Academic Competence Scale that can provide a quick estimate of academic functioning (AGS; Gresham & Elliott, 1990).

Assessment of Social and Communication Skills

The Assessment of Social and Communication Skills gathers information about a child's social and communication skills in more than 100 subskill areas. This assessment includes several questionnaires, checklists, and intervention activity sheets to improve aspects of social reciprocity, imitation, solitary play, social play, group skills, and social communication (Brookes Publishing Co; Quill, 2000).

Occupational Therapy/Physical Therapy

PDMS-2—Peabody Developmental Motor Scales, Second Edition

The PDMS-2 evaluates gross and fine motor skills of children between birth and 5 years of age (PRO-ED, Inc.; Folio & Fewell, 2000). These scales use six subtests to assess reflexes, stationary (body control and equilibrium), locomotion, object manipulation, grasping, and visual-motor integration. The PDMS-2 also offers ways to improve gross and/or fine motor skills in a child.

BOTMP—Bruininks-Oseretsky Test of Motor Proficiency

The BOTMP is used to assess fine motor skills in children ages 3–5. The test is composed of subtests, including running speed and agility, balance, bilateral

coordination, strength, fine and gross motor skills, upper limb coordination, response speed, visual motor control, and upper limb speed and dexterity (AGS; Bruininks, 1978).

TVPS-R—Test of Visual Perceptual Skills-Revised

The TVPS-R measures a child's ability to perceive, understand, and use visual perceptual stimuli. The assessment is meant for children ages 4–13 (MHS/Western Psychological Services Publishers; Gardner, 1988).

Sensory Profile

The Sensory Profile helps determine how well children ages 3–10 can process sensory information throughout everyday events (The Psychological Corporation; Dunn, 1999). Items that are assessed in this profile include sensory seeking, emotional reactive, low endurance/tone, oral sensory sensitivity, inattention/distractibility, poor registration, sensory sensitivity, sedentary, and fine motor/perceptual.

Adolescent/Adult Sensory Profile

The Adolescent/Adult Sensory Profile allows an individual to study his or her own sensory processing pattern and its effect on his or her performance by using a self-reporting questionnaire (The Psychological Corporation; Dunn, 2002). This questionnaire is meant for individuals ages 11 years and older, and it assesses the following areas: sensation seeking, sensation avoiding, sensory sensitivity, and low registration.

Appendix E: Evaluation Review Chart

Cognitive Assessment Test Results

IQ Tests

Date of Evaluation:	 Clinician:
Age of Child:	 Location:

Wechsler Scales (please circle the one administered):

WPPSI-R	WPPSI-III	WISC-III	WISC-IV
WAIS-R	WAIS-III	DAS-preschool	DAS-school age
DAS-2-preschool	DAS-2-school age	Stanford-Binet-IV	Stanford-Binet-V

Full-Scale IQ/General Composite Score

Verbal	IQ S	core	(or	VCI)
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Performance IQ/Nonverbal IQ Score (or POI)

Working Memory Index Score

Processing Speed Index Score

K-ABC	K-ABC II			
Full-Scale IQ/General Composite Score				
Verbal IQ Score (or V				
Performance IQ/Nonv				
Working Memory Inde				
Processing Speed Index Score				

Nonverbal IQ Tests

Date of Evaluation:	 Clinician:
Age of Child:	 Location:

Please circle the one administered:

CTONI	Leiter-R	Merrill-Palmer
Merrill-Palmer II Mullen Visual Reception		PPS
TONI-R	TONI-3	UNIT

Nonverbal IQ Score: _____

Date of Evaluation:	 Clinician:	
Age of Child:	 Location:	

Please circle the one administered:

CTONI	Leiter-R	Merrill-Palmer
Merrill-Palmer II	Mullen Visual Reception	PPS
TONI-R	TONI-3	UNIT

Nonverbal IQ Score: _____

Date of Evaluation:	 Clinician:	
Age of Child:	 Location:	

Please circle the one administered:

CTONI	Leiter-R	Merrill-Palmer
Merrill-Palmer II	Mullen Visual Reception	PPS
TONI-R	TONI-3	UNIT

Nonverbal IQ Score: _____

Developmental/IQ Tests:

Date of Evaluation:	ate of Evaluation: Clinician:			
Age of Child:	Location:			
Please circle the one administered:				
Bayley-II	Bayley-III	Mullen ELC Score		
PEP-R	PEP-3			
Developmental Quotient/Early	y Learning Composite (MDI/DQ/E	LC):		
Percentile:	Age Equivalent:			
Date of Evaluation:	Clinician:			
Age of Child:	Location:			
Please circle the one adminis	stered:			
Bayley-II	Bayley-III	Mullen ELC Score		
PEP-R	PEP-R PEP-3			
Developmental Quotient/Early	y Learning Composite (MDI/DQ/E	LC):		
Percentile: Age Equivalent:				
Date of Evaluation:	Clinician:			
Age of Child:	Location:			
Please circle the one administered:				
Bayley-II	Bayley-III Mullen ELC Sco			
PEP-R	PEP-R PEP-3			
Developmental Quotient/Early Learning Composite (MDI/DQ/ELC):				
Percentile: Age Equivalent:				

Autism Screening Test Results

Please circle the one administered:

	ASDS	CARS	GADS	GARS
	GARS-2	M-CHAT	SCQ	SRS
Tota	al Score:			
Quo	otient/T-Score:			
Per	centile:			

Classification:

Please circle the one administered:

ASDS	CARS	GADS	GARS
GARS-2	M-CHAT	SCQ	SRS

Total Score:	
Quotient/T-Score:	
Percentile:	
Classification:	

Please circle the one administered:

ASDS	CARS	GADS	GARS
GARS-2	M-CHAT	SCQ	SRS

Total Score:	
Quotient/T-Score:	
Percentile:	
Classification:	

Autism Diagnostic Test Results

<u>ADI-R</u>

Date of Evaluation:		Clinician:		
Age of Child:		Location:		
Reciprocal Social I Autism cuto	,	:		
Communication- <u>Ve</u> Autism cuto	e <u>rbal</u> (BV Total): off = 8 (Verbal)			
Communication- <u>No</u> Autism cuto	onverbal (BNV Tota off = 7 (Nonverbal)	l):		
Restricted Repetitiv Autism cuto		ehaviors (C Total):		
Abnormality of Dev Autism cuto		6 Months (D Total):		
ADI-R Diagnosis/C	lassification:			
ADOS				
Date of Evaluation:		Clinician:		
Age of Child:		Location:		
Module 1	Module 2	Module 3	Module	4
Communication To	tal (A):			
Reciprocal Social I	Reciprocal Social Interaction Total (B):			
Communication + S	Communication + Social Interaction Total:			
Play or Imaginatior	Play or Imagination/Creativity Total (C):			
Stereotyped Behav	viors and Restricted	I Interests (D):		
ADOS Diagnosis/C	lassification:			

Language Test Results

Expressive Vocabulary Tests

Date of Evaluation:	Clinician:	
Age of Child:	Location:	
Please circle the one admi	nistered:	
EVT	EVT-2	EOWPVT
MCDI exp	REEL-2 exp	REEL-3 exp
Raw Score: Standard Score: Percentile: Age-Equivalent (A-E):		
Receptive Vocabulary Te		
Date of Evaluation:	Clinician:	
Age of Child:	Location:	
Please circle the one admi	nistered:	
PPVT-III	PPVT-IV	ROWPVT
MCDI rec	REEL-2 recep.	REEL-3 recep.
Raw Score:		

Standard Score:	
Percentile:	
Age-Equivalent (A-E):	

Language Batteries

Date of Evaluation:	 Clinician:
Age of Child:	 Location:

Please circle the one administered:

CASL	CELF-3	CELF-4
CELF Presch	CELF Presch-2	Mullen Language Subscales
OWLS	PLS-3	PLS-4
TACL-3	TELD-3	TOAL-3
TOLD-P:3 (primary)	TOLD-I:3 (intermediate)	

Receptive/Comprehension Standard Score:	
Receptive/Comprehension A-E:	
Expressive Language Standard Score:	
Expressive Language A-E:	
Written Language Score:	
Written Language A-E:	
Total Language Standard Score:	
Total Language A-E:	

Language Batteries (continued)

Date of Evaluation:	 Clinician:
Age of Child:	 Location:

Please circle the one administered:

CASL	CELF-3	CELF-4
CELF Presch	CELF Presch-2	Mullen Language Subscales
OWLS	PLS-3	PLS-4
TACL-3	TELD-3	TOAL-3
TOLD-3:P (primary)	TOLD-3: I (intermediate)	

Receptive/ Comprehension Standard Score:	
Receptive/ Comprehension A-E:	
Expressive Language Standard Score:	
Expressive Language A-E:	
Written Language Score:	
Written Language A-E:	
Total Language Standard Score:	
Total Language A-E:	

Pragmatics Test

Dat	e of Evaluation:	Clinician:	Clinician:	
Age	e of Child:	of Child: Location:		
Ple	ase circle the one admini	stered:		
	CCC-2	TLC	TOPL	
	TOPS-2 Elem	TOPS-3 Elem	TOPS-2 Adol	
Tot	al Standard Score:	Total A-E:		
Dat	e of Evaluation:	Clinician:		
Age	e of Child:	Location:	Location:	
Ple	ase circle the one admini	stered:		
	CCC-2	TLC	TOPL	
	TOPS-2 Elem	TOPS-3 Elem	TOPS-2 Adol	
Tot	al Standard Score:	Total A-E:		
Dat	e of Evaluation:	Clinician:		
Age of Child: Location		Location:		
Ple	ase circle the one admini	stered:		
	CCC-2	TLC	TOPL	
	000-2			

Total Standard Score: _____ Total A-E: _____

The Evaluation Review Chart is reprinted with permission from the University of Miami, Department of Psychology.

Appendix F: Resources for Parents

Books

- Pierangelo, R., & Guiliani, G. A. (2005). Assessment in special education: A practical approach. Allyn & Bacon.
- Myles, B. S., Swanson, T. C., Holverstott, J., & Duncan, M. (2007). *Autism spectrum disorders: A handbook for parents and professionals* [two volumes]. Prager Publishing.
- Doyle, B. T., & Iland, E. D. (2004). *Autism spectrum disorders from A to Z*. Future Horizons.

Exkorn, K. S. (2005). The autism sourcebook. Regan Books.

Powers, M. (Ed.). (2000). Children with autism: A parent's guide. Woodbine House.

National Academies Press. (2001). Educating children with autism.

- Volkmar, F. R., & Wiesner, L. A. (2004). *Healthcare for children on the autism spectrum*. Woodbine House.
- Bashe, P. R., & Kirby, B. L. (2001). *The OASIS guide to Asperger syndrome: Advice, support, insight, and inspiration.* Crown Publishers.
- Braaten, E., & Felopulos, G. (2004). *Straight talk about psychological testing for kids*. Guilford Press.

Web Sites

Organization for Autism Research: <u>www.researchautism.org</u>

OAR is the only autism organization that focuses solely on applied research and putting this research to work to provide answers to questions for those confronted directly and indirectly by autism. Other "Life Journey Through Autism" guidebooks are available, free of charge, from the OAR Web site.

The Southwest Autism Research & Resource Center: www.autismcenter.org

The Southwest Autism Research & Resource Center (SARRC) is a nonprofit, community-based organization in Phoenix, Arizona, dedicated to research, education, and resources for individuals with autism spectrum disorders (ASDs) and their families. SARRC is the primary sponsor of the OAR guidebooks "A Parent's Guide to Assessment" and "A Guide to Transition to Adulthood."

The Doug Flutie Jr. Foundation for Autism: www.dougflutiejrfoundation.org

The primary goal of the Flutie Foundation is to promote awareness and support families affected by autism spectrum disorders. They are committed to funding organizations that provide direct services, family support grants, education, advocacy, and recreational opportunities for the purpose of improving the quality of life for individuals with autism and their families. The Doug Flutie Jr. Foundation for Autism is a sponsor of the OAR guide titled "A Parent's Guide to Assessment."

AutismOnline: www.autismonline.org

The mission of AutismOnline is to connect parents of children with autism and professionals working with these children with critical resources, support, and research information.

Autism Speaks: www.autismspeaks.org

The mission of Autism Speaks is to change the future for all who struggle with ASDs. Autism Speaks is a major funder of global biomedical research into the causes, prevention, treatments, and cure for autism.

Wright's Law: www.wrightslaw.com

Wright's Law provides accurate, reliable information about special education law, education law, and advocacy for children with disabilities.

The Association for Science in Autism Treatment: www.asatonline.org

ASAT is a not-for-profit organization of parents and professionals committed to improving the education, treatment, and care of people with autism. Since ASAT was established in 1998, it has been their goal to work toward adopting higher standards of accountability for the care, education, and treatment of all individuals with autism.

The National Autism Center: www.nationalautismcenter.org

The National Autism Center is a nonprofit organization dedicated to supporting effective, evidence-based treatment approaches, and to providing direction to families, practitioners, organizations, policy makers, and funders.