Best Practice Guidelines for the Assessment of African American Students

Cognitive Processes

Diagnostic Center, Northern California
39100 Gallaudet Dr.
Fremont, CA 94538
www.dcn-cde.ca.gov

California Department of Education
June 2012

Preface

Through the combined efforts and talents of the Diagnostic Center Northern California staff the following guidelines are recommended to fulfill the promise of the Larry P. mandate. The *Best Practice Guidelines for the Assessment of African American Students* are consistent with federal and state laws and regulations and suggest how these mandates might be carried out.

Implementation of the Guidelines will require commitment and courage as specialists will be asked to suspend their reliance on standardized assessment tools and engage in authentic assessment, relying heavily on the power of observation and interviews. It is our belief that when this new model of assessment is implemented with fidelity, we will have met our responsibility as educators to ensure equity and access.

Mary Anne Nielsen, Director

Diagnostic Center Northern California

California Department of Education

June 2012

This document was prepared by the Diagnostic Center Northern California, (DCN) California Department of Education. Sincere appreciation is extended to the DCN Speech and Language Pathologists and DCN School Psychologists for their time, expertise and commitment to developing Best Practice Guidelines for the Assessment of African American Students and to the DCN Support Staff for their tireless efforts.

Renee A Dawson, Ph.D., Co-Chair ***C. Ann England, M.A. CCC-SLP-L, Co-Chair***

School Psychologists

Mirit Friedland, M.A.
Sarah Gallagher, M.A.
James Hiramoto, Ph.D.
Natalie Jocic, M.A.
Marji Stivers, Ph.D.

Speech and Language Pathologists

Elizabeth Arenas, M.S. CCC-SLP-L
Betsy Caporale, M.S. CCC-SLP-L
Michelle Derryberry, M.S. CCC-SLP-L
Priscilla Harvell, M.S. CCC-SLP-L
Brian Mathis, M.A. CCC-SLP-L
Virginia Sanchez-Salazar, M.A. CCC-SLP-L

Special recognition is given to the leadership and assessment teams of the Mt. Diablo SELPA, Twin Rivers Unified School District, Fremont Unified School District, Antioch Unified School District, Vallejo Unified School District, and California State University, East Bay who generously gave their time, expertise and resources to make this body of work possible.

Janet Balcom, Assistant Superintendent*, Twin Rivers Unified School District*

Kristen Appel, School Psychologist
Mindie, Brown, School Psychologist
Swati Shende, School Psychologist

Mildred D. Browne, Ed.D.*,* ***Assistant Superintendent****, Mt. Diablo Unified School District*

Carolyn Sakkis, School Psychologist
Lavinia Henlon, School Psychologist
Stacie Fountaine, School Psychologist
Mike Giambonam, School Psychologist

Greg Jennings, Ph.D., *Clincial Child/School Psychology Program, CSU, East Bay*

Hunt Lin, Assistant Director of Special Education, *Fremont Unified School District*

Rafael Banaag, School Psychologist
Laurie Berberian, School Psychologist
Monica Guzman, School Psychologist
Robert Shelton, School Psychologist
Shakira Durham, School Psychologist
Gail Bromber, School Psychologist

Laura VanDuyn, Ed.D., Director of Special Education*, Antioch Unified School District*

Diane Smith, School Psychologist
Zane Anderson, School Psychologist
Sigrid Sundet, School Psychologist

Dyana Vukovich, Head Psychologist, *Vallejo Unified School District*

Anabelle Caron, School Psychologist
Jake Randall, School Psychologist
Gloria Mau, School Psychologist

BEST PRACTICE GUIDELINES FOR THE ASSESSMENT OF AFRICAN AMERICAN STUDENTS
2012

TABLE OF CONTENTS

Preface and Acknowledgments…… i
Table of Contents……..... iii

Section 1: Introduction
The MATRIX…….. 1
What's in the MATRIX Manual……..... 5
Cautions……... 8
How Do I Proceed?..... 9

Section 2: The Domains
Reasoning……. 11
Quick guide and blank form……... 15
Executive Functioning……..... 19
Quick guide and blank form……... 24
Visual-Spatial Skills……. 27
Quick guide and blank form……... 33
Social Cognition…….. 36
Quick guide and blank form……... 39
Language and Communication……. 42

Section 3: Procedural Categories
Assessment Checklists…….. 46
Review of School Records and Forms…… 48

Tips for Culturally Competent Interviews…… 52
General Interviews and Forms
Parent……..... 53
Teacher…… 57
Student……. 62
Other……. 66

Observations and Forms……... 69

Formal Testing and Forms……. 73
Reliability and Validity and Form……. 78
Danger Signs…….. 86
Standardized Testing vs. The MATRIX ……. 87

Informal Assessment and Form…….. 89
Games for Assessing Cognitive Development……. 91
Informal Assessment Methods Form……..... 97

Section 4: Interpreting Results
Interpreting the results of your assessment…… 99
The MATRIX …… 100
Specific Learning Disability, RTI2, and the MATRIX……. 101
Linking Basic Psychological Processes to the MATRIX……... 105
Sample MATRIX…….. 106
Intellectual Disability and the MATRIX……. 107
Sample MATRIX…….. 108

Section 5: Report Writing
Unbiased reporting of test results……. 111
Formulating the Report……... 112

Section 6: References
School Psychology References…… 114

Section 7: Glossary
Glossary……..... 124

Section 8: Appendix A, Race and IQ…… 128

Section 9: Appendix B, Other Assessment Models…… 132

Section 10: Appendix C, Domains and Development..……. 136

Section 11: Appendix D, Extra Forms ……. 138

Section 12: Appendix E ……. 155
- Ethical Practice of School Psychology- CASP 2007
- National Association of School Psychologists Principles for Professional Ethics 2010
- Code of Federal Regulations (assessment and special education)
- California Code of Regulations (assessment and special education)

Section 13: Appendix F, Collaboration……. 169

The MATRIX

What is the MATRIX?

The MATRIX is a multifaceted system for assessing cognitive and language and communication development without relying upon, or even requiring, administration of standardized tests. The system is designed to provide an organized, systematic, yet flexible system for gathering the necessary information to understand why a student may be struggling in school. It generates information across domains of development that serve as foundations for learning and are critical for school success: language and communication, reasoning, visual spatial skills, executive functioning, and social cognition. For each of these domains, the assessment team gathers various types of data from multiple sources. The MATRIX guides the data collection and provides a framework for synthesizing and analyzing the information. It yields rich and varied assessment data to understand a student's learning and communication and the best ways to meet the student's needs.

Collaboration[1] is essential to using the MATRIX. Representatives of all disciplines are equal members on a collaborative team and collaboration begins early in the process to ensure effective data collection and reduce duplication.

When thoroughly and thoughtfully implemented, it can provide more comprehensive, accurate, and practical information about a student's individual pattern of cognitive and language development.

Why was the MATRIX Developed?

The MATRIX was developed in response to widespread frustration and confusion on the part of California school psychologists and speech and language pathologists seeking clear, consistent information about legal and valid methods for assessing the cognitive and language and communication abilities of African American students that were legally sanctioned and considered to be valid for this population. The system is designed to provide a framework and flexible guidelines for the systematic collection and analysis of developmental data. It meets the state's legal criteria and conforms to recommendations for the assessment of African American students. It is also designed to reflect current knowledge about assessment and represent best practices for assessment of all students.

[1] Collaboration tips can be found in Appendix F

For further information, refer to the Appendix A.

How was the MATRIX Developed?

The DCN leadership determined that there was a need for a better formulated system to assess African American students. The leadership and staff explored possibilities for development of a system that met federal and state standards for African American students when assessing for special education (see CFR 300.204 and 300.309 and CDE Memorandums 1986 and 1997). In addition the leadership and staff decided the system should also incorporate current knowledge of cognitive and language communication development that reflects best assessment practices.

Several alternative assessment methods and models were reviewed. Some of these are designed to substitute for formal testing and some are mainly used to supplement test data. Although each model has a unique history and focus, there is substantial overlap in the types of assessment activities included. We focused on four fairly well-established models that many assessors find useful to ensure that methods associated with those models can be easily incorporated into the MATRIX system. These models are:

- Developmental assessment
- Authentic assessment
- Ecological assessment
- Dynamic assessment

Each model is described in greater detail in Appendix B.

The MATRIX was designed to incorporate, but not be limited by, any of the above systems (models). Although the MATRIX is highly structured, it is also flexible. The flexible framework allows the assessor to pick and choose among the useful strategies found in other systems. It should be adapted according to the needs of the student, the type of referral questions, the available settings and conditions for data collection, and the preferences of the assessor. Implementation of the MATRIX system also encourages the strategic use of novel, creative assessment activities to fill in critical gaps in available information or test competing hypotheses.

Two perpendicular axes, one representing the Domains and the other representing the Procedural Categories, form the framework of the MATRIX. Identification of procedural categories was fairly straightforward. It was more difficult to arrive at a useful set of

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Domains and many discussions took place about how to identify and name the key areas of development. The team decided to select a few (3-8) constructs to represent broader strands of development. This practice is often found in research literature and similar constructs underlie many of the broad scales included in major standardized test batteries. The team looked at quasi-empirical models such as Cattell's and Horn's fluid and crystalized intelligence, neuropsychological models based on Luria's work, and more recent neuropsychological models which place greater emphasis on executive functioning, perceptual-motor integration, and the memory processes. The team also reviewed classification systems designed for practical use in schools, such as the framework developed by Levine for *All Kinds of Minds* which is used by school staff throughout the country to understand students' learning strengths and challenges. It became clear that no particular set of categories is generally considered to be theoretically "correct" or empirically "proven." While our thinking was influenced by the major theories, usefulness and equity became our primary objectives.

The original MATRIX model included seven, rather than the current five, constructs, with each construct representing an aspect of cognitive and language and communication development that plays a central role in school survival and success. The procedural categories, which represent the various modes of data collection, have remained the same.[2]

Field Testing

The MATRIX was field tested in five urban school districts in northern California. Forty-five African American students were involved and were either referred for initial testing for special education services or were due for their triennials. Diagnostic Center Northern California (DCN) staff (school psychologists and speech and language pathologists) was paired with a district psychologist/speech and language pathologist when using the MATRIX with the target population. Participating district staff was surveyed twice (half way through the field testing and then at the end) in addition to being interviewed to provide DCN with feedback regarding the MATRIX process. The purpose of the survey was to provide information that would be instrumental in the modification of the MATRIX process.

[2] The five MATRIX constructs are the Domains: Reasoning, Executive Functioning, Visual Spatial, Social Cognition, and Language/Communication. More discussion about the Domains can be found in Section 3 of the manual. Procedural Categories are: Observations, Interviews, Record Review, Formal and Informal methods of assessment. Discussion about Procedural Categories can be found in Section 4.

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

In Summation

The Best Practice Guidelines for the Assessment of African American Students: Cognitive Processes is intended to provide the School Psychologist practicing in California public schools the necessary information to provide a fair and non-biased assessment of African American students. It is designed to support the School Psychologist in the assessment by providing an ecological approach at looking at the students strengths and weaknesses. The collaboration component of two *The Best Practice Guidelines for the Assessment of African American Students* results in a student profile that yields rich and varied assessment data to understand a student's cognitive process abilities and support the best ways to meet the student's needs.

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

THE MATRIX MANUAL

Organization

The development of a MATRIX Profile provides an assessment team with a unique way to assess and organize data through a variety of means and can serve as guidance for decisions regarding special education eligibility and instructional planning. Use of the MATRIX and development of the Student Profile through the procedures outlined in this manual invites collaborative analysis of information, organized by Domain and obtained through a variety of Procedures.

In this manual, separate sections will discuss the three components of the MATRIX process, followed by final sections that include interpreting data, report writing, reference materials and other supporting documents.
The MATRIX process includes three components.

- Domains
- Procedural Categories
- MATRIX Profile

The Domains and Procedural Categories serve as the rows and columns that make up the framework for data collection. The MATRIX profile is created by recording the information from each domain and procedure into the chart using the information gathered by the various disciplines. The process builds the student profile.

Domains

The Domains represent major areas of developmental competences necessary for school success. These domains are: Reasoning, Executive Functioning, Visual-Spatial, Social Cognition, and Language. In the following section you will find a description and rationale for each domain including a discussion of the key components along with examples of the type of information that falls under the domain. Each section will also include:

- A set of “Quick Guides” to assist the assessor by providing prompts or

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

examples to serve as reminders of some of the key features to look for when collecting data.
- Sample recording forms to organize your data by Domain. You may wish to adopt these forms or you may develop a method or format that works best for you.

Procedural Categories

The Procedural Categories represent the various sources of data and modes of data collection used to gather information. These categories are: Observations, Interviews, Review of School Records, Informal Assessment Activities, and, if applicable, Formal Testing.

The first four categories should be actively mined for information on student development in each of the domains. This will ensure that the assessment team obtains a broad range of information. Use of formal subtests or test batteries that are not prohibited by *Larry P*. is an optional method for collecting additional data.

- If using any form of standardized testing, a section is included that talks about Test Validity and Reliability and a form is provided to help you process the appropriateness of any standardized test being used.

The uniqueness of the MATRIX is in how data is gathered using these procedures. The goal is to accurately capture what the student can and cannot do; and the ways abilities are expressed at school, in other settings; and under what circumstances the student is most likely to demonstrate capabilities and acquire new knowledge and skills.

Similar to the Domains section of this manual, Procedural Categories is organized in the same manner. There will be support documents that will define each procedure in-depth, sample data collection forms, and charts and tables to assist in providing additional relevant information.

The MATRIX Profile

The MATRIX Profile is the final result of the process outlined above. It is completed collaboratively by the team involved in assessing the student. The information gathered by assessors representing the various disciplines involved is shared. Through discussion, key findings are charted on to the form or chart (the MATRIX) and synthesized to build the student profile. The MATRIX chart may be enlarged to a wall-sized poster for recording team data.

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Through the visual MATRIX chart and team discussions, assessment findings for eligibility or disability will be well-defined. To assist in that discussion, information on how the MATRIX relates to Specific Learning Disability (SLD) or Intellectual Disability (ID) is provided under the *Interpreting Results* section of this manual. The MATRIX can also function as a planning tool when considering RTI interventions.

Closing Sections

The last sections of the manual are devoted to:

- Reference list
- Glossary of Terms
- Appendices (includes additional MATRIX supporting documents, Code of Ethics for School Psychologists, and other legal citations).

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

CAUTION

Do Not Make Assumptions

- Do not assume that all members of an ethnic group share the same cultural values, identity, and beliefs.

- Do not make assumptions about family members that are based on your cultural expectations of a responsible family member.
    - For example, a parent missing, or not showing up, for a meeting should not be assumed to reflect a lack of concern for her child's education. Parents may not have access to transportation, any flexibility in their work hours, or may be responsible for taking care of any problems that arise for extended family members (infants to elderly).

- Do not assume that reluctance to participate in school activities or meetings, or to share information with school personnel, means that a parent is not interested in his child's education. The reluctance may reflect other issues such as a personal history of negative experiences associated with schools or deference towards school personnel expertise.

- When you pose a direct question to a family member and she provides a lengthy response for which the relevance to the question is not immediately apparent (e.g., stories, anecdotes), do not assume she is avoiding the question or that she lacks the ability to understand the question or to respond directly and succinctly.

- Be careful to avoid snap judgments which may be based on unconscious stereotypes or generalizations about a student's presentation (e.g., speech, gestures, facial expressions, behavior, and physical appearance). The student must be viewed within the context of his/her family and community.

- Consider the student's culturally inherent communication and socialization styles to obtain accurate information about the student's knowledge and skills (e.g. student who is reticent to speak in class but is loud and noisy on the yard).
- During the interview, always ask for clarification or an example whenever the parent/student/teacher uses non-descriptive language to describe behavior (e.g. he is a little bit noisy). When appropriate, request specific examples.

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

How Do I Proceed?

Refer to the Assessment Checklist in the binder (two samples are available to help you record your steps)

- Review of records
  - Chart out information from test results, anecdotal information, work samples, school history, etc.
  - When charting out information make two columns

What do I know	What do I need to know

  - Remember to include <u>any</u> information that addresses **exclusionary situations** as established under IDEA 97, Section 614(b)(5):

> "If a child has a lack of instruction in math or reading, limited English proficiency, history of inappropriate instruction, poor school attendance, environmental, cultural, or economic disadvantages, he or she must not be identified as being a "child with a disability", if any one of those is the reason for determining the child has a disability…"

- Look at the MATRIX guide sheets to determine what pieces of information you will need to know more about. For example, you may need to know more about Executive Functioning.
  - Review the Domain information (e.g. Executive Functioning) and also the guide sheet.
  - The guide sheet provides a road map as to how to go about obtaining this information.
  - Remember to always use more than one procedural category when (observations, interviews, informal methods, formal assessment) collecting data and filling in gaps of information about the student's level of functioning.

- Once you have the information and have collaborated with the rest of the team then you are ready to fill out the MATRIX profile.

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

THE DOMAINS

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

REASONING

Definition

Broad definitions of reasoning range from “critical analysis” to simply “thinking.” For the purposes of this Matrix, the domain of Reasoning is the active process of solving a novel problem or situation.

Rationale

Whether inductively or deductively, can an individual wrap their head around the nature of the problem to get to a solution? If an individual cannot reason, i.e. conceptualize the problem, there is not much hope for learning. Some individuals can talk themselves into circles trying to solve a problem, while some people almost instantly know the answer. As a school psychologist, you are probably most familiar with assessing reasoning using standardized testing such as the “Nonverbal” subtest tests that get at Abstract Thinking or Fluid Reasoning (that’s Gf for all you C-H-C people out there). These are typically some kind of Matrices, or pattern reasoning tasks that are usually of abstract shapes, numbers, representational images, or even pictures. These tasks require finding a salient rule that is consistent and true in all circumstances (deductive) or a reorganization of presented data so that the most likely answer is chosen (inductive). The big problem of this type of test is that they are designed so that little language is needed for response if at all. Some would argue that you can always ask the student about their process of solving a question. However, in doing so are you sure that you are not breaking standardization? In questioning you might give them insight into the methods they need to employ to solve the next problems. Worse yet, they may become fixated on that strategy only because you asked about it. This becomes a problem when the ability to switch strategies is part of the reasoning task being assessed. This is a common feature in tests of fluid reasoning.

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Key Components

Inductive reasoning is the process of taking isolated or specific pieces of information and identifying a common principle. It is known by other names like generalization, synthesis, and causal inference. Conclusions that are inductively made are based on observation. At best, inductive reasoning leads to reliable, predictable outcomes. At worst, it can be the formulation of a stereotype.

Deductive reasoning on the other hand is a step-by-step process where one arrives at an answer or conclusion based on generalizations of "truths." It is known by other names, including alternate hypothesis testing as well as analytical or logical thinking. Deductive reasoning builds from simple "truths" (facts or assumptions of fact) and to more complex statements.

The statement, "If A then B" is an example of how one might apply deductive reasoning

Inductive vs. Deductive Reasoning

Inductive reasoning can then be thought of as the inverse of deductive reasoning, where deductive reasoning narrows from general principle(s) to a specific principle; inductive reasoning widens from a specific principle to general principle(s).

Examples:

1. Inductive reasoning
    a. Observations:
        i. Timmy is a green child and did well on the test.
        ii. Jimmy is a blue child and did poorly on the test.
        iii. Rachel is a green child and did well on the test.
        iv. Lisa is a blue child and did poorly on the test.
    b. Conclusion:
        i. An observation does not guarantee truth beyond the observation; therefore, the conclusion is just the most probable outcome
        ii. Green children will (most likely) do better on this test than Blue children

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

2. Deductive reasoning
    a. Principle:
        i. Green children do better on this test than Blue children
        ii. Johnny is a green child
    b. Conclusion:
        i. Johnny will do well on this test compared to other Blue children
        ii. Accuracy of the conclusion depends on the truth of the principles it is based on. If the principles are true, then the answer must be true.

Intuition

Rarely, in everyday life do we actively process all of our reasoning. Much of it is done on almost a subconscious level. Doubt it? Think of the last time you actually tested to see if your chair could hold you. Some people can grasp very complex information with little to no explanation or need for it. Some people can even solve problems before you have finished telling them what it is. These individuals are able to anticipate, fill in the gaps, make leaps in understanding because of their ability to either extract more information from details provided (for inductive reasoning) or abstract principles that can be assumed (deductive reasoning). For others, you can repeat yourself until you are blue in the face, or show every detail, but they will still not understand what you are asking. This underlying feature of reasoning is being able to see the "big picture," to conceptualize the problem at hand. A popular idiom for this is "Not seeing the forest for the trees." Individuals who do not have a language disability, yet who struggle to grasp more complex and abstract questions have Cognitive Conceptualization difficulty.

What does this domain look like:

- Deductive Reasoning – To start with a set of rules, premises, or conditions; then use those rules in a logical way to reach a solution.
- Inductive Thinking – Using observations to uncover the underlying characteristics or principles that govern a problem or situation.
- Intuition - The ability to make intuitive leaps in judgment by filling in the details using an inductive and/or deductive process. Being able to see the "Big Picture."
- Novel Problem Solving - The problem solving is not a rote skill or practice. It Some forms of problem solving do not require much language. Some may argue that thought cannot occur without language; however, reasoning neither needs to be expressed or fully formed to work. Reasoning happens at the speed of thought, which lead to actions. Words may or may not follow.
- SLD processing area – Cognitive Conceptualization

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

A Real World Example

Things happen in everyday life that can demonstrate this ability. Sometimes we just have to be open to seeing them. This is an actual event that took place while conducting an assessment. Names are different and the quotes may not be exact; however, the essential nature of what occurs is accurate.

While walking back to class with Johnny from the room, we used for assessment, we came upon 3 of his fellow classmates (a boy and two girls) looking down in a wide grassy area next to the right of the cement way. I asked, “What are you doing?”. “Looking for my tooth,” the male student said as the two girls helped him look. “I lost it right after the passing bell,” he said. “We’re just helping him look,” said one of the girls. Before I knew that he had moved or could ask another question, Johnny announced from about 15 feet away to the right of the pathway, “Found it!” The boy thanked Johnny, and we continued on to class. When asked how he found it so quickly, he replied, “I looked where he came from, and I knew it couldn’t have gone that far.” He explained to me that Tommy came from his class but goes to speech after the bell. He knew he would be walking in a particular direction further along the edge of the grass on the other side. “If he lost it like he said he did, he couldn’t have gotten that far.” (deductive reasoning). I asked why Tommy was looking over there. “Tommy likes Susie; he probably went over to her to ask for help.” He explained that Susie’s class goes to the library at this time, which Johnny indicated was between where the tooth was found and the library.

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Reasoning – Quick Guide

- Problem Solving
- Abstract Thought
- Inferential Thinking
- Deduction

Observations Class Free time Playground Breaks	Look for: ❒ Understanding of cause and effect ❒ Problem-solving strategies (e.g., trial and error, foresight, process of elimination, response to obstacles) ❒ Use of and response to jokes, puns, humor ❒ Critical thinking skills (logical reasoning, making inferences, analyzing information, asking insightful questions, pointing out inconsistencies, drawing conclusion based on evidence, maintaining objectivity, judgment) ❒ Skepticism vs. gullibility; considering the source of information ❒ Inventiveness (e.g., making up games, rules, songs, stories, raps, etc.) ❒ Challenging the status quo, suggesting alternative ways to complete tasks ❒ Negotiating with peers, mediating conflicts for others ❒ Persuasiveness and manipulative behavior; ability to debate ❒ Ability to self-correct, seek assistance ❒ Evidence of "forest" vs. "trees" thinking ❒ Difficulty with forced-choice, yes/no questions, seeing shades of gray (e.g., "it depends…") ❒ Creativity, e.g., inventing games, songs, stories, poems, raps; using objects representationally in play ❒ Demonstrating understanding of a concept by inventing an as yet nonexistent version (e.g., creating a habitat for an imaginary creature) ❒ Drawing comparisons and using metaphor when giving explanations ❒ Problem solving strategies in different contexts ❒ Evidence of linking ideas and utilizing skills across environments (e.g., using math calculations in science class) ❒ Ability to make connections between concepts and real life examples ❒ Applying the rule system from one environment to another environment; applying school rules across different classrooms Spontaneous connection to prior learning or experience.

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Interviews School Family Student-if appropriate Other	Ask questions, e.g.: ❒ See the “big picture”? ❒ What household responsibilities is the student entrusted with? How capable and reliable is s/he in carrying these out independently? ❒ Does the student show clever management of household responsibilities (e.g., prioritizing, successfully avoiding, delegating to siblings)? ❒ Does the student demonstrate negotiating skills (e.g., run between parents for answers)? ❒ Relate new information to things s/he already knows? ❒ Pick up new concepts? How quickly? ❒ Student interview: Does the student demonstrate self-knowledge, insight, ability to set goals and make realistic plans to achieve goals? ❒ Use math calculation skills to determine if s/he has enough money to purchase desired items at store or mall? Relate new information and skills to those s/he already has?
Records and Work Samples	<u>Records</u> ❒ Teacher comments about style of learning (e.g., concrete, creative, slow) ❒ Evidence of meeting grade level standards ❒ Pattern of increased difficulty with school work as the demands for abstract thought, critical thinking, and inferential thinking increase ❒ Group standardized test results (comprehension and reasoning) Work Samples ❒ Classroom work ❒ Evidence of inferential thinking in reading comprehension assignments ❒ Demonstration of problem solving techniques in math word problems Look at academic testing ❒ Applying simple math skills to an art project (assembly of certain number of parts)

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Informal Assessment	Activities: ❒ Conduct ecological assessment (e.g., see student in multiple environments-home, school, and community) ❒ Use board games, card games, basketball, etc. ❒ Mapping activity - look for evidence of self-knowledge ❒ Classroom discussions about hypothetical situations, looking for insight, long-range planning and response to mediated questioning ❒ Affinity for brain teasers and logical reasoning puzzles ❒ Twenty Questions ❒ Conservation tasks ❒ Creating Venn diagrams ❒ Making a grocery list from newspaper ad using a predetermined budget ❒ Creating advertisements for favorite or invented products ❒ Learning a memory strategy and then, later in the assessment, being given unannounced opportunities to apply it.	
Formal Assessment	❒ D-KEFS Proverb ❒ D-KEFS Twenty Question ❒ NEPSY-II Animal Sorting ❒ TAPS-3 Auditory Cohesion	❒ D-KEFS Tower ❒ D-KEFS Word Context ❒ NEPSY-II Theory of Mind ❒ Roberts -2 Apperception Test for Children – African American cards

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Reasoning - Quick Guide

- Problem Solving
- Abstract Thought
- Inferential Thinking
- Deduction

Observations Class Free time Playground Breaks	
Interviews School Family Student-if appropriate Other	
Records and Work Samples	
Informal Assessment	
Formal Assessment	

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

EXECUTIVE FUNCTIONING

Definition

Executive functions are a set of cognitive control processes required to organize manage and regulate oneself and one's resources in order to achieve a goal. These cognitive processes are critical for engaging in effective goal-directed behavior and work production.

Practical Definition: Ability to manage life tasks. Ability to effectively complete and manage everyday demands and tasks.

Rationale

Executive functioning (EF) is crucial for both school and day-to-day functioning. EF is "the *how* of task performance." EF determines or equals production and the amount of energy and support required for production. EF skills develop beginning at birth and into adulthood. Demands for EF increase throughout age and schooling. EF deficits may not become apparent until later in childhood or when the demands for them increase. During preschool and early elementary school, the adult provides external structure and EF support for the child, i.e., explicit rules, breaking down tasks, time parameters to complete tasks, organization systems, simplified instructions, and structured social exchanges. However, the demands for EF increase and support/external structure decreases as the student gets older. For an individual with higher cognitive skills, or one that has average or higher skills in the other domains, EF deficits may not become apparent until late elementary school or more advanced grades.

One purpose of examining EF is to determine the "goodness" of fit between the student's skills and the demands of the environment. Identifying specific EF deficits guide and individualize intervention.

<u>What the domain looks like</u>: EF is best evaluated using informal measures including observations, review of products, interviews, and rating scales. Observations of everyday tasks include managing chores, emotions, planning, evaluating, and

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

completion of tasks. Production is one of the best ways to directly measure and observe for EF—as an EF deficit is a disorder in production.

Observing and dialoguing / interviewing the student on his process provides the how or specifics of his EF skills. Interviews with teacher and parents, who are everyday observers of the EF are extremely helpful. (More specifics of what to look for are included under the subcomponents of this section). Be cautious on relying on standardized tests because they minimize EF demands. Standardized tests are short in nature, therefore requiring minimal sustained attention. Often, the student is being tested by a "novel" person so their ability to initiate, sustain attention, self-monitor, etc. is greater. In addition, the adult mediates and monitors the tasks, providing an external EF for the student.

If giving formal/standardized tasks, observe metacognitive behaviors such as self-talk and self-evaluative remarks to measure both metacognitive and behavior regulation skills. The assessor may ask how the student solved a problem, have the student evaluate and describe the difficulty of the task, or ask how well the student thinks (s)he did.

Key Components

EF can be broken down to several subcomponents, with considerable overlap:

Planning: Ability to prioritize information and resources. Planning involves the ability to anticipate future events, set goals, and develop appropriate steps ahead of time to carry out the task or activity. Look for the student's ability to work independently, plan for long-term projects, and prioritize. Does he obtain the correct materials and tools needed to carry out a project in advance? Look for difficulties with estimating time needed to finish tasks, and trouble carrying out the actions needed to reach goals . Look at time management. i.e., Does the student complete his assignments in the allotted time? Does he arrive to places and meet people on time? Look for ability to effectively plan and implement a system. Does he frequently erase or change his approach?

Initiation: Ability to begin tasks and mobilize needed resources. The length of time needed to begin a task. Does the student seem unmotivated, or despite a desire, have difficulty beginning the tasks at hand?

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Inhibition: Ability to control impulses. Observe for frequency of speaking out and blurting. This would be important to observe in the classroom as well as less structured environments (recess, cafeteria). Also, observe for blurting out an answer before directions are completed and grabbing or reaching for materials before they are laid out by the examiner. Inhibition overlaps with distractibility.

Emotional Control: Ability to handle challenging tasks, different emotions, negative feedback, and persisting over time to achieve a goal. It involves the student's ability to control his behavior with others, and manage emotions (frustrated, stressed, and disappointed). Does the student change moods frequently, overreact to what others perceive as seemingly minor events ("hot headed"), cry or laugh too easily?

Organization: Ability to arrange or manage things using a system. Take a look at his workspace and backpack. Does he keep his areas and belongings neat? Does he find his assignments, worksheets, and personal items such as notebooks, keys and phones? Does he know where to find his belongings? Look for difficulty organizing oral and written information. Does he miss the "forest for the trees"? Does he have good ideas but fail to express them on written assignments and tests?

Working Memory: Ability to temporarily/actively hold onto information in order to complete a task. Look for difficulty following multi-step directions, ability to solve mental arithmetic, or forgetting sequence of steps or algorithm. How much repetition does student require? Does the student begin a task but get distracted along the way or forget/lose track of the original direction or goal?

Self-Monitoring: Ability to monitor and evaluate behavior. The amount of supervision the student requires to follow-up with and complete tasks. How does the student determine that he has completed the task, and evaluated his effectiveness? Look for careless errors and awareness of mistakes.

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Shifting and Cognitive Flexibility: Ability to prioritize information and resources, move freely between situations, activities, or aspects of a problem. It includes use of (efficient) problem solving skills and attending to (relevant) details. Look for examples such as “getting stuck,” poor writing from dictation, and multi-tasking (reading while music is on). Does the student repeatedly use the same approach to solve a problem even when it is ineffective? Does he act upset by change of plans, think too much about the topic, and / or perseverate?

Sustained Attention: Ability to maintain attention even when distracted, tired or bored. Percentage of time on task. How much cuing and redirection is given by the teacher (or needed to be given) compared to peers. Goal directed persistence. How student follows and manages more “tedious tasks.” Compare how the student’s performs on similar task(s) requiring close attention, i.e., one that has more appealing or interesting information to the student vs. one that is less appealing or interesting.

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

How to assess relative to developmental age

EF skills are required at all ages, but expectations vary depending on developmental age. In early childhood, the adult and environment provides more external support, and as the child gets older, the responsibility and demand of EF increase. In regards to academics, writing involves the highest demand of EF, because it involves planning, organization, generation of ideas, retrieval, and motor output. Difficulty in EF can become more apparent as writing demands increase.

Ruling out confounding factors

When looking at issues relating to EF, keep in mind there are other factors that can account for these difficulties, such as overall cognitive/ developmental level, other domains (e.g., weaknesses in reasoning), and emotional factors (depression, anxiety, fatigue, situational stress). Therefore, when evaluating EF, rule out if there are other factors that better account for the student's difficulties, and/or if the difficulties are explained by both EF deficits and the other factors. Also, determine which factor would be most relevant in guiding intervention. If the student has EF deficits, they should be seen across domains, processes and settings.

Games and other informal tasks that can be used to evaluate EF skills

Mastermind	Battleship
Chess	Blockus
Tour of Duty	Angry Birds

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Executive Functioning – Quick Guide

- Selective Attention
- Flexibility
- Working Memory
- Organization
- Multiple Perspectives
- Shifting Cognitive Sets
- Planning
- Self-Monitoring

Observations Class Free time Playground Breaks	Look for: ❒ Ability to sustain mental effort for multistep tasks ❒ Attention to relevant information ❒ Adequate working memory ❒ Finding necessary materials ❒ Organization and keeping track of materials and personal belongings ❒ Evidence of planning, such as looking over assignment, getting directions, use of strategies for work or games ❒ Tolerance of interruptions, adaptation to changes ❒ Consideration of other points of view ❒ Getting started and self-pacing ❒ Ability to shift attention or strategies when needed ❒ Difficulty with forced-choice, yes/no questions, seeing shades of gray (e.g., “it depends”…vs concrete thinker). ❒ Spontaneous connections to prior learning or experience ❒ Spontaneous sorting or grouping of toys or other materials ❒ Memory of procedures and class rules ❒ Memory for location of objects (personal, class, school) ❒ Following and remembering directions, repetition needed ❒ Knowing names of teachers and classmates ❒ How long it takes to understand rules of new games ❒ Explaining rules of game to another child ❒ Keeping track of materials ❒ Applying the rule system from one environment to another environment; applying school rules across different classrooms
Interviews School Family Student-if appropriate Other	Ask questions, e.g., does the student: ❒ Follow directions and completes tasks without frequent reminders? ❒ Keeps track of items used (personal, household, play)? ❒ Adapts to changes in plans? ❒ Negotiates family and peer activities (outings, tv shows)? ❒ Tolerates frustration, negotiates, compromises? ❒ Understand task directions? ❒ Use safety rules and signs in the community?

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

	❒ Identify symbols in the community and use them as landmarks? ❒ Teach others the rules for a game?	
Records and Work Samples	Review for evidence of: ❒ Pattern of haphazard work, inconsistent quality ❒ Pattern of missing/ late assignments and/ or poor attendance, tardiness ❒ Completion of complex, multi-step assignments and/or sequential course requirements ❒ Ability to demonstrate knowledge equally well in a variety of formats ❒ Ability to follow task directions ❒ Producing stories or essays with multiple perspectives, motives, or points of view ❒ Appropriate behavior in new environments (e.g. field trips) ❒ Ease of acquiring and using new information/skills ❒ Applying simple math skills to an art project (assembly of certain number of parts)	
Informal Assessment	Activities: ❒ Strategy games, such as Mastermind ❒ Drawing – observe planning, use of space on page ❒ Puzzles – look for strategies (sorting, starting with edges…) ❒ Observe ability to adapt to changes in rules ❒ Using pictures, puppets, or role-play, discuss different characters' perspectives, feelings ❒ Observe ability to control impulses, take turns ❒ Sorting attribute blocks ❒ Play an unfamiliar game ❒ Teaching the rules and strategy for a game to the examiner ❒ Making a grocery list using a predetermined budget ❒ Writing a persuasive letter or letter of complaint ❒ Learning a memory strategy and then, later in the assessment, being given unannounced opportunities to apply it.	
Formal Assessment	❒ Bender (use of space on page) ❒ NEPSY-II Animal Sorting ❒ NEPSY-II Auditory Response Set ❒ NEPSY-II Clocks ❒ NEPSY-II Design Fluency ❒ NEPSY-II Interference	❒ NEPSY-II Word Interference ❒ NEPSY-II Route Finding ❒ NEPSY-II Statue ❒ NEPSY-II Word Generation ❒ D-KEFS Card Sorting ❒ Wisconsin Card Sorting Test ❒ WRAML2 Verbal Working Memory

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Executive Functioning – Quick Guide

- Selective Attention
- Flexibility
- Working Memory
- Organization
- Multiple Perspectives
- Shifting Cognitive Sets
- Planning
- Self-Monitoring

Observations Class Free time Playground Breaks	
Interviews School Family Student-if appropriate Other	
Records and Work Samples	
Informal Assessment	
Formal Assessment	

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

VISUAL-SPATIAL

Definition

Visual-spatial abilities are broad capacities to perceive, process, and utilize visual and spatial information. These abilities include: perceptual accuracy; analysis (identifying components and key features of visual image, processing part-whole relationships); integration of multiple stimuli (analyzing similarities, differences, and categories); sequential processing (arranging in logical progression) or holistic processing (simultaneous – recognizing and analyzing patterns); as well as storage, retrieval, and application of visual information.

Rationale

Visual perception is fundamental to school survival. The applications of visual skills are wide-range, covering both academic learning and non-academic school survival skills. For academic learning, visual processing is needed for discriminating numbers and letters, symbols, sight words, and word parts (suffixes and prefixes) as well as recognizing and applying them in other contexts. An understanding of geometric forms, charts, diagrams, and reading of maps using a key is expected to assist understanding material in a variety of subjects. Visualization skills also aid memory and visualization and sequencing of visual stimuli are needed for planning multi-step tasks and projects. Rapid recognition of visual patterns facilitates processing and speeds learning.

At a basic level, visual processing is involved in self-care and independence (e.g., getting dressed, with shoes on corresponding feet and neck and arms in neck and armholes of shirt…). It is crucial for geographic navigation of the campus (finding the way to and from the classroom, playground, lunch room, and other key areas) and classroom (finding materials needed). Visual skills also aid social navigation of the school environment (e.g. recognition of faces, even with different haircuts and clothing, and key facial expressions). Visual skills are also involved in sports and recreational activities, (visual planning and spatial awareness for games, accurate imitation of successful models for learning athletic skills).

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Key Components

Perception/ visual analysis

- Visual matching – identifying similarities or contrasts among visual features
  Examples:
  - Using realistic pictures, sketches, symbols, words, word parts, letters, or objects (e.g., playing cards, toys):
    - "Circle all the ones on the page that look just like this one."
    - "Point to the one that does not look just like any of the others."
    - "Show me another letter 'A' on this page."
    - "Point to another place you see the word 'and' on this page."
    - "Can you find any other words with 'ing'?"
  - Help sort laundry by color, size, etc. (e.g. socks)

- Visual discrimination
  Examples:
  - Identify different types of bugs, plants, reptiles in school area.
  - Select the right equipment, e.g. basketball, kickball, or soccer ball, for games.
  - Recognize which tools are appropriate for the student's age and developmental level. Adjust difficulty level as needed for student to succeed, as this provides valuable insight regarding the amount of visual input and processing demands the student can sustain.
  - Recognize tools and know which to use for what or, if too young or not allowed to use, can assist by handing someone correct one when asked.

  (Visual perception caveat -- Many young students are particularly good at recognizing icons and logos and identifying similarities and differences among those they see regularly or find important in the contexts of their lives.)

- Applications of rapid visual analysis to games such as baseball, basketball
  Examples:
  - Follow trajectory of ball to catch it.
  - Based on where runner is and how fast, decide whether to throw to player on second or third base.
  - Judge how to bat a baseball based on its pitch.

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

- Anticipate location to catch balls that bounce off backboard.
- Can “fake out” opponent by pretending to pass the ball.

- Visual reasoning

  Ability to identify critical (functional or conceptual) features of visual items

  Example:
  - Given an array of objects or pictures: “What do these (pictures or objects) have in common?” The array may represent items of different sizes, shapes, or colors, but “all are scissors,” “all can be used for writing or drawing,” “all can protect a player’s body during a game,” or “all can live in the water.”

- Use of visual contextual cues

  Examples:
  - Ask the student to help find a missing piece of a partially completed puzzle. Observe search whether search is focused on a particular shape and color-based on the pattern formed by contiguous pieces.
  - Ability to figure out what is missing from picture or object (e.g., laces from lace-up shoes).
  - Follow visual instructions to put together or operate things.
  - Estimation -- Ability to estimate relative quantities, sizes, distances for containers, maps, drawings, diagrams.

- Figure/ ground

  Examples:
  - Find pictures of items hidden within other pictures.
  - Locate lost items; spot objects that are in sight, but not in their customary places.
  - Figure out shortcuts between playground, restroom, and classroom in the rain.
  - Hide & Seek – figure out where to hide and can guess where someone else might fit and find space to stand or sit still.
  - Finds missing things (keys, glasses…) -- knows key places to look where missing objects may have been seen before; is able to spot things quickly.

Visual Sequential Reasoning

Examples:

- Arrange pictures in sequence to tell a story.
- Identifying or selecting a missing piece or what comes next in a series of drawings or symbols.

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

- Place symbols or data in a logical order (linear).
- Handling multiple features and sequences (some matrices).

Visual gestalt (simultaneous), spatial visualization and conceptualization

Examples:

- Show understanding of perspective when viewing or drawing pictures.
- Understand 2D to 3D instructions for origami, paper airplanes, LEGO or other component designs.
- Take things apart and sometimes gets them back together, or fixes or makes good attempts to fix things at home or school.
  (For LEGOs, model building – in addition to following directions, look at conceptualizing and creating to add modifications or produce an original design.)

Visual memory

- Recognition at a later time or different context of what was previously seen (e.g., face, symbol, card from deck).
- Association between location and visual stimuli (matching cards faced down)
- Can recognize peers and adults in Halloween costumes by key facial features, posture, or gait.

Visual planning

Examples:

- Navigate a maze with crayon or pencil or road or track with toy vehicle.
- Plan drawing or writing to avoid running out of space on the page.
- Visualize the top or other side of a 3D object depicted in 2D.
- Complete 3-D puzzles and 3D block designs (from 2D pictures).

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Visual-motor

Examples:

- Graphomotor (fine-tuned communication links between eye and fingertips for writing symbols and numbers) skills to copy from book or board or produce written work.
- Fine-motor skills to pick up pencil, sheet of paper, draw pictures or diagrams
- Gross motor to play sports and use playground equipment, use depth perception to catch ball, visualization of trajectory when throwing.

Spatial representation through maps and diagrams

Examples:

- Draw basketball court.
- Draw or describe bus route or the way (s)he rides or walks to and from school.
- Show home, school, and route to & from on a map.
- Draw a map of campus.
- Draw a diagram or describe what's in a fairly familiar room at school (media center, cafeteria, school office) or elsewhere (grandmother's house).
- Draw person with age-appropriate detail and proportion – trunk, fingers, toes…

Examples:

- Draw basketball court.
- Draw or describe bus route or the way he/ she rides or walks to and from school.
- Show home, school, and route to & from on a map.
- Draw a map of campus.
- Draw a diagram or describe what's in a fairly familiar room at school (media center, cafeteria, school office) or elsewhere (grandmother's house).
- Draw person with age-appropriate detail and proportion – trunk, fingers, toes…

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

A Real World Example

What areas of visual-spatial skills are described here?

Observation: During 3rd grade PE, the class activity was basketball. Students divided up into teams. William was picked first. As the play progressed up and down the court, William appeared to take the position of guard, directing teammates and throwing the ball to the "open" player to make the shot.

Observation: During lunch recess William was observed playing football. The position he played was quarterback. He was observed talking during the huddle using his hands and fingers representing players and directions they should be going. The plays were not overly complicated, and everyone seemed to know where to go. William was successful on 7 out of 10 throwing plays. Two throws were fairly deep passes (over 25 ft). He was also adept at avoiding being tagged out by the pass rush.

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Visual-Spatial Thinking – Quick Guide

- Pattern completion
- Attention to detail Discrimination
- Spatial analysis
- Visual Motor Integration
- Part-to-whole reasoning Visual Memory (Short and Long Term)

Observations Class Free time Playground Breaks	Look for: ❑ Understanding of charts, diagrams, maps ❑ Ability to visually estimate number or size ❑ Social behavior that reflects awareness of peers' facial expressions, posture, gestures ❑ Awareness of visual patterns, ability to estimate distances during sports or games at recess ❑ Ability to navigate in the classroom and on the school campus ❑ Memory for location of objects (personal, class, school) ❑ Keeping track of materials
Interviews School Family Student-if appropriate Other	Ask questions such as how skillfully does the student: ❑ Build with blocks or legos? ❑ Put together jigsaw puzzles? Assemble things? ❑ Reading diagrams? Follow schematic directions? ❑ Repair household items? ❑ Navigate in the community? ❑ Give travel directions to others? ❑ During student interview, does student mention or describe above activities or projects, or ask questions that show evidence of noting visual details? ❑ Identify symbols in the community and use them as landmarks?
Records and Work Samples	Records – review for evidence of: ❑ Poor grades for handwriting, art, math, (especially geometry) ❑ Teacher comments regarding messy work Work samples - look for: ❑ Sense of proportion, awareness of details, 3-D representation, or perspective in student's drawings ❑ Diagrams, maps, charts done by student ❑ Student's proficiency using charts, maps, diagrams, geometric forms ❑ Visual organization, layout of assignments (do items overlap, does writing run off edge of page?) ❑ Applying simple math skills to an art project (assembly of certain number of parts

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Informal Assessment	Activities: ❑ Building with blocks, legos, other materials ❑ Puzzles or tangrams ❑ Origami ❑ Mazes ❑ Hidden figure pictures ❑ Comparing and contrasting pictures to find the differences (e.g., Hocus Focus) ❑ Giving directions to the examiner to the nearest bathroom, the school office, a nearby point of interest in the community, the student's home ❑ Creating Venn diagrams ❑ Writing a persuasive letter or letter of complaint
Formal Assessment	❑ NEPSY-II Arrows ❑ NEPSY-II Block Construction ❑ PEERAMID 2 Lock and Key ❑ PEEX 2 Visual Whole: Part Analysis ❑ NEPSY-II Geometric Puzzles ❑ NEPSY-II Picture Puzzles ❑ NEPSY-II Route Finding ❑ WRAML2 Finger Windows

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Visual-Spatial Thinking – Quick Guide

- Pattern completion
- Attention to detail Discrimination
- Spatial analysis
- Visual Motor Integration
- Part-to-whole reasoning Visual Memory (Short and Long Term)

Observations Class Free time Playground Breaks	
Interviews School Family Student-if appropriate Other	
Records and Work Samples	
Informal Assessment	
Formal Assessment	

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

SOCIAL COGNITION

Definition

Social cognition refers to (1) the ability to process and conceptualize social information, (2) determine the relevance of a situation, and (3) flexibly adjust behavior to the flow of the current interactions. Even if an individual struggles to conceptually follow a given situation, they observe their environment and identify patterns to help them decide how to behave. A key element of social cognition refers to behavior – or the ability to use environmental scenarios to showcase skills. A person recognizes that modifying their behavior to different social situations pays into the positive and negative consequences to that behavior. They must be able to apply multiple alternative social strategies that they have learned in their past in order to predict responses.

Rationale

Socially competent children are able to enter a new social scene, perceive and interpret its ambiance (apply Theory of Mind), and follow its tone and drift. They are able to make contributions that maintain the existing flow. Higher social cognition infers having finely tuned repertoire of social skills. Having these skills is important because it helps one to “fit in” and perhaps even know how to operate and navigate a situation to yield the most advantageous outcomes for that person. An argument can be made that the most cognitively challenging tasks most individuals must cope with are navigating other individuals and their environment.

Key Components

Albert Bandura conceptualized social learning theory, which is based on the principle that people learn by observing models in their environment. People can learn by observing others’ behaviors and the outcomes of those behaviors. The environment reinforces or punishes imitation of a model. These consequences provide intrinsic or extrinsic motivation for the student to judge whether it is worth continuing to develop that skill.

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Cognitive factors that are associated with social learning include:

Vicarious Learning – Learning through observation.

Imitation of Models – This can be structured modeling of a behavior that a student is explicitly taught to learn. It can also be implicit modeling that an observer naturally learns from live models or symbolic models that are made available through medias such as television, text, etc.

Sustaining Attention – Attention is required for an individual to observe a behavior and subsequently link what consequences occur as a result of the behavior.

Forming Expectations – Consequences result from behavior, and patterns of consequences form expectations that guide an individual's future responses. *Theory of mind*

One way to identify traits included in social cognition is to consider students who are labeled "popular" or students who everybody likes. These individuals know how to navigate their social environments to gain social status and fulfill their wants and needs. This applies to peer and adult interactions. Social competencies that are associated with popularity are:

- Relevance — The ability to "read" a social situation and adapt behavior accordingly.
- Responsiveness — Capacity to receive and reinforce the social initiatives of others.
- Timing and Staging — Capacity to pace relationships; knowing what and when to do or say.
- Indirect Approaches — Awareness that relationships and interactions are often initiated and sustained by indirect means.

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

- Feedback cues	Sensitivity to negative and positive social feedback while relating.
- Resolution of Conflict	Skills for settling disagreement without verbal or physical aggression.
- Verbal Pragmatics	Understanding and effective use of language in social contexts.
- Social Memory	Recall and use of prior interactional experiences.
- Social Prediction	Ability to foresee the social consequences of one's actions and/or words.
- Awareness of Image	Tendency to present oneself to peers in a socially acceptable way.
- Affective Matching	Ability to discern and reinforce the current feelings of a peer.
- Recuperative Strategies	Ability to compensate for social error.
- Social Metacognition	The knowledge of one's own social skill patterns and perceptions of others.

Social Development

A primary element of social development is the formation of friendships. As friendships develop, there is increased understanding about others' values, backgrounds, and interests. For school-aged children, some key aspects are:

1. Emergence of play from a standpoint of convenience to mutual respect, affection, and sharing of feelings
2. Understanding of how personal actions can affect a friend's state of mind and feelings
3. Perspective taking
4. Ability to distinguish between acquaintances, friendships, and close friendships
5. Growing independence and transition from adult participation in friendships
6. Increase in selfless actions for another person.

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Social Cognition – Quick Guide

- Cultural competency
- Understanding social rules
- Adapt behavior
- Social prediction
- Evaluating social scenarios
- Perspective-taking

Observations Class Free time Playground Breaks	Look for: ▪ Imitation – using successful peers/adults as models ▪ Adapt behavior to setting – formal/informal, purpose, social composition, activity ▪ Capacity to pace relationships; knowing what and when to do or say ▪ Resolve conflicts on playground with peers ▪ Evidence of correctly “reading” others’ affect from gestures, body posture, facial expressions ▪ Recess – ease of initiating/joining a game and following the rules; level of explicit teaching needed ▪ Skills for settling disagreement without verbal or physical aggression ▪ Effectively using language in social contexts ▪ Ability to compensate for social error ▪ Shared enjoyment and interest in others’ shared enjoyment ▪ Evaluating a social scenario to plan own entrance ▪ Perspective taking ▪ Ability to predict what would happen next
Interviews School Family Student-if appropriate	Ask questions, e.g., does the student: ▪ Recall and use prior interactional experiences? ▪ Foresee social consequences to own actions? ▪ Strategize how to respond or change behavior when predicting consequences of own actions? ▪ Know how to appropriately enter a conversation? ▪ Ask questions that incorporate the bullets from “Observations, Class, Free time, Playground, Breaks” (above)
Records and Work Samples	Records - review for evidence of: ▪ Review teacher comments in school cumulative folder ▪ Review teacher comments on report cards ▪ Review report card grades for citizenship

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

	Work Samples – look for: ▪ Writing compositions that problem-solve social topics ▪ Child's role in group projects
Informal Assessment	Activities: ▪ Interactive games ▪ Playing a game – back and forth flow, reciprocity, fairness ▪ Does child initiate board game with peers? ▪ Does child choose an activity that integrates everyone's preferences? ▪ Novel imaginative games that integrate characters and social scenario ▪ Ability to problem-solve an unpredicted "monkey wrench"/complexity during imaginative play ▪ Can child adjust competitiveness to win a game based on other players' reactions ▪ Child's understanding of own social skill patterns and perceptions of others.
Formal Assessment	▪ Behavior Assessment System for Children, 2nd Edition ▪ Roberts-2 Apperception Test ▪ Thematic Apperception Test ▪ Tell-Me-A-Story ▪ Adaptive Behavior Assessment Scale, Second Edition – Social Composite ▪ Vineland Adaptive Behavior Scales, Second Edition – Socialization Domain

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Social Cognition – Quick Guide

- Cultural competency
- Understanding social rules
- Adapt behavior
- Social prediction
- Evaluating social scenarios
- Perspective-taking

Observations Class Free time Playground Breaks	
Interviews School Family Student-if appropriate	
Records and Work Samples	
Informal Assessment	
Formal Assessment	

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

LANGUAGE

Definition

The verbal and nonverbal ways in which people convey information, express their thoughts, needs, and feelings, and interpret other people's communication.

Rationale

As school psychologists we must gather, informally or formally, some basic information on our students' capacities to use and process language. This is necessary for mapping out a student's cognitive profile to assist in determining eligibility. The category of Specific Learning Disability (SLD) specifies the following basic processing areas that deal significantly with language:

- Auditory Processing: "The ability to recognize and interpret visual stimuli involving auditory stimuli; Perception (discrimination, closure), memory sequencing, integration, blending."
- Cognitive Association: "The ability to see similarities, correspondence among stimuli. The ability to memorize and learn by rote."
- Cognitive Expression: "The ability to communicate ideas through language such as writing, gesturing and speaking."

When speech and language is a major difficulty, a speech and language pathologist (SLP) is needed for further assessment of a student's strengths and weaknesses in various aspects of language. It is highly recommended that school psychologists consult with their speech and language specialist counterparts as often as possible, to be cognizant of each other's areas of expertise and recognize when the other is needed either for consultation or to be added to an assessment team.

However, school psychologists must sometimes deal with real world situations where a speech language therapist may not be available to be part of the assessment team. Language is a domain which interacts extensively with all the other domains, so language skills must be explored and the interactions must be addressed. For instance, we may

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

hear reports and also observe and that a student seems “lost” whenever the teacher explains a new idea to the class. In order to determine whether the student needs help, and what kind of help, we need to explore the extent to which the student may have trouble understanding the reasoning involved, problems with focused and sustained attention, and/ or trouble processing what the teacher’s oral language.

Key Components

Verbal Comprehension: Include the understanding of synonyms/antonyms, and verbal analogies. This domain also includes the understanding of directions, recalling of stories or sentences i.e. (meaningful memorization).

Verbal Information: General Information, academic knowledge, receptive and/or expressive picture vocabulary.

Retrieval Fluency: This includes the rapid: naming of pictures; association of items in a category/group (e.g. Name as many things that you can smell as quickly as you can); matching of associated images.

The Language domain subsumes by its nature the auditory processing domain and therefore auditory processing task specific issues such as:

Phonemic Awareness: The blending of sounds, word gestalt (filling in missing sounds when words are incomplete). Related to this is sound discrimination, such as vocal patterns/intonations, sound patterns in music.

Auditory Memory Span: This can include short term memory for auditory information of an non-meaningful nature (not a sentence or a story) e.g. a string of digits to auditory working memory e.g. numbers reversed.

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

PROCEDURAL CATEGORIES

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

ASSESSMENT CHECKLIST

Review of Records	Date
Cum Folder	
Attendance	
Behavior	
Confidential File	
Health Records	
Report Cards	
CST, STAR testing	
Other:	

Observations - Location	Date / Time

Interview - Name	Date

Standardized Assessment	Date / Time

Informal Assessment Activity	Date / Time

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Assessment Checklist

For specific information on the assessment components, refer to individual domain quick guide checklists.

Review of Records

RECORDS	DATES
CUM	
Attendance	
Word Samples	
Confidential File	
Other	

Observations

DATE	WHERE

Interviews

DATE	PERSON

Informal Assessment Methods

DATE	TASK

Standardized Assessments

DATE	TEST

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

REVIEW OF SCHOOL RECORDS

What is the purpose of the reviewing school records?

The purpose of reviewing a student's school records is to obtain a global picture of the student's educational history. School records may come from multiple sources and include various formats of information.

A review of records is important because it gives you a snap shot of that child's school history. A record review should be done in the initial stages of the assessment process. Through a record review, the assessor should be able to see where gaps occur in the child's education. Sometimes, the smallest piece of information that is buried deep in the records will provide the missing piece of the puzzle.

What does the review of records include?

The cumulative folder or file is the primary source of a student's records. Cumulative or "Cum files" will often contain the following information:

- Attendance records
- Report cards
- School history, programs attended, and number of times a student may have moved
- Health records (vision and hearing screening)
- Standardized achievement test scores
- Any discipline or behavior reports
- Student work samples
- Anecdotal information

Don't forget the importance of reviewing work samples that are produced over a period of time.

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Other records to review**:**

Many districts have a supplementary file that is considered a special confidential record. This file may be kept in a different location. It may contain information such as psychological test results and other specialist assessment reports. If the student is or was in special education, this file will give you a history of special education placements, Individual Education Plans, and Behavior Support Plans (if relevant). In addition, the file may contain documentation of guardianship (if in question), parents' rights, and other information the teacher or parent feel is important. Occasionally, additional medical information may be found in this file.

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Record Review
Best Practice Guidelines for the Assessment of African American Students

Attach Signed Assessment Plan and All Exchanges of Information

Name:		Date of Birth:	
Grade:		School Site & Room #:	
Parent(s)/ Guardian(s):	Phone #'s: Email(s):		
Current Teacher:	Phone #'s: Email(s):		
RSP/SDC/Speech:	Phone #'s: Email(s):		
Other Agencies:	Phone #'s: Email(s):		
Languages spoken in the home:		Is English student's primary language	

Health Records (including vision & hearing screenings)	Current: Previous Year(s):
Attendance/Tardies*	Current: Previous Year(s):
Discipline or Behavior Reports*	Current: Previous Year(s):
SST(s) Summary (attach copy of original to back)*	Current: Previous:

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Standardized Achievement Score Summary (STAR, CST)*	English-Language Current: Previous Years:	Mathematics Current: Previous Years:	Science History-Social Science
Report Card(s)*	Current Areas of Strength: Current Areas of Concern: Consistency from previous year(s) report card(s).		
School history, programs attended, past schools attended (# of times student has moved), and additional anecdotal information			
	Attach student work samples*		

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

TIPS FOR CULTURALLY COMPETENT INTERVIEWING

✓ **If unfamiliar with the culture, seek help from a "cultural broker."**

✓ **Involve family members in the planning of the interview logistics.**

This may mean being creative with time frame to meet needs of the family.

✓ **Preview the interview with the family members.**

Communicate purpose of the interview and some sensitive questions you might ask.

✓ **Be flexible and responsive to the family's interaction and interview style.**

Establishing rapport is critical, and it must be done in a genuine manner.
Family members may not answer questions directly for various reasons.

- Many family members have a "storytelling" way of communicating and will talk around the question before answering.
- Family members may be suspicious and will feel uncomfortable about answering certain questions. Building rapport first is most important.
- Communicate with family members how the information that is provided will help determine their child's educational needs.

✓ **Examine why you are asking each question.**

Ask only those questions that will provide valuable information for your assessment.

✓ **Speak naturally – do not attempt to conform to student's or family's speech style (e.g., using slang with an adolescent student).**

✓ **Remember that each individual and family is unique.**

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

GENERAL INTERVIEW
PARENT

Medical and Developmental History:

Begin by accessing and reviewing forms and records which already contain information provided by the parents. These include the district or school nurse's health and developmental questionnaires, and information obtained from review of records (including school health file and previous psychoeducational reports). If this information is not available, have parents complete or interview them using a background or structured developmental history, i.e., Sattler Background Questionnaire or the BASC Structured Developmental History.

Specific areas to review and obtain information about include:

- **Pregnancy**, including complications, drugs/medications used, mother illnesses, length of pregnancy
- **Birth**, including mode of delivery, any complications, prematurity, jaundice, Apgar scores, length of stay in hospital, incubator
- **Developmental** milestones and any concerns about development of language, communication, understanding directions, attachment, attention, forming friendships, and emotional regulation
- **Medical History**, including childhood illnesses, medical conditions, surgeries, injuries, possible head injuries, ear infections, hearing, vision. Medication child takes. Investigate and note whether the child has been diagnosed or treated for problems associated with development and learning, i.e., autism, AD/HD, behavioral and emotional problems.
    - How often does your child see a doctor? For what did he last see his doctor?
- **Family history** of medical, learning, communication, mental health, emotional, behavioral, substance abuse, other. Ask specifically about immediate family members including parents and siblings
- **Additional concerns during infancy and early childhood** including eating, emotional regulation, communication, learning, separation, crying, bedwetting, sleep problems
- **Educational history,** including first concerns about learning, what subjects/areas have been challenging, when he began specific interventions or special education classes and why. Clarify from review of records, if needed, schools and programs he has attended.

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

I. Whenever possible, face-to-face interviews are best. Create rapport while identifying the parents' main concerns and observations of their child. Begin with more open-ended questions, and then taper to more specific questions. Examples of general questions include:

- What is your understanding of why your child is being assessed?
- How long has this problem been of concern for you?
- When were you first concerned about your child?
- What were your previous concerns?
- What things does he have difficulty learning?
- Has your child received an evaluation or treatment of this current problem or similar problem?
- What do you think will help your child?
- What concerns do you have about his behavior?
- What disciplinary techniques do you use when he behaves inappropriately?
- Review the information from Medical and Developmental History and review of records and ask for clarification. If you notice inconsistencies, clarify them, or ask a more open ended question to elicit/clarify this information.
- Is there any additional information that would be helpful for me to know about his school history?

II. More specific or tapered questions include:

- Emotional regulation/mood. Example questions include: How does he express feelings? Does he show any fears or anxieties? What upsets him? What makes him happy?
- Activity level, impulsivity, concentration, distractibility, completion of tasks, forgetfulness, impatience
- Compliance
- Peer relationships: bossiness, perception of others liking him, friendships, sharing/taking turns, how he deals with losing, how he handles conflicts with others, empathy, ability to make friends, who he plays with (younger, older, more dominant), does he play alone, role he takes in playing with others
- Independent or adaptive skills
- What are his chores and responsibilities?

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

III. Include questions that elicit the positives, including the student's strengths, what helps him, and what motivates him:

- What seems to help him?
- What was the last thing you did with your child?
- What are his strengths / what is he good at?
- What motivates him?
- When has he been successful (in specific class, specific task, accomplishment)?
- What are his favorite activities? What does he enjoy doing in his free time? What does he like at school?
- What does he enjoy doing with his friends, siblings, family?
- What helps him focus?
- How does he like school?
- What disciplinary techniques are effective/does he respond to?

IV. At end of interview, wrap up by asking parent:

- Is there any additional information that would be helpful for us to know when working with your child?

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Interview Data Form for PARENT

Interview Comments	Quick Notes / Hypothesis	Domain

Domains: R = Reasoning Lang = Language Soc = Social Cognition EF = Executive Functioning VS = Visual-Spatial

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

GENERAL INTERVIEW
TEACHER

Prior Information:

Prior to interviewing the teacher, the psychologist usually has been presented with reason(s) for referral and will have reviewed records, such as the cum file and student study team (SST) notes. Low test performance often prompts a referral for a special education assessment. A triennial assessment involves review of prior assessments and progress towards student's individualized goals. Interviews can be conducted before or after observations, as both can influence what additional information is gathered from the other; interviews can prompt specific information to observe for, and observations can prompt questions to probe for during an interview. Prior information collected will assist in tapering the teacher interview and making the best use of time used to interview.

General questions:

Begin by asking some general questions to identify and/or validate the main areas of concerns, as well as to identify the student strengths. Begin with general questions, and taper to more specific ones based on interviewee responses and prior information:

- How does the student perform in your class?
- What are your specific concerns?
- What are his weaknesses?
- What does he have difficulty learning? Why do you think he has difficulty learning?
- Does he have difficulty completing tasks on time?
- How does he compare to his peers?
- How long does it take him to learn specific skills and concepts (letters, numbers, words, vocabulary words, calculation)?
- Does he apply the skills he learned (adding to counting change)?
- How long does it take him to learn routines?
- How much scaffolding does he require?
- Is he able to follow directions? Does he need repetition?
- How much help does he need to complete assignments?
- (When) is he able to keep up with his class?
- How are his self-monitoring skills, i.e., does he check if he completes tasks, how much does he rely on others to complete tasks?

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Ask the teacher for specific work examples, samples and data, including benchmarks, performance on tests, journal entries, and drawings. Have them show you average student samples for comparison.

Include question to elicit student strengths:

- What are his strengths? What are his best subjects?
- What are his other special skills and characteristics?
- In what situations does he demonstrate strengths (subject, whole group, mode of presentation, mode of response, etc.)?
- What helps him learn best?
- What helps him remember things?
- What are his favorite activities?
- When has he been successful (in specific class, specific task)?
- What motivates him?
- What does he do when he has difficulty?
- Is he creative? Can you give me any examples of him demonstrating creativity?
- When has he been successful (in specific class, specific task, accomplishment)?
- What school activities does he enjoy?
- What helps him focus?
- What disciplinary techniques are effective or does he respond to?

If not already identified from the strengths questions, ask questions to help identify interventions that will help the student:

- What happens when he can't figure out a problem?
- What helps him?
- What do you think will help your student?
- What are your recommendations for him?
- What accommodations or modifications do you use to help him? How helpful are these?
- What other accommodations or modifications do you think will help him be successful?

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Include behavior questions impacting or related to cognitive skills, including attention, executive functions, self-awareness, compliance, peer relations, and emotional regulation:

- Does he complete tasks on time? Does he complete assignments on time? Does he complete tests on time?
- Does he remember to turn things in?
- How does he communicate and express himself?
- How does he express his feelings?
- How are his organization skills? Does he remember to turn in and find his assignments? Does he lose important possessions, books, or papers?
- How does he approach new problems? Does he solve problems haphazardly or come up with a systematic way to solve them?
- Describe his peer relations, i.e., awareness of others' feelings, gullibility, bossiness, sharing/taking turns, how he deals with conflicts with others, ability to make friends, who he plays with (more/less dominant, popular, mature student), role he takes in playing with others
- Does he complete work independently and prioritize tasks?
- Is he able to regulate his emotions, including how he handles negative feedback and conflicts?

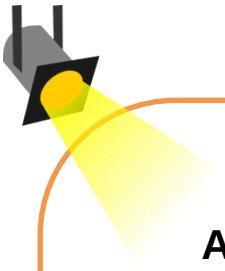
At the end of the interview, wrap up by asking the teacher.

Is there any additional information that would be helpful for me to know about his learning and progress?

Follow up suggestions:

If either review or interviews suggest concerns in behaviors, emotional regulation, social skills, have the teacher complete a broad band rating scale such as the BASC. Consider administering adaptive rating scales when there are concerns about overall cognitive functioning, language, independence skills, and behavioral disorders such as AD/HD and autism. Review and score the ratings. If there are inconsistencies or missing information, or additional clarification needed, check in with the teacher for clarification.

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.



Additional Information to Obtain from Teacher

- School attendance, test scores, amount of homework completed and returned .
- Consider having the teacher rate him in these areas compared to his peers.
- Request work samples to gauge the student's performance in class. Compare them to the average, top, and bottom student.
- During or as soon as possible after observation, get. clarification from teacher(s) and specialist(s) of how typical is this

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Interview Data Form for TEACHER

Interview Comments	Quick Notes / Hypothesis	Domain

Domains: R = Reasoning Lang = Language Soc = Social Cognition EF = Executive Functioning VS = Visual-Spatial

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

GENERAL INTERVIEW STUDENT

Prior Information:

Before interviewing the referred student, the psychologist should gather background information, including understanding the reasons for referral and completing a record review (SST notes, previous assessments, CUM file, teacher reports, etc.). It is also useful to complete an observation prior to direct interaction with the student. A discrete observation allows the psychologist to notice patterns of behavior, responses, and learning style, and these observations can be discussed during the interview to get the student's perspective. Prior information collected will assist in focusing the student interview and making the best use of time used to interview.

Inform the Student:

Students naturally question why they are pulled out of class, often wondering if they are in trouble. They will be more comfortable and focused once they have this answer. The interviewer's role is to provide an honest explanation that also instills confidence in the interviewee. A sample response is:

> "Do you know why you are here? [Student responds.] Well, your teachers and family care a lot about how you learn. It's clear you can do a lot of things well in school. Sometimes some work can be hard though, and it is our job to figure out the best way for you to keep learning. We are going to meet a few times to figure out all the things you do well and some ways to make school easier for you. I bet you already have some ideas about what you're good at and what is a little hard for you, right? [Student responds.] Has anyone ever asked you what you think is easy about school and what you wish was different or could make school better for you? [Student responds.] Well, your opinion is very important, so I would like you to share that information with me."

Establish Rapport:

Begin by investing time to build rapport so that the student views the interviewer as someone they can trust, not simply a school authority figure. Help the student maintain a sense of self-esteem and self-acceptance. It is important to establish trust because

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

the student will be more comfortable answering questions honestly instead of providing responses (s)he thinks the interviewer would prefer. Spontaneous offering of information may also occur once rapport is attained. Quality rapport also allows the student to be more relaxed and comfortable, which assists in bringing out the student's full potential during formal and informal assessment, since diminished anxiety and apprehensions reduce confounding variables and allow the student's full potential to shine.

Begin by "shootin' the breeze" – being curious about the student's hobbies, skills, and interests. Consider playing a game that will both gain the student's buy-in and provide diagnostic information. If the student is able to multi-task or seems interested, weave in some general questions to identify and/or validate the main areas of concerns, as well as to identify the student strengths. Be prepared to be flexible and use unstructured and semi-structured interviews formats that assist in making the student comfortable. Begin with general questions, and taper to more specific ones based on student responses and prior information. Adapt the questions to the child's chronological and developmental level.

Include questions to elicit student strengths:

- What are your favorite things to do for fun?
- What do you like about that activity?
- How did you decide on that answer? (when playing a game)
- What do you think about school?
- What's your favorite subject in class?
- What do you think your best subject is?
- What do you like about that subject?
- What is your favorite part of the day in class?
- What do you like to do during recess / passing periods?
- Are there any sports you like to play? Tell me about that.
- What is your favorite game? Can you describe how to play? (look for planning, strategy, sequencing, understanding of purpose)

Reflective Listening

Reflective statements that paraphrase a statement made by the student are helpful because it allows the student to feel heard. For students who struggle in school, reflective listening is invaluable because it gives them a voice and lets them know that they are understood. When an individual feels like their thoughts or opinions matter to someone, they will likely elaborate on a topic, offer their own input, and they will be more comfortable to correct any misinterpretations the interviewer concluded. Reflective listening is especially useful when discussing topics such as school struggles

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

and ideas for intervention since students are often very aware of what could make school a more successful learning environment.

Ask questions to help identify interventions that will help the student:

- If you had three wishes, what would they be to make schoolwork easier?
- If you had three wishes, what would they be to make anything at school better?
- If you had to rank your preference of teaching, what order would you put these in? (seeing it on the board, hearing your teacher's lesson, doing hands on projects, writing things down?
- Does it help when your teacher connects a current lesson to a previous lesson? How?
- Does it help when your teacher connects a current lesson to one of your favorite games/activities/experiences? How?
- You know how your teacher teaches you differently for math, ELA, etc? Sometimes they do a big lesson to the class and then small group work. Sometimes they even let you work with peers or let you work on your own with really specific steps? What is your favorite way to learn?
- What do you do when you can't figure out a problem?

At the end of the interview, ask this open-ended question:

Is there any additional information you think is important for me to know about you? Is there anything I could tell other people about you that you would want them to know?

If either review or interviews suggest concerns in behaviors, emotional regulation, and/or social skills, complete a broad band rating scale such as the BASC-2 and follow up with more comprehensive social-emotional assessment as warranted. Consider administering adaptive rating scales to staff and family when there are concerns about overall cognitive functioning, language, independence skills, and behavioral disorders such as AD/HD and autism. Review and score the ratings.

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Interview Data Form for STUDENT

Interview Comments	Quick Notes / Hypothesis	Domain

Domains: R = Reasoning Lang = Language Soc = Social Cognition EF = Executive Functioning VS = Visual-Spatial

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

INTERVIEW - OTHERS

What is the purpose?

Interviews are used to gather additional information about the student's cognitive functioning in each domain from those familiar with him across different environments. Interview data can significantly expand the range of knowledge about a student's abilities by finding out how the student is able to apply those abilities in a range of settings and situations outside school. Consider also interviewing for the following reasons:

- To gain a clearer picture of the student's strengths and challenges
- To determine accuracy of previously collected information
- When it is no longer possible to observe those reported skills or lack of skills
- To help determine what informal assessments to conduct
- To gather information to facilitate rapport with the student

What does the interview component include?

Who:

- Identify the person(s). Other than the parent and the teacher, who are other individuals you feel you need to talk to in order to get a more comprehensive view of the student. Consider intervention specialists, after school program staff, counselors, coaches and others key players in the student's life.

When**:** Conduct additional interviews during and after your observation and testing. Also, make sure you have clarified what period in this student's life the interviewer worked with him and to what period he is referring to during the interview.

How**:** General Guidelines

Create rapport with the interviewee by letting them know the purpose of the assessment. Emphasize that your purpose is to assist the student to be successful and help those working with him better support his success. You are interviewing them to get a clearer picture of him than just test scores.

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Begin with more general, open-ended questions. Refer to parent and teacher open-ended questions, in addition to:

- What are/have been your concerns?
- What are the student's strengths (learning, socially, sports, artistic, construction) and weaknesses?
- What are his skills, i.e., chores, cooking, assembling, shopping?
- What games does he play and what skills do these involve?
- What other activities does he perform and what skills do these involve?
- How does he learn best?
- How do his skills compare to that of his peers (general and/or special education)?
- Why do you think he has difficulties with learning?
- How does he learn best?
- What are his strengths and weaknesses?
- How long does it take him to learn a new task? A new concept?

Collect information that will assist in selecting assessment tools and instruments:

- What motivates him?
- What are his favorite activities so that you can have him describe, explain, or show them?

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Interview Data Form for OTHER

Interview Comments	Quick Notes / Hypothesis	Domain

Domains: R = Reasoning Lang = Language Soc = Social Cognition EF = Executive Functioning VS = Visual-Spatial

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

OBSERVATIONAL ASSESSMENT

What is the purpose of student observations?

Observations provide samples of skills in everyday life contexts. Some students have skills which they are unable to demonstrate optimally in a test setting because of factors such as the unfamiliar context, task format, and task demands. Observations in a natural context provide opportunities to capture more, and richer, information about the student's abilities to perceive, understand, and respond adaptively to his or her environment.

Information gathered through this qualitative data-gathering process serves multiple purposes, including 1) environmental factors contributing to a student's learning; 2) cognitive strengths, weaknesses, and learning styles; and 3) behavioral needs. It is also very likely that an observation of one situation will apply to multiple domains such as visual-spatial thinking, executive functioning, reasoning, contextual learning, and language development. Information presented below details how to conduct an observation to identify cognitive strengths, weaknesses, and learning styles.

What does the observational assessment include?

During an observation, the examiner's role is to record a description which is as objective as possible that records what the examiner sees and hears in the observed environment and with the observed student. Classroom observations are a key component of any school assessment. It is best to observe the student participate in different types of activities, e.g., whole group vs. independent, structured vs. unstructured. Whenever possible, it is useful to observe the student outside class as well, such as lunch, breaks, recess.

<u>How to conduct a classroom observation:</u>

1. Identify the purpose of the observation. Enter with a hypothesis so that there is a focus for the observation, and be prepared to accept information that supports and/or contrasts the hypothesis.
2. Prepare the teacher in advance. It is generally helpful to let the teacher know who you are observing and that you would like this observation to be discrete. Teachers may ask for increased participation from that student, which will likely contribute to the observation. Teachers may also provide you with work samples that will likely provide insight regarding the student's learning style.
3. It is best if the student does not realize s/he is being observed. One way this can be accomplished is by trying to blend in the background as much as possible.

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

"Look" at the student without placing your eyes directly on the student; use peripheral vision to observe the student while making it appear that your eyes are focused on something nearby, and employ listening skills to notice what the student does and does not contribute. Another way to observe is to engage a variety of students, including the one being examined – ask what they are learning, how they made their conclusions, comment on their problem-solving process, etc. This gives the examiner an opportunity to see what the student is able to do and not do, how the student is able to articulate his/her own understanding of how to accomplish the task, and to compare the observed student to peers.

4. Write down the information as it is being observed to ensure an objective observation. If you can see it, hear it, smell it, or feel it, it is objective and can be quantified. The more time that lapses between the observation and its documentation, the more likely subjective tints will be added to what actually occurred. Avoid subjective input such as ideas, thoughts, or opinions.
    a. Objective Example - Student A sorted objects by one dimension such as color in 9/10 trials; when presented the task of sorting by two dimensions such as color and size, he threw all manipulatives within reach toward the examiner.
    b. Subjective Example - Student A destroyed the task when asked to sort by two dimensions such as color and size.

<u>What to Observe:</u>

1) It is important to consider the student's background and environmental exposures prior to making conclusions.
2) Direct observations of a student in structured and non-structured environments (e.g., playground, classroom, elective classes, home, etc.) allows you to learn:
    a. how the student functions in situations requiring planning, decision making, memory, attention, and related functions;
    b. whether the student's reactions to social stressors (e.g., disagreements with others, timed tests, etc.) and environmental stressors (e.g., noise, physical position in classroom, time of day, etc.) are influenced by his/her ability to manage the incoming information; if the student is overwhelmed, then ask why this is the case.
3) What is the student's method of problem-solving? Trial and error? Planning? Flexibility to reorganize strategy? Is the student cognizant of what s/he knows or does not know? What does this say about the student's *reasoning* and/or *executive functioning* skills?
4) What is the pattern of the child's successes and failures? If s/he experiences mostly successes and then failures, does this speak to working memory being exhausted?
5) Does the student generally experience success when s/he takes time to plan response versus success for rote calculation or repetition of knowledge learned? How well does the student recognize errors and then proceed to make changes to help solve the problems? What can then be concluded about the student's

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

executive functioning skills?

6) Does the student perform better on tasks that involve building a structure using manipulatives? What signs tell you the student is frustrated when completing a paper-pencil maze? How does this relate to *visual-spatial thinking*?
7) Does the student learn anything from successful completion of earlier tasks? Does the student perform better on tasks to which s/he has been environmentally exposed, or is the student applying previously learned concepts to novel situations? What does this say about the student's reliance on *contextual learning*?
8) Is the student able to verbally describe how things are related? Can s/he categorize? How does this relate to *language development*?
9) Example of the Importance of Observation - In the aforementioned example of sorting, the examiner may want to know the length of time the student was required to sort by varying difficulty levels, which task was first, or if a reinforcement system was required to complete trials. This information is important because it influences whether the conclusion could be that the student was tired, bored, minimally engaged, etc. (environmental factors). Another hypothesis could be the two-dimensional sorting task was difficult because he had not developed concept formation for different categories, pattern recognition skills, nonverbal reasoning skills, etc. (processing skills).

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Observation Data Form

Observation Comments	Quick Notes / Hypothesis	Domain

Domains: R = Reasoning Lang = Language Soc = Social Cognition EF = Executive Functioning VS = Visual-Spatial

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

FORMAL TESTING

What is the purpose of Formal Testing?

When conducting a MATRIX assessment, formal testing may be used to complement other procedures. Strategically selected tasks taken from formal test batteries that are not prohibited by law may provide information that can be used to help confirm or reject specific hypotheses or to clarify and extend the findings obtained through other procedures.

What does Formal Testing include?

"Formal testing" refers to the use of standardized, norm-referenced test batteries. Tasks are presented in accordance with specified procedures described in the examiner guidelines that accompany each test. The examiner is expected to follow prescribed procedures, including scripted task instructions, arrangements of task materials, and allowable repetitions or responses to student questions. Guidelines about acceptable responses to obtain credit for items are also clearly spelled out. This ensures that students tested have as similar as possible test experiences and that all students' scores are based on consistent criteria.

These consistencies are cited as justification for deriving standardized scores based on age- or grade-level norms representing the population sample on which the test was normed. Standardization also is used to justify comparison of different students' performances on the same test and to attribute meaning to differences in scores.

However, the test conditions, task instructions, and types of material that are conducive to optimal performance for students of some cultural backgrounds may be far from optimal for students from other backgrounds. Differences in the ways in which students of varying cultural background and experience respond to the prescribed conditions of widely used standardized tests are poorly understood. The magnitude of the difference between the average scores of African American students and those of non-African American students suggest that these poorly understood differences can play a large role in the misclassification of African American students.

Not all formal tests and subtests are prohibited for use with African American students under Larry P. The ruling specifically proscribed tests that yield IQ scores, any other scores claimed by test publishers to represent broad intellectual abilities, or scores on scales considered to measure broad areas of intellectual ability (e.g., verbal/performance, simultaneous/sequential, etc.). If a test battery is determined by these criteria to not be appropriate for African American students, then its subtests are

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

also not appropriate. Normed tests that do not yield IQ scores and purport to assess "neuropsychological processes," including attention, executive functioning, visual-motor integration, or learning and memory fall into a gray area and should be viewed cautiously. Some of the tasks included in these batteries are very similar to those found in "IQ tests."

Even if a standardized test is determined not to be a measure of intellectual ability, it may not be appropriate for use with African American students. Further questions should be explored to determine appropriateness .

- Does the statistical/technical manual provide breakdown of scores by ethnic group or other population parameters? Beware of author/publisher cover-ups. They can make it difficult or impossible to see whether scores differ among groups (perhaps in part due to Larry P).

- Are different cultural groups sampled in proportion to their representation in general population or is oversampling used to create sub-samples that are of adequate size for analysis? It is not enough for the normative sample to include statistically proportional representation of African-American students. Did they test an adequate number of African-American students to analyze predictive validity? Is the subsample stratified across SES levels and geographic distribution (parts of the country; urban, suburban and rural) with adequate numbers of students in each category; can the sample of African-American students be viewed by age level, region, and SES level to determine predictive validity for the different subgroups?

Using Formal Testing as part of MATRIX Assessment

Although the emphasis of the MATRIX assessment system is on the collection other types of assessment information, formal tests that are not proscribed by law may, at times, be useful adjuncts. Generally, with the extensive range of information generated using the MATRIX, administration of a full test battery is not likely to be productive; it's more likely to produce noise – information that is redundant, extraneous, and/or irrelevant.

However, selective testing may be a useful source of complementary data. Particularly, strategically selected tasks may produce data that can be used to confirm or reject hypotheses or to clarify and extend matrix findings. Allowable tests generally focus on specific neuro-developmental competencies, such as memory, executive functioning,

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

and sensory-motor integration, and do not purport to assess overall cognitive ability or major components of overall cognition. Proceed with caution because allowable tests may be as invalid for African American students as prohibited tests and take care using norm-referenced scores.

Strategically select specific tasks (subtests) to test specific hypotheses and extend or clarify information generated through use of the MATRIX. For instance, if a student is noted to have trouble retaining auditory information, the assessor may wish to use tasks from a standardized instrument to determine whether the student has trouble with short- or long-term auditory memory problems or both. Or the assessor may wish to examine a student's memory for words vs. sentences vs. narrative to find out about use of contextual cues, optimal chunk size, the extent to which attention is dependent on material being meaningful and other educationally relevant information. In these cases, the assessor may wish to follow standardized procedures in order to obtain norm-referenced scores for comparison of the student's scores across subtests.

At other times, tasks from cognitive batteries may be used informally, with tester modifications, and with no numerical scores derived or reported. For instance, it may appear that a student has verbal memory difficulties and that these difficulties may be due to insufficient depth of processing and/or inadequate use of strategies for processing the information to be remembered. The assessor may present a verbal learning task (word lists with multiple presentations) and if the student shows anticipated difficulties, you or the assessor may want to teach and coach on strategies for forming clusters of associated words. The assessor may wish to try finding out whether the student can adopt and use strategies he or she is taught. This may be done by teaching the student to develop word clusters based on associations that are easy to visualize (boat next to dock next to beach with birds and sand) vs. more abstract categories (tools, living things, household things) vs. semantic similarities (e.g., words beginning with "s," or with "b"). Use one word list for instruction and practice and then another one as a post-test.

This section concludes with the usual caveat, which cannot be repeated too often: **Never base any conclusion on test scores only. You should always have corroborating information obtained by another method.**

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Helpful Tips

The Table Domains and Development can be found in the Appendix C of this manual. This table was created to provide general guidelines for age ranges when evaluating student performance within specific Domains. Remember to compare observational information on the student being assessed with that of age level peers in the same environment.

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Formal Testing Notes

Test	Findings	Comments / Domains

Domains: R = Reasoning Lang = Language Soc = Social Cognition EF = Executive Functioning VS = Visual-Spatial

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

RELIABILITY AND VALIDITY

Definition

Reliability refers to an instrument's consistency. A ruler is reliable as it gives us the same units of measurement every time we use it. We can then use the reading to compare lengths or heights. If our ruler was not reliable, comparisons between measured items would be meaningless.

Validity, however, isn't so much about consistency, but accuracy. Validity isn't a simple yes or no answer. Validity has to do with how close you are measuring what you think you are measuring. It can be a superficial closeness, or it can be a deep, intrinsic to its nature, closeness.

Rationale

"All Diagnostic Center Assessments comply with all of the following Legal Mandates regarding the assessment of African American Students (CDE Memorandums 1986, 1997).

All assessment tools, surveys, reviews of records, interviews, observations, directed and non-directed play take into consideration cultural differences and adhered to the letter and spirit of the CDE's directive regarding the assessment of African American Students with respect to special education evaluations. No tests of intelligence are used or reviewed as part of an assessment.

In addition, pursuant to Code of Federal Regulations 300.304:

- No one measure or assessment tool is the sole criterion for determining eligibility
- All assessment tools are selected and administered so as not to be discriminatory or racially or culturally biased
- Are provided in child's native language or other mode of communication most likely to yield accurate information on what the child knows and can do academically, developmentally functionally unless clearly not feasible to do so
- Are used for the purposes for which they are designed to produce valid and reliable results"

The Diagnostic Centers use the following form to evaluate tests for reliability and validity. Section 1 of the form identifies the purpose of the test (check all that applies). Section 2, is about the norming population. See Key Components on page 3-47 for an example of critical analysis of norming population. Section 3, is based on information

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

provided in the technical or administrative manual of each test. Sections 4, 5 and the open ended questions are based on the rater's opinion. In the additional comments section a yes or no response is required.

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Analysis of Test Reliability/Validity

Date: **Name of Test/ Edition (Date Normed):**

1. **Test Type**

Psychological	Speech/Language	Academic
☐ Attention ○ Alertness ○ Performance consistency ○ Self-monitoring ☐ Temporal-sequential ordering ○ Sequential awareness ○ Perception ○ Memory ○ Time management ☐ Spatial ordering ○ Spatial awareness ○ Perception ○ Memory ☐ Memory ○ Short-term ○ Long-term ○ Active working ☐ Social Cognition ○ Verbal pragmatics (includes interpretation of feelings) ○ Code switching ○ Social behaviors ☐ Language ○ Receptive ○ Expressive ☐ Executive Functions/Reasoning ○ Concept formation ○ Critical thinking ○ Creativity ○ Problem solving ○ Logical thinking ☐ Developmental Levels ☐ Motor ○ Gross ○ Fine (e.g., graphomotor) ☐ Social/Emotional ☐ Adaptive Behavior	☐ Receptive Language ☐ Expressive Language ☐ Vocabulary ○ Basic Concepts ☐ Semantics ☐ Syntax/Morphology ☐ Auditory Processing ☐ Language Processing ☐ Pragmatics ○ Verbal ○ Non-verbal ○ Paralinguistics ☐ Critical Thinking ○ Verbal Problem Solving ☐ Articulation/Phonology ☐ Other	☐ Reading ○ Alphabetic Principle ○ Phonemic Awareness ○ Word analysis/attack ○ Oral ○ Silent ○ Fluency ○ Comprehension ○ Vocabulary ○ Automaticity of word recognition ☐ Written ○ Handwriting ○ Mechanics and grammar ○ Spelling ○ Organization ○ Style ○ Ideation ○ Editing ☐ Math ○ Operations/computation ○ Application ○ Concepts ○ Problem solving ○ Functional ○ Time ○ Money ○ Charts/Tables/Graphs ○ Measurement ○ Statistics and Probability ☐ Adaptive Behavior ○ Self-care/daily living ○ Communication ○ Social Skills ○ Attention ○ Motor Skills ○ Problem solving ☐ Other

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Analysis of Test Reliability/Validity

1. Appropriate samples for test validation

Population for the test								
Sample population	Sample Size	Age	Gender	Ethnic background	SES	Language	Region of U.S.	Other Country

2. Reliability

Is the reliability sufficiently high to warrant the use of the test as a basis for making decisions concerning individual students? (In general: .90=high; .80=moderate; .70=low)	**High**	**Moderate**	**Low**

3. Predictive Validity (Rater judgment)

Is it an accurate predictor of performance? (If Questionable is marked, please explain under the final question, *additional limitations*, below.)	**Yes**	**Question-able**	**No**

4. Content Validity (Rater judgment)

Are there sufficient test items to measure the skill being assessed?	**Yes**	**No**
What limitations are described in the manual?		
Are there additional limitations that the examiner should consider? From ❒ Mental Measurements Yearbook ❒ Rater		
Does the manual indicate that the test was reviewed by a cultural bias review panel? If so, how many individuals were consulted and what were their qualifications? How was their input used?		
Additional Comments Is this test appropriate to use with African American students ☐yes (whole test) ☐yes (part) ☐no Is this test appropriate to use with English language learner students ☐ yes (whole test) ☐yes (part) ☐no		

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Key Component SAMPLE: Analyzing Section 2 requires a careful look.

The WISC IV Integrated, WJ-III/NU, DAS-II, CAS, or KABC-II all report that they have representative ethnic/racial groups based on the latest census data (available at the time) to develop their normative tables … There is a large sample size in each age category.

Actual "N" (number of subjects) represented for the Development of Each Test's Normative Tables by Age

Age Group By Year	**WISC IV-Integrated** (US March 2000 Census by sex, parent education level and geographic region, in addition to ethnicity/race and age)	**WJ-III NU** (2005 US Census data weighted by region, community size, sex, Hispanic origin, and place of birth, over sampled American Indian to ensure more accurate contributions to the overall norms).	**KABC-II** (Current Population Survey 2001) parental education closely matches US population, education placement was a stratification variable based on National Center for Educational Statistics (2002)	**DAS-II** (stratified sample based on 2002 US Census Bureau data by sex, parent education level and geographic region, in addition to ethnicity/race and age)	**CAS** (stratified sample based on 1990 US Census Bureau data (sex, parent education level and geographic region, in addition to ethnicity/race and age)
10	**200**	**579**	**200**	**200**	**200**
11	**200**	**428**	**200**	**200**	**200**
12	**200**	**352**	**200**	**200**	**200**

However, when you break them down by age and ethnicity/race, very few African American students are represented.

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

"N" represented for the Development of Each Test's Normative Tables by Age for African Americans Only					
Age Group By Year	**WISC IV-Integrated**	**WJ-III NU**	**KABC-II**	**DAS-II**	**CAS**
10	**33**	**93**	**27**	**34**	**28**
11	**31**	**69**	**25**	**30**	**27**
12	**31**	**57**	**30**	**33**	**27**

Only the WJ-III NU has more than a typical classroom of African American's represented in their norming data. Small sample sizes have great difficulty adequately representing their parent group as outliers will have more of an impact creating a greater potential for sampling error. This is one of the reasons why testing companies do not supply norms for these subgroups. Also, this is only a gross break down of ethnicity/race by age. This does not reflect the even fewer subjects each cell will have when they are also broken down by socio-economic status and parental education.

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Here is another subgroup for comparison.

"N" Represented for the Development of Each Test's Normative Tables by Age for Asians Only					
Age Group By Year	**WISC IV-Integrated**	**WJ-III NU**	**KABC-II (lumped in American Indians, Alaska Natives, Pacific Islanders, and other groups not classified)**	**DAS-II**	**CAS (lumped in American Indians, Asian, Pacific Islanders, and other groups not classified according to what is described those of Hispanic origin may have been put in this category)**
10	**7**	**24**	**N/A**	**5**	**N/A**
11	**9**	**18**	**N/A**	**9**	**N/A**
12	**8**	**14**	**N/A**	**5**	**N/A**

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Here is a third subgroup to compare.

"N" Represented for the Development of Each Test's Normative Tables by Age for Whites Only					
Age Group By Year	**WISC IV-Integrated**	**WJ-III NU**	**KABC-II**	**DAS-II**	**CAS**
10	**126**	**455**	**123**	**124**	**155**
11	**127**	**336**	**130**	**127**	**155**
12	**123**	**276**	**129**	**127**	**155**

- By the above data charts, are the ethnic/racial group adequately represented?
- What group is adequately represented by the data charts?

Validity and Reliability Form can also be found in Appendix D

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

- When it is difficult to find the information about the composition of the population for which the test was normed

- When percentages of norming population are based only on Census percentage; this often leads to underrepresentation of diverse groups in the norming population

- If there is not a Cultural Review Panel

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

STANDARDIZED TESTING VS. THE MATRIX

The following table summarizes some short-comings of Standardized Testing which are addressed through the implementation of the MATRIX assessment model. By using the MATRIX to guide the psycho-educational assessment, you are ensuring a comprehensive evaluation.

Standardized Testing	Criteria	MATRIX Model Assessment
Data reflect student's performance in an artificial environment which is relatively quiet and free of distractions.	Authenticity & Evidence	Data reflect performance in the "real world" in which the student has to function and provides information about the ways in which real-world variables impact the student's performance.
The student's behavior during testing <u>may</u> provide insight into classroom behavior	Authenticity & Evidence Acceptability	Actual classroom behavior provides the best insight into classroom behavior. Observations allow comparisons across variations in classroom settings, including various demand characteristics, degrees of structure, modes and styles of instruction, and types of tasks or activities assigned. It provides opportunities to compare observations with reports from interviews with individuals who observe the student at home and in the community. There can be different values and expectations in various settings and finding out how well the student can negotiate these differences provides a more complete picture of the student's functioning.
Testing makes use of novel situations and props to reduce effects of prior learning	Authenticity, Evidence, Universality, & Utility	This allows more opportunities students to demonstrate adaptive skills and how they utilize strengths and prior learning to compensate, if needed, for areas of weakness.
Testing assesses student's responses to artificial tasks designed to target (as far as possible) specific, discrete aspects of cognitive processing.	Authenticity, Acceptability & Evidence	Assessment allows for the use of functional content – the student's responses have applications and value in school (curriculum), family (relationships), and community (citizenship), so results are more applicable to meaningful outcomes.

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or an Information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Standardized Testing	Criteria	MATRIX Model Assessment
Testing results in a set of standard scores used to compare the student's performance with that of age- or grade- level peers.	Universality, Utility & Authenticity	Provides opportunity to show developmental progress/gains year to year that are lost when comparing standard scores
Standardized testing relies on use of novel tasks as the basis for asserting that differences in test performance represent "true differences," the assumption is that novelty controls for any effects of prior learning or practice.	Authenticity Universality, Evidence & Utility	An individual's performance profile is a product of complex and dynamic combinations and interactions between nature and nurture (experience in various environments). The assumption that novelty can control for differences in experience is simplistic and, at best, limited. (It is more likely that a limited sample of a student's responses to relatively novel stimuli is simply a rough indicator of how well the student responds to novelty) Direct observation and interviews provide rich information about a student's levels of functioning and adaptation to a variety of settings.
The results of standardized testing are only as useful as the skills of the school psychologist who must analyze, interpret, and explain the data.	Authenticity, Evidence, Universality & Utility	The more the data collected reflects student performance in real world settings, the less the IEP team must rely on the psychologist for analysis, interpretation, and extrapolation to understand the meaning and implications of assessment results.
What happens when Standardized Testing produces no clear results or conflicting data?	Authenticity, Evidence, Universality & Utility	Use direct observations and reports by informants to identify specific actual activities with which the student struggles. Use this information to develop a better understanding of the ways the student learns and identify the major barriers to progress. Based on this understanding, identify the supports and strategies most likely to be helpful. When possible, perform systematic trials to test for effectiveness and combine to develop into a program that is effective in addressing the student's needs.

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or an Information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

INFORMAL ASSESSMENT

What is the purpose of Informal Assessment?

In the context of the MATRIX, Informal Assessment includes a wide range of non-normed, non-standardized activities which provide opportunities for a student to demonstrate a variety of strengths and challenges. The information derived from these activities complements the data gathered through observations, interviews, work samples, and record reviews. Informal assessment may be used to gather general information about a student's level of functioning and to clarify specific abilities. Information obtained through informal assessment activities can replace, and often surpass, a great deal of the data traditionally gathered through formal testing.

What does Informal Assessment include?

In addition to the information obtained through the Record Review, Observations, and Interviews, Informal Assessment can include a wide range of activities and conversations with the student. This is a great opportunity to exercise your creativity. Over time, you will build an increasingly broad repertoire of activities which will serve as a rich source of information for understanding your student's learning and development.

Activities may:

- Be unstructured or highly structured
- Occur indoors or outside
- Include two or more people

Conversations may be spontaneous or directed, e.g., "Tell me the story that takes place in your favorite movie." With strategic introduction of topics and use of prompts and cues by the assessor, conversations can provide opportunities to acquire information about the student's social cognition, expressive language, organization and sequencing of narrative material, and many other abilities.

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or an Information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Games, puzzles, and other activities, generally based on commercially available play materials, can be used to tap into all areas of cognitive functioning. Play dough or containers to measure sand, liquid, or other materials can be used to assess the development of basic concepts such as conservation (Piaget).

Two- and three-dimensional puzzles can be used to assess visual-spatial abilities, organization and planning, and fine motor development. Games such as 20 Questions may be used to assess reasoning with verbal material. Other games require players to demonstrate memory skills. In addition to assessing the specific skills required to play a particular game, board games for two or more players can provide information about the student's social development, capacity to understand and follow directions, and use of strategies.

Helpful Tips The following pages provide some suggested activities. This list is not designed to be exhaustive but is provided to assist you when considering potential informal activities. **Make sure to ask parents and teachers what games the student actually plays or has been exposed to. Remember we are not only trying to test for novel learning but also to provide opportunities for students to demonstrate their skills.**

Helpful Tips The Table Domains and Development can be found in Appendix C of this manual. This table was created to provide some general guidelines for age-level expectations within the specific Domains. Remember to compare observational information on the student being assessed with that of age level peers in the same environment (classroom or school).

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or an Information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Games for Assessing Across MATRIX Categories

GAME	AGE LEVEL	Reasoning	Lang./ Comm.	Social Cognition	Executive Functioning	Visual-Spatial	Developmentally typical performance
Action Verbs J-I-N-G-O (educationalwonderland.com)	K-3rd Grade		✓	✓	✓		
A-ha! 3D puzzle (Thinkfun)	8 + yrs	✓		✓	✓	✓	
Balderdash (Mattel)	12+ yrs.	✓	✓	✓			
Bananagrams (Bananagrams)	7+ yrs.		✓	✓	✓		
Blocks, teddy bear, pop beads, other manipulatives	1 yr.	✓		✓		✓	Complexity of pattern imitated Coming up & following own pattern
Blokus (Mattel)	5+ yrs	✓		✓	✓	✓	
Blue's Clues Colorfelt (Colorforms)	3-8 yrs.	✓	✓	✓			
Blurt (The Keys Pub.)	7+ yrs.			✓	✓		
Bug Trails (Thinkfun)	6+ yrs			✓	✓	✓	

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

GAME	AGE LEVEL	Reasoning	Lang./ Comm.	Social Cognition	Executive Functioning	Visual-Spatial	Developmentally typical performance
Candy Land (Hasbro)	4yrs.			✓		✓	Turn taking, matching cards to the board markers, following the board pattern
Candyland (Hasbro)	4+ yrs			✓			
Card Games: sorting categorization memory tasks slap jack calculation range		✓		✓		✓	
Catch Phrase (Parker Brothers)	18+ yrs.	✓	✓	✓	✓		
Checkers Chess Backgammon	8 yrs.	✓		✓	✓	✓	Establish set-up, demonstrate knowledge of rules, strategies and functions of board pieces
Cir-Kis (Hasbro)	8 yrs +		✓	✓	✓	✓	
Clue (Parker Brothers)	9+ yrs.	✓		✓	✓		
Concentration, Memory,	?			✓			

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

GAME	AGE LEVEL	Reasoning	Lang./ Comm.	Social Cognition	Executive Functioning	Visual-Spatial	Developmentally typical performance
Go Fish							
Connect 4 (Hasbro)	4 yrs.	✓		✓	✓	✓	Age 2 yrs., imitate putting discs into slots, 5 yrs., able to play with an opponent
Diner Dash (Nintendo)	6+ yrs.			✓	✓	✓	
Disney Wheel of Fortune (Pressman Toy)	6+ yrs.		✓	✓			
Dominoes	6+ yrs.			✓	✓	✓	Develop a pattern using addition facts
Family Feud (Endless Game)	8+ yrs.			✓	✓		
Flipover (Thinkfun)	4+ yrs	✓		✓	✓	✓	
Guess Who? (Hasbro)	6+ yrs.	✓		✓	✓		
I Spy	3+ yrs.	✓	✓	✓		✓	asking broad questions
I Spy Word Scramble (Scholastic)	7-12 yrs.		✓	✓	✓		
Jenga	6+ yrs.	✓		✓	✓	✓	Demonstrate

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

GAME	AGE LEVEL	Reasoning	Lang./ Comm.	Social Cognition	Executive Functioning	Visual-Spatial	Developmentally typical performance
(Parker Brothers)							knowledge of strategy, i.e. picking blocks to avoid toppling of structure
Mad Gab (Mattel)	10-18 yrs.		✓	✓			
Mastermind (Pressman)	8yrs +	✓		✓	✓	✓	
Mathdice (Thinkfun)	6yrs+	✓	✓	✓	✓	✓	
Mr. Potato Head (Hasbro)	2 yrs.	✓		✓	✓	✓	Using the appropriate pieces to create multiple faces
Nesting Blocks, Matrioshkas	2yrs	✓		✓		✓	Nesting 2-3 with trial & error Nesting 3+ automatically
Password (Endless Games)	8+ yrs.		✓	✓			
Pathwords (Thinkfun)	12+		✓	✓		✓	
Pictionary/Pictionary Jr. (Hasbro)	7+ yrs.	✓		✓		✓	
Puzzles	2 yrs.	✓		✓	✓	✓	Age 2 yrs., imitate

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

GAME	AGE LEVEL	Reasoning	Lang./ Comm.	Social Cognition	Executive Functioning	Visual-Spatial	Developmentally typical performance
							single piece puzzles
Quiddler (Set Enterprises, Inc)	8+ yrs.	✓	✓	✓	✓		
Racko (Parker Brothers)	8-12 yrs.	✓		✓	✓		
Ratuki (Hasbro)	8+ yrs.			✓	✓	✓	
Rhyming Words J-I-N-G-O (educationalwonderland.com)	K-3rd Grade		✓	✓	✓		
Rook (Milton Bradley)	8+ yrs.	✓		✓	✓		
Scrabble	8+ yrs.		✓	✓			
Scrabble/Scrabble Jr. (Hasbro)	5+ yrs			✓			
Sequence Cards	4yrs.	✓		✓		✓	3 card sequences
Shape Sorter Shape Form Board	1 yr.	✓		✓		✓	By 1 or 2+ attributes
Smart Mouth	7+ yrs.		✓	✓	✓		

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

GAME	AGE LEVEL	Reasoning	Lang./ Comm.	Social Cognition	Executive Functioning	Visual-Spatial	Developmentally typical performance
(Binary Arts)							
Suduko	8+ (pref. Older)	✓		✓	✓	✓	
Tea Set, Birthday Party	1 yr.		✓	✓			Turn taking, pretend skills
Think Fast (Nintendo Wii)	6+ yrs.		✓	✓			
Tic-Tac-Toe	?			✓	✓		Establish set-up, turn taking, demonstrate knowledge of strategy
Tilt	8+	✓		✓	✓	✓	
Traffic Jam (online game)	5 yrs.	✓		✓	✓	✓	Plan and find solution by moving one piece at a time
Trivial Pursuit (University Games)	15+ yrs.			✓			
Trouble (Hasbro)	5-12 yrs.			✓			
Twenty Questions/ Guess Who	6 yrs.	✓	✓	✓	✓		Demonstrate knowledge of strategy, i.e. asking broad questions first
Uno (Mattel)	6+ yrs.	✓		✓	✓	✓	Turn taking, match cards by category (color, number)
Who What Where (University Games)	12+ yrs.			✓	✓		

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Informal Testing Notes

Test	Findings	Comments / Domains

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

INTERPRETING RESULTS

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or an Information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

INTERPRETING THE RESULTS OF YOUR ASSESSMENT

After the completion of the collaborative assessment involving all professionals and family, the gathered information can be recorded to create the MATRIX profile of the student. This profile can help the team make decisions about eligibility and instructional strategies. The MATRIX profile is as a visual representation of a student's abilities in the five domain areas and will look different depending on what factors may be affecting that particular student's ability to learn.

Following are descriptions of how the MATRIX can be used when a team is considering the eligibility categories of Specific Learning Disability (SLD) and Intellectual Disability (ID) for a student. The MATRIX can show when conflicting data and/or incomplete areas need further investigation.

The following pages will provide examples of profiles generated using the MATRIX.

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or an Information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

MATRIX

Identify Strengths/Weaknesses under each domain; note emerging skill/important information in Comments

Domains	Reasoning	Language/ Communication	Social Cognition	Executive Function	Visual-Spatial
Description	• Problem Solving • Abstract Thought • Deductive Thinking • Inductive Thinking • Intuition/Inferential Thinking	• AAC • Abstract Language/Reasoning • Articulation/Phonological/ Oral Motor • Fluency/Prosody/Voice • Language Literacy • Language Processing • Semantic Abilities • Social Communication/ Pragmatics • Syntax & Morphology • Verbal Formulation	• Knowledge acquired, directly attributed to observation of others in context of social interaction/ experience • Vicarious Learning • Social Problem-Solving • Memory / Forming Expectations • Responsiveness/ Feedback Cues • Social Metacognition	• Sustained Attention Selective Attention • Organization • Strategizing • Flexibility/Shifting Cognitive Sets • Multiple Perspectives • Self-Monitoring • Working Memory	• Pattern Completion • Spatial Analysis • Part to Whole Reasoning • Visual Memory • Visual Motor Integration
Strengths					
Weaknesses					
Comments					

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or an Information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

SPECIFIC LEARNING DISABILITY, RTI^2, AND THE MATRIX

Rationale

If a student is suspected to have a Specific Learning Disability (SLD), the MATRIX can be used to:

- Make a general statement about the student's intellectual functioning
- Identify processing strengths and weaknesses
- Identify how processing strengths and weaknesses relate to academic achievement

For a student with SLD, we would expect the MATRIX to show strengths in two or more domain areas, that is average or above abilities in those domains. Can the student keep up with majority of classmates in specific areas, without additional supports? The following chart details how the MATRIX can be applied to the eligibility criteria specified in Cal. Educ. Code § 56337 under section Cal. Code Regs. tit. 5, § 3030 (j).

Ed. Code	Relationship to MATRIX
A pupil has a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which may manifest itself in an impaired ability to listen, think, speak, read, write, spell, or do mathematical calculations, and has a severe discrepancy between intellectual ability and achievement in one or more of the academic areas specified in Cal. Educ. Code § 56337 under section Cal. Code Regs. tit. 5, § 3030 (j). (1) Basic psychological processes include attention, visual processing, auditory processing, sensory-motor skills, cognitive abilities including association, conceptualization and expression.	A pupil has a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which may manifest itself in an impaired ability to listen, think, speak, read, write, spell, or do mathematical calculations, and has a severe discrepancy between intellectual ability and achievement in one or more of the academic areas specified in Section 56337(a) of the Education Code. For the purpose of Section **3030**(j), and California Ed Code 30 EC 56337 (1) Basic psychological processes include attention, visual processing, auditory processing, sensory-motor skills, cognitive abilities including association, conceptualization and expression. They also include the MATRIX domains of Reasoning, Language/ Communication, Social Cognition, Executive Processes and Visual-Spatial (see following chart for information regarding how phonological processes translate to MATRIX domains).

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or an Information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

(2) Intellectual ability includes both acquired learning and learning potential and shall be determined by a systematic assessment of intellectual functioning.	(2) Intellectual ability includes both acquired learning and learning potential and shall be determined by a systematic assessment of intellectual functioning.
(3) The level of achievement includes the pupil's level of competence in materials and subject matter explicitly taught in school and shall be measured by standardized achievement tests	(3) The level of achievement includes the pupil's level of competence in materials and subject matter explicitly taught in school and shall be measured by standardized achievement tests and demonstrated mastery / performance on curriculum and (state) standards
(4) The decision as to whether or not a severe discrepancy exists shall be made by the individualized education program team, including assessment personnel in accordance with Section 56341(d), which takes into account all relevant material which is available on the pupil.	(4) The decision as to whether or not a learning disability exists shall be made by the individualized education program team including assessment personnel in accordance with Section 56341(d), which takes into account all relevant information.
Per California Ed Code 30 Education Code 56337 b & c: a local agency is not required to take into consideration whether a pupil has a severe discrepancy between achievement and intellectual ability…In determining whether a pupil has a specific learning disability, a local agency may use a process that determines if the pupil responds to scientific, research based intervention as part of the assessment procedures covered in sections Code of Federal Regulations (CFR) 300.307 to 300.311 (see below).	The MATRIX provides another method to determine a specific learning disability other than a severe discrepancy between achievement and intellectual ability. The MATRIX complements Response to Intervention (RTI)
No single procedure shall be used as the sole criterion for the decisions of the individualized education program team as to the pupil's eligibility for special education. In determining the existence of a severe discrepancy, the individualized education program team shall use the following procedures:	No single score or product of scores, or test results shall be used as the sole criterion for determining eligibility for special education. In determining a learning disability, the IEP team shall use the following procedures:
(A) When standardized tests are considered to be valid for a specific pupil, a severe discrepancy is demonstrated by: first, converting into common standard scores, using a mean of 100 and standard deviation of 15, the achievement test score and the ability test score to be compared; second, computing the difference between these common standard scores; and third, comparing this computed difference to the standard	(A) A severe point discrepancy cannot be done with African-Americans due to the ban on IQ Tests.

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or an Information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

criterion which is the product of 1.5 multiplied by the standard deviation of the distribution of computed differences of students taking these achievement and ability tests. A computed difference which equals or exceeds this standard criterion, adjusted by one standard error of measurement, the adjustment not to exceed 4 common standard score points, indicates a severe discrepancy when such discrepancy is corroborated by other assessment data which may include other tests, scales, instruments, observations and work samples, as appropriate.	
(B) When standardized tests are considered to be invalid for a specific pupil, the discrepancy shall be measured by alternative means as specified on the assessment plan.	(B) The IEP team shall use alternative means as specified on the assessment plan. The assessment plan will involve multiple methods and measures for every domain and academic skill area.
(C) If the standardized tests do not reveal a severe discrepancy as defined in subparagraphs (A) or (B) above, the individualized education program team may find that a severe discrepancy does exist, provided that the team documents in a written report that the severe discrepancy between ability and achievement exists as a result of a disorder in one or more basic psychological processes. The report shall include a statement of the area, the degree, and the basis and method used in determining t discrepancy. The report shall contain information considered by the team which shall include, but not be limited to:	(C) The IEP team may find an SLD is manifested, provided that the team documents in a written report that a severe discrepancy in academic skills exists as a result of a disorder in one or more basic psychological processes. The report shall include a statement of the area, the degree, and the basis and method used in determining a learning disability. The report shall contain information considered by the team which shall include, but not be limited to:
1. Data obtained from standardized assessment instruments; 2. Information provided by the parent; 3. Information provided by the pupil's present teacher; 4. Evidence of the pupil's performance in the regular and/or special education classroom obtained from observations, work samples, and group test scores;	To comply with the 1979 Order, CDE in 1986 issued a directive to state special educators. LEAs are not to use intelligence tests in the assessment of African-American students referred for any special education services. In lieu of IQ tests, the MATRIX highlights alternative means/methods of assessment such as but not limited to: assessments of the pupil's personal history and development, adaptive behavior, classroom performance, academic achievement, interviews of all those involved with the student at home and at school, observations and evaluative instruments designed to point out specific information relative to a pupil's abilities

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or an Information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

5. Consideration of the pupil's age, particularly for young children; and 6. Any additional relevant information (5) The discrepancy shall not be primarily the result of limited school experience or poor school attendance.	and inabilities in specific skill areas. This is to be done by an school psychologist who is trained to be able to take into consideration the developmental process and knowledgeable of what additional relevant information is needed to make the evaluation comprehensive to address assessment plans concerns. (5) The discrepancy between a student's estimated overall ability and demonstrated skills in academic areas shall not be primarily the result of limited school experience or poor school attendance.

The next chart illustrates the how the basic psychological processes as described by the Education Code (attention, visual processing, auditory processing, sensory-motor skills, and cognitive abilities including association, conceptualization and expression) link to the domains addressed by the MATRIX.

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or an Information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Linking Basic Psychological Processes to MATRIX Domains

Auditory Processing

Language/Communication
- Phonemic (receptive)
- Short Term Recall (receptive, not Attention related)

Cognitive: Expression

Language/Communication
- Oral Fluency (expressive)
- Writing Fluency (expressive)

Visual Processing

Visual-Spatial
- Visual Memory (not Attention related)
- Visual Motor Integration

Sensory Motor

Language/Communication
- Writing Fluency

Visual-Spatial
- Graphic Representation (Visual Expression)

Attention

Executive Function
- Attention

Cognitive: Conceptualization

Executive Function
- Planning and Organization
- Working Memory

Reasoning
- Deductive, Inductive & Inferential Thinking
- Critical Thinking Skills

Cognitive: Association

Reasoning
- Integration of Memory (Auditory, Visual, Kinesthetic)

Language/Communication
- Synonym/Antonym
- Analogies

Social Cognition
- Knowledge from Environment/Cultural Competency
- Learns Rules

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or an Information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

MATRIX Example - SLD

Identify Strengths/Weaknesses under each domain; note emerging skill/important information in Comments

Domains	Reasoning	Language/ Communication	Social Cognition	Executive Function	Visual-Spatial
Description	• Problem Solving • Abstract Thought • Deductive Thinking • Inductive Thinking • Intuition/Inferential Thinking	• AAC • Abstract Language/Reasoning • Articulation/Phonological/ Oral Motor • Fluency/Prosody/Voice • Language Literacy • Language Processing • Semantic Abilities • Social Communication/ Pragmatics • Syntax & Morphology • Verbal Formulation	• Knowledge acquired, directly attributed to observation of others in context of social interaction/ experience • Vicarious Learning • Social Problem-Solving • Memory / Forming Expectations • Responsiveness/ Feedback Cues • Social Metacognition	• Selective Attention • Organization • Strategizing • Flexibility/Shifting Cognitive Sets • Multiple Perspectives • Self-Monitoring • Working Memory	• Pattern Completion • Spatial Analysis • Part to Whole Reasoning • Visual Memory • Visual Motor Integration
Strengths	use of nonverbal problem solving skills (uses of manips to solve math problems) -average performance on NEPSY Animal Sorting		references peers to determine what to do -works collaboratively with peers -encourages and compliments others	accuracy -materials well organized -plans before reproducing design responses -attentive/focused on nonverbal tasks -self monitors	penmanship -drawing with details and 3-d perspective -accurately copying info -visual memory; -accurately reproduced > 90% of details of Rey Complex Figure; accurately reproduction after time delay -Lego construction
Weaknesses	-generalizing/applying skills	phonological processing: decoding, blending sounds, orally segmenting indiv sounds of words -following verbal directions short term auditory memory -word finding -verbal formulation		-working memory (auditory and multi-digit calculation)	-required repetition to learn basic math skills
Comments		-identified with language impairment at age 5 -history of difficulty learning letter sounds -slow progress in reading		previous assessments indicate average skills	

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or an Information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

INTELLECTUAL DISABILITY AND THE MATRIX

Rationale

If a student is suspected as having an Intellectual Disability (ID), the MATRIX can be used:

- to make a general statement about intellectual functioning
- in conjunction with measures of adaptive functioning
    - Much of the information provided by measures of adaptive functioning (e.g., ABAS-II) can be plotted onto matrix under specific domain areas
    - Qualitative data on adaptive functioning gained from informal assessments

Education Code 3030, section (h) defines ID as significantly below average general intellectual functioning existing concurrently with deficits in adaptive behavior and manifested during the developmental period, which adversely affect a pupil's educational performance.

For a student with ID, we would expect the MATRIX to show a pattern of major weaknesses across all or most domains which substantially impact student's ability to have needs met without significant modifications.

- Weaknesses in general mental capabilities, including: reasoning, planning (EF), solving problems, thinking abstractly, applying and generalizing learned information, comprehending complex ideas, learning rate, and learning from experience.
    - Weaknesses prevent student from accessing the standards
    - May find relative strengths in imitation, rote memory

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or an Information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

MATRIX Example – Intellectual Disability

Identify Strengths/Weaknesses under each domain; note emerging skill/important information in Comments

Domains	Reasoning	Language/ Communication	Social Cognition	Executive Function	Visual-Spatial
Description	• Problem Solving • Abstract Thought • Deductive Thinking • Inductive Thinking • Intuition/Inferential Thinking	• AAC • Abstract Language/Reasoning • Articulation/Phonological/ Oral Motor • Fluency/Prosody/Voice • Language Literacy • Language Processing • Semantic Abilities • Social Communication/ Pragmatics • Syntax & Morphology • Verbal Formulation	• Knowledge acquired, directly attributed to observation of others in context of social interaction/ experience • Vicarious Learning • Social Problem-Solving • Memory / Forming Expectations • Responsiveness/ Feedback Cues • Social Metacognition	• Selective Attention • Organization • Strategizing • Flexibility/Shifting Cognitive Sets • Multiple Perspectives • Self-Monitoring • Working Memory	• Pattern Completion • Spatial Analysis • Part to Whole Reasoning • Visual Memory • Visual Motor Integration
Strengths			- Eye contact, gesturing -smiles at others - recognizes others' emotions		
Weaknesses	applying learned skills -limited problem solving -difficulty following new routines	-following simple directions; 1 step only -unintelligible speech -receptive & expressive language around 2-3 year old level -uses 1-2 word phrases	Relies on scaffolding for simple pretend play - simple turn taking with prompts	relies on individual adult support to stay on task -impulsive in answers; did not look at all choices	- Slow learning of letters -delayed fine motor -difficulty forming letters
Comments	Slow academic progress Follows simple routines	All milestones delayed	mostly approaches adults and not peers -beginning to socialize with peers that take a motherly role		

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or an Information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

REPORT WRITING

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

UNBIASED REPORTING OF TEST RESULTS

Alternative assessment findings must be reported through unbiased report writing to assist with the development of appropriate goals and benchmarks. Key points to remember when reporting assessment results for African American students include the following:

- Include information from the case history on the student's overall developmental and health history. This information is gathered via review of the student's records, observation in various settings with peers, alone, etc., and interview of parents, teachers, student, and others who are familiar with the student.

- Information from qualitative information sources that might affect test scores (e.g., performance factors), should be integrated throughout the report.

- Multiple data sources should be used and documented in the report. These include adaptive behavior, academic achievement, and other evaluative instruments designed to point out specific information relative to a student's abilities and inabilities in specific areas.

- Always include a comprehensive overview of the student's strengths and weaknesses.

- Report any test modifications made during the assessment process. These might include, but are not all inclusive of, the following modifications:
    - Reword test instructions
    - Increase the number of practice items
    - Continue to test beyond the ceiling
    - Record student's entire response
    - Question and probe the student when in doubt of skill level
    - Identify alternative testing methods for gathering data and justify skill levels

- *Special attention should be paid by the assessor regarding how their interpretations and report writing might influence if the African American student is identified with disabilities and placed in special education.*

Remember, if standardized tests are used, include a cautionary statement concerning the reliability and/or validity of test results. Please refer to Reliability and Validity in Section 4 of this manual.

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

FORMULATING THE REPORT

When formulating the psychoeducational report, it is very important to make the logic of the report transparent. Avoid jargon and use vocabulary that individuals outside of the profession would understand. Synthesizing the gathered information into a report requires a logical outline including:

1. Rationale for Assessment:
    - A concise and focused referral section would include the background of the referral and the description of concerns, behaviors, or symptoms leading to the referral.

2. One or More Hypotheses:
    - Explicit assessment questions are derived from concerns and needs.
    - Reasons for referral can usually be categorized into three question types.
        - Questions about the presence of a disability.
        - Questions about present levels of functioning in relevant domains.
        - Questions about changes in the educational program.
    - The assessment process should focus on what information is needed to answer the referral questions.

3. Background Information:
    - Report relevant background information. This includes a record review and interviews with the student's staff and family.

4. Organizing the Results Section:
    - Make reports understandable by avoiding jargon and emphasizing words rather than numbers.
    - Remember R.I.O.T. – Review, Interview, Observe, and Test.
        - The job of an assessment team is to put all the pieces of the puzzle together. Ask yourself if data from different sources overlap and use this information to form conclusions. If there is a discrepancy in the data sources, ask yourself what factors influence such discrepancy.
    - Consider reorganizing how results are presented by focusing on answering the referral questions. This structure promotes synthesizing gathered data by focusing on a summary of the interpretation and analysis of results. A hierarchy of preferred reporting methods are:

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

    - BEST – Results are organized around assessment questions or significant findings. Summaries of significant findings are provided under assessment questions. Additional interpretations and data are written in the appendix section.
    - Satisfactory – Results are grouped under abilities or functional domains.
    - Not recommended – Results are listed out test by test.
  - Make sure that the results and interpretation section address all areas of potential need related to all areas of suspected disability.

5. <u>Summary:</u>
   - An assessment summary can be included that briefly restates reasons for referral and summary statements for each assessment question.

6. <u>Recommendations and Next Steps:</u>
   - Be specific.
   - Document whether additional data is needed and how this will be gathered.
   - List accommodations and modifications to the student's program that could be considered by the IEP team.
   - List interventions to address educationally relevant areas of need that could be considered by the IEP team.
   - Recommend general and special education services to be considered by the IEP team.

7. <u>Appendix:</u>
   - This section may include assessment data and specific interpretation of data, if applicable.

Remember, the most important part of a psychoeducational report is how the assessment is synthesized to answer specific questions related to the student.

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

REFERENCES

SCHOOL PSYCHOLOGY

REFERENCES

Alfonso, V. C., Flanagan, D. P. & Radwan, S. (2005). The Impact of the Cattell-Horn-Carroll Theory on Test Development and Interpretation of Cognitive and Academic Abilities. In D. P. Flanagan & P. L. Harrison (Eds.) *Contemporary intellectual assessment, second edition: theories, tests, and issues,* Chapter 9. The Guilford Press.

Beebe-Frankenberger, M. (2008). Best Practices in Providing School Psychological Services in Rural Settings. *A. Thomas & J. Grimes (Eds.) Best practices in school psychology fifth edition, Vol. 5,* Chapter 112. National Association of School Psychologists Publications.

Braden, J., P. & Athanasiou M. S. (2005). A Comparative Review of Nonverbal Measures of Intelligence. In D. P. Flanagan & P. L. Harrison (Eds.) *Contemporary intellectual assessment, second edition: theories, tests, and issues,* Chapter 26. The Guilford Press.

Braden, J., P. & Niebling, B. C. (2005 & 2012). Using the Joint Test Standards to Evaluate the Validity Evidence for Intelligence Tests. In D. P. Flanagan & P. L. Harrison (Eds.) *Contemporary intellectual assessment, second and third edition: theories, tests, and issues,* Chapter 28 and 31 respectively. The Guilford Press.

Brown-Chidsey, R. (2005). Intelligence Tests in an Era of Standards-Based Educational Reform. In D. P. Flanagan & P. L. Harrison (Eds.) *Contemporary intellectual assessment, second edition: theories, tests, and issues,* Chapter 29. The Guilford Press.

Brown-Chidsey, R. & Andren K. J. (2012). Intelligence Tests in the Context of Emerging assessment Practices: Problem-Solving Applications. from In D. P. Flanagan & P. L. Harrison (Eds.) *Contemporary intellectual assessment, third edition: theories, tests, and issues,* Chapter 35. The Guilford Press.

Carroll, J. B. (1993). *Human cognitive abilities: A survey of factor-analytic studies*, New York: Cambridge University Press.

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or an Information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Carroll, J. B. (2005). The Three-Stratum Theory of Cognitive Abilities. In D. P. Flanagan & P. L. Harrison (Eds.) *Contemporary intellectual assessment, second edition: theories, tests, and issues,* Chapter 4. The Guilford Press.

Chen, J. & Gardner, H. (2005). Assessment Based on Multiple-Intelligences Theory. In D. P. Flanagan & P. L. Harrison (Eds.) *Contemporary intellectual assessment, second edition: theories, tests, and issues,* Chapter 5. The Guilford Press.

Das, J. P., Naglieri, J. A., & Kirby, J. R. (1994). *Assessment of cognitive processes.* Needham Heights: MA: Allyn & Bacon.

Dawson, P., Guare, R. (2004). *Executive Skills in Children and Adolescent: A Practical Guilde to Assessment and Intervention*. NY: Guilford Press.

Decker, S. L., Englund, J. A. & Roberts, A. M. (2012). Intellectual and Neuropsychological Assessment of Individuals with Sensory and Physical Disabilities and Traumatic Brain Injury. In D. P. Flanagan & P. L. Harrison (Eds.) *Contemporary intellectual assessment, third edition: theories, tests, and issues,* Chapter 30. The Guilford Press.

Eagle, J. W. Dowd-Eagle, S. E. & Sheridan, S. M (2008). Best Practices in School-Community Partnerships. *A. Thomas & J. Grimes (Eds.) Best practices in school psychology fifth edition, Vol. 3,* Chapter 58. National Association of School Psychologists Publications.

Elliott, C. D. (2005). The Differential Ability Scales. In D. P. Flanagan & P. L. Harrison (Eds.) *Contemporary intellectual assessment, second edition: theories, tests, and issues,* Chapter 18. The Guilford Press.

Fiorello, C. A., Hale, J. B. & Wycoff, K. L. (2012). Cognitive Hypothesis Testing: Linking Test Results to the Real World. In D. P. Flanagan & P. L. Harrison (Eds.) *Contemporary intellectual assessment, third edition: theories, tests, and issues,* Chapter. The Guilford Press.

Fitch, T., Ludwig, H., & Bugnyar, T. (2010). Social Cognition and the Evolution of Language: Constructing Cognitive Phylogenies. Neuron *65*, 1-21.

Flanagan, D. P., Alfonso, V. C., & Ortiz, S. O. (2012). The Cross-Battery Assessment Approach: An Overview, Historical Perspective, and Current Directions. In D. P. Flanagan & P. L. Harrison (Eds.) *Contemporary intellectual assessment, third edition: theories, tests, and issues,* Chapter 19. The Guilford Press.

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or an Information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Flanagan, D. P., Ortiz, S. O. & Alfonso, V. C. (2007*). Essentials of cross-battery assessment (essentials of psychological assessment)*. Second Edition, Wiley.

Flanagan, D. P., Ortiz, S. O. & Alfonso, V. C. (2008). Best Practices in Cognitive Assessment. *A. Thomas & J. Grimes (Eds.) Best practices in school psychology fifth edition, Vol. 2,* Chapter 39. National Association of School Psychologists Publications.

Floyd, R. G. (2005). Information-Processing Approaches to Interpretation of Contemporary Intellectual Assessment Instruments. In D. P. Flanagan & P. L. Harrison (Eds.) *Contemporary intellectual assessment, second edition: theories, tests, and issues,* Chapter 10. The Guilford Press.

Floyd, R. G. & Kranzler, J. H. (2012). Processing Approaches to Interpretation of Information from Cognitive Ability Tests: A Critical Review. In D. P. Flanagan & P. L. Harrison (Eds.) *Contemporary intellectual assessment, third edition: theories, tests, and issues,* Chapter 21. The Guilford Press.

Ford, L. & Dahintenm, V. S. (2005). Use of Intelligence Tests in the Assessment of Preschoolers. In D. P. Flanagan & P. L. Harrison (Eds.) *Contemporary intellectual assessment, second edition: theories, tests, and issues,* Chapter 22. The Guilford Press.

Ford, L. Kazey, M. L. & Negreiros, J. (2012). Cognitive Assessment in Early Childhood: Theoretical and Practice Perspectives. In D. P. Flanagan & P. L. Harrison (Eds.) *Contemporary intellectual assessment, third edition: theories, tests, and issues,* Chapter 24. The Guilford Press.

Gioia, G. A., Isquith, P. K., Guy, S. C. & Kenworthy, L. (2000). *Behavior Rating Inventory of Executive Function (BRIEF) Professional Manual*. Psychologist Assessment Resources, Inc.

Godber, Y. (2008). Best Practices in Program Evaluation. *A. Thomas & J. Grimes (Eds.) Best practices in school psychology fifth edition, Vol. 6,* Chapter 139. National Association of School Psychologists Publications.

Gutkin, T.B. (1999). Collaborative Versus Directive/Prescriptive/Expert School-Based Consultation: Reviewing and Resolving a False Dichotomy. *Journal of School Psychology, 37(2)* 161-190.

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or an Information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Hale, J. B., Yim, M. Schneider, A. N., Wilcox, G, Henzel, J. N. & Dixon, S. G. (2012). Cognitive and Neuropsychological Assessment of Attention-Deficit/Hyperactivity Disorder: Redefining a Disruptive Behavior Disorder. In D. P. Flanagan & P. L. Harrison (Eds.) *Contemporary intellectual assessment, third edition: theories, tests, and issues,* Chapter 29. The Guilford Press.

Harrison, Pl. L. & Raineri, G. (2008). Best Practices in the Assessment of Adaptive Behavior. *A. Thomas & J. Grimes (Eds.) Best practices in school psychology fifth edition, Vol. 2,* Chapter 37. National Association of School Psychologists Publications.

Hass, M., Riel, J.J., & Carriere, J.A. (2008, March). Writing useful and defendable psychological reports. Seminar presented at the annual convention of the California Association of School Psychologists, Burlingame, CA.

Hintze, J. M., Volpe, R. J. & Shapiro, E. S. (2008). Best Practices in the Systematic Direct Observation of Student Behavior. *A. Thomas & J. Grimes (Eds.) Best practices in school psychology fifth edition, Vol. 52* Chapter 18. National Association of School Psychologists Publications.

Horn, J. L. & Blankson, N. (2005 & 2012). Foundations for Better Understanding of Cognitive Abilities. In D. P. Flanagan & P. L. Harrison (Eds.) *Contemporary intellectual assessment, second and third editions: theories, tests, and issues,* Chapter 3. The Guilford Press.

Kamphaus, R. W., Winsor, A. P., Rowe, E. W. Kim S. (2005 & 2012). A History of Intelligence Test Interpretations. In D. P. Flanagan & P. L. Harrison (Eds.) *Contemporary intellectual assessment, second and third edition: theories, tests, and issues,* Chapter 2., The Guilford Press.

Keith, T. Z. (1990). Confirmatory and hierarchical confirmatory analysis of the Differential Ability Scales. *Journal of Psychoeducational Assessment, 8,* 291-405.

Keith, T. Z. (2005). Using Confirmatory Factor Analysis to Aid in Understanding the Constructs Measured by Intelligence Tests. In D. P. Flanagan & P. L. Harrison (Eds.) *Contemporary intellectual assessment, second edition: theories, tests, and issues,* Chapter 27. The Guilford Press.

Keith, T. Z. (2008). Best Practices in Using and Conducting Research in Applied Settings. *A. Thomas & J. Grimes (Eds.) Best practices in school psychology fifth edition, Vol. 6,* Chapter 137. National Association of School Psychologists Publications.

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or an Information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Keith, T. Z. & Reynolds, M. R. (2012). Using Confirmatory Factor Analysis to Aid in Understanding the Constructs Measured by Intelligence Tests. In D. P. Flanagan & P. Harrison (Eds.) *Contemporary intellectual assessment, third edition: theories, tests, and issues,* Chapter 32. The Guilford Press.

Kelly-Vance, L. & Ryalls, B. O. (2008). Best Practices in Play Assessment and Intervention. *A. Thomas & J. Grimes (Eds.) Best practices in school psychology fifth edition, Vol. 2* Chapter 33. National Association of School Psychologists Publications.

Klinger, L. G., O'Kelley, S. E., Mussey, J. L., Goldstein, S. & DeVries, M. (2012). Assessment of Intellectual Functioning in Autism Spectrum Disorder. In D. P. Flanagan & P. L. Harrison (Eds.) *Contemporary intellectual assessment, third edition: theories, tests, and issues,* Chapter 27. The Guilford Press.

Levine, Mel (1998). *Developmental variation and learning disorders, 2nd edition*. MA: Educators Publishing Services.

Levine, Mel (2000). *A table of neurodevelopmental constructs*. MA: Educators Publishing Services.

Levine, Mel (2001). *Jarvis clutch – social spy*. MA: Educators Publishing Services.

Lichtenstein, R. (2008) Best Practices in Identification of Learning Disabilities. *A. Thomas & J. Grimes (Eds.) Best practices in school psychology fifth edition, Vol. 2,* Chapter 17. National Association of School Psychologists Publications.

Luria, A. R. (1966). *Human brain and psychological processes*, New York: Harper & Row.

Luria, A. R. (1973a). *The origin and cerebral organization of man's conscious action. In S. G. Sapir & A.C. Nitzburg (EDS.), Children with learning problems (pp. 109-130)*, New York: Brunner/Mazel.

Luria, A. R. (1973b). *The working brain: An introduction to neuropsychology.* New York: Basic Books.

Luria, A. R. (1980). *Higher cortical functions in man (2nd ed.).* New York: Basic Books.

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or an Information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Maricle, D. E. & Avirett, E. (2012). The Role of Cognitive and Intelligence Tests in the Assessment of Executive Functions. In D. P. Flanagan & P. L. Harrison (Eds.) *Contemporary intellectual assessment, third edition: theories, tests, and issues,* Chapter 34. The Guilford Press.

Mather, N., & Wendling, B. J. (2005 & 2012). Linking Cognitive Assessment Results to Academic Interventions and Students with Learning Disabilities. In D. P. Flanagan & P. L. Harrison (Eds.) *Contemporary intellectual assessment, second and third edition: theories, tests, and issues,* Chapters 13 and 23 respectively. The Guilford Press.

McCloskey, G., Whitaker, J., Murphy, R. & Rogers, J. (2012). Intellectual, Cognitive, and Neuropsychological Assessment in Three-Tier Service Delivery Systems in Schools. In D. P. Flanagan & P. L. Harrison (Eds.) *Contemporary intellectual assessment, third edition: theories, tests, and issues,* Chapter 36. The Guilford Press.

McCue, M., Chase, S.L., Dowdy, C.A., Pramuka, M., Petrick, J., Aitken, S., & Fabry, P. (1994). Functional assessment of individuals with cognitive disabilities: A desk reference for rehabilitation. U.S. Department of Education Rehabilitation Service Administration #H129J10012 and #H246D30003. Pittsburgh, PA: Center for Applied Neuropsychology.

McGrew, K. W. (2004). Pre-publication book chapter of The Cattell-Horn-Carroll Theory of Cognitive Abilities, Past, Present and Future.

McGrew, K. W. (2005). The Cattell-Horn-Carroll Theory of Cognitive Abilities, Past, Present and Future. In D. P. Flanagan & P. L. Harrison (Eds.) *Contemporary intellectual assessment, second edition: theories, tests, and issues,* Chapter 8. The Guilford Press.

McGrew, K. & Flanagan, D. (1998). *Intelligence test desk reference (ITDR): the Gf-Gc cross-battery assessment*, Pearson Education.

Miller, D. C. & Maricle, D. E. (2012). The Emergence of Neuropsychological Constructs into Tests of Intelligence and Cognitive Abilities. In D. P. Flanagan & P. L. Harrison (Eds.) *Contemporary intellectual assessment, third edition: theories, tests, and issues,* Chapter 33. The Guilford Press.

Miller, D. D. & Kraft, N. P. (2008). Best Practices in Communicating With and Involving Parents. *A. Thomas & J. Grimes (Eds.) Best practices in school psychology fifth edition, Vol. 3,* Chapter 57. National Association of School Psychologists Publications.

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or an Information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Minke, K. M. & Anderson K. J. (2008). Best Practices in Facilitating Family-School Meetings. *A. Thomas & J. Grimes (Eds.) Best practices in school psychology fifth edition, Vol. 3,* Chapter 59. National Association of School Psychologists Publications.

Miranda, A. H. (2008) Best Practices in Increasing Cross-Cultural Competence. *A. Thomas & J. Grimes (Eds.) Best practices in school psychology fifth edition, Vol. 5,* Chapter 109. National Association of School Psychologists Publications.

Miranda, A. H. & Olivo II, J. C. (2008) Best Practices in Urban School Psychology. *A. Thomas & J. Grimes (Eds.) Best practices in school psychology fifth edition, Vol. 5,* Chapter 113. National Association of School Psychologists Publications.

Nagle, R. J. & Gagnon, S. G. (2008). Best Practices in Planning and Conducting Needs Assessment. *A. Thomas & J. Grimes (Eds.) Best practices in school psychology fifth edition, Vol. 6,* Chapter 140. National Association of School Psychologists Publications.

Naglieri, J. A. (2003). *Naglieri Nonverbal Ability Test – Individual Form.* San Antonio, TX: Harcourt Assessment.

Naglieri, J. A. (2005). The Cognitive Assessment System. In D. P. Flanagan & P. L. Harrison (Eds.) *Contemporary intellectual assessment, second edition: theories, tests, and issues,* Chapter 20. The Guilford Press.

Naglieri, J. A. (2008). Best Practices in Linking Cognitive Assessment of Students With Learning Disabilities to Interventions. *A. Thomas & J. Grimes (Eds.) Best practices in school psychology fifth edition, Vol. 2,* Chapter 41. National Association of School Psychologists Publications.

Naglieri, J. A. & Das, J. P. (1997). *Das-Naglieri: Cognitive Assessment System*, Itasca, IL: Riverside.

Naglieri, J. A. & Das, J. P. (2005). Planning, Attention, Simultaneous, Successive (PASS). Theory: A Revision of the Concept of Intelligence. In D. P. Flanagan & P. L. Harrison (Eds.) *Contemporary intellectual assessment, second edition: theories, tests, and issues,* Chapter 7. The Guilford Press.

Naglieri, J. A., Das, J. P. & Goldstein, S. (2012). Planning, Attention, Simultaneous, Successive: A Cognitive-Processing-Based Theory of Intelligence, Chapter 7, from Contemporary Intellectual Assessment, Third Edition: Theories, Tests, and Issues, Editors Flanagan, D. P & Harrison, P. L, The Guilford Press.

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or an Information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Naglieri, J. A. & Otero, T. M. (2012). The Wechsler Nonverbal Scale of Ability – Assessment of Diverse Populations. In D. P. Flanagan & P. L. Harrison (Eds.) *Contemporary intellectual assessment, second edition: theories, tests, and issues,* Chapter 18. The Guilford Press.

Ortiz, S. O. (2008). Best Practices in Nondiscriminatory Assessment. *A. Thomas & J. Grimes (Eds.) Best practices in school psychology fifth edition, Vol. 2,* Chapter 40. National Association of School Psychologists Publications.

Ortiz, S. O., Flanagan, D. P. & Dynda, A. M. (2008). Best Practices in Working with Culturally Diverse Children and Families. *A. Thomas & J. Grimes (Eds.) Best practices in school psychology fifth edition, Vol. 5,* Chapter 108. National Association of School Psychologists Publications.

Ortiz, S. O. & Dynda, A. M. (2005). Use of Intelligence Tests with Culturally and Linguistically Diverse Populations. In D. P. Flanagan & P. L. Harrison (Eds.) *Contemporary intellectual assessment, second edition: theories, tests, and issues,* Chapter 25. The Guilford Press.

Ortiz, S. O. & Ochoa, S. H. (2005). Advances in Cognitive Assessment of Culturally and Linguistically diverse Individuals. In D. P. Flanagan & P. L. Harrison (Eds.) *Contemporary intellectual assessment, second edition: theories, tests, and issues,* Chapter 11. The Guilford Press.

Ortiz, S. O., Ochoa, S. H. & Dynda, A. M. (2012). Testing with Culturally and Linguistically Diverse Populations: Moving beyond the Verbal-Performance Dichotomy into Evidence-Based Practice. In D. P. Flanagan & P. L. Harrison (Eds.) *Contemporary intellectual assessment, third edition: theories, tests, and issues,* Chapter 22. The Guilford Press.

Robinson, G. & Struthers, L. (2011). Executive Functioning Deficits: Applications and Interventions for School Psychologists. National Association of School Psychology Convention, San Francisco.

Sattler, J.M. (2001). Assessment of Children: Cognitive Applications, 4th Edition. Jerome M. Sattler Publisher, Inc.

Sattler, J. M. & Hoge, R. D. (2006). Assessment of Children: Behavioral, Social, and Clinical Foundations, 5th Edition. Jerome M. Sattler Publisher, Inc.

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or an Information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Schneider, W. J. & McGrew, K. S. (2012). the Cattell-Horn-Carroll Model of Intelligence. In D. P. Flanagan & P. L. Harrison (Eds.) *Contemporary intellectual assessment, third edition: theories, tests, and issues,* Chapter 4. The Guilford Press.

Schulte, A.C. & Osborne, S.S. (2003). When Assumptive Worlds collide: A Review of Definitions of Collaboration in Consultation. *Journal of Educational and Psychological Consultation,14(2)*, 109-138.

Sheridan, S. M., Taylor, A. M. & Woods, K. E. (2008). Best Practices for Working With Families: Instilling a Family-Centered Approach. *A. Thomas & J. Grimes (Eds.) Best practices in school psychology fifth edition, Vol. 3,* Chapter 60. National Association of School Psychologists Publications.

Shinn, M. R. (2008). Best Practices in Using Curriculum-Based Measurement in a Problem-Solving Model. *A. Thomas & J. Grimes (Eds.) Best practices in school psychology fifth edition, Vol. 2,* Chapter 14. National Association of School Psychologists Publications.

Sternberg, R. J. (2005 & 2012). The Triarchic Theory of Successful Intelligence. In D. P. Flanagan & P. L. Harrison (Eds.) *Contemporary intellectual assessment, second and third edition: theories, tests, and issues,* Chapter 6. The Guilford Press.

Stewart, L. H. & Silberglitt, B. (2008). Best Practices in Developing Academic Local Norms. *A. Thomas & J. Grimes (Eds.) Best practices in school psychology fifth edition, Vol. 2,* Chapter 13. National Association of School Psychologists Publications.

Unknown Author. (n.d.). Citing Website. An Encyclopedia Britannica Company. Retrieved April 19, 2005, from http://www.merriam-webster.com/.

Watkins, M. W., Glutting, J. J. & Youngstrom, E. A. (2005). Issues in Subtest Profile Analysis. In D. P. Flanagan & P. L. Harrison (Eds.) *Contemporary intellectual assessment, second edition: theories, tests, and issues,* Chapter 12. The Guilford Press.

Wechsler, D., & Naglieri, J. A. (2006). *Wechsler Nonverbal Scale of Ability.* San Antonio, TX: Harcourt Assessment.

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or an Information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

GLOSSARY

SCHOOL PSYCHOLOGY

Glossary

Adaptive Behavior: behavior that changes to meet the demands of another situation.

Collaboration: a process of joint and shared decision making with all parties.

Culture: Culture is the system of shared beliefs, values, customs, behaviors, and artifacts with which the members of that culture understand their world and one another.

Cultural Competency: Respecting differences of diverse populations. Cultural competence is a set of behaviors and attitudes that assure the ability to work with diverse populations.

Cultural Broker: A cultural broker is an individual who acts as a bridge/mediator between groups or persons of different cultural backgrounds. As a cultural broker, one understands the culture (e.g., values and beliefs) s/he represents and is able to facilitate the bridge of understanding with that of the dominant culture.

Cultural Proficiency: Knowing one's culture (values and beliefs) and how it may influence interactions with diverse populations. A culturally proficient educator has self-awareness of one's own culturally-based values and assumptions and an appreciation of cultural differences.

Deductive Reasoning: A step-by-step process where one arrives at an answer/conclusion based on generalizations. It is also known as alternative hypothesis testing, analytical, or logical thinking.

Executive Functioning: A set of cognitive control processes required to organize, manage, and regulate oneself and one's resources in order to achieve a goal. These cognitive processes are critical for engaging in effective goal-directed behavior and work production. This includes the ability to effectively complete and manage everyday demands and tasks.

Emotional Control: The ability to handle challenging tasks, different emotions, negative feedback, and persisting over time to achieve a goal.

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or an Information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Inductive Reasoning: Taking isolated or specific pieces of information and identifying a common principal. It is also known as generalization, synthesis, and causal inference.

Inhibition: The ability to control impulses.

Initiation: The ability to begin tasks and mobilize needed resources.

Intuition: The ability to see the "big picture" and grasp complex concepts despite little or no exposure to relevant information.

Organization: The ability to manage multiple pieces of information using a predefined system.

Perspective Taking: The ability to understand the thoughts, emotions, or feelings of another person. This may occur via another person's explanation and/or one's own observation.

Planning: The ability to prioritize information and resources to step out a plan of action.

Reasoning: The act of using higher-order thinking processes to form conclusions based on abstract or inferential concepts.

Self-Monitoring: The ability to 1) evaluate behavior, 2) monitor behavior, and 3) adjust behavior as needed to the given situation.

Shifting and Cognitive Flexibility: The ability to prioritize information and resources, move freely between situations, activities, or aspects of a problem.

Social Prediction: The ability to foresee the social consequences of one's actions and/or words based on prior experiences and evaluation of current circumstances.

Social Rules: Agreed upon standards or social norms that influence ones' behaviors.

Sustained Attention: The ability to maintain attention even when distracted, tired, or bored.

Working Memory: The mental ability to temporarily and actively hold information in order to complete a task in real time.

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or an Information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Reliability: Refers to consistency and stability of test scores via the degree to which the same people receives the same score when retested on the same or on an equivalent form of the test.

Validity: Refers to the degree a test actually measures what it purports to measure.

Pattern Completion: The ability to complete an image based on external cues or images.

Spatial Analysis: The ability to look at an object and determine what is required for writing, copying, and other hands-on manipulative tasks.

Visual Discrimination: The ability to identify and/or recognize differences between visual stimuli.

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or an Information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

APPENDIX A

- Race and IQ Testing

RACE AND IQ TESTING; IMPLICATIONS FOR SPECIAL EDUCATION ASSESSMENT IN CALIFORNIA

Background

The dilemmas faced by California school psychologists when they are called on to assess African American students are rooted in controversies that go back almost a century. Since the United States embraced IQ testing as a method to label students or assign them to tracks, there has continuously been a vocal minority that raised concerns about the artificial nature of these tests, their limited applicability to solving problems that occur the complex situations that characterize everyday life, and the applicability of IQ tests for populations whose cultures or subcultures differ from that of the dominant culture represented by the developers and promoters of these tests.

These issues came to a head in California during the 1970s and ‘80s. In 1974, the California Department of Education (CDE) issued a legal advisory discouraging the use of any IQ testing for special education assessment of African American students. The following year, evidence presented in court demonstrated that IQ testing led to disproportionate assignment of African American students to classes for “educable mentally retarded” students. In what came to be known as the Larry P. decision, California school districts were prohibited from using IQ test scores for placing African American children in this type of class. Similar rulings and regulations followed, including a 1986 amendment that prohibited any IQ testing of African American students for special education purposes.

Caught in the Middle

The controversies, events, and legal proceedings described above had major long-term consequences for school psychologists in California. They find themselves caught between conflicting sets of expectations; traditional assessment practices have led to expectations on the part of districts for clear, concise data on cognition and it is unclear how to provide this information under the current laws and regulations.

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or an Information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

When an assessment is requested because a student is struggling to keep up with classmates, the psychologist is responsible for generating further data and information to help identify the underlying reasons for the student's difficulties. This information is used by parents, teachers, and other district staff members to identify student needs and appropriate interventions. Psychologists have come to rely on formal (standardized, norm-referenced) test batteries because they are relatively quick and easy to administer, score, and interpret and, despite their limitations, results sometimes provide useful information for helping students. Although school psychologists gather information from a variety of sources, formal testing appears to be the predominant method of generating data. Standardized test scores appear prominently in reports and presentations to IEP teams and play a central role in influencing decisions about the student's abilities and needs.

When assessing African American children, California school psychologists must grapple with the legal constraints of Larry P. decision which are often ambiguous and confusing. There continues to be considerable controversy about which tests designed to assess cognition or information processing abilities, if any, can be given to African American students. Many school psychologists have expressed frustration about not being allowed to follow their usual assessment practices in light of a perceived absence of alternative assessment methods available to them.

To acquire further information about the experiences of school psychologists assessing African American students, the DCN staff conducted a survey of school psychologists in northern California. The survey results confirmed suspicions that school districts face a dilemma when determining appropriate methods of assessment for this population and that there is considerable variation in their interpretations of state regulations, with no unified standards.

Not surprisingly, the majority of school psychologists surveyed reported that they were dissatisfied with the methods they had available for assessing their African American students. A large majority reported that no guidelines or standard procedures were provided by their districts. More surprising to the DCN team, the majority of psychologists who responded to the survey reported that they regularly used standardized tests of cognitive ability to assess African American students. The respondents who reported relatively less dissatisfaction with their methods tended to be those who reported greater use of standardized tests. These psychologists also tended to work in districts with relatively high proportions of African American students.

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or an Information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

A Way Forward

There have been long-standing concerns about the limitations of standardized test batteries and many experts on learning have been advocating a broader approach for ALL students. We need to be aware of the continuing importance of the Larry P. decision and the regulations and recommendations that followed. The most current data available clearly demonstrate that disproportionate representation of African American students in special education continues. We have to consider the ways in which our ongoing assessment practices may contribute to the continuation of this discrepancy. We need to continue seeking better ways to identify and nurture the strengths of African American students, accurately identify any weaknesses, and understand the obstacles to progress in school. This requires us to continue challenging ourselves and our ideas; even when we have completed formal training and acquired years of practical experience, our ways of thinking about assessment can, and should, continue to evolve. As we develop a broader and deeper understanding of the assessment process, we need to also seek a corresponding expansion in our repertoire of assessment practices.

Under the leadership of Mary Anne Nielsen, the psychologists and speech and language pathologists at DCN began to work on a best practices model that is specifically designed for African American students. Given the overlap of some cognitive processes with language development and educational progress, this model is designed to promote collaboration between school psychologists, speech and language pathologists, special education teachers, and other professionals involved in the assessment process. The professional team also needs to collaborate with the family, general education staff and other important people in the student's life in order to fully understand the unique combination of strengths, weaknesses, and potential of the student.

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or an Information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

APPENDIX B

- Other Assessment Models

OTHER ASSESSMENT MODELS

Developmental Assessment

Developmental assessment generally includes informal tasks derived from well-researched theories about the stages of cognitive development (such as Piaget's). Rather than based on standardized test materials, many tasks can be improvised using play dough, variously shaped containers, nesting cups, toys such as cars or animals, and other materials widely available in settings for young children. Although the tasks are generally not norm-referenced, there is substantial agreement that various levels of conceptualization are sequential and universal and that particular levels are generally mastered within specific age ranges. The approach is particularly well-suited to young children (preschool-K) or those functioning at a young age level.

Authentic Assessment

Authentic assessment has been described as: "how students are approaching, processing, and completing 'real-life' tasks in a particular domain" (Garcia and Pearson 1994). One advantage is that "real-life" tasks involve the integration and application of multiple abilities developed by student. For instance, building a bird house involves visual-spatial, visual-motor, planning, and problem-solving. This can be a disadvantage if the student is unsuccessful, but it is unclear where the break-down occurred.

When it is not practical to observe relevant activities in their natural contexts, tasks may be contrived by the assessor, but should, as much as possible, replicate everyday situations and assess cognitive abilities through applications that are meaningful in the context of the student's life (e.g., figuring out purchasing power of a specific amount of money, developing a plan and timeline to save for a desired item).

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or an Information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Ecological Assessment

The emphasis is on analyzing the influence of environmental factors on the student's school performance. The student is observed and information is gathered on the student's functioning in a variety of school settings. Focus is on the ways in which the student's cognitive strengths and weaknesses are expressed in different contexts, such as physical setting (familiarity, distraction), social settings (small or large group, formal or informal), and according to instructional style, type of task demands, active vs. passive activities, length of instructional session, material presented orally, visually, or both.

Some ecological assessors may obtain information about development of the cognitive abilities needed to succeed in school, but seek examples or evidence of these skills applied to tasks and activities in settings familiar to student, valued by friends and family, where may be opportunities for models with whom student identifies, or engages in because personally meaningful to individual

Dynamic Assessment

"Concerned with areas of cognitive functioning, learning style, modifiability of learning dynamics and appropriate interventions." (From CDE 1997 Memorandum sent to all LEAs regarding clarification the Use of Intelligence Tests with African-American Students for Special Education Assessment)

This technique is based on Vygotsky's perspective that children acquire the skills they need to function in their cultures through interactions, including modeling and reinforcement, with individuals who are competent in the culture and can offer appropriate degrees of support and guidance. Adaptation to assessment of a child at school involves skilled teaching (modeling, joint and individual practice, constructive feedback and coaching, explicit and specific reinforcement) of a novel skill. The assessor notes how quickly the skill is mastered (e.g. number of repetitions), how well the skill is retained (especially following introduction of subsequent skills), and how well the skill is applied, generalized, or adapted to novel tasks.

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or an Information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

The MATRIX was designed to incorporate, but not be limited by, any of these approaches. It provides a flexible framework which allows the assessor to pick and choose among the key elements of any of these established approaches and also welcomes the strategic use of novel, creative assessment activities to fill in critical gaps in available information or test competing hypotheses.

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or an Information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

APPENDIX C

- Domains and Developmental Levels

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or an Information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Domains and Development

	Reasoning	Visual-Spatial	Executive Functioning	Social cognition	Language
Preschool To Kindergarten	-Developing an understanding of time, value and sequencing of events -Can remember events but can be easily influenced by others -Developing perspective taking -May still have difficulty telling reality from fantasy -Should be able to classify objects by a single feature, all circles, all squares all one color.	- Visual discrimination of shapes, symbols (numbers and letters - Basic concept of visual series (e.g. 1,2,3 & A,B,C) - Drawing a basic person with some detail (e.g. trunk, hands, feet) -understanding visual boundaries (e.g. edges of page, lines or divisions marked on paper, lines on playground for games - Increasing visual-motor integration (forming letters, throwing a ball with aim)	-1-2 step directions -Clean up with help -Simple self-help tasks with reminders -Manage emotions using self-talk -Inhibit impulses -Play simple games - Wait for turn -Make transitions -Learn & follow routines -Attend to teacher defined tasks -Simple assignments	- Egocentric or undifferentiated perspectives - Understands concept of "mine" and "his/hers" - Emerging cooperative play - Representational play using objects - Compliance with adult supervision in play	See Speech and Language Binder for Information on Best Practices
First grade To Second grade	-Developing logical sequencing -Developing ability to classify by multiple features -Conservation of number @ age 6 and mass @ age 7,	- Pattern recognition, visual gestalt (e.g. sight words) -Practical sequences (e.g. days of the week) --Serial order recognition and recall for spelling - Increasing attention to visual detail	-2-3 step directions -Clean up toys and room -Simple self-help tasks -Bring papers to/from school -Complete homework -Decide how to spend $ -Inhibit behaviors to follow rules -Work independently	- Initial challenge of sharing and conflict resolution - Beginning differentiation of peer and adult interaction roles - Has a best friend	
Third grade To Fifth grade	-Capable of concrete thinking -Some reversibility of quantities can be restored e.g. 3+4=7 and 7-4=3 -Conservation of weight @ age 9.	- No letter/# reversals - Identify word parts and re-sequence for new words - Visual graphic interpretation (e.g. maps, graphs, charts) -understanding of causal sequential chains of events - Use of visual imagery to comprehend and store information - Basic math algorithms (look at problem and know where to start)	-Run errands -Tidy room -Complete chores -Transport and keep track of belongings -Assignments for 1 hour -Plan simple projects -Keep track of changing daily schedule -Save money -Inhibit behaviors when teacher is present -Refrain bad manners -Internalize self-talk to regulate emotions	- Appreciate perspectives of others - Requirements for recognizing two-way nature of relationships - Demand for reciprocity (giving and taking) - Expanded use of verbal pragmatics	
Sixth grade To Eighth grade	-understands the concepts of time and place -ability to classify categories from narrow to broader more expansive groups	- Use understanding and recall of sequence of steps to schedule or prioritize - Step-wise problem solving -use of graphic organizers -use of visualization for planning and strategies in games (board games and playground)	-Perform daily chores -Babysit siblings for pay -Use organization systems -Follow school schedule -Plan & carry out daily schedule, long-term projects -Mange time and responsibilities -Inhibit rule breaking in absence of authority	- Quest for intimacy in friendship - Need for conscious reputation building - Emergence of varying degrees of friendship - Emphasis on conforming and normality - Focus on lingo use - Stress on affective matching - Call for collaboration - Third person or mutual perspectives	
Ninth grade To Twelfth grade	-Begins to think logically about abstract prepositions and test hypotheses systematically "if" "then" -Thinks about the future and aware of possible concerns with the hypothetical, and ideological problems	-Sequential solutions for geometric proofs -Logical, stepwise reasoning -Memory and discrimination of complex visual patterns -Develop visual representations of ideas (charts, diagrams) -Assemble complex objects from diagrams	-Turn work in on time -Study for tests -Manage and pace time -Adjust effort & work quality in response to feedback -Set and work towards long-term goals -Manage leisure time -Inhibit risky behavior	- Subgroup membership - Greater tolerance for diversity - High-profile interactions with opposite gender - Increased perspective–taking during reading, writing, and listening - Need to control peer pressure - Use political judgment in teacher and peer interactions	

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or an Information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

APPENDIX D

Extra Forms

- Domain Forms
- Formal Assessment Form
- Informal Assessment Form
- Interview Forms
- MATRIX
- Observation Forms
- Record Review Form
- Validity and Reliability Form

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Reasoning

- Problem Solving
- Abstract Thought
- Inferential Thinking
- Deduction

Observations Class Free time Playground Yard	
Interviews Family School Staff Child	
Records and Work Samples	
Informal Assessment	
Formal Assessment	

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Executive Functioning

- Selective Attention
- Flexibility
- Organization
- Multiple Perspectives
- Shifting cognitive sets
- Planning
- Self-monitoring

Observations Class Free time Playground Breaks	
Interviews Family School Staff Student-if appropriate Other	
Records and Work Samples	
Informal Assessment	
Formal Assessment	

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Visual-Spatial Thinking

- Pattern completion
- Attention to detail
- Spatial analysis
- Discrimination
- Part-to-whole reasoning

Observations Class Free time	
Interviews Family School Staff Child	
Records and Work Samples	
Informal Assessment	
Formal Assessment	

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Social Cognition

- Cultural competency
- Understanding social rules
- Adapt behavior
- Social prediction
- Evaluating social scenarios
- Perspective-taking

Observations Class Free time Playground Breaks	
Interviews School Family Student-if appropriate	
Records and Work Samples	
Informal Assessment	
Formal Assessment	

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Formal Testing Notes

Test	Findings	Comments / Domains

Domains: R = Reasoning Lang = Language Soc = Social Cognition EF = Executive Functioning VS = Visual-Spatial

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Informal Testing Notes

Test	Findings	Comments / Domains

Domains: R = Reasoning Lang = Language Soc = Social Cognition EF = Executive Functioning VS = Visual-Spatial

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Interview Data Form for PARENT

Interview Comments	Quick Notes / Hypothesis	Domain

Domains: R = Reasoning Lang = Language Soc = Social Cognition EF = Executive Functioning VS = Visual-Spatial

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Interview Data Form for TEACHER

Interview Comments	Quick Notes / Hypothesis	Domain

Domains: R = Reasoning Lang = Language Soc = Social Cognition EF = Executive Functioning VS = Visual-Spatial

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Interview Data Form for STUDENT

Interview Comments	Quick Notes / Hypothesis	Domain

Domains: R = Reasoning Lang = Language Soc = Social Cognition EF = Executive Functioning VS = Visual-Spatial

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Interview Data Form for OTHER

Interview Comments	Quick Notes / Hypothesis	Domain

Domains: R = Reasoning Lang = Language Soc = Social Cognition EF = Executive Functioning VS = Visual-Spatial

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

MATRIX

Identify Strengths/Weaknesses under each domain; note emerging skill/important information in Comments

Domains	Reasoning	Language/ Communication	Social Cognition	Executive Function	Visual-Spatial
Description	• Problem Solving • Abstract Thought • Deductive Thinking • Inductive Thinking • Intuition/Inferential Thinking	• AAC • Abstract Language/Reasoning • Articulation/Phonological/ Oral Motor • Fluency/Prosody/Voice • Language Literacy • Language Processing • Semantic Abilities • Social Communication/ Pragmatics • Syntax & Morphology • Verbal Formulation	• Knowledge acquired, directly attributed to observation of others in context of social interaction/ experience • Vicarious Learning • Social Problem-Solving • Memory / Forming Expectations • Responsiveness/ Feedback Cues • Social Metacognition • Cultural Competency	• Sustained Attention • Selective Attention • Organization • Strategizing • Flexibility/Shifting Cognitive Sets • Multiple Perspectives • Self-Monitoring • Working Memory	• Pattern Completion • Spatial Analysis • Part to Whole Reasoning • Visual Memory • Visual Motor Integration
Strengths				Executive Function	
Weaknesses					
Comments					

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Observation Data Form

Observation Comments	Quick Notes / Hypothesis	Domain

Domains: R = Reasoning Lang = Language Soc = Social Cognition EF = Executive Functioning VS = Visual-Spatial

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Record Review
Best Practice Guidelines for the Assessment of African American Students

Attach Signed Assessment Plan and All Exchanges of Information

Name:		Date of Birth:	
Grade:		School Site & Room #:	
Parent(s)/ Guardian(s):	Phone #'s: Email(s):		
Current Teacher:	Phone #'s: Email(s):		
RSP/SDC/Speech:	Phone #'s: Email(s):		
Other Agencies:	Phone #'s: Email(s):		
Languages spoken in the home:		Is English student's primary language	

Health Records (including vision & hearing screenings)	Current: Previous Year(s):
Attendance/Tardies*	Current: Previous Year(s):
Discipline or Behavior Reports*	Current: Previous Year(s):
SST(s) Summary (attach copy of original to back)*	Current: Previous:

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Standardized Achievement Score Summary (STAR, CST)*	English-Language Current: Previous Years:	Mathematics Current: Previous Years:	Science History-Social Science
Report Card(s)*	Current Areas of Strength: Current Areas of Concern: Consistency from previous year(s) report card(s).		
School history, programs attended, past schools attended (# of times student has moved), and additional anecdotal information			
	Attach student work samples*		

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Analysis of Test Reliability/Validity

Date: **Name of Test/ Edition (Date Normed):**

1. Test Type

Psychological	Speech/Language	Academic
☐ Attention ○ Alertness ○ Performance consistency ○ Self-monitoring ☐ Temporal-sequential ordering ○ Sequential awareness ○ Perception ○ Memory ○ Time management ☐ Spatial ordering ○ Spatial awareness ○ Perception ○ Memory ☐ Memory ○ Short-term ○ Long-term ○ Active working ☐ Social Cognition ○ Verbal pragmatics (includes interpretation of feelings) ○ Code switching ○ Social behaviors ☐ Language ○ Receptive ○ Expressive ☐ Executive Functions/Reasoning ○ Concept formation ○ Critical thinking ○ Creativity ○ Problem solving ○ Logical thinking ☐ Developmental Levels ☐ Motor ○ Gross ○ Fine (e.g., graphomotor) ☐ Social/Emotional ☐ Adaptive Behavior	☐ Receptive Language ☐ Expressive Language ☐ Vocabulary ○ Basic Concepts ☐ Semantics ☐ Syntax/Morphology ☐ Auditory Processing ☐ Language Processing ☐ Pragmatics ○ Verbal ○ Non-verbal ○ Paralinguistics ☐ Critical Thinking ○ Verbal Problem Solving ☐ Articulation/Phonology ☐ Other	☐ Reading ○ Alphabetic Principle ○ Phonemic Awareness ○ Word analysis/attack ○ Oral ○ Silent ○ Fluency ○ Comprehension ○ Vocabulary ○ Automaticity of word recognition ☐ Written ○ Handwriting ○ Mechanics and grammar ○ Spelling ○ Organization ○ Style ○ Ideation ○ Editing ☐ Math ○ Operations/computation ○ Application ○ Concepts ○ Problem solving ○ Functional ○ Time ○ Money ○ Charts/Tables/Graphs ○ Measurement ○ Statistics and Probability ☐ Adaptive Behavior ○ Self-care/daily living ○ Communication ○ Social Skills ○ Attention ○ Motor Skills ○ Problem solving ☐ Other

Analysis of Test Reliability/Validity

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

1. Appropriate samples for test validation

Population for the test								
Sample population	Sample Size	Age	Gender	Ethnic background	SES	Language	Region of U.S.	Other Country

2. Reliability

Is the reliability sufficiently high to warrant the use of the test as a basis for making decisions concerning individual students? (In general: .90=high; .80=moderate; .70=low)	**High**	**Moderate**	**Low**

3. Predictive Validity (Rater judgment)

Is it an accurate predictor of performance? (If Questionable is marked, please explain under the final question, *additional limitations*, below.)	**Yes**	**Question-able**	**No**

4. Content Validity (Rater judgment)

Are there sufficient test items to measure the skill being assessed?	**Yes**	**No**
What limitations are described in the manual?		
Are there additional limitations that the examiner should consider? From ❒ Mental Measurements Yearbook ❒ Rater		
Does the manual indicate that the test was reviewed by a cultural bias review panel? If so, how many individuals were consulted and what were their qualifications? How was their input used?		
Additional Comments Is this test appropriate to use with African American students ☐yes (whole test) ☐yes (part) ☐no Is this test appropriate to use with English language learner students ☐ yes (whole test) ☐yes (part) ☐no		

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or any information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

APPENDIX E

- Ethical Practice of School Psychology- CASP 2007
- National Association of School Psychologists Principles for Professional Ethics 2010
- Code of Federal Regulations (specific to assessment and special education)
- California Code of Regulations (specific to assessment and special education)

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or an Information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Ethical Practice of School Psychology

California Association of School Psychologists
Code of Ethics Latest Revision Aug 2007

C. Assessment

1. School psychologists strive to maintain the highest standard of service by an objective collecting of appropriate data and information necessary to effectively work with students. In conducting a psycho-educational evaluation and counseling/consultation service, due consideration is given to individual integrity and individual differences. School psychologists recognize differences in age, gender, native language, disability, socioeconomic, and ethnic backgrounds and strive to select and use appropriate procedures, techniques, and strategies relevant to such differences.

2. School psychologists understand the parameters of psycho-diagnostic instruments and utilize their data professionally. **They are obligated to combine observations, background information, and other data to report the most comprehensive and valid picture possible of the individual.**

3. School psychologists do not promote the use of psycho-educational assessment techniques by inappropriately trained or otherwise unqualified persons through teaching, sponsorship or supervision.

4. School psychologists assess the student in his/her native language or other mode of communication for completion of a valid assessment. In the event this is impossible, use of a skilled interpreter or pre-recorded material is clearly documented in oral and/or written reports. Adequate interpretation must follow such modified techniques.

5. School psychologists restrict themselves to the collection and evaluation of information only to the depth that is relevant to the educational needs of the student.

6. School psychologists draw upon their own professional experience and skill in deciding whether assessment is appropriate. Background and supportive data are acquired to justify the need for assessment. Final decisions regarding the need for assessment, however, are made by a team, based on school district policy. Parents' requests for assessment are honored when appropriate.

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or an Information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

7. School psychologists are knowledgeable about the validity and reliability of their instruments and techniques, choosing those that have up-to-date standardization data and are applicable and appropriate for the benefit of the child.

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or an Information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

National Association of School Psychologists
Principles for Professional Ethics 2010

Principle I.3. Fairness and Justice

In their words and actions, school psychologists promote fairness and justice. They use their expertise to cultivate school climates that are safe and welcoming to all persons regardless of actual or perceived characteristics, including race, ethnicity, color, religion, ancestry, national origin, immigration status, socioeconomic status, primary language, gender, sexual orientation, gender identity, gender expression, disability, or any other distinguishing characteristics.

> **Standard I.3.1 School psychologists do not engage in or condone actions or policies that discriminate against persons, including students and their families, other recipients of service, supervisees, and colleagues based on actual or perceived characteristics including race; ethnicity; color; religion; ancestry; national origin; immigration status; socioeconomic status; primary language; gender; sexual orientation, gender identity, or gender expression; mental, physical, or sensory disability; or any other distinguishing characteristics.**
>
> **Standard I.3.2 School psychologists pursue awareness and knowledge of how diversity factors may influence child development, behavior, and school learning. In conducting psychological, educational, or behavioral evaluations or in providing interventions, therapy, counseling, or consultation services, the school psychologist takes into account individual characteristics as enumerated in Standard I.3.1 so as to provide effective services.**
>
> **Standard I.3.3 School psychologists work to correct school practices that are unjustly discriminatory or that deny students, parents, or others their legal rights.** They take steps to foster a school climate that is safe, accepting, and respectful of all persons.

Principle II.3. Responsible Assessment and Intervention Practices

School psychologists maintain the highest standard for responsible professional practices in educational and psychological assessment and direct and indirect interventions.

> Standard II.3.1 Prior to the consideration of a disability label or category, the effects of **current behavior management and/or instructional practices on the student's school performance are considered.**

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or an Information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Standard II.3.2 School psychologists use assessment techniques and practices that the **profession considers to be responsible, research-based practice and strategies that are reliable and valid for the child and the purpose of the assessment.** When using standardized measures, school psychologists adhere to the procedures for administration of the instrument that are provided by the author or publisher or the instrument. **If modifications are made in the administration procedures for standardized tests or other instruments, such modifications are identified and discussed in the interpretation of the results.**

- **If using norm-referenced measures, school psychologists choose instruments with up-to-date normative data.**
- When using computer-administered assessments, computer-assisted scoring, and/or interpretation programs, school psychologists choose programs that meet professional standards for accuracy and validity.
- **School psychologists use professional judgment in evaluating the accuracy of computer-assisted assessment findings for the examinee.**

Standard II.3.3 A psychological or psychoeducational assessment is based on a variety of different types of information from different sources.

Standard II.3.4 Consistent with education law and sound professional practice, children with suspected disabilities are assessed in all areas related to the suspected disability

Standard II.3.5 School psychologists conduct valid and fair assessments. They actively pursue knowledge of the student's disabilities and developmental, cultural, linguistic, and experiential background and then select, administer, and interpret assessment instruments and procedures in light of those characteristics (see Standard I.3.1. and I.3.2).

Standard II.3.6 When interpreters are used to facilitate the provision of assessment and intervention services, school psychologists take steps to ensure that the interpreters are appropriately trained and are acceptable to clients.
Standard II.3.7 It is permissible for school psychologists to make recommendations based solely on a review of existing records. However, they should utilize a representative sample of records and explain the basis for, and the limitations of, their recommendations.

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or an Information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Standard II.3.8 School psychologists adequately interpret findings and present results in clear, understandable terms so that the recipient can make informed choices.

Standard II.3.9 School psychologists use intervention, counseling and therapy procedures, consultation techniques, and other direct and indirect service methods that the profession considers to be responsible, research-based practice:

- **School psychologists use a problem-solving process to develop interventions appropriate to the presenting problems and that are consistent with data collected.**
- Preference is given to interventions described in the peer-reviewed professional research literature and found to be efficacious.

Standard II.3.10 School psychologists encourage and promote parental participation in designing interventions for their children. When appropriate, this includes linking interventions between the school and the home, tailoring parental involvement to the skills of the family, and helping parents gain the skills needed to help their children.

- **School psychologists discuss with parents the recommendations and plans for assisting their children. This discussion takes into account the ethnic/cultural values of the family and includes alternatives that may be available.** Subsequent recommendations for program changes or additional services are discussed with parents, including any alternatives that may be available.
- **Parents are informed of sources of support available at school and in the community.**

Standard II.3.11 School psychologists discuss with students the recommendations and plans for assisting them. To the maximum extent appropriate, students are invited to participate in selecting and planning interventions.

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or an Information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Code of Federal Regulation

CFR Sec. 300.304 Evaluation Procedures.

(a) Notice. The public agency must provide notice to the parents of a child with a disability, in accordance with Sec. 300.503, that describes any evaluation procedures the agency proposes to conduct.

(b) Conduct of evaluation. In conducting the evaluation, the public agency must--

- (1) Use a variety of assessment tools and strategies to gather relevant functional, developmental, and academic information about the child, including information provided by the parent, that may assist in determining--
  - (i) Whether the child is a child with a disability under Sec. 300.8; and
  - (ii) The content of the child's IEP, including information related to enabling the child to be involved in and progress in the general education curriculum (or for a preschool child, to participate in appropriate activities);
- (2) Not use any single measure or assessment as the sole criterion for determining whether a child is a child with a disability and for determining an appropriate educational program for the child; and
- (3) Use technically sound instruments that may assess the relative contribution of cognitive and behavioral factors, in addition to physical or developmental factors.

(c) Other evaluation procedures. Each public agency must ensure that--

- (1) Assessments and other evaluation materials used to assess a child under this part--
  - (i) Are selected and administered so as not to be discriminatory on a racial or cultural basis;
  - (ii) Are provided and administered in the child's native language or other mode of communication and in the form most likely to yield accurate information on what the child knows and can do academically, developmentally, and functionally, unless it is clearly not feasible to so provide or administer;
  - (iii) Are used for the purposes for which the assessments or measures are valid and reliable;
  - (iv) Are administered by trained and knowledgeable personnel; and
  - (v) Are administered in accordance with any instructions provided by the producer of the assessments.
- (2) Assessments and other evaluation materials include those tailored to assess specific areas of educational need and not merely those that are designed to provide a single general intelligence quotient.
- (3) Assessments are selected and administered so as best to ensure that if an assessment is administered to a child with impaired sensory, manual, or speaking skills, the assessment results accurately reflect the child's aptitude or achievement level or whatever other factors the test purports to measure, rather than reflecting the child's impaired sensory, manual, or speaking skills (unless those skills are the factors that the test purports to measure).

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or an Information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

(4) The child is assessed in all areas related to the suspected disability, including, if appropriate, health, vision, hearing, social and emotional status, general intelligence, academic performance, communicative status, and motor abilities;

(5) Assessments of children with disabilities who transfer from one public agency to another public agency in the same school year are coordinated with those children's prior and subsequent schools, as necessary and as expeditiously as possible, consistent with Sec. 300.301(d)(2) and (e), to ensure prompt completion of full evaluations.

(6) In evaluating each child with a disability under Sec. Sec. 300.304 through 300.306, the evaluation is sufficiently comprehensive to identify all of the child's special education and related services needs, whether or not commonly linked to the disability category in which the child has been classified.

(7) Assessment tools and strategies that provide relevant information that directly assists persons in determining the educational needs of the child are provided.

(Authority: 20 U.S.C. 1414(b)(1)-(3), 1412(a)(6)(B))

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or an Information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

CFR Sec. 300.306 Determination of eligibility.

(a) General. Upon completion of the administration of assessments and other evaluation measures--

(1) A group of qualified professionals and the parent of the child determines whether the child is a child with a disability, as defined in Sec. 300.8, in accordance with paragraph (b) of this section and the educational needs of the child; and

(2) The public agency provides a copy of the evaluation report and the documentation of determination of eligibility at no cost to the parent.

(b) Special rule for eligibility determination. A child must not be determined to be a child with a disability under this part--

(1) If the determinant factor for that determination is--

(i) Lack of appropriate instruction in reading, including the essential components of reading instruction (as defined in section 1208(3) of the ESEA);

(ii) Lack of appropriate instruction in math; or

(iii) Limited English proficiency; and

(2) If the child does not otherwise meet the eligibility criteria under Sec. 300.8(a).

(c) Procedures for determining eligibility and educational need.

(1) In interpreting evaluation data for the purpose of determining if a child is a child with a disability under Sec. 300.8, and the educational needs of the child, each public agency must--

(i) Draw upon information from a variety of sources, including aptitude and achievement tests, parent input, and teacher recommendations, as well as information about the child's physical condition, social or cultural background, and adaptive behavior; and

(ii) Ensure that information obtained from all of these sources is documented and carefully considered.

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or an Information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

CFR Sec. 300.309 Determining the existence of a specific learning disability.

(a) The group described in Sec. 300.306 may determine that a child has a specific learning disability, as defined in Sec. 300.8(c)(10), if--

(1) The child does not achieve adequately for the child's age or to meet State-approved grade-level standards in one or more of the following areas, when provided with learning experiences and instruction appropriate for the child's age or State-approved grade-level standards:

(i) Oral expression.
(ii) Listening comprehension.
(iii) Written expression.
(iv) Basic reading skill.
(v) Reading fluency skills.
(vi) Reading comprehension.
(vii) Mathematics calculation.
(viii) Mathematics problem solving.

(2)

(i) The child does not make sufficient progress to meet age or State-approved grade-level standards in one or more of the areas identified in paragraph (a)(1) of this section when using a process based on the child's response to scientific, research-based intervention; or

(ii) The child exhibits a pattern of strengths and weaknesses in performance, achievement, or both, relative to age, State-approved grade-level standards, or intellectual development, that is determined by the group to be relevant to the identification of a specific learning disability, using appropriate assessments, consistent with Sec. Sec. 300.304 and 300.305; and

(3) The group determines that its findings under paragraphs (a)(1) and (2) of this section are not primarily the result of--

(i) A visual, hearing, or motor disability;
(ii) Mental retardation;
(iii) Emotional disturbance;
(iv) Cultural factors;
(v) Environmental or economic disadvantage; or
(vi) Limited English proficiency.

(b) To ensure that underachievement in a child suspected of having a specific learning disability is not due to lack of appropriate instruction in reading or math, the group must consider, as part of the evaluation described in Sec. Sec. 300.304 through 300.306--

(1) Data that demonstrate that prior to, or as a part of, the referral process, the child was provided appropriate instruction in regular education settings, delivered by qualified personnel; and

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or an Information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

(2) Data-based documentation of repeated assessments of achievement at reasonable intervals, reflecting formal assessment of student progress during instruction, which was provided to the child's parents.

(c) The public agency must promptly request parental consent to evaluate the child to determine if the child needs special education and related services, and must adhere to the timeframes described in Sec. Sec. 300.301 and 300.303, unless extended by mutual written agreement of the child's parents and a group of qualified professionals, as described in Sec. 300.306(a)(1)--

(1) If, prior to a referral, a child has not made adequate progress after an appropriate period of time when provided instruction, as described in paragraphs (b)(1) and (b)(2) of this section; and

(2) Whenever a child is referred for an evaluation.

(Authority: 20 U.S.C. 1221e-3; 1401(30); 1414(b)(6))

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or an Information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

California Code of Regulations

Title 5 CCR 3030 - Eligibility Criteria

A pupil shall qualify as an individual with exceptional needs, pursuant to Section 56026 of the Education Code, if the results of the assessment as required by Section 56320 demonstrate that the degree of the pupil's impairment as described in Section 3030 (a through j) requires special education in one or more of the program options authorized by Section 56361 of the Education Code. The decision as to whether or not the assessment results demonstrate that the degree of the pupil's impairment requires special education shall be made by the individualized education program team, including assessment personnel in accordance with Section 56341(d) of the Education Code. **The individualized education program team shall take into account all the relevant material which is available on the pupil. No single score or product of scores shall be used as the sole criterion for the decision of the individualized education program team as to the pupil's eligibility for special education. The specific processes and procedures for implementation of these criteria shall be developed by each special education local plan area and be included in the local plan pursuant to Section 56220(a) of the Education Code.**

(a) A pupil has a hearing impairment, whether permanent or fluctuating, which impairs the processing of linguistic information through hearing, even with amplification, and which adversely affects educational performance. Processing linguistic information includes speech and language reception and speech and language discrimination.
(b) A pupil has concomitant hearing and visual impairments, the combination of which causes severe communication, developmental, and educational problems.
(c) A pupil has a language or speech disorder as defined in Section 56333 of the Education Code, and it is determined that the pupil's disorder meets one or more of the following criteria:

(1) Articulation disorder.

(A) The pupil displays reduced intelligibility or an inability to use the speech mechanism which significantly interferes with communication and attracts adverse attention. Significant interference in communication occurs when the pupil's production of single or multiple speech sounds on a developmental scale of articulation competency is below that expected for his or her

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or an Information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

chronological age or developmental level, and which adversely affects educational performance.
(B) A pupil does not meet the criteria for an articulation disorder if the sole assessed disability is an abnormal swallowing pattern.

(2) Abnormal Voice. A pupil has an abnormal voice which is characterized by persistent, defective voice quality, pitch, or loudness.
(3) Fluency Disorders. A pupil has a fluency disorder when the flow of verbal expression including rate and rhythm adversely affects communication between the pupil and listener.
(4) Language Disorder. The pupil has an expressive or receptive language disorder when he or she meets one of the following criteria:

(A) The pupil scores at least 1.5 standard deviations below the mean, or below the 7th percentile, for his or her chronological age or developmental level on two or more standardized tests in one or more of the following areas of language development: morphology, syntax, semantics, or pragmatics. When standardized tests are considered to be invalid for the specific pupil, the expected language performance level shall be determined by alternative means as specified on the assessment plan, or
(B) The pupil scores at least 1.5 standard deviations below the mean or the score is below the 7th percentile for his or her chronological age or developmental level on one or more standardized tests in one of the areas listed in subsection (A) and displays inappropriate or inadequate usage of expressive or receptive language as measured by a representative spontaneous or elicited language sample of a minimum of fifty utterances. The language sample must be recorded or transcribed and analyzed, and the results included in the assessment report. If the pupil is unable to produce this sample, the language, speech, and hearing specialist shall document why a fifty utterance sample was not obtainable and the contexts in which attempts were made to elicit the sample. When standardized tests are considered to be invalid for the specific pupil, the expected language performance level shall be determined by alternative means as specified in the assessment plan.

(d) A pupil has a visual impairment which, even with correction, adversely affects a pupil's educational performance.
(e) A pupil has a severe orthopedic impairment which adversely affects the pupil's educational performance. Such orthopedic impairments include

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or an Information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

impairments caused by congenital anomaly, impairments caused by disease, and impairments from other causes.
(f) A pupil has limited strength, vitality or alertness, due to chronic or acute health problems, including but not limited to a heart condition, cancer, leukemia, rheumatic fever, chronic kidney disease, cystic fibrosis, severe asthma, epilepsy, lead poisoning, diabetes, tuberculosis and other communicable infectious diseases, and hematological disorders such as sickle cell anemia and hemophilia which adversely affects a pupil's educational performance. In accordance with Section 56026(e) of the Education Code, such physical disabilities shall not be temporary in nature as defined by Section 3001(v).
(g) A pupil exhibits any combination of the following autistic-like behaviors, to include but not limited to:

(1) An inability to use oral language for appropriate communication.
(2) A history of extreme withdrawal or relating to people inappropriately and continued impairment in social interaction from infancy through early childhood.
(3) An obsession to maintain sameness.
(4) Extreme preoccupation with objects or inappropriate use of objects or both.
(5) Extreme resistance to controls.
(6) Displays peculiar motoric mannerisms and motility patterns.
(7) Self-stimulating, ritualistic behavior.

(h) A pupil has significantly below average general intellectual functioning existing concurrently with deficits in adaptive behavior and manifested during the developmental period, which adversely affect a pupil's educational performance.
(i) Because of a serious emotional disturbance, a pupil exhibits one or more of the following characteristics over a long period of time and to a marked degree, which adversely affect educational performance:

(1) An inability to learn which cannot be explained by intellectual, sensory, or health factors.
(2) An inability to build or maintain satisfactory interpersonal relationships with peers and teachers.
(3) Inappropriate types of behavior or feelings under normal circumstances exhibited in several situations.
(4) A general pervasive mood of unhappiness or depression.
(5) A tendency to develop physical symptoms or fears associated with personal or school problems.

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or an Information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

(j) A pupil has a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which may manifest itself in an impaired ability **to listen, think, speak, read, write, spell, or do mathematical calculations**, and has a severe discrepancy between intellectual ability and achievement in one or more of the academic areas specified in Section 56337(a) of the Education Code. For the purpose of Section 3030(j):

(1) Basic psychological processes include attention, visual processing, auditory processing, sensory-motor skills, cognitive abilities including association, conceptualization and expression.
(2) **Intellectual ability includes both acquired learning and learning potential and shall be determined by a systematic assessment of intellectual functioning.**
(3) The level of achievement includes the pupil's level of competence in materials and subject matter explicitly taught in school and shall be measured by standardized achievement tests.
(4) The decision as to whether or not a severe discrepancy exists shall be made by the individualized education program team, including assessment personnel in accordance with Section 56341(d), **which takes into account all relevant material which is available on the pupil. No single score or product of scores, test or procedure shall be used as the sole criterion for the decisions of the individualized education program team as to the pupil's eligibility for special education.** In determining the existence of a severe discrepancy, the individualized education program team shall use the following procedures:

(A) When standardized tests are considered to be valid for a specific pupil, a severe discrepancy is demonstrated by: first, converting into common standard scores, using a mean of 100 and standard deviation of 15, the achievement test score and the ability test score to be compared; second, computing the difference between these common standard scores; and third, comparing this computed difference to the standard criterion which is the product of 1.5 multiplied by the standard deviation of the distribution of computed differences of students taking these achievement and ability tests. A computed difference which equals or exceeds this standard criterion, adjusted by one standard error of measurement, the adjustment not to exceed 4 common standard score points, indicates a severe discrepancy when such discrepancy is corroborated by other assessment data which may include other

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or an Information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

tests, scales, instruments, observations and work samples, as appropriate.
(B) When standardized tests are considered to be invalid for a specific pupil, the discrepancy shall be measured by alternative means as specified on the assessment plan.
(C**) If the standardized tests do not reveal a severe discrepancy as defined in subparagraphs (A) or (B) above**, the individualized education program team may find that a severe discrepancy does exist, provided that the team documents in a written report that the severe discrepancy between ability and achievement exists as a result of a disorder in one or more basic psychological processes. The report shall include a statement of the area, the degree, and the basis and method used in determining the discrepancy. **The report shall contain information considered by the team which shall include, but not be limited to:**

1. Data obtained from standardized assessment instruments;
2. Information provided by the parent;
3. Information provided by the pupil's present teacher;
4. Evidence of the pupil's performance in the regular and/or special education classroom obtained from observations, work samples, and group test scores;
5. Consideration of the pupil's age, particularly for young children; and
6. Any additional relevant information.

(5) The discrepancy shall not be primarily the result of limited school experience or poor school attendance.

[Authority cited: Statutes of 1981, Chapter 1094, Section 25(a); and Section 56100(a), (g), (i), Education Code] [Reference: 20 U.S.C. 1401(a)(15) and 1412(5); 34 CFR 300.5(b)(7) and (9), 300.532(a) (2), (d) and (e), 300.533, 300.540, 300.541-43; and Sections 56026, 56320, 56333, and 56337, Education Code]

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or an Information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

APPENDIX F

- Collaboration

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or an Information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

COLLABORATION

Definition:

The Merriam-Webster Dictionary defines *collaboration* as

> "the work and activity of a number of persons who individually contribute toward the efficiency of the whole".

Common synonyms for collaboration include:

cooperation mutualism reciprocity partnership

Keeping in mind the definition of collaboration and its associated words is important in establishing the foundational elements of a successful assessment process dedicated to the students we serve. Effective collaboration involves real-time interaction between families, students, and school staff that allows all parties to foster and shape ideas towards the common goal of understanding a student. With regards to best practices in assessment, crucial collaborative elements include:

- Enlisting the active support of relevant individuals across the student's environments
- Accepting and respecting differences within a group
- Creating equality within a group
- Establishing mutual goals when meeting
- Building upon ideas across disciplines through joint and complementary efforts in all phases of problem solving
- Yielding control of interactions so that others may fold in their opinions as the group as a whole actively refines the information they gather
- Respecting each person's contribution to an interaction with equal value
- Communicating with supportive and non-judgmental statements
- Co-creating the approach towards problem identification, assessment plan development, analysis, and interventions
- Allowing equal decision-making power

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or an Information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.

Collaboration can occur in a variety of environments, including but not limited to:

- Assessment team meetings
- Family-school staff meetings or interviews
- Scheduled planning meetings
- Student study team meetings
- IEP meetings

THE MATRIX

The MATRIX requires collaboration from all individuals who will be involved in the assessment of the student including the family and student. Collaboration should occur throughout the MATRIX process. This will ensure that there is no duplication in the assessment process unless designed for that purpose. This result in a shared workload, unified diagnostic approach and holistic educational recommendations. Consider the following key areas for collaboration in the assessment process.

Collaboration is about

- Setting up of case
- During the assessment for critical information exchange
- Completing the MATRIX

All rights reserved for this document/training. No part of this document/training may be used or reproduced in any form or by any electronic or mechanical means including photocopying, recording or an Information storage and retrieval system without written permission from the Diagnostic Center, Northern California. Permission may be requested by contacting the Diagnostic Center, Northern California.