Collaborative vs. Traditional Models for English Learners in Special Education

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Academic Attainment and Instructional Practices for English Language Learners

Although many effective instructional practices are similar for both ELLs and non ELLs why does instruction tend to be less effective for ELLs?

*Because ELLs face the double challenge of learning academic content **and** the language of instruction simultaneously.*

To understand the implications of this challenge requires a good understanding of early child development and the interaction between language, cognition, and academic achievement.
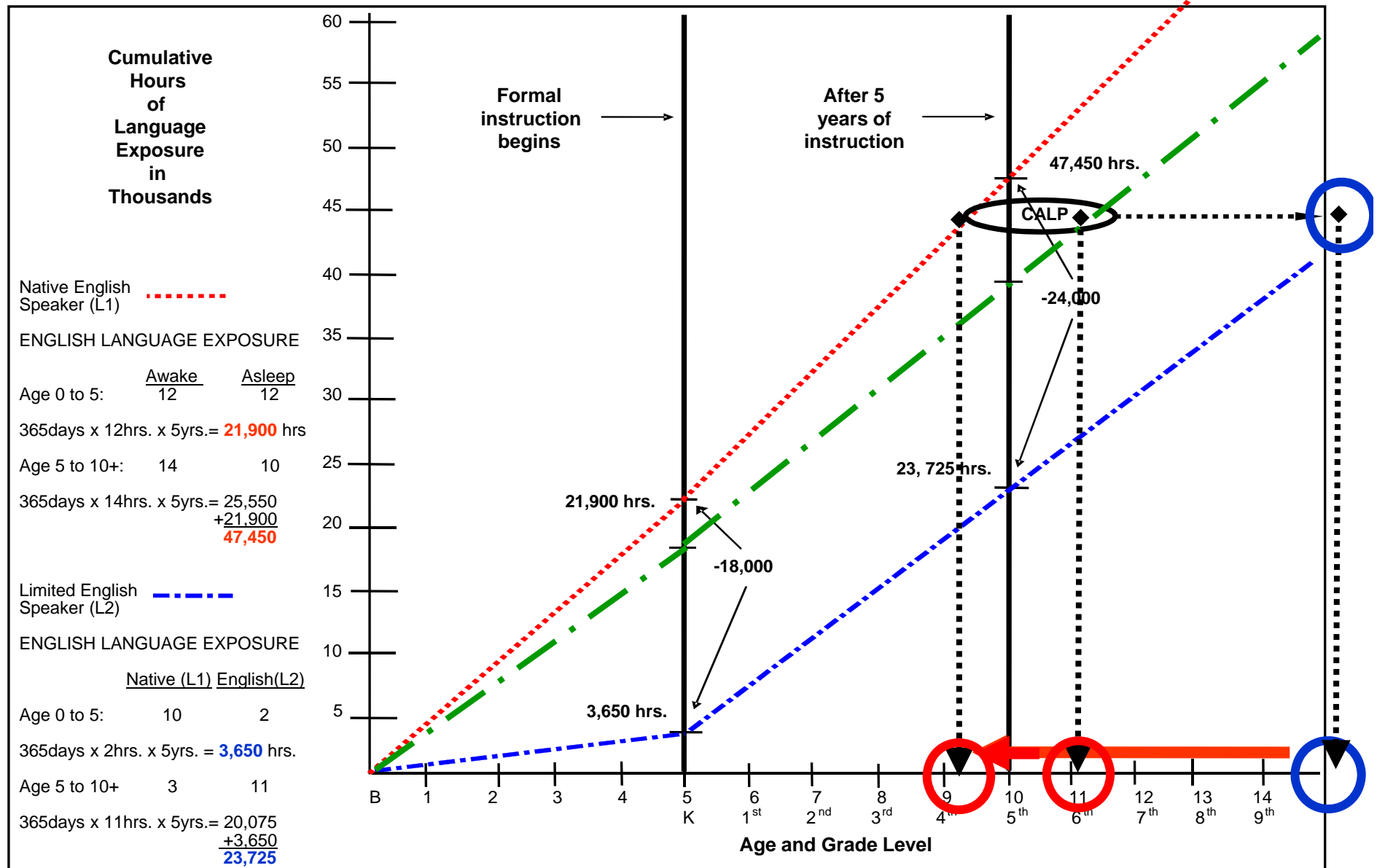
Source: Goldenberg, C. (2008). Teaching English language learners: What the research does—and does not—say. American Educator, 32 (2) pp. 8-23, 42-44.

Developmental Implications of Early Language Difference

The 30 Million Word Gap

- *according to research by Betty Hart and Todd Risley (2003), children from privileged (high SES) families have heard 30 million more words than children from underprivileged (low SES) families by the age of 3.*
- *in addition, "follow-up data indicated that the 3-year old measures of accomplishment predicted third grade school achievement."*

Source: Hart, B. & Risley, T. r. (2003). The Early Catastrophe: The 30 million word gap. American Educator 27(1), 4-9.
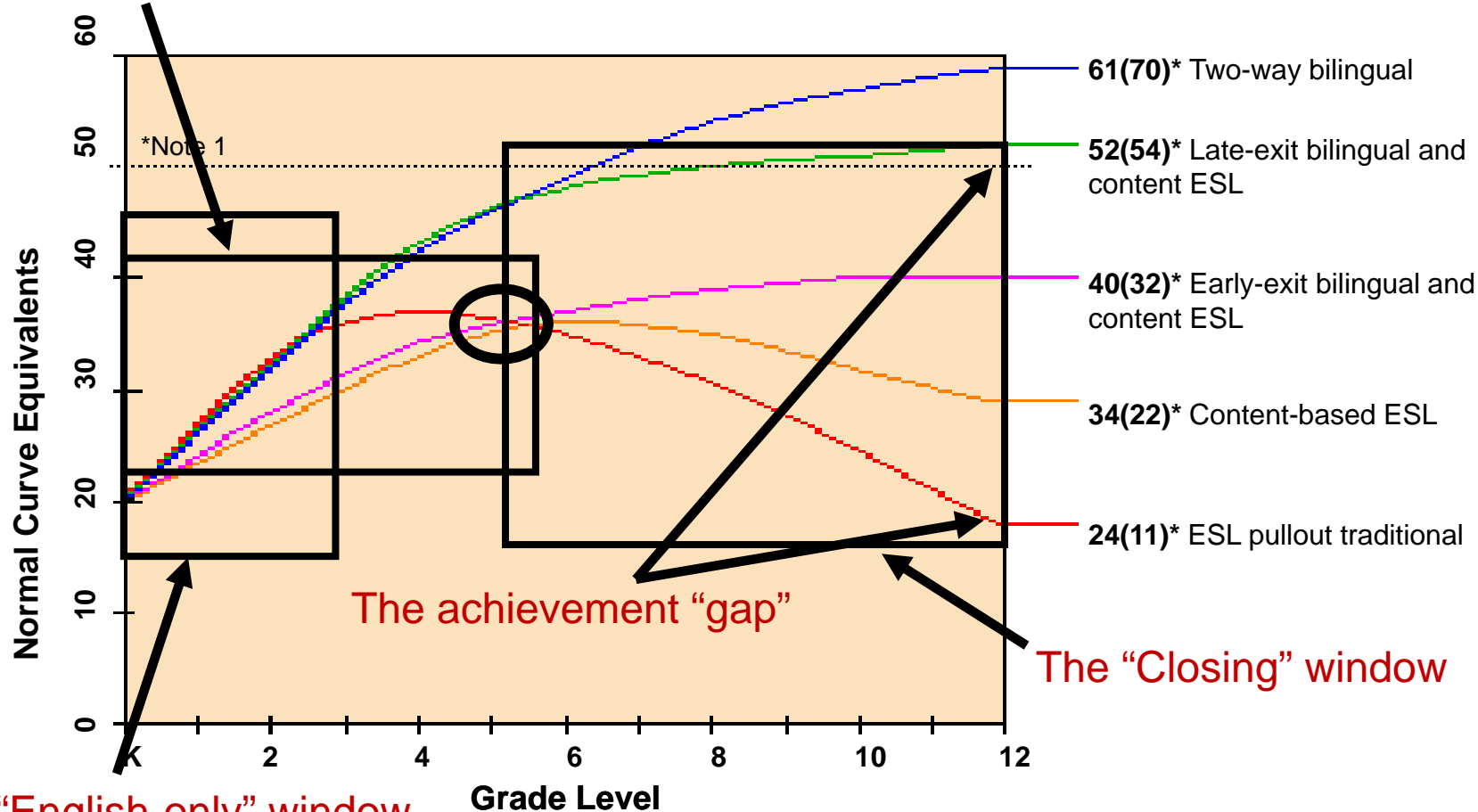
Developmental Implications of Early Language Differences: When do ELLs "catch up?"

Cumulative Hours of Language Exposure in Thousands

Native English Speaker (L1)

ENGLISH LANGUAGE EXPOSURE

	Awake	Asleep
Age 0 to 5:	12	12

365days x 12hrs. x 5yrs.= **21,900** hrs

| Age 5 to 10+: | 14 | 10 |

365days x 14hrs. x 5yrs.= 25,550
+21,900
47,450

Limited English Speaker (L2)

ENGLISH LANGUAGE EXPOSURE

	Native (L1)	English(L2)
Age 0 to 5:	10	2

365days x 2hrs. x 5yrs. = **3,650** hrs.

| Age 5 to 10+ | 3 | 11 |

365days x 11hrs. x 5yrs.= 20,075
+3,650
23,725

Formal instruction begins

After 5 years of instruction

47,450 hrs.

CALP

-24,000

23, 725 hrs.

21,900 hrs.

-18,000

3,650 hrs.

Age and Grade Level

| B | 1 | 2 | 3 | 4 | 5 K | 6 1st | 7 2nd | 8 3rd | 9 4th | 10 5th | 11 6th | 12 7th | 13 8th | 14 9th |

Achievement Trajectories for ELLs: Native language makes a difference.

**General Pattern of Bilingual Education Student Achievement
on Standardized Tests in English**

The "Slavin" window

The "English-only" window

The achievement "gap"

The "Closing" window

Normal Curve Equivalents

Grade Level

*Note 1

61(70)* Two-way bilingual

52(54)* Late-exit bilingual and content ESL

40(32)* Early-exit bilingual and content ESL

34(22)* Content-based ESL

24(11)* ESL pullout traditional

*Note 1: Average performance of native-English speakers making one year's progress in each grade. Scores in parentheses are percentile ranks converted from NCEs.

Adapted from: Thomas, W. & Collier, V. (1997). Language Minority Student Achievement and Program Effectiveness. Washington DC: National Clearinghouse for Bilingual Education.

Implications of Early Language Differences on Academic Achievement

The ELL Achievement Gap

"On the 2007 National Assessment of Educational Progress, fourth-grade ELLs scored 36 points below non-ELLs in reading and 25 points below non-ELLs in math. The gaps among eighth-graders were even larger—42 points in reading and 37 points in math."

Source: Goldenberg, C. (2008). Teaching English language learners: What the research does—and does not—say. American Educator, 32 (2) pp. 8-23, 42-44.

Implications of Early Language Differences on Academic Achievement
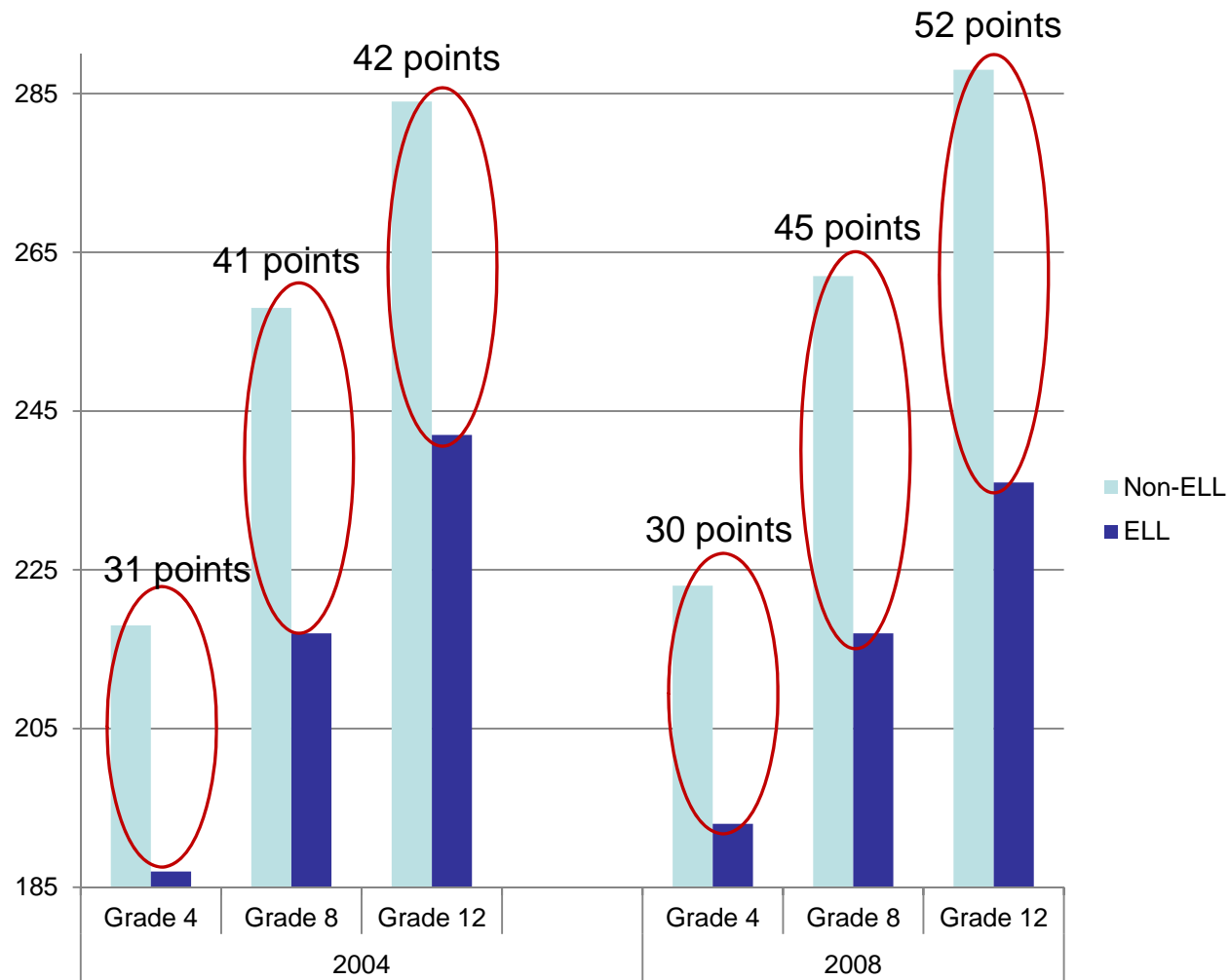
Results of NAEP Data on Reading Achievement for ELL vs. Non-ELL

Effective Instruction for ELLs:
What the Research Says

Typical English Learners who begin school 30 NCE's behind their native English speaking peers in achievement, are expected to learn at:

"…an average of about one-and-a-half years' progress in the next six consecutive years (for a total of nine years' progress in six years--a 30-NCE gain, from the 20th to the 50th NCE) to reach the same long-term performance level that a typical native-English speaker…staying at the 50th NCE) (p. 46).

In other words, they must make 15 months of academic progress in each 10 month school year for six straight years—they must learn *1½ times faster* than normal.

Source: Thomas, W. & Collier, V. (1997). Language Minority Student Achievement and Program Effectiveness. Washington DC: NCBE.

Effective Instruction for ELLs:
What the Research Says

Of the five major, meta-analyses conducted on the education of ELLs, ALL five came to the very same conclusion:

"Teaching students to read in their first language [i.e., bilingual education] promotes higher levels of reading achievement in English" **(p. 14, 2008).**

"Bilingual education [i.e., teaching students to read in their first language] produced superior reading outcomes in English compared with English immersion" **(p. 9, 2013).**

This is true primarily because teaching in the native language does not interrupt or inhibit the linguistic and cognitive development that students bring to school.

Sources: Goldenberg, C. (2013). Unlocking the Research on English Learners: What we know—and don't know—about effective instruction. American Educator, 37,(2), pp. 4-11, 38-39. and Goldenberg, C. (2008). Teaching English language learners: What the research does—and does not—say. American Educator, 32 (2) pp. 8-23, 42-44.

Linking Assessment to Responsive Intervention

- The value of the heritage language (L1) in being able to facilitate learning is too valuable to be ignored and *the potential of bilingualism for improving academic progress, response-to-intervention, and testing, is necessary now more than ever.*

- Merely teaching English learners to speak and comprehend English may comply with Title I and III of ESEA (aka NCLB) but *is insufficient to foster academic success for the large majority of students.*

- Of the three major variables in learning (language, cognition, curriculum) only the curriculum is within our control. To improve learning *we must not attempt to fit the child to the curriculum but rather, fit the curriculum to the child.*

- Political ideology or knee-jerk psychology about bilingualism and schooling cannot continue to be used as the basis for instruction of ELLs. The research is very clear, *the longer children are taught in their native language, the better they succeed in English.*

Collaborative Framework for Intervention

In describing a basic three-tier RTI model, one of the stated potential benefits included:

"Increased fairness in the assessment process, particularly for minority students"

Kovaleski & Prasse, 2004

Although it has long been assumed that RTI will benefit ELLs by avoiding the types of biases associated with standardized testing, this premise does not appear to be wholly supported by research.

Collaborative Framework for Intervention

Tier 1 RTI evaluation implications for ELLs:

Determine whether effective instruction is in place for groups of students

"Teaching ELLs to read in their first language and then in their second language, or in their first and second languages simultaneously (at different times during the day), compared with teaching them to read in their second language only, boosts their reading achievement *in the second language*" (emphasis in original).

"The NLP was the latest of five meta-analyses that reached the same conclusion: learning to read in the home language promotes reading achievement in the second language."

Source: Goldenberg, C. (2008). Teaching English language learners: What the research does—and does not—say. American Educator, 32 (2) pp. 8-23, 42-44.

Collaborative Framework for Intervention

Use evidence-based practices shown to reduce the achievement gap

Sample School District Evidence-Based Practices

Our district believes that by implementing the following practices, we can reduce the achievement gap and increase outcomes for all student groups.

Leadership:

    Work with staff through training and coaching to have high expectations for all students

    Provide high quality professional development to support teachers in delivering effective instruction

Teaming/Assessment:

    Use data-based decision making, universal screening, and progress monitoring
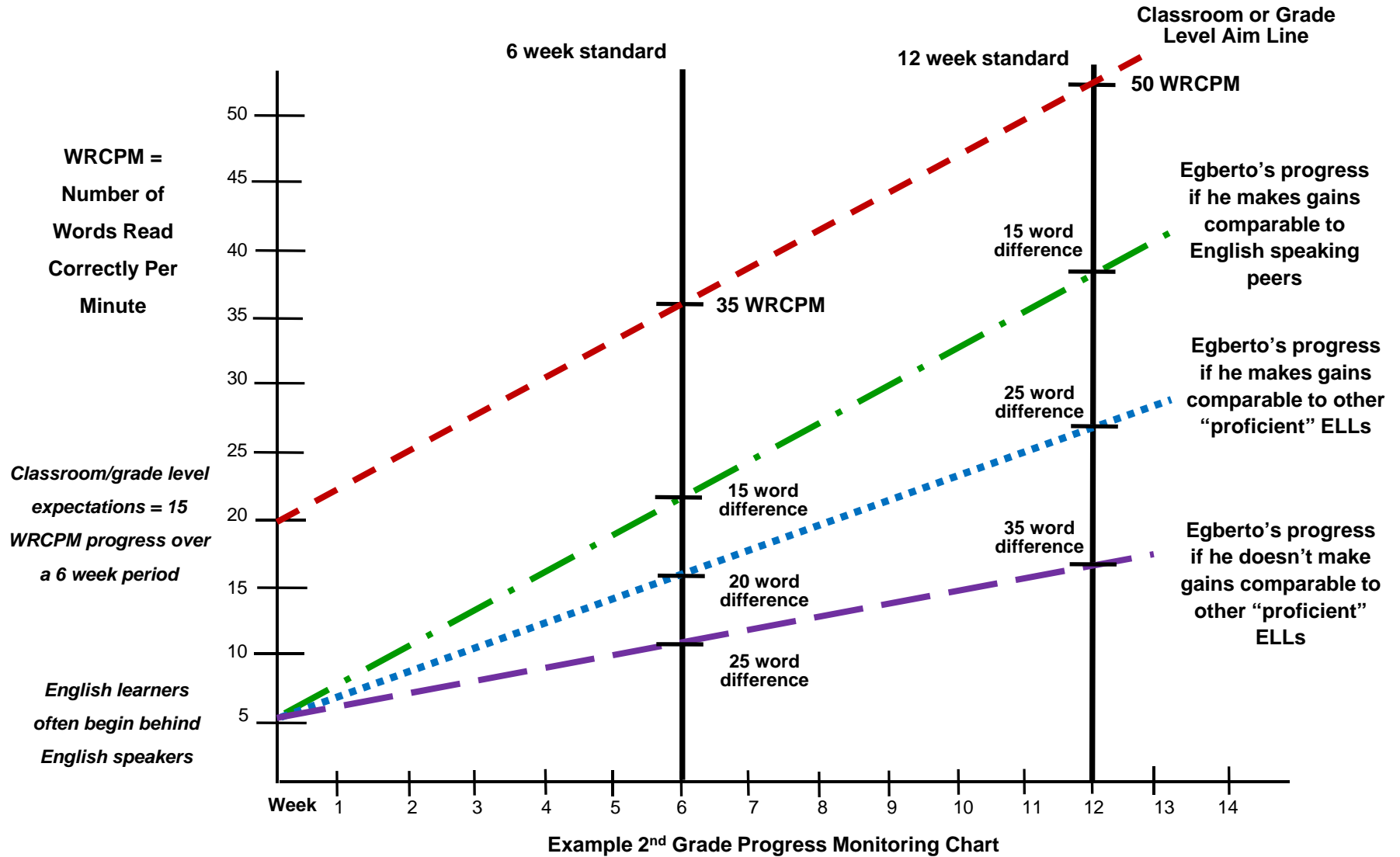
Instructional:

    Use explicit instruction to teach the 5 big ideas of reading

    Use sheltered instruction in all classes all day long

    Use effective, predictable classroom management routines

    Embed intensive vocabulary instruction in all subject areas

    Provide instruction to develop academic English

    Integrate oral and written English language instruction into content area teaching

    Provide regular opportunities for students to develop written language skills

    Provide Interventions for students who need more

Collaborative Framework for Intervention

**RTI Identification Process
Elementary Schools**

**All Students Receive Quality Behavior
and Academic Instruction and Support**

All Students are Screened
for additional instructional needs.
(Fall, Winter, & Spring DIBELS
Next, IDEL, OAKS, Office Discipline
Referrals, Math CBMs, etc.)

**Small Group
Interventions**
are chosen from the
standard protocols
by RTI Teams

**Interventions
are further
individualized**

Tier 1 goals are very noble and represent a strong commitment to all children. However, when it comes to ELLs, the question regarding what constitutes "quality" academic instruction and support tends to be overlooked in the most general sense.

Fairness in Evaluation of ELLs via RTI/MTSS: Tier 3 Issues

Example 2nd Grade Progress Monitoring Chart

Note: The name,"Egberto," is a derivative of "Egbert" and used with the blessings of Dan Reschley.

Collaborative Framework for Intervention

- Don't be afraid to provide the cognitively-linguistically appropriate level of instruction regardless of current AGE or GRADE.
- Teach within the zone of proximal development, essentially what comes NEXT because instruction that is beyond what comes "NEXT" will be ineffective and impede development even further.
- Don't try to alter cognitive or linguistic development because you CAN'T. Alter the curriculum, because you CAN.
- Provide access to core curriculum and focus on developing thinking and literacy skills from the CURRENT developmental level.
- Use meta-cognitive strategies that help students think about, plan, monitor, and evaluate learning at their CURRENT level.
- Use cognitive strategies that help engage students in the learning process and which involve interacting with or manipulating the material mentally or physically, and applying a specific technique to learning tasks at their CURRENT developmental level.
- Use social-affective strategies that help students interact with another person, accomplish a task, or that assist in learning.

LEARNING AND DEVELOPMENT

Prior Learning   **Proximal Learning**   **Future Learning**

Independent Performance ("known")   *Assisted Performance ("with help")*   *Beyond Performance ("can't do")*

Appropriate level of instruction
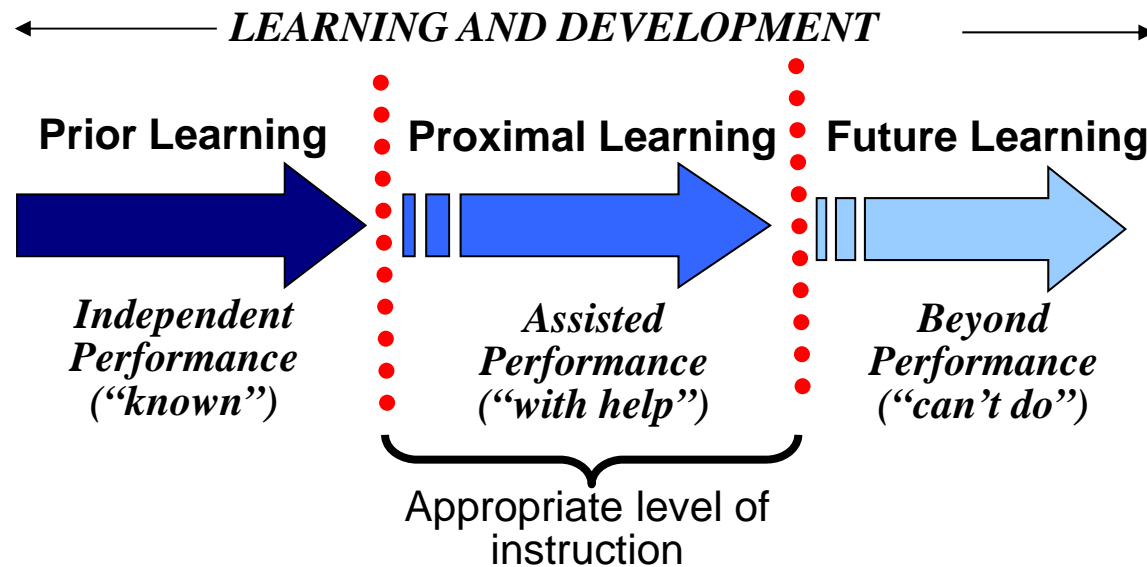
The Language Proficiency-Academic Performance Continuum

Level	Learner Characteristics	How will they gain language?	What do they Understand?	What can they do?
1	Can be silent for an initial period; Recognizes basic vocabulary and high frequency words; May begin to speak with few words or imitate	Multiple repetitions of language; Simple sentences; Practice with partners; Use visual and realia, Model, model, model; Check for understanding; Build on cultural and linguistic history	Instructions such as: Listen, Line up, Point to, List, Say, Repeat, Color, Tell, Touch, Circle, Draw, Match, Label	Use gestures; Use other native speakers ; Use high frequency phrases; Use common nouns; Communicate basic needs; Use survival language (i.e., words and phrases needed for basic daily tasks and routines)
2	Understand phrases and short sentences; Beginning to use general vocabulary and everyday expressions; Grammatical forms may include present, present progress and imperative	Multiple repetitions of language; Visual supports for vocabulary; Pre-teach content vocabulary; Link to prior knowledge	Present and past tense; School related topics; Comparatives & superlatives; Routine questions; Imperative tense; Simple sequence words	Routine expressions; Simple phrases; Subject verb agreement; Ask for help
3	Increased comprehension in context; May sound proficient but has social NOT academic language; Inconsistent use of standard grammatical structures	Multiple repetitions of language; Use synonyms and antonyms; Use word banks; Demonstrate simple sentences; Link to prior knowledge	Past progressive tense; Contractions; Auxiliary verbs/verb phrases; Basic idioms; General meaning; Relationship between words	Formulate questions; Compound sentences; Use precise adjectives; Use synonyms; Expanded responses
4	Very good comprehension; More complex speech and with fewer errors; Engages in conversation on a variety of topics and skills; Can manipulate language to represent their thinking but may have difficulty with abstract academic concepts; Continues to need academic language development	Multiple repetitions of language; Authentic practice opportunities to develop fluency and automaticity in communication; Explicit instruction in the use of language; Specific feedback; Continued vocabulary development in all content areas	Present/perfect continuous; General & implied meaning; Varied sentences; Figurative language; Connecting ideas; Tag questions	Range of purposes; Increased cultural competence (USA); Standard grammar; Solicit information
5	Communicates effectively on a wide range of topics; Participates fully in all content areas at grade level but may still require curricular adjustments; Comprehends concrete and abstract concepts; Produces extended interactions to a variety of audiences	May not be fully English proficient in all domains (i.e., reading, writing, speaking, listening); Has mastered formal and informal language conventions; Multiple opportunities to practice complex grammatical forms; Meaningful opportunities to engage in conversations; Explicit instruction in the smaller details of English usage; Focus on "gaps" or areas still needing instruction in English; Focus on comprehension instruction in all language domains	Analyze, Defend, Debate, Predict, Evaluate, Justify, Hypothesize and Synthesize, Restate, Critique	May not yet be fully proficient across all domains; Comprehends concrete and abstract topics; Communicates effectively on a wide range of topics and purposes; Produces extended interactions to a variety of audiences; Participates fully in all content areas at grade level but may still require curricular modifications; Increasing understanding of meaning, including figurative language; Read grade level text with academic language support; Support their own point of view; Use humor in native-like way

Source: Turner & Brown, (2012) as cited in Brown, J. E. & Ortiz, S. O. (2014). Interventions for English Learners with Learning Difficulties. In J. T. Mascolo, V. C. Alfonso, and D. P. Flanagan (Eds.), *Essentials of Planning, Selecting, and Tailoring Interventions for Unique Learners* (pp. 267-313)., Hoboken, NJ: Wiley & Sons.

PLUSS Framework for Evidence-based Instruction for ELLs

PLUSS Framework	Definition	Evidence
Pre-teach critical vocabulary	Presentation of critical vocabulary prior to lessons to ensure later comprehension using direct instruction, modeling, and connections to native language	Beck, McKeown and Kucan (2002); Heibert and Lubliner (2008); Martinez and Lesaux (2011); Nagy, Garcia, Dyrgunoglu and Hancin (1993)
Language modeling and opportunities for practice	Teacher models appropriate use of academic language, then provides structured opportunities for students to practice using the language in meaningful contexts	Dutro and Moran (2003); Echevarria, Vogt and Short (2008); Gibbons (2009); Linan-Thompson and Vaughn (2007); Scarcella (2003)
Use visuals and graphic organizers	Strategically use pictures, graphic organizers, gestures, realia, and other visual prompts to help make critical language, concepts, and strategies more comprehensible to learners	Brechtal (2001); Echevarria and Graves (1998); Haager and Klingner (2005); Linan-Thompson and Vaughn (2007); O'Malley and Chamot, (1990)
Systematic and explicit instruction	Explain, model, provide guided practice with feedback, and opportunities for independent practice in content, strategies, and concepts	Calderón (2007); Flagella-Luby and Deshler (2008); Gibbons (2009); Haager and Klingner (2005); Klingner and Vaughn (2000); Watkins and Slocum (2004)
Strategic use of native language & teaching for transfer	Identify concepts and content students already know in their native language and culture to explicitly explain, define, and help them understand new language and concepts in English	Carlisle, Beeman, Davis and Spharim (1999); Durgunoglu, et al. (1993); Genesee, Geva, Dressler, and Kamil (2006); Odlin (1989); Schecter and Bayley (2002)

Examples of PLUSS Framework Applied in the Classroom

PLUSS Framework	Example
Pre-teach critical vocabulary	Select 3-5 high utility vocabulary words crucial to understanding text (not necessarily content specific words) and explicitly teach student friendly definitions, model using the words, and provide students with repeated opportunities to use the words over time (Honig, Diamond, & Gutlohn, 2008; Beck, McKeown, Kucan, 2002)
Language modeling and opportunities for practicing	Provide language frames and sentence starters to structure language interaction. For example, after having defined the word, "preoccupied," for instance, ask students to use the word, "preoccupied," in a sentence, "Think of a time when you were preoccupied." (pause to give time to think). "Turn to your partners and share, starting your sentence with, 'I was preoccupied when…', what will you start your sentence with?" (Have students repeat the sentence starter before turning to their neighbor and sharing).
Use visuals and graphic organizers	Consistently use a Venn diagram to teach concepts, such as compare and contrast, and use realia and pictures to support the teaching of concepts (Echevarría, Vogt, & Short, 2008)
Systematic and explicit instruction	Teach strategies like summarization, monitoring and clarifying, and decoding strategies through direct explanation, modeling, guided practice with feedback, and opportunities for application (Honig, Diamond, & Gutlohn, 2008).
Strategic use of native language & teaching for transfer	Use native language to teach cognates (e.g., teach that preoccupied means the same thing as preocupado in Spanish) or explain/clarify a concept in the native language before or while teaching it in English.

Source: Brown, J. E. & Ortiz, S. O. (2014). Interventions for English Learners with Learning Difficulties. In J. T. Mascolo, V. C. Alfonso, and D. P. Flanagan (Eds.), *Essentials of Planning, Selecting, and Tailoring Interventions for Unique Learners* (pp. 267-313)., Hoboken, NJ: Wiley & Sons.

Summary of Instructional and Intervention Strategies for English Language Learners

1. Instruction must always match linguistic/cognitive development regardless of the individual's age or grade.

2. No amount or type of instruction can make up for developmental delays that occur as a function of differences in the primary language and the language of instruction.

3. Individual differences means that some children will succeed despite the way we instruct them and many will fail because of the way we instruct them.

4. There is no single teaching method or intervention that is appropriate for all English language learners.

5. There is no single teaching method or intervention that will help all English learners "catch up."

6. Of the three major variables for learning, language, cognition, and academic development, only the latter is within our control. Thus, to improve learning we must not attempt to fit the child to the curriculum but rather, fit the curriculum to the child. Any other way will not prove successful.

What would you choose?

SCHOOL   ENROLLMENT   FORM

Please select an instructional program for your child by placing a check in the appropriate box below:

☐ English as a Second Language

SURGEON GENERAL'S WARNING: This program has been scientifically validated to lower achievement in English, increase special education placement, raise the risk of dropping out, and decrease rates of graduation.
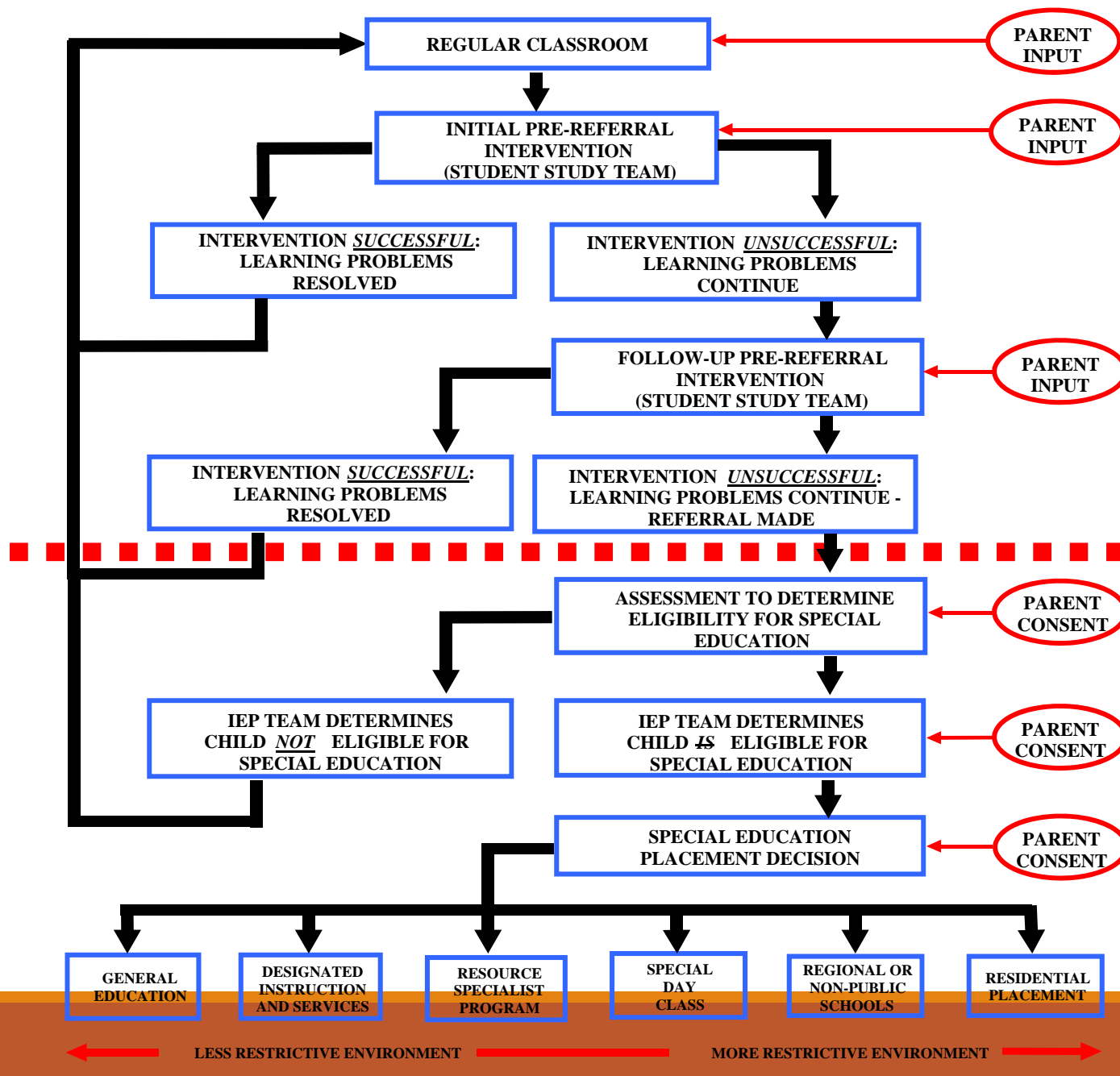
☑ Bilingual Education

Collaborative Framework for Intervention

Once an ELL has been exited from or deemed to no longer need or require bilingual education or ESL services (i.e., they have been FLEP'd, or un-LEP'd), it cannot be assumed that they are comparable in terms of their academic achievement to their monolingual English speaking peers.

ELLs will invariably continue to have increasingly less foundation and life-long experiences in English language development and in then acquisition of the acculturative knowledge that is embedded within and underlies the subject matter of all curricula and for which mastery remains a critical requirement for success in school.

"Once a bilingual, always a bilingual." ELLs do not suddenly cease to be bilingual simply because they have become proficient and dominant in English.

The Special Education Process: Pre- to Post-Assessment

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                    REGULAR CLASSROOM  ◄──────────  PARENT INPUT

                    INITIAL PRE-REFERRAL
                    INTERVENTION        ◄──────────  PARENT INPUT
                    (STUDENT STUDY TEAM)

    INTERVENTION SUCCESSFUL:        INTERVENTION UNSUCCESSFUL:
    LEARNING PROBLEMS               LEARNING PROBLEMS
    RESOLVED                        CONTINUE

                                    FOLLOW-UP PRE-REFERRAL
                                    INTERVENTION        ◄──────  PARENT INPUT
                                    (STUDENT STUDY TEAM)

    INTERVENTION SUCCESSFUL:        INTERVENTION UNSUCCESSFUL:
    LEARNING PROBLEMS               LEARNING PROBLEMS CONTINUE -
    RESOLVED                        REFERRAL MADE

    - - - - - - - - - - - - - - - - - - - - - - - - - - - -

                                    ASSESSMENT TO DETERMINE
                                    ELIGIBILITY FOR SPECIAL    ◄──  PARENT CONSENT
                                    EDUCATION

    IEP TEAM DETERMINES             IEP TEAM DETERMINES
    CHILD NOT ELIGIBLE FOR          CHILD IS ELIGIBLE FOR      ◄──  PARENT CONSENT
    SPECIAL EDUCATION               SPECIAL EDUCATION

                                    SPECIAL EDUCATION
                                    PLACEMENT DECISION         ◄──  PARENT CONSENT
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| GENERAL EDUCATION | DESIGNATED INSTRUCTION AND SERVICES | RESOURCE SPECIALIST PROGRAM | SPECIAL DAY CLASS | REGIONAL OR NON-PUBLIC SCHOOLS | RESIDENTIAL PLACEMENT |

◄── LESS RESTRICTIVE ENVIRONMENT   MORE RESTRICTIVE ENVIRONMENT ──►

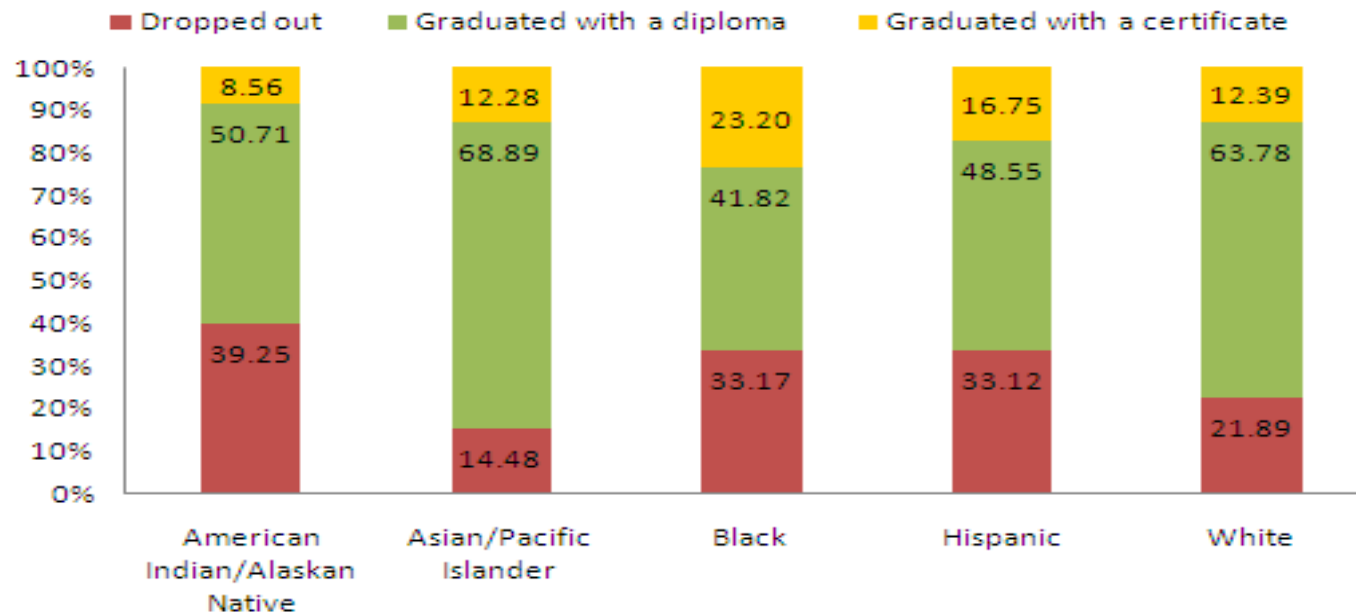# The Top 10 Reasons why ELs are referred for Special Education Evaluation

1. Poor/low achievement

2. Behavioral problems

3. Oral language related problems (acquisition or delay)

4. Reading problems

5. Learning difficulties

6. Socio-emotional difficulties

7. Diagnosis for particular handicapping condition

8. Written language problems

9. Low attention span

10. Unable to understand or follow directions

Source: Ochoa, Robles-Pina, Garcia, & Breunig, 1999)

Is Special Education the Answer?

Table 5. Percent of students served under IDEA, Part B, ages 14-21 who dropped out, graduated with a diploma, or graduated with a certificate by race (2006)

Legend:
- Dropped out
- Graduated with a diploma
- Graduated with a certificate

Race	Dropped out	Graduated with a diploma	Graduated with a certificate
American Indian/Alaskan Native	39.25	50.71	8.56
Asian/Pacific Islander	14.48	68.89	12.28
Black	33.17	41.82	23.20
Hispanic	33.12	48.55	16.75
White	21.89	63.78	12.39

Source: U.S. Department of Education, Office of Special Education Programs, Data Analysis System, Table B5B.

Special education cannot solve problems that are rooted in general education.

From Pre- to Post-Referral Collaboration

❖ Analysis of pre-referral data is done to identify patterns of referral that differentiate between the needs of teachers, the needs for programs, and the individual needs of children

❖ Lack of knowledge, skills, confidence, or objectivity to teach CLD students effectively has been eliminated as primary cause of learning problems

❖ Cultural and linguistic differences as well as environmental and economic disadvantage have been eliminated as primary causes of learning problems

❖ Lack of school experience or poor attendance have been eliminated as primary causes of learning problems

From Pre- to Post-Referral Collaboration

Assessment & Instruction

ESL/Bilingual
Education

Special
Education

COLLABORATIVE
Pre-referral
Process
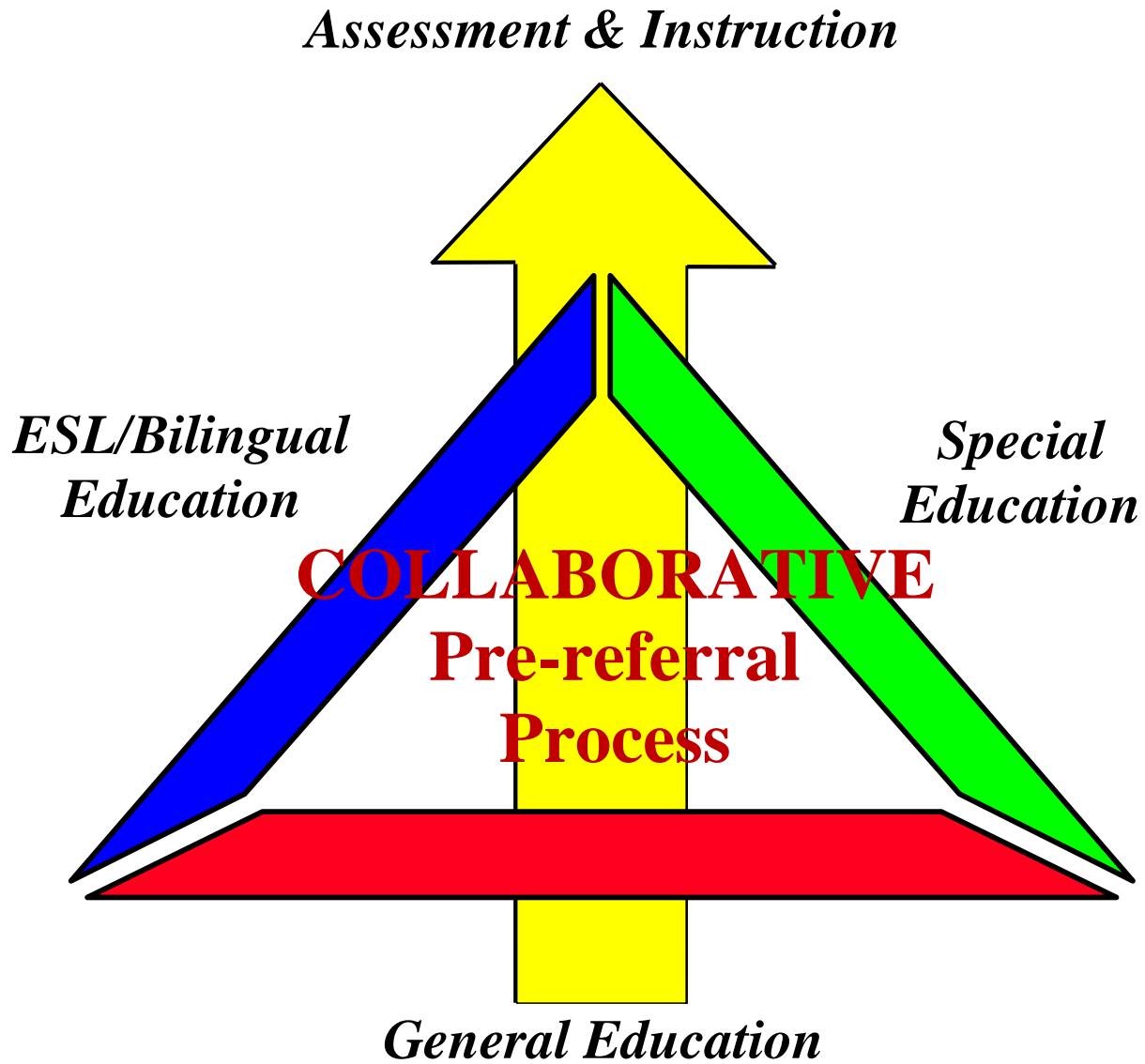
General Education

From Pre- to Post-Referral Collaboration

❖ Parent(s) and general education teacher(s) continue as equal partners in the problem definition and assessment process

❖ Student Study Team easily reconstitutes itself into Assessment Team

❖ Transdisciplinary collaboration involves all assessment partners

❖ Language or languages of assessment are determined collaboratively by Assessment Team

❖ Assessment Team selects appropriate tools and techniques on the basis of pre-referral data

Comparison of Traditional vs. Collaborative Service Models

TYPICAL SERVICE DELIVERY MODEL

general education

↓

pre-referral intervention

↓

assessment

↓

special education

COLLABORATIVE SERVICE DELIVERY MODEL

general education

pre-referral intervention

assessment

special education
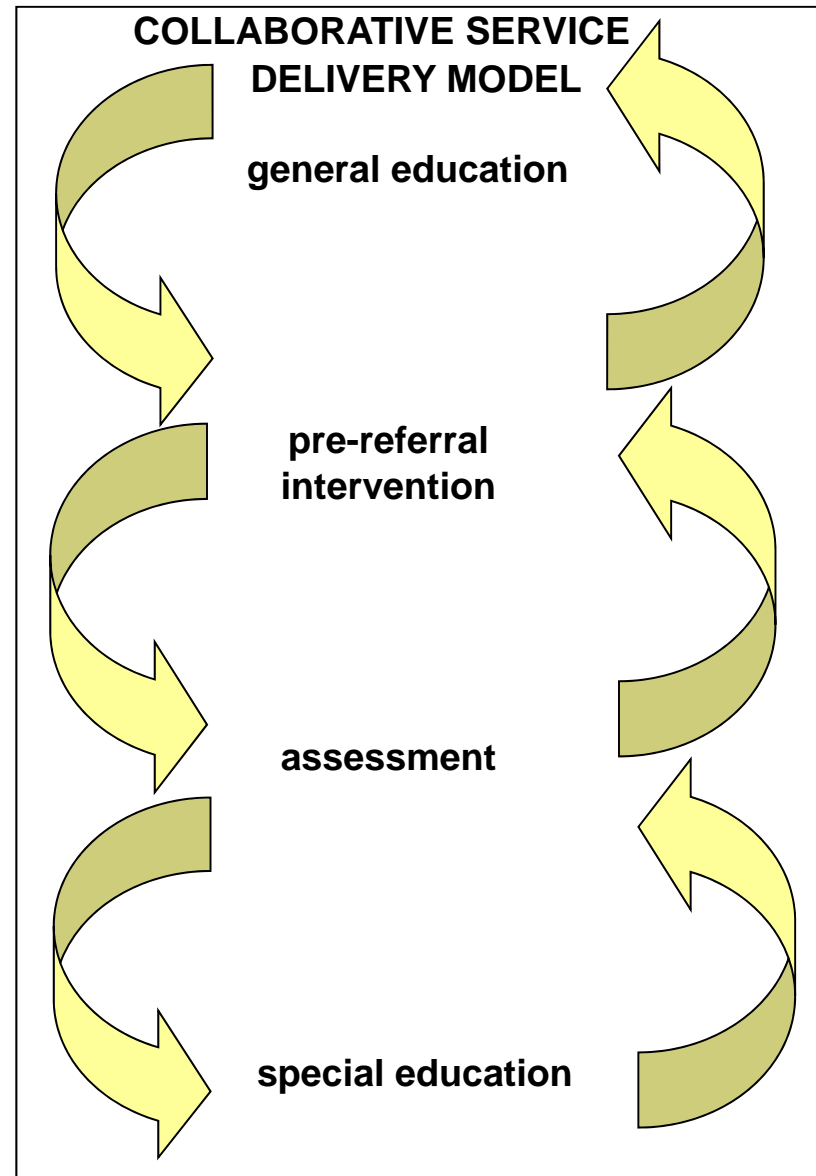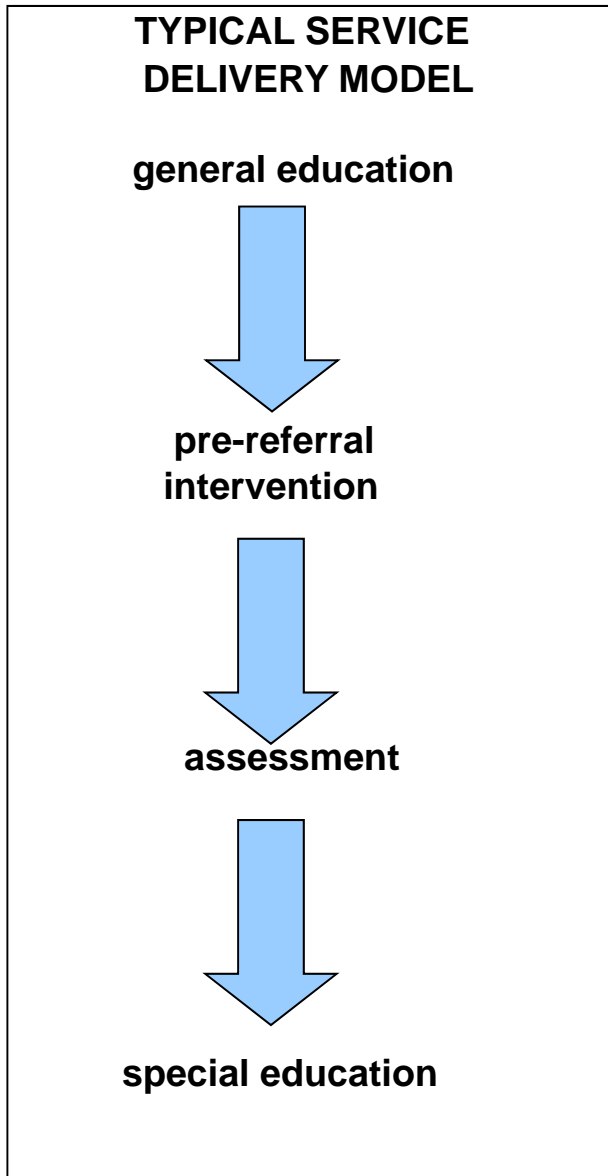
Comparison of Traditional vs. Collaborative Evaluation Models

TRADITIONAL MODEL	ALTERNATIVE MODELS
Based on "medical" model where the learning problem is identified as being an internal flaw _within_ the child	Based on "ecosystems" model where the learning problem is identified as being due to dysfunctional transactions _between_ the child and learning environment
Focus is on measuring performance on tests and comparing results to provide relative standing against performance of other age and grade level peers	Focus is on assessing environmental and systemic factors which may be affecting child's ability to learn
Intent of assessment is to identify disabilities in isolation rather than generate intervention strategies or modifications	Intent of assessment is to identify problem situations in context in order to develop intervention strategies or modifications
Children are given labels corresponding to their measured performance and are classified by disability category	Strengths and weaknesses of the situation and the child are identified regardless of disability
Child's abilities and potential is innate, static, immutable, and unchangeable	Child's abilities are experiential, dynamic, modifiable, and changeable
Assessment is conducted by a "multidisciplinary" team of experts who evaluate learning difficulties relatively independently	Assessment is conducted by a team of people familiar with the child who collaborate in a "transdisciplinary" approach
Parents and general education teachers are not active participants in the assessment process	Parents and general education teachers are key participants in the assessment and intervention planning process
Standardized testing provides little useful information that can assist in the development of instructional approaches for the classroom	Alternative and authentic methods of assessment provide information directly applicable to the development of instruction for the classroom

Comparison of Traditional vs. Collaborative Evaluation Models

	PSYCHOMETRIC	ECOSYSTEMIC
ORIENTATION **ROLE OF HOME AND CULTURE**	Individual Child Background information	Ecosystem of the Child Foreground of hypothesis generation and central to "interpretations"
ROLE of PARENTS	Source of information	Collaborators
PROBLEM DEFINITION	Internal individual differences	Situations
PROCESS	Identification of child's deficits	Differentiation of functional and dysfunctional transactions and settings and identification of potential resources.
INTERVENTION	Remediation	Mediation Liaison Consultation
GOAL	"Fix" the child	Alter transactions

Comparison of Traditional vs. Collaborative Evaluation Models

Differentiation of Terms

	Testing	Evaluation	Assessment
ORIENTATION	Measurement	Judgments	Problem solving
FOCUS	Traits	Person	Problem situations
ROLE of TESTS	Central	Essential	Optional
ROLE OF TEAM MEMBERS	Cleric or Technician	Expert or Diagnostician	Consultant or Collaborator
RESULTS	How much	Comparison	Problem resolution(s)
REPRESENTATION	Scores	Diagnosis/Label	Descriptions
REPORT STYLES	Test focused	Person focused	Problem focused
LINKED to INTERVENTION	Rarely	Optional	Central

Adapted From: Cook-Morales, V. J. (1983). Testing v. Measurement v. Appraisal v. Evaluation v. Assessment: Is it a 'Game of Semantics' or 'Is Naming Knowing?' Unpublished manuscript. San Diego State University.

Comparison of Traditional vs. Collaborative Evaluation Models

POTENTIAL BIAS	APPROACH	TECHNIQUES/PROCEDURES
Failure to consider cultural and linguistic implications of background experiences	**Transactional**	• Cultural knowledge bases • Culture appropriate processes • Parent and child involvement • Cultural advocates
Failure to view behavior or performance within context of learning environment or ecology	**Ecological**	• Ecosystems assessment • Culture-based hypotheses • Ecological assessment • Adaptive behavior evaluation
Failure to measure both performance and achievement via informal and direct methods	**Alternative**	Authentic (skill focused) • CBA/M, portfolio (work samples) • Criterion-referenced tests/procedures • Contextual-participant observation Process (cognition focused) • Dynamic assessment • Clinical observations • Piagetian assessment (Ordinal Scales)
Failure to reduce potential bias and discrimination in the use of standardized tests	**Psychometric**	• Underlying theory • Cultural and linguistic bias • Test adaptations • Test selection • Test interpretation
Failure to collaborate across disciplines in evaluation and decision making	**Interdisciplinary**	• Establishing a professional assessment team • Inclusion of parent in the assessment process

Source: Adapted from Flanagan & Ortiz, 2001 and Cook-Morales, 1995.

Cultural and Linguistic Experiences Mediate Learning: Classroom Behavior and Performance

Characteristics and behaviors often associated with various learning problems	Common manifestations of English Language Learners (ELLs) during classroom instruction that may mimic various disorders or cognitive deficits.
Slow to begin tasks	ELLs may have limited comprehension of the classroom language so that they are not always clear on how to properly begin tasks or what must be done in order to start them or complete them correctly.
Slow to finish tasks	ELLs, especially those with very limited English skills, often need to translate material from English into their native language in order to be able to work with it and then must translate it back to English in order to demonstrate it. This process extends the time for completion of time-limited tasks that may be expected in the classroom.
Forgetful	ELLs cannot always fully encode information as efficiently into memory as monolinguals because of their limited comprehension of the language and will often appear to be forgetful when in fact the issue relates more to their lack of proficiency with English.
Inattentive	ELLs may not fully understand what is being said to them in the classroom and consequently they don't know when to pay attention or what exactly they should be paying attention to.
Hyperactive	ELLs may appear to be hyperactive because they are unaware of situation-specific behavioral norms, classroom rules, and other rules of social behavior.
Impulsive	ELLs may lack the ability to fully comprehend instructions so that they display a tendency to act impulsively in their work rather than following classroom instructions systematically.
Distractible	ELLs may not fully comprehend the language being being spoken in the classroom and therefore will move their attention to whatever they can comprehend appearing to be distractible in the process.
Disruptive	ELLs may exhibit disruptive behavior, particularly excessive talking—often with other ELLS, due to a need to try and figure out what is expected of them or to frustration about not knowing what to do or how to do it.
Disorganized	ELLs often display strategies and work habits that appear disorganized because they don't comprehend instructions on how to organize or arrange materials and may never have been taught efficient learning and problem solving strategies.

General Nondiscriminatory Assessment Processes and Procedures

I. Assess for the purpose of intervention

II. Assess initially with authentic and alternative procedures

III. Assess and evaluate the learning ecology

IV. Assess and evaluate language proficiency

V. Assess and evaluate opportunity for learning

VI. Assess and evaluate relevant cultural and linguistic factors

VII. Evaluate, revise, and re-test hypotheses

VIII. Determine the need for and language(s) of formal assessment

IX. Reduce potential bias in traditional assessment practices

X. Support conclusions via data convergence and multiple indicators

Addresses concerns regarding fairness and equity in the assessment process

Addresses possible bias in use of test scores

Pre-referral procedures (I. - VIII.)
Post-referral procedures (IX. - X.)

Main Threats to Test Score Validity for ELLs

NO BIAS

- **Test items**
  (content, novelty)

- **Test structure**
  (sequence, order, difficulty)

- **Test reliability**
  (measurement error/accuracy)

- **Factor structure**
  (theoretical structure, relationship of variables to each other)

- **Predictive Validity**
  (correlation with academic success or achievement)

BIAS

- **Construct Validity**
  (nature and specificity of the intended/measured constructs)

When a test measures an unintended variable...

- **Incorrect Interpretation**
  (undermines accuracy of evaluative judgments and meaning assigned to scores)

"As long as tests do not at least sample in equal degree a state of saturation [assimilation of fundamental experiences and activities] that is equal for the 'norm children' and the particular bilingual child it cannot be assumed that the test is a valid one for the child."   Sanchez, 1934

Main Threats to Test Score Validity for ELLs

Acculturative Knowledge Acquisition – Not Race or Ethnicity

"When a child's general background experiences differ from those of the children on whom a test was standardized, then the use of the norms of that test as an index for evaluating that child's current performance or for predicting future performances may be inappropriate."

Salvia & Ysseldyke, 1991

Developmental Language Proficiency – Not Language Dominance

"Most studies compare the performance of students from different ethnic groups…rather than ELL and non-ELL children within those ethnic groups….A major difficulty with all of these studies is that the category Hispanic includes students from diverse cultural backgrounds with markedly different English-language skills….This reinforces the need to separate the influences of ethnicity and ELL status on observed score differences."

Lohman, Korb & Lakin, 2008

Processes and Procedures for Addressing Test Score Validity

IX. *REDUCE BIAS IN TRADITIONAL TESTING PRACTICES*

Exactly how is evidence-based, nondiscriminatory assessment conducted and to what extent is there any research to support the use of any of these methods in being capable of establishing sufficient validity of the obtained results?

- **Modified Methods of Evaluation**

  - *Modified and altered assessment*

- **Nonverbal Methods of Evaluation**

  - *Language reduced assessment*

- **Dominant Language Evaluation: L1**

  - *Native language assessment*

- **Dominant Language Evaluation: L2**

  - *English language assessment*

Comparison of Methods for Addressing Main Threats to Validity

Evaluation Method	Norm sample representative of bilingual development	Measures full range of ability constructs	Does not require bilingual evaluator	Adheres to the test's standardized protocol	Substantial research base on bilingual performance
Modified or Altered Assessment	✗	✓	✓	✗	✗
Reduced-language Assessment	✗	✗	✓	✓	✗
Dominant Language Assessment in L1: native	✗	✓	✗	✓	✗
Dominant Language Assessment in L2: English	✗	✓	✓	✓	✓

Addressing issues of fairness with respect to norm sample representation is an issue of validity and dependent on a sufficient research base.

Evaluating and Defending Construct ELL Test Score Validity

Whatever method or approach may be employed in evaluation of ELL's, the fundamental obstacle to nondiscriminatory interpretation rests on the degree to which the examiner is able to defend claims of test score construct validity. This is captured by and commonly referred to as a question of:

"DIFFERENCE vs. DISORDER?"

Simply absolving oneself from responsibility of doing so via wording such as, "all scores should be interpreted with extreme caution" does not in any way provide a defensible argument regarding the validity of obtained test results and does not permit interpretation.

At present, the only manner in which test score validity can be evaluated or established is via use of the existing research on the test performance of ELLs as reflected in the degree of "difference" the student displays relative to the norm samples of the tests being used, particularly for tests in English. This is the sole purpose of the C-LIM.

Practical Considerations for Addressing Validity in Evaluation Procedures for SLD with ELLs

1. *The usual purpose of testing is to identify deficits in ability (i.e., low scores)*
2. *Validity is more of a concern for low scores than average/higher scores because:*

   - *Test performances in the average range are NOT likely a chance finding and strongly suggests average ability (i.e., no deficits in ability)*

   - *Test performances that are below average MAY be a chance finding because of experiential or developmental differences and thus do not automatically confirm below average ability (i.e., possible deficits in ability)*

3. *Therefore, testing in one language only (English or native language) means that:*

   - *It can be determined that a student DOES NOT have a disability (i.e., if all scores are average or higher, they are very likely to be valid)*

   - *It CANNOT be determined if the student has a disability (i.e., low scores must be validated as true indicators of deficit ability)*

4. *Testing in both languages (English and native language) is necessary to determine disability*

   - *Testing requires confirmation that deficits are not language-specific and exist in both languages (although low performance in both can result from other factors)*

5. *All low test scores, whether in English or the native language, must be validated*

   - *Low scores from testing in English can be validated via research underlying the C-LIM*
   - *Low scores from testing in the native language cannot be validated with research*

A Recommended Best Practice Approach for Using Tests with ELLs

Step 1. Assessment of Bilinguals – validate all areas of performance (exclusion of cultural/linguistic factors)

- *Select or create an appropriate battery that is comprehensive and responds to the needs of the referral concerns, irrespective of language differences*
- *Administer all tests in standardized manner first in English only with no modifications*
- *Score tests and plot them for analysis via the C-LIM*
- *If analysis indicates expected range and pattern of decline, scores are invalid due to cultural and linguistic factors that cannot be excluded as primary reason for poor academic performance*
- *If analysis does not indicate expected range or pattern of decline, apply XBA (or other) interpretive methods to determine specific areas of weakness and difficulty and continue to Step 2*

Step 2. Bilingual Assessment – validate suspected areas of weakness (cross-language confirmation of deficit areas)

- *Review results and identify areas of suspected weakness or difficulty:*
  - a. *For Gc only, evaluate weakness according to high/high cell in C-LIM or in context of other data and information*
  - b. *For all other abilities, evaluate weakness using standard classifications (e.g., SS < 90)*
- *Except for Gc, re-test all other areas of suspected weakness using native language tests*
- *For Gc only:*
  - a. *If the high/high cell in C-LIM is within/above expected range, consider Gc a strength and assume it is at least average, thus re-testing is not necessary*
  - b. *If the high/high cell in C-LIM is below expected range, re-testing of Gc in the native language is recommended*
- *Administer native language tests or conduct re-testing using one of the following methods:*
  - a. *Native language test administered in the native language (e.g., WJ III/Bateria III or WISC-IV/WISC-IV Spanish)*
  - b. *Native language test administered via assistance of a trained interpreter*
  - c. *English language test translated and administered via assistance of a trained interpreter*
- *Administer tests in manner necessary to ensure full comprehension including use of any modifications and alterations necessary to reduce barriers to performance, while documenting approach to tasks, errors in responding, and behavior during testing, and analyze scores both quantitatively and qualitatively to confirm and validate areas as true weaknesses*
- *Except for Gc, if a score obtained in the native language validates/confirms a weakness score obtained in English (both SS < 90), use/interpret the score obtained in English as a weakness*
- *If a score obtained in the native language invalidates/disconfirms a weakness score obtained in English (native SS ≥ 90), consider it as a strength and assume that it is at least in the average range*
- *Scores for Gc obtained in the native language and in English can only be interpreted relative to developmental and educational experiences of the examinee in each language and only as compared to others with similar developmental experiences*

Practical Considerations for Addressing Validity in Evaluation Procedures for SLD with ELLs

Given the preceding considerations, the most practical and defensible general approach in evaluating ELLs would be:

- *Test in English first and if all test scores indicate strengths (average or higher) a disability is not likely and thus no further testing is necessary*

- *If some scores from testing in English indicate weaknesses, re-test those areas in the native language to cross-validate as areas of true weakness*

When combined with the C-LIM, this approach provides the most efficient process and best use of available resources for evaluation since it permits ANY evaluator to begin (and in some cases, complete) the testing without being bilingual or requiring outside assistance.

In addition, this approach is IDEA compliant and consistent with the specification that assessments "be provided and administered in the language and form most likely to yield accurate information" because it relies on an established body of research to guide examination of test score validity and ensures that that the results upon which decisions are based are in fact accurate.

Research Foundations for ELL Evaluation

ELL test performance is a linear, continuous pattern, not a dichotomy.

Cultural Loading and Linguistic Demand

Low   Moderate   High
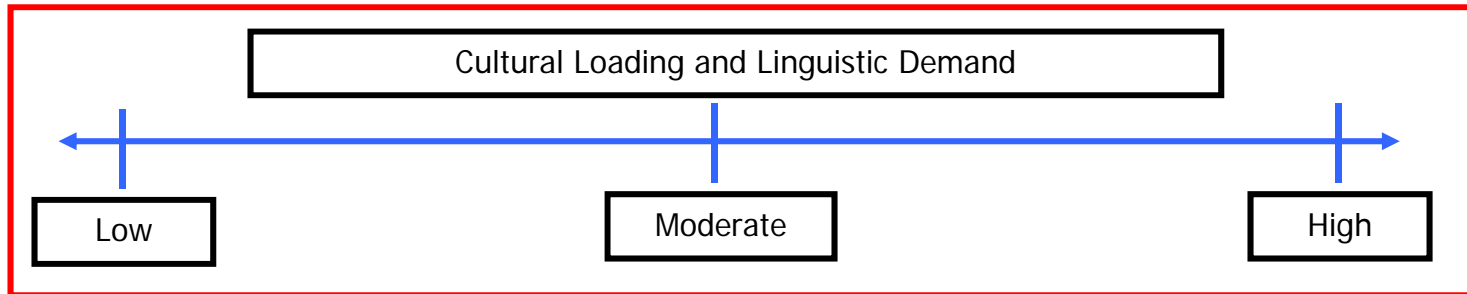
Subtests can be arranged from high to low in accordance with the mean values reported by empirical studies for ELLs

SS =   100   95   90   85   80
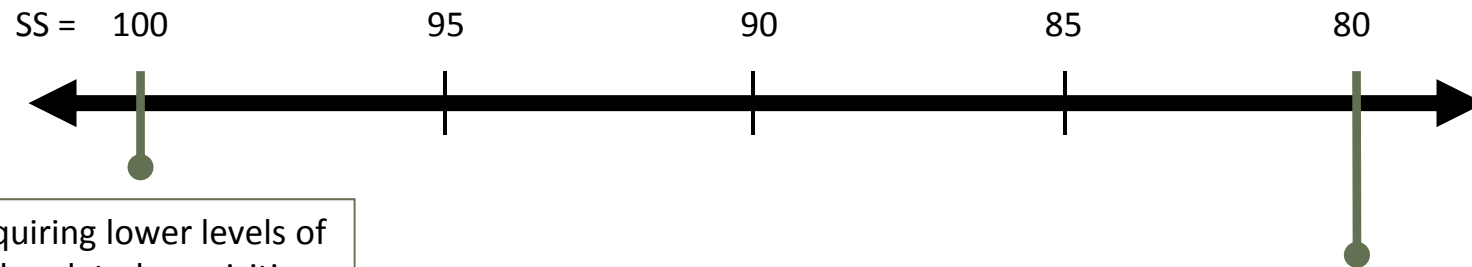
Tests requiring lower levels of age/grade related acquisition of culture and language result in higher mean scores

Tests requiring higher levels of age/grade related acquisition of culture and language result in lower mean scores

Research Foundations for ELL Evaluation

Principle 3: ELL performance is moderated by linguistic/acculturative variables

Subtest Name	Hispanic Group (Mercer) (1972) Mean SS	Hispanic Group (Vukovich & Figueroa) (1982) Mean SS	ESL Group (Cummins) (1982) Mean SS	Bilingual Group (Nieves-Brull) (2006) Mean SS
Information	7.5	7.8	5.1	7.2
Vocabulary	8.0	8.3	6.1	7.5
Similarities	7.6	8.8	6.4	8.2
Comprehension	7.8	9.0	6.7	8.0
Digit Span	8.3	8.5	7.3	*
Arithmetic	8.7	9.4	7.4	7.8
Picture Arrangement	9.0	10.3	8.0	9.2
Block Design	9.5	10.8	8.0	9.4
Object Assembly	9.6	10.7	8.4	9.3
Picture Completion	9.7	9.9	8.7	9.5
Coding	9.6	10.9	8.9	9.6

Data for this subtest were not reported in the study.

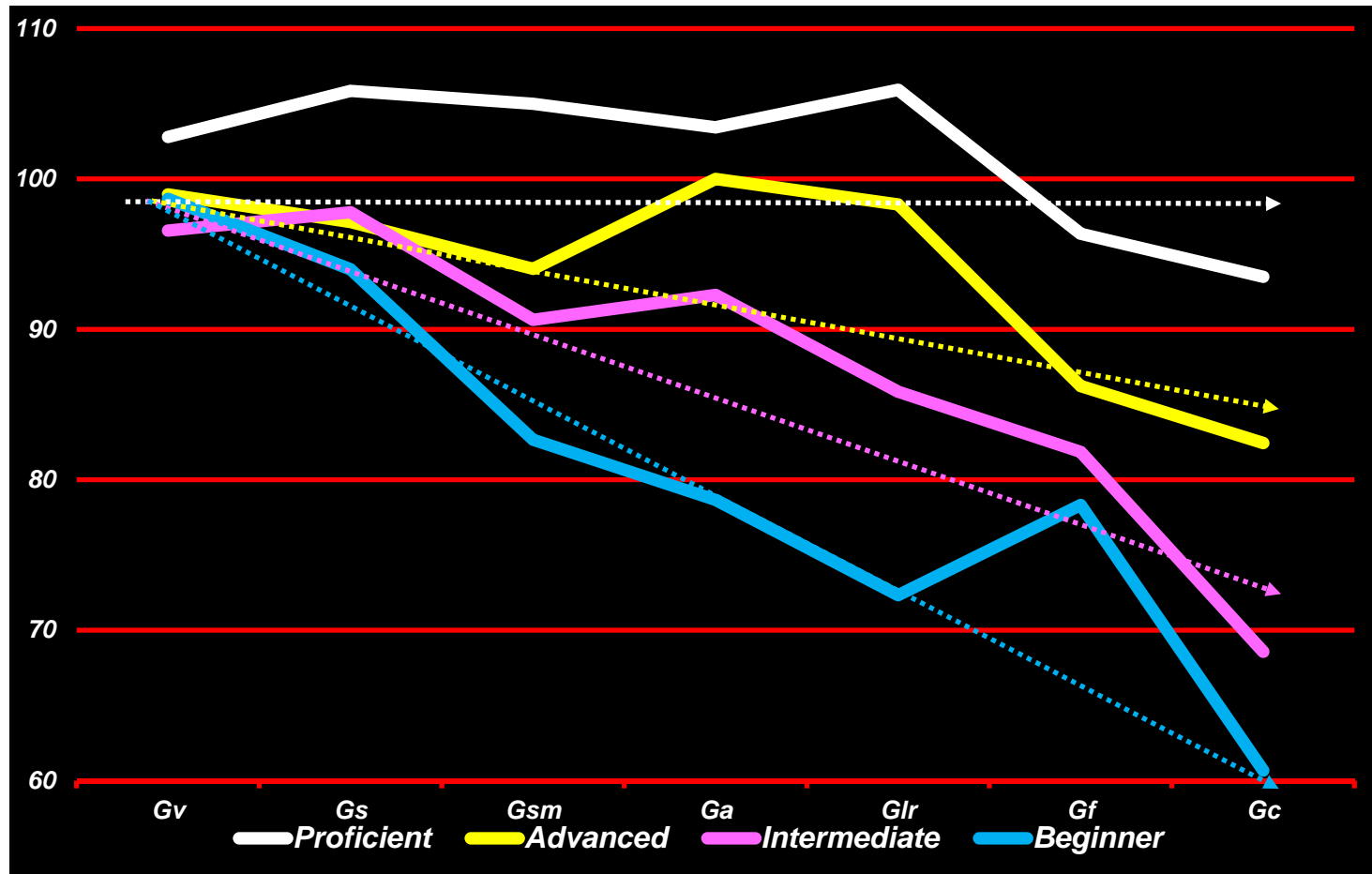# Research Foundations for ELL Evaluation

Principle 3: ELL performance is moderated by linguistic/acculturative variables
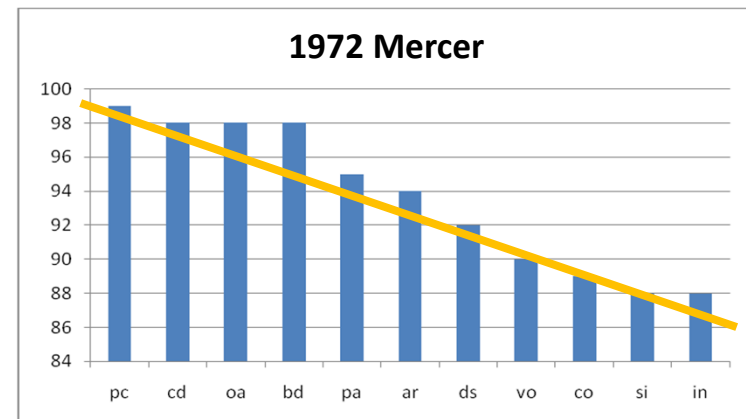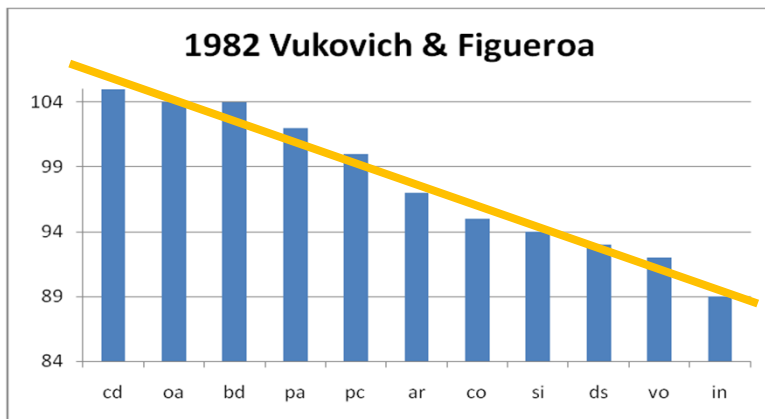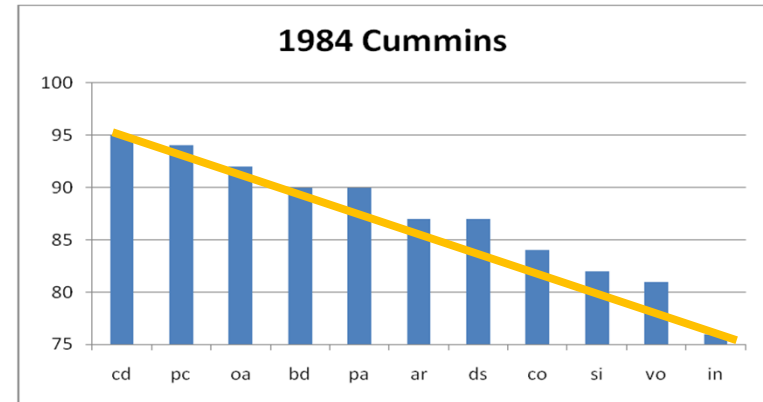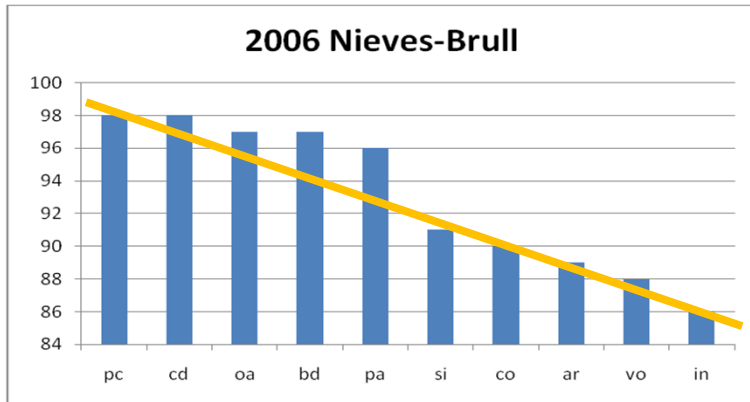
Research Foundations for ELL Evaluation

Principle 3: ELL performance is moderated by linguistic/acculturative variables

Domain specific scores across the seven WJ III subtests according to language proficiency level on the NYSESLAT


Source: Sotelo-Dynega, M., Ortiz, S.O., Flanagan, D.P., Chaplin, W. (2013). English Language Proficiency and Test Performance: Evaluation of bilinguals with the Woodcock-Johnson III Tests of Cognitive Ability. Psychology in the Schools, Vol 50(8), pp. 781-797.

Research Foundations for ELL Evaluation

Principle 3: ELL performance is moderated by linguistic/acculturative variables

Mean subtest scores across the four WASI subtests and four WMLS-R subtests according to language proficiency level
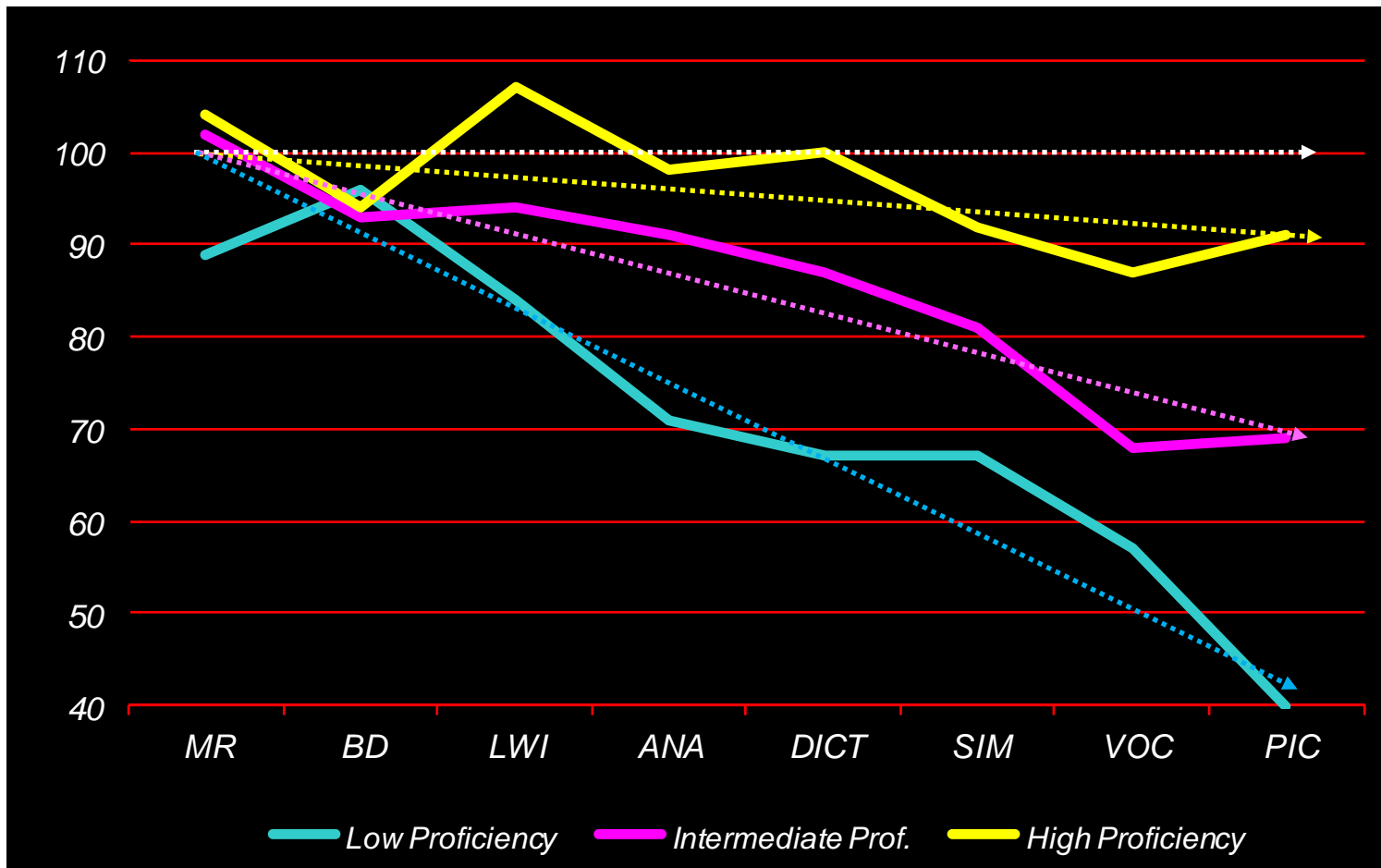
Source: Dynda, A.M., Flanagan, D.P., Chaplin, W., & Pope, A. (2008), unpublished data..

The Culture-Language Interpretive Matrix (C-LIM)

Important Facts for Use and Practice

The C-LIM is not a test, scale, measure, or mechanism for making diagnoses. It is a visual representation of current and previous research on the test performance of English learners arranged by mean values to permit examination of the combined influence of acculturative knowledge acquisition and limited English proficiency and its impact on test score validity.

The C-LIM is not a language proficiency measure and will not distinguish native English speakers from English learners with high, native-like English proficiency and is not designed to determine if someone is or is not an English learner. Moreover, the C-LIM is not for use with individuals who are native English speakers.

The C-LIM is not designed or intended for diagnosing any particular disability but rather as a tool to assist clinician's in making decisions regarding whether ability test scores should be viewed as indications of actual disability or rather a reflection of differences in language proficiency and acculturative knowledge acquisition.

The primary purpose of the C-LIM is to assist evaluators in ruling out cultural and linguistic influences as exclusionary factors that may have undermined the validity of test scores, particularly in evaluations of SLD or other cognitive-based disorders. Being able to make this determination is the primary and main hurdle in evaluation of ELLs and the C-LIM's purpose is to provide an evidence-based method that assists clinician's regarding interpretation of test score data in a nondiscriminatory manner.

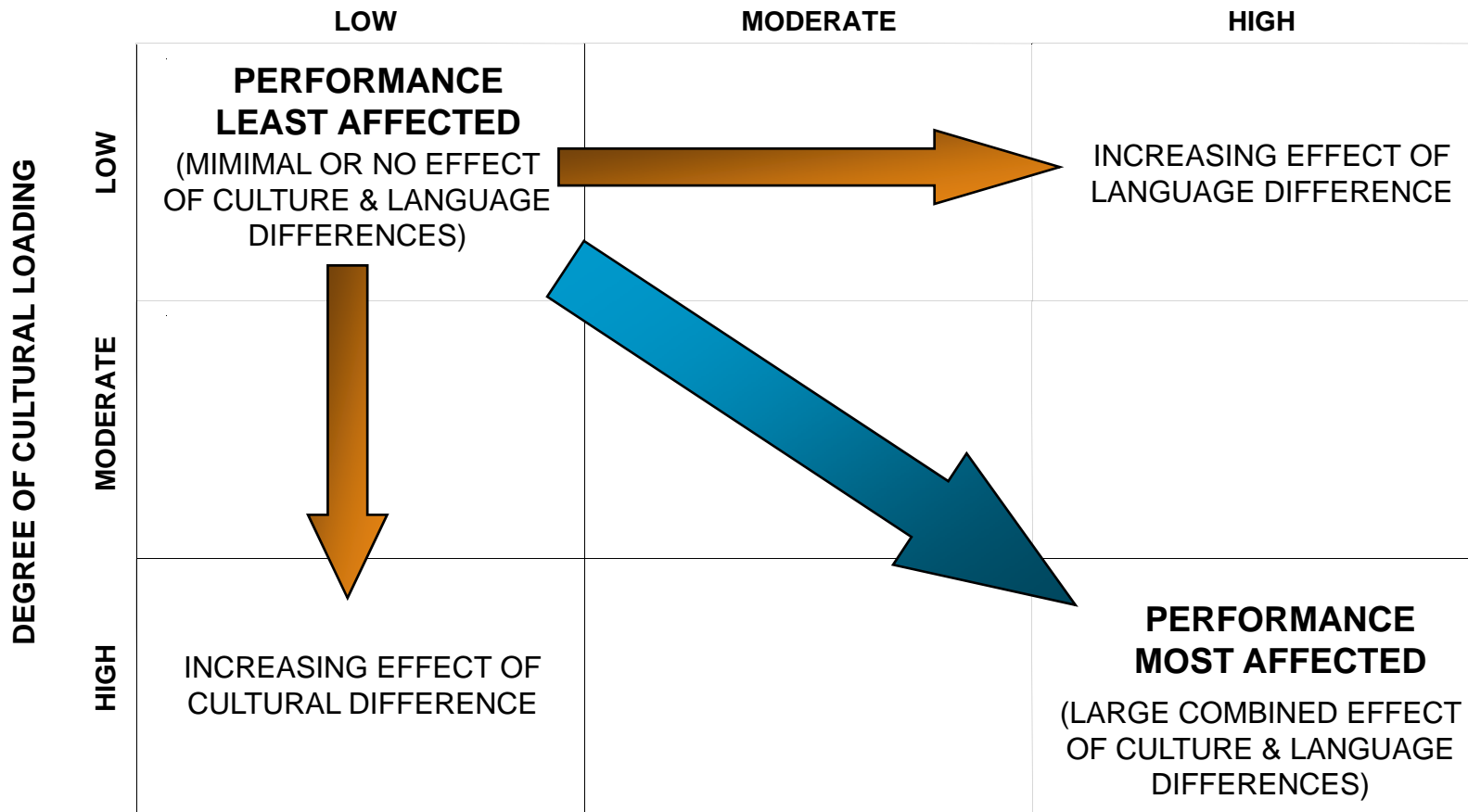# The Culture-Language Interpretive Matrix (C-LIM)
Addressing test score validity for ELLs

Translation of Research into Practice

1. The use of various traditional methods for evaluating ELLs, including testing in the dominant language, modified testing, nonverbal testing, or testing in the native language do not ensure valid results and provide no mechanism for determining whether results are valid, let alone what they might mean or signify.

2. The pattern of ELL test performance, when tests are administered in English, has been established by research and is predictable and based on the examinee's degree of English language proficiency and acculturative experiences/opportunities as compared to native English speakers.

3. The use of research on ELL test performance, when tests are administered in English, provides the only current method for applying evidence to determine the extent to which obtained results are **valid (a minimal or only contributory influence of cultural and linguistic factors), possibly valid (minimal or contributory influence of cultural and linguistic factors but which requires additional evidence from native language evaluation),** or **invalid (a primary influence of cultural and linguistic factors)**.

4. The principles of ELL test performance as established by research are the foundations upon which the C-LIM is based and serve as a de facto norm sample for the purposes of comparing test results of individual ELLs to the performance of a group of average ELLs with a specific focus on the attenuating influence of cultural and linguistic factors.

Application of Research as Foundations for the Cultural and Linguistic Classification of Tests and Culture-Language Interpretive Matrix

PATTERN OF EXPECTED PERFORMANCE FOR ENGLISH LANGUAGE LEARNERS

DEGREE OF LINGUISTIC DEMAND

DEGREE OF CULTURAL LOADING

	LOW	MODERATE	HIGH
LOW	**PERFORMANCE LEAST AFFECTED** (MIMIMAL OR NO EFFECT OF CULTURE & LANGUAGE DIFFERENCES)		INCREASING EFFECT OF LANGUAGE DIFFERENCE
MODERATE			
HIGH	INCREASING EFFECT OF CULTURAL DIFFERENCE		**PERFORMANCE MOST AFFECTED** (LARGE COMBINED EFFECT OF CULTURE & LANGUAGE DIFFERENCES)

Application of Research as Foundations for the Cultural and Linguistic Classification of Tests and Culture-Language Interpretive Matrix

PATTERN OF EXPECTED PERFORMANCE FOR ENGLISH LANGUAGE LEARNERS

DEGREE OF LINGUISTIC DEMAND

	LOW	**MODERATE**	**HIGH**
LOW	**HIGHEST MEAN SUBTEST SCORES** (CLOSEST TO MEAN) 1	2	3
MODERATE	2	3	4
HIGH	3	4	**LOWEST MEAN SUBTEST SCORES** (FARTHEST FROM MEAN) 5

DEGREE OF CULTURAL LOADING

The Culture-Language Interpretive Matrix (C-LIM)

RANGE OF POSSIBLE OUTCOMES WHEN EVALUATING TEST SCORES WITHIN C-LIM

Condition A: Overall pattern generally appears to decline across all cells and all cell aggregate scores within or above shaded range—test scores likely <u>**invalid**</u>, cultural/linguistic factors are primary influences, but examinee likely has average/higher ability as data do not support deficits, and further evaluation via testing is unnecessary.

Condition B: Overall pattern generally appears to decline across all cells but at least one cell aggregate (or more) is below shaded range—test scores **possibly valid**, cultural/linguistic factors are contributory influences, and further evaluation, including in the native language, is necessary to establish true weaknesses in a given domain.

Condition C: Overall pattern does not appear to decline across all cells and all cell aggregate scores within or above average range—test scores <u>**likely valid**</u>, cultural/linguistic factors are minimal influences, and further evaluation may be unnecessary if no weaknesses exist in any domain.

Condition D: Overall pattern does not appear to decline across all cells and at least one cell aggregate (or more) is below average range—test scores **possibly valid**, cultural/linguistic factors are minimal influences, and further evaluation, including in the native language, is necessary to establish true weaknesses in a given domain.

The Culture-Language Interpretive Matrix (C-LIM)

RANGE OF POSSIBLE OUTCOMES WHEN EVALUATING TEST SCORES WITHIN C-LIM

	A general, overall pattern of decline exists?	All scores within or above the expected range?	All scores within or above the average range?	Degree of influence of cultural and linguistic factors	Likelihood that test scores are valid indicators of ability?
Condition A	Yes	Yes	No	Primary	Unlikely
Condition B	Yes	No	No	Contributory	Possibly*
Condition C	No	Yes	Yes	Minimal	Likely
Condition D	No	No	No	Minimal	Possibly*

*Determination regarding the validity of test scores that are below the expected and average ranges requires additional data and information, particularly results from native language evaluation, qualitative evaluation and analysis, and data from a strong pre-referral process (e.g., progress monitoring data).

Culture-Language Interpretive Matrix: Guidelines for evaluating test scores.
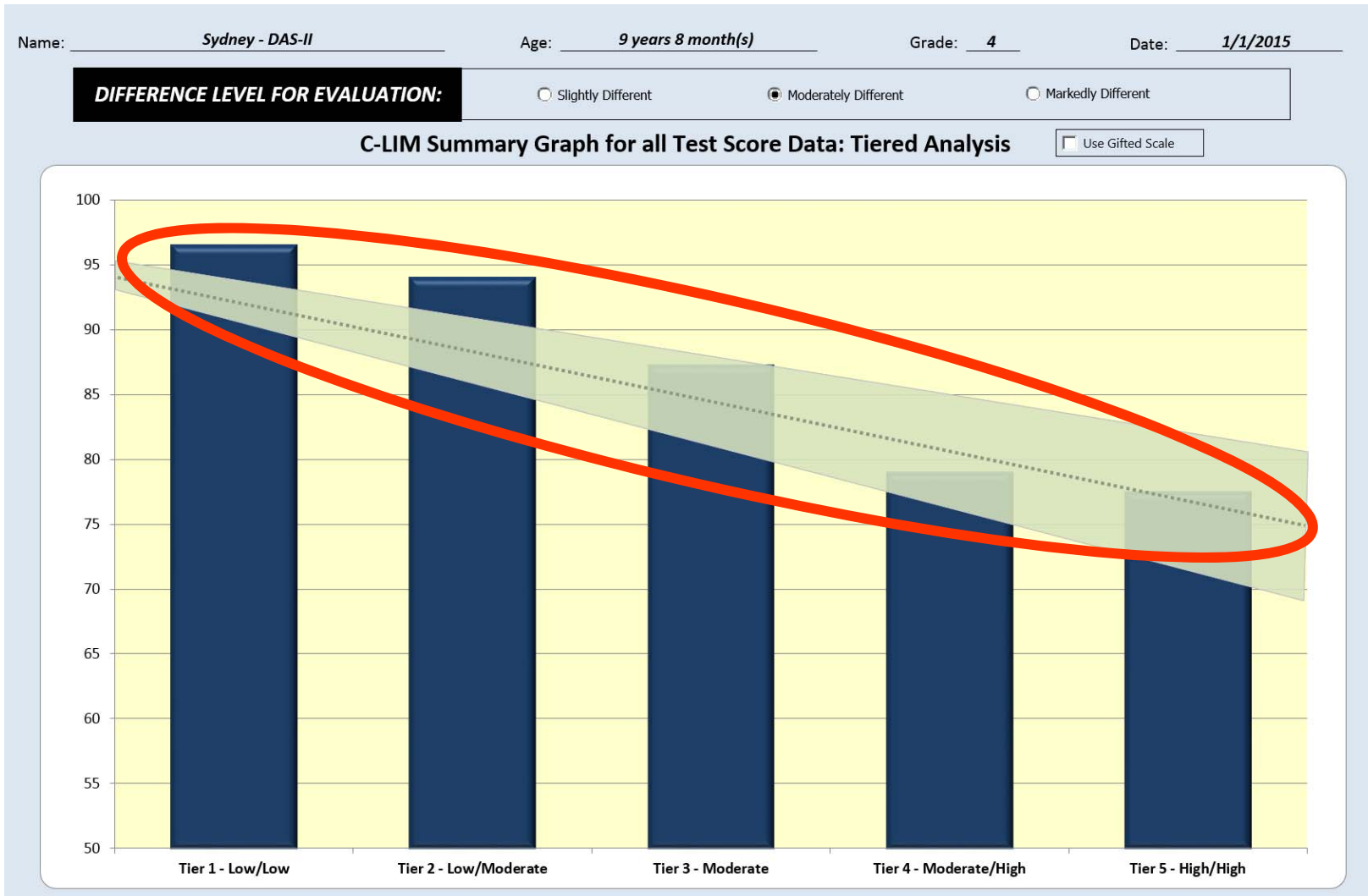
CONDITION A: General declining pattern, all scores within or above expected range.

Culture-Language Interpretive Matrix - Analyzer and Data Entry

Name: *Sydney - DAS-II*   Age: *9 years 8 month(s)*   Grade: *4*   Date: *1/1/2015*

DEGREE OF LINGUISTIC DEMAND

DEGREE OF CULTURAL LOADING	LOW	Score		MODERATE	Score		HIGH	Score
LOW	DAS-II Copying			DAS-II Recall of Digits-Backward	49	99	DAS-II Recall of Digits-Forward	42	88
	DAS-II Matching Letter-Like Forms			DAS-II Speed of Information Processing	40	85		
	DAS-II Matrices	45	93					
	DAS-II Pattern Construction	54	106					
	DAS-II Recall of Designs							
	DAS-II Sequential & Quantitative Reasoning	44	91					
	Cell Average =	**97**		**Cell Average =**	**92**		**Cell Average =**	**88**
MODERATE	DAS-II Picture Similarities		Score	DAS-II Early Number Concepts		Score	DAS-II Phonological Processing	36	79
	DAS-II Recall of Objects-Delayed			DAS-II Rap...	41	87		
	DAS-II Recall of Objects-Immediate	45	93	DAS-II Reca...				
	DAS-II Recognition of Pictures	50	100					
	Cell Average =	**96**		**Cell Average =**	**87**		**Cell Average =**	**79**
HIGH			Score	DAS-II Naming Vocabulary		Score	DAS-II Ve... Similarities	31	72
				DAS-II Verbal Comprehension			DAS-II ...ns	39	84
	Cell Average =			**Cell Average =**			**Cell Average =**	**78**

CULTURE/LANGUAGE INFLUENCE: PRIMARY – all test scores are UNLIKELY to be valid.

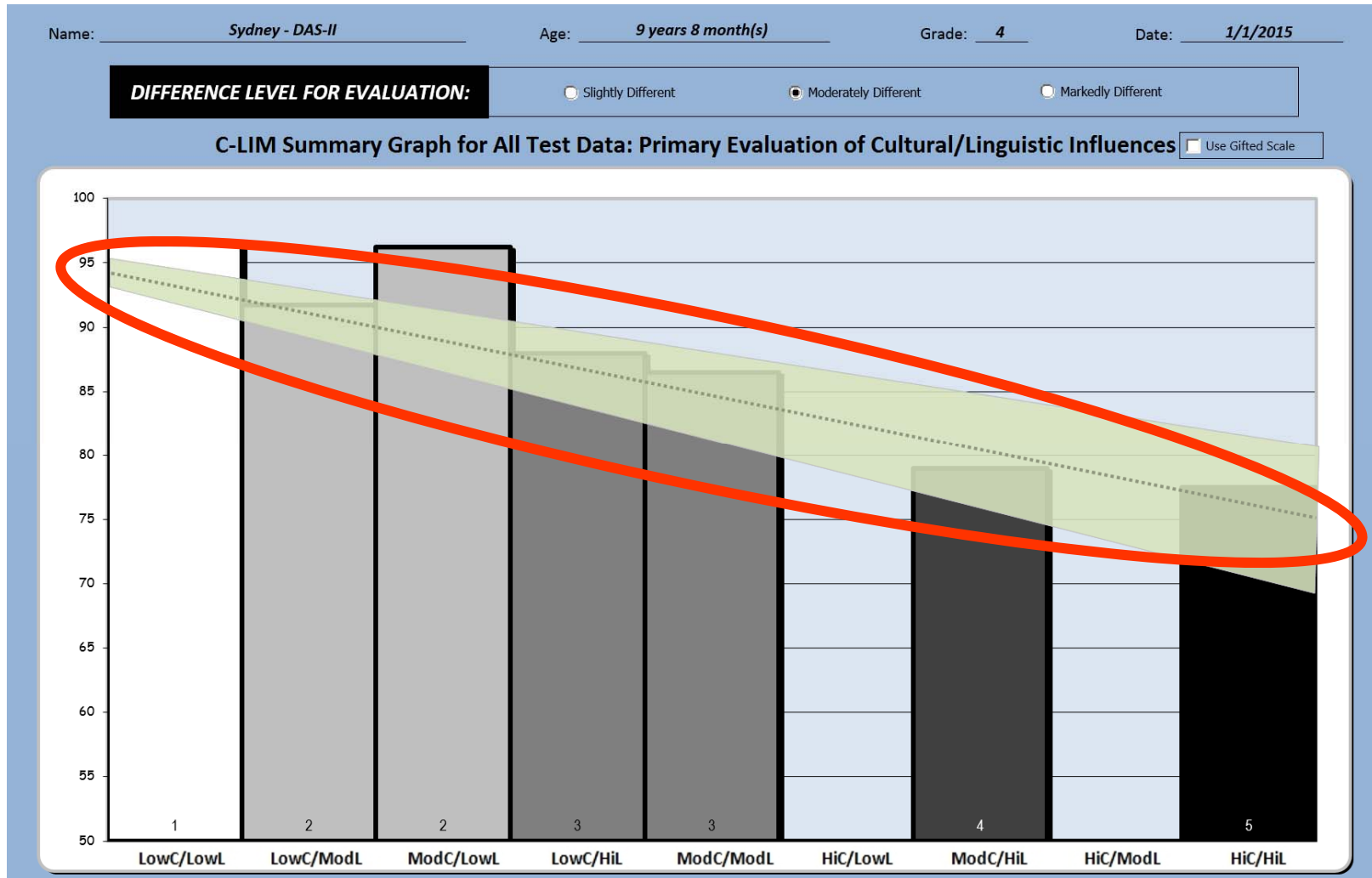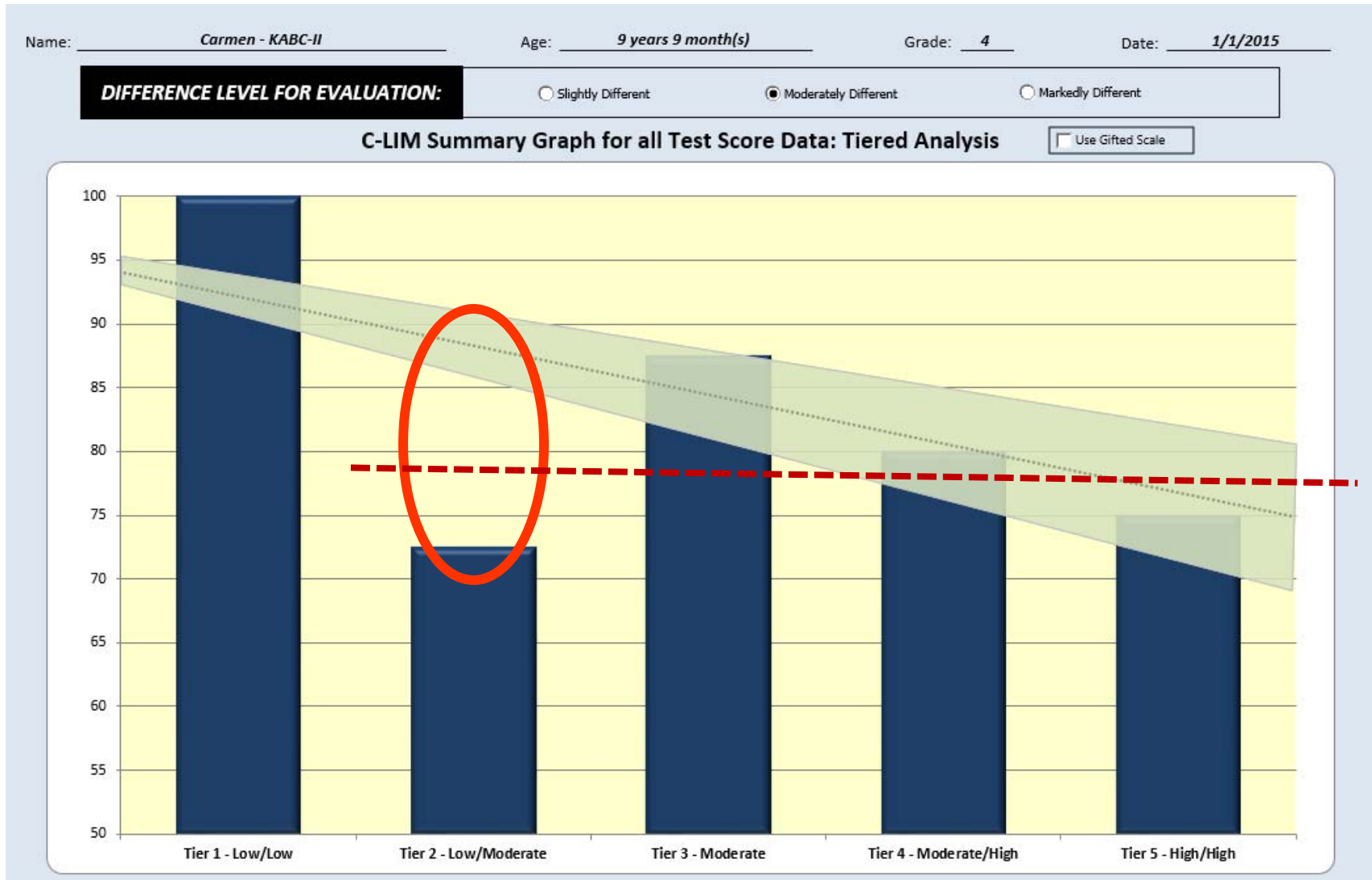# Culture-Language Interpretive Matrix: Guidelines for evaluating test scores.

CONDITION A: General declining pattern, all scores within or above expected range.

Name: _Sydney - DAS-II_ Age: _9 years 8 month(s)_ Grade: _4_ Date: _1/1/2015_

DIFFERENCE LEVEL FOR EVALUATION: ○ Slightly Different ◉ Moderately Different ○ Markedly Different

C-LIM Summary Graph for all Test Score Data: Tiered Analysis   ☐ Use Gifted Scale

Tiers (x-axis): Tier 1 - Low/Low, Tier 2 - Low/Moderate, Tier 3 - Moderate, Tier 4 - Moderate/High, Tier 5 - High/High

CULTURE/LANGUAGE INFLUENCE: PRIMARY – all test scores are UNLIKELY to be valid.

Culture-Language Interpretive Matrix: Guidelines for evaluating test scores.

CONDITION A: General declining pattern, all scores within or above expected range.

| Name: | Sydney - DAS-II | Age: | 9 years 8 month(s) | Grade: | 4 | Date: | 1/1/2015 |

DIFFERENCE LEVEL FOR EVALUATION: ○ Slightly Different   ● Moderately Different   ○ Markedly Different

C-LIM Summary Graph for All Test Data: Primary Evaluation of Cultural/Linguistic Influences ☐ Use Gifted Scale

Chart axis values: 100, 95, 90, 85, 80, 75, 70, 65, 60, 55, 50

Bar labels: 1 — LowC/LowL, 2 — LowC/ModL, 2 — ModC/LowL, 3 — LowC/HiL, 3 — ModC/ModL, HiC/LowL, 4 — ModC/HiL, HiC/ModL, 5 — HiC/HiL

CULTURE/LANGUAGE INFLUENCE: PRIMARY – all test scores are UNLIKELY to be valid.

Culture-Language Interpretive Matrix: Guidelines for evaluating test scores.

CONDITION B: Generally declining pattern, one or more scores below expected range.

Culture-Language Interpretive Matrix - Analyzer and Data Entry

Name: _Carmen - KABC-II_   Age: _9 years 9 month(s)_   Grade: _4_   Date: _1/1/2015_

DEGREE OF LINGUISTIC DEMAND

	LOW	Score	MODERATE	Score	HIGH	Score
LOW	KABC-II Atlantis	10 / 100	KABC-II Block Counting			
	KABC-II Atlantis Delayed		KABC-II Number Recall	4 / 70		
	KABC-II Face Recognition		KABC-II Rebus	5 / 75		
	KABC-II Hand Movements		KABC-II Rebus Delayed			
	KABC-II Pattern Reasoning (7-18 years)	11 / 105				
	KABC-II Triangles	9 / 95				
	Cell Average =	**100**	Cell Average =	**73**	Cell Average =	

		Score	MODERATE	Score		Score
MODERATE			KABC-II Conceptual Thinking			
			KABC-II Rover	7 / 85		
			KABC-II Word Order	8 / 90		
	Cell Average =		Cell Average =	**88**	Cell Average =	

	LOW	Score	MODERATE	Score	HIGH	Score
HIGH	KABC-II Gestalt Closure		KABC-II Story Completion (7-18 years)	6 / 80	KABC-II Expressive Vocabulary	
					KABC-II Riddles	5 / 75
					KABC-II Verbal Knowledge	5 / 75
	Cell Average =		Cell Average =	**80**	Cell Average =	**75**

DEGREE OF CULTURAL LOADING

CULTURE/LANGUAGE INFLUENCE: CONTRIBUTORY – low test scores are POSSIBLY valid.

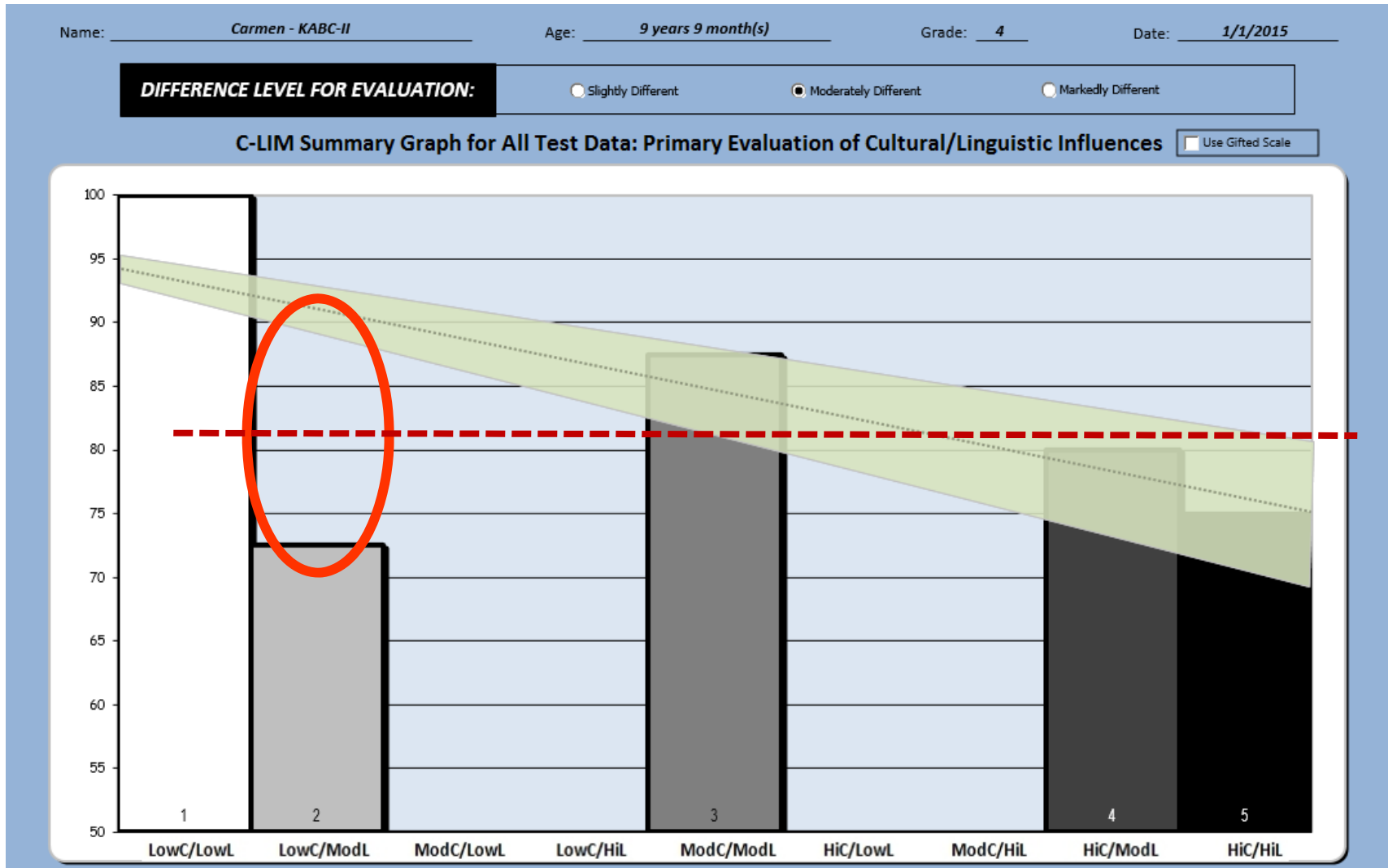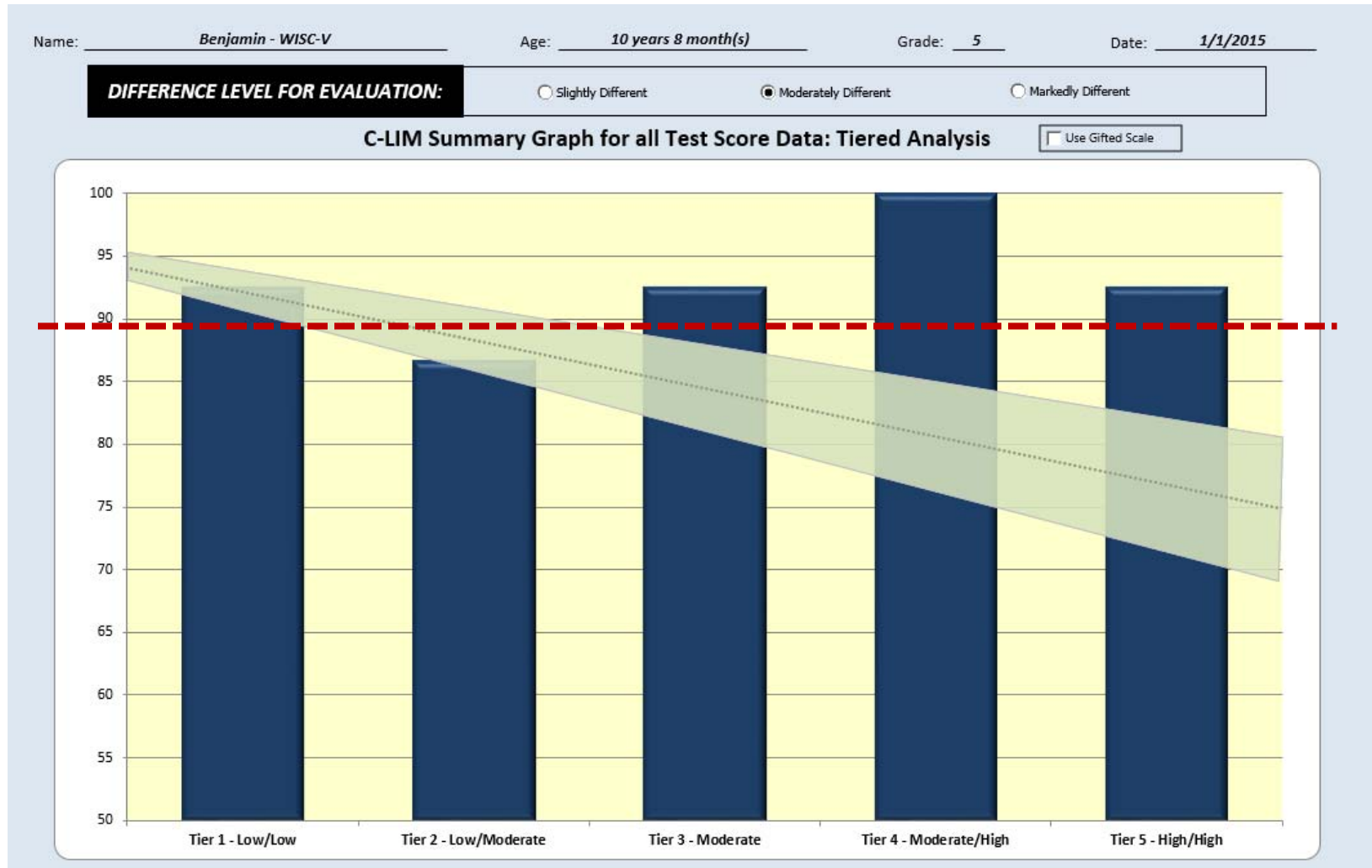# Culture-Language Interpretive Matrix: Guidelines for evaluating test scores.

CONDITION B: Generally declining pattern, one or more scores below expected range.

| Name: | Carmen - KABC-II | Age: | 9 years 9 month(s) | Grade: | 4 | Date: | 1/1/2015 |

DIFFERENCE LEVEL FOR EVALUATION: ○ Slightly Different   ◉ Moderately Different   ○ Markedly Different

C-LIM Summary Graph for all Test Score Data: Tiered Analysis   ☐ Use Gifted Scale

Tier 1 - Low/Low   Tier 2 - Low/Moderate   Tier 3 - Moderate   Tier 4 - Moderate/High   Tier 5 - High/High

CULTURE/LANGUAGE INFLUENCE: CONTRIBUTORY – low test scores are POSSIBLY valid.

Culture-Language Interpretive Matrix: Guidelines for evaluating test scores.

CONDITION B: Generally declining pattern, one or more scores below expected range.

CULTURE/LANGUAGE INFLUENCE: CONTRIBUTORY – low test scores are POSSIBLY valid.

Culture-Language Interpretive Matrix: Guidelines for evaluating test scores.

CONDITION C: No declining pattern, all scores within or above average range.

Culture-Language Interpretive Matrix - Analyzer and Data Entry

Name: **Benjamin - WISC-V**   Age: **10 years 8 month(s)**   Grade: **5**   Date: **1/1/2015**

DEGREE OF LINGUISTIC DEMAND

	LOW	Score		MODERATE	Score		HIGH	Score
LOW	WISC-V Cancellation	9 / 95	WISC-V Block Design	10 / 100	WISC-V Digit Span	
	WISC-V Matrix Reasoning	8 / 90	WISC-V Coding	9 / 95	WISC-V Letter-Number Sequencing	10 / 100
	WISC-V Naming Speed Quantity		WISC-V Delayed Symbol Translation			
	WISC-V Visual Puzzles		WISC-V Immediate Symbol Translation			
			WISC-V Picture Span			
			WISC-V Recognition Symbol Translation			
			WISC-V Symbol Search	10 / 100		
	Cell Average =	**93**	Cell Average =	**98**	Cell Average =	**100**
MODERATE	WISC-V Picture Concepts	5 / 75	WISC-V Arithmetic	7 / 85	WISC-V Comprehension	10 / 100
			WISC-V Figure Weights			
			WISC-V Naming Speed Literacy			
	Cell Average =	**75**	Cell Average =	**85**	Cell Average =	**100**
HIGH					WISC-V Information	
					WISC-V Similarities	9 / 95
					WISC-V Vocabulary	8 / 90
	Cell Average =		Cell Average =		Cell Average =	**93**

DEGREE OF CULTURAL LOADING

CULTURE/LANGUAGE INFLUENCE: MINIMAL – all test scores are LIKELY to be valid.

Culture-Language Interpretive Matrix: Guidelines for evaluating test scores.
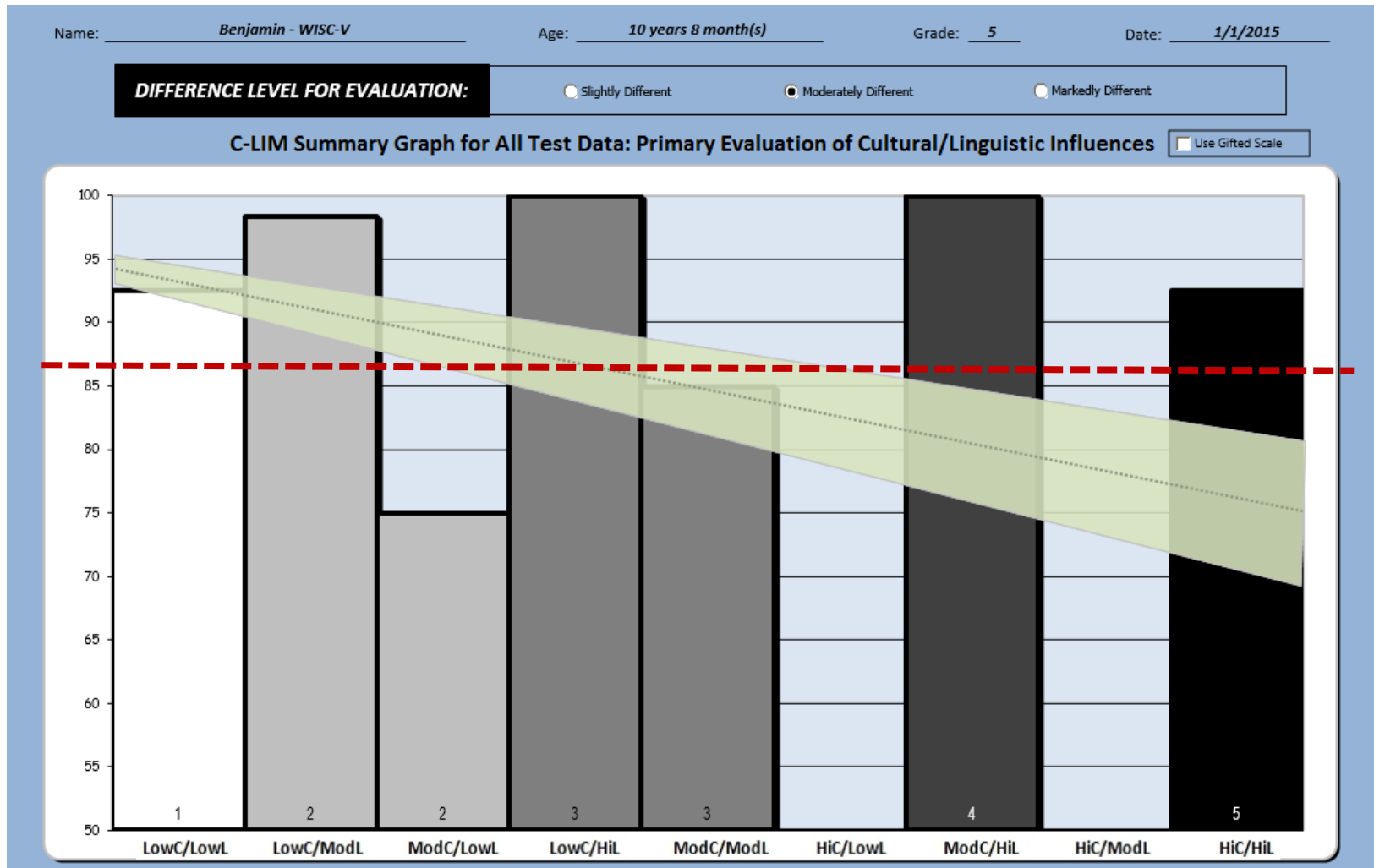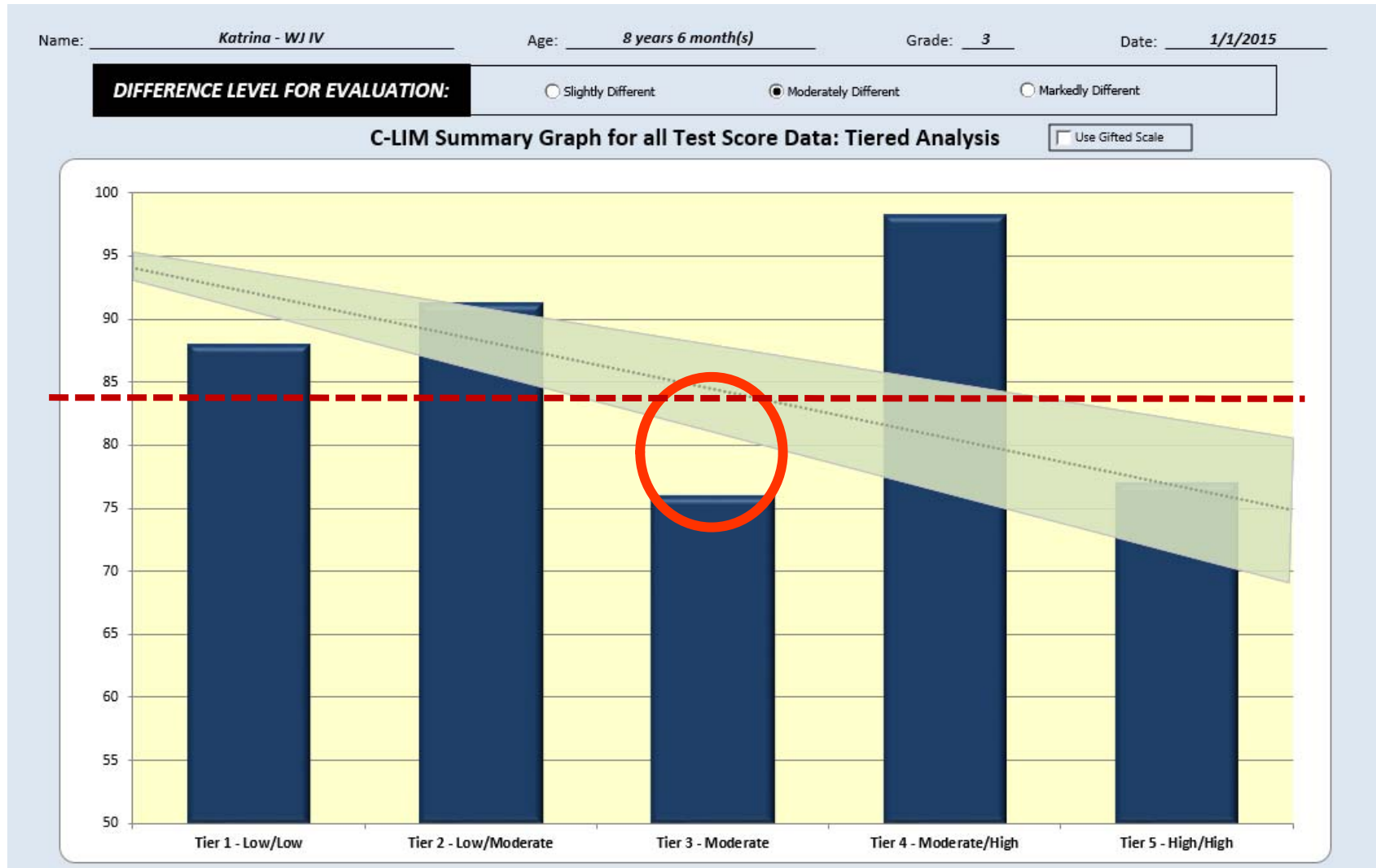
CONDITION C: No declining pattern, all scores within or above average range.

| Name: | Benjamin - WISC-V | Age: | 10 years 8 month(s) | Grade: | 5 | Date: | 1/1/2015 |

DIFFERENCE LEVEL FOR EVALUATION: ○ Slightly Different ● Moderately Different ○ Markedly Different

C-LIM Summary Graph for all Test Score Data: Tiered Analysis ☐ Use Gifted Scale

Tier 1 - Low/Low   Tier 2 - Low/Moderate   Tier 3 - Moderate   Tier 4 - Moderate/High   Tier 5 - High/High

CULTURE/LANGUAGE INFLUENCE: MINIMAL – all test scores are LIKELY to be valid.

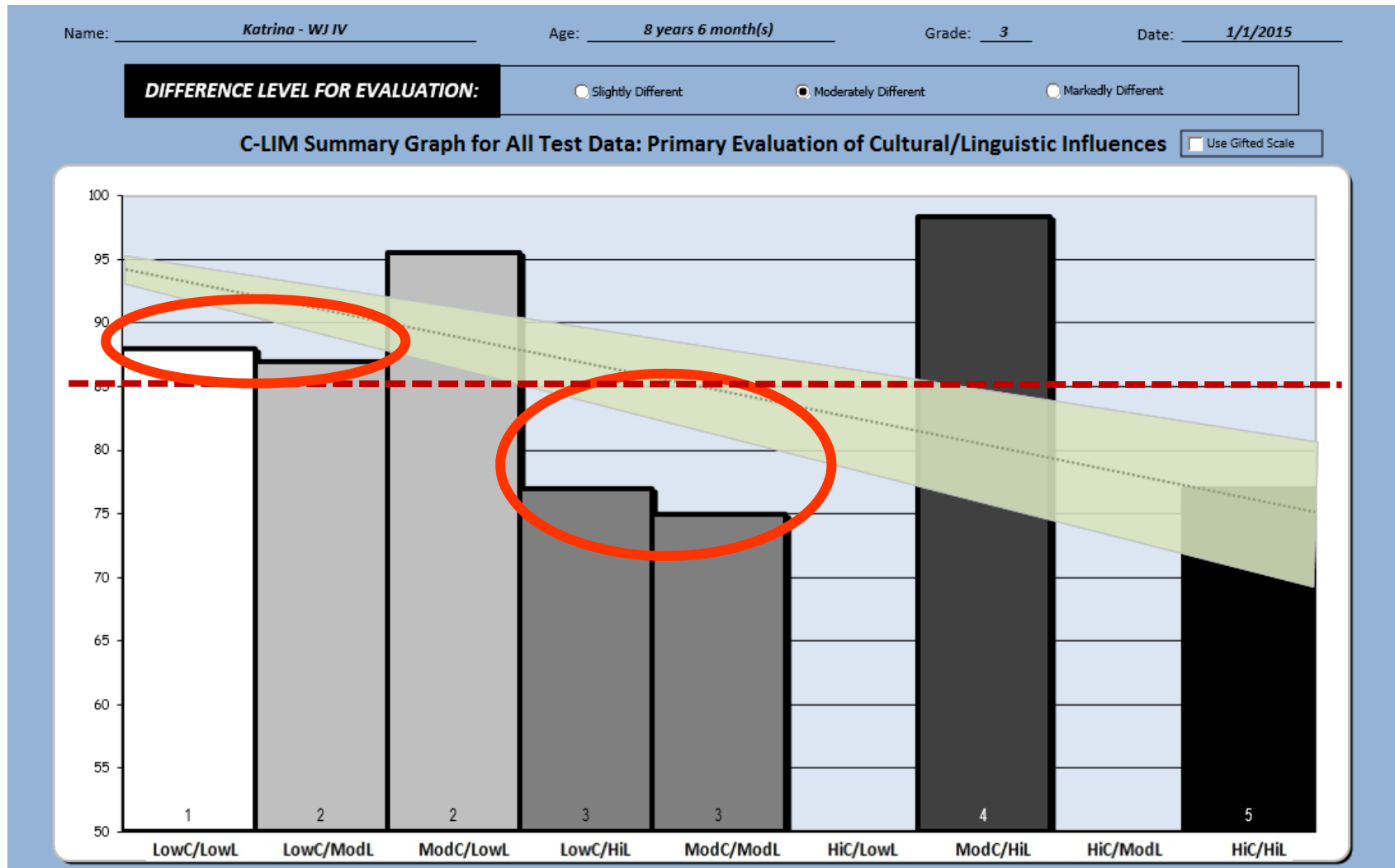# Culture-Language Interpretive Matrix: Guidelines for evaluating test scores.

CONDITION C: No declining pattern, all scores within or above average range.

| Name: | Benjamin - WISC-V | Age: | 10 years 8 month(s) | Grade: | 5 | Date: | 1/1/2015 |

DIFFERENCE LEVEL FOR EVALUATION: ○ Slightly Different ● Moderately Different ○ Markedly Different

C-LIM Summary Graph for All Test Data: Primary Evaluation of Cultural/Linguistic Influences ☐ Use Gifted Scale

X-axis categories: LowC/LowL, LowC/ModL, ModC/LowL, LowC/HiL, ModC/ModL, HiC/LowL, ModC/HiL, HiC/ModL, HiC/HiL

CULTURE/LANGUAGE INFLUENCE: MINIMAL – all test scores are LIKELY to be valid.

Culture-Language Interpretive Matrix: Guidelines for evaluating test scores.

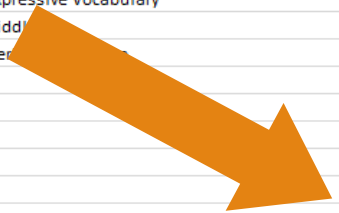## CONDITION D: No declining pattern, one or more scores below average range.

Culture-Language Interpretive Matrix - Analyzer and Data Entry

Name: _Katrina - WJ IV_   Age: _8 years 6 month(s)_   Grade: _3_   Date: _1/1/2015_

DEGREE OF LINGUISTIC DEMAND

	LOW	Score	MODERATE	Score	HIGH	Score
LOW	WJ IV COG Number Series	82	82	WJ IV COG Analysis-Synthesis	87	87	WJ IV COG Concept Formation	77	77
	WJ IV COG Number-Pattern Matching			WJ IV COG Numbers Reversed	87	87	WJ IV COG Object-Number Sequencing		
	WJ IV COG Pair Cancellation	110	110					
	WJ IV COG Visualization	72	72					
	Cell Average =	**88**		Cell Average =	**87**		Cell Average =	**77**
MODERATE	WJ IV COG Letter-Pattern Matching	99	99	WJ IV COG Nonword Repetition	80	80	WJ IV COG Memory for Words	104	104
	WJ IV COG Picture Recognition	92	92	WJ IV COG Visual Auditory Learning	70	70	WJ IV COG Phonological Processing	99	99
							WJ IV COG Verbal Attention	92	92
							WJ IV OL Sentence Repetition		
	Cell Average =	**96**		Cell Average =	**75**		Cell Average =	**98**
HIGH		Score	WJ IV OL Picture Vocabulary	Score	WJ IV COG General Information	80	80
					WJ IV COG Oral Vocabulary	78	78
					WJ IV COG Story Recall	73	73
	Cell Average =			Cell Average =			Cell Average =	**77**

CULTURE/LANGUAGE INFLUENCE: MINIMAL – low test scores are **POSSIBLY** valid.

Culture-Language Interpretive Matrix: Guidelines for evaluating test scores.

CONDITION D: No declining pattern, one or more scores below average range.

Name: _Katrina - WJ IV_   Age: _8 years 6 month(s)_   Grade: _3_   Date: _1/1/2015_

DIFFERENCE LEVEL FOR EVALUATION: ○ Slightly Different   ● Moderately Different   ○ Markedly Different

C-LIM Summary Graph for all Test Score Data: Tiered Analysis   ☐ Use Gifted Scale

Tier 1 - Low/Low | Tier 2 - Low/Moderate | Tier 3 - Moderate | Tier 4 - Moderate/High | Tier 5 - High/High

CULTURE/LANGUAGE INFLUENCE: MINIMAL – low test scores are POSSIBLY valid.

Culture-Language Interpretive Matrix: Guidelines for evaluating test scores.

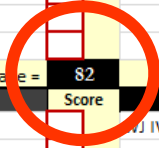## CONDITION D: No declining pattern, one or more scores below average range.

| Name: | Katrina - WJ IV | Age: | 8 years 6 month(s) | Grade: | 3 | Date: | 1/1/2015 |

DIFFERENCE LEVEL FOR EVALUATION: ○ Slightly Different ● Moderately Different ○ Markedly Different

C-LIM Summary Graph for All Test Data: Primary Evaluation of Cultural/Linguistic Influences ☐ Use Gifted Scale

Bars (left to right):
- 1 — LowC/LowL
- 2 — LowC/ModL
- 2 — ModC/LowL
- 3 — LowC/HiL
- 3 — ModC/ModL
- HiC/LowL
- 4 — ModC/HiL
- HiC/ModL
- 5 — HiC/HiL

CULTURE/LANGUAGE INFLUENCE: MINIMAL – low test scores are POSSIBLY valid.

Culture-Language Interpretive Matrix: Additional Interpretive Issues
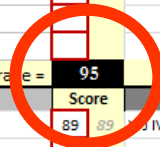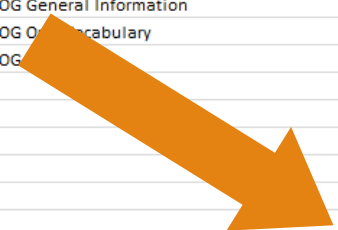
KABC-II DATA FOR TRAN (ENGLISH)

Culture-Language Interpretive Matrix - Analyzer and Data Entry

Name: _Tran - KABC-II_   Age: _10 years 10 month(s)_   Grade: _4_   Date: _1/1/2015_

DEGREE OF LINGUISTIC DEMAND

	LOW	Score		MODERATE	Score		HIGH	Score
LOW	KABC-II Atlantis	6 / 80	KABC-II Block Counting					
	KABC-II Atlantis Delayed		KABC-II Number Recall	5 / 75				
	KABC-II Face Recognition		KABC-II Rebus	4 / 70				
	KABC-II Hand Movements		KABC-II Rebus Delayed					
	KABC-II Pattern Reasoning (7-18 years)	5 / 75						
	KABC-II Triangles	7 / 85						
	Cell Average =	**80**		Cell Average =	**73**		Cell Average =	

	LOW	Score		MODERATE	Score		HIGH	Score
MODERATE			KABC-II Conceptual Thinking					
			KABC-II Rover	3 / 65				
			KABC-II Word O...	4 / 70				
	Cell Average =			Cell Average =	**68**		Cell Average =	

	LOW	Score		MODERATE	Score		HIGH	Score
HIGH	KABC-II Gestalt Closure		KABC-II Story Completion (7-18 years)	2 / 60	...BC-II Expressive Vocabulary				
					KABC-II Ridd...	1 / 55		
					KABC-II Ver...	1 / 55		
	Cell Average =			Cell Average =	**60**		Cell Average =	**55**

DEGREE OF CULTURAL LOADING
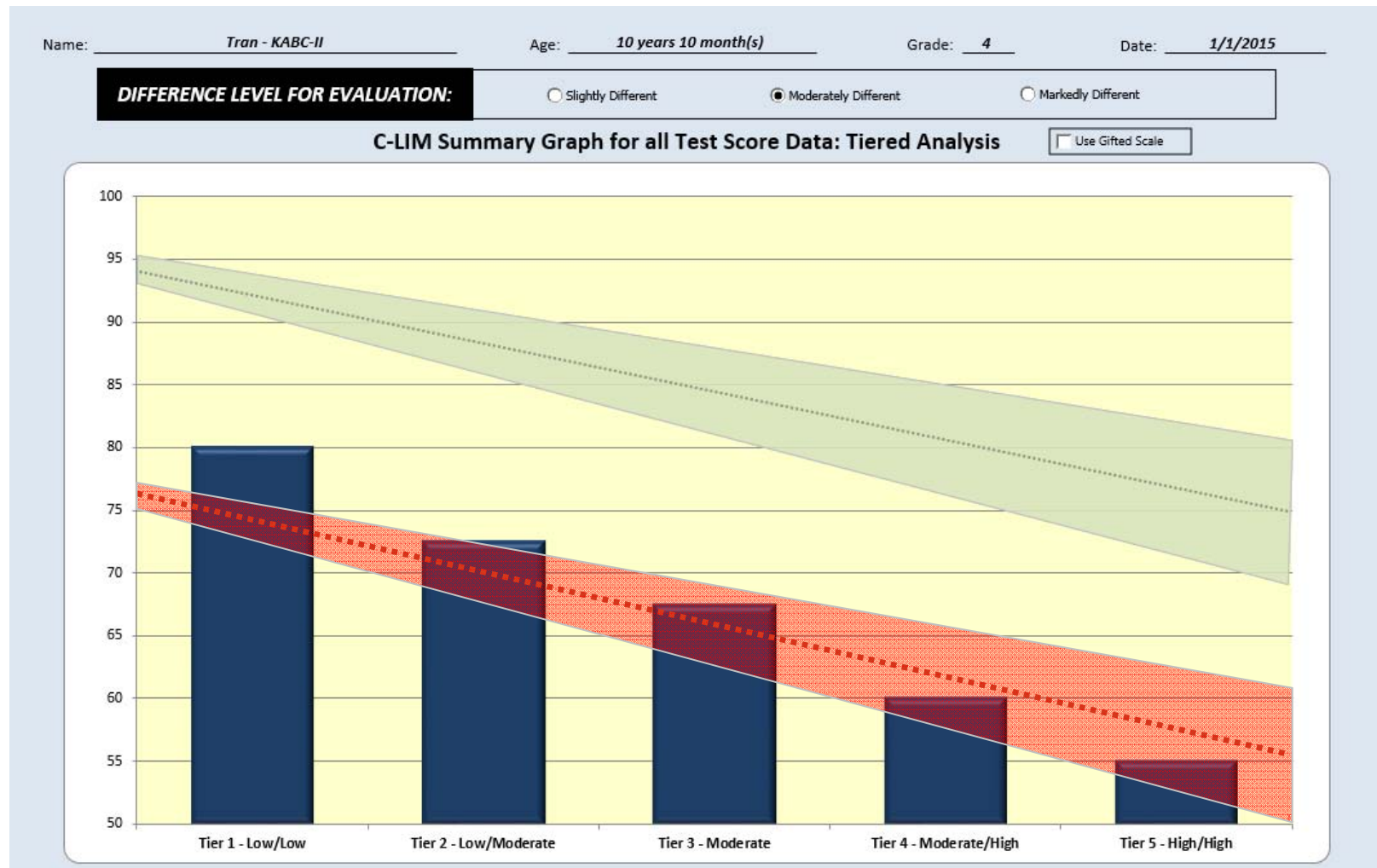
Culture-Language Interpretive Matrix: Additional Interpretive Issues

KABC-II DATA FOR TRAN (ENGLISH)

CONDITION B: Generally declining pattern, one or more scores below expected range.

CULTURE/LANGUAGE INFLUENCE: CONTRIBUTORY – low test scores are POSSIBLY valid.

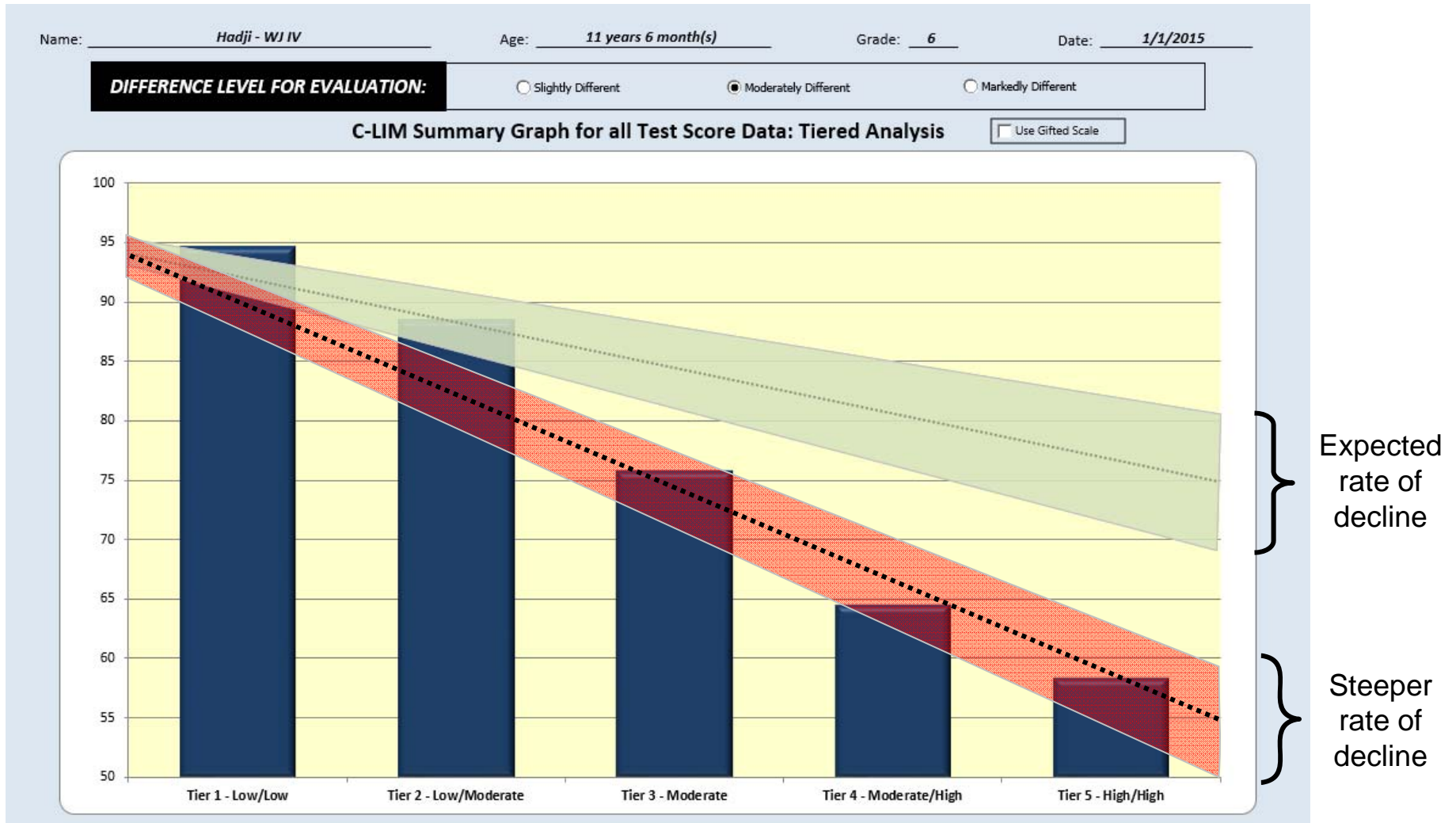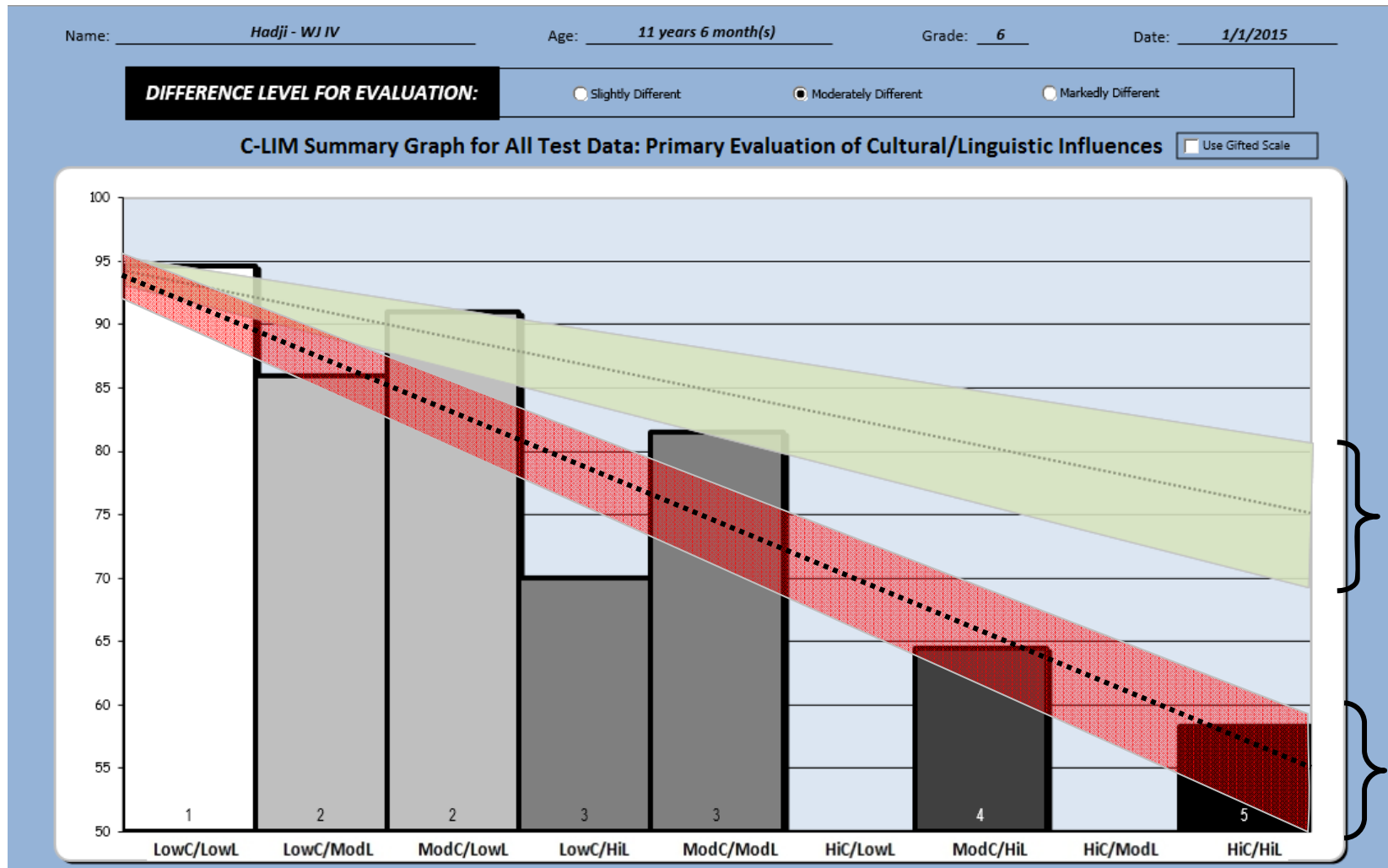# Culture-Language Interpretive Matrix: Additional Interpretive Issues

KABC-II DATA FOR TRAN (ENGLISH)

Name: _Tran - KABC-II_ Age: _10 years 10 month(s)_ Grade: _4_ Date: _1/1/2015_

DIFFERENCE LEVEL FOR EVALUATION: ○ Slightly Different ● Moderately Different ○ Markedly Different

C-LIM Summary Graph for All Test Data: Primary Evaluation of Cultural/Linguistic Influences ☐ Use Gifted Scale

(x-axis categories: LowC/LowL, LowC/ModL, ModC/LowL, LowC/HiL, ModC/ModL, HiC/LowL, ModC/HiL, HiC/ModL, HiC/HiL)
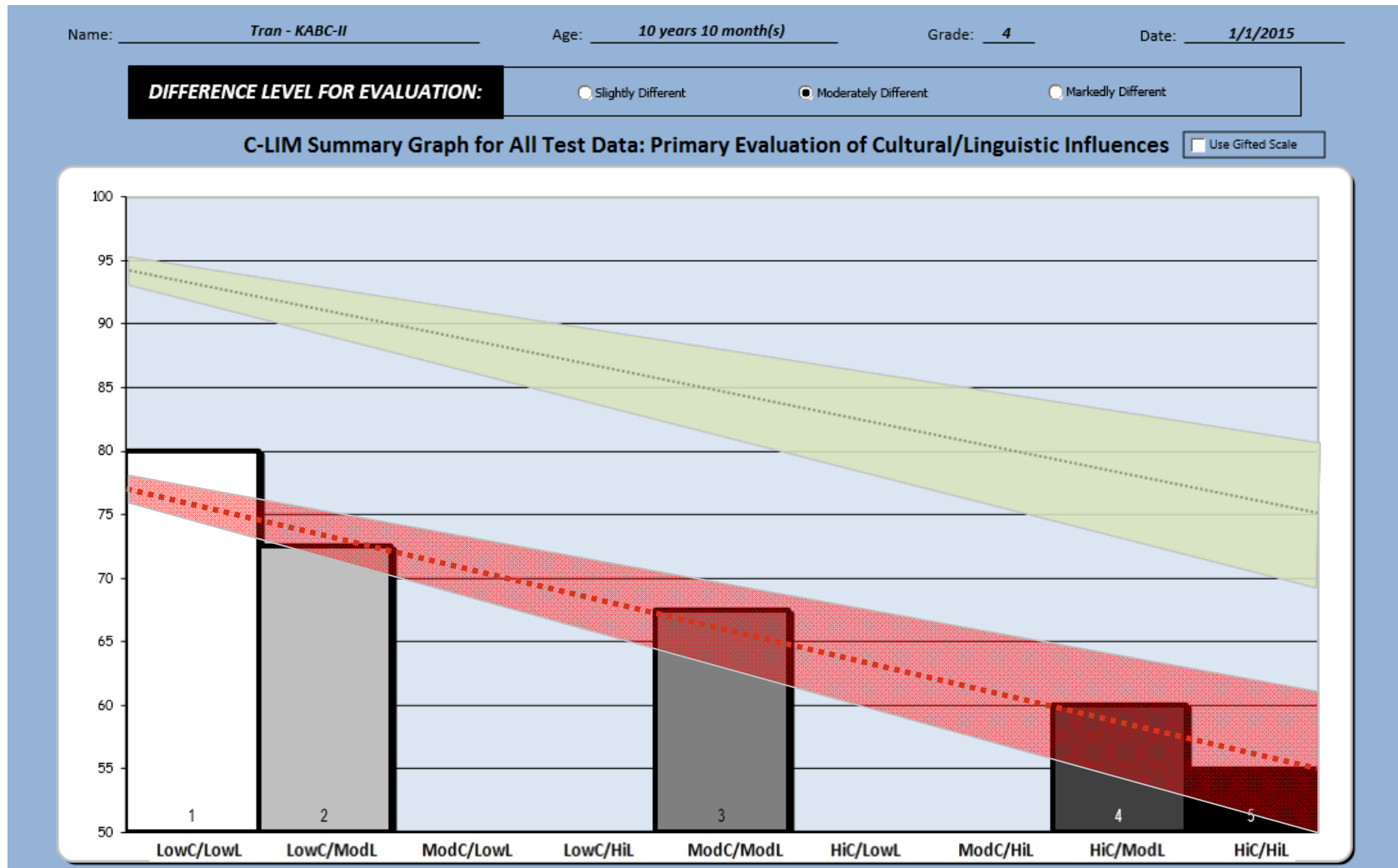
CONDITION B: Generally declining pattern, one or more scores below expected range.

CULTURE/LANGUAGE INFLUENCE: CONTRIBUTORY – low test scores are POSSIBLY valid.

Culture-Language Interpretive Matrix: Additional Interpretive Issues

WJ IV COG DATA FOR HADJI (ENGLISH)

Culture-Language Interpretive Matrix: Additional Interpretive Issues

WJ IV COG DATA FOR HADJI (ENGLISH)

CONDITION B: Generally declining pattern, one or more scores below expected range.

CULTURE/LANGUAGE INFLUENCE: CONTRIBUTORY – low test scores are POSSIBLY valid.

Culture-Language Interpretive Matrix: Additional Interpretive Issues

WJ IV COG DATA FOR HADJI (ENGLISH)

CONDITION B: Generally declining pattern, one or more scores below expected range.

CULTURE/LANGUAGE INFLUENCE: CONTRIBUTORY – low test scores are POSSIBLY valid.

Comparison of Patterns of Performance Among English-Speakers and English-Learners with SLD, SLI, and ID

Mean cell scores on WPPSI-III subtests arranged by degree of cultural loading and linguistic demand
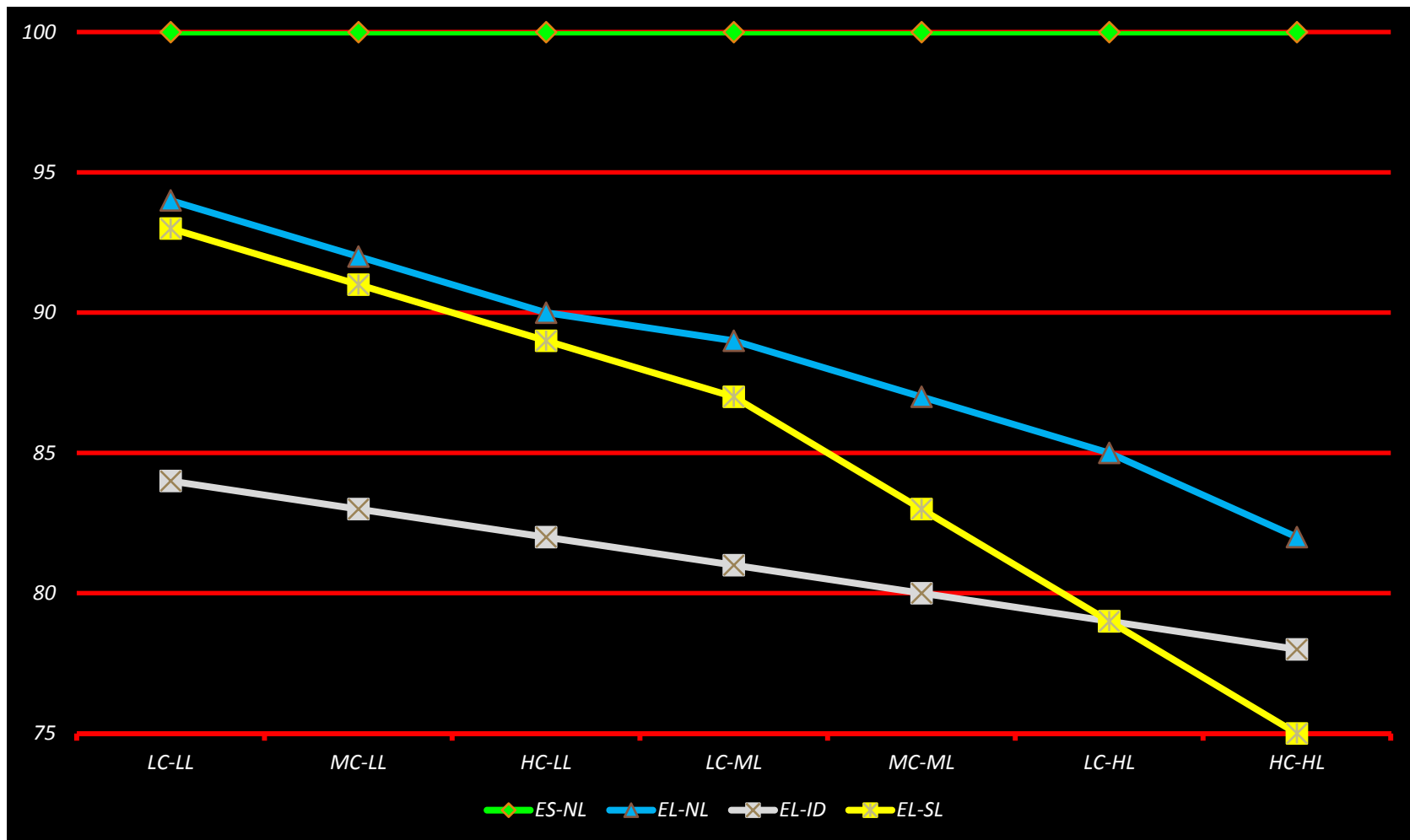
Source: Tychanska, J., Ortiz, S. O., Flanagan, D.P., & Terjesen, M. (2009), unpublished data..

Culture-Language Interpretive Matrix:
The Importance of Difference

Subtests	Standard Score	Confidence Interval (95% Band)	Descriptions
Verbal Comprehension	64	56 – 72	Very Low
Visual-Auditory Learning	88	76 – 100	Low Average
Spatial Relations	98	91 – 107	Average
Sound Blending	75	64 – 87	Low
Concept Formation	70	62 – 78	Low
Visual Matching	86	76 – 97	Low Average
Numbers Reversed	80	67 – 93	Low
Incomplete Words	78	65 – 91	Low
Auditory Working Memory	85	76 – 94	Low Average
Analysis-Synthesis	78	66 – 90	Low
Auditory Attention	81	67 – 95	Low
Decision Speed	72	63 – 81	Low
Retrieval Fluency	82	69 – 95	Low
General Information	69	60 – 78	Very Low

Culture-Language Interpretive Matrix:
The Importance of Difference

XBA Culture-Language Interpretive Matrix (XBA C-LIM v2.0) for WJ III NU COG

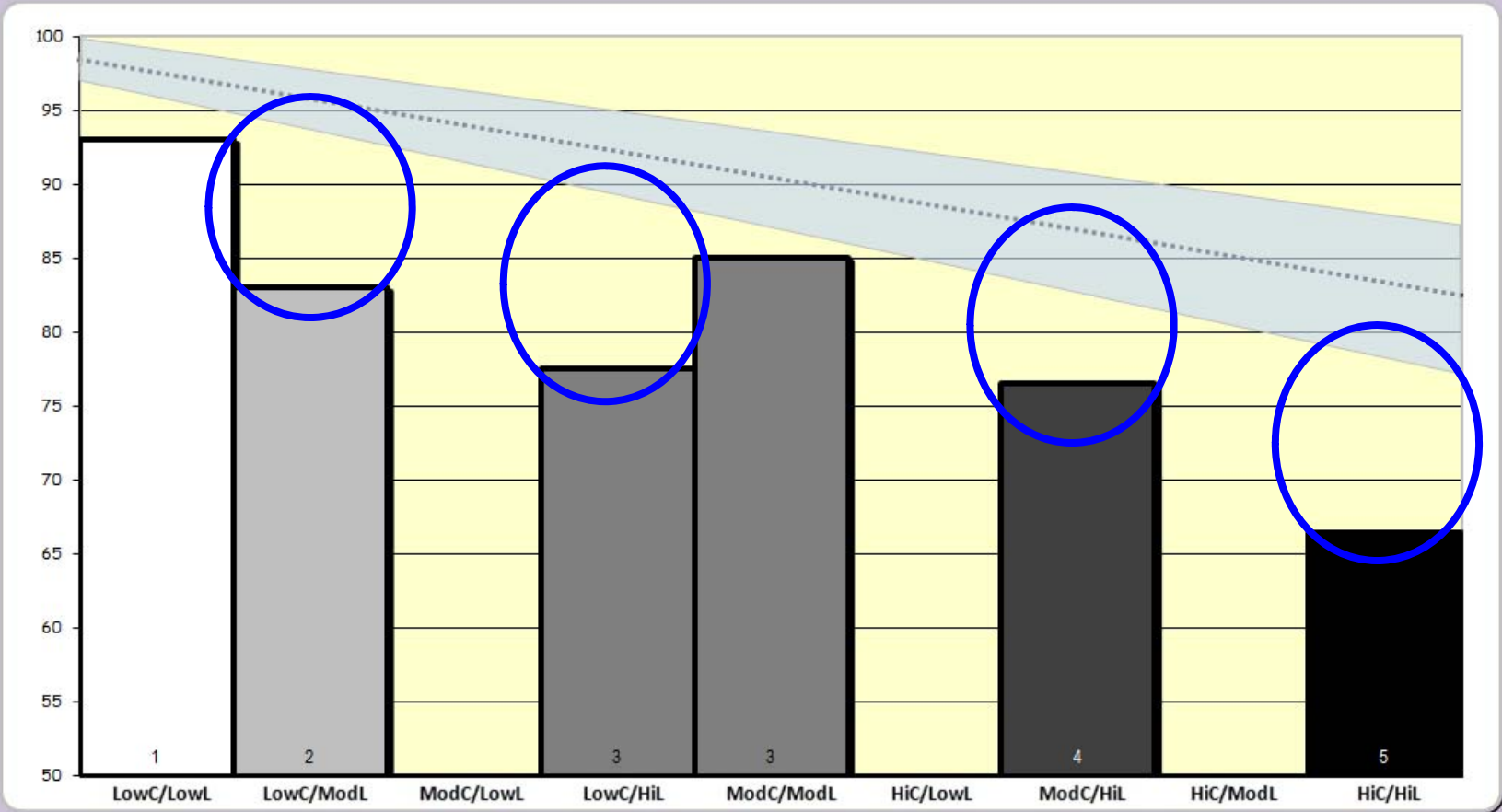Name: _____   Age: _____   Grade: _____ | CLEAR DATA | | SAVE DATA |

DEGREE OF LINGUISTIC DEMAND

DEGREE OF CULTURAL LOADING	LOW	Score	MODERATE	Score	HIGH	Score
LOW	WJ III Spatial Relations	93 93	WJ III Numbers Reversed	80 80	WJ III Analysis-Synthesis	78 78
			WJ III Visual Matching	86 86	WJ III Auditory Working Memory	85 85
					WJ III Concept Formation	70 70
	Cell Average =	**93**	Cell Average =	**83**	Cell Average =	**78**
MODERATE	WJ III Pair Cancellation		WJ III Delayed Recall: Visual Auditory Learning		WJ III Auditory Attention	81 81
	WJ III Picture Recognition		WJ III Rapid Picture Naming		WJ III Decision Speed	72 72
	WJ III Planning		WJ III Retrieval Fluency	82 82	WJ III Incomplete Words	78 78
			WJ III Visual Auditory Learning	88 88	WJ III Memory for Words	
					WJ III Sound Blending	75 75
	Cell Average =		Cell Average =	**85**	Cell Average =	**77**
HIGH					WJ III General Information	69 69
					WJ III Verbal Comprehension	64 64
	Cell Average =		Cell Average =		Cell Average =	**67**

Culture-Language Interpretive Matrix:
The Importance of Difference

Culture-Language Interpretive Matrix:
The Importance of Difference

Culture-Language Interpretive Matrix:
The Importance of Difference

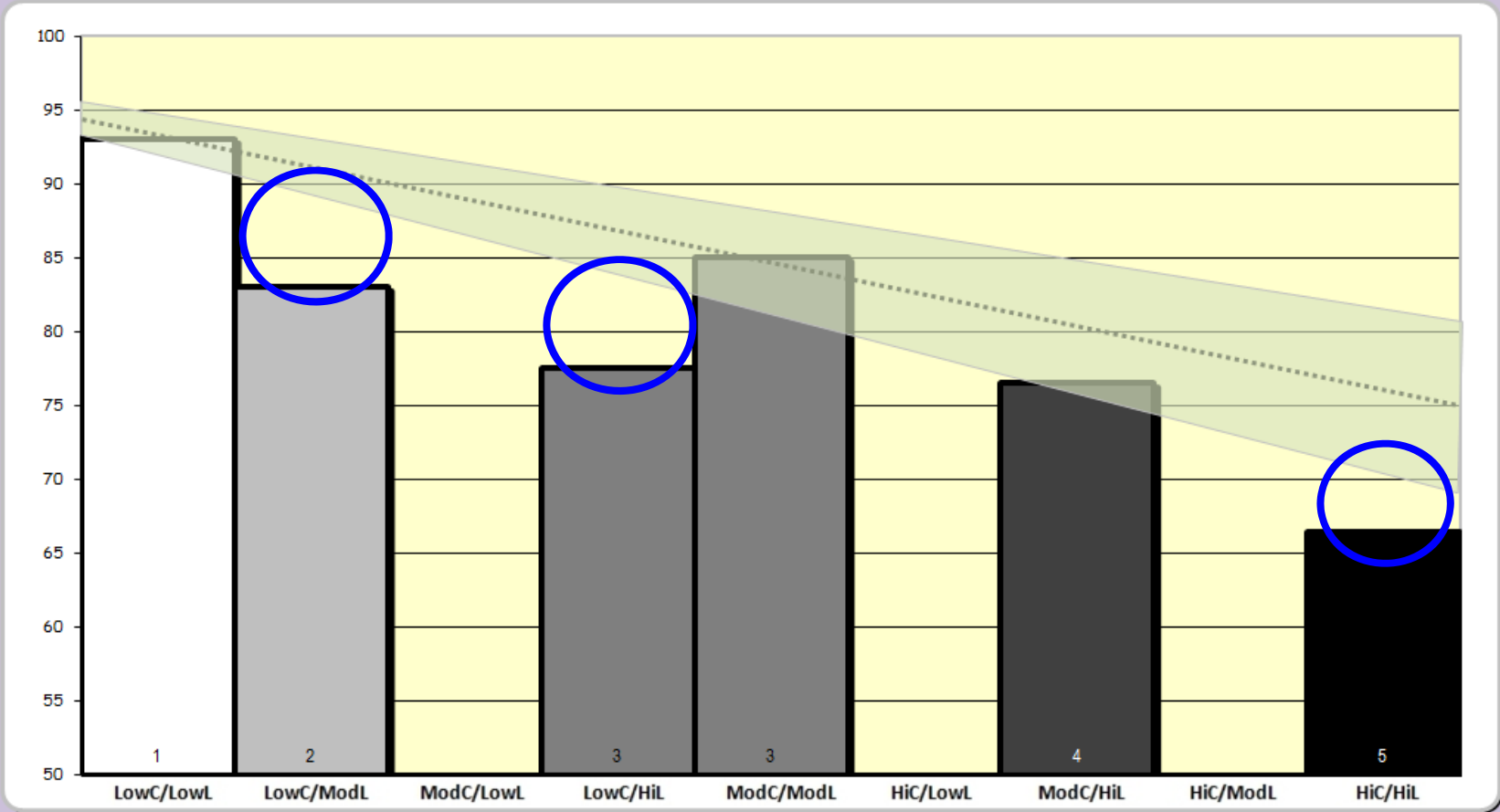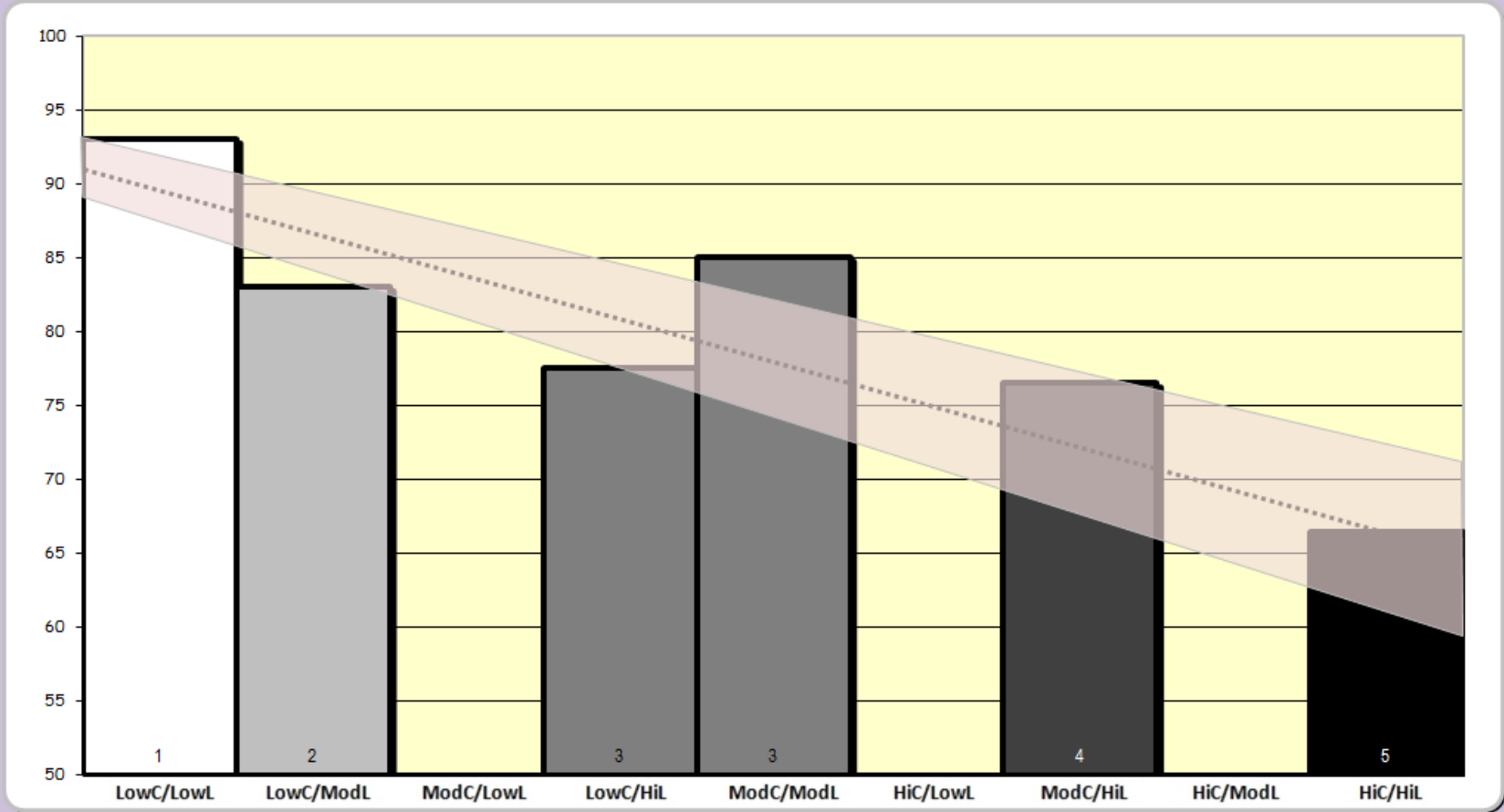**Name:** _____   **Age:** _____   **Grade:** _____

DIFFERENCE LEVEL FOR EVALUATION: ○ Slightly Different   ○ Moderately Different   ● Markedly Different

XBA C-LIM Graph for WJ III NU COG: Primary Evaluation of Cultural and Linguistic Influences

Final Thoughts on Collaborative Evaluation

"The danger with not paying attention to individual differences is that we will repeat the current practice of simple assessments in curricular materials to evaluate a complex learning process and to plan for interventions with children and adolescents with markedly different needs and learning profiles" (p. 567; Semrud-Clikeman, 2005).

The Culture-Language Test Classifications and Interpretive Matrix: Caveats and Conclusions

Used in conjunction with other information relevant to appropriate bilingual, cross-cultural, nondiscriminatory assessment including...

- level of acculturation
- language proficiency
- socio-economic status
- academic history
- familial history
- developmental data
- work samples
- curriculum based data
- intervention results, etc.

...the C-LTC and C-LIM can be of practical value in helping establish credible and defensible validity for test data, thereby decreasing the potential for biased and discriminatory interpretation. Taken together with other assessment data, the C-LTC and C-LIM assist practitioners in answering the most basic question in ELL assessment:

"Are the student's observed learning problems due primarily to cultural or linguistic differences or disorder?"