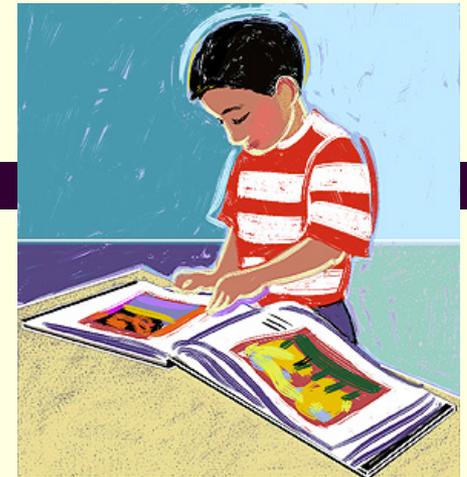# A Cultural, Linguistic, and Ecological Framework for Response to Intervention

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# General Features of RTI

- High quality classroom instruction
- Research-based instruction
- Classroom staff design and complete student assessments and are actively involved in curriculum planning
- Universal screening of academics and behavior
- Continuous progress monitoring
- Research-based interventions
- Progress monitoring during interventions
- Fidelity measures

# General Attributes of RTI

- The concept of multiple tiers of increasingly intense student interventions
- Implementation of a differentiated curriculum with the option of different curriculum at second and third tiers
- Interventions can be delivered by staff other than classroom teacher (although classroom teachers' maintain ultimate responsibility)
- Varied duration, frequency and time of interventions
- Categorical or noncategorical placement decisions at highest tier

# Problems

- Where is the scientifically-based instruction for ELLs in either L1 or L2 literacy?

- Vaughn, Mathes, Linan-Thompson & Francis (2005) say: "At the current time, it is very difficult to actually implement this model with ELLs because efficacy of various interventions has not been tested with this population."

- The main problem with RTI and ELLs is the same as that with standardized assessment – what is the appropriate standard, expectation for growth or baseline to use?

# Why Do Some Children Have Difficulty Learning to Read?

- Vellutino (2006) says there are two broad (but not mutually exclusive) possibilities:
  - Basic cognitive deficits: "inherent limitations in reading related cognitive abilities that make it difficult for a child to acquire foundational reading skills.
  - Experiential/Instructional deficits: "deficiencies in the child's emergent literacy skills and/or early literacy instruction.
- I say there is one more possibility:
  - Being culturally and linguistically diverse in a system that does not adequately accommodate these differences and build on the strengths these children bring with them.

# RTI: Universal Screening for *All* Including ELL Students

- Screenings should occur for all ELL students in the following areas:
  - Phonemic Awareness, letter knowledge, concepts of print
  - The alphabetic code: phonics and decoding
  - Fluency and automaticity
  - Vocabulary
  - Comprehension
- Screening should also occur for:
  - First and second oral proficiency
  - Existing knowledge base for content

# The Intervention Paradigm - Pros

- There is an increased emphasis on curriculum based assessment and alternative local assessments.

- Progress monitoring and universal screening for all.

- Students can be compared to peers in their local cohort rather than to national norms.

- There are increased opportunities for collaboration and consultation with other site support personnel.

# The Intervention Paradigm - Cons

- There is no mechanism for determining a disorder in the basic psychological processes (which remains part of the federal definition for LD).

- It may be difficult to determine if a child's ecology or intrinsic learning problem is the primary cause of academic challenges.

- Once all interventions have been exhausted and a student's progress has been minimal, there is little guidance as to next steps. Evaluation of a child's cognitive abilities (not "learning styles") may aide in determining why the previous interventions may not have been successful and what might be done to improve the interventions for this particular child.

# Questions

- Compton (2004) asks if low verbal ability, often a source of poor reading comprehension skill, is a defendable category of LD?

- What do we do about ELL students with low verbal abilities and poor reading comprehension skills?
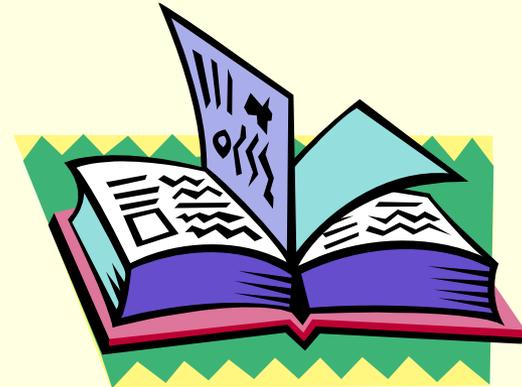
# Questions

■ If the federal definition of learning disability still includes a disorder in one or more of the basic psychological processes, how will these deficits be identified in the RTI model?

# The Traditional Assessment Approach

- The traditional assessment approach has been criticized for:
  - Emphasizing eligibility rather than linking to intervention
  - Using a discrepancy approach in learning disability determinations that does not necessarily highlight a disorder in one or more of the basic psychological processes
- To circumvent the problems with the traditional approach, the RTI model has been outlined in IDEA 2004 as an alternative.
- The main idea of RTI is that students should receive interventions as early as possible and in the general classroom setting before being referred for a special education evaluation.

# However…

- Vellutino (2006) says "appropriate psychometric tests may also be useful in cross-validating initial impressions based on response to intervention."

- "Over time, cognitive ability tests have moved away from '*g*' and there are now well-normed, well-validated, theory-based tests of cognitive processes that measure multiple and complex processes or abilities" (cited in Kavale, Holdnack & Mostert, 2005).

# Needed: New Framework

- In current RTI models, little focus has been on the role of standardized assessment, and there has been no discussion of the role of standardized assessments for ELL students.

- Some suggest that assessments must be part of the RTI process because the results can guide the design of appropriate interventions for an individual's unique needs (Braden & Kratochwill, 1997; Hale & Fiorello, 2001).

- "It is virtually impossible to make a valid diagnosis or an individualized intervention program without test data gleaned from a comprehensive evaluation that elucidates individual strengths and weaknesses" (Kavale, Holdnack & Mostert, 2005, p. 9).

# Modern Intelligence Theory

- "The Carroll-Horn-Cattell (CHC) theory of cognitive abilities is supported by a large network of validity evidence, which includes more than half a century of factor analytic, developmental, heritability, external outcome validity, and neurocognitive research evidence" (Floyd, Evans, McGrew, 2003).

Figure 2.2 The Cattell-Horn-Carroll Theory of Cognitive Abilities (CHC Theory)

Broad Stratum II:

| Fluid Intelligence (*Gf*) | Quantitative Knowledge (*Gq*) | Crystallized Intelligence (*Gc*) | Reading and Writing (*Grw*) | Short-Term Memory (*Gsm*) | Visual Processing (*Gv*) | Auditory Processing (*Ga*) | Long-Term Storage & Retrieval (*Glr*) | Processing Speed (*Gs*) | Decision Speed/ ReactionTime (*Gt*) |
|---|---|---|---|---|---|---|---|---|---|

Narrow Stratum I:

**Fluid Intelligence (*Gf*)**
- General Sequential Reasoning
- Induction
- Quantitative Reasoning
- Piagetian Reasoning
- Speed of Reasoning

**Quantitative Knowledge (*Gq*)**
- *Math. Know.*
- *Math. Ach.*

**Crystallized Intelligence (*Gc*)**
- Language Develop.
- Lexical Knowl.
- Listening Ability
- *General Info.*
- *Info. about Culture*
- *General Science Info.*
- *Geography Ach.*
- Comm. Ability
- Oral Production & Fluency
- Gram. Sensitivity
- Foreign Language Proficiency
- Foreign Language Aptitude

**Reading and Writing (*Grw*)**
- **Reading Decoding**
- **Reading Comp.**
- **Verbal Language Comp.**
- **Cloze Ability**
- **Spelling Ability**
- **Writing Ability**
- *English Usage Knowledge*
- **Reading Speed**

**Short-Term Memory (*Gsm*)**
- Memory Span
- Working Memory
- Learning Abilities

**Visual Processing (*Gv*)**
- Visualization
- Spatial Relations
- **Visual Memory**
- Closure Speed
- Flexibility of Closure
- Spatial Scanning
- Serial Perceptual Integration
- Length Estimation
- Perceptual Illusions
- Perceptual Alternations
- Imagery

**Auditory Processing (*Ga*)**
- **Phon. Cdg.: Analysis**
- **Phon. Cdg.: Synthesis**
- Speech Snd. Discrim.
- Res. to Aud. Stim. Distortion
- Memory for Sound Patterns
- General Snd. Discrim.
- Temporal Tracking
- Musical Discrim. & Judgment
- Maintaining & Judging Rhythm
- Snd-Intensity Duration Discrim.
- Snd-Freq. Discrim.
- Hearing & Speech Threshold
- Absolute Pitch
- Sound Localization

**Long-Term Storage & Retrieval (*Glr*)**
- **Assoc. Memory**
- **Mngful. Memory**
- **Free Recall Memory**
- Ideational Fluency
- Assoc. Fluency
- Expressional Fluency
- Naming Facility
- Word Fluency
- Figural Fluency
- Figural Flexibility
- Sensitivity to Problems
- Originality/ Creativity
- Learning Abilities

**Processing Speed (*Gs*)**
- Perceptual Speed
- Rate-of-Test Taking
- Number Facility
- Semantic Processing Speed*

**Decision Speed/ ReactionTime (*Gt*)**
- Simple Reaction Time
- Choice Reaction Time
- Mental Comparison Speed
- Correct Decision Speed

*Italic* indicates abilities that were not included in Carroll's three-stratum model but were included by Carroll in the domains of knowledge and achievement.

**Bold** indicates abilities that are placed under different CHC broad abilities than in Carroll's model. These changes are based on the Horn-Cattell model and/or recent research (see Flanagan, McGrew & Ortiz, 2000; Flanagan & Ortiz, 2001; McGrew, 1997; McGrew & Flanagan, 1998).

*Semantic Processing Speed was previously classified under *Gt* consistent with Carroll (1993). However, recent data analysis from WJ III now suggests that it may be a narrow *Gs* ability instead (see Woodcock et al., 2001).

See Appendix B for more detailed information regarding both the broad and narrow abilities.

Flanagan, D.P. & Ortiz, S.O. (2001). *Essentials of cross-battery assessment.* New York: Wiley & Sons.

# CHC Theory as a Problem Solving Model

- CHC Theory is a combination of the theories of three researchers
  - Cattell
  - Horn (his work was an extension of Cattell's original Gf-Gc formulation)
  - Carroll
- McGrew (2004) states: "CHC Theory of Intelligence is the tent that houses the two most prominent psychometric theoretical models of human cognitive abilities."
- This model serves as the theoretical foundation for some of the latest cognitive assessment instruments in is gaining acceptance by assessment specialists (Fiorello & Primerano, 2005).

16

# Cross-Battery Assessment

- Along with the evolution of CHC theory, cross battery assessment has emerged as a framework in which to assess students (McGrew & Flanagan, 1998; Flanagan & Ortiz, 2001)

- The main idea is to select tests from varied batteries that best match the referral concern.

- The examiner then puts the scores into a cross-battery template and follow a series of procedures.

# Strengths of Cross-Battery

- Assessments can (and should be) based on the referral concern rather than administering the same standard battery to all children.
- Individual cognitive profiles can be highlighted that reflect a child's strengths and weaknesses.
- Reynolds, Kamphaus, Rosenthal, & Hiemenz, 1997, p. 40) state: "Changing the focus from the *content* of test items (e.g., auditory, visual) to the underlying psychological *processes* may be key to understanding the true nature of brain-behavior relationships for individual children."
- The research is beginning to link cognitive constructs with academic deficiencies (Evans, et al, 2002, Lloyd, 2003) .
- Garruto (2005) says "A thorough assessment of cognitive abilities can be helpful in terms of determining to what extent other facilitators and inhibitors may be hindering progress of students (e.g., attention and focus, motivation and instruction).

# Why Use CHC As Part of the Problem Solving Model?

- It is an empirically-based.
- Research shows that cognitive constructs are related to certain academic difficulties.
- It allows for identification of a processing disorder in one of more of the psychological processes.
- Assessment can be directly linked to intervention.
- Using CHC Theory and a cross-battery approach allows practitioners to use the Cultural and Linguistic Test Classifications (C-LTC) and Culture-Language Interpretive Matrix (C-LIM) (Ortiz & Flanagan, 1998; Ortiz, 2001; Flanagan & Ortiz, 2001; Ortiz & Ochoa, 2005; Ortiz & Dynda, 2005; Rhodes, Ochoa & Ortiz, 2005) for interpreting the test scores of ELL students in the most fair and defensible way.

# Interpreting Standardized Test Scores of ELL Students

■ The C-LIM (Ortiz & Flanagan, 1998; Ortiz, 2001; Flanagan & Ortiz, 2001; Ortiz & Ochoa, 2005; Ortiz & Dynda, 2005; Rhodes, Ochoa & Ortiz, 2005) was designed to answer the question: "*Is the measured performance a reflection primarily of actual ability or simply one of cultural or linguistic difference?*"

■ The results of an individual's C-LIM can be interpreted within the following expected pattern of performance for diverse individuals.

# CULTURAL AND LINGUISTIC CLASSIFICATION OF TESTS ADDRESSING BIAS IN TEST VALIDITY AND INTERPRETATION

## Pattern of Expected Performance of Culturally and Linguistically Diverse Children
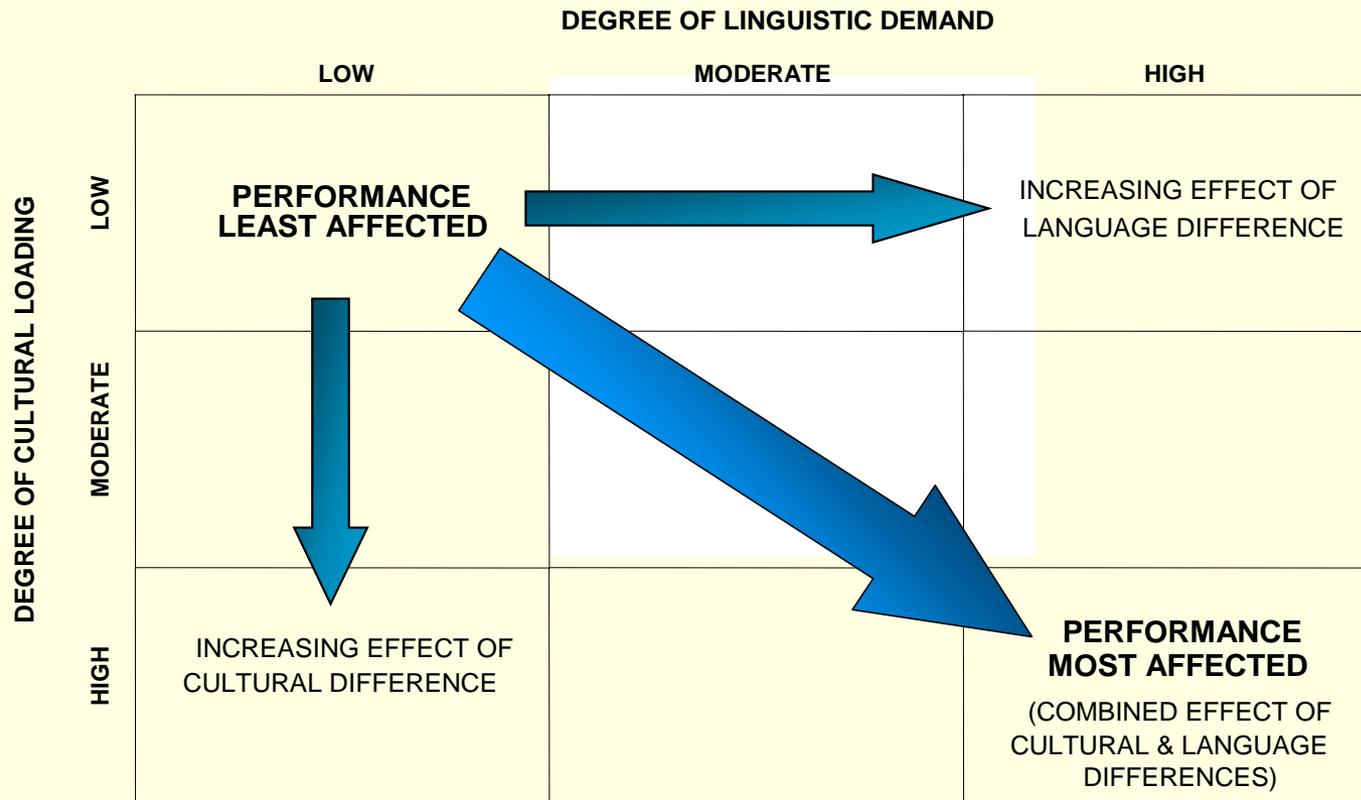


Flanagan, D.P. & Ortiz, S.O. (2001). *Essentials of cross-battery assessment.* New York: Wiley & Sons.

# Using the Framework

- To use this framework (Ortiz & Ochoa, 2005; Ortiz & Dynda, 2005: Rhodes, Ochoa & Ortiz, 2005), practitioners will first identify appropriate tests to administer that relate to the initial referral concern based on the CHC constructs.

- Then, assessors can narrow down these choices to the subtests that have the most appropriate level of cultural loading and linguistic demand.

- After the assessment has been completed, the individual subtest scores are then recorded into one of the nine cells on the C-LIM.

# Using the C-LIM

- Three patterns may emerge on the C-LIM:
  - The effect of cultural loading only
  - The effect of linguistic demand only
  - The overall effect of both culture and language
- When patterns emerge that are not consistent with the expected general pattern of performance for ELL students, then practitioners should look for inter- and intra-cognitive analyses conducted previously and base interpretations on results at that level.

# What Do the Patterns Reflect?

- When patterns diverge from the expected pattern of performance, then the attenuated scores may not simply be reflecting an individual's cultural and linguistic differences, but may be reflecting some inherent weaknesses (Ortiz & Ochoa, 2005; Ortiz & Dynda, 2005; Rhodes, Ochoa & Ortiz, 2005).

- Flanagan and Ortiz (2001) caution that the classification are not necessarily definitive but are currently somewhat subjective.

# CULTURE-LANGUAGE INTERPRETIVE MATRIX (C-LIM): PREDICTED MEAN SCORES FOR ELL STUDENTS

**DEGREE OF LINGUISTIC DEMAND**

|  | **LOW** | **MODERATE** | **HIGH** |
|---|---|---|---|
| **LOW** | Test Name: _____ Score: (_____) (_____) (_____) (_____) (_____) Cell Average = __98__ | Test Name: _____ Score: (_____) (_____) (_____) (_____) (_____) Cell Average = 95__ | Test Name: _____ Score: (_____) (_____) (_____) (_____) (_____) Cell Average = 92__ |
| **MODERATE** | Test Name: _____ Score: (_____) (_____) (_____) (_____) (_____) Cell Average = __95__ | Test Name: _____ Score: (_____) (_____) (_____) (_____) (_____) Cell Average = 92__ | Test Name: _____ Score: (_____) (_____) (_____) (_____) (_____) Cell Average = __89__ |
| **HIGH** | Test Name: _____ Score: (_____) (_____) (_____) (_____) (_____) Cell Average = __92__ | Test Name: _____ Score: (_____) (_____) (_____) (_____) (_____) Cell Average = 89__ | Test Name: _____ Score: (_____) (_____) (_____) (_____) (_____) Cell Average = _85____ |

**DEGREE OF CULTURAL LOADING**

. Ortiz, S.O. (2002).   Best practices in nondistriminatory assessment.  In A. Thomas & J. Grimes (Eds.)
*Best Practices in School Psychology*, 4th Edition.  Washington, DC: National Association
of School Psychologists.

# Woodcock-Johnson III

Name of Examinee: _____   Age: _____   Grade: _____   Date: _____

**DEGREE OF LINGUISTIC DEMAND**

|  | LOW | MODERATE | HIGH |
|---|---|---|---|
| **LOW** | Test Name:  Score: <br> **SPATIAL RELATIONS** (*Gv*-VZ,SR) ( ) <br> _____(_____) <br> _____(_____) <br> _____(_____) <br> _____(_____) <br><br> Cell Average = [ ] | Test Name:  Score: <br> **VISUAL MATCHING** (*Gs*-P,R9)(_____) <br> **NUMBERS REVERSED** (*Gsm*-MW)(_____) <br> _____(_____) <br> _____(_____) <br> _____(_____) <br><br> Cell Average = [_____] | Test Name:  Score: <br> **CONCEPT FORMATION** (*Gf*-I)  (_____) <br> **ANALYSIS SYNTHESIS** (*Gf*-RG)  (_____) <br> **AUD WKING MEMORY** (*Gsm*-MW) (_____) <br><br> Cell Average = [ ] |
| **MODERATE** | Test Name:  Score: <br> **Picture Recognition** (*Gv*-MV) ( ) <br> **PLANNING** (*Gv*-SS)  (_____) <br> **PAIR CANCELLATION** (*Gs*-R9)  (_____) <br> _____(_____) <br> _____(_____) <br> _____(_____) <br> Cell Average = [_____] | Test Name:  Score: <br> VISUAL-AUDITORY LEARNING (*Glr*-MA) (_____) <br> Delayed Recall – Vis Aud Learning (*Glr*-MA) (_____) <br> **RETRIEVAL FLUENCY** (*Glr*-FI)  (_____) <br> **RAPID PICTURE NAMING** (*Glr*-NA)  (_____) <br> _____ (_____) <br> _____(_____) <br><br> Cell Average = [_____] | Test Name:  Score: <br> **MEMORY FOR WORDS** (*Gsm*-MS) (_____) <br> **INCOMPLETE WORDS** (*Ga*-PC)  (_____) <br> **SOUND BLENDING** (*Ga*-PC)  (_____) <br> **AUDITORY ATTENTION** (*Ga*-US/U3) (_____) <br> **DECISION SPEED** (*Gs*-R4)  (_____) <br><br> Cell Average = [ ] |
| **HIGH** | Test Name:  Score: <br> _____(_____) <br> _____(_____) <br> _____(_____) <br> _____(_____) <br> _____(_____) <br> Cell Average = [_____] | Test Name:  Score: <br> _____(_____) <br> _____(_____) <br> _____(_____) <br> _____(_____) <br> _____(_____) <br> Cell Average = [_____] | Test Name:  Score: <br><br> **VERBAL COMP** (*Gc*-VL,LD)  (_____) <br> **GENERAL KNOWLEDGE** (*Gc*-K0) (_____) <br> _____(_____) <br> _____(_____) <br> _____(_____) <br> Cell Average = [_____] |

*(left axis label: DEGREE OF CULTURAL LOADING)*

. Ortiz, S.O. (2002).   Best practices in nondistriminatory assessment.  In A. Thomas & J. Grimes (Eds.) *Best Practices in School Psychology*, 4th Edition.  Washington, DC: National Association of School Psychologists.

# Tier I

**Population:** All students          **Setting:** General education

| Guiding Questions | Student Characteristics | Service Provider | Service Provider Skills | Instruction/ Interventions |
|---|---|---|---|---|
| Is scientifically-based instruction in place for the target student and consideration given to his/her cultural, linguistic, socioeconomic and experiential background?<br><br>Is instruction targeted at the student's level of English proficiency?<br><br>Is the concern examined within the context (i.e., language of instruction, acculturation)<br><br>Has accurate baseline data been collected on a student's mastery of specific instructional standards-based objectives?<br><br>Is L1 and L2 language proficiency monitored regularly<br><br>Has the student's *ecology* been reviewed and background data gathered? (See ELLPre-referral Multi-Source Data Organizer [Brown])<br><br>One of the most important questions to ask is what was the | Achievement is **both** at a lower level when compared to "true-peers" (same levels of language proficiency and acculturation) and occurs at a substantially slower rate | General education teacher<br><br>Collaboration with ELL Specialist<br><br>Collaboration with other specialists such as special education teacher, school psychologist, counselor, social worker, Title I teacher | • Able to provide developmentally, culturally, linguistically and experientially appropriate instruction and assessment to *all* students<br>• Knowledgeable about the cultures represented by their students<br>• Able to describe problem<br>• Able to validate the existence of a problem<br>• Able to describe behaviors/areas in observable terms and establish baselines<br>• Ability to identify the elements that will lead to success in the identified problem area<br>• Able to identify instructional and student variables that may contribute to a solution<br>• Understands that no student characteristic (e.g., disability label, race, SES, cultural group) dictates *a priori* what intervention will work<br>• Skilled in collaboration with other service providers and parents<br>• Screening tools may assess native language skills | • All students receive high-quality, research-based instruction by qualified staff<br>• Universal screening of academics and behavior of all students to identify those who need close monitoring or intervention<br>• Progress monitoring compares ELL student to other true-peer ELL students since their rate of progress cannot be compared to that of the English-only group<br>• Appropriate instructional interventions are developed such as individually designed instructional units or standardized treatments, a "double-dose" of instruction, or different instructional methods<br>• Interventions occur using the general education curriculum<br>• Background knowledge is built<br>• Research-based interventions are implemented for at least 8 – 12 weeks and progress is monitored<br>• Culturally responsive instruction is fundamental at this tier and not an add-on<br>• Explicit and linguistically appropriate instruction is also fundamental (attention given to language forms and functions)<br>• Strategies appropriate for instructing ELL students such as Total Physical Response, visuals, real objects, modeling, repetitive language and gestures must be used<br>• Instruction includes language activities, explicit instruction in phonological awareness, the alphabetic code, vocabulary development and comprehension strategies that are situated within a holistic, sociocultural context<br>• Instruction in native language is considered<br>• Parents are contacted and home-school link is established |

**Tier I**

**Population:** All students          **Setting:** General education

| Guiding Questions | Student Characteristics | Service Provider | Service Provider Skills | Instruction/ Interventions |
|---|---|---|---|---|
| child's pre-school literacy experiences, if any?<br><br>Has there been a vision and hearing screen?<br><br>What tasks *can* the student perform and in what settings?<br><br>Have specific Tier I RTI goals that are culturally, linguistically & experientially appropriate been developed? | | | | |

# Tier II

**Population:** Students who need different instruction from Tier I          **Setting:** Small group setting

| Guiding Question | Student Characteristics | Service Provider | Service Provider Skills | Instruction/ Interventions |
|---|---|---|---|---|
| Will instruction in a small group setting lead to success?<br><br>Has the student's progress been compared to him or herself using data collected over time and across settings?<br><br>Does the child's learning rate appear to be that of an average learning "true-peer"?<br><br>Is the child responding or not to interventions? | Achievement continues **both** at a lower level as compared to "true-peers" and occurs at a substantially slower rate | Specialist (Title I, Reading Teacher, Special Education Teacher, Related Service Provider)<br><br>General education teacher responsible for integrating all tiers of instruction into the classroom and monitoring instruction | • Able to ensure that culturally and linguistically appropriate classroom instruction was provided in Tier I<br>• Able to accurately monitor and report student's progress | • Option of receiving different curriculum from Tier I (time and intensity) and it is systematic and explicit instruction with modeling, multiple examples, and feedback<br>• This supplemental instruction is in addition to the time allowed for core reading instruction in general ed<br>• Curriculum addresses the specific deficit(s) and progress is carefully monitored and reported<br>• Observations must occur across settings and be of various activities/tasks<br>• Assess potential<br>  o Testing the limits (nonstandardized administration)<br>  o Dynamic assessment (test-teach-test)<br>• If the student does not respond to interventions, consider referring to school team for a possible special education evaluation. |

# Tier III

**Population:** Students who need the most intensive interventions available          **Setting:** Alternate setting

NOTE: Parental rights and consent are required at this tier because the student is removed from the general education environment for instruction. Student could be qualified to receive special education services under the eligibility category of Specific Learning Disability and have an IEP developed at this tier without further assessment.

| Guiding Question | Student Characteristics | Service Provider | Service Provider Skills | Instruction/ Interventions |
|---|---|---|---|---|
| How many rounds of Tier II instruction (approximately 10 weeks for each round) has the student had?<br><br>Will these students be successful with different curriculum, teaching approaches and individualized setting?<br><br>Is there evidence of progress from previous interventions?<br><br>For LD:<br><br>What are the functional, developmental, academic, linguistic, and cultural needs?<br><br>Have you gathered information from parents?<br><br>Are your instruments technically sound and valid for the student you are assessing?  If not, are test results interpreted in a manner that considers student's language proficiency in L1 and L2 and their level of acculturation?<br><br>Are your procedures and assessments nondiscriminatory?<br><br>Do your assessments include information in the students home language and English?<br><br>Have you assessed all areas of suspected disability?<br><br>Has the student received continuous instruction? (Absences do not make up a good portion of the student's profile.) | Achievement continues **both** at a lower level than like-peers, occurs at a substantially slower rate, and the student needs individual instruction in order to learn | Special education teacher or related service provider<br><br>General education teacher responsible for integrating all tiers of instruction into the classroom<br><br>All service providers must collaborate with the ELL specialist. | • Able to ensure that adequate instruction was provided in Tiers I and II<br>• Able to accurately monitor student's progress<br>• Able to develop culturally and linguistically appropriate IEP and plan appropriate individualized instruction<br>• Instruction must be appropriate to the student's development level and needs, level of language proficiency and acculturation<br>• Native language instruction/ Intervention must be considered | • Option of receiving different curriculum from Tiers I and II<br>• Curriculum and instruction addresses the specific deficit area(s) and progress is carefully monitored<br>• Standardized cognitive and academic assessment should be conducted at this tier to identify processing profile<br>• If cognitive assessment is conducted, native language assessment should be included<br>• Interpretation of standardized test data must be interpreted within the context of student's language proficiency and acculturation<br>• Does the student differ from like peers in the following  ways:<br>  o  Level of performance<br>  o  Learning slope<br>• Monitoring the system to determine the demographic characteristics of students served at Tier III |

# What ALL Teachers Need to Know

# English Sounds that Do Not Exist in Spanish

■ Twenty-seven consonants and consonant blends are the same in English and Spanish. However, there are many letters and combinations that are pronounced differently or that do not exist in Spanish.

■ There sounds do not exist:
- Initial consonants of *g, h, j, r, v, z*
- Digraphs of ch, dg, sh, th, wh

# English Sounds that Do Not Exist in Spanish

- Letter combinations: *-ck, -ght, -nd, -ng, -nt, sc-, sch-, scr-, sk-, sl-, sm-, sn-, sp-, spl-, spr-, sq-, st-, str-, sw-, -tch, thr-, tw-*

- Short vowel sounds */a/, /e/, /i/, /o/, /u/*

- Long vowel sounds */a/* represented as *a-e, ai, ay, ei; /e/* represented as *ea, ee, ie, y; /i/* represented as *I, i-e, ight, -ind, y; /o/* represented by *o-e, oe, ow, oa, o; /u/* represented by *u-e, u*

# English Sounds that Do Not Exist in Spanish

- Diphthongs *au, aw, ew, oi, ou, ow, oy, ue*
- R-controlled vowels */ar/, /er/, /ir/, /or/, /ur/*
- Schwa *a* as in *again, a* as in *second a* in *camera* and *around, e* as in *stolen, e* as in the second *e* in *obedience, o* as in *dragon, u* as in *circus,* and *u* as in *suspect*
- Silent letters *–gn-, kn-, -mb, wr-*

# Phonemes Commonly Mispronounced in English by Spanish-speaking Students

- **/st/ for /est/**
- *Phonetic error:* addition
- *Phonological strategy:* linguistic transference.  This transfer occurs in initial word positions because the syllabic consonant-vowel structure of the Spanish language means that no words starts with two consonants (besides clusters present in the language).
- **/sh/ for /ch/**
- *Phonetic error:* change in the mode of articulation (a fricative for an affricate)
- *Phonological strategy:* linguistic transference.  This transfer occurs because the sound /sh/ does not exist in Spanish, and it is substituted for the most similar one in Spanish; both phonemes are voiceless linguopalatals in terms of place of articulation.
- **/b/ for /v/**
- *Phonetic error:* change in place and manner of articulation (a fricative is converted into an occlusive)
- *Phonological strategy:* linguistic transference.  This transfer occurs because the sound /v/ is pronounced in Spanish as /b/.

# Phonemes Commonly Mispronounced in English by Spanish-speaking Students

- **/f/ or /s/ for /th/**
- *Phonetic error:* change in the place and manner of articulation (to a labiodental for /f/ and to a linguoalvelar for /s/)
- *Phonological strategy:* linguistic transference.  This transfer occurs because the /th/ does not exist in Spanish and is substituted for phonemes that have the same manner of articulation and voice.
- **/d/ for /b/ and /t/ for /th/**
- *Phonetic error:* change in place and manner of articulation ( a voiceless occlusive for a voiceless fricative)
- *Phonological strategy:* linguistic transference.  This transfer occurs because the phoneme /th/ does not exist in Spanish, and the /d/ and /t/ phonemes are pronounced with different points and manners of articulation in Spanish than in English.

# Phonemes Commonly Mispronounced in English by Spanish-speaking Students

- /ch/ for /dz/
- *Phonetic error:* change in a voice (a voiceless for a voiced phoneme)
- *Phonological strategy:* linguistic transference. This transfer occurs because the sound /dz/ does not exist in Spanish.
- /n/ for /ing/
- *Phonetic error:* change in place of articulation (a voiced linguoalveolar for a voiced linguopalatal)
- *Phonological strategy:* linguistic transference. This transfer occurs because the phoneme /ing/ does not exist in Spanish.

# Phonemes Commonly Mispronounced in English by Spanish-speaking Students

- *l*ch/ for /th/
- *Phonetic error:* change in mode of articulation (a voiceless affricate for a voiceless fricative)
- *Phonological strategy:* linguistic transfer.  This transfer occurs because the phoneme /th/ does not exist in Spanish.
- /ks/ for /rks/, /f/ for /lf/, /n/ for /nd/, /n/ for /nt/, and /s/ for /st/
- *Phonetic error:* reductions of consonant clusters in final position
- *Phonological strategy:* avoidance.  This occurs because the /ks/, /rks/, /lf/, /nt/, and /st/ phonemes do not exist in Spanish, due to its consonant-vowel syllabic structure.

# Phonemes Commonly Mispronounced in English by Spanish-speaking Students

- /ch/ for /th/
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# Phonemic Awareness and ELLs

- Rhyming may be difficult for ELL students because it is so dependent on English oral language proficiency.

- Nursery rhymes in Spanish are more likely to play with vowels, while in English they are more likely to play with consonants.

- ELL students need to see rhyming words in print as well as hear them.

- Two types of phoneme manipulations seem to be directly involved in the reading and spelling process: blending and segmenting.

# Teacher Roles in RTI

- What new roles will teachers have?
  - Delivering scientifically-based instruction for all students including ELL students
  - Administering curriculum-based measures
  - Regularly monitoring progress
  - Interpreting data
  - Grouping students
  - Choosing appropriate interventions
  - Making decisions as to which students move into higher tiers

*To teach in a manner that respects and cares for the souls of our students is essential if we are to provide the necessary conditions where learning can most deeply and intimately begin.*
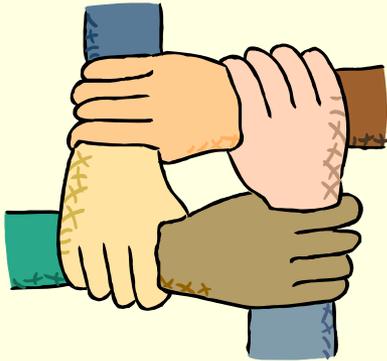


- bell hooks, *Teaching to Transgress*

# To Conclude…

## "It is essential to find out what works *with whom"*



(cited in NCCRESt, 2005, p. 5).

http://www.nccrest.org/