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Assessing and Treating the Speech and Language Skills of Bilingual Children

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Inez Miller Conference on Communication Sciences and Disorders
 University of Central Oklahoma
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My Story

Your Story (Edmond)

- ◆ 7.2%: Lang. other than English spoken at home-age 5+ (~6,300)
- ◆ Student Population (via Edmond Public Schools)
 - White- 65.4%
 - Black- 10.2%
 - Hispanic- 9.3%
 - Mixed- 7.8%
 - Asian- 5.0%
 - American Indian- 2.1%
- ◆ 2.3 % English Language Learners (529)
- ◆ Per pupil funding of \$5,947 (48th lowest in OK)

An Clinical Practice Story...

- ◆ you are about to hear is true.
- ◆ The names have been changed to protect...well, in accordance with HIPAA guidelines.

The Background

- ◆ A set of twin boys (A. & B.) aged 3;8 referred by their aunt (whose children are already receiving services) for a speech and language evaluation.
- ◆ Heard and spoke Amharic (Ethiopia) since birth; exposed to English through older sister and in English-speaking school for 5 months.
- ◆ Aunt concerned boys not developing in English.
- ◆ What would you do?

A Note on Terminology

- ◆ LEP
- ◆ NEP
- ◆ CLD
- ◆ ELL
- ◆ DLL
- ◆ Bilingual

Prime Directives

- ◆ Least-Biased Assessment
 - Determine *difference* vs. *disorder* vs. *difficulty*
(Westby & Hwa-Froehlich, 2010; in Shatz & Wilkinson, *The Education of English Language Learners*, Guilford Press)
- ◆ Evidence-Based Intervention

To Accomplish the Prime Directives

- ◆ Go beyond language dominance
- ◆ Assess in ways other than standardized tests
- ◆ Treat in the non-English language (but in English too)

Steps in Completing a Valid Assessment

- ◆ Understand the construct you are evaluating
- ◆ Determine the question you are trying to answer
- ◆ Gather data from a variety of sources
- ◆ Determine the logistics of the assessment

Steps in Completing a Valid Assessment

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What is Bilingualism?

Bilingualism “Defined”

“A speaker [who] is bilingual is able to function in two (or more) languages either in monolingual or bilingual communities in accordance with sociocultural demands...”

(Skutnabb-Kangas, 1995, p. 46)

Defining “Bilingual”

- ◆ “Defining who is or is not bilingual is essentially elusive and ultimately impossible. Some categorization is often necessary and helpful to make sense of the world.”

Baker (1996, p. 13)

Humans love...



- ◆ To *categorize*
 - to describe by labeling or giving a name to; to characterize (dictionary.com)
 - process in which ideas and objects are recognized, differentiated, and understood (wikipedia).

“Categorizing” Bilinguals

- ◆ Simultaneous/Bilingual First Language Acquisition (BFLA)
- ◆ Sequential
 - Age 3? (McLaughlin; 1972)
 - Age 5? (Meisel, 2004)
- ◆ Are these categories reliable and valid? Why? Why not?

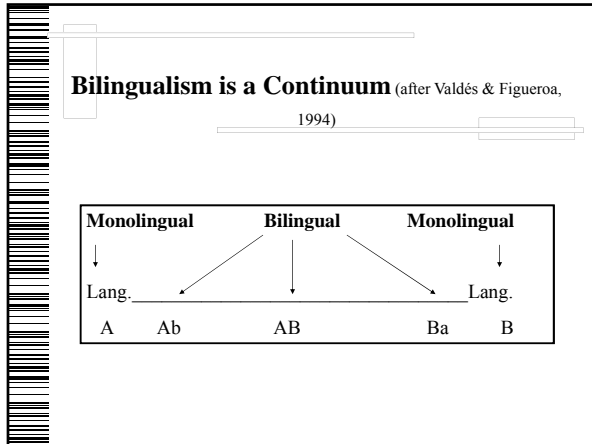
Bilingualism “rather than being an absolute condition is a relative one. Bilingual individuals can be both slightly bilingual or very bilingual.”
(Valdés & Figueroa, 1994, p. 115)

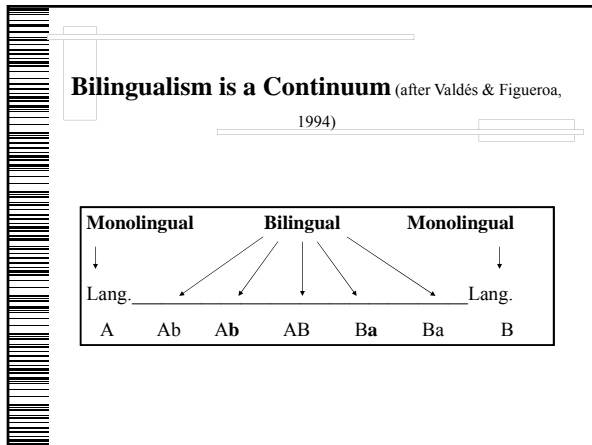
Bilingualism is a Continuum (after Valdés & Figueroa, 1994)

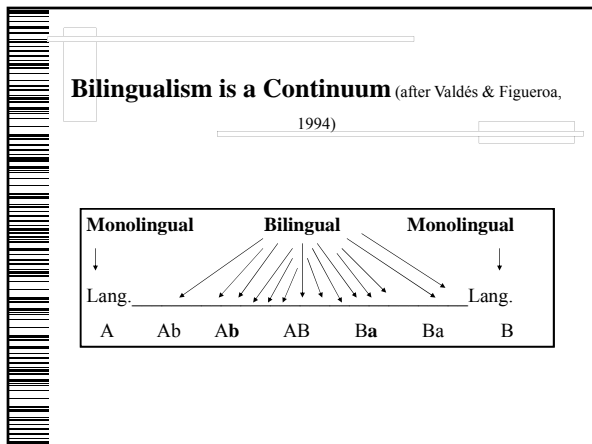
Monolingual	Monolingual
↓	↓
Lang. A	Lang. B

Bilingualism is a Continuum (after Valdés & Figueroa, 1994)

Monolingual	Bilingual	Monolingual
↓	↓	↓
Lang. A		Lang. B







Bilingualism on a Continuum:
Overall Proficiency

Bilingual

Ab Ab Ab AB Ba Ba Ba

Bilingualism on a Continuum:
Overall Proficiency

Bilingual

Ab Ab Ab ~~AB~~ Ba Ba Ba

Are Skills the Same in each
Language?

- ◆ What occurs over time?

**Bilingualism on a Continuum-
Revised: Modality Specific**

Vocabulary	Ab	Ab	Ab	AB	Ba	Ba	Ba
Grammar	Ab	Ab	Ab	AB	Ba	Ba	Ba
Word Meaning	Ab	Ab	Ab	AB	Ba	Ba	Ba
Speech Sounds	Ab	Ab	Ab	AB	Ba	Ba	Ba

**Bilingualism on a Continuum-
Revised: 3 months of L2 Exposure**

Vocabulary	Ab	Ab	Ab	AB	Ba	Ba	Ba
Grammar	Ab	Ab	Ab	AB	Ba	Ba	Ba
Word Meaning	Ab	Ab	Ab	AB	Ba	Ba	Ba
Speech Sounds	Ab	Ab	Ab	AB	Ba	Ba	Ba

**Bilingualism on a Continuum-
Revised: 6 months of L2 Exposure**

Vocabulary	Ab	Ab	Ab	AB	Ba	Ba	Ba
Grammar	Ab	Ab	Ab	AB	Ba	Ba	Ba
Word Meaning	Ab	Ab	Ab	AB	Ba	Ba	Ba
Speech Sounds	Ab	Ab	Ab	AB	Ba	Ba	Ba

**Bilingualism on a Continuum-
Revised: 9 months of L2 Exposure**

Vocabulary _____
Ab Ab **Ab** AB Ba Ba Ba

Grammar _____
Ab Ab **Ab** AB Ba Ba Ba

Word Meaning _____
Ab Ab **Ab** AB Ba Ba Ba

Speech Sounds _____
Ab Ab **Ab** AB Ba Ba Ba

**Bilingualism on a Continuum-
Revised: 12 months of L2 Exposure**

Vocabulary _____
Ab Ab **Ab** AB Ba Ba Ba

Grammar _____
Ab Ab **Ab** AB Ba Ba Ba

Word Meaning _____
Ab Ab **Ab** AB Ba Ba Ba

Speech Sounds _____
Ab Ab **Ab** AB Ba Ba Ba

Dominance??

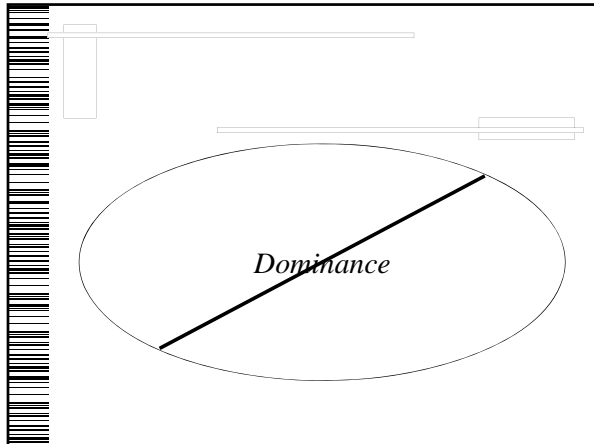
Psychologically Responsible?
(Menn)

- ◆ Welsh-English bilingual children, ages 2;6-5;0 (Ball, Müller, & Munro, 2001)
 - Welsh-dominant children acquired the trill earlier than their peers who were English-dominant
- ◆ But

- ◆ French-English bilingual 2-year-olds (Paradis, 2001)
 - English-dominant bilinguals preserved higher frequency of 2nd syllables than did French-dominant bilinguals. However,
 - French-dominant bilinguals preserved a higher frequency of 3rd syllables than did English-dominant bilinguals

But Wait, There's More...

- ◆ Bilingual Cantonese- and Putonghua-speaking children, ages 2;6-4;11 (Law & So, 2006)
 - Both Cantonese-dominant and Putonghua-dominant children acquired Cantonese phonology first



Bilingualism "Defined"

A bilingual speaker is one who has the "past, present, or future need for two languages." (Kohnert, 2008, p. 18)

Language Acquisition

Is the myth dead yet?

- ◆ Despite the acquisition of two languages, bilingual children do **not** appear to be “remarkably delayed nor remarkably advanced” relative to that of monolingual children (Nicoladis & Genesee, 1997, p. 264).

Trajectory of Bilingual Language Development

- ◆ Group data indicate that bilingual language development is similar, although not identical, to monolingual language development.
- ◆ How does it vary?

Language Variation in Bilinguals


- ◆ Acceleration
 - Faster rate of acquisition in bilinguals as compared to monolinguals (Fabiano, 2006)
- ◆ Delay (prefer *Deceleration*)
 - Slower rate of acquisition in bilinguals as compared to monolinguals (Vihman, 1982; Gildersleeve, Davis, & Stubbe, 1996)
- ◆ Transfer (prefer *Cross-Linguistic Effects*)
 - Language-specific features found in productions of the other language (Paradis, 2001)

Vocabulary Development (Pearson et al., 1993)

Age	Monolingual		Bilingual	
	Avg.	Range	Avg.	Range
6-17 mos.	44	9-79	40	9-71
20-21 mos.	109	38-180	168	50-286
24-25 mos.	286	116-456	190	54-326


By age 3, 2000-3000 words (Hulit & Howard, 1997)

In a language sample, a child produces:




horse
caballo

How many words are in the child's lexical system? 1 or 2?



horse
caballo

How many words are in the child's lexical system? 1 or 2?



horse (1)
caballo (2)
the concept of "horse" (1)

Type of Vocabulary Items (Peña & Stubbe Kester, 2004)

- ◆ Total Vocabulary
 - Total vocabulary in L1 ≠ Total vocabulary in L2
 - Bilinguals ≠ Monolinguals
- ◆ Conceptual Vocabulary
 - Conceptual vocabulary: L1 = L2
 - Bilinguals = Monolinguals
- ◆ Translation Equivalents
 - Bilingual's vocabulary is not all translation equivalents (Peña, Božić, & Zlatić, 2002)
 - percentage of unique items ~68%

$1 + 1 \neq 2$

- ◆ For bilingual children, language skills are not equally distributed across the two languages.

Word meaning performance differs by language (Peña, Bedore, & Rappazzo, 2003)

Level of Difficulty	Spanish	English
Easy	-expressive functions (<i>tell me what you do with a hammer</i>) -receptive functions (<i>show me what you do with a hammer</i>)	-expressive functions -receptive similarities and differences
Medium	-receptive similarities & differences (<i>which 2 objects are the same?</i>)	-receptive functions
Hard	-expressive linguistic concepts (<i>Why is X bigger than Y?</i>) -expressive associations	-expressive linguistic concepts -expressive associations

Word meaning performance differs by language (Peña, Bedore, & Rappazzo, 2003)

Level of Difficulty	Spanish	English
Easy	-expressive functions -receptive functions	-expressive functions -receptive similarities and differences
Medium	-receptive similarities & differences	-receptive functions
Hard	-expressive linguistic concepts -expressive associations	-expressive linguistic concepts -expressive associations

- Stronger/Weaker Language** (Paradis et al., 2011)
- ◆ Longer MLU
 - ◆ More frequent advanced morpho-syntactic structures
 - ◆ Higher NDW
 - ◆ Fewer pauses or hesitations
 - ◆ Greater volubility

Cross-Linguistic Effects

เขตจอดเรือ
BOAT AREA

อย่าขับเรือโดยประมาทหรือใช้ความเร็วสูงในเขตนี้
ถ้าสวมใส่เสื้อชูชีพทุกครั้งที่มีกาขับเรือจะปลอดภัยกว่า

DON'T DRIVE THE BOATS BY CARELESS OR USE HIGHSPEED NEAR
PLEASE WEAR PRESERVER EVERY TIMES WHEN DRIVE OR TRAVEL BY WATERWAY

Don't Drive the Boats by Careless or Use Highspeed Near
Please Wear Preserver Every Times When Drive or Travel by Waterway

Cross-Linguistic Effects

- ◆ Spanish-influenced English
 - *red house* → *house red*
 - /kɹet/ (*crate*) → [kret]
- ◆ English-influenced Spanish
 - *to park* (verb) → *parquear*
 - /flɔr/ (*flower*) → [floə]
 - /komo se jama/ → [ko^umo^u se^l jama]

Cross-Linguistic Effects...

- ◆ are not highly occurring (~1%) (Fabiano & Goldstein, 2005)
- ◆ are variable (Schnitzer & Krasinski, 1994; 1996)
- ◆ occur in both languages (Gildersleeve-Neumann et al., 2009)
- ◆ are not equally represented in both languages (Goldstein, 2008)
- ◆ are not errors
- ◆ are not treated

Bilingual Code-Mixing (Paradis, et al., 2011)

- ◆ “Use of phonological, lexical, morphosyntactic, or pragmatic patterns from two languages in the same utterance or stretch of conversation” (p. 89).

Types of Bilingual Code-Mixing (Paradis, et al., 2011)

- ◆ Intra-utterance: *Alguien se murió en ese cuarto* [someone died in that room...] *that he sleeps in.*
- ◆ Inter-utterance: *Pa ¿me vas a comprar un jugo?* [are you going to buy me juice] *It cos' 25 cents.*
- ◆ Mixing words: *Estamos como marido y* [we are like man and] *woman.*
- ◆ Mixing clauses: *You know how to swim but no te tapa* [...it won't be over your head]

Second Language Acquisition



Stages of Second Language Acquisition (Cummins, 2000)

- **BICS:** *Basic Interpersonal Communication Skills*
- **CALP:** *Cognitive Academic Language Proficiency*
- **CUP:** *Common Underlying Proficiency*

Trajectory of Bilingual Language Development

- ♦ Group data indicate that bilingual language development is similar, although not identical, to monolingual language development...over time.
 - After 21 months of exposure to English, sequential bilinguals exhibited skills within the normal range of monolinguals (Paradis, 2007):
 - 40% for morphology
 - 65% for receptive vocabulary
 - 90% for story grammar

- ♦ After 21 months of exposure to English, sequential bilinguals exhibited skills within the normal range of monolinguals (Paradis, 2007):
 - 40% for morphology
 - 65% for receptive vocabulary
 - 90% for story grammar
- ♦ After an avg. of 8 mos. exposure to English, sequential bilinguals, ages 4;6-6;9) averaged consonant accuracy of 90% (Gilhool, Goldstein, Burrows, & Paradis, 2009)
 - Only 2/10 children had consonant accuracy <90% (83%)

Stage I: Pre-Production

- ◆ first 3 months of second language (L2) exposure
- ◆ silent period
- ◆ focusing on comprehension

Stage II: Early Production

- ◆ 3-6 months after L2 exposure
- ◆ focusing on comprehension
- ◆ using 1-3 word phrases
- ◆ may be using formulaic expressions (“gimme five”)

Stage III: Speech Emergence

- ◆ 6 months – 2 years after L2 exposure
- ◆ increased comprehension
- ◆ using simple sentences by expanding vocabulary
- ◆ continued grammatical errors

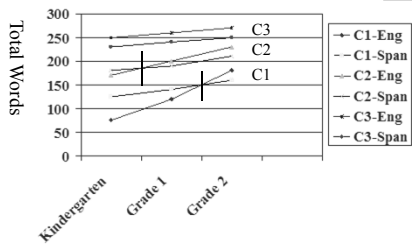
Stage IV: Intermediate Fluency

- ◆ 2-3 years after L2 exposure
- ◆ improved comprehension
- ◆ adequate face-to-face conversational skills
- ◆ more extensive vocabulary
- ◆ few grammatical errors

Trajectory of Bilingual Language Development

- ◆ Group data indicate that bilingual language development is similar, although not identical, to monolingual language development, but
- ◆ consider individual variation

Language Trajectory (Iglesias, 2003)



Bilingual Children with Language Disorders

- ◆ Bilingual children with language impairments showed commensurate language skills to monolinguals with language impairments (Paradis, 2005).
- ◆ Bilingual children with language impairments exhibited same type and frequency of grammatical errors as monolinguals with language impairments (Paradis, Crago, Genesee, & Rice, 2003).

Bilingual Children with Language Disorders

- ◆ Bilingual children with Down Syndrome (DS) showed commensurate language skills to monolingual children with DS (Kay-Raining Bird, Cleave, Trudeau, Thordardottir, Sutton, & Thorpe, 2005).
- ◆ Bilingual children with language impairments exhibit (protracted) periods of plateaus or regressions (in grammatical development) (in Kohnert, 2008).

Bilingual Children with Language Disorders

- ◆ A disorder in bilinguals is not caused by bilingualism or cured by monolingualism (Kohnert, 2008).
- ◆ “Being monolingual in a bilingual family or community exacerbates a weakness, turning a disability into a handicap” (Kohnert, 2008, pp. 143-144).
- ◆ Being bilingual, does not “cause” or exacerbate a communication disorder, learning disability, reading disorder, etc. However, being bilingual does complicate differentially diagnosing these disorders.

Steps in Completing a Valid Assessment

- ◆ Understand the construct you are evaluating
- ◆ Determine the question you are trying to answer
- ◆ Gather data from a variety of sources
- ◆ Determine the logistics of the assessment

Questions in Assessment

- ◆ Is the child typically developing or does the child have a language disorder?
- ◆ What are the child's strengths and weaknesses?
- ◆ What is the child's learning style?
- ◆ What is the child's ability to learn?
- ◆ What type of progress is the child making (in academics, therapy, etc.)?

To Gauge Language Development:

- ◆ Assess all academic/language skills in all languages with different interlocutors over time using formal and informal measures. These measures should be product- and process-based.
 - Yes, I know how how much time it takes...
- ...but we want to get it right!

For bilingual children, gather information on:

- ◆ the socio-cultural characteristics in your community (if need be, from a cultural broker)
- ◆ the structure of the non-English language
 - vocabulary, grammar, word meaning, speech sounds, pragmatics
- ◆ age of acquisition
 - Bilingual First Language Acquisition (BFLA), simultaneous
 - sequential
- ◆ language history
- ◆ use
 - how often and with whom is each language used
- ◆ proficiency
 - how well is each language used

Steps in Completing a Valid Assessment

- ◆ Understand the construct you are evaluating
- ◆ Determine the question you are trying to answer
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- ◆ Determine the logistics of the assessment

The End before the Beginning

- ◆ Identification as *at-risk* for language impairment (semantics & syntax) **not** predicted by being bilingual (Peña, Gillam, Bedore, & Bohman, 2011, AJSLP, Aug. 5, 2011).
- ◆ Finding assumes both languages are tested.

Philosophy of Assessment

- ◆ Assessment is more than differential (difficulty?) diagnosis
 - Strengths and weaknesses
 - Learning style
 - Ability to learn
 - Progress in therapy



Standardized tests...

- ◆ rarely include bilingual children in the normative data (they usually are specifically excluded)
- ◆ rarely include bilingual children in the norm data, even for non-English tests
- ◆ do not test the full range of bilingual skills (i.e., from a “little” bilingual to “a lot” bilingual”), even for tests that include bilingual children

To use standardized tests for bilingual children, determine...

- ♦ if the norms include bilingual children
- ♦ if the bilingual children in the norms are similar to the group with whom you will use the test
- ♦ if confidence intervals are provided
- ♦ if the manual reports data on:
 - sensitivity (i.e., percentage of individuals correctly identified with a disorder)
 - specificity (i.e., percentage of individuals correctly identified as typically developing)

Sensitivity/Specificity Example: PLS-4 Spanish (Zimmerman, Steiner, & Pond, 2002)

Age	Sensitivity (total lang. score)	Specificity (total lang. score)
3;0-3;11		
4;0-4;11		
5;0-5;11		
Total		

Alter Testing Procedures

- ♦ Choose items from the buffet that you find most delectable:



Informal Procedures (compiled from Cheng, 1993; Erickson & Iglesias, 1986; Kayser, 1989; 1993, 1995; Langdon, 1992; Norris, Juarez, & Perkins, 1989; Roseberry-McKibbin, 1994; Taylor & Payne, 1983; Terrell & Terrell, 1993; Van Kuelen, Weddington, & DeBose, 1998; Vaughn-Cooke, 1986)

- ◆ standardized tests used informally
 - give more detailed explanations of tasks
 - add practice items
 - repeat stimuli and/or re-word test
 - test beyond the ceiling
 - ask individuals to explain answers
 - Re-score. (1) record scores as indicated in manual. (2) Re-score giving credit for items correct in person's language/dialect.
 - Do *not* score dialect differences as errors

Informal Procedures (compiled from Cheng, 1993; Erickson & Iglesias, 1986; Kayser, 1989; 1993, 1995; Langdon, 1992; Norris, Juarez, & Perkins, 1989; Roseberry-McKibbin, 1994; Taylor & Payne, 1983; Terrell & Terrell, 1993; Van Kuelen, Weddington, & DeBose, 1998; Vaughn-Cooke, 1986)

- ◆ informal checklists
- ◆ compare to published data on similar children
- ◆ focus more on process-based measures (rate and quality of "learning") rather than on static measures (Hwa-Froelich & Matsuo, 2005; Peña & Quinn, 1997).
- ◆ Narratives/Conversational Samples (Gutierrez-Ciellen, 2004)
 - Measure number of different words (NDW); number of clauses per utterance; cohesion

Informal Measures

- ◆ Parent questionnaire (e.g., Restrepo, 1998)
- ◆ Classroom (Roseberry-McKibbin, 1995; 2002)
 - Teacher questionnaire
 - Portfolio assessment
 - Observation
 - Academic tasks
 - Curriculum
 - Literacy-related tasks
 - Test-taking abilities

Dynamic Assessment

- ◆ Based on the work of Vygotsky (1978) and his concept of Zone of Proximal Development: "distance between the level of performance a child can reach unaided and the level of participation that can be accomplished when guided by a more knowledgeable participant." (Campione & Brown, 1987, p. 83).
 - Can be interpreted as "potential."

Goals of Dynamic Assessment

- ◆ Profile learner's abilities
- ◆ Observe learner's modifiability
- ◆ Induce active, self-regulated learning
- ◆ Inform intervention

Tapping Future Skills (or Modifiability) (Peña, 1996)

- ◆ modifiability (i.e., change through mediation)
 - to determine how a child learns and what is needed for that child to learn and generalize the task
- ◆ modifiability involves 3 factors:
 - child responsiveness (how child responds to and uses new information)
 - examiner effort (quantity and quality of effort needed to make a change)
 - transfer (generalization of new skills)

Components of Dynamic Assessment (Peña, 1996)

- ◆ Test
- ◆ Teach
- ◆ Re-Test

Test

Central Principles of Teach Component

- ◆ Clinician models the target behaviors
- ◆ Strategies are always modeled in meaningful contexts
- ◆ Children are made aware of the nature of the strategies and when and how they are to be applied.
- ◆ Children lead some of the time.
- ◆ As skills are mastered, increase demands.

Components to Measure

- ◆ Examiner Effort
 - how much aid is needed by individuals to maximize their performance
- ◆ Child Responsiveness
 - how rapidly child changes to teaching
- ◆ Transfer
 - the generalization of the task to other tasks & other domains

Research Support (Lidz, 1991, p. 50)

- ◆ Mediation is associated with improved performance on a variety of tasks for a variety of learners.
- ◆ Practice alone does not account for these effects.
- ◆ Two powerful components of the MLE are
 - verbalization
 - elaborated feedback (correctness of the performance and rationale for the procedures).
- ◆ The greatest degree of improvement is for lower-functioning children.

Testing Don'ts
(Kayser, 1993; Roseberry-McKibbin, 1995)

- ◆ Don't use norm-referenced tests only
- ◆ Don't use only a language sample or multiple assessments to qualify someone for services
- ◆ Don't use tests administered in English only
- ◆ Don't assume that features of a second language are characteristics of a disorder (overdiagnosis)
- ◆ Don't assume that support personnel are automatically trained

Don't Use Translated Tests

- ◆ There are differences in structure & content of each language.
- ◆ It implies (mistakenly) that all children receive similar socialization, language input, academic instruction, etc.
- ◆ Differences in frequency of target words vary from language to language
- ◆ Grammatical forms may not be equivalent
- ◆ They do not tap into ability to acquire language.

Responsibilities & Roles of Monolingual SLP (ASHA, 1985)

- ◆ **Monolingual SLPs may:**
 - test in English
 - perform oral-peripheral exam
 - conduct hearing screenings
 - complete nonverbal assessments
 - complete nonverbal assessments
 - conduct family interview (w/ support personnel)
 - be an advocate for the client and family

Responsibilities & Roles of Monolingual SLP (ASHA, 1985)

- ◆ **Strategies for SLP unable to speak child's language**
 - hire bilingual consultants or itinerant bilingual SLPs
 - utilize support personnel
 - establish networks with university programs,
 - create CFY & graduate practicum sites
 - develop interdisciplinary teams

Sources of Information

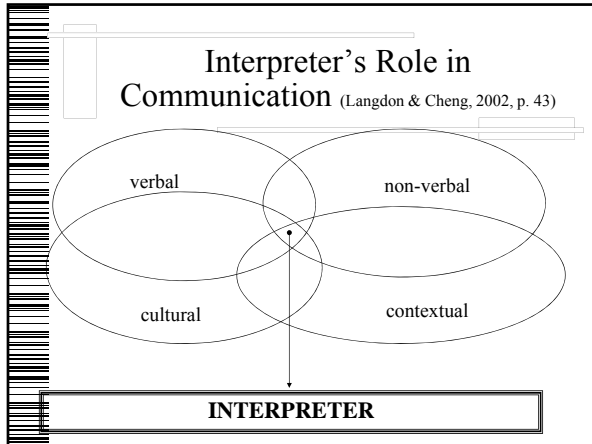
- ◆ Parents/Primary caregivers
- ◆ Teachers
- ◆ Siblings/other relatives?
- ◆ Other professionals

Interpreter and Translators (Langdon & Cheng, 2003)

- ◆ The interpreter acts as a bridge in the communication process between SLP and child/family.
- ◆ The use of an interpreter does not negate your role as SLP...it is your job to construct assessment and intervention and to train an interpreter how to work with you effectively in your Dx or Tx sessions.

Interpreters & Translators

- ◆ Interpretation
 - conveying information from one language to another when the message is oral
- ◆ Translating
 - conveying information from one language to another when the message is written



- ### Recruitment and Retention of Interpreters
- ♦ Asking anyone who speaks a language other than English without appropriate training should be avoided.
 - ♦ The interpreter, once trained, should be permanent (i.e., you shouldn't use a different interpreter every time you assess/treat a child).
 - Be sure they understand their role!
 - ♦ Asking friends, neighbors, siblings, or relatives should be avoided.

- ### 3 Main Steps
- ♦ Briefing
 - plan the session
 - train the interpreter
 - review critical questions/issues
 - ♦ Interaction
 - time with the family
 - interpret verbal/nonverbal cues
 - ♦ Debriefing
 - review the outcomes

Assessment with an Interpreter
(Langdon, 2003)

- ◆ SLP makes observations on body language of the child and notes if the interpreter uses too many words when instructing the child.
- ◆ The interpreter should record all responses and ask for clarification when questions arise.
- ◆ The SLP reviews the interpreter's impressions
- ◆ The SLP and interpreter discuss any difficulties related to the process.
- ◆ All reports should state that an assessment was performed with the assistance of an interpreter.
- ◆ The SLP makes final recommendations- The SLP has the "final say."

Intervention with an Interpreter
(Langdon, 2003)

- ◆ An interpreter and SLP should discuss what is planned for each therapy session
- ◆ An interpreter should seek clarification if something is unclear
- ◆ An interpreter should convey messages that seem clear, and be able to explain issues in multiple ways

Measure:

- ◆ Change over time
- ◆ Modifiability
 - How easy or hard is it to teach the child a new skill?
 - How hard do you have to work to teach the child a new skill?
- ◆ Generalization to new situations
- ◆ Whether the disorder exists in both languages (it should)

Steps in Completing a Valid Assessment

- ◆ Understand the construct you are evaluating
- ◆ Determine the question you are trying to answer
- ◆ Gather data from a variety of sources
- ◆ Determine the logistics of the assessment

Institution of Assessment

- ◆ 1:1 model
 - Every professional assesses
 - Bilingual consultant/diagnostician
 - trained support personnel
- ◆ Assessment Teams
 - Disciplinary → Interdisciplinary → Transdisciplinary
 - SLP and/or interpreter/translator and/or regular ed. teacher and/or special ed. teacher and/or ...
- ◆ Assessment Center
- ◆ Interpreter/Translator

In the end...

- ◆ Do not focus on trying to figure out, “in which language the child is *dominant*.”
 - Focus on “thickly” describing skills in all domains in both languages.
- ◆ Do not focus on type of bilingual, etiology of the disorder, or standardized scores.
 - Focus on behaviors/symptoms/characteristics.

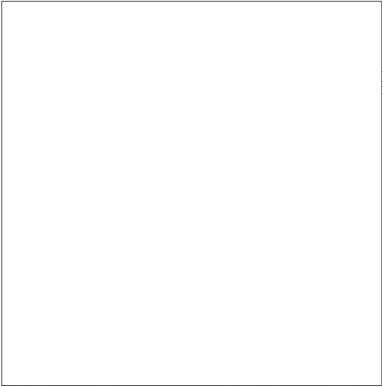
Real-life Assessment and Intervention Situations

- ◆ What would you do?
 - You are a monolingual SLP who has received the file for a 3-year-old bilingual Spanish-English speaking child whose mother has concerns about his speech development. The service coordinator states on the intake form that his dominant language is English, the mother is a monolingual Spanish-speaker, and there is a 12-year-old older sister who will be present at the evaluation and she speaks English. This is the only information you are given about the family situation. Based on this information, what do you need to do to prepare for this evaluation? Do you need an interpreter?

Intervention

what do we do?





In Search of Evidence

- ◆ Since 1991 (when AJSLP was born), 103 papers published in AJSLP, LSHSS, JSLHR with *bilingual* in title/abstract.
 - 5 per year
 - ~2 per journal per year
- ◆ 89 for *African American*
- ◆ 10 for *Latino*
- ◆ 5 for *Asian*
- ◆ 42 for *linguistically diverse* (or some variation)

116

Evidence-Based Practice (Dollaghan, 2007)


◆ EBP → E³BP

117

Evidence-Based Practice--E³BP (Dollaghan, 2007)

118

**Push Me Pull You:
Science vs. Clinical
Practice**



“... the scientific method, with its emphasis on theoretical coherence, replicability, unbiased measurements, and logic, is diametrically opposed to flexible, dynamic, spontaneous, reactive, and creative clinical practice (Kamhi, 2011, p. 61).

119

Client Goals

120

**Contrasting Beliefs, Values, and
Practices** (Langdon, 2008, p. 89)

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Choices: African American, Anglo, Asian American, Latino, and Native American²¹

Clinical Judgment


123

But the leak is intermittent!



124

Sources of Evidence



- ◆ Where do most practitioners get information on assessment and treatment?
- ◆ This holds for your doctor too!

125

Practice-Based Evidence (PBE)

- ◆ “PBE can range from unsystematic observational evidence obtained by practitioners about the effectiveness of their treatments to systematic research that evaluates in-depth, comprehensive information about patient characteristics, processes of care, and outcomes” (Horn & Gassaway, 2007 in Kamhi, 2011, p. 62).

126

The purpose of intervention is to

systematically improve the communication skills of children by a culturally and linguistically competent professional.

Overarching Principles

- ◆ Be consistent with family’s socio-linguistic practices. If not consistent, tell parents what you are doing & why you are doing it.
- ◆ Determine communication demands of family and in school: match or mismatch?
- ◆ Involve significant others in the process BUT may be asking them to do something uncomfortable.
- ◆ Involve other professionals: cultural broker, interpreter, translator.
- ◆ Use the appropriate comparison database

Structure Goals According to Bloom's Taxonomy

- ♦ **Knowledge:** arrange, define, duplicate, label, list, memorize, name, order, recognize, relate, recall, repeat, reproduce state.
- ♦ **Comprehension:** classify, describe, discuss, explain, express, identify, indicate, locate, recognize, report, restate, review, select.
- ♦ **Application:** apply, choose, demonstrate, dramatize, employ, illustrate, interpret, operate, practice, schedule, sketch, solve, use, write.

- ♦ **Analysis:** analyze, appraise, calculate, categorize, compare, contrast, criticize, differentiate, discriminate, distinguish, examine, experiment, question, test.
- ♦ **Synthesis:** arrange, assemble, collect, compose, construct, create, design, develop, formulate, manage, organize, plan, prepare, propose, set up, write.
- ♦ **Evaluation:** appraise, argue, assess, attach, choose, compare, defend estimate, judge, predict, rate, core, select, support, value, evaluate.

<http://www.officeport.com/edu/blooms.htm>

Case Study

“Just a general question, for children with a moderate to severe expressive language/speech disorder that are between the ages of 12-36 months, would you promote the use of one language until some expressive language/speech skills begin to emerge or encourage use of both languages? Assume receptive language skills are only mildly delayed to within average limits for age in both languages.” (from ASHA Forums)

- What questions do you have?
- How might your goals be different if the child were sequential vs. simultaneous bilingual?
- What suggestions do you have for the family?

4-Step Process for Intervention

- ◆ 1. Choose Goals
- ◆ 2. Choose Targets
- ◆ 3. Choose Intervention Targets
- ◆ 4. Choose the Language of Intervention

1. Choose Goals

Cognitively Undemanding	
Stage I (0-3 mos.) Greeting someone 1-2 word responses Full context Embedded	Stage II (3-6 mos.) Listening to story Describing story heard on TV Reduced context
Stage III (6mos.-2 yrs.) Seeking solutions Explaining & justifying	Stage IV (2-3 years) Reading book & discussing it Relating new info. to existing knowledge Performing metaling. skills
Cognitively Demanding	

2. Choose Targets (Hearne, 2000)

- ◆ The following are only general guidelines. Individual children may vary with respect to task and time.

Stage I: Pre-production (first 3 mos.)

- ◆ Yes/No responses
- ◆ 1-word answers
- ◆ Drawing/painting
- ◆ Copying, pointing, circling, underlining
- ◆ Choosing among objects, matching objects

Stage II: Early Production (3-6 mos.)

- ◆ 1-3 word responses
- ◆ naming/labeling items, choral responses
- ◆ answering simple questions (who, what, where)
- ◆ grouping & labeling
- ◆ acting out responses

Stage III: Speech Emergence (6 mos.-2 years)

- ◆ Recalling,
- ◆ Telling/retelling
- ◆ Describing/explaining
- ◆ Comparing
- ◆ Sequencing
- ◆ Demonstrating
- ◆ Role-playing/acting
- ◆ Cooperative group tasks

Stage IV: Intermediate Fluency (2-3 years)

- ♦ Predicting
- ♦ Describing/explaining
- ♦ Summarizing
- ♦ Giving opinions
- ♦ Creating stories
- ♦ Cooperative group tasks

3. Choose the Approach


3. Choose the Approach

- ♦ which drives the language of intervention (Step 4)

2 General Approaches to Intervention (Kohnert & Derr, 2004)

- ◆ Bilingual Approach
- ◆ Cross-Linguistic Approach

Bilingual Approach



- ◆ focus on skills common to both languages by
 - focusing on the cognitive principles common to all language learning (i.e., efficient processing and quickly attending to changes in form)
 - training aspects of form, content, & use that are shared by both languages
 - highlighting interactions between cognition & language or between L1 & L2 (e.g., contrastive analysis; translation)

Cognitive Principles

- ◆ Goal is to increase ability to process information (non-verbal & verbal); for example:
 - categorization tasks
 - I Spy
 - “same or different” tasks
 - recall tasks
 - speeded identification or naming tasks

Form, Content, Use

- ◆ Goal is to highlight the similarities between languages; for example:
 - sounds common to each language
 - shared lexical concepts (people, part-whole relationships, functions)

Highlighting Interactions between Cognition & Language

- ◆ Goal is to highlight the interaction between systems; for example:
 - highlight the interaction between form and content by using phonological awareness and lexical development to transition to literacy.
 - Goals can be embedded in natural contexts like conversations or narratives.

Cross-Linguistic Approach

- ◆ focus on skills unique (i.e., non-overlapping) to each language; for example:
 - word order variation
 - morphology
 - omission of subjects
 - word length
 - syllable types
 - orthography

4. Choose the Language of Intervention

***Initial* Language of Intervention Depends on:**

- ♦ language history (relative experience with each language)
- ♦ use in each language (how frequently the child utilizes each of the languages)
- ♦ proficiency in each language (how well the child understand and produces each language)

154

***Initial* Language of Intervention Depends on:**

- ♦ environment (where and with whom the child uses each language)
- ♦ family considerations; the family's goals (as part of EBP)
- ♦ child's phonological skills and errors/error patterns in each of the two languages

155

Bilingual/CLD Resources (Verdon, 2015)

- ♦ International children’s digital library
 - <http://en.childrenslibrary.org/>
- ♦ Children’s Books Online by the Rosetta Project:
 - <http://www.childrensbooksonline.org/>
- ♦ Children’s books forever
 - <http://www.childrensbooksforever.com/>
- ♦ Links to speech assessments in available in many languages
 - <http://www.csu.edu.au/research/multilingualspeech/speech-assessments>
- ♦ Intelligibility in Context Scale
 - <http://www.csu.edu.au/research/multilingual-speech/ics>

Regardless of Steps 1-4,

Monitor Progress

158

Monitor Progress

159

Monitor Progress

(after Williams, 2003)

- ◆ Monitor skills within each language and across both languages by determining:
 - Efficiency
 - Effects
 - Effectiveness

Real-life Assessment and Intervention Situations

“Just a general question, for children with a moderate to severe expressive language/speech disorder that are between the ages of 12-36 months, would you promote the use of one language until some expressive language/speech skills begin to emerge or encourage use of both languages? Assume receptive language skills are only mildly delayed to within average limits for age in both languages.” (from ASHA Forums)

- ◆ What questions do you have?
- ◆ How might your goals be different if the child were sequential vs. simultaneous bilingual?
- ◆ What suggestions do you have for the family?

Real-life Assessment and Intervention Situations

- ♦ You recently evaluated a 5-year-old child who was diagnosed with a moderate expressive language delay and she is assigned to your caseload for therapy in an elementary school. The child is bilingual, but speaks English most of the time. There are no bilingual SLPs available to provide this child services. You need to see the child twice a week for an hour, and your school principal says there isn't money in the budget to pay an interpreter. What do you do?

Summary

And Finally...

THANK YOU!

Arabic <i>Shoukran</i>	Korean <i>Kamsu hamnida</i>
Cambodian <i>Orkun</i>	Laotian <i>Kob chie</i>
Chinese (Cantonese) <i>Doh je</i>	Latvian <i>Paldies</i>
Chinese (Mandarin) <i>Xie-xie</i>	Lithuanian <i>Attyu</i>
Czech <i>Dekuju</i>	Malay <i>Terima kasih</i>
Danish <i>Tak</i>	Mongolian <i>Vayarla</i>

165
