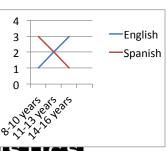
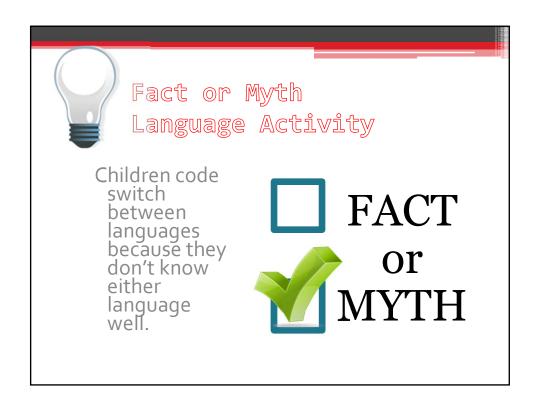
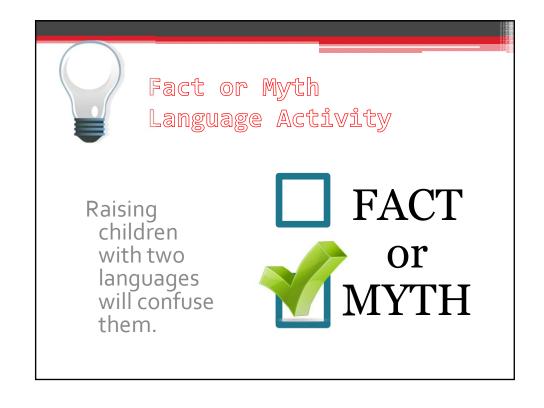


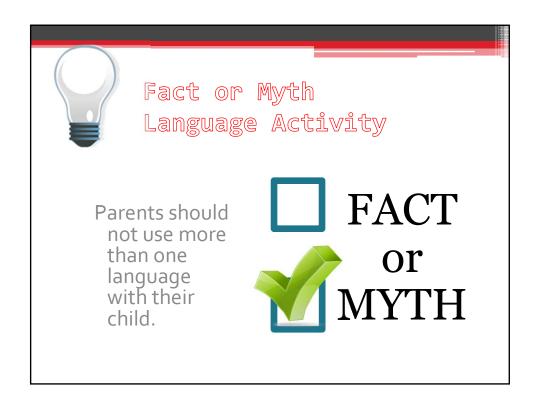
Changes over time

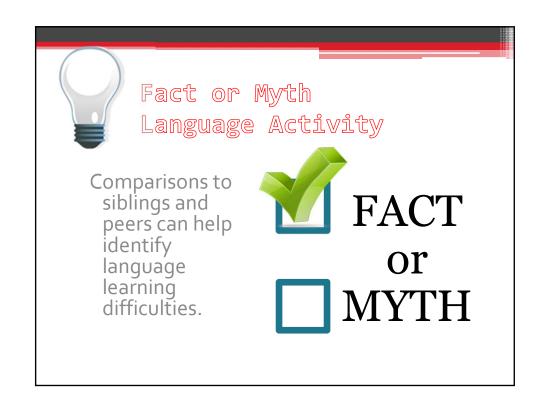
- Children tend to shift L1 to L2
 - 8-10 year-old were faster in English but more accurate in Spanish.
 - 11-13-year-olds showed no clear advantage in either language.
 - By 14-16 years of age children were more accurate and faster in English.
- Consider:
 - Transitional programs
 - Dual language programs

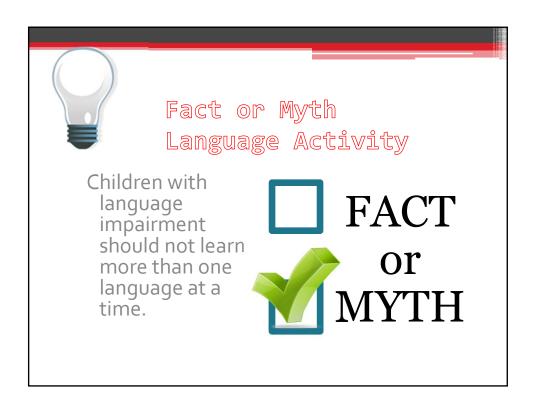


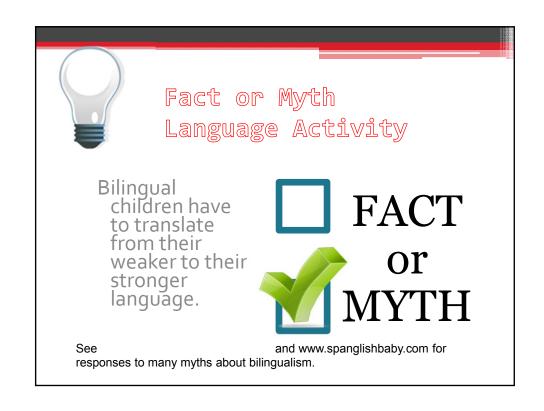


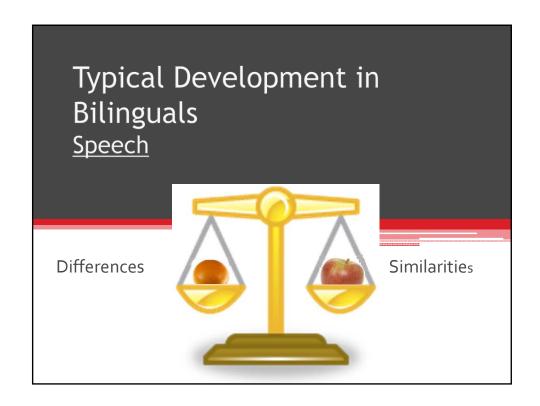


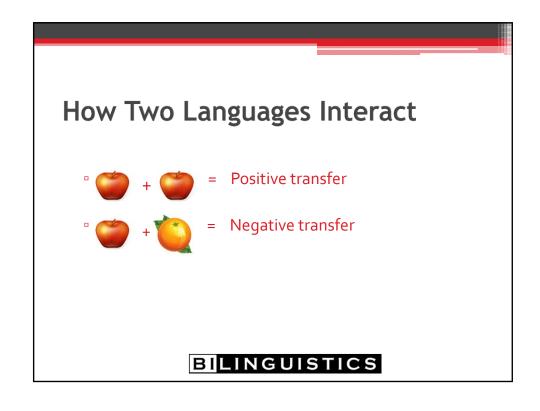














Building blocks for Language

- 0-1 month crying and vegetative sounds
- 2-3 months eye gaze
- 6-9 months-- joint attention
- 9-12 months -- using gestures
- 12-15 months--following simple commands
- 18 months symbolic play, pretend play
- 24 months sequencing of activities
- 36 months episodic play





Crosslinguistic Influence

- Based on the Competition Model as applied to bilingual development (MacWhinney & Bates, 1989)
 - Forward Transfer (L1 to L2) expected for ELLs
- The effects of Spanish on English can result in errors in:
 - Verb errors (especially unmarked present for past tense)
 - Content word errors (more than general words)
 - Prepositions
 - Pronouns
 - Word order





Building blocks for speech



- O-1 month crying and vegetative sounds
- 1-6 months cooing, laughter, squealing, growling
- 4-6 months marginal babbling
- 6-8 months reduplicated babbling
- 8-10 months variegated babbling
- 8-12 months echolalia*
- 9-12 months phonetically* consistent forms
- 9-12 months jargon*





Language Influenced*

BILINGUISTICS

Speech Intelligibility

- For parents: (Lynch, Brookshire & Fox, 1980)
 - □ 18 months ~25% intelligible
 - 2 year olds 50-75% intelligible
 - $^{\circ}$ 3 year olds $\,$ 75%-100% intelligible
- For unfamiliar: (Flipsen, 2006)
 - □ 18 months ~25% intelligible
 - □ 2 year olds ~50% intelligible
 - $^{\circ}$ 3 year olds ~75% intelligible
 - 4 year olds 100% intelligible

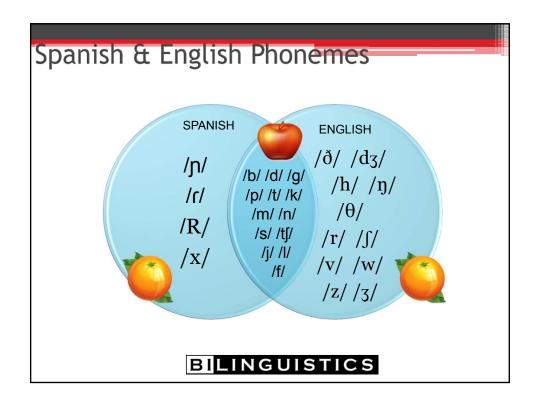


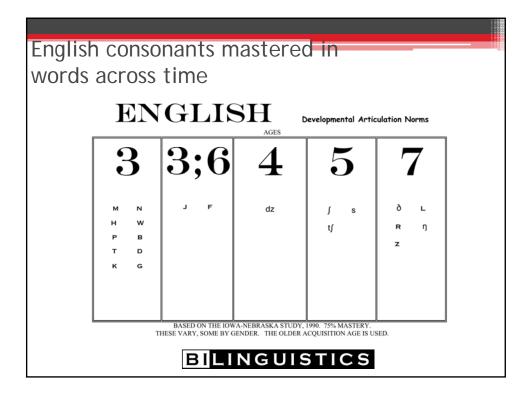


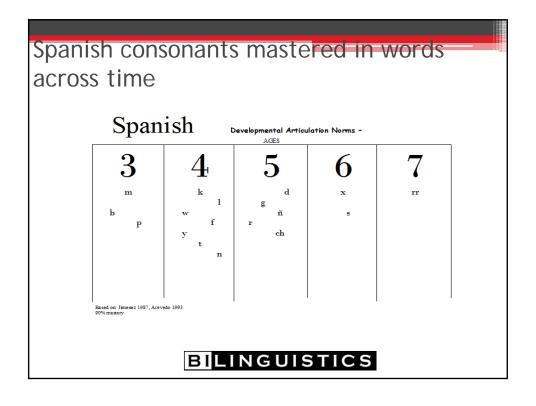
Red Flags For Speech Impairment in Bilinguals



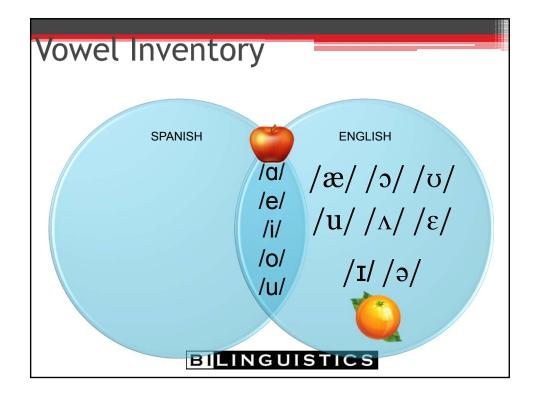
- Difficulty producing sounds in both languages, even with adult assistance
- · Family history of speech-language impairment
- Slower development than siblings
- Difficulty interacting with peers
- Difficulty with speech production in many routines and settings
- Speech production unlike others with similar cultural/linguistic experiences

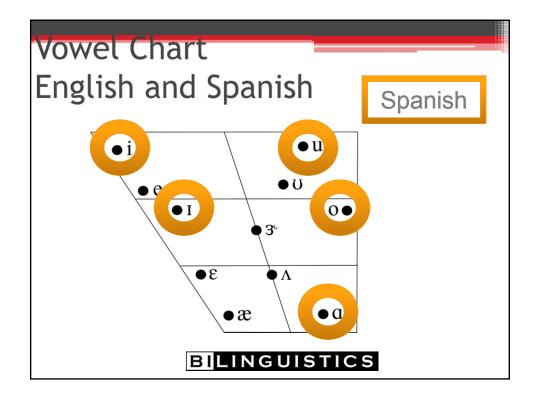


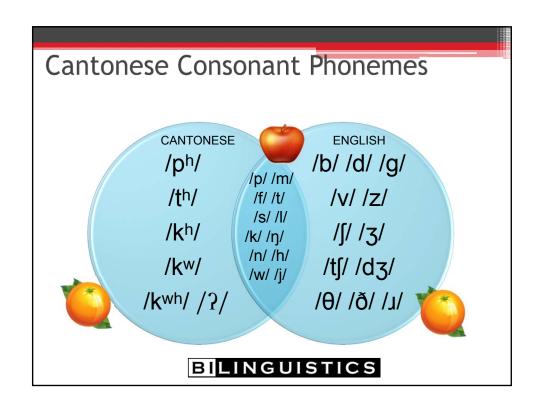


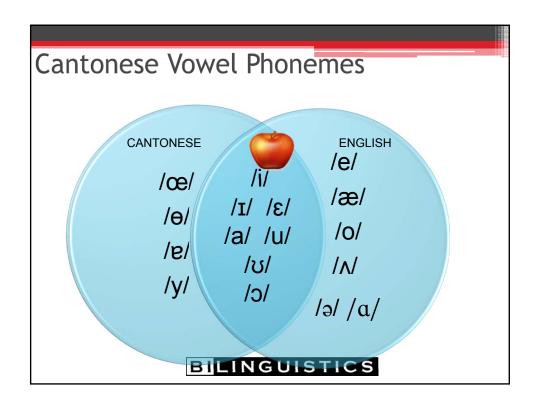


	<u>Phono</u>	ological Processes	
Suppr	essed by:	Pattern	Example
Spanish (Goldstein+)	English (Shriberg)	Syllabic Patterns	
ge 3	Age 3	Final Consonant Deletion	"ca" for "cat"
ge 3	Age 4	Medial Consonant Deletion	"ta.o" for "taco"
ge 5	Age 7	Gliding	"bwack" for "black"
ge 5	Age 4	Cluster Reduction	"fat" for "flat"
ge 3	Age 4	Weak Syllable Deletion	"telphone" for "telephone"
ge 3 (uncommon)	Age 3	Initial Consonant Deletion	"at" for "cat"
		Substitution Patterns	
ge 5	Age 3	Stopping	"bat" for "fat"
ge 3	Age 4	Fronting	"bat" for "kat"
ge 5	Age 7	Liquid Simplification	"wake" for "lake"
A	Age 7	Vocalization	"powah" for "power"
ge 5	NA	Flap/Trill Deviation	"dat" for "rat"
ge 3	Age 3	Assimilation	"tato" for "taco"
ge 3	Age 3	Backing	"kat" for "bat"











Language Intervention Strategies for Monolingual and Bilingual Children.

Identifying treatment methods that work across languages and cultures

BILINGUISTICS

Selecting Intervention Activities

Developmentally Appropriate
Linguistically Appropriate
Culturally Appropriate
Variable
Addresses the needs of the classroom



Literacy-based Intervention

- Pre-Reading Activities
- Reading Activities
- Post-Reading Activities
- Building the narrative structure that is integral to communicating events and answering questions.







FACT Vocabulary Building

- Function
- Attribute
- Category
- Therapy
- Building the linguistic structure that allows new words to be learned, accessed, and remembered.



Why use storybooks?

Storybooks

- provide structure for addressing goals
- can be used with all ages and cultures
- can be used to address goals across semantics, syntax, comprehension, pragmatics, and discourse.
- can decrease preparation time are fun and interesting for students
- make homework programs more relevant for parents
- allow for programmatic collection of intervention data

Qualification

Typical Aspects of Intervention:

- A. Difficulty in comprehending communication
- B. An underdeveloped sound system
- C. Reduced expressiveness



Why use storybooks?

Shared reading activities

- Increase development in multiple areas (Doyle & Bramwell, 2006; Debaryshe, 1993; Burner, 1978)
- Promote language development in children with typical development (Teale & Sulzby, 1986; Westby, 1985) and with language impairments (Gillam & Ukrainetz, 2006)
- Promote a greater desire to read (Mason & Blanton, 1971)
- Exposes student to printed materials and positive reading models (Teal, 1984)

Qualification

Typical Aspects of Intervention:

- A. Difficulty in comprehending communication
- An underdeveloped sound system
- C. Reduced expressiveness



Why use storybooks?

Develop Pre-linguistic Skills

- Play
 - Symbolic play predicts comprehension
- Gestures/Signs
 - Bridge to producing language
- Joint Attention
 - Gaze, pointing, showing, directing attention
- Vocalizations
 - Diversity of sound types predicts expressive vocabulary and speech performance
- Comprehension
 - Predicts grammatical complexity and vocabulary

Qualification

Typical Aspects of Intervention:

- A. Difficulty in comprehending communication
- B. An underdeveloped sound system
- C. Reduced expressiveness

Watt, Wetherby & Shumway, 2006

Book Selection

- Age-appropriate
- Interesting and relevant
- · Related to goals
- Simple
- Good illustrations
- Resources
 - School librarians
 - Classroom teachers
 - Internet

Level	English Title	Spanish Title	Author/Illustrator
Preschool through Kindergarten:	Bear on a Bike	Oso en bicicleta	Stella BlackstoneDebbie Harter
	The Cow that sad OINK	La vaca que decía OINK	Bernard Most
	The Grouchy Lady Bug	La mariquita malhumorada	Eric Carle
	Brown Bear, Brown Bear	Oso Pardo, Oso pardoQué ves allí	Eric CarleBill MartinTeresa Mlawer
	We are going on a Bear Hunt	Vamos a cazar un Oso	Michael RosenHelen Oxenbury
	Click Clack Moo: Cows that Type	Click Clack Moo: Vacas Escritoras	Doreen Cronin and Betsy Lewin
	Where the Wild Things Are	Dónde Vivan los monstruos	Maurice Sendak
	Where is Max?	Dónde está Max	Mary PearsonSamantha Walker
Kindergarten through 2nd grade	Bear on a Bike	Oso en bicicleta	Stella BlackstoneDebbie Harter
	Where is Max?	Dónde está Max	Mary PearsonSamantha Walker
	Where the Wild Things Are	Dánde Vivan los monstruos	Maurice Sendak
	The Giant Turnip	El nabo gigante	Aleksei Tolstoy and Niamh Sharkey
	Goldilocks and the Three Bears	Ricitos de Oro y los tres osos	Eng: Caralyn Buehner and Mark BuehnerSpan: Valeri Gorbachev
	The Cow that sad OINK	La vaca que decía OINK	Bernard Most
	It Could Have Been Words	Podría haber sido peor	A. H. Benjamin and Tim Warnes
	Tell Me a Cuento	Cuéntame un story	Joe Hayes
	Click Clack Moo: Cows that Type	Click Clack Moo: Vacas Escritoras	Doreen Cronin and Betsy Lewin
	Walter the Farting Dog	Walter el perror pedorrero	William Kotzwinkle, Glenn Murray, and Audrey Colman
2 nd through 5th	The Giant Turnip	El nabo gigante	Aleksei Tolstoy and Niamh Sharkey
	Goldilocks and the Three Bears	Ricitos de Oro y los tres osos	Eng: Caralyn Buehner and Mark BuehnerSpan: Valeri Gorbachev
	Walter the Farting Dog	Walter el perror pedorrero	William Kotzwinkle, Glenn Murray, and Audrey Colman

Pre-Reading Activities

Pre-reading activities are used to bridge any gaps between a student's current skills and the targeted skills.

- <u>Music</u> use songs semantically related to the material in the book. (Hoggan & Strong, 1994)
- <u>Semantic mapping/graphic organizers</u> the adult and students develop a list of words and concepts related to the story and then develop a visual representation or map of how the words and concepts are related to one another (Gillam & Ukrainetz, 2006; Hoggan & Strong, 1994).

Pre-Reading Activities

- <u>Illustration discussion</u> The student creates a story using illustrations from the selected book. Scaffolding techniques may be used to facilitate higher semantic and syntactic complexity. Several templates that can be used during this activity are included.
- <u>Pre-reading discussion</u> Pre-reading questions are designed to tie the students' knowledge and ideas from the graphic organizer to the concepts in the book.

BILINGUISTICS

Reading Activities

While reading the book, use scaffolding techniques to engage the student and check understanding. Clinicians commonly use scaffolding techniques in order to help the student learn target skills.

Scaffolding techniques

- <u>Print reference</u> The adult references a target from the book by pointing or commenting (e.g. The adult points to an illustration and asks, "What is happening in the picture?")
- <u>Cloze procedures</u> The adult provides the first part of an utterance and the student completes the thought (e.g. A: The mouse lost his balance and _______ S: fell off).

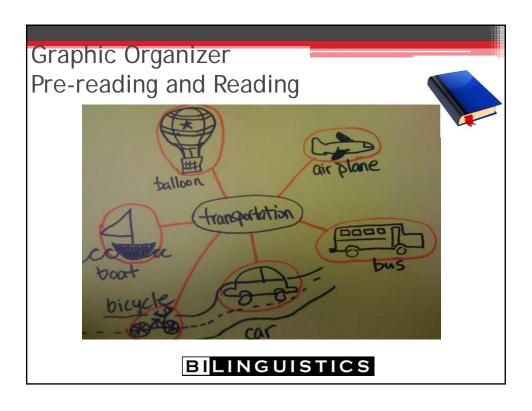
Post-Reading Activities

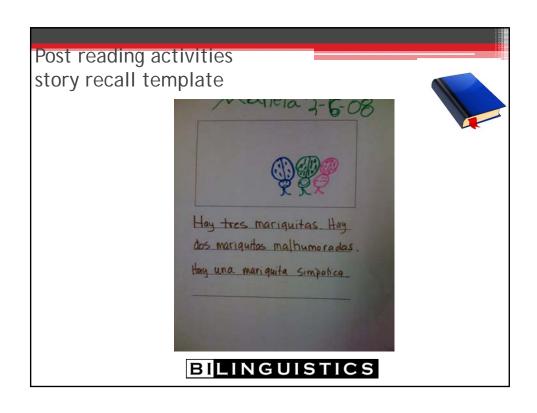
- <u>Semantic activities</u> Students add to their word books through art activities in the areas of object/function, part/whole, categories, antonyms, and synonyms. *Suggested targets:* comparison, categories, and action words.
- <u>Narrative retelling</u> use scaffolding techniques and visuals from the book to support the student while retelling the story.
- <u>Phonology/Articulation</u> Use images from the book as well as general images in order to target specific phonological and articulation skills. See articulation chart in the following activities.

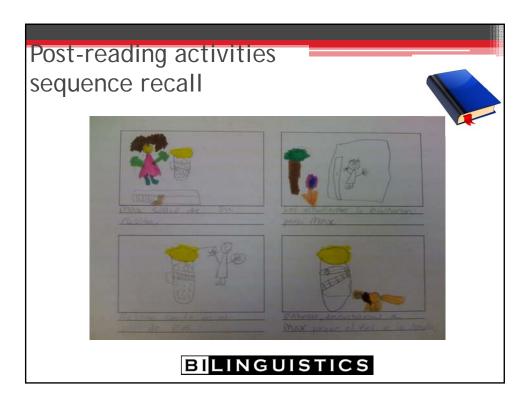
BILINGUISTICS

Graphic organizer - ex. Bear on a Bike

- Say: "We are going to read about a bear who goes on an adventure. On his adventure, he uses different types of transportation."
- Ask:
 - What are ways we get from one place to another?
 - How do you get to school?
 - How do others get to school?
 - What do you use to travel in your neighborhood?
 - What do you use to travel in the water?





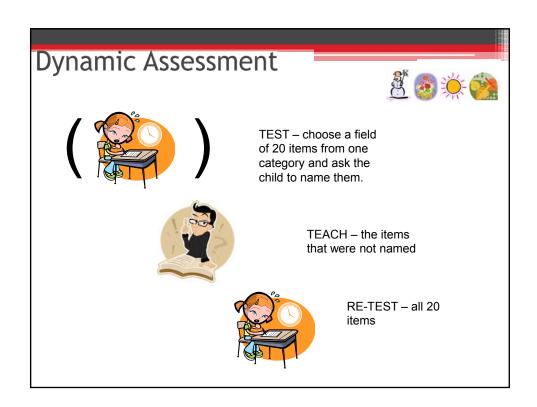


Take Away Points for Storybook Intervention

- Language of intervention should mirror the child's environment
- Initial therapy targets should be elements that exist in both language
- Let the child and the classroom guide the topics
- Use the same book across multiple groups to save planning time

Function, Attribute, Category Therapy

- What is important to academics?
 - Low vocabulary is often sited in referrals
 - Vocabulary is heavily weighted in academic testing
 - Vocabulary is heavily weighted in LD testing.
- Do we teach vocabulary?
- How does vocabulary relate to us?
- The answer is that we teach the structure that allows vocabulary to be acquired.



FACT: How do I choose a category?

Choose a category that relates to the student, to the classroom, AND to the home.

Animals

• Body Parts

Household Objects

Clothes

Transportation

Instruments

Food

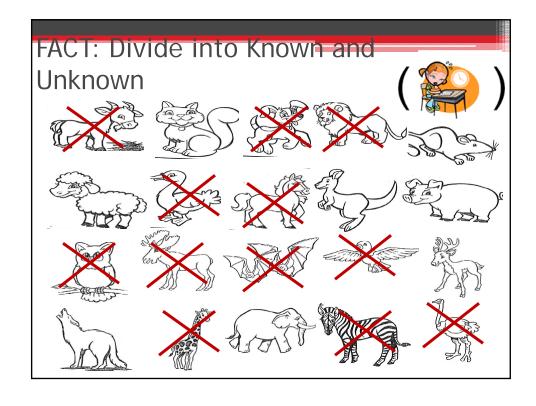
You can choose subcategories but wait until the process is learned.

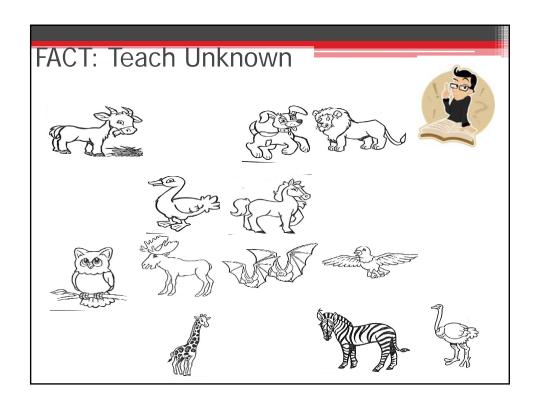
Transportation:

-Air

-Land

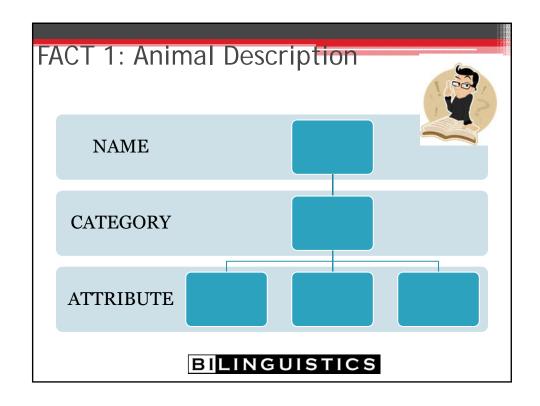
-Water

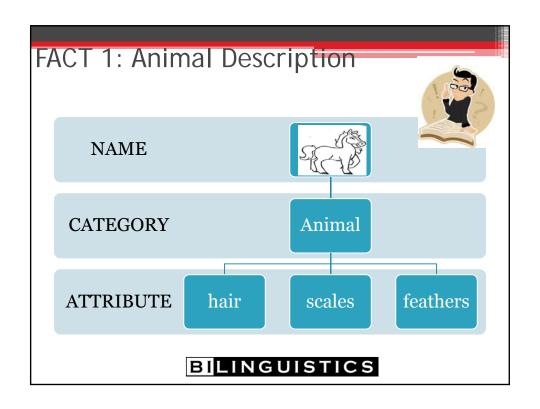


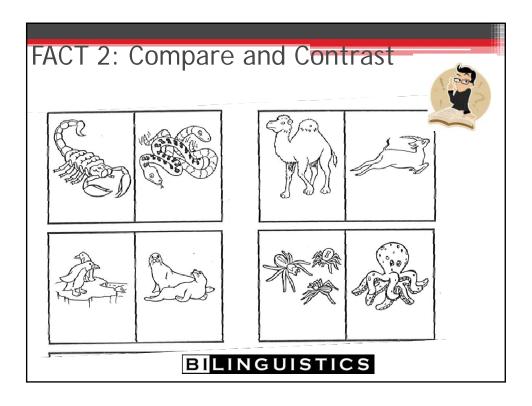


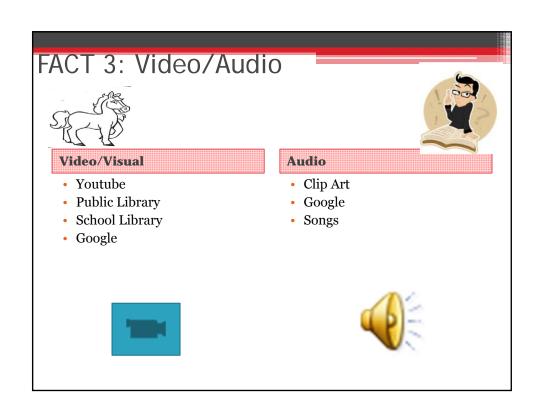
FACT: Teach Unknown

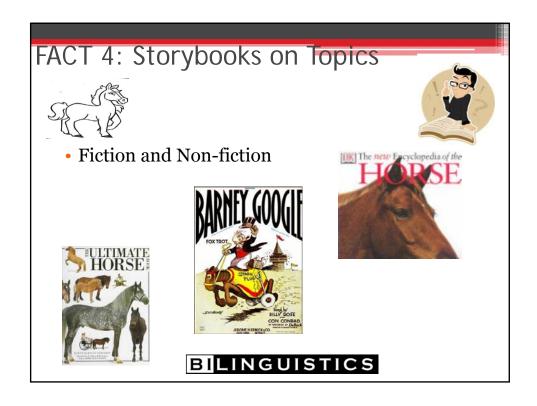
- Teaching of Vocabulary Acquisition is:
 - Systematic
 - $\boldsymbol{\cdot}$ The same process for each category group
 - We are not teaching specific vocabulary!
 - We are teaching the structure that allows them to learn, organize retain, and retrieve vocabulary!
 - Multimodal
 - 1.Description (utterance expansion)
 - 2.Compare and Contrast
 - 3.Video/Audio
 - 4. Storybook on Topic
 - 5.In Context

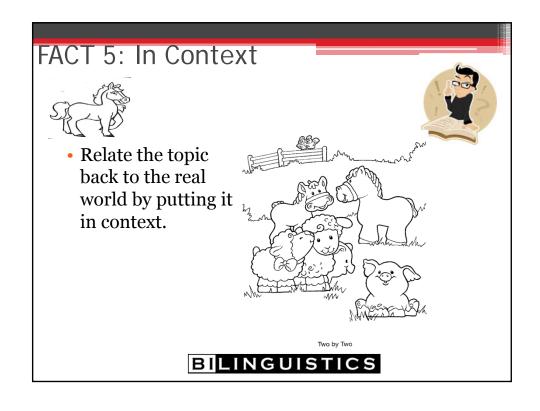


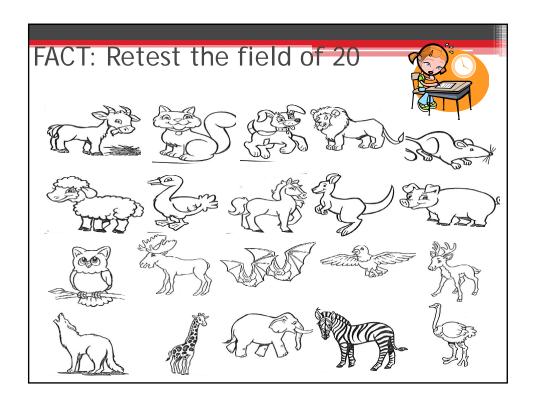












Take Away Points for Functional, Attribute, Category Therapy

- Don't make any assumptions of prior knowledge
- Do not teach vocabulary, teach structure
- Use classroom topics and areas of interest
- Use the mode (video) that the student likes best as a reward.

Selecting Intervention Targets: Language

Developmentally Appropriate
Linguistically Appropriate
Not errors influenced by another language
Start with problems affecting both languages

Early Language Milestones

Language Milestones	English	Spanish
using gestures	9-12mo	9-12 mo
following simple commands	12-15mo	12-15mo
symbolic play	18mo	18mo
episodic play	36mo	36mo
recognizes familiar objects when named	7-12mo	7-12mo





Toddler Language Skills

Language Milestones	English	Spanish
combine 2 words	1-2yrs	1-2yrs
point to named items in book/picture	1-2yrs	1-2yrs
combine 2-3 words	2-3yr	2-3yr
follow 2-step directive	2-3yr	2-3 yr
present progressive verb form	2-3yr	2-3yr
plural use	2-3yr	2-3yr







Preschool Language Skills

Language Milestones	English	Spanish
possessives	3-4yr	3-4yr
negatives	3-4 yr	3-4 yr
answer simple WH?s	3-4yr	3-4yr
combine 4+ words	3-4yr	3-4yr
tells story related to topic	4-5yr	4-5yr
use of adjective and descriptors in sentences	4-5yr	4-5yr





School-Age Language Skills

Language Milestones	English	Spanish
tell and re-tell stories in a logical order using complete sentences	6-7yr	6-7yr
uses more complex sentence structures	7-8yr	7-8yr
when not understood can re-clarify and explain their ideas	7-8yr	7-8yr





