The Science of Dual Language Learning for Children Birth Through Age Five: Effective Practices that Improve Outcomes

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Early Childhood Investigations Webinar

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Who is a Dual Language Learner? Terminology Matters!

➢ *Dual language learners are young children learning two or more languages at the same time, as well as those learning a second language while continuing to develop their first (or home) language.*

➢ Includes simultaneous and sequential, successive

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Demographic Urgency

*Diverse group that is growing—
in size and diversity of backgrounds…*

➢ **More than 30% of children enrolled in Head Start live in households where English is not the primary language (ACF, 2013)**

➢ **15% of K-12 Enrollment in U.S (2011, NCES);**

➢ **27% of all children in U.S. born in DL homes; most speak Spanish (80-85%)**

Diversity Within the DLL Population

- *Countries of origin; family cultures*

- *Immigrant vs non-immigrant experience*

- *Exposure and opportunities to learn in home language & English*

- *Socioeconomic status and parental education*

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POLL #1

Who are dual language learners and what do we know about their development and achievement?

Developmental Paradoxes!!

POLL #2

Poll #2: Answer

* "…young DLL children may know certain words in the home language, but not in English, and as a result, they may have a smaller vocabulary than English or Spanish monolinguals. For example, they may know the names of objects in the kitchen and home in Spanish but not in English. In these cases the child may look like he has limited vocabulary in each language."

* In *Challenging Common Myths About Young Dual Language Learners: An Update to the Seminal 2008 Report* Page 17

POLL #3

Poll #3: Answer

* Recent studies from cognitive neuroscientists have found differences in brain activity in the areas of the brain that process language across bilingual and monolingual PreKindergarteners. Young bilingual children develop more widely dispersed and evenly distributed neural pathways across both brain hemispheres.

* *In Challenging Common Myths About Young Dual Language Learners: An Update to the Seminal 2008 Report* Page 8

POLL #4

Poll #4: Answer

* These studies have also demonstrated that knowing more than one language does not delay the acquisition of English or impede academic achievement in English when both languages are supported. Research on children who learn English after their home language has been established—usually around three years of age—has also shown that most young children are capable of *adding* a second language and that this dual language ability confers long-term cognitive, cultural, and economic advantages.

* *In Challenging Common Myths*, page 6

POLL #5

Poll #5: Answer

* Even when teachers do not speak the child's home language, there are many specific teaching practices that will support continued development of the home language. Teachers and ancillary staff can support children's home language throughout the day in all kinds of learning situations;... they can also train parents, community members, and volunteers to work with DLL children in their home language.

* *In Challenging Common Myths About Young Dual Language Learners: An Update to the Seminal 2008 Report* Page 12

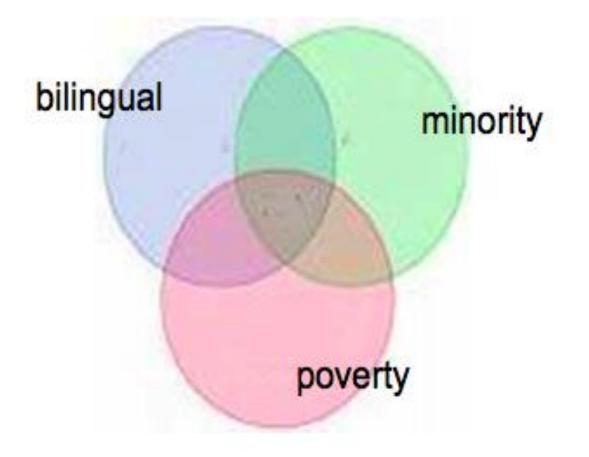# LATEST RESEARCH ON DLL DEVELOPMENT AND ACHIEVEMENT

1. *California Department of Education (2013). California's Best Practices for Young Dual Language Learners: Research Overview Papers*

2. *National Academies of Sciences: Report on Fostering the Success of DLLs, Birth to 18 (in process)*

3. *Center on Early Care and Education Research-Dual Language Learners: 30 products on DLLs*

   http://cecerdll.fpg.unc.edu/

Children from Low-income and Dual Language Families Highly Vulnerable to Underachievement

- ➢ NAEP Scores
- ➢ State Achievement Data
- ➢ K Entry Data
- ➢ High School Completion
- ➢ College Enrollment

How Much of Achievement Gap is Due to Language Status (DLL) vs Poverty vs Cultural/Linguistic Discontinuity???
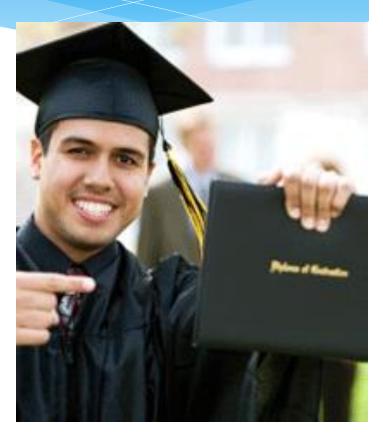
Dual Language Learners are Very Diverse

- **Context Matters!**
  - *SES*
  - *Country of origin*
  - *Languages spoken*
  - *Age of exposure*
  - *Quantity and quality of language inputs*
  - *Opportunities to use language*

Having a second language is sometimes linked to higher achievement in English… ECLS-K data analysis.
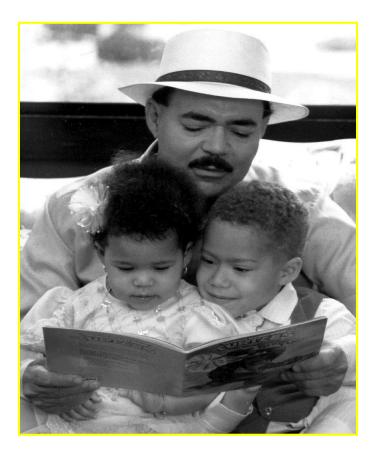
Espinosa, et al., 2007

"The combination of living in poverty and having limited access to early education increases the vulnerability of young DLLs to negative outcomes."

Castro, Espinosa, & Paez, (2011)

Having more than one language during ECE years should not be considered a risk factor !!

What WE Do in ECE Programs (from bus rides to meals to storybooks) Will Have Long-term Benefits for Children.

Young DLLs Often Underserved or Inappropriately Served

* **Missed opportunities**
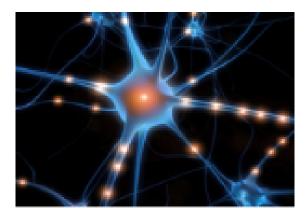
* **Unrealized potentials**

The Science of Early Bilingualism

1. Capacity of Young Children; Age of Exposure

2. Benefits/Differences: Cognitive, Social, Linguistic, Executive Function Skills, Family Dynamisms Vocabulary

3. Need to Support Both Languages

4. Families are Critical Partners

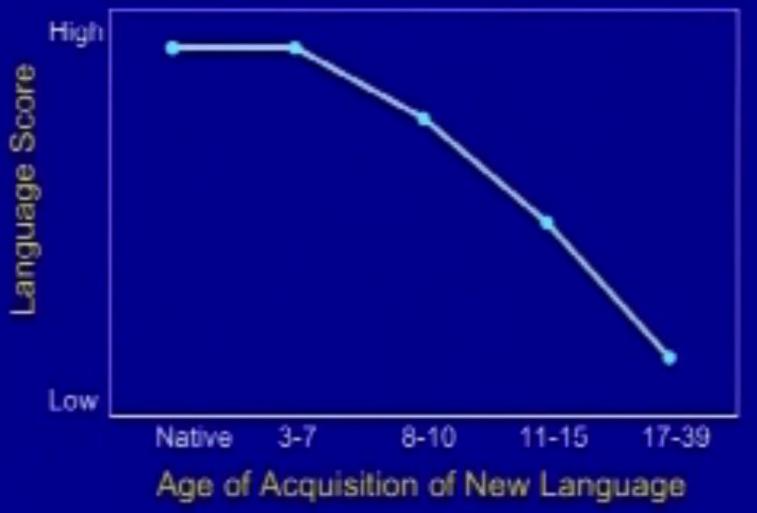# Infant Brains & Bilingualism: Study Methods

Research Base

- **Brain development of young bilinguals:**

  - *Different than monolinguals*

  - *Two linguistic systems develop*

  - *At birth, can perceive all phonemes in all languages; by 10-12 months phonemic pruning has occurred*

The 'critical period' for language

*Cognitive Development**

Young bilinguals show advanced skills in non-verbal executive control skills….detectable at 7 months!

✓ **inhibitory control** (ability to resist a habitual response or information not relevant)

✓ **working memory or updating** (ability to hold information in mind and mentally manipulate it)

✓ **cognitive flexibility (**ability to adjust to changes in demands or priorities and switch between goals)

* Barac, R., Bialystok, E., Castro, D. C., & Sanchez, M. (2014). The Cognitive Development of Young Dual Language Learners: A Critical Review. Early Childhood Research Quarterly, 29 (4), 699-714.

Language and Literacy Development of DLLs*

- Timing: age of exposure

- Amount and quality of exposure

- Opportunity to use and practice

* Hammer, C. S., Hoff, E., Uchikoshi, Y., Gillanders, C. & Castro, D. C. (2014). The Language and Literacy Development of Young Dual Language Learners: A Critical Review. Early Childhood Research Quarterly, 29 (4), 715-733.

Language and Literacy Development of DLLs..

- Vocabulary development looks different: longer lexical retrieval time

- Smaller vocabularies in each language; conceptual vocabularies when combined in 2 languages comparable

- Speech production somewhat slower

- Grammatical development differed

- Cross-language (L1-L2) influences varied by similarities of 2 languages

Social Emotional Development of DLLs*

- Children of Mexican immigrant families tended to have more social-emotional competencies (initiative and self-control) and fewer behavior problems than

nonimmigrants at K entry.

Halle, T., Whittaker, J. V., Zepeda, M., Rothenberg, L., Anderson, R., et al (2014). The Social--Emotional Development of Dual Language Learners: Looking Back at Existing Research and Moving Forward with Purpose. Early Childhood Research Quarterly, 29 (4), 734-749.

Bilingual Advantages Tied to Extent of Bilingualism

* Balanced bilingualism necessary for cognitive, linguistic benefits
* Bilingual advantages found across cultural and SES groups

Language Exposure and Opportunity to Use Best Predictors of Proficiency

➢ Children need opportunities to hear, process, and use language during meaningful interactions

➢ Research suggests I/Ts need sufficient time with high quality input in language to learn it

EARLY CARE AND EDUCATION CONTEXTS

Child care appears to be especially beneficial for DLLs: larger gains than other children
- in center-based care
- in high quality care
- when home language is spoken in setting

Evidence suggests DLLs are less likely to
- be in child care before Pre-K
- be enrolled in center-based care before Pre-K experience high quality care or use home language in center care

Espinosa, L. M., Burchinal, M., Winsler, A., Tien, H., Castro, D. C., & Peisner- Feinberg, E. (under review). Child Care Experiences among Dual Language Learners in the US: Analyses of the Early Childhood Longitudinal Survey-Birth

Importance of Supporting Both Languages

➤ Frequently early English exposure leads to loss of home language

➤ Carefully balanced language approach is needed during early years

➤ Learning English is important, but should not come at the expense of continued development in first language

What does this mean?

- DLLs should not be expected to perform like monolinguals: different patterns of development

- Initial differences may look like delays; DLLs need time and language learning opportunities to become proficient in both languages

- Bilinguals cannot be compared to monolingual norms when assessing children

Need to revise and implement improved policies and practices birth to eight that reflect the current research on bilingual development and the realities of local contexts.

State Early Learning and Development Standards/Guidelines, Policies & Related Practices

How responsive are they to the needs of young dual language learners?

Linda M. Espinosa, Ph.D.
Miriam Calderon, MSW

October 2015

Challenge: How do we support home language development <u>and</u> promote English language development with multiple languages of children/families, monolingual teachers, different educational contexts?

Program Approaches, Interaction and Instructional Strategies that Promote Improved Development and Achievement for DLLs

First--- Warm, Responsive, Enriched Interactions and Good Instructional Practices Help Dual Language Learners *(but are not sufficient)*

Goldenberg, et al., 2013

Considerations When Implementing a Language Model for Pre-K DLLs

- *<u>Language Goals</u>: Dual language or balanced approach with explicit bilingualism and bi-literacy goals?*

- *<u>Staffing Capacity</u>: Language abilities of program staff, families, community*

FIRST STEP

- *Early in the year or at registration have a conversation with parents:*

  - Collect information on child's earliest language experiences, current language opportunities, family feelings about maintaining home language, family interests and talents

  - Record and use information

  - Conduct in family's preferred language (may need to hire an interpreter)

  Important for establishing rapport, respect, and common focus on child's well-being; Building relationship based on trust

Sample Family Languages and Interests Survey

AME: _____   Date:_____

| First | Middle | Last |

h: _____   Gender: ⌘ Male   ⌘ Female   Age:

| Month | Day | Year |

any family members live with you and the child? _____

re the members of your family? _____

_____

the primary caregiver of your child? _____

anguage does the primary caregiver speak most often with the child? _____

anguage did your child learn when he or she first began to talk? _____

tell me what language(s) each of the following people in your household uses when speaking to your child?

	Only English	Mostly English, some other language (identify)	Mostly other language (identify), some English	Only other language (identify)
Mother (or you)				
Father (or you)				
Older siblings				
Grandmother				
Grandfather				
Aunt/Uncle				
Others, after school, community members				

re your feelings about maintaining your home language? _____

_____

t age was your child first exposed to English? _____

es your child play with most often? _____

 have any hobbies or interests that you would like to share with your child's class? _____

 you be interested in volunteering in your child's class? _____

 preferred day and time _____

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DLL program considerations…

- **_Structure of program_: Who will speak which language and for what purposes? 50-50, 90-10, 75-25?**

   Or

- **ELD with home language support? Each requires careful planning and frequent monitoring.**

Considerations, ….

Develop initial language goals for child:

E.g., if child has very little English and is mostly listening and following others or using only one-word responses, then design many opportunities for child to build receptive language skills and minimize demands for child to speak English publicly

Must know child's stage or level of English acquisition

Examples of Phases of Second Language Acquisition

Phases of second language acquisition	Example	Example
Home Language	William is on the sand table. He asks an English-speaking child, "¿Me das la pala?"	Linda asks the teacher, ¿Cuándo vamos a comer el lonch?
Quiet period	Yazmin looks intently to the teacher and remains quiet while the teacher is reading a book aloud in English.	Jessica holds the teacher's hand to show her something interesting she has discovered in the classroom.
Telegraphic/ Formulaic Speech	Francisco uses expressions such as "come on" to invite other children to play in the playground.	Antonio tells to one of his classmates: "Two people" to indicate that only two people can be in the housekeeping area.
Productive Speech	Rogelio announces after being in the playground, "I sandbox in shoe."	Jessica tells the teacher, "Carlos es mi friend."

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Setting Up the Environment

* Labeling in both languages (color coding)

* Visual cues pictures and graphics

* Word walls in both languages

* Daily schedule with pictures and both languages represented

Example of Daily Routine

How to wash your hands...

1. Wet your hands.
2. Use soap.
3. Scrub your hands.
4. Rinse with water.
5. Dry your hands with a towel.

Cómo lavar las manos...

1. Moja las manos.
2. Usa jabón.
3. Frote las manos.
4. Enjuaga con agua.
5. Seca las manos con una toalla.

Example of Daily Schedule

Language, Any Language, is the Foundation for Literacy......and Literacy in English is Critical for School Success

Focus on oral language (extended vocabulary, grammar, narratives, listening comprehension, academic language)

Explicit/intentional teaching of some language and literacy skills (phonemic awareness, vocabulary)

Grouping practices important (small, instructional groups, structured pairings)

Best Practices/Strategies…

- Anchor book, intentional message, vocab. Imprinting, songs, chants, visual cues/gestures
- Skilled Story Book Reading (specific strategies that build vocab and narrative)
- Bring home language into classroom
- Opportunities to Practice Across Contexts
- Screening and Continuous Assessment
- Strong Parent-Family Partnerships (home visiting, parent-school collaborations, parent education, family support programs)

From Espinosa (2015),Getting It Right for Young Children from Diverse Backgrounds, Chapter 4
And CPPG (2015), DLL Chapter

How to Support Home Language While Promoting English Language Development

- *Set of Strategies* that Bridge between home language (L1) and English:
  - Cognate charts
  - Front-loading vocabulary in home language
  - ***Use of photos and pics***

Cognates

ambulance	🚑	ambulancia
bicycle	🚲	bicicleta
chocolate	🍫	chocolate
elephant	🐘	elefante
telephone	☎	teléfono

ALL ECE Practitioners Can Support ALL Languages

- If possible, hire qualified bilingual teachers, family liaisons, and assessors

- For monolingual, English speaking teachers there are many strategies to provide rich learning opportunities in each language

  - Bring home language into setting (family, volunteers, community reps.), authentic bilingual materials, music, CDs, activities

    - videos

"…… young dual language learners are learning through two languages and both languages must be supported through intentional instruction, specific language interactions, frequent assessments of children's progress in both languages, and culturally sensitive engagement with families."

From CA Preschool Program Guidelines, 2015

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Conclusion

While all ECE teachers cannot instruct in all languages, all teachers can support all languages by working with families and using specific strategies that bring home language and culture into ECE settings.

תודה

Dankie   Gracias

Спасибо   شكرًا
Merci   Takk

Köszönjük   Terima kasih

Grazie Dziękujemy   Dėkojame

Ďakujeme   Vielen Dank   Paldies

Kiitos   Täname teid   谢谢

Thank You   Tak

感謝您   Obrigado   Teşekkür Ederiz

감사합니다

Σας Ευχαριστούμ   ขอบคุณ

Bedankt   Děkujeme vám

ありがとうございます

Tack

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