



RMTC-D/HH

Resource Materials and Technology Center for the Deaf and Hard of Hearing

We're Not Just Growing Language, We're Growing Brains!

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Resource Materials and Technology Center for the Deaf and Hard of Hearing

Working Collaboratively to Support the Education of Students who are Deaf/Hard of Hearing in Florida

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F S D B Florida School for the Deaf & the Blind
Do More. Be More. Achieve More.

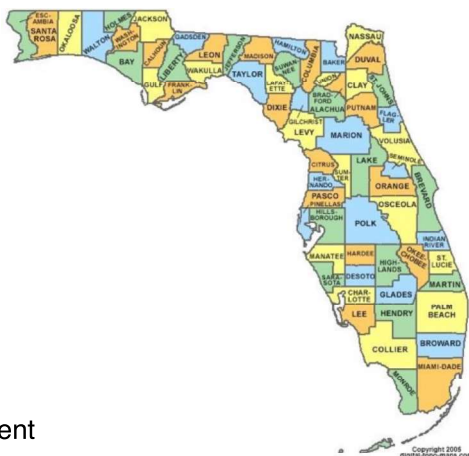


FREE SERVICES Available by REQUEST to:

- School District Staff
- Teachers
- Parents
- Other Professionals

Services Provided:

- Trainings & Professional Development
- Assessments & Evaluations
- Consultation, Information, & Referral
- Resources & Materials



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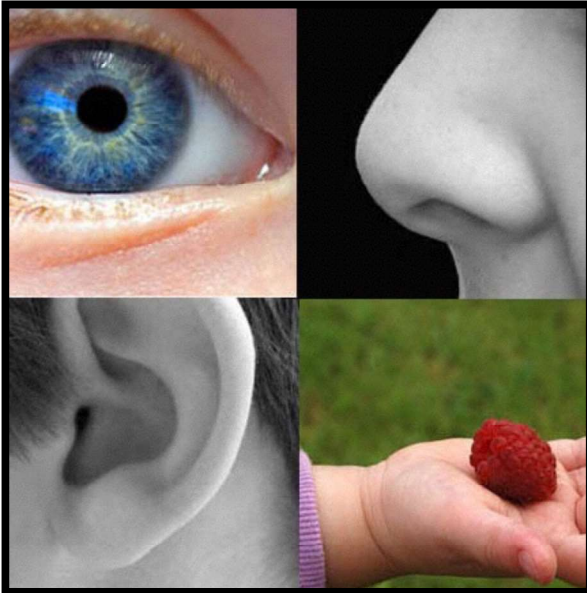
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Objectives: Participants will

Describe the relevant research related to language development for students who are Deaf.

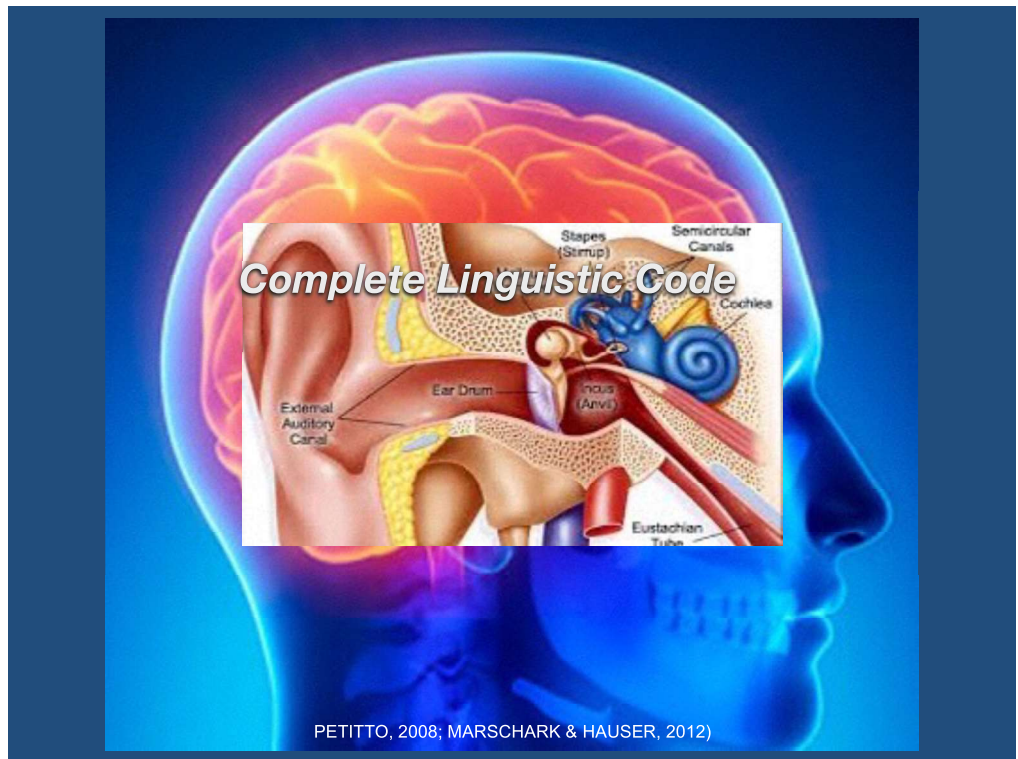
Explain at least two ways the research is currently impacting the education of students who are Deaf.

List more than one resource to obtain further information related to visual language and visual learning.

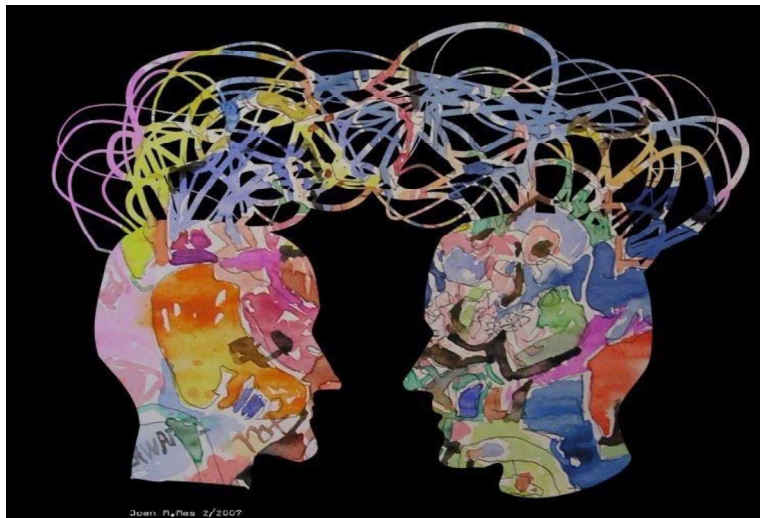


Language Learning Experience

(Marschark & Hauser, 2012)



What is language?



(VL2 Research Brief #9, 2013)



Studies in neuroscience confirm that the brain has the ability to learn **both** visual and spoken languages.

Learning both a visual and a spoken language **does not harm** the development of either language.

There is no risk in learning a visual language but there are risks in not providing adequate access to language.

(Kovelman, Shalinsky, White, Schmitt, Berens, Paymer, et al., 2009; Petitto, Katerelos, Levy, Guana, Tetreault, Ferro, 2001; Petitto, Kovelman, 2003; Mellon, Niparko, Rathman, et al., 2015 VL2 Research Brief # 6)

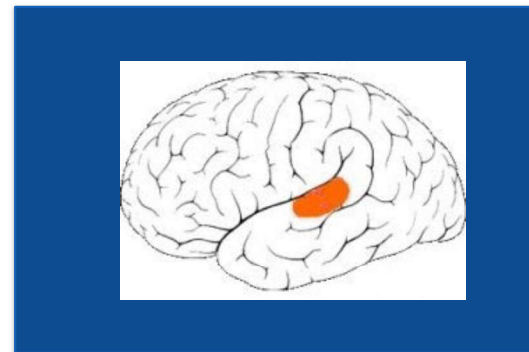


Spoken language outcomes are unpredictable for all children who are DHH, there is a risk of language delay if an accessible, visual language is not used as EARLY as possible.

Sign language DOES NOT interfere with deaf children learning to speak. Early sign language has beneficial effects on learning a spoken language for children with and without cochlear implants

The acquisition of a signed language can actually support the learning of a spoken language.

(VL2 Research Brief # 6; Marschark & Hauser, 2012))

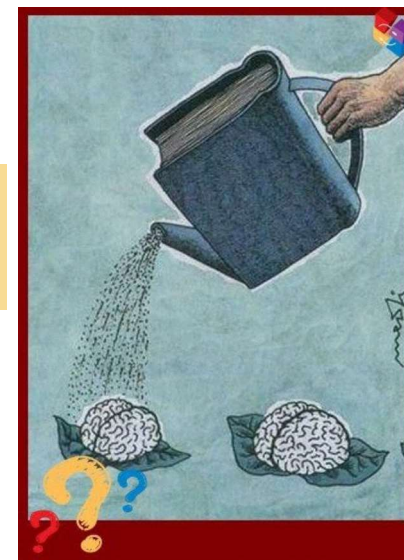


sound and sign are biologically equivalent in the human brain

(Petitto, Stone, Andriola, Kartheiser, & Cochran, 2016)



What will foster brain growth?





Impact Language Development

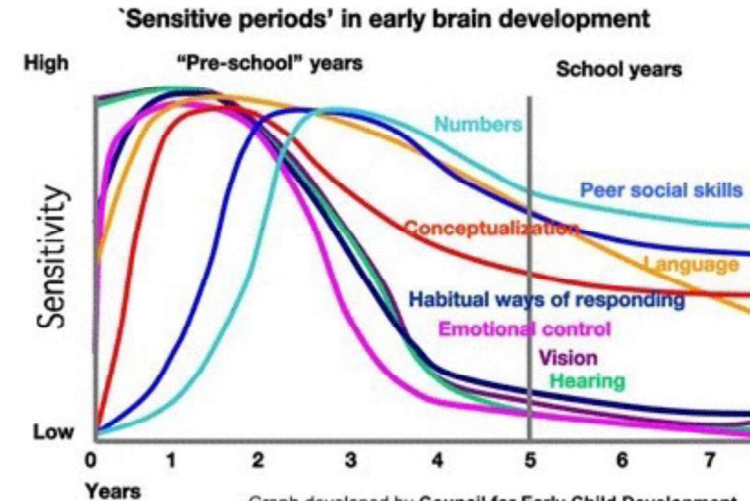


- 1: CRITICAL TIME PERIOD FOR LANGUAGE LEARNING
2. PARENTAL INVOLVEMENT
3. LANGUAGE RICH ENVIRONMENTS

(Humphries, et al., 2012; Knoors & Marschark, 2012; Marschark & Spencer, 2009; Mayberry, 1997; Petitto, 2009; Petitto & Dunbar, 2009; Stanley, 2005; VL2 Research Brief # 2, 2011; Laurent Clerc Center, 2015; Longo & Robinson, 2015)



#1 Critical Time Period



(Humphries, et al., 2012; Knoors & Marschark, 2012; Marschark & Spencer, 2009; Mayberry, 1997; Petitto, 2009; Petitto & Dunbar, 2009; Stanley, 2005)



Infants and Toddlers



(Mayberry, 1993; VL@ Research Brief #2, 2011; MARSCHARK & HAUSER, 2012)



Three - Seven Years Old

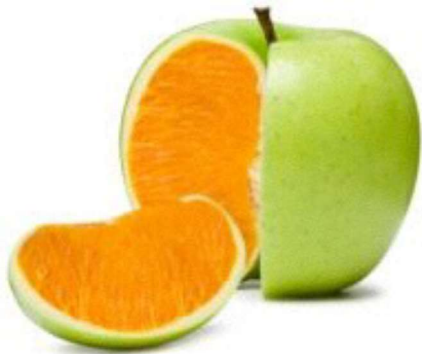


(Knoors & Marschark, 2012; NAD Position Paper, 2014; Petite, 2009; Marschark & Hauser, 2012)



“Language acquisition that starts at age three or four is not natural.”

-Marschark & Hauser, 2012-



#2 Parental Involvement



(Laurent Clerc Center, 2015)



PARENT INVOLVEMENT

in their child's education

(Laurent Clerc Center, 2015; Marschark & Spencer, 2009; Petitto, 2009; VL2 Research Brief #4, 2011)

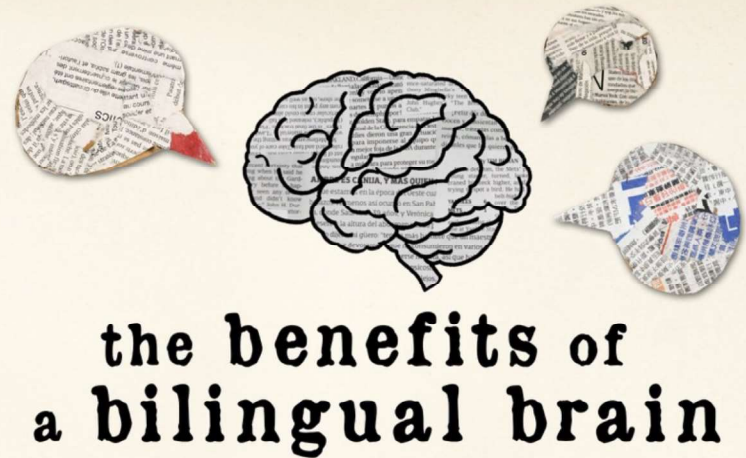
Marschark & Hauser, 2012



#3 Language Rich Environment



(Carter & Senterfeit, 2013; Laurent Clerc Center, 2015)



Benefits of Bilingualism



achieve developmental milestones on time

promotes language and literacy development

promotes cognitive flexibility

(VL2 Research Brief # 7, 2012; Marschark & Hauser, 2012)



What is the ripple effect of the research findings?



Deaf Education Teacher Training Programs with a Bilingual Focus

ASL/English Bilingual Education Programs

ASL/English Bimodal Bilingual Programs

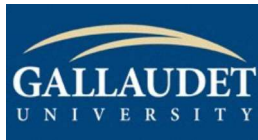
(VL2 Research Brief # 8, 2012)



Deaf Education Teacher Training Programs with a Bilingual Focus



UC San Diego



(VL2 Research Brief # 8, 2012)



ASL/English Bilingual Education Programs



ASL

Promoted as a first language and used as the medium of instruction and communication.

English

Addressed primarily through reading and writing



ASL/English Bimodal Bilingual Programs



Traditional ASL & English Bilingual Program

+ with +

Additional strategies and opportunities for children to develop and use spoken language commensurate with their oral ability



Research Briefs





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Survey