

How Deaf Students Learn: What Research Shows Us



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Outline

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- ⌘ Background: Deaf students in US
- ⌘ Cognitive development
- ⌘ Language learning
- ⌘ Literacy development
- ⌘ Implications for the classroom

Background: Deaf Students in US

- ⌘ Demographics
- ⌘ School placement
- ⌘ School achievement

Cognitive Development: Visuospatial Skills

⌘ Sensory compensation?

⌘ Visual function

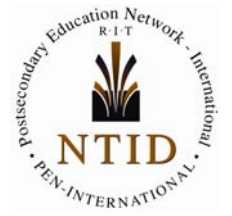
☑ Image generation

☑ Attention

Cognitive Development: Short Term Memory

- ⌘ Do deaf people have shorter memory spans?
- ⌘ Recent research on STM
- ⌘ The verbal span
 - ☐ Native speaker: 7 +/- 2
 - ☐ Deaf signer: 4 +/- 1
- ⌘ Effects of STM span size on reading

Interaction of Knowledge and Reading



ASUL
BERDE
PULA
LILA

Interaction of Knowledge and Reading



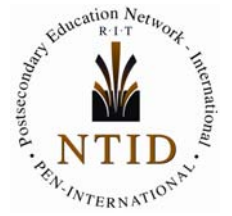
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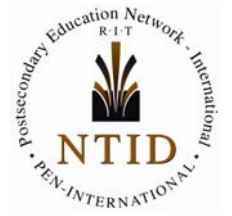
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Interaction of Knowledge and Reading



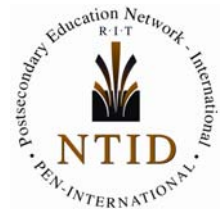
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Cognitive Development: Long Term Memory



- ⌘ Examples of long term (semantic) memory
- ⌘ Importance of long term memory
- ⌘ Differences in knowledge organization

Language Learning

⌘ Deaf students learning a sign language

☑ English: Daddy Tagalog: Ama/Tatay

☑ English: goed, foots ASL: DON'T--EAT

⌘ Key factors in language acquisition

☑ A rich language environment

☑ Quality parent-child communication

⌘ Learning to speak versus learning to sign

Literacy Development

⌘ Reading

- ☐ different decoding strategies
- ☐ Similar metacognitive strategies

⌘ Writing

- ☐ Product: vocabulary & structure; organization and content.
- ☐ Process: modeling and social interaction

⌘ Language and Literacy

Implications for the Classroom

- ⌘ Visual distractions
- ⌘ STM and reading
- ⌘ Semantic memory and reading
- ⌘ Language learning and academic success
- ⌘ Clear and meaningful communication
- ⌘ Interactive, constructivist approaches

References

- ⌘ Bavelier, D.(December, 2003). Effects of early deafness on visual attention and short term memory. National Technical Institute for the Deaf, Department of Research Lecture Series, Rochester, NY.
- ⌘ Marschark, M., Convertino, C.& LaRock, D. (in press). Optimizing academic performance of deaf students: Access, opportunities, and outcomes. In D.F. Moores & D.S. Martin (Eds.), *Deaf learners: New developments in curriculum and instruction*. Washington, D.C.: Gallaudet University Press.
- ⌘ Marschark, M., Lang, H.G., & Albertini, J.A.(2002). Educating deaf students: From research to practice. Oxford: Oxford University Press.
- ⌘ Marschark, M. & Spencer, P.E. (Eds.) (2003). *Oxford handbook of deaf studies, language, and education*. Oxford: Oxford University Press.