ENSURING LANGUAGE ACQUISITION: ASL AND ENGLISH

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Window of Opportunity

- Babies born with innate ability to acquire language, but ability decreases over time
- Earliest years: most critical for language acquisition
  - Numerous studies agree: The earlier, the better
  - First six months most crucial
- Language acquisition starts at DAY ONE
  - Each day without access to language, more delayed deaf/HH baby is
- More access to language: more readily the acquisition
  - E.g ability to attribute independent mental states to himself and others
- Language acquisition happens naturally – through environment
  - Language development is contingent on frequent, consistent, and accessible communication.

Language: Not Merely Words or Grammar

- Language competency: essential for cognitive, social, emotional, and psychological development
  - Enable us to reason, deduct, create
    - Broaden conversation topics to include more than what's in the visual field
  - Tool for thinking, problem-solving sharing concepts, forming relationships with others
  - Access to culture and society
    - Most learning is incidental
    - Acquire tools necessary to make sense of the world
  - Child's identity formed from emotional/cognitive dispositions
  - Child ability to separate mental states – his own and others
- Without concept, just rote memorization or copying bodily motion

Early Acquisition: L1 and L2

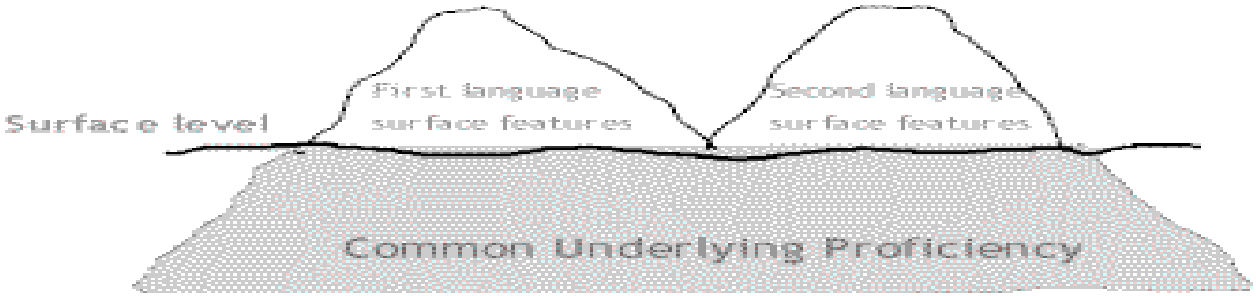
- For innate capacity to develop understanding of syntax and grammar effortlessly, must develop fluency in L1 during critical period
- Children are better equipped to learn L2 at a very young age
- When L2 is not readily accessible, L1 acts as a backbone by providing access to concepts.
- When 2 languages learned at the same time at a young age, same part of brain for both
  - L2 learned later: different part of brain

Early Acquisition: L1 and L2

- Children younger than 5 behave like native speakers in both languages
  - Not really second language learners
- Simultaneous acquisition of L1 and L2 more beneficial
  - Otherwise – lack of necessary language facility to learn through medium of that language

Common Underlying Proficiency Model

- Studies on spoken 1L and L2
  - Underlying cognitive/academic proficiency common across languages which allows cognitive/academic or literacy-related proficiency to be transferred from one language to another.

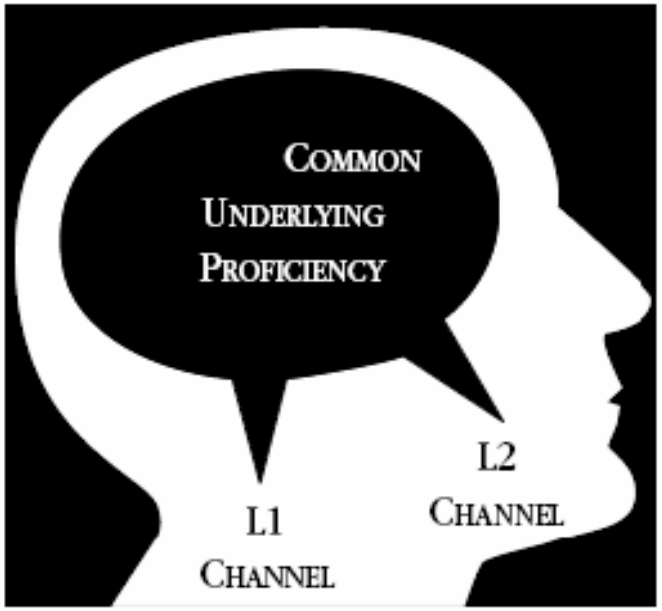


- (Cummins, 1981 and 2001; Baker, 2001; Genesse, et al, 2006)

L1 Enables, not Inhibits L2

THE SEPARATE UNDERLYING PROFICIENCY (SUP) MODEL OF BILINGUAL PROFICIENCY

THE COMMON UNDERLYING PROFICIENCY (CUP) MODEL OF BILINGUAL PROFICIENCY



Cummins, available at http://gallaudet.edu/aa/Documents/Cummins_ASL-Eng.pdf

Threshold Theory

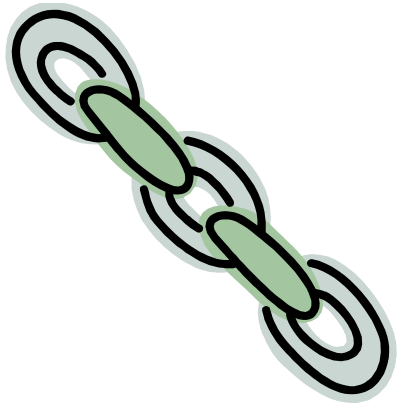
- Three levels of balanced bilingualism (Cummins)
  - limited bilingual
  - less balanced bilingual
    - age-appropriate competence in one language
  - balanced bilingual
    - age-appropriate competence in both languages
- helps to explain why language minority children taught only through the second language may fail in school and why children educated in developmental bilingual programs may have a cognitive advantage over monolingual students

Developmental Interdependence Hypothesis

- Child's L2 competence partly dependent on level of competence of L1
- Basic Interpersonal Communicative Skills (BISC)
  - development of conversational fluency
- Cognitive/Academic Language Proficiency (CALP)
  - the use of language in decontextualized academic situations

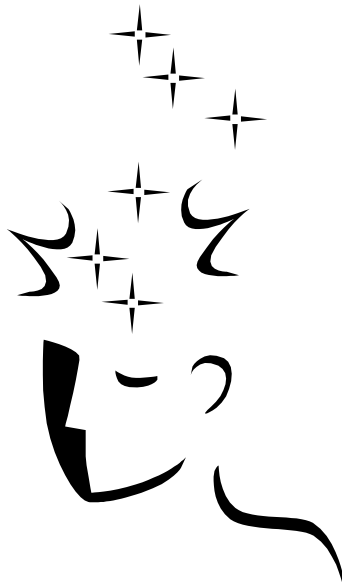
ASL: Link to Language

- Fully accessible visual language
- Not based on rote or articulating
  - Can link words to concepts, rather than words to articulation
- Early access to cultural and social concepts
  - Most learning is incidental
  - Key to cognitive development
  - As opposed to learning mechanisms



ASL as L1

- Deaf children may gain some degree of ASL skills at any time
- To be **native**, must be exposed to ASL during critical period
- More fluent in ASL, more readily English acquisition



English as L1

- Limited and artificial exposure to English initially
  - Children resort to rote memorization and physical movement or pictures without understanding the meaning of words
    - No link between arbitrary word and concept
  - Access to only surface information
    - miss out on sounds, tone of voice
- 85% of parents of deaf children choose spoken language as primary communication
  - CHOP reports that only 25% of these children become successful auditory, spoken users with no visual language
  - This leaves the **other 75%** = behind
- Whether written or spoken, not readily accessible for deaf and hard of hearing children
  - Even for those with CI

Cochlear Implants

- USA: 12 months or older
  - 12 months without language stimulation if no visual language use
  - Once activated, must learn how to listen – child does not know how to interpret the wealth of auditory information immediately (missed 12 months)
    - Newest CI technology by Cochlear Inc. shows 77% of word recognition at fitting.
  - Even after months or years of wearing CI and listening, still not at the same level of hearing children

ASL as a Bridge: English Acquisition

- ASL does NOT impede English development written/spoken
  - Speech can be taught more effectively based on English knowledge achieved through reading – but need language first. hence ASL
- Not a novel concept
  - Study on hearing child of deaf/hearing parents:
    - Bilingual learning may temporarily slow vocabulary but ASL may enhance communicative effectiveness (Prinz & Prinz, 1979)
- Similar results as studies on spoken L1/L2

ASL Enhances English

- Studies show better vocabulary acquisition if child knows ASL first
  - True even for children of deaf adults
- Sign supports English – even for children with CIs
  - evidence for the benefits that learning ASL confers on spoken and written English language development in deaf children.
  - No studies to the contrary
    - No studies showing quicker language acquisition for children with CI in spoken environment v. in signed environment
  -

Case Study

- Susie is a 12 year old deaf female in the 5th grade
- Cochlear implant at 2, continues to use it
- Total communication program with speech therapy
- "Great" speech and ASL
  - Strong BICS – can converse in either language
- However, overall language skills significantly delayed for her age
  - Weak CALP –
    - Antonyms, synonyms, completing sentences with appropriate word, constructing grammatically correct sentences, sentence and paragraph comprehension, comprehension and explanation of intended meaning when literal meaning does not convey message, use of inference
    - Use of social language: expressions of regret, sympathy, etc.
    - Listening comprehension: Identifying main concepts, defining words, overall message
- Report blames lack of foundation in ASL (L1) which inhibits development of English (L2)

Additional Advantages of ASL

- Parent – child communication
  - Positive interaction
- Best predictors of Language Development
  - effective mother-child communication, early intervention programs and early use of ASL

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