BSL Acquisition and Assessment of Deaf Children- Part 4:

Dynamic Language Assessment of Deaf Children

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Assessing deaf children's language

- Variability in children's language experience
- Low performance on standardized tests
- Lack of appropriate instruments & accepted intervention strategies

Child A

- Male
- Age: 6;11
- Hearing parents
- EAL, Spanish, some sign
- ASD

Child B

- Female
- Age: 6;4
- Deaf parents
- ASL
- No additional needs

Child A

Child B

Child A

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- Age: 6;11
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Child B

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- Age: 6;4
- Deaf parents
- ASL
- No additional needs

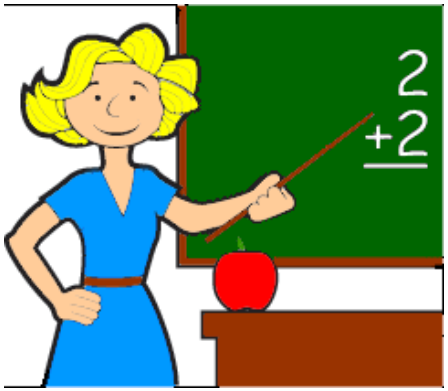
Below average score on ASL vocabulary test

A practitioner's dilemma

- How to differentiate between low test performance due to..
  - language delay ?
  - language difference ?
  - language learning problem ?

support ≠ needs

Dynamic Assessment (DA)



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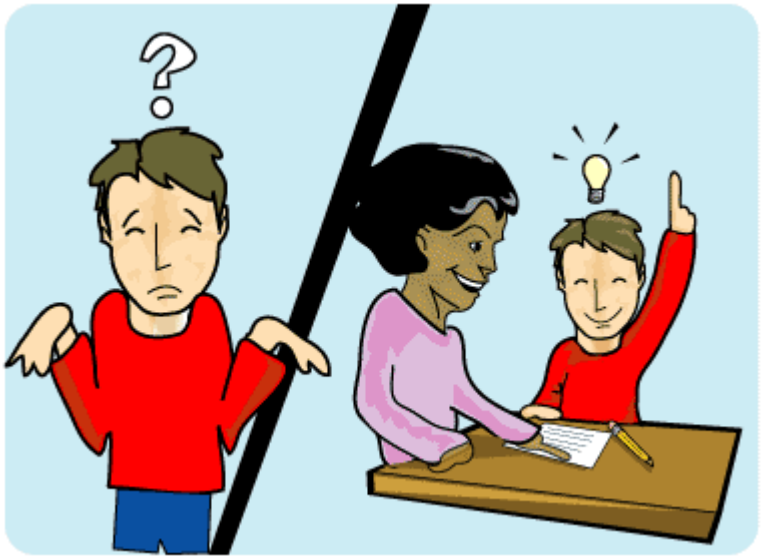
- learning potential
- enhanced performance

‘HOW’ instead of ‘WHAT’



- Learning through interaction with more experienced peer or adult (Vygotzky, 1978)
- Measuring how much learning results from a mediated intervention

What are the advantages of DA?

- We are able to test individuals for whom standardised tests are not applicable e.g., children with hearing loss, learning difficulties, autism or ADHD
- We may be able to distinguish children whose poor test performance stems from different linguistic or cultural background
- We can determine which cues or prompts are useful tools for an individual, and may be used in therapy programmes
- We may be able to predict the amount of intervention that a child may need

How do you carry out a Dynamic assessment ?

There are two main methods:

1. Test – teach – retest

This involves giving the child a task, monitoring how he does it, then prompting or scaffolding him to achieve it, and finally retesting him to see if he has grasped the skills and can use them himself on another example. Which prompts and scaffolds, and how much help the child needs to grasp the task is noted.

2. Graduated prompting

- There is no standardised testing at the start
- The child is given a task and prompts to achieve it are given if and when they are needed
- Cues or prompts are arranged in a hierarchy of facilitative cues from least supportive to most
- Start with giving the child the smallest amount of support for him to achieve the task
- Record the number of cues that enabled the child to succeed

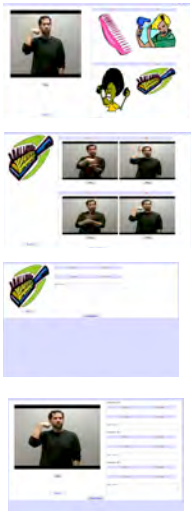
DA with deaf children

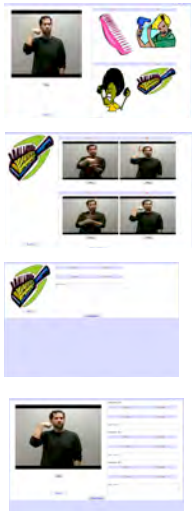
- Focus on assessing children's cognitive skills
  (Lidz, 2004; Olswang & Bain, 1996; Tzuriel & Caspri, 1992)
- DA of language
  (Asad, Hand, Fairgray, & Purdy, 2013)
- Useful alternative approach to standardized testing
- Standardized tests underestimate abilities

DA of vocabulary knowledge

(Mann, Pena & Morgan, 2014; Mann, Pena, & Morgan, 2015)

Test > Teach > Re-test





- 37 children, 6-10 years, from Deaf school in USA
- 2 Language ability groups (weak vs. strong)

Study design:

	STAGE 1: TEST	STAGE 2: TEACH	STAGE 3: RETEST	STAGE 4: TEACH
Mediation Group	X	X	X	-
No mediation Group	X	-	X	X
Count	37	18	37	19

Identification of language ability

- Use of signing experts as language assessors
- Establish reference standard independent of the DA or other testing
- 11 children identified as weaker language learners

Aims

Is DA sensitive to variation in deaf children's language skills ?

Distinguish among stronger/ weaker language learning groups

Better identification of deaf children with language impairment

Putting DA into practice/adapt instruction to individual needs

Short-term goal

Long-term goal

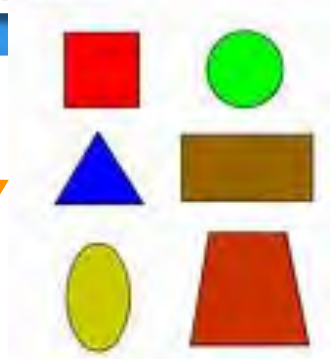
Mediation

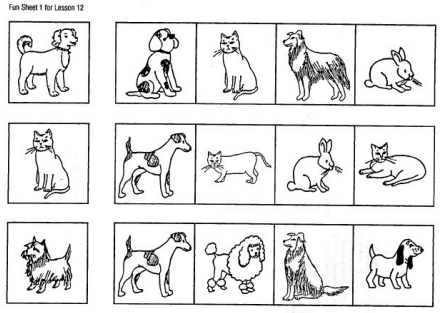
- 2 30-minute, individual, scripted sessions in ASL
- Target: vocabulary knowledge, specifically semantic categorization
- Two Mediators
- Both fluent signers (CODAs)
- Blind to child language ability
- Ratings of children's responsiveness to mediation (behavior and cognitive strategies)

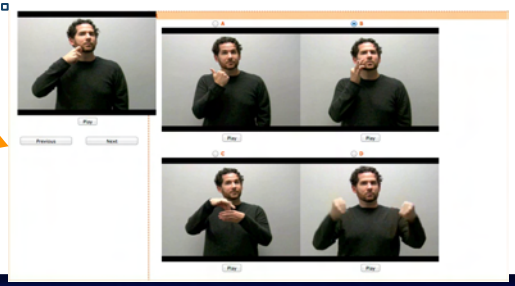
Teaching activities

Adapted from *Bright Start* curriculum (Haywood, Brooks, & Burns, 1992)

"Categories"

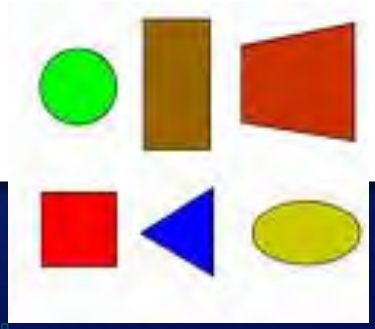






Example

Activity 1: Grouping cutouts



A: Could you explain to me how you grouped these?

C: Well if they were all mixed up and then for example, I needed to find a square, I know exactly where it is rather than having to search through them all. It's better this way. Like if you were to ask me to find a small rectangle, I could find it here.

A: That's a good idea. It's right. Could you think of another way to group these? (*Child starts rearranging*)

A: What's that?

C: They're in rows of big shapes and rows of small shapes. Rather than looking around the table for a shape, you can just look up or down the rows for a shape or size.

A: Oh so the big shapes are in the row and the smaller shapes are in this row? I see. You're right, it is a lot easier to find. Could I group it like this?

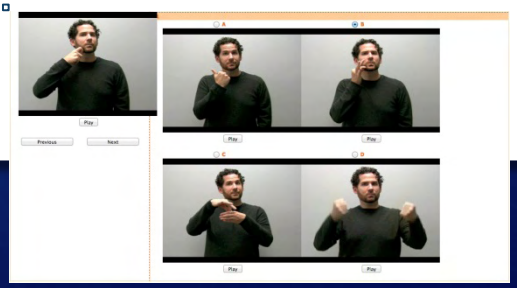
C: Oh by color.

A: Yeah, is that right?

C: Yeah I know what you mean. You're matching it by color.

Example

Activity 2: Grouping signs



C: It is a fruit. Apple and fruit are together.

A: So that means that fruit and apples can be put into a group.

C: Fruit and bananas are also fruit.

A: Right. So all fruit can be put into that group. Can we group apple and candy? Can those be grouped together? Can apples and candy be put into one group? (*Child shakes head*) Why not?

C: Because they are different. Fruit is its own group and candy has its group.

A: Can apples and tea be group together? Apples and tea, can they be grouped together? Both of them in the same group?

C: No.

A: Why not?

C: Because apples are in their own group.

A: But why?

C: Because they are different.

Findings

Finding 1: Difference in learning

+ Children respond differently to mediation

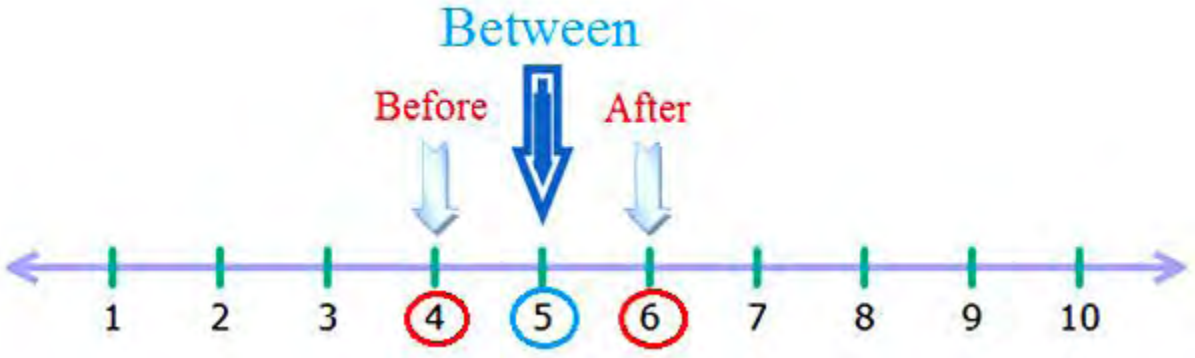
  - Cognitive tools
    - Problem Solving
    - Task Orientation
  - Behavioral tools
    - Motivation
    - Response to feedback

Finding 2: Language learning ability

- Mediator ratings of children are highly sensitive to language learning ability
  - Children identified as having weak language require more mediator support

Finding 3: Learning Improvement

- Impact of mediation on post-test performance
  - Children who receive mediation perform better on post test measures compared to those who don't
  - Similar gains by stronger/weaker children following mediation but different level of support required



Child A

Child B

Summary

- Differences in weaker/stronger language learners' response to mediation
  - use of cognitive tools
  - level of mediator support required
- Response to mediation predictive of language ability
- Increase in post test scores

Implications

- Potential for use with deaf populations
  - provides information in a short & structured way on how the child learns
  - complementary to formal assessments
  - has a role and utility of clinical judgment and observation in clinical decision making

- useful for interpreting learning in a population that is highly heterogeneous
- offers insights into learning strategies in deaf individuals with different language experiences
- enables assumptions how a student may respond to a particular type of intervention in the future

Contact

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- Thank you!