# Dynamic Assessment of deaf children's language and literacy skills

Wolfgang Mann, PhD

SSC/adept conference, June 24th, 2017

# Is this new?

- Problem in studying children's language development in that it is difficult to distinguish between impairment and delays due to natural variations in the learning backgrounds   (Hart & Risley, 1995)

- Bilingual children/ELL
(Gutierrez-Clellen, Simon-Cereijido, & Sweet, 2012; Sullivan, 2011)
  - Unfamiliarity with standardized testing   (Peña, Iglesias, & Lidz, 2001)
  - Differences between their home and school language experiences (Flanagan, Ortiz, & Alfonso, 2013; Rogoff, 2003; Schieffelin & Ochs, 1986)

- Cognitive profile of children with reading disability cannot always be discriminated from that of generally low-achieving children when using static or traditional assessments (Swanson & Howard, 2005)

# Why is this distinction important?

- Avoiding misdiagnosis
- Decreasing the likelihood of a mismatch between..

support ≠ needs

WHAT?

HOW?

Pictures removed due to copyright

Child's response to assisted performance as frame of reference for separating poor readers from children who are reading disabled

# Dynamic Assessment (DA)

+                                              =

- measure learning potential
- evaluate enhanced performance

○ Learning through interaction with a more experienced peer or adult (Vygotzky, 1978)

# Performance

- Initial ability level
- Learning ability

Pictures removed due to copyright

**Learning potential**: extend to which the performance of a child at a given time can be modified with intervention

# *How* do you carry out a Dynamic assessment ?

1.  Test – teach – retest
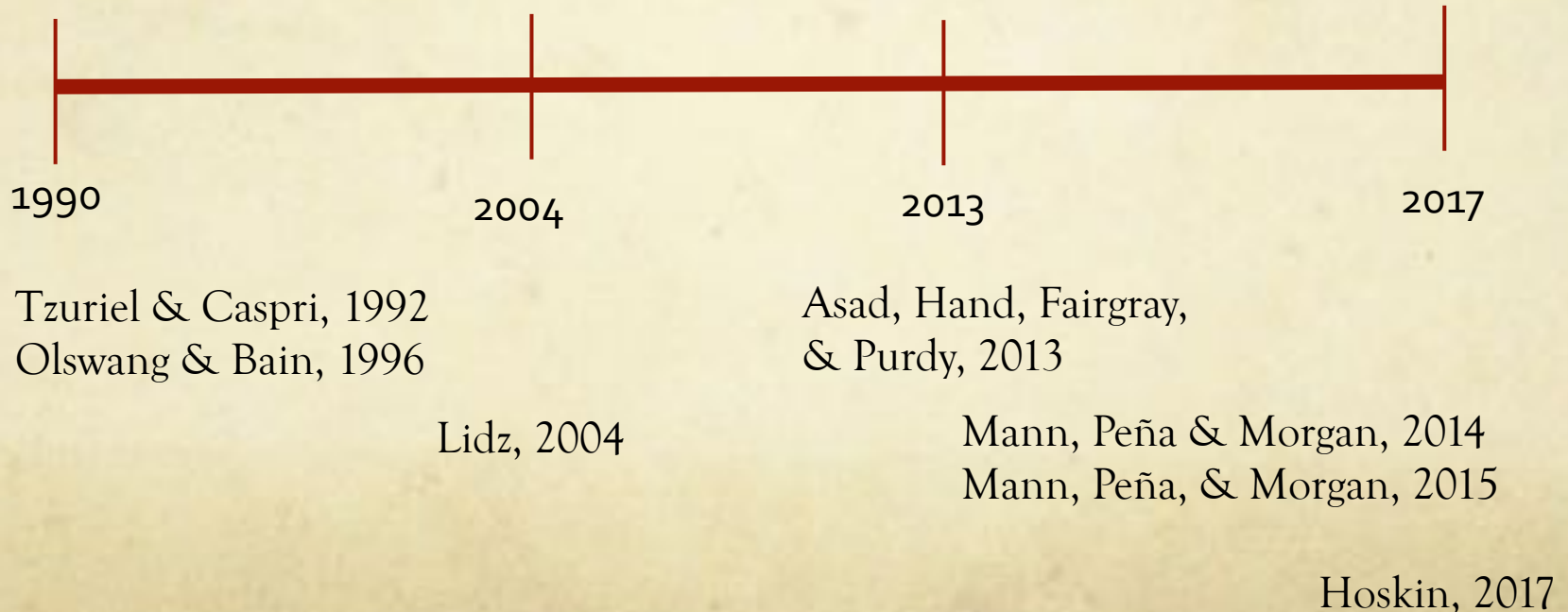
<span style="color:red">Pictures removed due to copyright</span>

2.  Graduated prompting

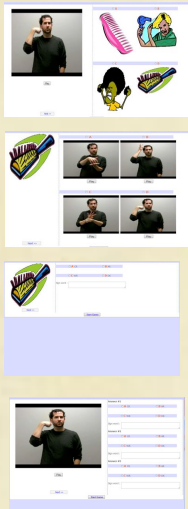# DA with deaf children

DA focus on cognitive skills
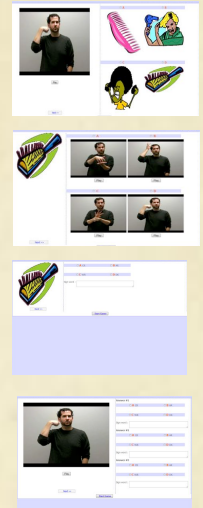
DA within language learning context

1990      2004      2013      2017

Tzuriel & Caspri, 1992
Olswang & Bain, 1996

Asad, Hand, Fairgray,
& Purdy, 2013

Lidz, 2004

Mann, Peña & Morgan, 2014
Mann, Peña, & Morgan, 2015

Hoskin, 2017

# DA of vocabulary knowledge

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

Test     →     Teach     →     Re-test

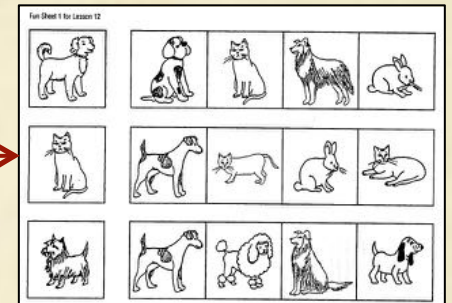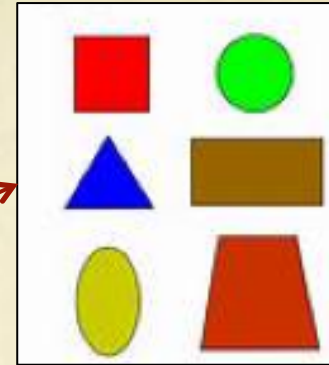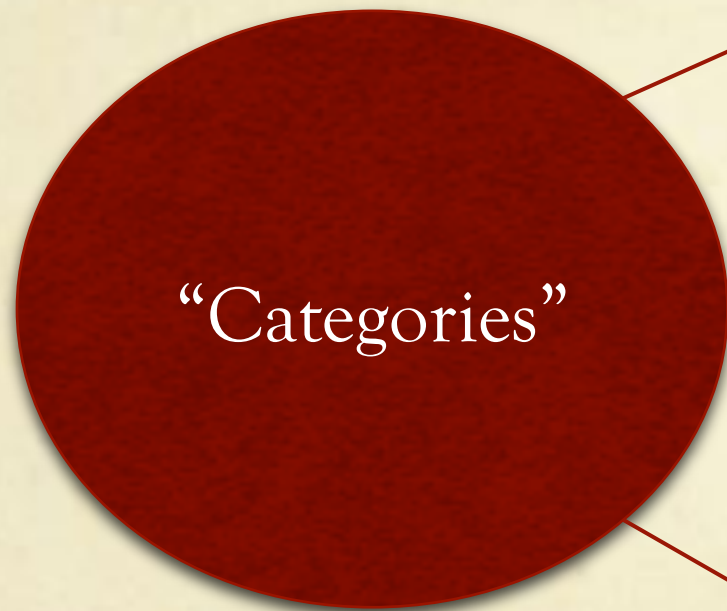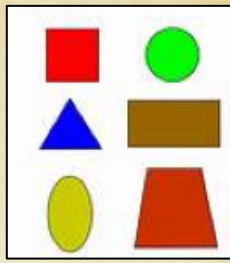Picture removed due to copyright

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

# Mediation activities



## "Categories"
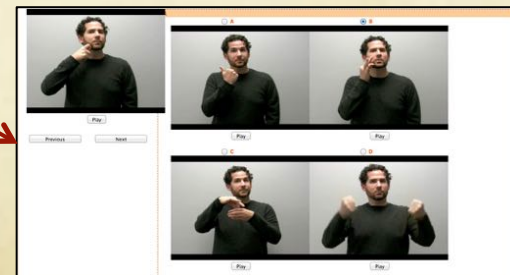
A: ..can you think of a different way of grouping these items? These shapes, you grouped them, but can you think of a different way of grouping these?

C: [Shakes head]

A: No?  Is this right or wrong?  [puts all of the purple shapes together] Can you do this?

C: No because they are different shapes.

A: In what way are these shapes similar?

C: The color. Same.

A: You cannot group them?

C: Can't group them.  They don't fit in the same group because of their different shapes.

9 yrs
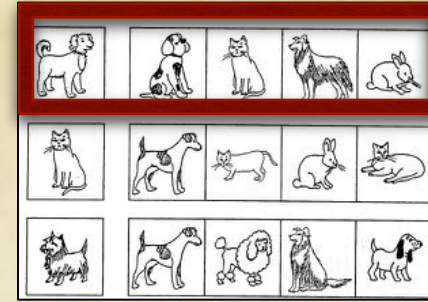
- A: Ok so you put all the dog pictures together in one group. OK. Can you think of a different way to group them?

- C: No.

- A: Think of different ways you can group them. You can do it any way you want. Use your imagination. Is it possible to put all of the pictures in this top row in a group together?

- C: No they are different. One is a cat and the other is a dog.

- A: That's true, they are all very different. But they are all animals, right?

- C: Yes but they are all different animals.

11 years

A: Can you think of a specific group that would include apple and candy?

C: *Shakes head*  Because candy is not healthy. And fruit is healthy.

A: So they are separate.

C: They are different...

A: Do you think it would be possible to group candy because it is a food, right?  And an apple is food, right?  So if I wanted to make a big group of all foods, can I put both apple and candy into the group?

C: They are different but you could.  But I don't like to do that because if you have too big of a group you are forced to root through it to find anything.

10 years
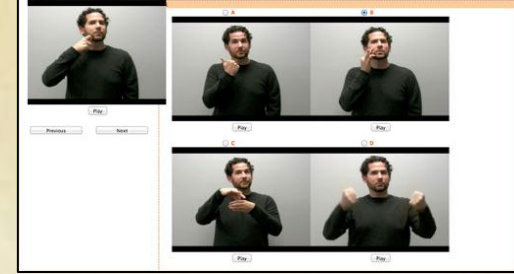
# Findings

- Group (strong/weak) differences in learners' response to mediation

- Response to mediation predictive of language ability

- Increase in post test scores

- Benefit of mediation regardless of ability

# But.. isn't DA just like teaching?

## YES but...

# DA..

..provides information on how a child learns in a

*short*          &          *structured*          way.

# DA..

..provides information on how a child learns in a

Each session about 20-25 minutes

*short* & *structured* way.

Pictures removed due to copyright

# DA..

..provides information on how a c...

*short* & *structured* way.

Each session about 20-25 minutes

Scripted mediation, Measure of child's response to mediation

# DA..

..provides information on how a c[hild]

Scripted mediation, Measure of child's response to mediation

Each session about 20-25 minutes

*short* & *structured* way.

Pictures removed due to copyright

This enables practitioners to form assumptions how the child may respond to future intervention

# Evaluating children's response to learning

| | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| **AFFECTIVE** | | | | | |
| • Anxiety | Calm, little to no soothing required | Fidgety, but can be soothed | Uncomfortable, breaks needed to sooth | Distressed, much soothing required | Distraught, crying, cannot be soothed |
| Comments: | | | | | |
| • Motivation | Enthusiastic, engages in tasks readily | Curious, asks about tasks | Ambivalent, unsure about tasks | Guarded, seems fearful of tasks | Avoidant, does not want to engage |
| Comments: | | | | | |
| • Tolerance to frustration | Persistent, wants to continue despite difficulty | Contrite, voices difficulty, but continues | Tentative, appears unsure about continuing | Frustrated, continues under protest | Rejecting, cannot continue |
| Comments: | | | | | |

Mediated Learning Observation Form (Peña & Villareal, 2000):

# Evaluating children's response to learning

| COGNITIVE (cont.) | | | | | |
|---|---|---|---|---|---|
| Elaboration | | | | | |
| • Problem-solving | Systematic and efficient | Organized, but inefficient | Sketchy plan | Disorganized, haphazard plan | No plan; trial and error |
| Comments: | | | | | |
| • Verbal mediation | Elaborates plan clearly | Talks through problem | Talks occasionally | 1-2 word utterances only | No verbal mediation |
| Comments: | | | | | |
| • Flexibility | Uses multiple strategies readily | Has preferred strategies, but can change when necessary | Some evidence of more than one strategy and occasionally utilizes them | Recognizes limitations of strategy, but cannot see alternatives | Persists with one strategy, regardless of outcome |

Mediated Learning Observation Form (Peña & Villareal, 2000):

THEORY

<span style="color:red">Picture removed due to copyright</span>

PRACTICE

# How to make DA meaningful in the classroom?

# Improving Learning through DA Framework

(Lauchlan & Carrigan, 2013)

# Improving Learning through DA Framework

(Lauchlan & Carrigan, 2013)

# Improving Learning through DA Framework
(Lauchlan & Carrigan, 2013)

# Improving Learning through DA Framework

(Lauchlan & Carrigan, 2013)

# Improving Learning through DA Framework

(Lauchlan & Carrigan, 2013)

# Improving Learning through DA Framework
(Lauchlan & Carrigan, 2013)

# A collaborative approach

○ Educational psychologist, SLT, teacher, SENCO, CSW, parent, child, researcher

○ Agreeing on which Learning Principles to target (cognitive & emotional) and how to target them

○ Use of DA to bring about change in these principles

  ○ In what ways can the assessor/mediator enable change in the child's approach to learning?

Picture removed due to copyright

# Deaf children's online reading
(Mann, O'Neill & Thompson, ongoing)

- Exploring strategies used by deaf and hearing secondary students when reading online/carrying out searches on the internet

- Focus on good readers

- Extend to students with varying literacy levels

- http://www.ssc.education.ed.ac.uk/research/onlinereading/

IMPROVING LEARNING THROUGH DYNAMIC ASSESSMENT

A PRACTICAL CLASSROOM RESOURCE

Thank you!

Wolfgang.Mann@roehampton.ac.uk

Asad, A. N., Hand, L., Fairgray, L., & Purdy, S. C. (2013). The use of dynamic assessment to evaluate narrative language learning in children with hearing loss: Three case studies. Child Language Teaching and Therapy, 1-24. DOI: 10.1177/0265659012467994

Hart, B., & Risley, T. R. (1995). *Meaningful differences in the everyday experience of young American children*. Paul H Brookes Publishing.

Hoskyn, M., & Swanson, H. L. (2000). Cognitive processing of low achievers and children with reading disabilities: A selective meta-analytic review of the published literature. *School Psychology Review*, *29*(1), 102.

Lauchlan, F. (2012). Improving learning through dynamic assessment. *The Australian Educational and Developmental Psychologist*, *29*(02), 95-106.

Lauchlan, F., & Carrigan, D. (2013). *Improving learning through dynamic assessment: A practical classroom resource*. Jessica Kingsley Publishers.

Lidz, C. S. (2004). Successful application of a dynamic assessment procedure with deaf students between the ages of four and eight years. International Journal of Theoretical and Applied Finance, 7(2), 59-73.

Mann, W., Peña, E. D., & Morgan, G. (2015). Child Modifiability as a Predictor of Language Abilities in Deaf Children Who Use American Sign Language. *American Journal of Speech-Language Pathology*, *24*(3), 374-385.

Mann, W., Peña, E. D., & Morgan, G. (2014). Exploring the use of dynamic language assessment with deaf children, who use American Sign Language: Two case studies. *Journal of communication disorders*, *52*, 16-30.

Olswang, L. B., & Bain, B. A. (1996). Assessment information for predicting upcoming change in language production. Journal of Speech, Language and Hearing Research, 39(2), 414-423.

Stuebing, K. K., Fletcher, J. M., LeDoux, J. M., Lyon, G. R., Shaywitz, S. E., & Shaywitz, B. A. (2002). Validity of IQ-discrepancy classifications of reading disabilities: A meta-analysis. *American Educational Research Journal*, *39*(2), 469-518.

Swanson, H. L., & Howard, C. B. (2005). Children with reading disabilities: Does dynamic assessment help in the classification? *Learning Disability Quarterly*, *28*(1), 17-34.

Tzuriel, D., & Caspi, N. (1992). Cognitive modifiability and cognitive performance of deaf and hearing preschool children. The Journal of Special Education, 26(3), 235-252.

Vygotsky, L. S. (1978). Mind in society: The development of higher mental process. Harvard University Press.