

# Using Dynamic Assessment to measure deaf children's reading skills

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# Discriminating poor readers

- Lack of procedures for separating children who primarily have reading problems related to instructional or environmental factors from children who have information processing deficits.

(Hoskyn & Swanson, 2000; Stuebing et al., 2002)

- 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)



WHAT?



HOW?

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

# 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

**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
2. Graduated prompting

# DA with deaf children

DA focus on  
cognitive skills

DA within language  
learning context



Tzuriel & Caspri, 1992  
Olswang & Bain, 1996

Lidz, 2004

Asad, Hand, Fairgray,  
& Purdy, 2013

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

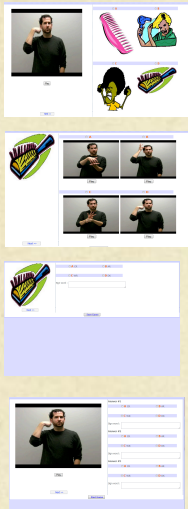
Hoskin, 2017



# DA of vocabulary knowledge

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

Test → Teach → Re-test



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

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.

# Findings

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

Assessing beyond performance

*Not evaluated in psychometric testing*

DA also evaluates the child's  
learning disposition

# Evaluating children's response to learning

	1	2	3	4	5
<b>AFFECTIVE</b>					
• 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

PRACTICE

How to make DA meaningful  
in the classroom?

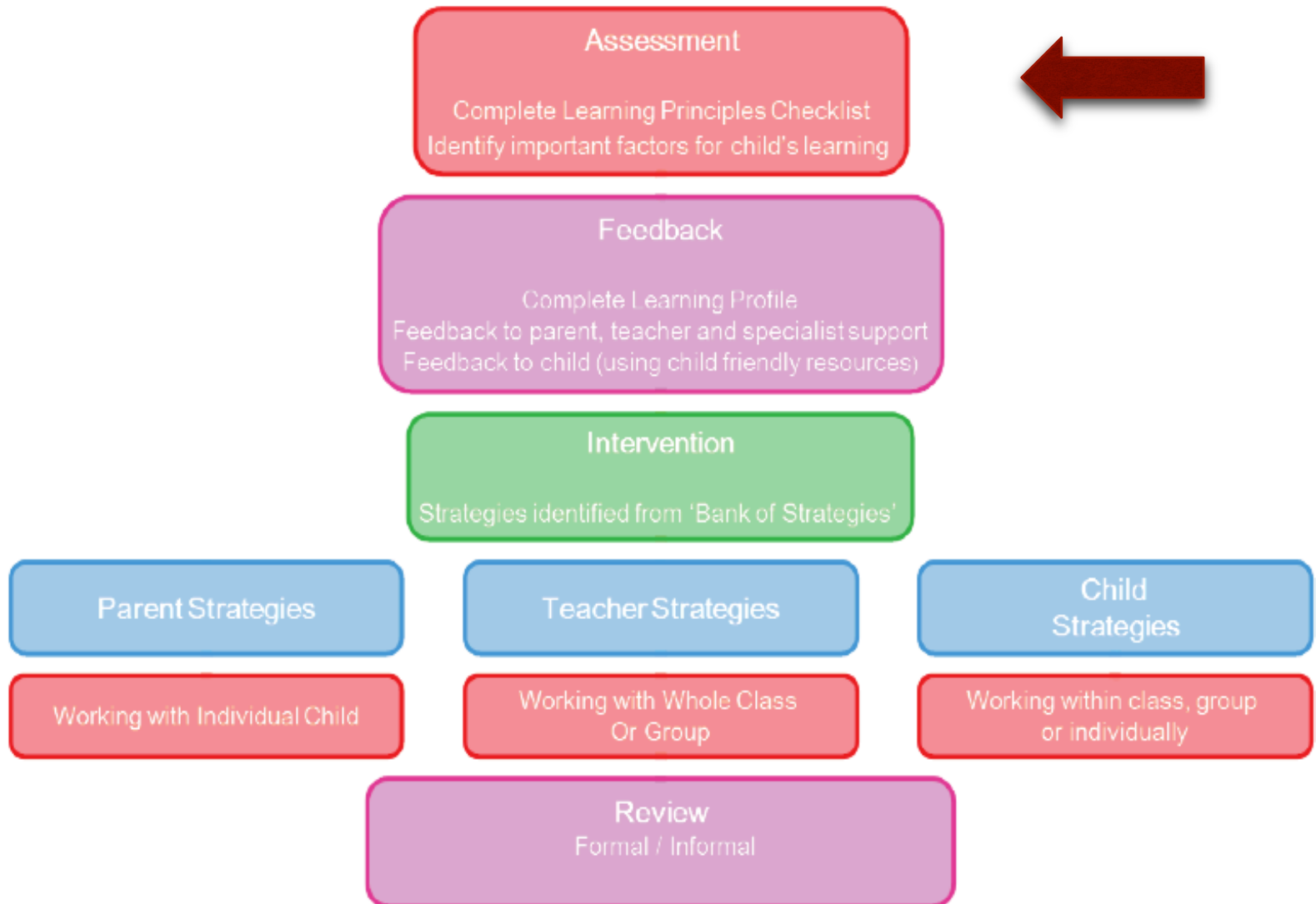
# Improving Learning through DA Framework

(Lauchlan & Carrigan, 2013)



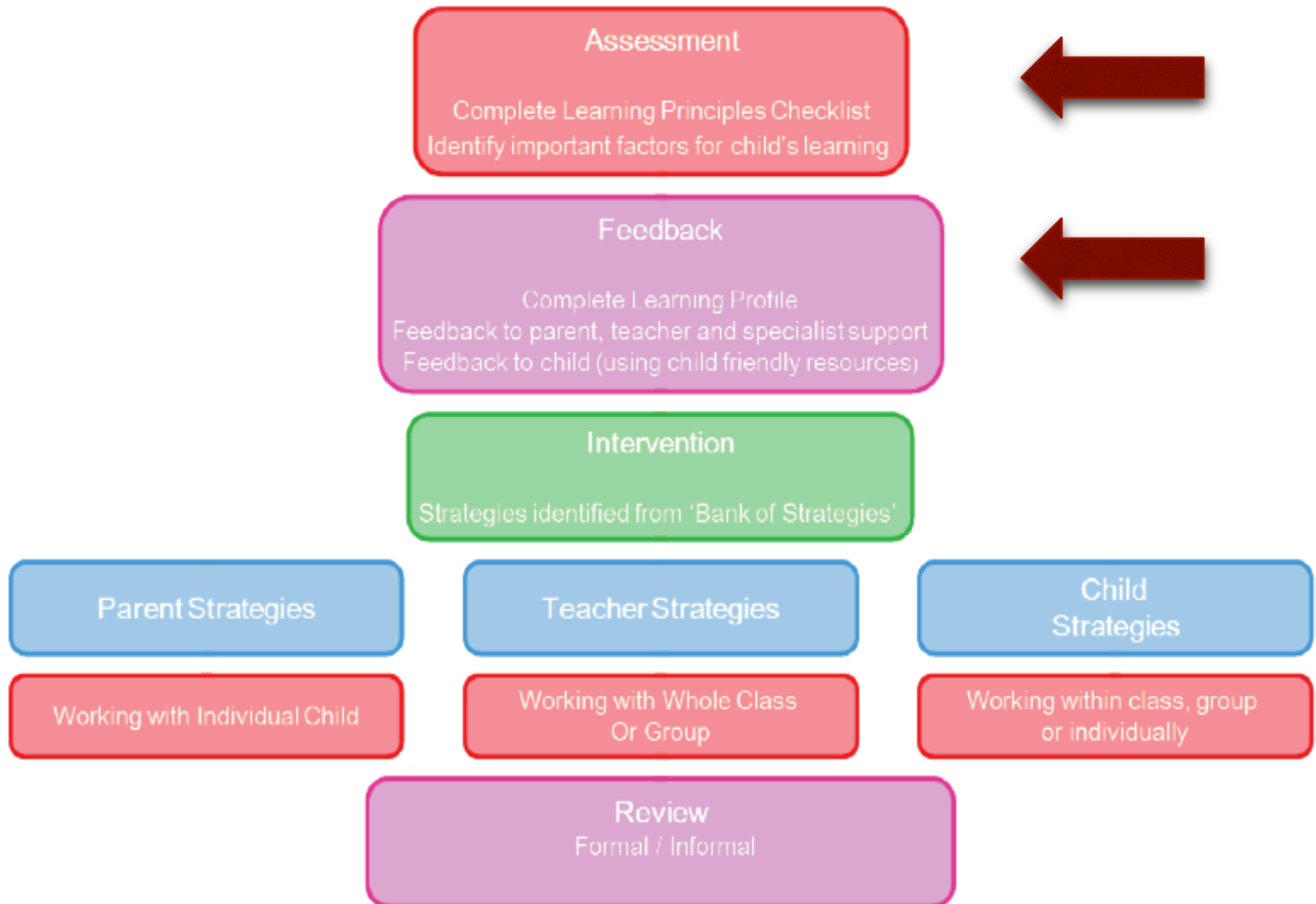
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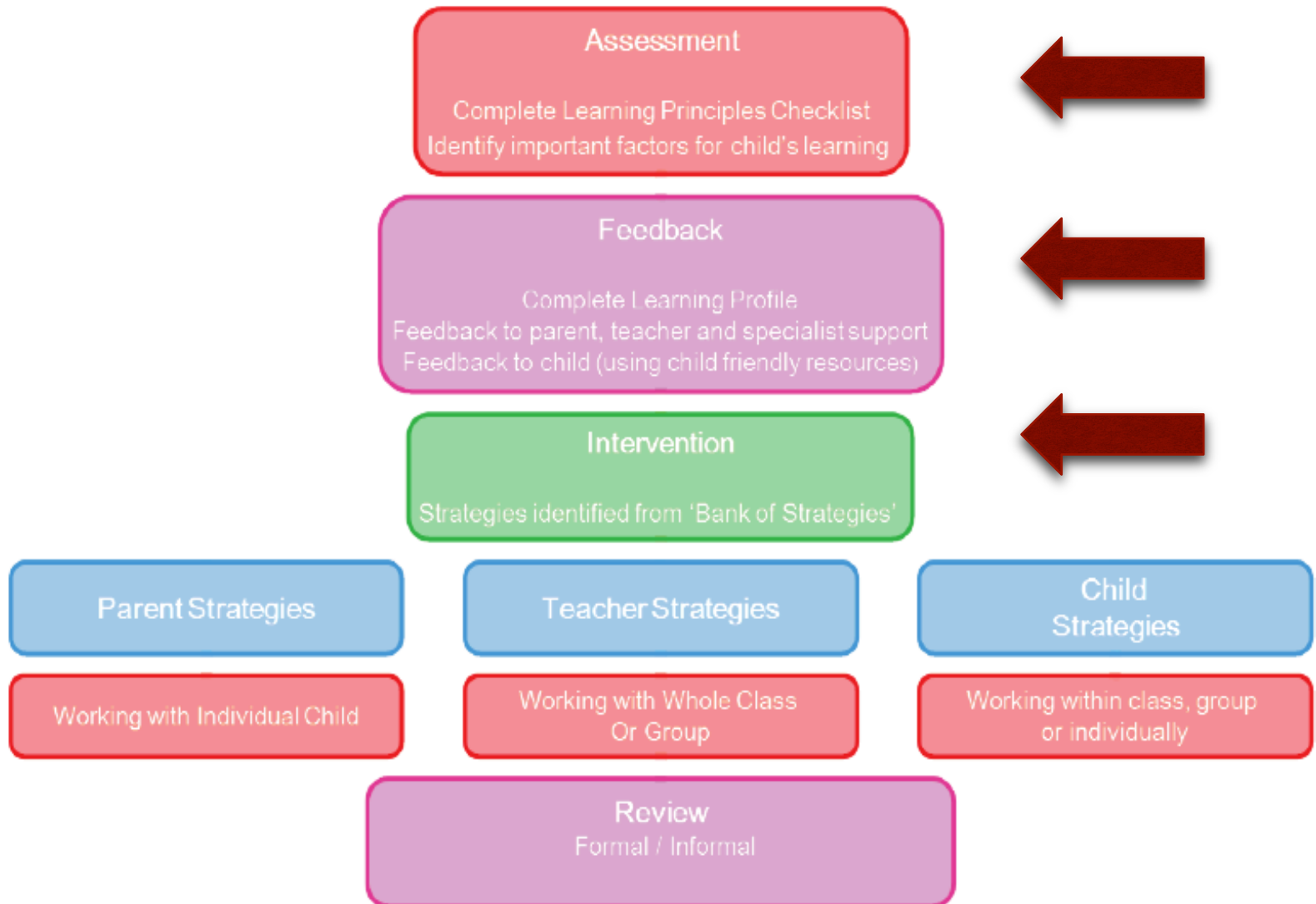
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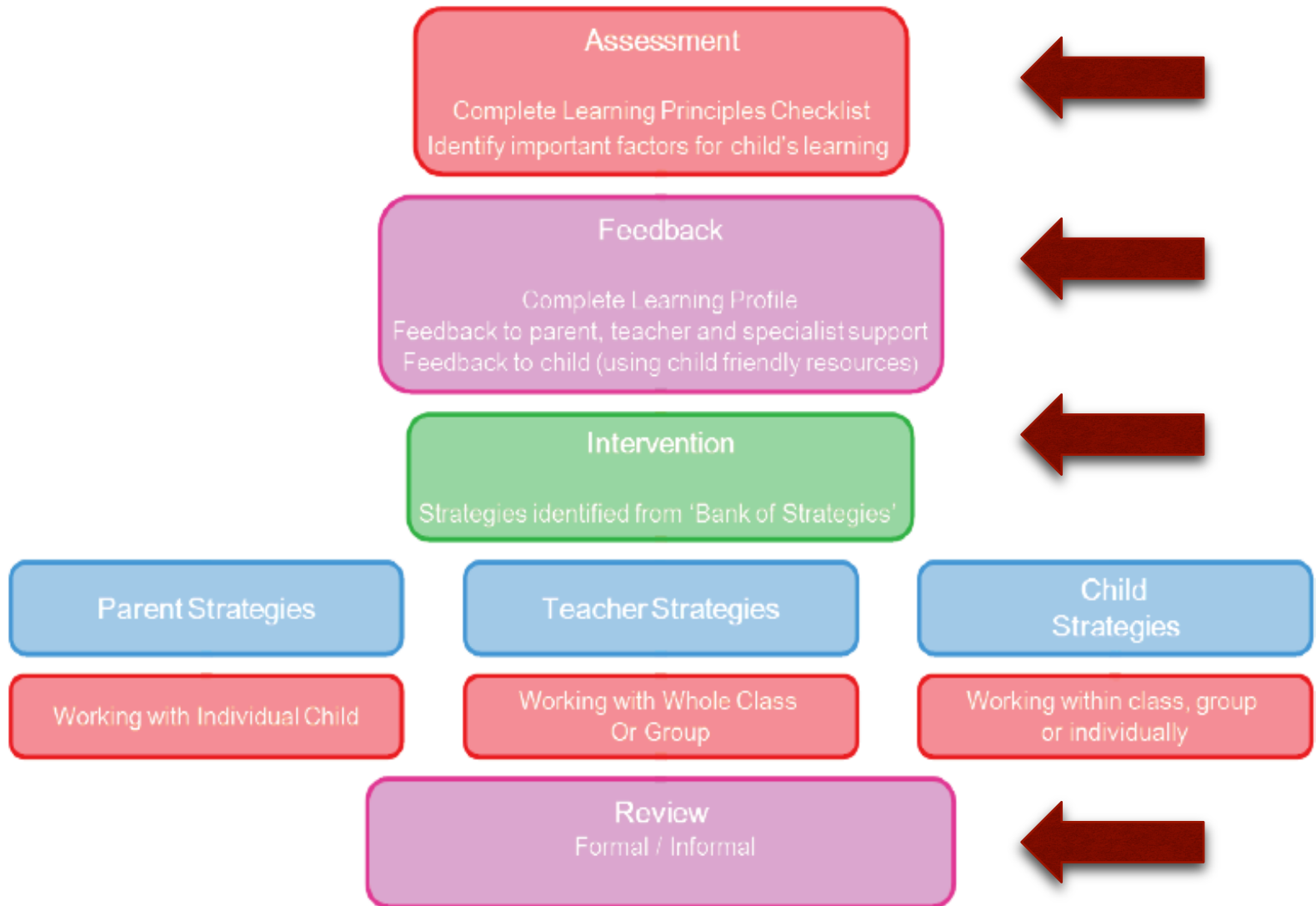
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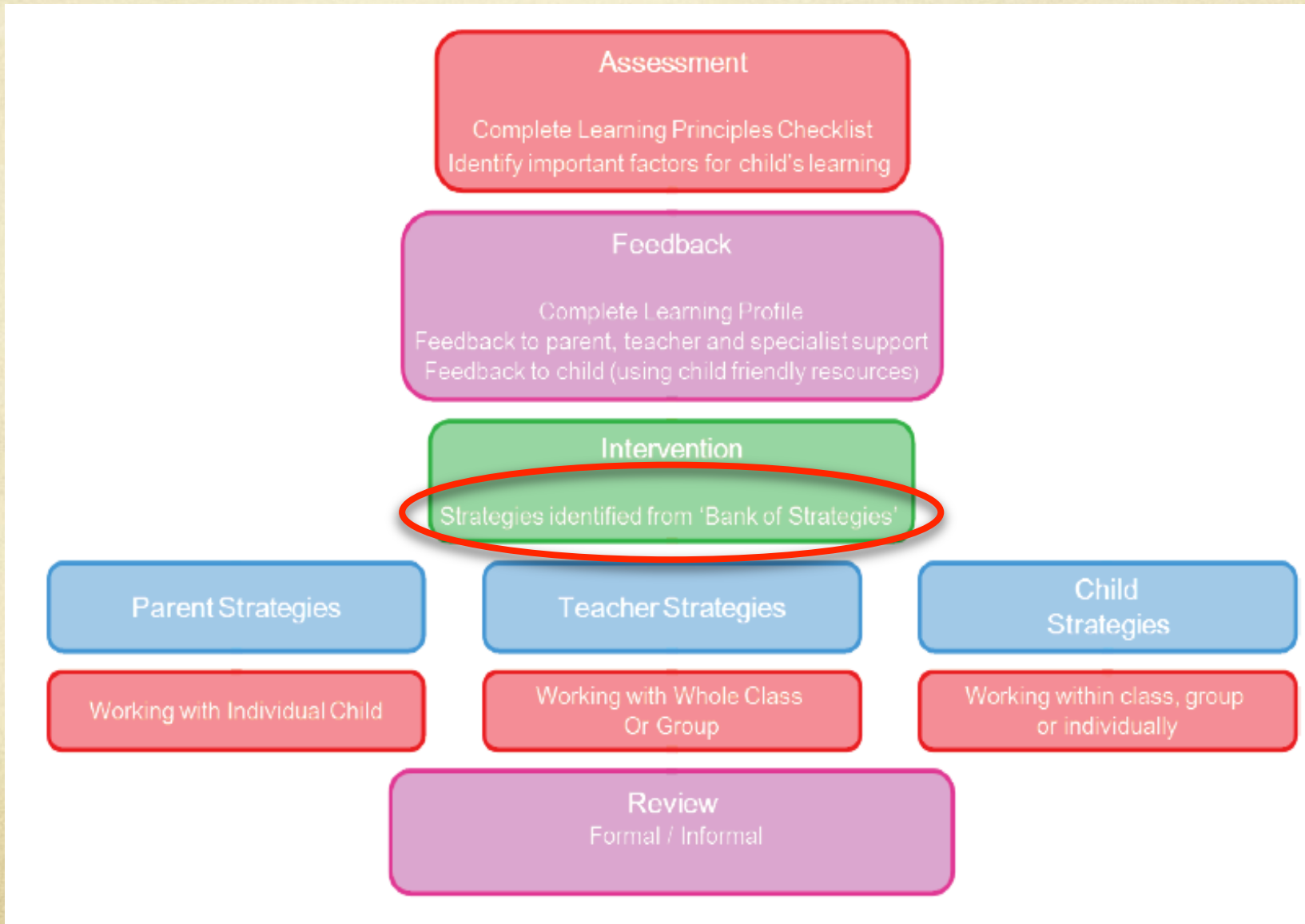
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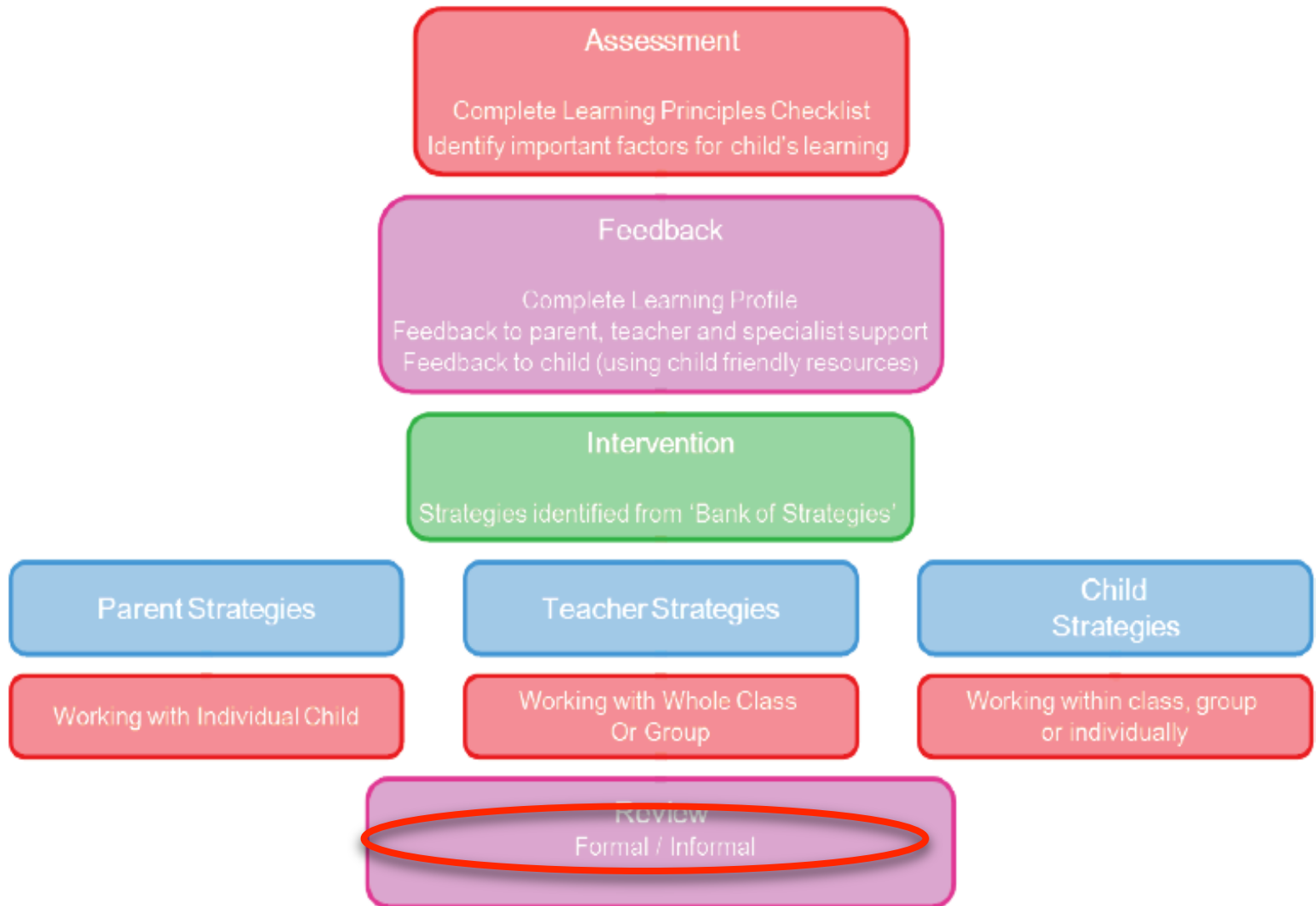
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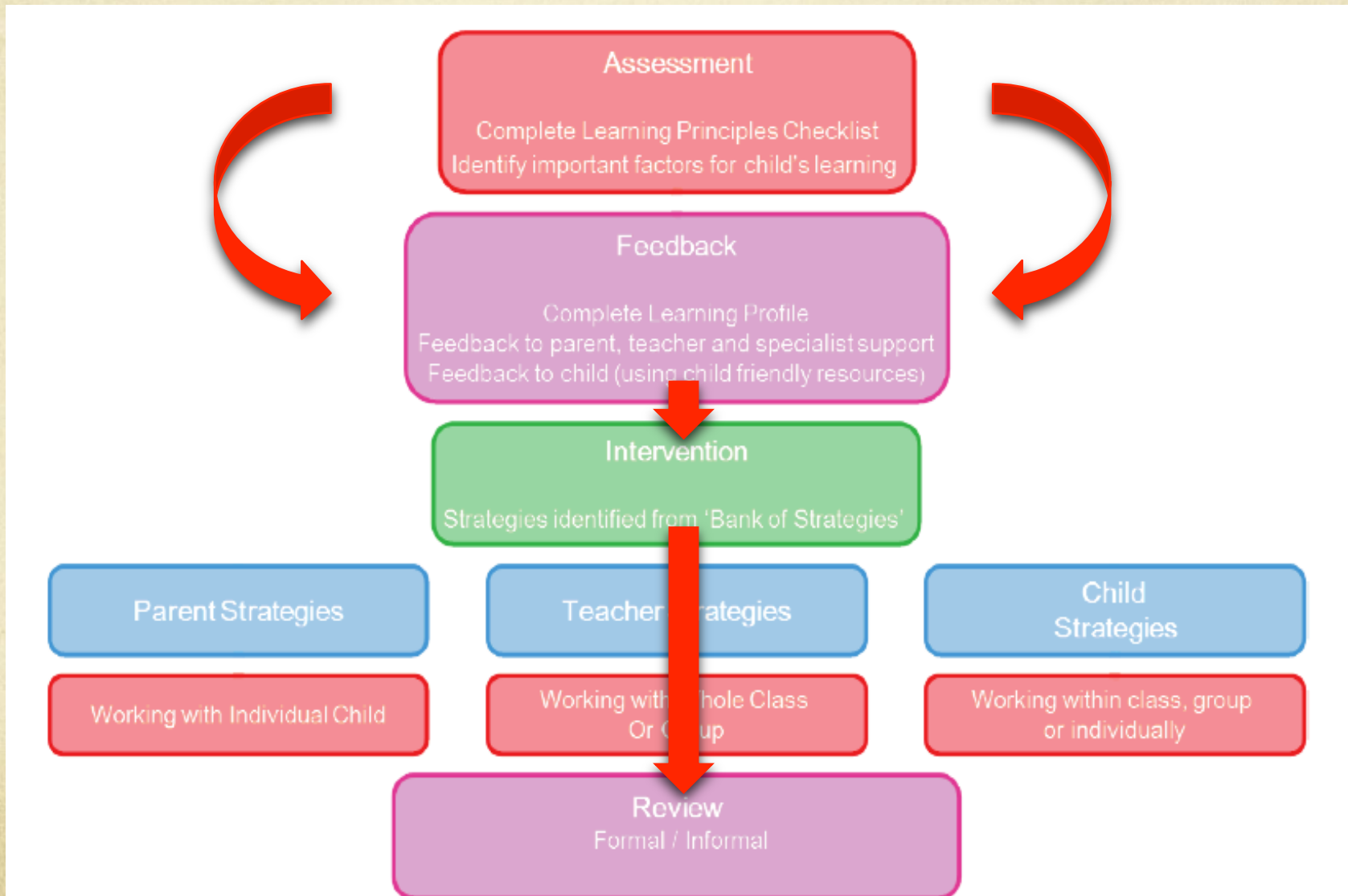
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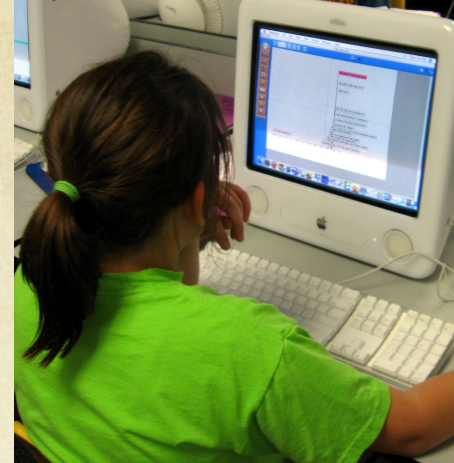
# A collaborative approach

- 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?

Ok, I'm in!  
How can I get involved?

# 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/>

Thank you!

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