



Mind the Gap: Language Development is Key for Inclusive Education and Wellbeing

Thursday 27th March 2025





Session 3: Seeking to improve the identification of language needs

9:30-13:00

Chair: Petra Schulz

Linguistic knowledge for better identification, assessment and intervention. This panel will discuss the necessary liaison across disciplines and sectors to improve assessment highlighting the role of linguistics





Leibniz-Zentrum
Allgemeine Sprachwissenschaft



WHICH MECHANISMS SHAPE (HERITAGE) GRAMMARS?

ARTEMIS ALEXIADOU

MIND THE GAP: LANGUAGE DEVELOPMENT IS KEY FOR INCLUSIVE EDUCATION AND WELLBEING

BRITISH ACADEMY, LONDON, MARCH 27, 2025

INTRODUCTION

The construction of multilinguals as Others

Do we practice what we preach?

Edited by

Artemis Alexiadou

Claudio Scarpaglieri

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Heike Wiese

- Multilingualism: the normal condition for contemporary as well as historical human societies
- Widespread *Othering* of multilingual speakers: constructed as members of a social and linguistic out-group
- *Othering* not restricted to public discourse but also in educational practice and in academia

INTRODUCTION: HERITAGE SPEAKERS

1. Heritage speakers (HSs): minority language speakers in a majority language environment
2. HSs are multilingual speakers
3. By adulthood, HSs tend to be dominant in the language of their larger national community

Lohndal et al.(2019). Heritage language acquisition:what it reveals and why it is so important for linguistic theory.*Language and linguistics compass*.

INTRODUCTION

- Lack of formal education in the heritage language
- Low status of the heritage language
- Surely, their language/grammar is different?

DIFFERENT HOW?

- HS grammar \neq native monolingual grammar:
 - heritage grammar both **augments** and **reduces** patterns in comparison to the **monolingual native** grammar

Scontras et al. (2018) In support of representational economy: Agreement in heritage Spanish. *Glossa: a journal of general linguistics* 3(1):1.1–29

POSSIBLE OUTCOMES: BOTH NOT MONOLINGUAL-LIKE?

1. **augment:** use **more articulated structures**, one-to-one correspondence between form and meaning, *Analyticity*
Example: HSs would say make open instead of simply open in a sentence like John opened the door
2. **reduce:** use **less articulated patterns**, make fewer distinctions, *Representational Economy (ease of working memory)*
Example: if a language has three genders, HSs might restructure to two or lose gender

Scontras et al. (2018): is it possible to predict **for H-grammars** which domains may deliver less articulated structures, and which may increase analyticity?

BUT WHY DO WE THINK HSS ARE SPECIAL?

- Heritage languages are not less or more complex
- They employ patterns found also in monolingual language and use
- Investigation of a variety of domains of language use leads to a different picture of what HSs can do and how this relates to the monolingual grammar

REGISTER VARIATION

- Register variation: “variation in the form of linguistic expressions according to the formality of the social context of use” (Paolillo 2000:215)
- Formal vs. informal, spoken vs. written registers vary with respect to certain features
- Look at both HSs and monolinguals in different communicative situations to identify
 - markers of register variation among monolingual speakers
 - the patterns HSs employ

HERITAGE LANGUAGES AND REGISTER

- HSs might lack some registers of the heritage language, especially if these are transmitted by formal education, Rothman (2009)
- H-languages are spoken at home they are characterized by a casual, conversational speech style, (Dressler 1991: 101-102)
- This leads to a gradual loss of some registers among HSs, Chevalier (2004)
- Which features are subject to register variation?
- Are changes in the H-grammar amplified by language contact?

HERITAGE LANGUAGES AND REGISTER

Greek: *diglossia*, Ferguson (1959), two divergent registers of the same language

- low variety, acquired naturalistically at home and used for everyday conversation, *dhimotiki*
- high variety, learned through formal instruction, *katharevusa*
- Standard Modern Greek has several learned features (e.g., vocabulary), acquired late even by monolingual speakers

METHOD

Two age groups of Greek HSs in Germany & US: adolescents and adults; monolingual controls
HSs-Germany : N=27 adults, N=21 adolescents, HSs-US N=31 adults, N=32 adolescents
Monolinguals: N=32 m adults, N=32 adolescents; focus on US group

written
witness report

formal

voicemail
to police

written



spoken

text
to friend

informal

voicemail
to friend

Wiese (2020): 'language situation' setting is a method that allows researchers to elicit naturalistic data.
This set-up provides comparable both oral and written data and in different levels of formality (data sets 2x2).



ASPECT

- | | | |
|-----|---------------------------------|---------------------------------|
| (1) | agap(a)-o
love.Pres.Impf.1SG | agapi-s-o
love.Pres.Perf.1SG |
| (2) | graf-o
write.Pres.Impf.1SG | grap-s-o
write.Pres.Perf.1SG |

■ Perfective (completed event) vs. Imperfective (ongoing event) marked in morphology

ASPECT: OUR DISCOVERY

- Both monolingual and HSs make use of periphrastic constructions (PCs) instead of simple lexical verbs
 - light verb *do, kano* + a bare nominal/verbal form, familiar from code-switching
 - use of PCs in informal and oral contexts by monolinguals and overgeneralization of periphrasis by HSs

Alexiadou, A. & V. Rizou. 2022. The use of periphrasis for the expression of aspect by Greek Heritage speakers: a case study of register variation narrowing. *Register Studies*.

ASPECT: OUR DISCOVERY

PCs	Lexical verb
Kano <u>freno</u> , <u>vazo</u> <u>ta</u> <u>frena</u> , kano brake = do brake	Frenaro= brake
perno attention = take attention	Siniditopio = realise
Perno agalia = take a hug	Agaliazo= hug
Kano erevna= do an investigation	Erevno= investigate
Kano parking= do parking	Stathmevo= park
Den ixé ora na = don't have time to	Prolaveno= catch up
Kano stop= do stop	Stamatao= stop
Kano report=do a report	<u>Katatheto</u> = testify

ASPECT: OUR DISCOVERY

Mode	Register	HSs in Germany	HSs in the US	Control group
No PCs	No PCs	45.8%	50.8%	62.5%
oral	formal	8.3%	9.5%	3.1%
oral	informal	8.4%	6.4%	6.3%
written	formal	0.0%	4.8%	0.0%
written	informal	4.2%	0.0%	1.6%

WHY PCS? OUR DISCOVERY

- Use of PCs correlates with the [+learned (= *katharevusa*)] features of the verb: HSs avoid using synthetic forms for [+learned] verbs, e.g., *kata-theto* 'testify'
- Monolingual speakers use PCs as well in informal settings and in oral mode
- The use of PCs in perfective aspect: HSs tend to generalize the perfective form over the imperfective, especially in narration tasks
- Analyticity feature of register variation; also identified in language change: *synthetic to analytic*

GENDER AGREEMENT MISMATCHES

(3) i bala tu ksafniase ena skilo...ke pige ja na to piasi
the ball-**FEM** his surprised a dog and went so that it.**NEUT** catches

'His ball surprised a dog who ran to catch it.' *US H-speaker*

(4) Ke to skili ide tin bala ke tin kiniguse
And the dog saw-.3SG the ball-FEM and cl-FEM chase-IMP.PAST.3SG

- Greek has 3 genders: masculine, feminine and neuter, nouns agree in gender with articles and pronouns that refer back to them; No gender on English nouns
- Gender agreement mismatch in Heritage (3), but not in monolingual Greek (4)

OUR RESULTS

	HS USA adolescents		
category	correct	errors	%
Clitic agreement	211	47	18.2

	Monolingual Adolescents		
category	correct	errors	%
Clitic agreement	198	1	0.5

Alexiadou, A., V. Rizou, N. Tsokanos & F. Karkaletsou. 2021. [Gender agreement mismatches in Heritage Greek](#). *Languages* 6.

DEVELOPMENT OF A SEMANTIC AGREEMENT SYSTEM?

- No correlation with register
- Overgeneralization of neuter gender:
 - pattern familiar from changes in Greek dialects and L1 and L2 acquisition (phase of neuterization, neuter as default, Tsimpli & Hulk 2013)
 - Karatsareas (2011): a major development in gender agreement patterns in two Asia Minor Greek dialects (in contact with Turkish that lacks gender) is that **inanimate** masculine and feminine nouns become **neuter (semantic agreement)**

DISCUSSION

Changes in Heritage Greek in two areas: Aspect and Gender

- Aspect: analyticity
 - Register levelling: in one direction only **informal pattern -> formal**
- Gender: less distinctions, neuter as default for inanimates

DISCUSSION

- Aspect: the monolingual grammar has two alternatives, each guided by the particular communicative setting (analyticity favored in informal register)
- Gender changes not related to register
 - re-semanticization: a general process of language change (amplified by contact?)
 - nouns used do not allow register-dependent variability in gender
- Register may correlate with both analyticity and loss of distinctions (relative clause formation)

RESTRICTIVE RELATIVE CLAUSES (RRCs)

Greek RRCs:

- a) *o opios* [lit. the who] agrees in gender and number with the noun it modifies irrespectively of animacy, preferred in formal registers
- b) *pu* [that] un-inflected complementizer used irrespectively of animacy, preferred in informal register

(5) *o anthropos* *o* *opios* */pu* *agorase* *ena milo*
the man.M.NOM the.M.NOM who.N.NOM/that bought.3SG an apple
'The man who/that bought an apple...'

PU PRODUCTIONS

Table 3: Production of *pu* RRCs across registers and modalities in the two groups.

	Heritage Speakers in the US	Monolingual controls
Formal spoken	135	123
Formal written	93	129
Informal spoken	101	111
Informal written	61	85
	390	448

○ OPIOS PRODUCTIONS

Table 4: Production of *o opios* RRCs across registers and modalities in the two groups.

	Heritage Speakers in the US	Monolingual controls
Formal spoken	3	88
Formal written	3	61
Informal spoken	0	39
Informal written	2	23
	8	211

RRCS

- *pu* RRCs: the two groups pattern similarly
- The groups **diverge** concerning *o opios* RRCs, slight correlation of form with register
- Greek HSs avoid RRCs introduced by *o opios*, **tracking of agreement seems to be the problem**
- Pattern correlates with agreement mismatches

CONCLUSIONS: MECHANISMS

HS grammar \neq native monolingual grammar?

1. Analyticity

2. Less articulated patterns

- 1 is not a feature unique to H-grammars (register)
- 2 may also be a register feature
- 1 & 2 familiar from language change
- Not special to H-languages but characterize language faculty
- In support of the view that HSs are native speakers

Effective Language Assessment: Insights from Linguistic Theory and Language in Autism

Laurie Tuller

Université de Tours, INSERM, Imaging Brain & Neuropsychiatry iBrain, U1253
Tours, France

Linguistics



Language
Assessment

Linguistics

```
graph LR; L[Linguistics] --- S[Similarities/differences between languages of the world]; L --- G[Language growth in children]; L --> A([Language Assessment]);
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Similarities/
differences
between
languages of
the world

Language
growth in
children

Language
Assessment

Similarities/
differences between
languages of the
world



Language growth in
children

Illustrations from the phonological
component of language

The 12 most frequent consonants of the world's languages
=
95% of all consonants produced in early babbling in children

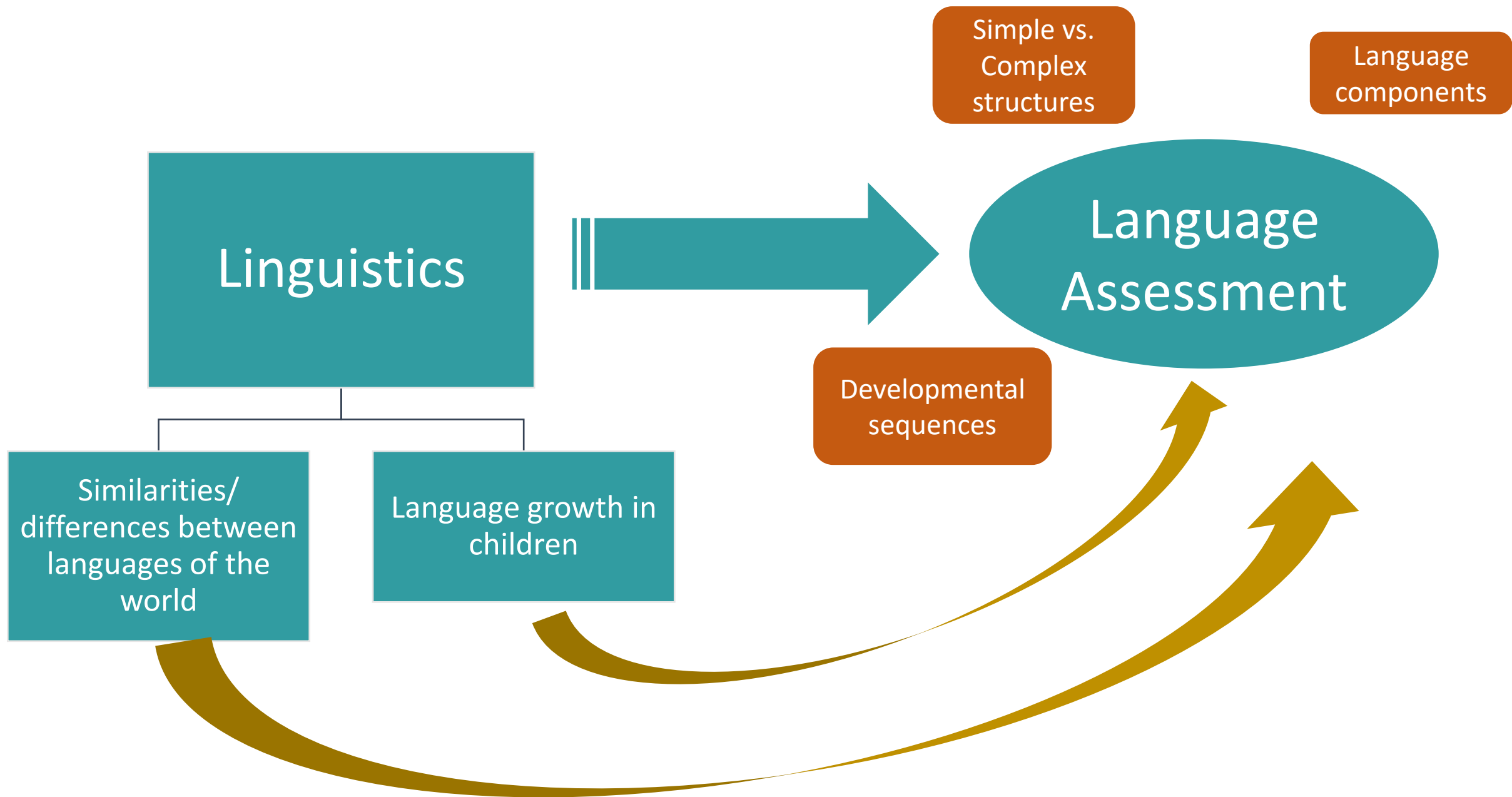
- **Phoneme inventory patterns**

Lgs in the world	Vowel Quality
2 vowels	/a, i/
3 vowels	/a, i, u/
5 vowels	/a, i, u, e, o/

Languages in the world	Consonants
Few consonants	stops
Average number of consonants	stops, fricatives
Large number of consonants	stops, fricatives, affricates

- **Syllable structure patterns**

Languages in the world	Types of Syllables		
	Simple	Moderately Complex	Complex
Very few	(C)V		
Most	(C)V	CVC, CCV	
Some	(C)V	CVC, CCV	(C) (C) (C)V(C) (C) (C) (C)



Roadmap

**1. Linguistic
Theory**



**2. Implications
for language
assessment**



**3. Language
in autism**



**4. Beyond
autism, beyond
childhood**

1. Linguistic Theory

- 1) What constitutes knowledge of language?
- 2) How is knowledge of language acquired?
- 3) How is knowledge of language put to use?

1) What constitutes knowledge of language?

A component of the mind **specifically dedicated to language**:

a computational system that generates mental structures

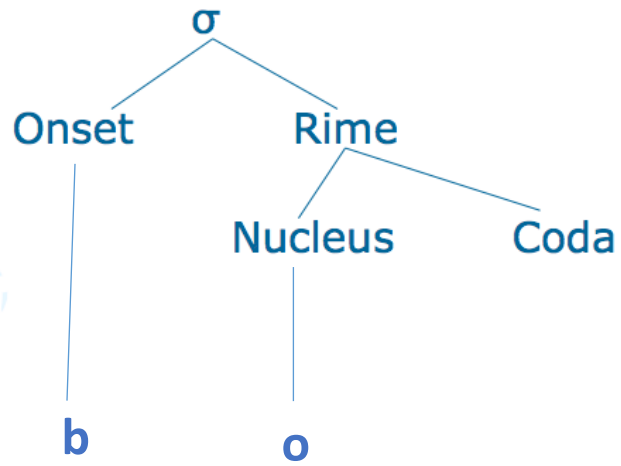
- This module of the mind consists of **different components**, each having different kinds of structures.

Internal ("Little") Modularity

- Structures differ in their relative **computational complexity**.

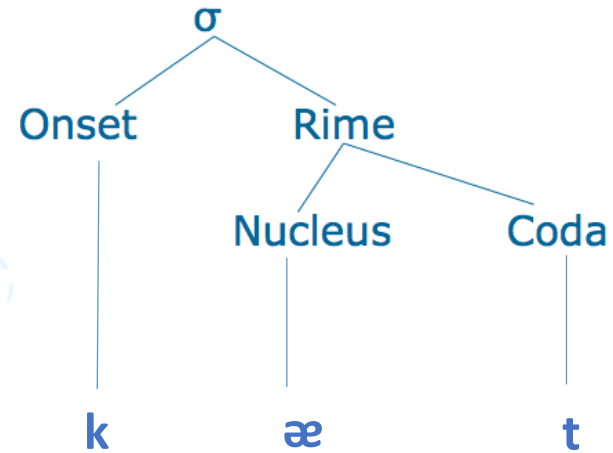
Phonological complexity

French *beau* 'beautiful'



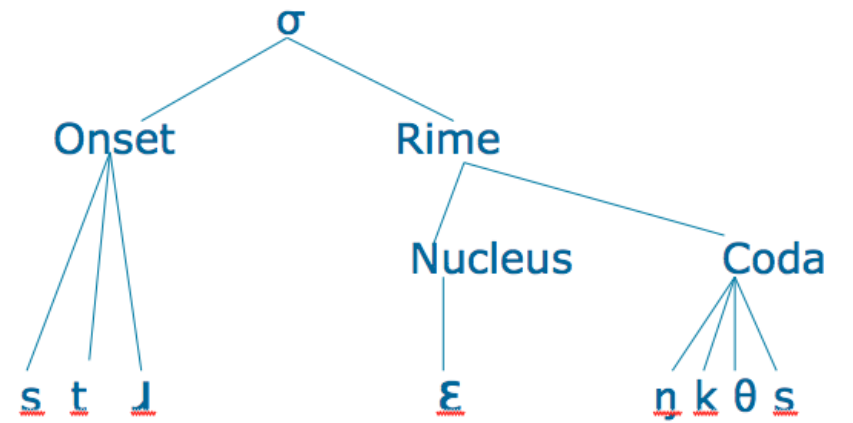
Simple

cat



Moderately Complex

strengths



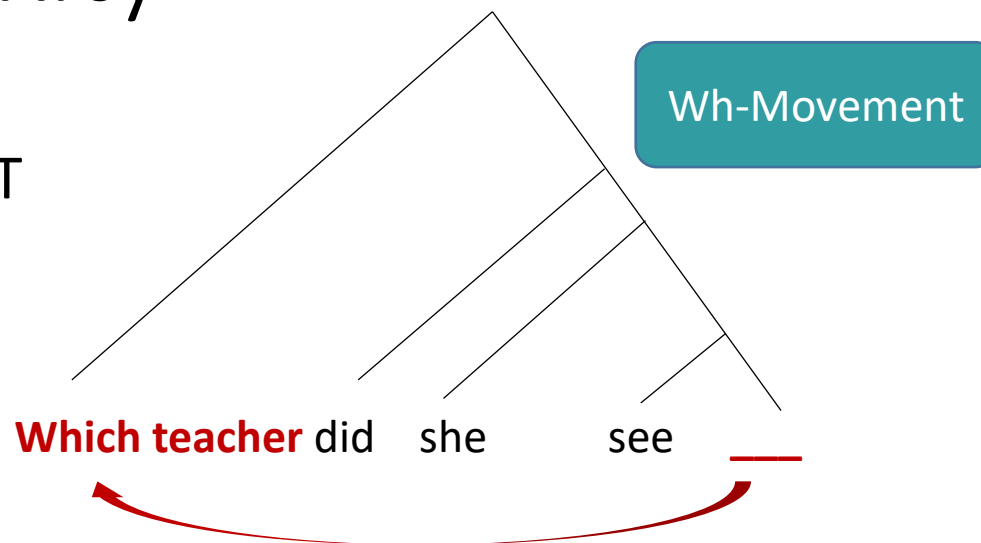
Complex

Morphosyntactic complexity

- Syntactic dependencies, such as MOVEMENT

(1) a. Your sister saw **her teacher** at the store

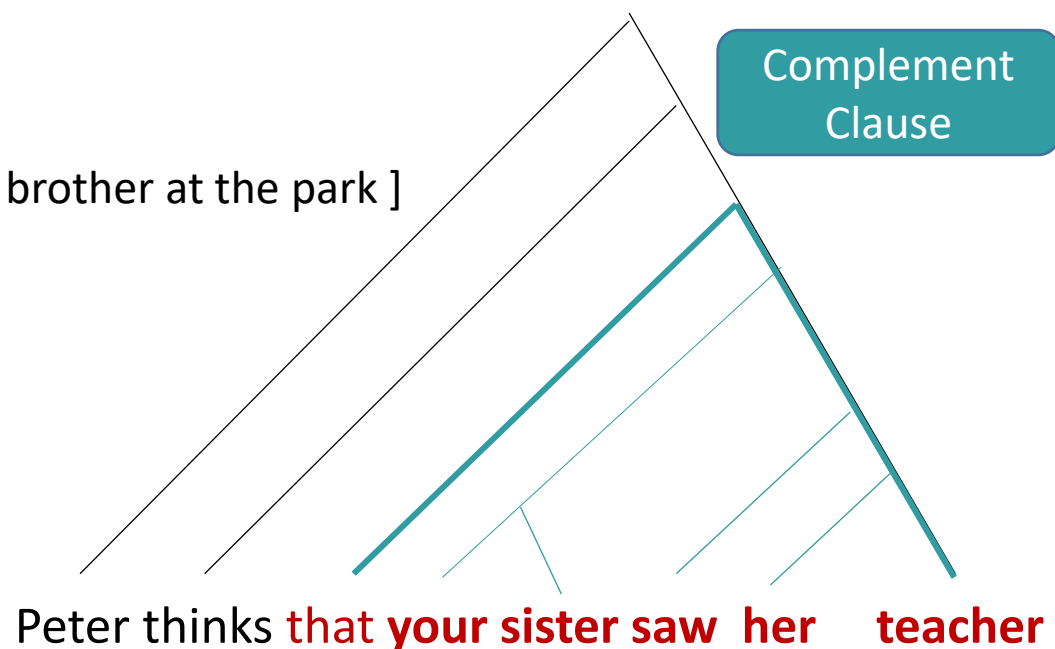
b. [**Which teacher**] did she see ____ at the store?



- Clausal Embedding

(2) a. [Your sister saw her teacher at the store] and [Peter saw his brother at the park]

b. Peter thinks [**that your sister saw her teacher at the store**]



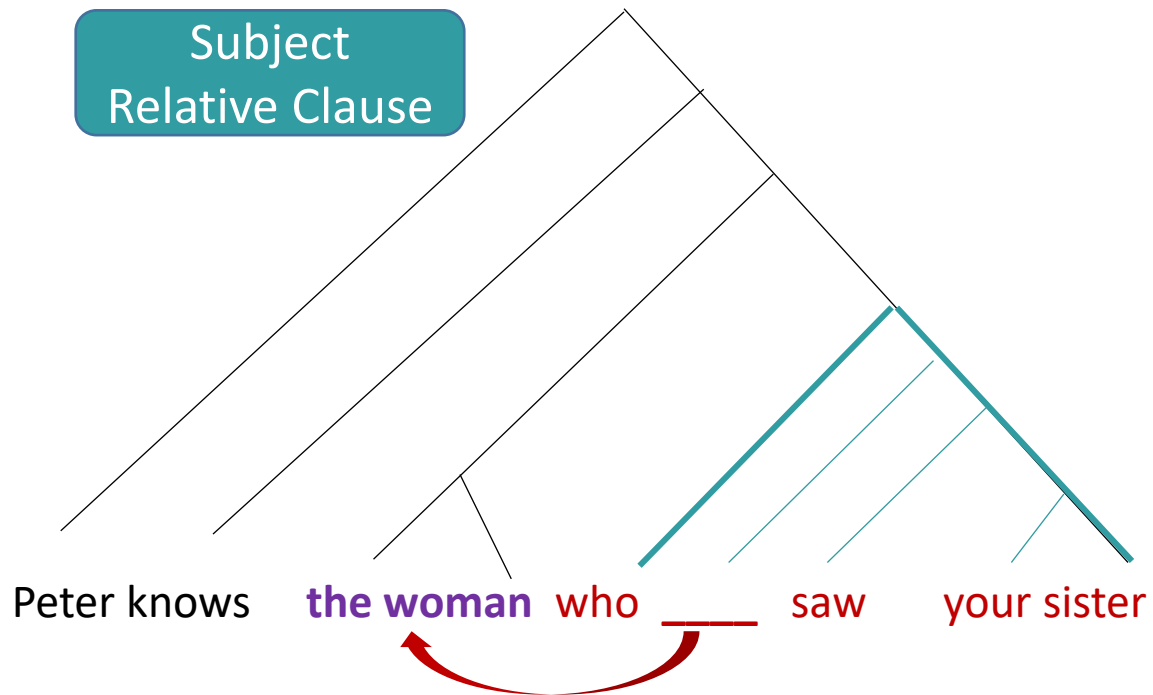
Morphosyntactic complexity

- Movement + Clausal Embedding (+ Intervention)

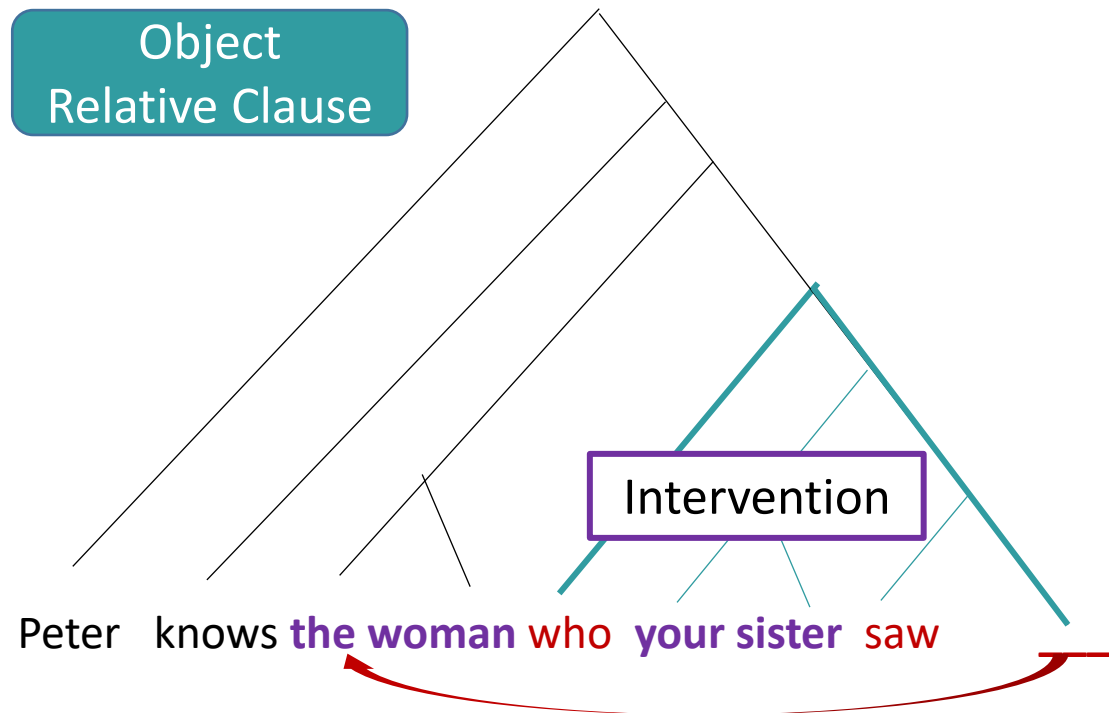
(3) a. Peter knows [**the woman** [**who** ____ saw your sister at the store]]

b. Peter knows [**the woman** [**who** **your sister** saw ____ at the store]]

Subject
Relative Clause



Object
Relative Clause



1. Linguistic Theory

- 1) What constitutes knowledge of language?
- 2) How is knowledge of language acquired?**
- 3) How is knowledge of language put to use?

2) How is knowledge of language acquired?

Language matures in children, along with other skills.

- There are distinct developmental timetables (early mastery, late mastery) for different modalities, components, and structures:
 - Comprehension > production
 - Lexicon vs. other components
 - Phonology vs. Morphosyntax
 - Pragmatics vs. other components
 - Simpler structures > more complex structures

High complexity > later acquired > long-lasting weakness

Accusative clitics in French:

(1) a. Marie lave **le chien** 'Mary is washing the dog'

b. Marie **le** lave

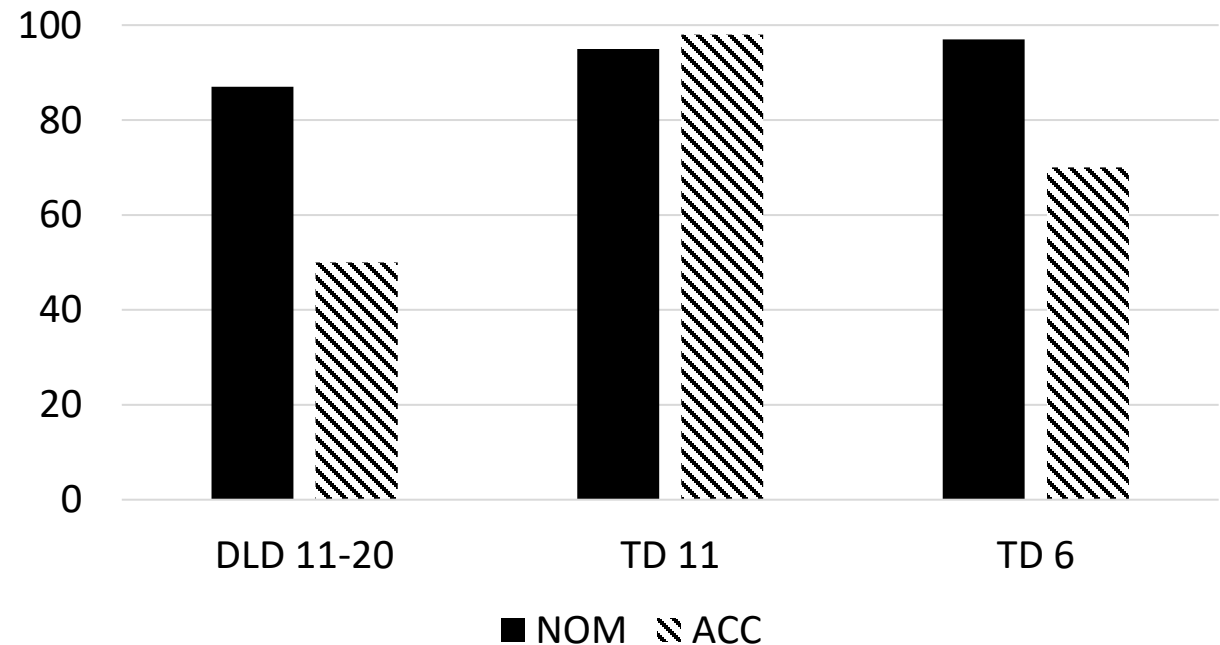


'Mary is washing him'



Elicited production of clitic pronouns

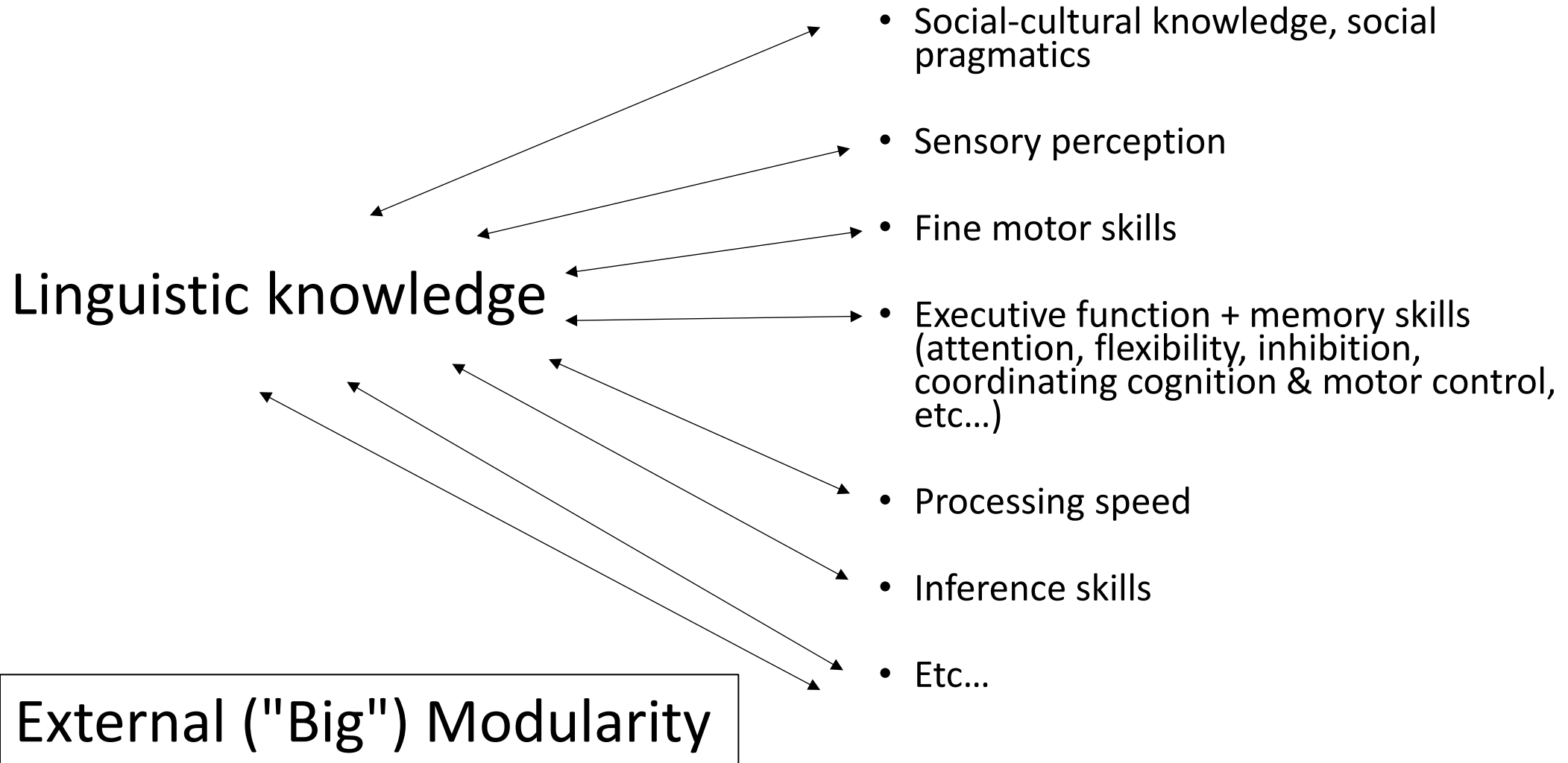
- 37 Adolescents with DLD, ages 11-20
- 11-year-olds with TD
- 6-year-olds with TD



1. Linguistic Theory

- 1) What constitutes knowledge of language?
- 2) How is knowledge of language acquired?
- 3) How is knowledge of language put to use?**

3) How is knowledge of language put to use?



2. Implications for language assessment

Linguistic theory suggests that efficacious language assessment should strive for the following:

- 1) Independent assessment of individual language components
- 2) Assessment of a component, based on their relative contribution to overall language proficiency
- 3) Assessment that controls for heavy reliance on other skills

Narrowly targeted language tasks may be more revealing than omnibus language tasks/scores.

Omnibus language tests

CELF-5 Formulated Sentences (ages 5-21)

- Objective: “These abilities reflect the capacity to **integrate semantic, syntactic, and pragmatic rules and constraints while using working memory.**”

Receptive language index
Language Structure index

CELF-5 Semantic Relationships (ages 9-16)

- Task: The student listens to a sentence and selects the two choices that answer a target question.
- Objective: to evaluate ability to interpret sentences with specific semantic relationships

"Dan is taller than Jeff, and Lee is taller than both of them. Dan is ... "

a) taller than Lee, b) shorter than Lee, c) the tallest, d) not the shortest

Receptive Language index
Language Memory index

Formulated Sentences

Start All ages: Item 1	Reversal Rule None	Repetitions Allowed	Discontinue Rule Four consecutive 0 scores
----------------------------------	------------------------------	-------------------------------	--

Write student's responses verbatim. See the Examiner's Manual for scoring rules and guidelines.


Demo book: The girl is reading a book.

Trial 1 reading

Trial 2 first

1. she

SCORE		
2	1	0



FS Trial 2

Omnibus language tests

What do omnibus languages tests asses?

Illustration: CELF-4 Sentence Structure (ages 5-8), De Cat & Melia, 2020



Dad sat behind the children.



The woman asked, "How much does that chair cost? "

What do omnibus language tests asses?

- Participants: 174 TD monolingual and bilingual 5- to 7-year-olds
- Predictors of accuracy on Sentence Structure subtest:

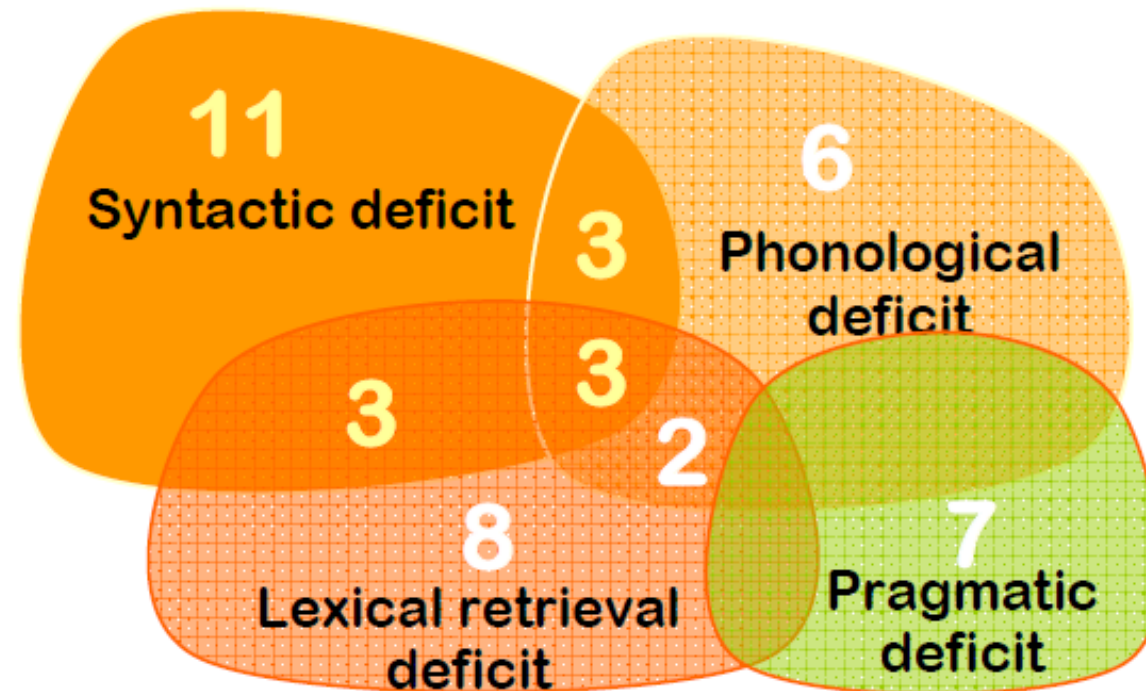
	Sentence Repetition		Lexical Semantics		Discourse Semantics		CELF SST	
	t	p	t	p	t	p	t	p
Cumulative English exposure	3.75	0.0003	2.37	0.02	2.62	0.01	0.18	0.86
SES	2.08	0.04	2.09	0.04	3.01	0.003	1.22	0.23
Short term memory	2.99	0.0037	2.16	0.034	-0.61	0.54	0.82	0.41
Working memory	-0.7	0.48	2.12	0.0375	0.87	0.39	3.55	0.0006
Cognitive flexibility	2.02	0.05	3.58	0.0006	3.31	0.001	6.83	0.000000001
Gender	-1.04	0.3	-0.98	0.33	-0.51	0.61	0.96	0.34

Targeted tasks show that language difficulties can be selective

Language in 43 children with DLD aged 9-14, Friedmann & Novogrodsky, 2007

Selective impairment in

- Syntax
- Phonology
- Lexicon
- Linguistic-Pragmatics



Assessment targeting specific components and structures

Two examples from the LITMUS toolkit*

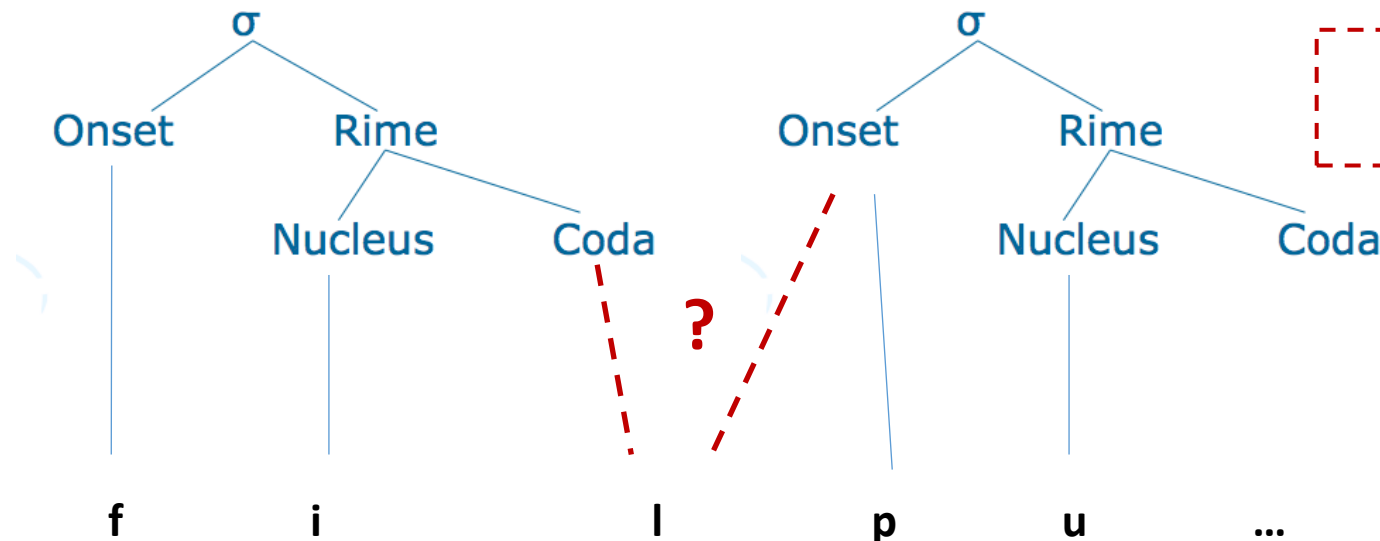
LITMUS-QU-NWR

- Controlled for length (1-3 syllables) and wordlikeness
- Designed to target syllables of varying complexity
- Includes most common segments and syllable types in languages
- Current version: 31 items

*Language Impairment Testing in Multilingual Settings (LITMUS), COST Action IS0804 : <https://www.bi-sli.org/litmus-tools>

LITMUS-QU-NWR Syllable Types

	Baseline	Minimally Complex	Moderately Complex	Very Complex
Example nonwords	plu, kip	kifapu, plifu	plal, piks, klifak, kuspa, kuflapi	plusk, kufalpi, fikuspa
Corresponding syllable structures	C(C)V CVC	CV.CV.CV. CCV.CV	CCVC CVCC CCV.CVC CVs.CV CV.CCV.CV	CCVCC CV.CVC.CV CV.CVs.CV



The complex computation of
Internal Codas

Assessment targeting specific components and structures

Two examples from the LITMUS toolkit*

LITMUS-QU-NWR

- Controlled for length (1-3 syllables) and wordlikeness
- Designed to target syllables of varying complexity
- Targets most common segments and syllable types in languages
- Current version: 31 items

LITMUS-SR-French

- Controlled for sentence length and vocabulary
- Designed to target morphosyntactic structures of varying complexity
- Current version: 16 items

*Language Impairment Testing in Multilingual Settings (LITMUS), COST Action IS0804 : <https://www.bi-sli.org/litmus-tools>

LITMUS-SR-French: syntactic structure types

Item	Sentence	Sentence type	Sentence Subtype
1	Le garçon prend un bain.	SVO - Present	Present-3SG
2	Les enfants ont fermé la porte.	SVO - Past	Composite-past-3PL
3	Le papa sait très bien conduire la voiture	Complement Clause	Compl. Clause-Nonfinite
4	J'ai vu le chat qui a griffé la vache.	Relative	Subject Relative
5	Le lapin a mangé la carotte.	SVO - Past	Composite-past-3SG
6	La dame dit que le garçon a pris le ballon.	Complement Clause	Compl. Clause-Finite
7	Tu as vu le cheval que le chien a mordu.	Relative	Object Relative
8	Les parents punissent les enfants.	SVO - Present	Present-3PL
9	Le singe a pris la banane.	SVO - Past	Composite-past-3SG
10	Le lapin veut manger la salade maintenant.	Complement Clause	Compl. Clause-Nonfinite
11	Tu as vu la vache que le chat a griffée.	Relative	Object Relative
12	Les parents ont rangé les jouets.	SVO - Past	Composite-past-3PL
13	La fille croit que le papi a cassé un verre.	Complement Clause	Compl. Clause-Finite
14	Les enfants prennent un bain.	SVO - Present	Present-3PL
15	J'ai vu le chien qui a mordu le cheval.	Relative	Subject Relative
16	La maîtresse punit les enfants.	SVO - Present	Present-3SG

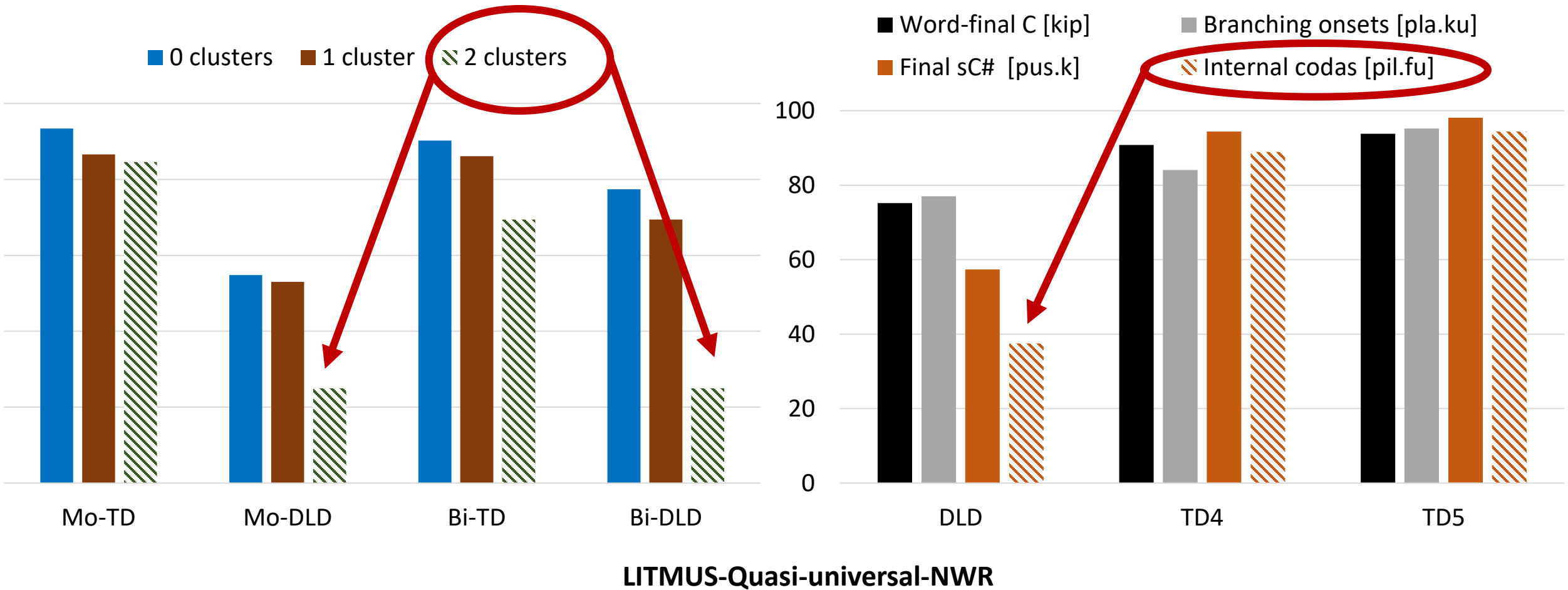
LITMUS tasks target linguistic knowledge

De Cat & Melia, 2020:

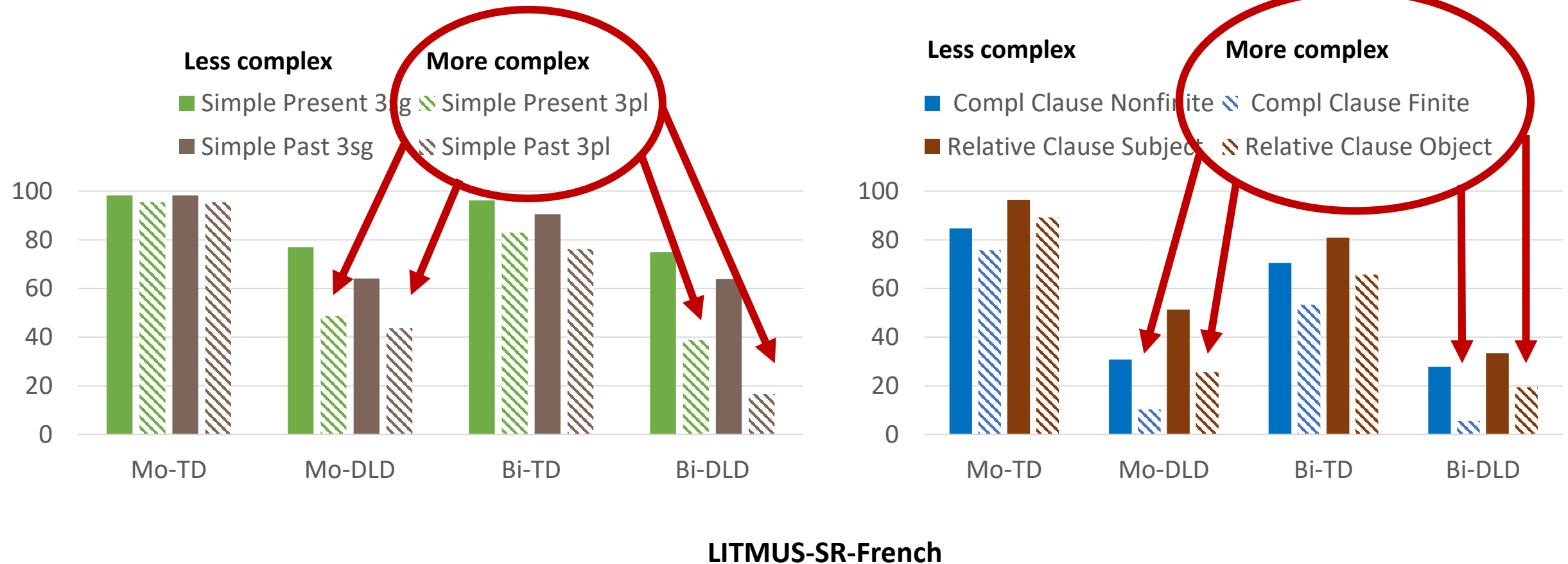
- Participants: 174 TD monolingual and bilingual 5- to 7-year-olds
- In bilingual children, language exposure is expected to predict English language performance

	LITMUS-SR-English		Lexical Semantics		Discourse Semantics		CELF SST	
	t	p	t	p	t	p	t	p
Cumulative English exposure	3.75	0.0003	2.37	0.02	2.62	0.01	0.18	0.86
SES	2.08	0.04	2.09	0.04	3.01	0.003	1.22	0.23
Short term memory	2.99	0.0037	2.16	0.034	-0.61	0.54	0.82	0.41
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Cognitive flexibility	2.02	0.05	3.58	0.0006	3.31	0.001	6.83	0.000000001
Gender	-1.04	0.3	-0.98	0.33	-0.51	0.61	0.96	0.34

Structural complexity effects in LITMUS tasks: phonology



Structural complexity effects in LITMUS tasks: syntax

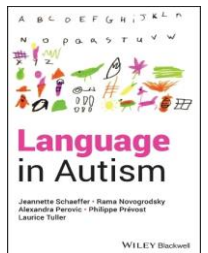


3. Language in autism

The Autism Spectrum is ... a spectrum.

- Developmental Intellectual Disorder: 31%
- Many other co-occurring conditions:
 - NDDs: e.g., ADHD (40-70%)
 - Neurological conditions: e.g., epilepsy (10-25%)
 - Psychiatric conditions: anxiety, depression, etc.
 - Medical conditions: sleep disorder, GI disorders, etc.
- Frequent late language emergence
- Minimally-/Not-speaking: 25-30%
- Ubiquitous impaired pragmatics
- Frequent structural language impairment

Schaeffer et al., 2023, in press



Task completion rates in studies on language in ASD: Targeted tasks and omnibus tests

85 autistic 4- to 14-year-olds, with a wide IQ range
(Kjelgaard & Tager-Flusberg, 2001)

- PPVT (receptive vocabulary): **92% completion rate**
- EVT (expressive vocabulary): **91%**
- NWR-NEPSY (2-5 syllables, ex. *dotidahma*) : **45%**
- CELF composite score ("morphology, syntax, semantics, and working memory for language"): **49%**
 - No age affect on ability to complete
 - Children unable to complete had lower FSIQ scores.

85 verbal autistic 6- to 12-year-olds, wide IQ range
(Silleresi et al., 2018, 2020)

- LITMUS-SR-FR & LITMUS-QU-NWR

Children able to complete each task: **82%**

Including 31 children with extremely or very low FSIQ

Need for *inclusive*
language assessment

LACA* Baseline Battery

Autism-friendly Language Tasks:

- Short testing time
- Simple instructions (short, simple language)
- Minimal demands on extralinguistic cognition (e.g. deciphering detailed pictures)
- Pragmatic skills controlled
- Target a specific linguistic component
- Target specific linguistic structures

Recommended tasks for structural language assessment:

- LITMUS-NWR
- LITMUS-SR

*Language Abilities in Children with Autism (LACA) Network <https://laca.humanities.uva.nl/>

Schaeffer, J., Novogrodsky, R., Perovic, R., Prévost, P. & Tuller, L. (in press)

Targeted tasks show that language difficulties in ASD can be selective

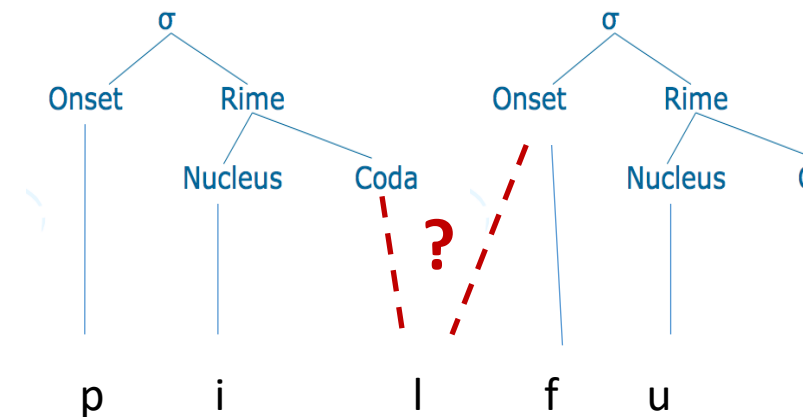
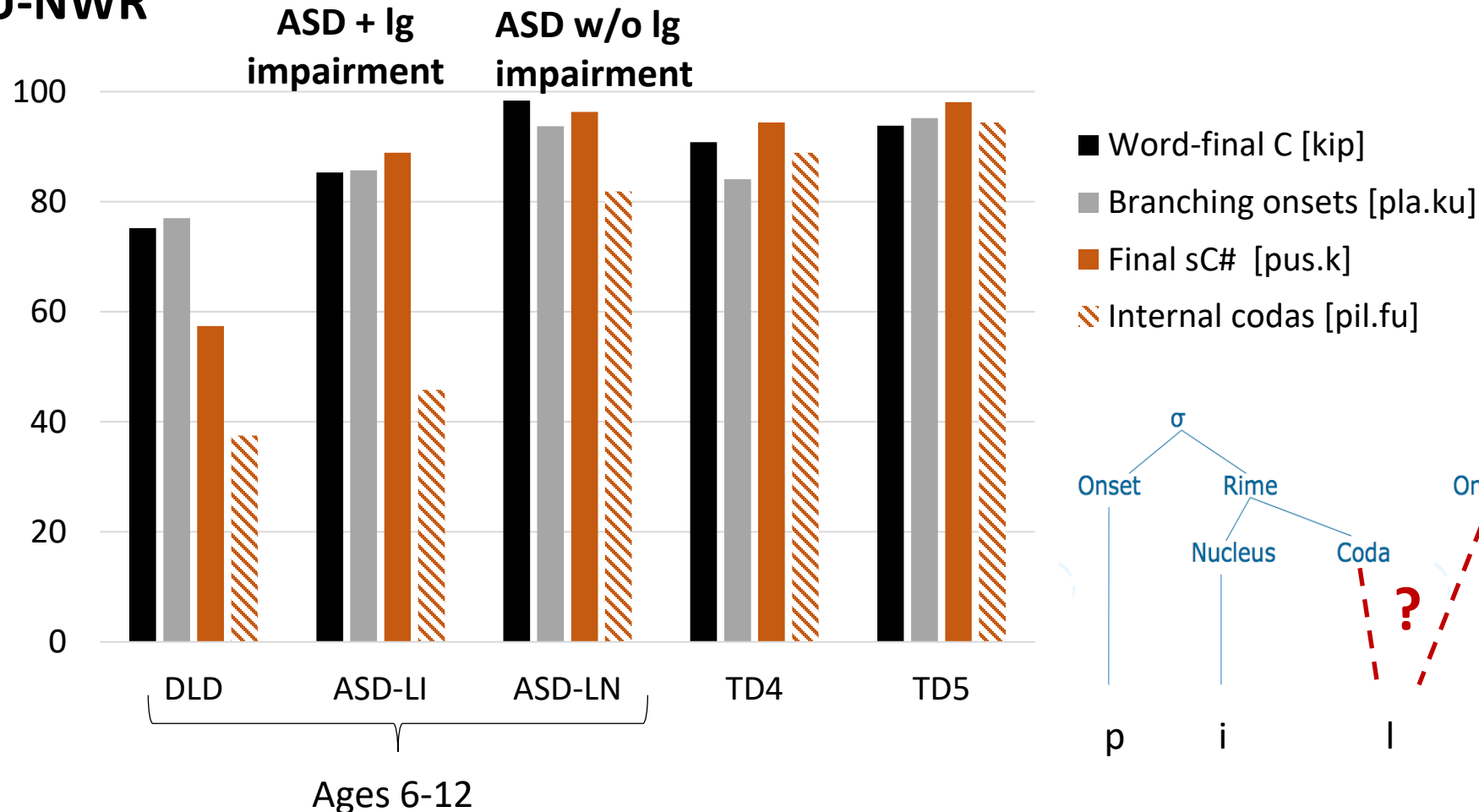
Language skills in 51 6- to 12-year-old autistic children:

N (%) children in profile (/51)	Lexicon	Phonology (LITMUS-NWR-QU)	Syntax (LITMUS-SR)
19 (37%)	spared	spared	spared
3 (6%)	spared	spared	impaired
2 (4%)	impaired	spared	spared
1 (2%)	spared	impaired	spared
2 (4%)	spared	impaired	impaired
1 (2%)	impaired	impaired	spared
7 (14%)	impaired	spared	impaired
16 (31%)	impaired	impaired	impaired
N (%) impaired	26 (41%)	20 (39%)	28 (55%)

32%

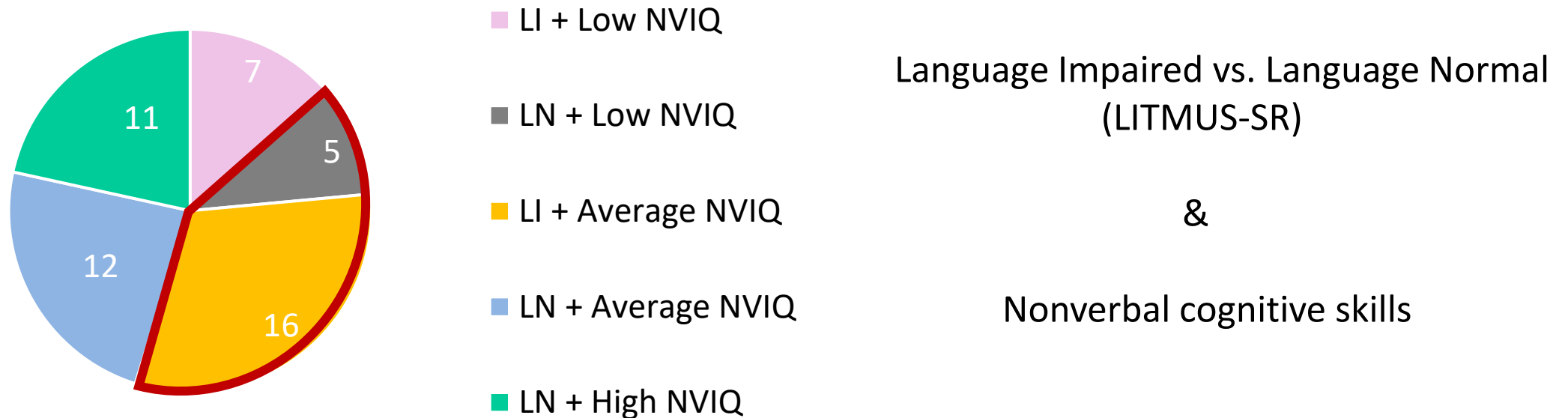
Targetted repetition tasks reveal structural complexity effects in autistic children's production

LITMUS-QU-NWR



Targeted repetition tasks reveal diverse linguistic/ extralinguistic cognitive profiles in autistic children

Language and NVIQ skills in 51 6- to 12-year-old autistic children:



4. Beyond autism, beyond childhood

Elicited production of pronominal clitics in French-speaking **adolescents**

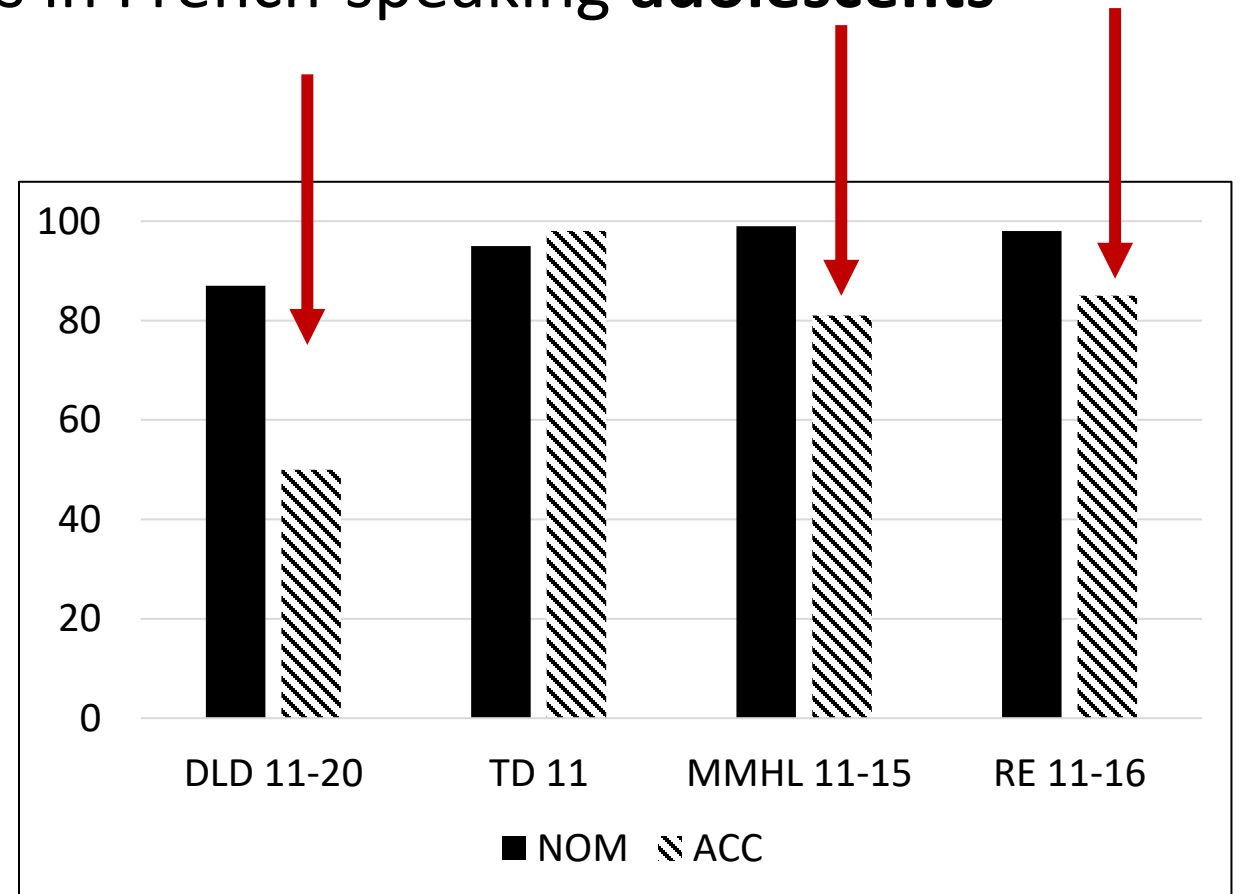
- with DLD
- with **Mild-to-Moderate Hearing Loss**
- with childhood **Rolandic/“Benign” Epilepsy**



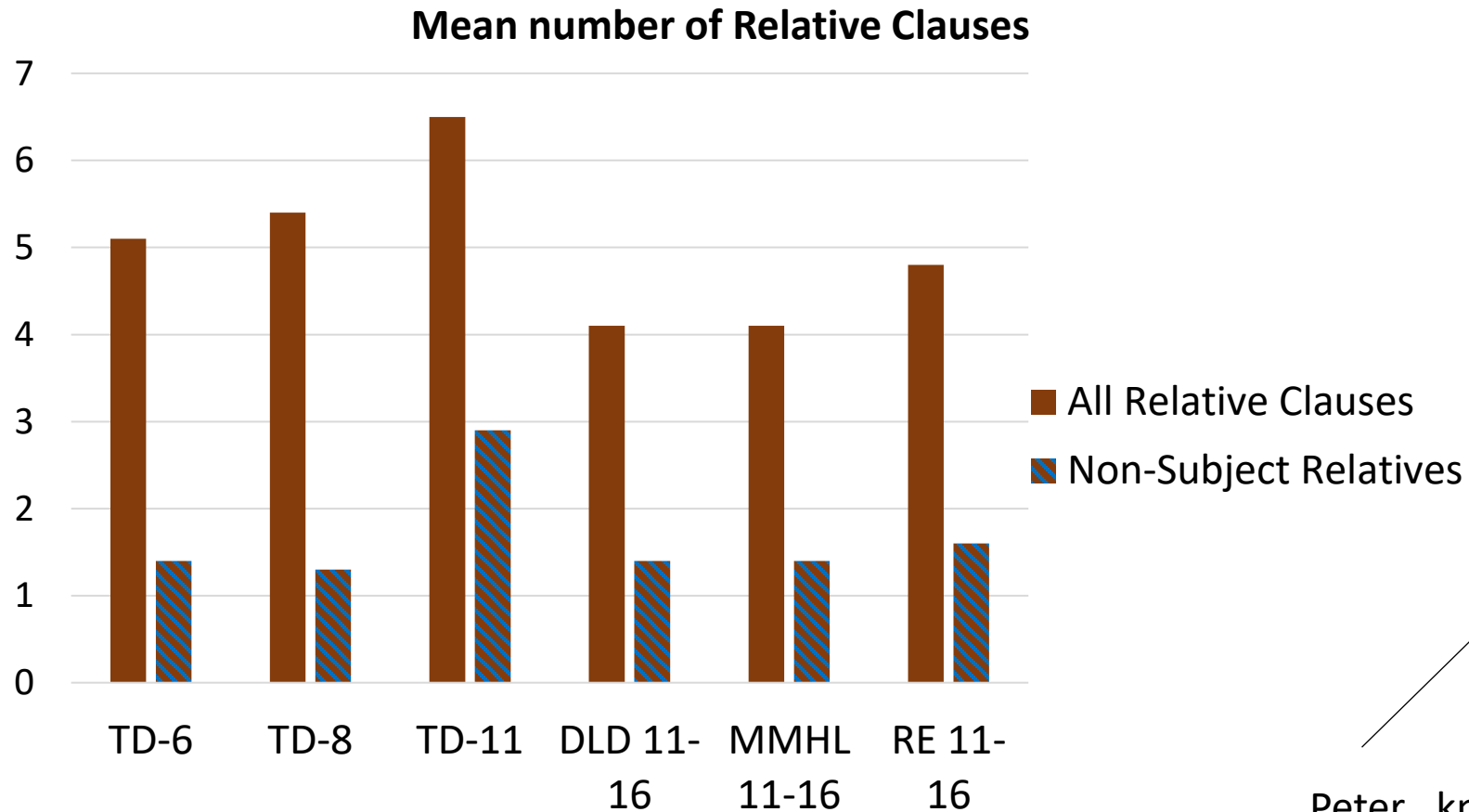
Accusative clitics in French:

a. Marie lave **le chien** 'Mary is washing the dog'

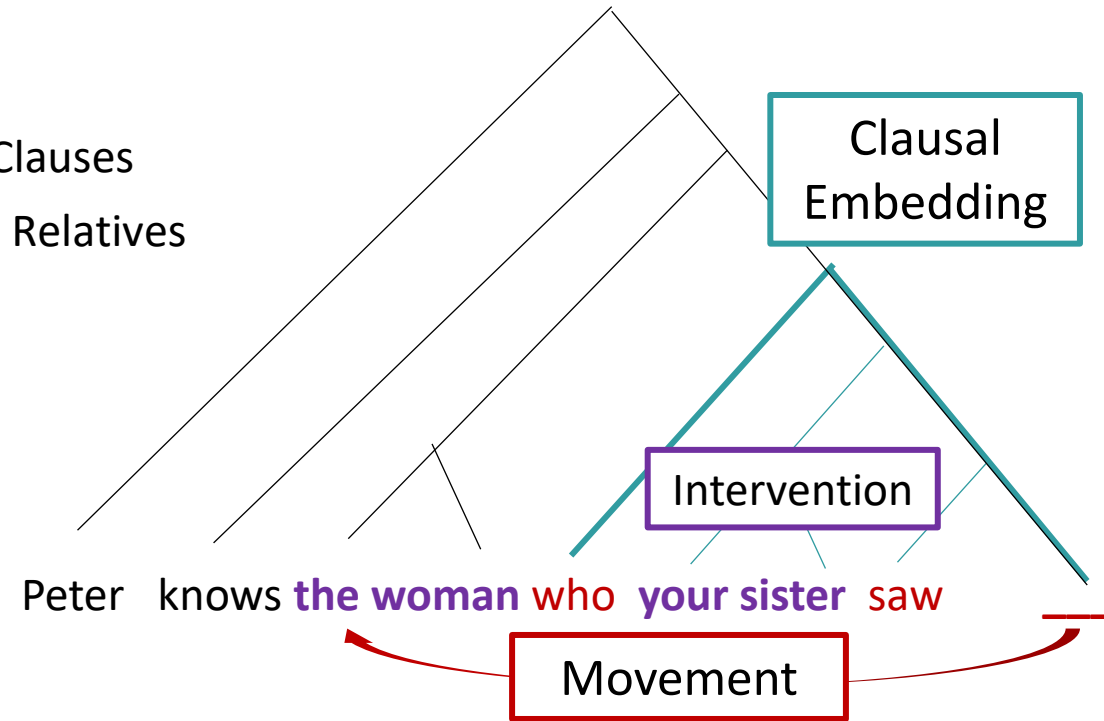
b. Marie **le** lave 'Mary is washing him'



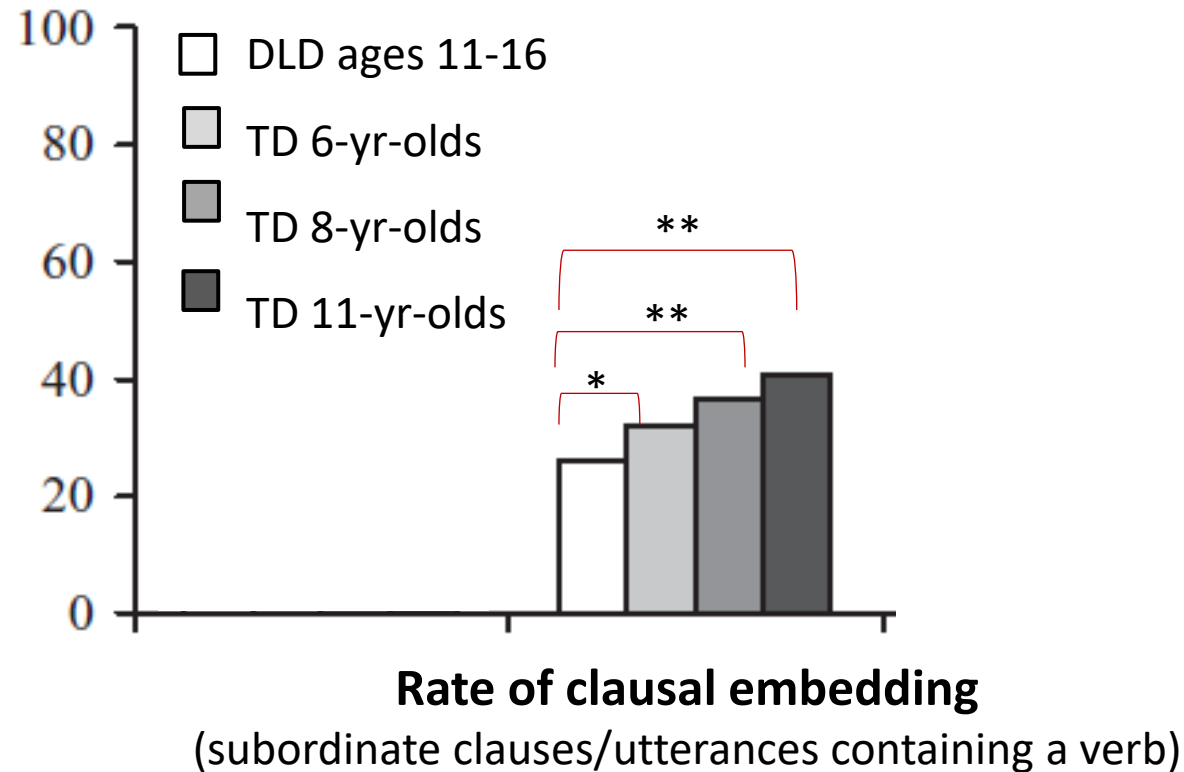
Measuring complexity in adolescents' spontaneous language samples



Tuller et al., 2012



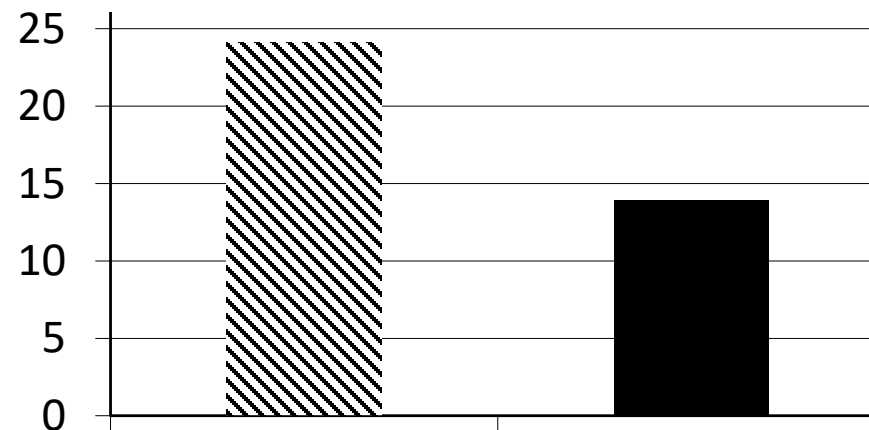
Measuring complexity in adolescents' spontaneous language samples



Measuring complexity in adolescents' spontaneous language samples

	Juxtaposed Root Clauses instead of a Relative Clause (<i>n</i> participants)	Self-interruption of an Embedded Clause (<i>n</i> participants)
TD 6-yr-olds	2/12	3/12
TD 8-yr-olds	1/12	4/12
TD 11-yr-olds	3/12	3/12
DLD, ages 11-16	9/18	14/18

Erroneous Complex vs. Simple Utterances (%) produced by Adolescents with DLD:



Summarizing

Linguistic theory suggests that language assessment is efficacious ***and inclusive*** when it

- narrowly targets *linguistic* knowledge
- narrowly targets *specific linguistic components*
- includes structures of *varying degrees of computational complexity*

These guideposts may be particularly important for assessing language in individuals

- with conditions that are complex (e.g., autism)
- whose language challenges are subtle (e.g., benign epilepsy, MMHL)
- after childhood
- with multilingual language exposure/use

They are also relevant for effective, inclusive assessment of receptive language abilities

- ❖ Intermodal preferential looking with eye-tracking
- ❖ Truth Value Judgment tasks



Coffee break

11:00-11:30





Grammatical language difficulties in children with Developmental Language Disorder (DLD): target identification and intervention

Dr Susan Ebbels

@SusanEbbels @MHResTrain

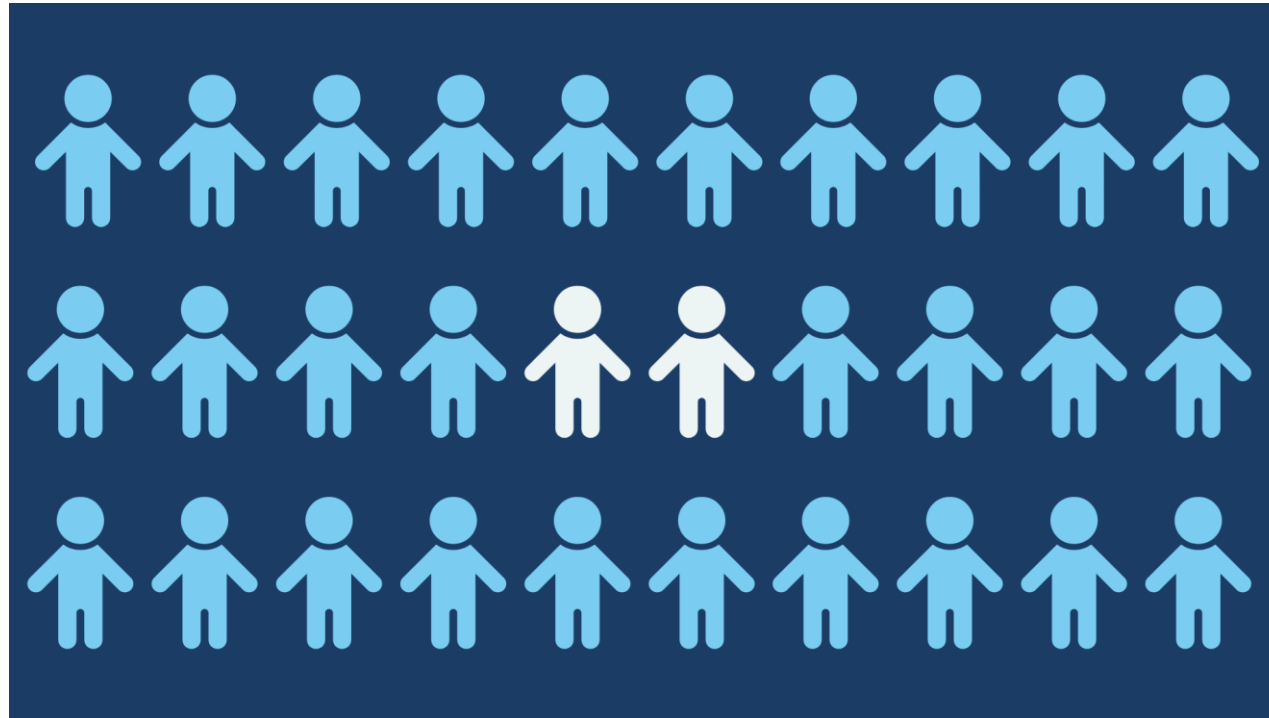
Moor House Research and Training Institute;
Department of Language and Cognition, UCL

What is Developmental Language Disorder (DLD)?



- Consensus term for neurodivergence characterised by challenges with **speaking** and **understanding language** that restrict communication.
- impacts on education and social interactions
- and frequently mental health
- life-long

2 children in every classroom have DLD



Around 1 million children in the UK

Majority are unidentified and undiagnosed

Grammatical difficulties in DLD

- Grammar particularly affected in DLD
 - Limited sentence structures understood and used
 - Grammatical errors
- Children with DLD find implicit learning challenging (Lammertink et al., 2017)
- Today's talk
 1. Individualised target identification and intervention for production of grammar in children with DLD
 2. Understanding of Maths word problems by children with DLD

Grammatical interventions

- Many studies show implicit grammar facilitation methods are effective, but
 - Most studies with young children
 - Amounts intervention not feasible in clinical practice in the UK (15-60 hours)
- Explicit intervention approach provides visual support for grammar
 - Older children
 - Much shorter intervention times

Explicit grammatical intervention



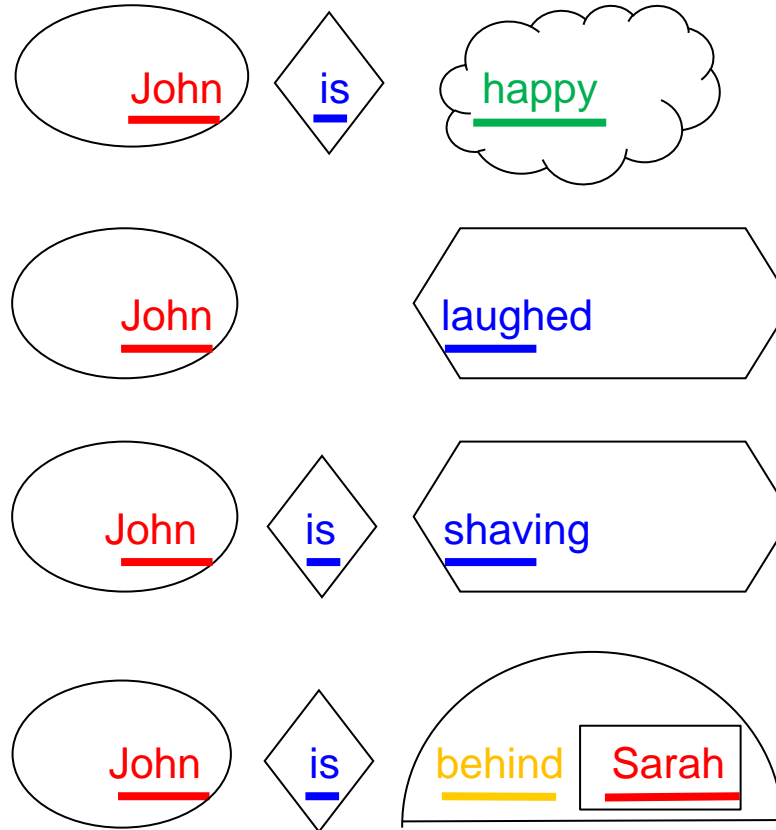
www.shapecoding.com

The SHAPE CODING™ system

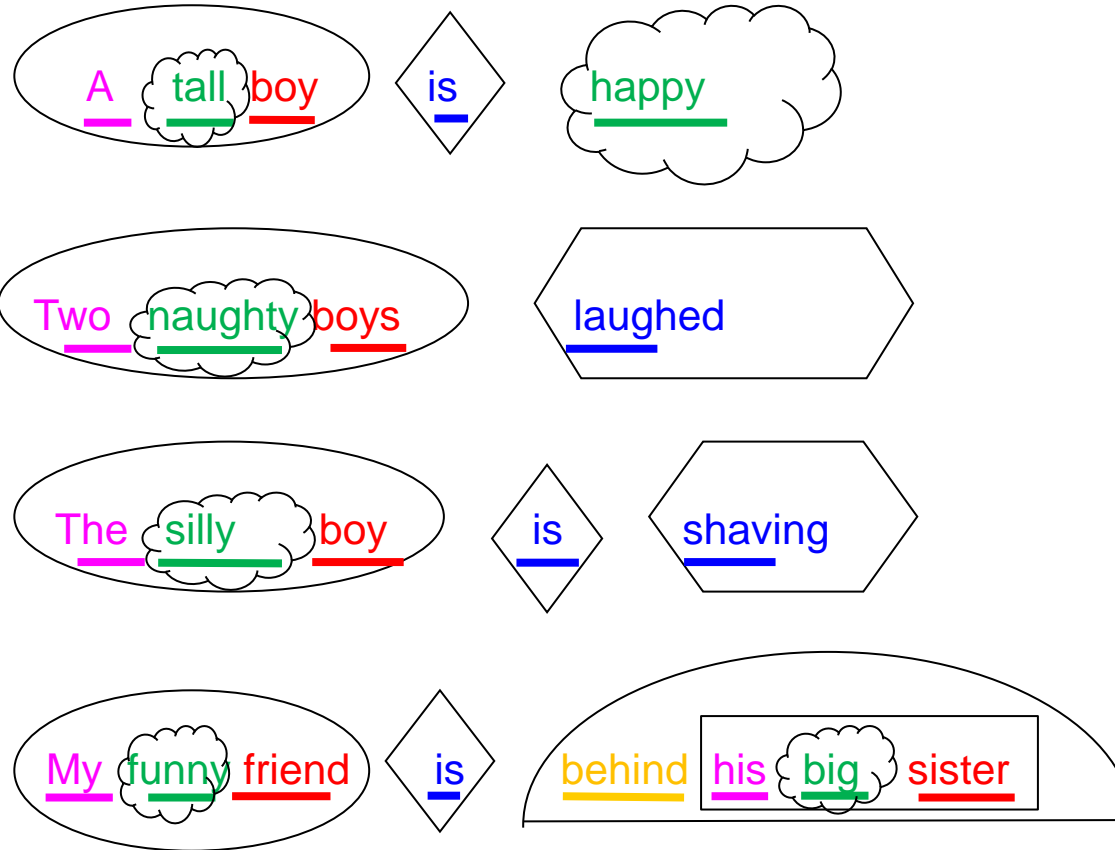
1. Codes **word classes** with colours
2. Codes **phrases** with shapes
3. Codes **morphology** with arrows (for tenses) and lines (for singular versus plural and gender)

Can be adapted for other languages

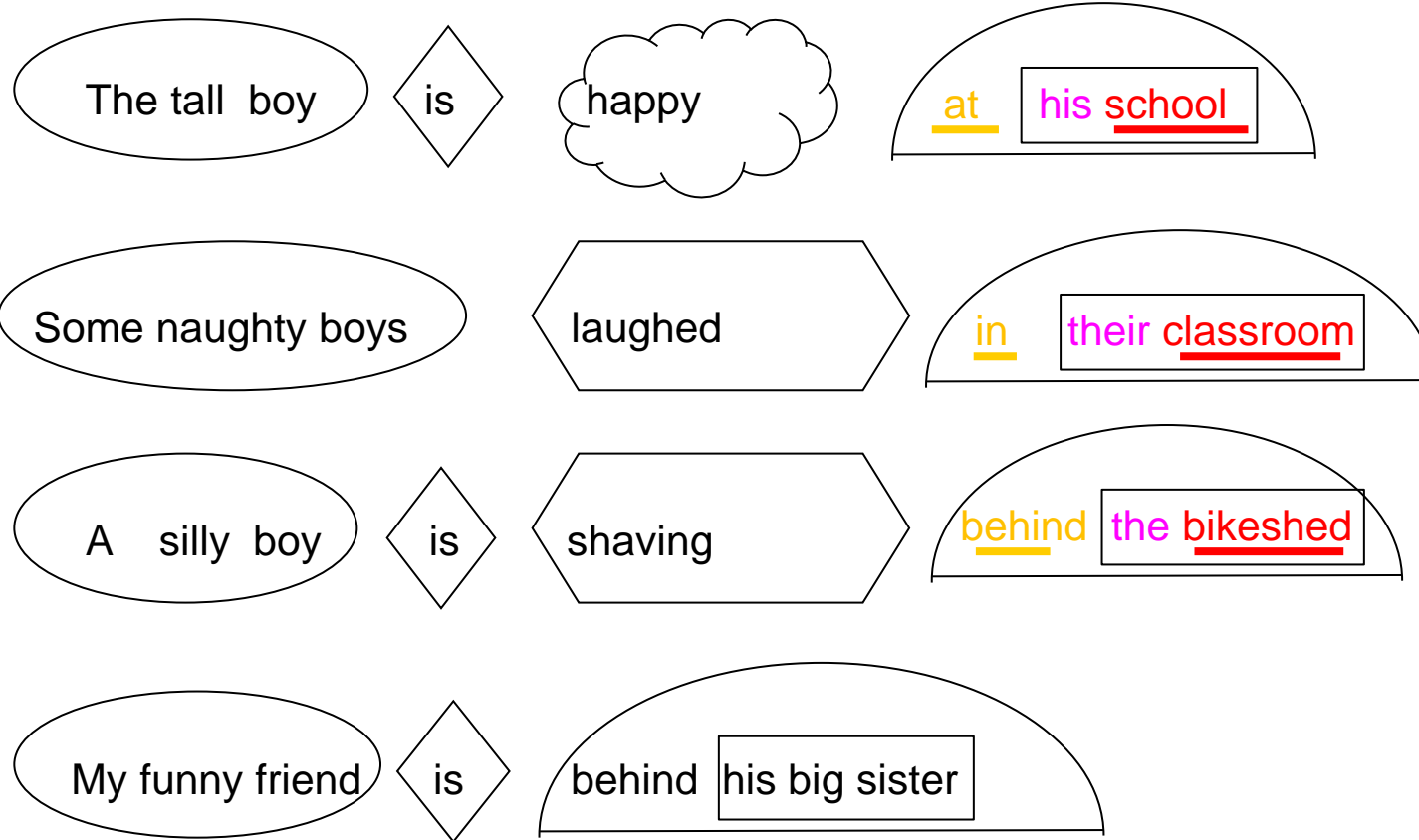
Basic sentence templates



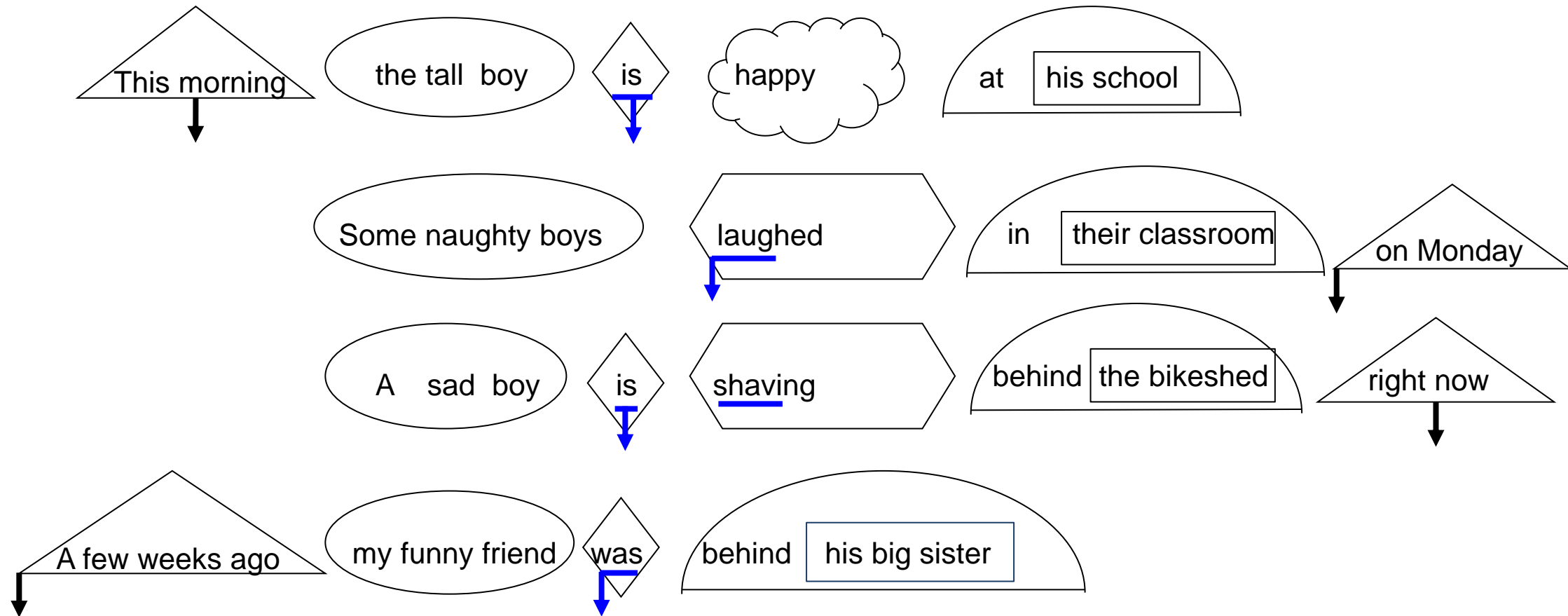
Colours and shapes



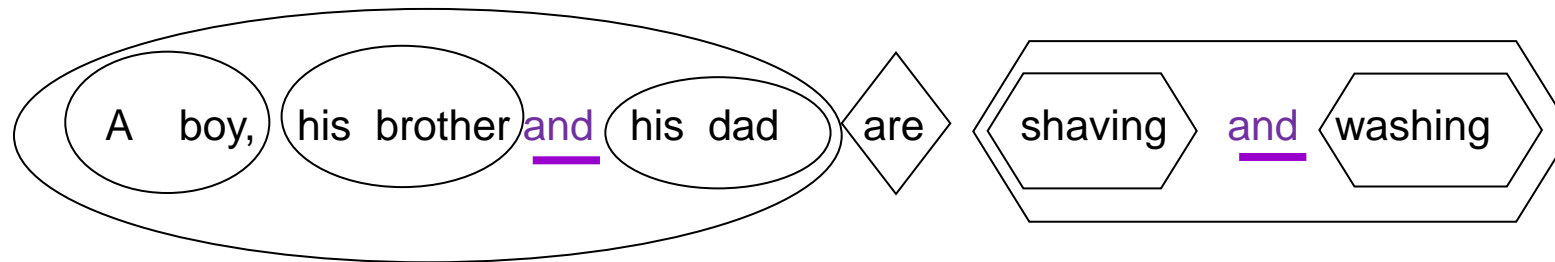
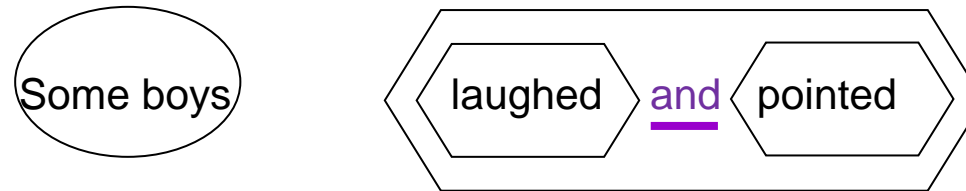
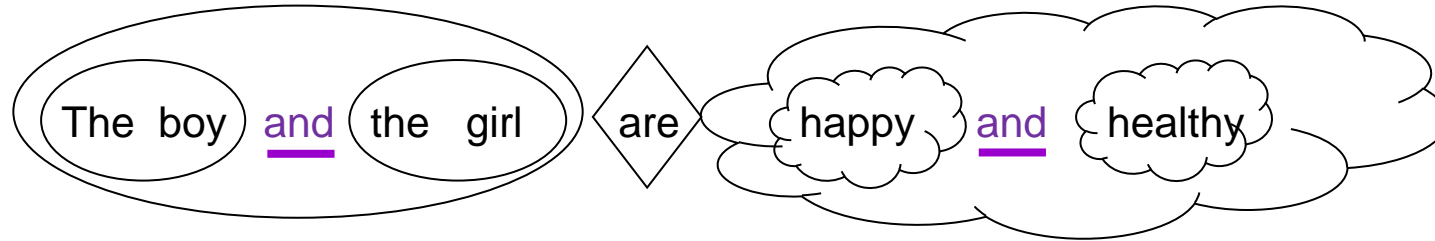
Adding adjuncts



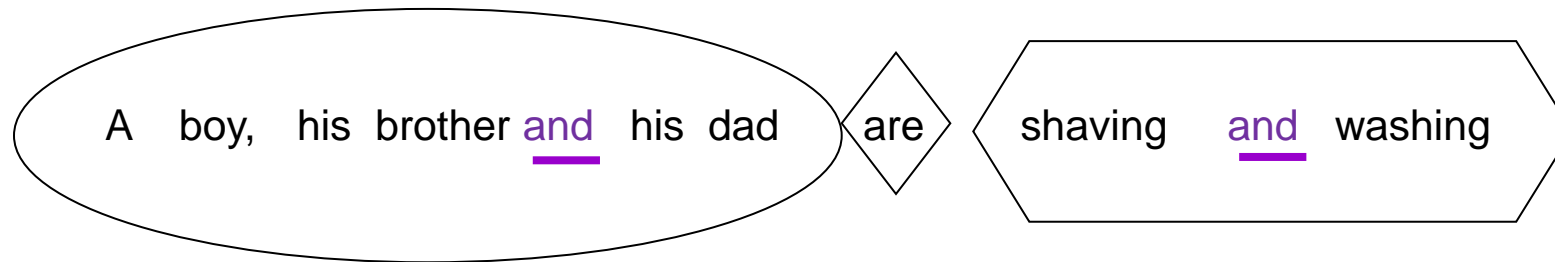
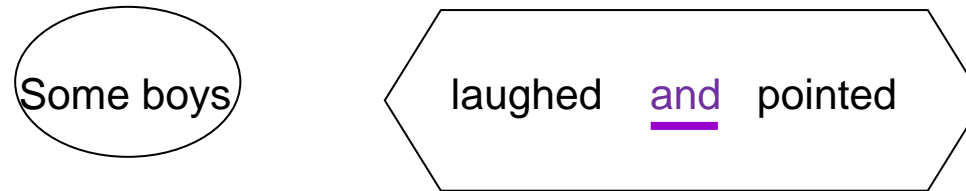
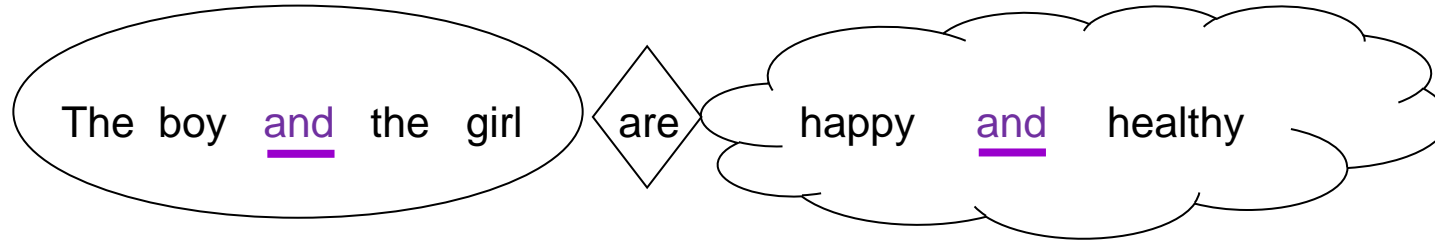
Adding adjuncts



Increasing complexity - add "and"



Increasing complexity - add “and”

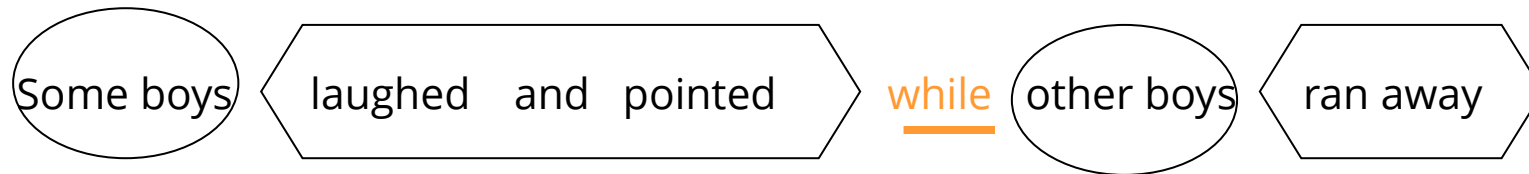


Increasing complexity further

- Add sentences into shapes



- Join whole sentences together with conjunctions



- Combinations of all of the above

Research to date

- Delivered by clinicians (trained in the system)
- In special schools and language units/resource bases
- Children with severe DLD aged 5-16 years
- UK / Australia
- 30 mins 1 or 2 x per week for 4-10 weeks
- Range of language structures (comprehension and expression)
- No obvious predictors of who can benefit
- Children receiving more teaching episodes made more progress

Ebbels & van der Lely, 2001, Ebbels 2007, Ebbels et al (2014, 2007), Kulkarni et al. (2014), Tobin & Ebbels (2019), Calder et al. (2020, 2021a, 2021b)

Moving forwards...

- Previous studies
 - targeted just one structure
 - for a set number of sessions
- To **maximise efficiency** probably need:
 - Highly individualised targets at just the right level
 - Targeted for just the right length of time
 - Techniques that support learning
 - High number of teaching episodes per session (dosage)

Individualized target identification & intervention (incl. dosage)

Ebbels, Gadd, Nicoll, Hughes, Dawson, Burke,
Calder & Frizelle (2024)

Language Speech and Hearing Sciences in Schools,
55, 803-837.

Multiple baseline design

Individualised intervention

- 8 participants (aged 8;0-10;10) with DLD
- Multiple baseline design where each target has
 - >3 baseline tests
 - Weekly probe tests until 90% criterion reached, when
 - Intervention for that target ceased and
 - New target introduced from baseline
 - Maintenance tests (2, 6 & 14 weeks after intervention ceased)

Target identification

- Language sample from standardised narrative generation and re-tell and a sentence production test
- Analysed against 133 potential targets in priority order

Target identification

Identifying Grammatical targets - 2nd edition, Ebbels & Nicoll (2023).

Extension of: *Grammatical Concepts of English: Suggested Order of Intervention*, Ebbels & Owen Van Horne (2020)



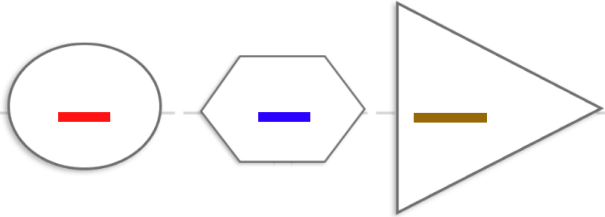
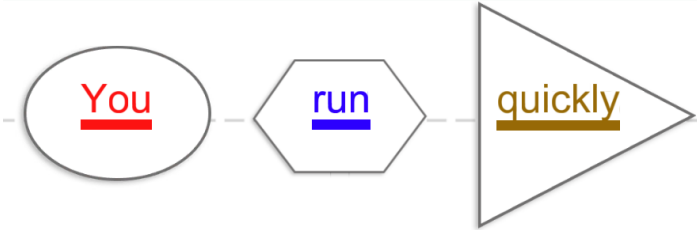
	Main Clause Structure	Questions	Negation	Noun Phrases		
FOUNDATIONAL LEVEL	MC1 main verb MC2 subject + verb MC3 subject + <i>not</i> + verb MC4 subject + adjective MC5 subject + verb + object MC6 subject + PP/location	Q1 <i>who</i> / person Q2 <i>what</i> / thing Q3 <i>what doing</i> / actions Q4 <i>how feel</i> / emotion Q5 <i>what like</i> / description Q6 <i>where</i> / location	NG1 <i>not, no</i> / refusal	NP1 plural -s	FOUNDATIONAL LEVEL	For important information about this chart, see the "Info" tab below. The numbered order with those structures. The foundational concepts (in red) should be taught first. After that, you may (across categories) before moving on to the more advanced skills in the next colour group. How and/or example. The column headings are linked to the individual sheets for that category (see examples, explanations, prerequisite structures, visual examples using the SHAPE CODING system targets to work on (see the "Instructions" below for more information).
					Adjective Phrases	Tense & Aspect
LEVEL 1	MC7 time adverbial MC8 subject + verb + PP/goal MC9 subject + verb + object + PP/goal MC10 manner adverbial MC11 subject + verb + adj MC12 subject + verb + object + instrument MC13 time adverbial with preposition	Q7 Comprehension of <i>who/what</i> object questions in SVO and SV + PP Q8 <i>when</i> / time Q9 <i>why</i> / reason Q10 Move pres. cop./aux. in Y/N ?s Q11 Move modal in Y/N ?s Q12 <i>how</i> / manner Q13 <i>whose</i> + Noun / possession. Subject vs object question comprehension Q14 <i>which</i> [noun]? Subject vs object question comprehension Q15 Move auxiliary/copula with <i>Where, How, When, Why</i> questions Q16 <i>who/what</i> ?s requiring aux movement Q17 <i>what doing</i> ? questions, present/past progressive (move aux) Q18 <i>what like</i> ? questions for adjectives (move copula) Q19 <i>Whose/which</i> object questions (with aux movement) Q20 <i>How</i> can ask about an instrument	NG2 auxiliary/copula + <i>not</i> NG3 modal + <i>not</i>	NP2 singular subject (and object) pronouns NP3 determiner + noun NP4 plural subject (and object) pronouns NP5 demonstrative pronouns & determiners (singular) NP6 demonstrative pronouns and determiners (plural) NP7 possessive pronoun + noun or possessive demonstrative NP8 determiner/pronoun + adj + noun NP9 possessive noun 's + noun	AP1 degree modifiers with gradable adjectives and the link with <i>How</i> AP2 comparative constructions AP3 equative constructions AP4 superlatives	TA1 present progressive <i>aux + -ing</i> TA2 present tense copula (<i>am/is/are</i>) TA3 modal <i>can/will</i> + infinitive TA4 past tense copula/aux (<i>was</i>) TA5 simple regular past tense <i>-ed</i>

<https://shapecoding.com/resources/grammar-spreadsheet/>

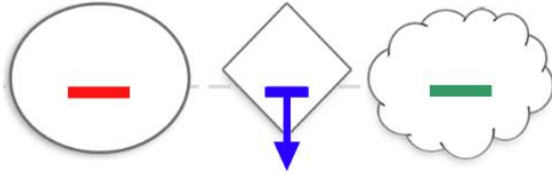
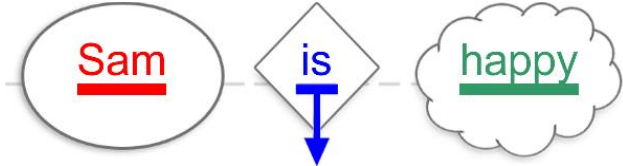
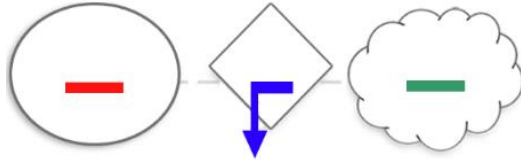
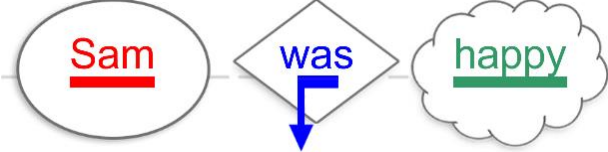

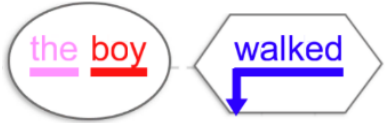
Target identification

- Language sample from standardised narrative generation and re-tell and a sentence production test
- Analysed against 133 potential targets in priority order
- Probe tests if not used twice or >25% errors
- <90% = target
- Across 8 children, 47 targets, 27 unique

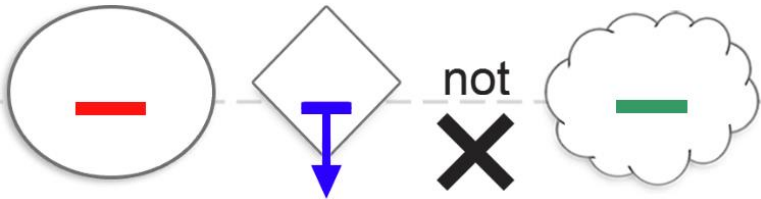
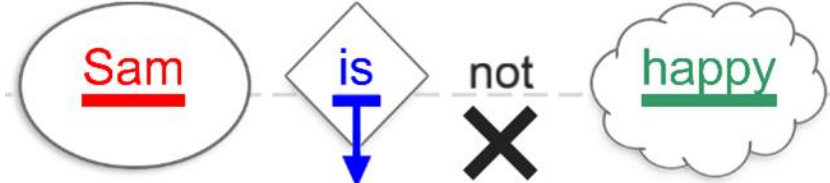
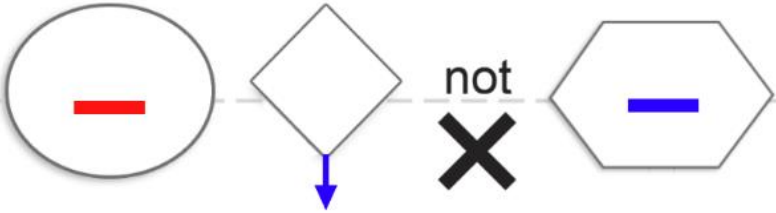
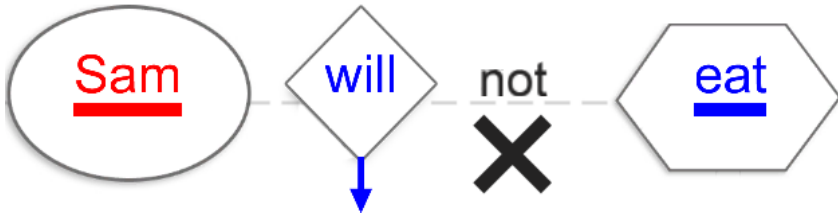
Targets: main clause

Code: Structure	SHAPE CODING template plus rule	Example
MC9: Subject moves an object to a new place (Subject + Verb + Object + Prepositional Phrase)	 <p>Oval moves rectangle to a new place (semi-circle)</p>	
MC10: Adverbs of manner	 <p>Make brown word from green word by adding -ly. Brown word tells you how the oval is doing the blue word (pointy triangle goes with pointy hexagon)</p>	

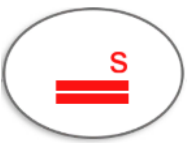



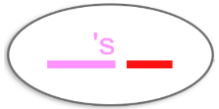

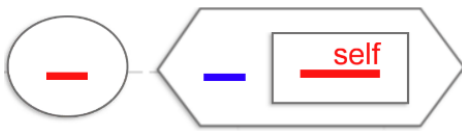
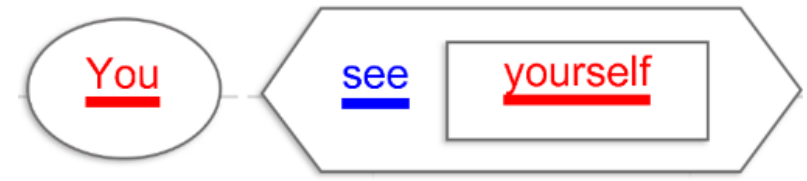
Targets: Tense and aspect

Code: Structure	SHAPE CODING template plus rule	Example
TA2: present tense copula/aux (<i>is/are/am</i>)	 <p>Need a blue word (<i>is, are, am</i>) in the diamond between oval and cloud</p>	
TA4: past tense copula/aux (<i>was/were</i>)	 <p>When talking about past time, we need a past (back) arrow on the blue word in the diamond (this changes <i>is</i> and <i>am</i> to <i>was</i>, and <i>are</i> to <i>were</i>).</p>	
TA5: sentences requiring the past tense	 <p>Adding back arrow for past time onto hexagon blue word adds <i>-ed</i> (pronounced /t, d, Id/)</p>	

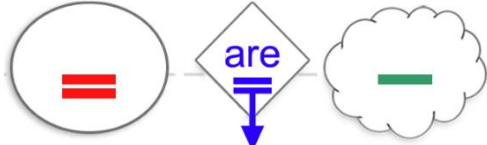
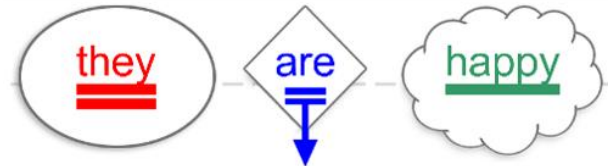
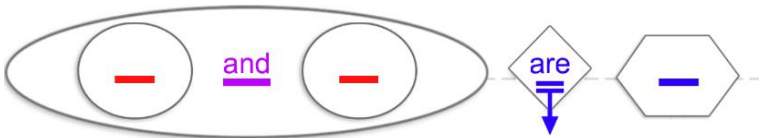


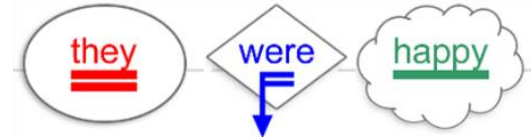
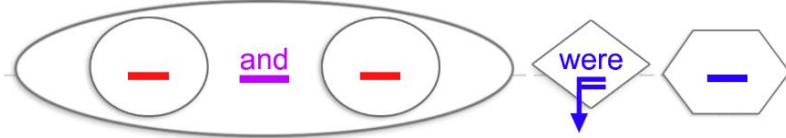

Targets: Negatives

Code: Structure	SHAPE CODING template plus rule	Example
NG2: auxiliary/copula + <i>not</i>	 <p>The <i>not</i> cross goes after a diamond</p>	
NG3: modal + <i>not</i>	 <p>The <i>not</i> cross goes after a diamond</p>	

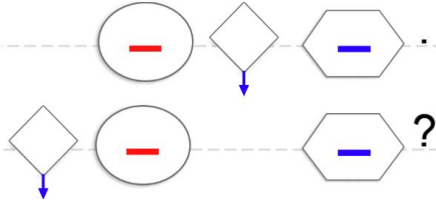
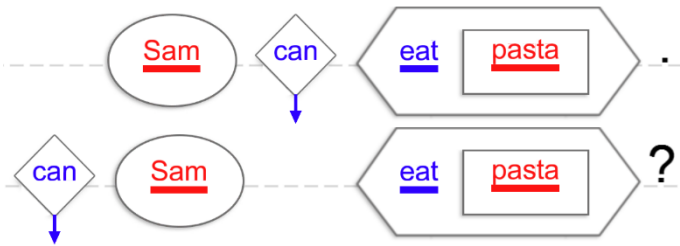
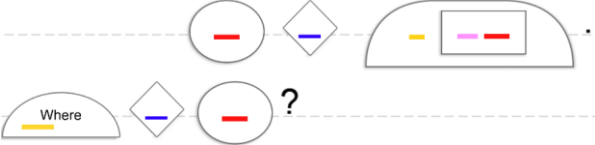
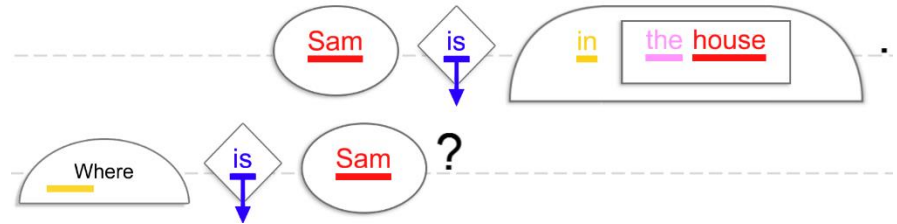
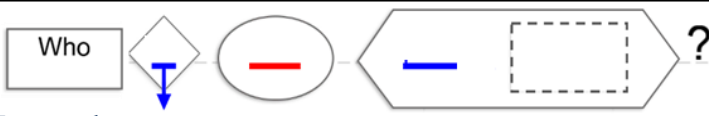
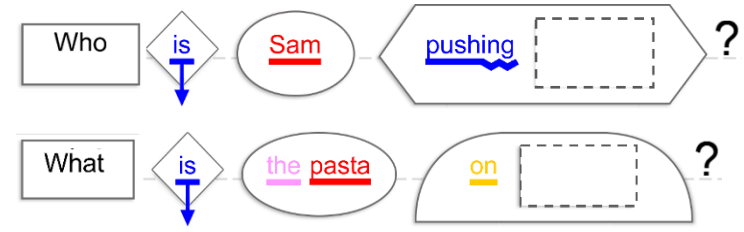
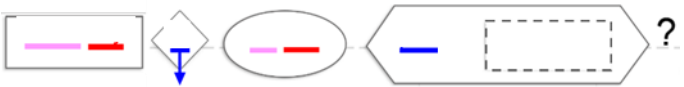
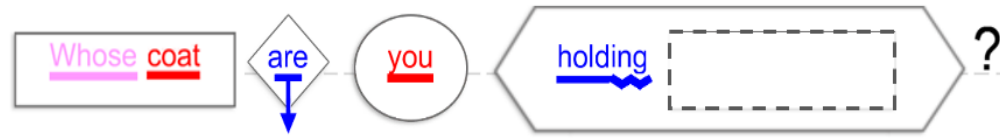
Targets: Noun phrases

Code: Structure	SHAPE CODING template plus rule	Example
NP1: Plural -s	 <p>More than one needs two red lines. Add -s (pronounced /s,z,iz/)</p>	
NP5: Demonstratives <i>this</i> vs <i>that</i>	 <p><i>This</i> is for nearby, <i>that</i> is for further away. Can be red or pink word</p>	
NP7: Possessive -s + Noun	 <p>To show something belongs, add -'s to turn red word into pink word</p>	
NP10: Reflexive pronoun	 <p>When oval and rectange are the same person use <i>myself</i>, <i>yourself</i>, <i>himself</i>, <i>herself</i>, <i>ourselves</i>, <i>themselves</i> in the rectangle</p>	

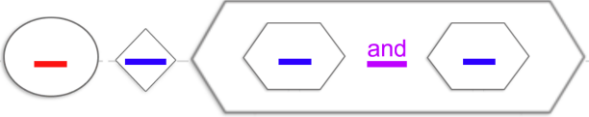

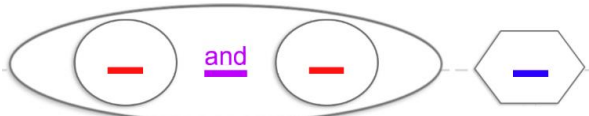
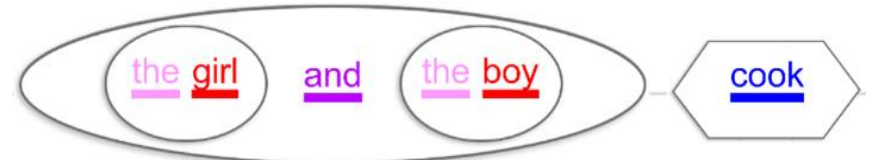
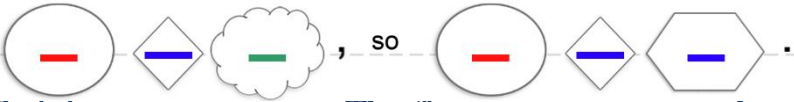

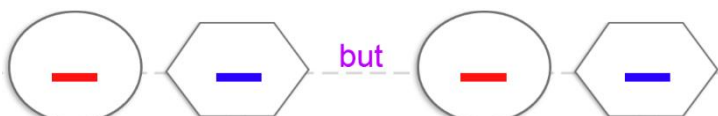
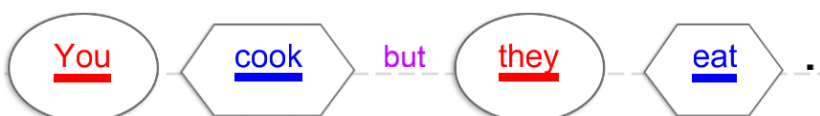


Targets: Agreement

Code: Structure	SHAPE CODING template plus rule	Example
AG1: <i>are</i> with plural Noun Phrase	 <p>Two red lines in oval needs two blue lines in diamond, <i>are</i> in present tense</p>	
AG2: <i>are</i> with coordinated Noun Phrases	 <p>Two red lines in big oval (one in each small oval) needs two blue lines in diamond, <i>are</i> in present tense</p>	
AG3: <i>were</i> with plural Noun Phrase	 <p>Two red lines in oval needs two blue lines in diamond, <i>were</i> in past tense</p>	
AG4: <i>were</i> with coordinated Noun Phrases	 <p>Two red lines in big oval (one in each small oval) needs two blue lines in diamond, <i>were</i> in past tense</p>	

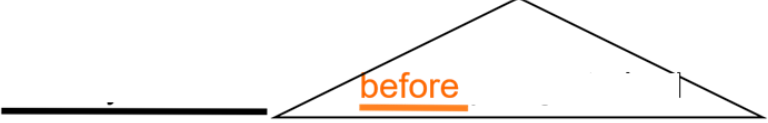
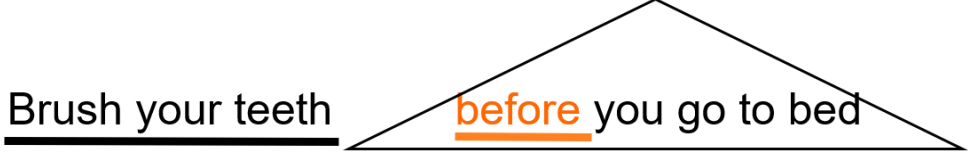
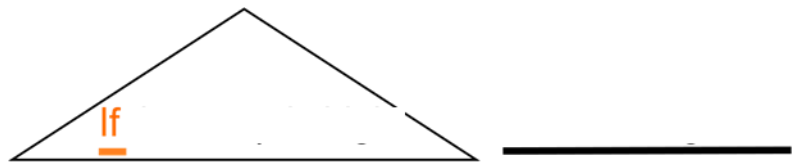
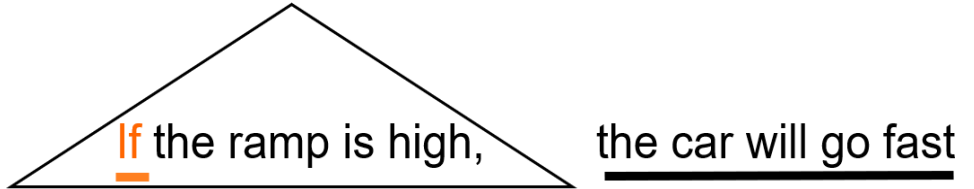

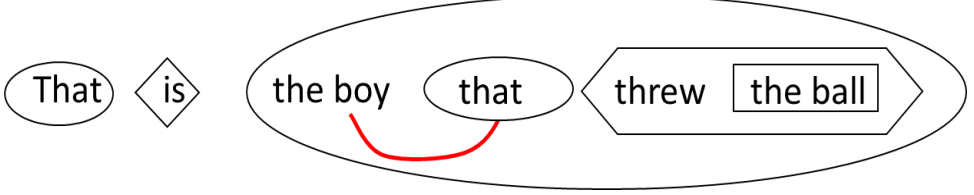
Targets: Questions

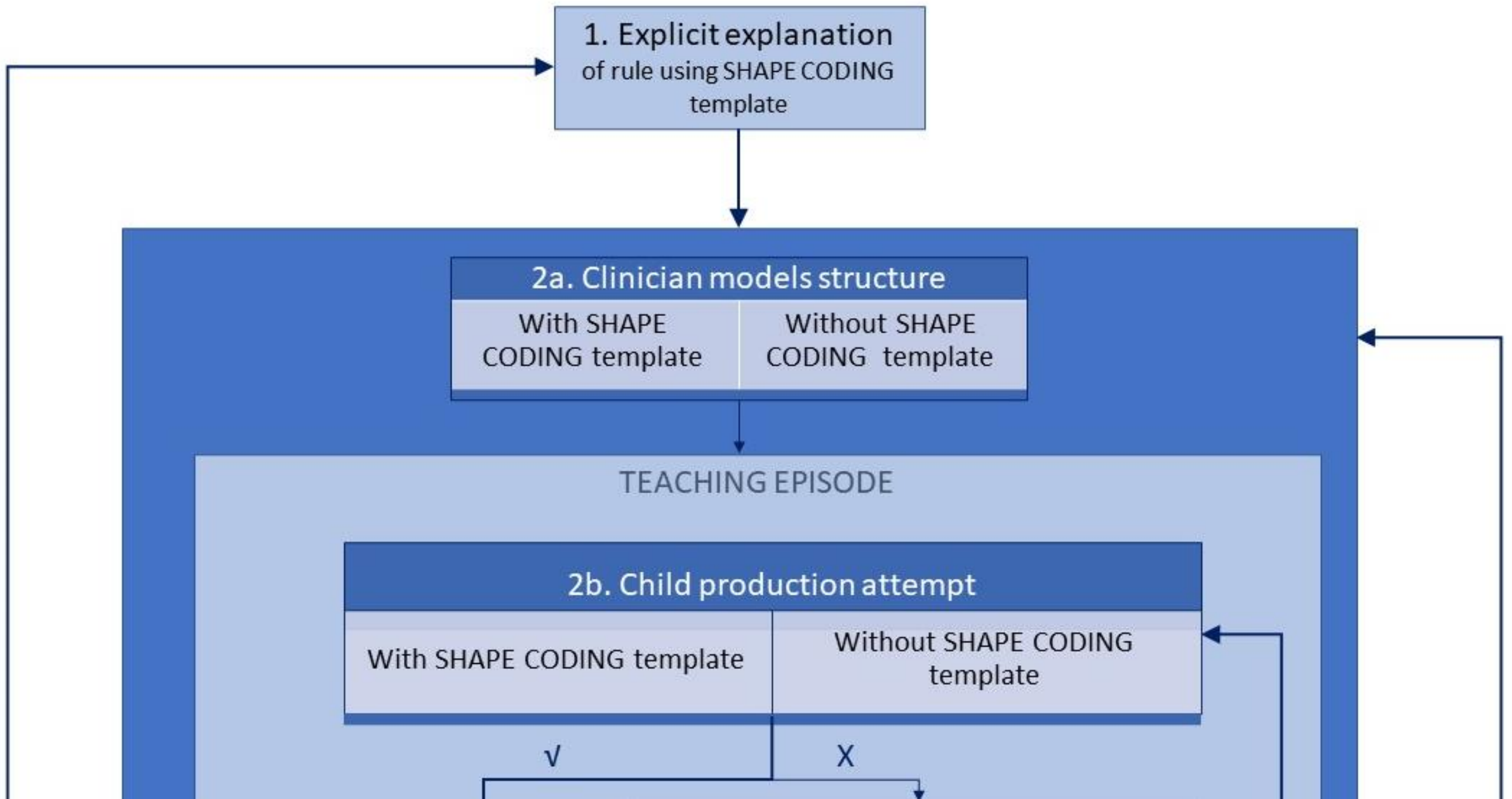
Code: Structure	SHAPE CODING template plus rule	Example
Q11: Question formation with movement of modal	 <p>To ask a <i>yes/no</i> question, move the diamond to the front</p>	
Q15: <i>Where, why, how</i> questions	 <p>Move the <i>Wh</i> shape to the front and then move the diamond to second position</p>	
Q16: <i>Who, what</i> object questions requiring movement	 <p>Move the <i>Wh</i> rectangle to the front and then move the diamond to second position. To understand these questions, put the rectangle back in place.</p>	
Q19: <i>Whose, which</i> Noun object questions requiring movement	 <p>Move the <i>Wh</i> rectangle to the front and then move the diamond to second position. To understand these questions, put the rectangle back in place.</p>	

Targets: Conjoining

Code: Structure	SHAPE CODING template plus rule	Example
CJ4: Coordinated Verb and Adjective Phrases with <i>and</i>	 <p>Join two clouds in a big cloud, or two hexagons in a big hexagon.</p>	
CJ5: Coordinated Noun Phrases with <i>and</i>	 <p>Join two ovals together in a big oval</p>	
CJ6: Causal conjunct <i>so</i>	 <p><i>So</i> joins two sentences. The first sentence causes the second to happen.</p>	
CJ7: Coordinated clauses with <i>but, or</i>	 <p>Join two sentences together with <i>but</i>. The second sentence is a surprise.</p>	
CJ8/9: Coordinated phrases with <i>but not, or</i>	 <p>Join two shapes the same together with <i>but not</i>. The first one happens, the second one doesn't.</p>	

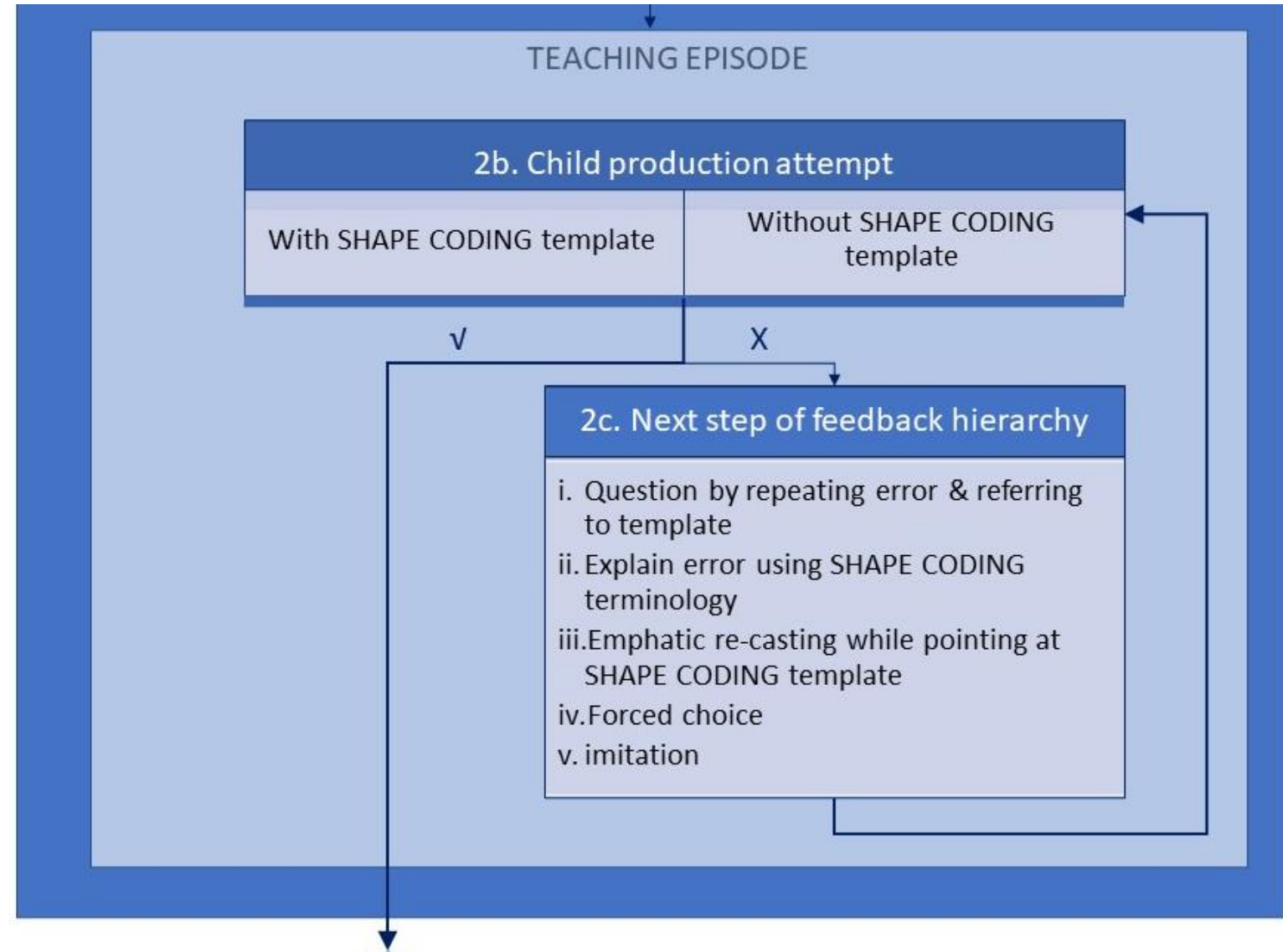
Targets: Adverbials & relative clauses

Code: Structure	SHAPE CODING template plus rule	Example
AD3: Adverbial subordinate clauses with temporal conjunctions <i>before, after, when, until</i>	 <p>The sentence in the triangle tells you when the main sentence (black line) happens. The main sentence happens 1st with <i>before</i>, 2nd with <i>after</i>, 2nd with <i>when</i> (but straight away, triangle starts it), 1st with <i>until</i> (triangle stops it). Doesn't matter if triangle appears second or first, meaning stays the same.</p>	 <p><u>Brush your teeth</u> <i>before</i> you go to bed</p>
AD4: Adverbial subordinate clauses with conditional conjunctions <i>if, unless</i>	 <p><i>If</i> works same as <i>when</i> and <i>unless</i> same as <i>until</i>, difference is they might never happen.</p>	 <p><i>If</i> the ramp is high, <u>the car will go fast</u></p>
RC1-4: Unembedded or presentational relative clauses	 <p>Put a whole sentence inside an oval to give more information.</p>	 <p>That is the boy that threw the ball</p>



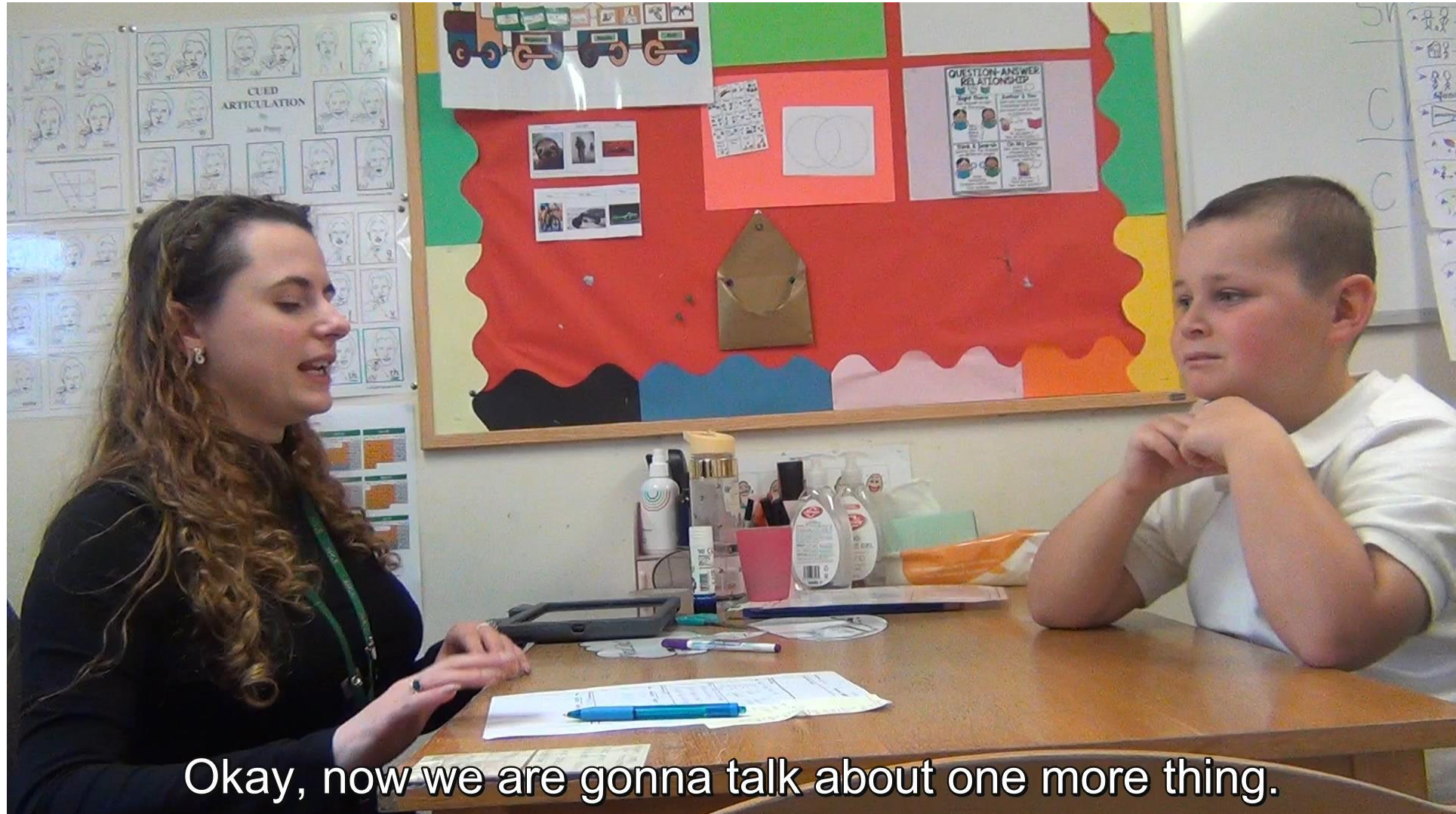
Teaching episode

- Teaching episode complete once child produced target accurately



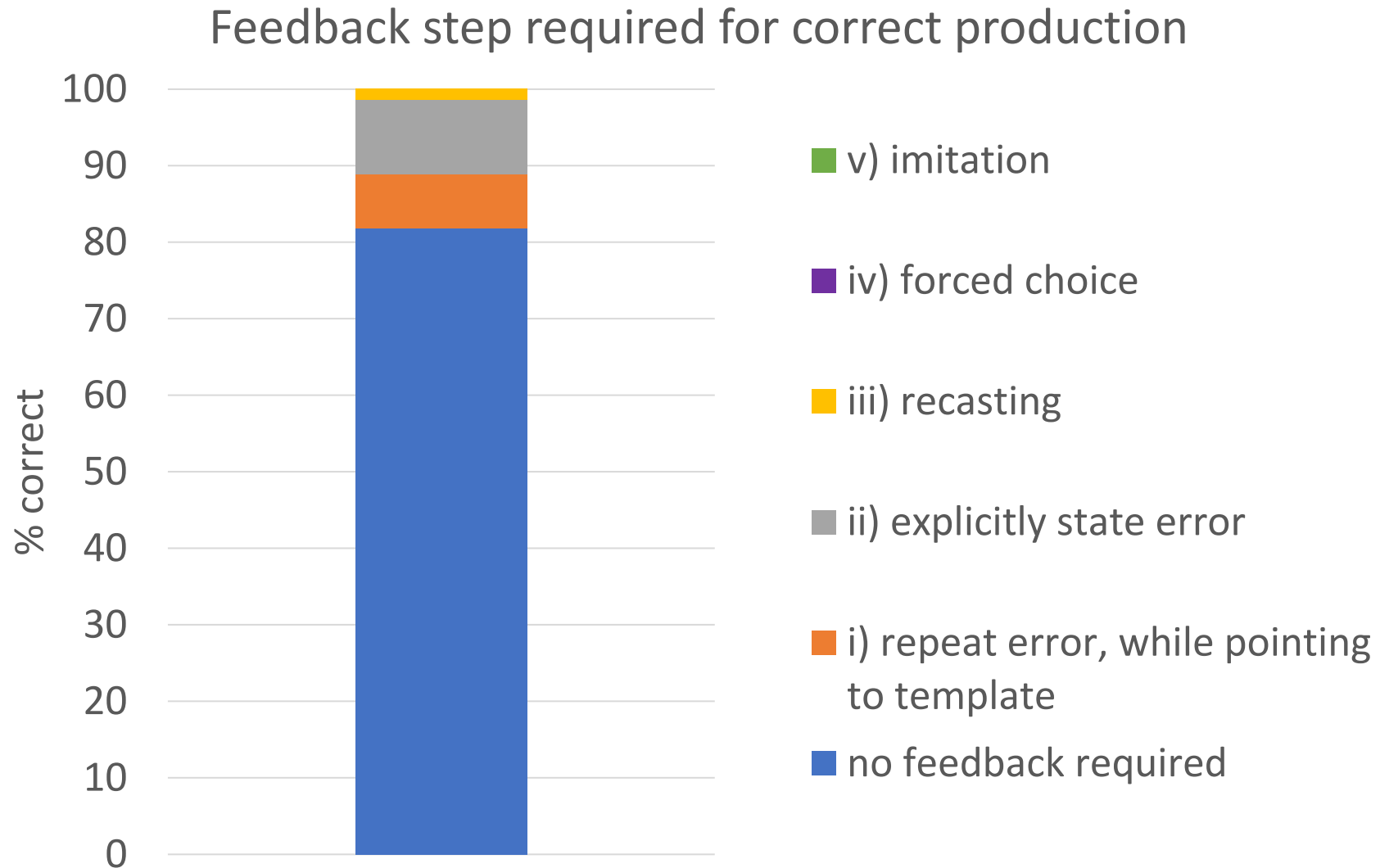
See also: www.shapecoding.com

Modelling, production practice and feedback



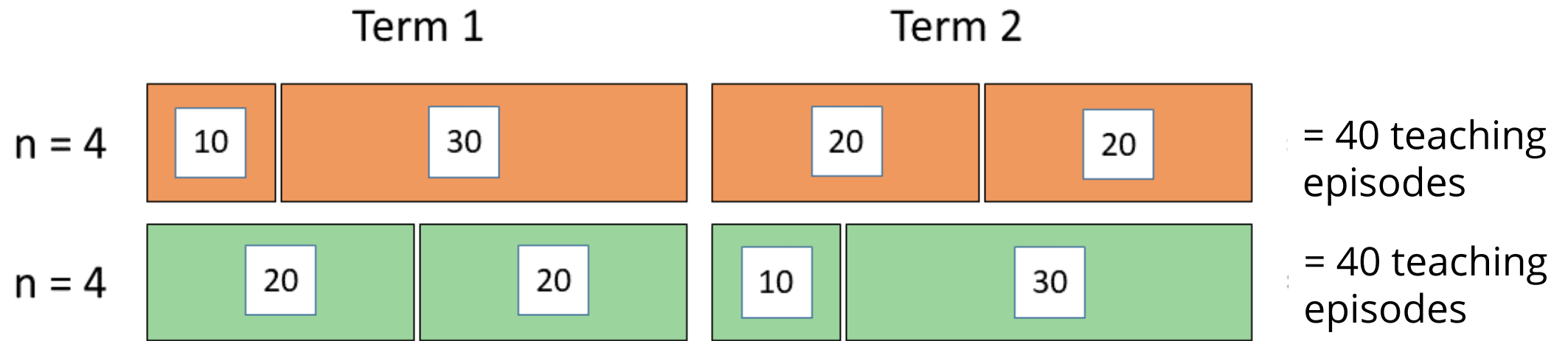
Okay, now we are gonna talk about one more thing.

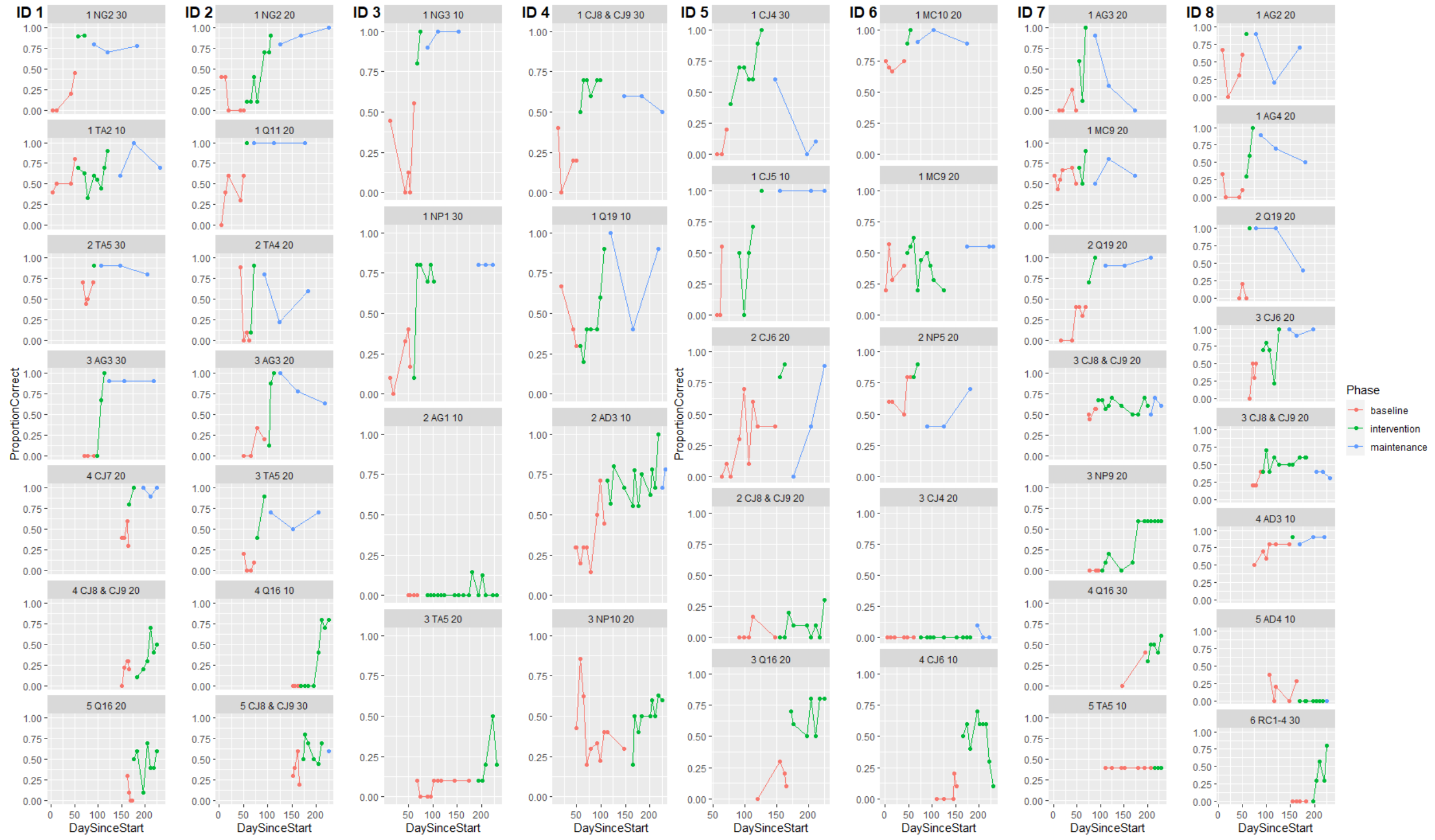
Templates and feedback hierarchy



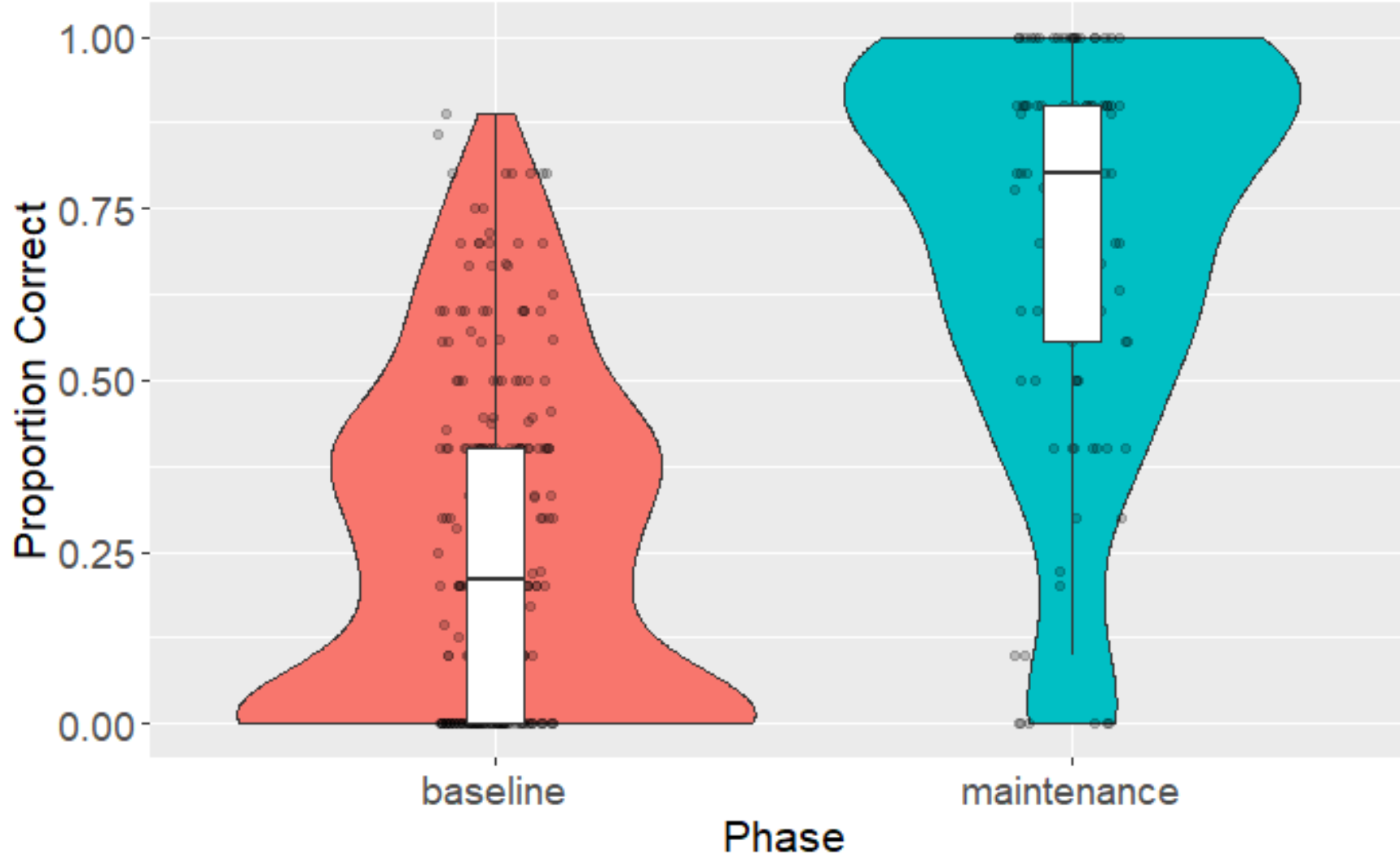
Intervention dosage

- 1:1 with single SLT (second SLT back-up)
- 1x per week (30 mins) for 16-20 sessions (\approx 9 hours)
- 2 targets per session (order alternates weekly)



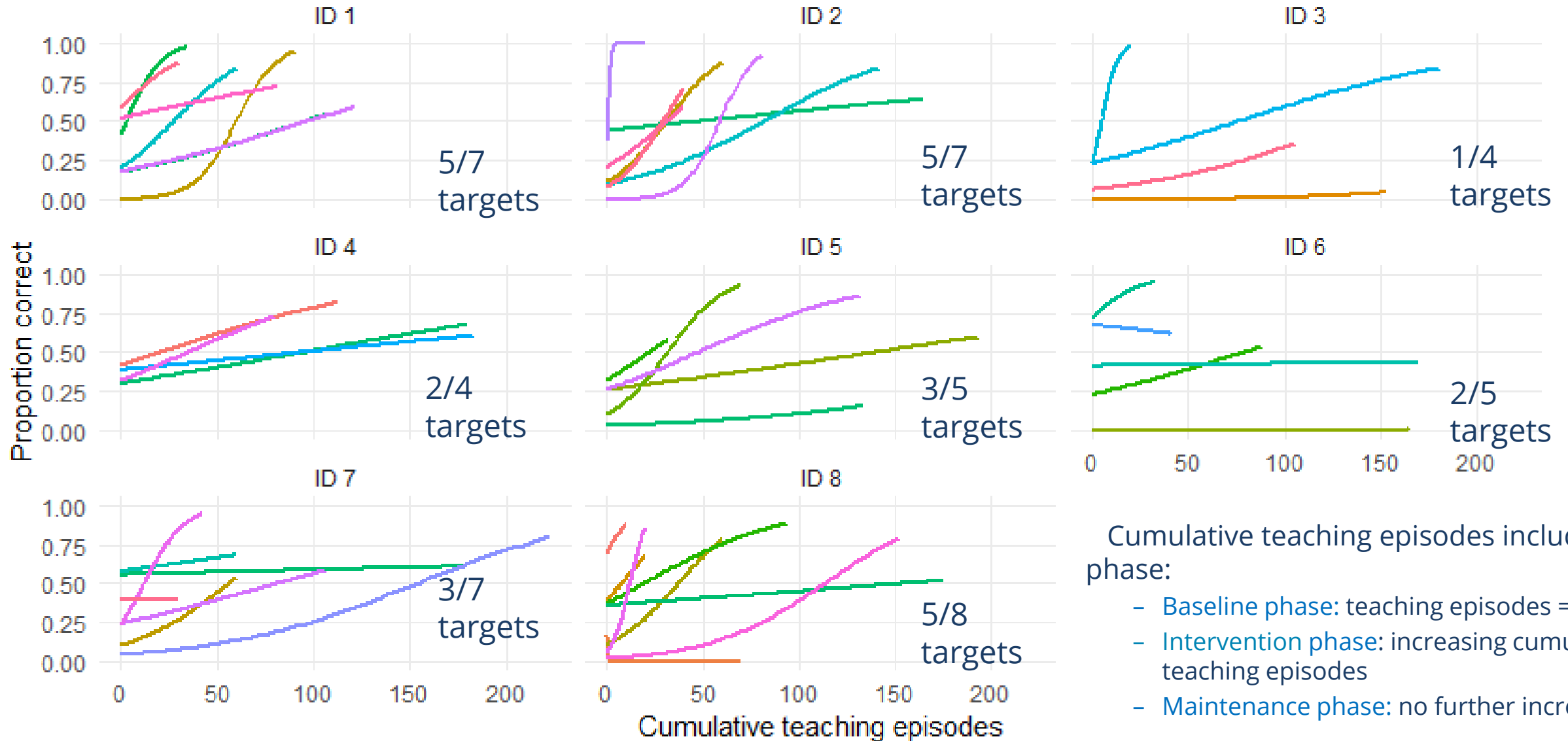


Effect of intervention



- Maintenance > baseline, $p < .001$

Proportion correct by cumulative teaching episodes



Differences between participants?

- One participant (ID2) showed steeper progress than the mean
 - in school for longer
 - involved in previous pilot studies
 - experienced with intervention
- ID6 showed shallower (not sig) progress
 - Poorest attention

Does number of teaching episodes per session matter?



- Each target received 10, 20 or 30 teaching episodes per session
- When considering
 - number of sessions: $30 > 20 > 10$
 - cumulative teaching episodes: $30 = 20 = 10$
- Odds of correct response increases 3.9% for every teaching episode
- Targets that were achieved required 40-60 teaching episodes (2-3 intervention sessions, <1 hour!).
- No significant decrease during maintenance period (or interaction with number of teaching episodes)

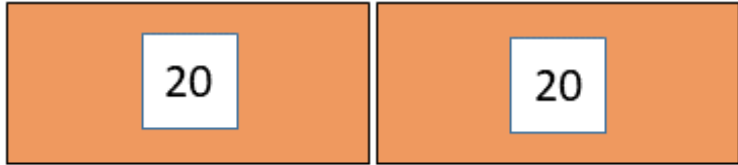
Conclusions

- Scores following **intervention higher than baseline** scores
- **Significant progress with intervention** (cumulative teaching episodes)
 - Faster progress for one child – most experience
 - One child made no significant progress – poorest attention
 - Rate of progress varied with target
 - Total number of teaching episodes is key (distribution across sessions less important)
 - Feedback hierarchy rarely needed – errorless learning?
- **Progress maintained**

Next steps

- Investigate effectiveness delivered
 - in a range of settings by trained clinicians (?and/or other staff)
 - to larger number of children with a broader range of language difficulties and wider range of ages
- Improve implementation
 - Finish sharing detailed intervention steps & associated resources
 - develop training further to maximise effectiveness and efficiency of intervention

On-going study

- RCT with sequential design ([Lakens, 2014](#))
 - 40-260 participants (interim analyses at 40, 80, 140)
 - Target identification and intervention as above
 - 2 targets per session
- 

= 40 teaching episodes
- Delivered in mainstream schools by trained clinicians
 - Children aged 5-11 with grammatical difficulties (regardless of diagnosis)

Maths word problems in young people with DLD

Nicola Dawson, Hilary Nicoll, Helena Osana,
Anne Lafay, Susan Ebbels

Background

- Mathematical word problems among most challenging problems (Daroczy et al., 2015)
 - Include irrelevant contextual or numerical information
 - Complex syntactic structures
 - Domain-specific vocabulary
 - Language that is inconsistent with numerical operation

*Joey had 14 books. He had 5 **more** than Mary. How many books did Mary have?*

$$14 - 5$$

*Joey had some books. He gave 5 **away**. Now he has 14 books. How many books did Joey have in the beginning?*

$$14 + 5$$

Background



"Jack needs to raise £200, but he only has £60 at the moment. **How much more** does he need to raise to reach his target?"

SITUATIONAL MODEL – mental representation of the scenario



PROBLEM MODEL – mathematical structure of the problem



COMPUTATION



Additive word problems

- **Combine** – not in this study
- **Change** - quantities that change over time, either by increasing or decreasing an initial quantity
- **Compare** - unchanging quantities in an additive relationship that are compared to each other.

Features of word problems

Problem type	Consistency	Unknown	Key word	Add vs subtract
change	consistent	final state	more	add
change	consistent	final state	away	subtract
change	consistent	change	away	subtract
change	inconsistent	initial state	away	add
change	inconsistent	initial state	more	subtract
change	inconsistent	change	more	subtract
compare	consistent	one state	more	add
compare	consistent	one state	fewer	subtract
compare	consistent	difference	fewer	subtract
compare	inconsistent	one state	fewer	add
compare	inconsistent	one state	more	subtract
compare	inconsistent	difference	more	subtract

Problem components

Each problem included

- Additional contextual information
- Additional numerical information
- How many (more) Xs? question

Lea loves reading. This morning, Lea read 16 books and watched 2 videos in her bedroom. This evening, Lea read 8 more books. How many books did Lea read today?

Simplification strategies

- Remove additional contextual information

~~Lea loves reading.~~ This morning, Lea read 16 books and watched 2 videos
~~in her bedroom.~~ This evening, Lea read 8 more books. How many books
did Lea read today?

Simplification strategies

- Remove additional numerical information

Lea loves reading. This morning, Lea read 16 books ~~and watched 2 videos~~ in her bedroom. This evening, Lea read 8 ~~more~~ books. How many books did Lea read today?

Simplification strategies

- Re-order "How many (more) Xs"? question

Lea loves reading. This morning, Lea read 16 books and watched 2 videos in her bedroom. This evening, Lea read 8 more books. ~~How many books did Lea read today?~~ Lea read how many books today?

- Simplification strategies added to each other in cumulative fashion

Participants

- Eventually: approx. 200 students with DLD aged 7-19
- Now:
 - Only those who scored $>60\%$ on arithmetic test of sums represented in word problems (current $n = 126$)
- Next stage
 - Will create new set of word problems with same structure but all numbers <10 to include students with lower mathematical abilities

Primary Research questions

- 1) Which types of word problems are most challenging for children and adolescents with (D)LD? Problem type and consistency
- 2) Is there a cumulative effect of multiple simplification strategies on participants' ability to derive the word problem structure, and is this modulated by language consistency and word problem type?
- 3) How does each simplification strategy, or combination of strategies, affect participants' ability to derive the word problem structure?

Dependent variable



SITUATIONAL MODEL – mental representation of the scenario



PROBLEM MODEL – mathematical structure of the problem

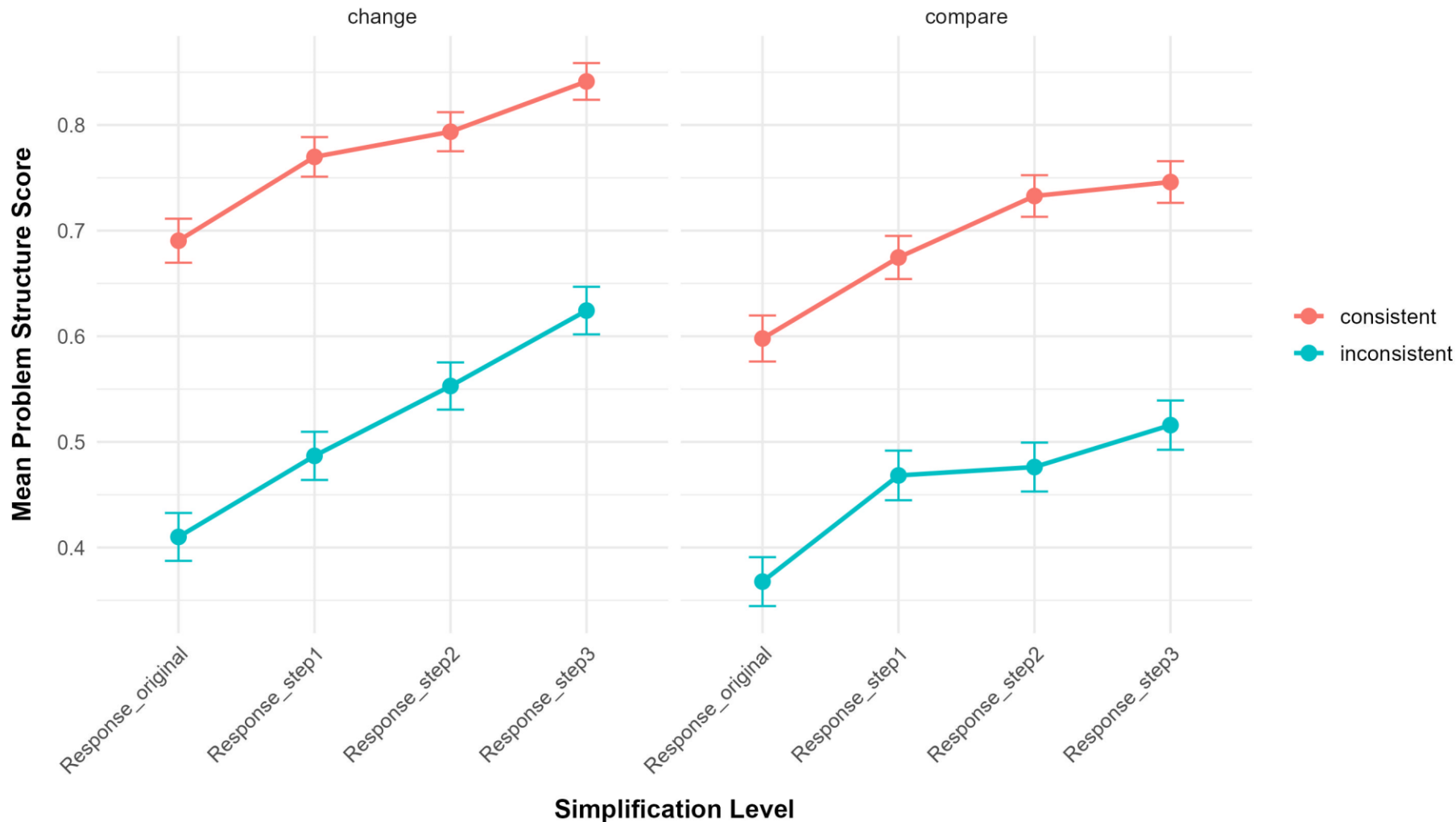


COMPUTATION



Preliminary results – problem model

Problem Structure Score by Simplification Level, Problem Type & Language Consistency



Problem type (change vs. compare)
 $p = .07$

Main effect of consistency,
 $p < .001$

Main effect of simplification level, each additional step,
 $p < .01$

No interactions

Dependent variable



SITUATIONAL MODEL – mental representation of the scenario



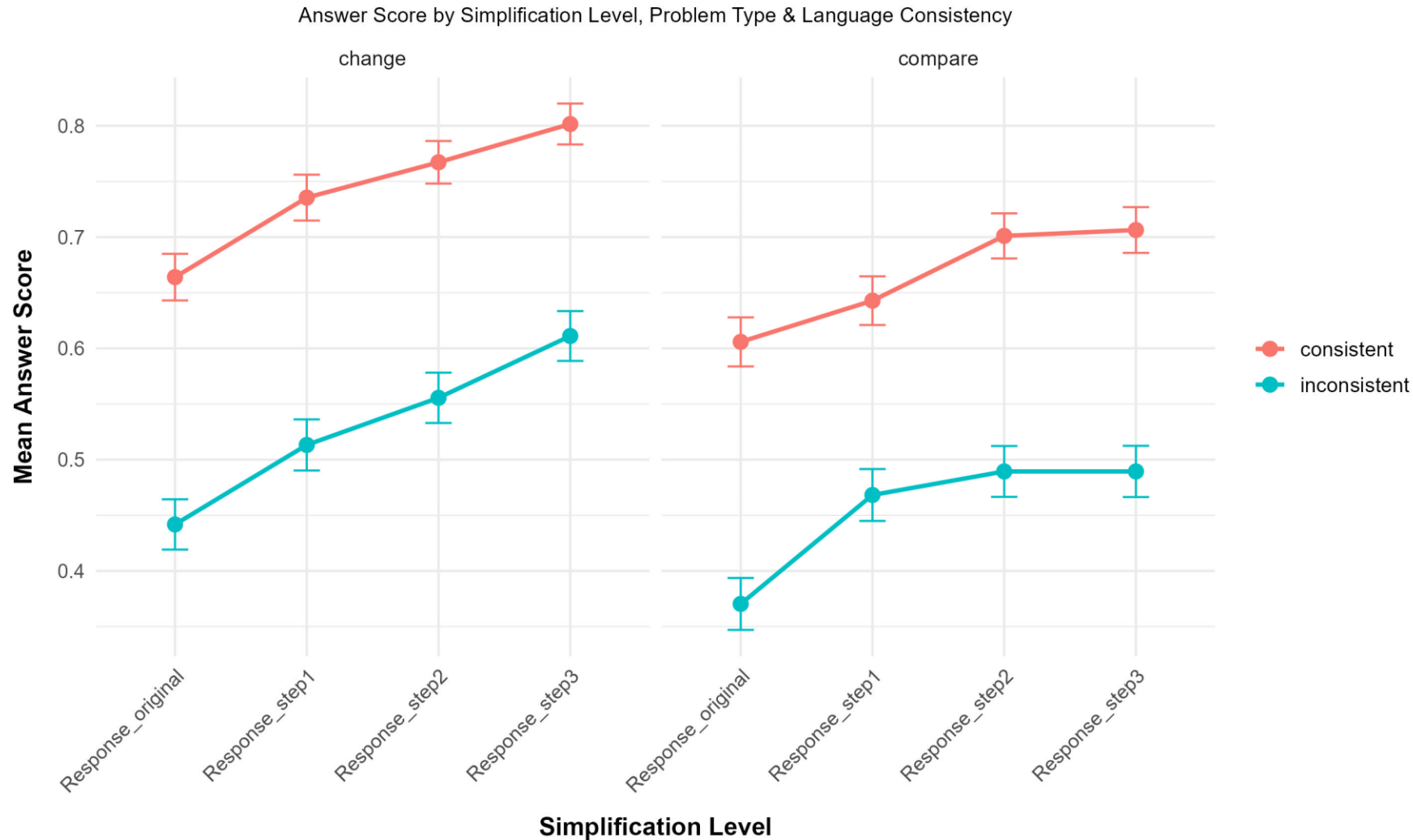
PROBLEM MODEL – mathematical structure of the problem



COMPUTATION



Preliminary results – computational answer



Same pattern of results

Research questions – preliminary answers



- 1) Which types of word problems are most challenging for children and adolescents with (D)LD?
 - Inconsistent problems
 - ? Compare problems
- 2) Is there a cumulative effect of multiple simplification strategies on participants' ability to derive the word problem structure?
 - yesand is this modulated by language consistency and word problem type?
 - no
- 3) How does each simplification strategy, or combination of strategies, affect participants' ability to derive the word problem structure?
 - Not yet analysed, but appears removal of additional numerical info biggest effect

Further analyses & intervention planning



- Which linguistic features contribute to the complexity of maths word problems and how do they interact with other features already examined?
- How can we help children with DLD to understand word problems?
 - Apply their own simplification strategies
 - Remove irrelevant contextual information
 - Remove irrelevant numerical information
 - Re-order the question
 - Improve understanding of linguistic features required

Linguistic knowledge needed for change problems



- Identify initial versus final state
 - Time concepts:
 - *earlier/before vs now (final), now (initial) vs tomorrow, this morning vs this evening,*
 - Tenses:
 - *Had 3 (initial), now has 8 (final). Now has 3 (initial), wants/needs 8 (final)*
- Identify direction of change
 - Verbs & prepositions
 - *Lose, give away, send, drop, break (Subject decreases number)*
 - *Get, receive, take, earn (Subject increases number)*
 - *X gives some As to Y, X gives Y some As (X decreases number while Y increases)*
 - *X moves A **from** Y **to** Z (Y decreases number while Z increases)*

Linguistic knowledge needed for compare problems



- Comparatives
 - *A has 5 more/fewer apples (than B (has (apples)))*
 - A unknown = consistent
 - B unknown = inconsistent
- Unknown difference (always subtract)
 - *How many more/fewer apples does A have (than B (has (apples)))?*

Additional help for children with DLD

Can try to teach children with DLD how to navigate these incredibly complex word problems.

However..... if we want to test their maths rather than their language:

- Reduce the linguistic demands
- Simplify the linguistic complexity
- ? videos of situations instead of of complex language

Summary

- Learning, understanding and using language, especially morphosyntax and related vocabulary is very challenging for children with DLD

Improve their skills.
Teach them the language they need in the most effective and efficient way possible

Minimise the demands on their language so that they can succeed despite their language difficulties

DEVELOPMENTAL LANGUAGE DISORDER

Strategies for activity leaders and coaches

There are some simple things you can do to support a child or young person who has Developmental Language Disorder (DLD). These support strategies can make a real difference to those who might otherwise struggle to join in due to their language needs.

How can I support a child or young person who has DLD?

GET THEIR ATTENTION

Say their name and make sure they're listening.



MODIFY YOUR LANGUAGE

Use simple words. Keep sentences short.

SLOW DOWN

Talk calmly and slowly. Give them time to respond.



KEEP INSTRUCTIONS SHORT

Say exactly what you want them to do, one instruction at a time.

MAKE IT VISUAL

Use gestures, facial expression, pictures and diagrams.



CHECK THEY'VE UNDERSTOOD

Ask them to repeat what you have said.

HELP THEM CHOOSE

Reduce the number of choices. Show or point to options.



EXPLAIN NEW WORDS

Talk about what new words mean and repeat them often.

STOP AND LISTEN

Repeat back what they say to check you've understood them.



CELEBRATE STRENGTHS

Make positive comments about joining in and commend effort.

Further support and guidance can be found at:
moorhouseinstitute.com/dld



COULD IT BE LANGUAGE?

Developmental Language Disorder (DLD) is a hidden but common condition when a child has difficulty using and/or understanding language and is a sub category of SLCN (Speech, Language and Communication Needs)

Key strategies to support language disorders in the classroom



TIME

to process information and instructions



VISUAL SUPPORT

visual templates, language rich displays and clear/simple signage

SIGN IT

gesture, facial expressions and body language



DO IT

multi-sensory teaching approach

MODIFY YOUR LANGUAGE

rate of speech, one instruction at a time, keep it short



CHUNK INFORMATION

pause, repeat, be explicit, use literal language

WORDS

explicitly teach key vocabulary



SMALL STEPS

break down tasks

REPEAT IT

recap previous learning, do activities more than once



MODEL IT

whether spoken or written, model the language

Find out more about DLD and training for teachers at:

moorhouseinstitute.com/dld

Moor House Research & Training Institute, Mill Lane, Hurst Green, Oxted, RH8 9AQ

moorhouseinstitute.com/dld-resources

DEVELOPMENTAL LANGUAGE DISORDER

Children with Developmental Language Disorder (DLD) have significant, on-going difficulties understanding and/or using language which can affect their behaviour and progress at school.



Afasic
voice for life

How can I support my child's communication?

GET THEIR ATTENTION

say their name and get down to their level to support their listening



USE SIMPLE LANGUAGE

keep sentences short; use simple words; repeat if necessary

KEEP INSTRUCTIONS SHORT

say exactly what you want them to do; give one instruction at a time



SLOW DOWN

talk calmly and slowly; give them time to respond

HELP THEM SEE IT

use gestures, facial expression, pictures and symbols to help them understand what you say



CHECK THEY'VE UNDERSTOOD

ask them to repeat what you have said; if needed, say it again and show them

LET THEM CHOOSE

reduce the number of choices; show them or point to the options



FOCUS ON WORDS

talk about new words; explain their meaning and use them often in play and shared activities

STOP AND LISTEN!

make positive comments; repeat what they say with correct grammar



ENJOY TIME TOGETHER

model language while you play; practise taking turns and listening to each other; have fun!

Further support and guidance for parents can be found at:

afasic.org.uk
moorhouseinstitute.com/dld

Moor House Research & Training Institute, Mill Lane, Hurst Green, Oxted, RH8 9AQ

Icon credit: Freepik

DEVELOPMENTAL LANGUAGE DISORDER

Information for activity leaders and coaches

Children and young people with Developmental Language Disorder (DLD) have significant, on-going difficulties understanding and/or using language. This can affect them in a number of different ways.

Children and young people with DLD may struggle with...



☐ EXPRESSING THEMSELVES

sharing ideas, thoughts, feelings or needs



☐ VOCABULARY

learning, remembering and using new words



☐ FOLLOWING INSTRUCTIONS

understanding and remembering what to do



☐ CONVERSATION

following and joining in, especially in a group



☐ MAKING SENSE

combining words to use sentences that others understand



☐ CONCENTRATION

maintaining attention; they may tire easily



☐ READING & WRITING

making links between letters, sounds, words and meaning



☐ BEHAVIOUR

managing emotions and regulating behaviour



☐ FRIENDSHIP & TEAMWORK

making friends, joining in and following the rules



☐ CONFIDENCE

speaking in a group and asking for help



Further support and guidance can be found at:
moorhouseinstitute.com/dld

COULD IT BE LANGUAGE?

Children with Developmental Language Disorder (DLD) have significant, on-going difficulties understanding and/or using language which can affect their behaviour and progress at school.

What are the signs of DLD?

Children with DLD may struggle with...



☐ PROCESSING LANGUAGE

listening to, understanding, remembering what others say



☐ FOLLOWING INSTRUCTIONS

understanding long or complex sentences



☐ VOCABULARY

understanding and using words accurately



☐ GRAMMAR

understanding and using grammar (spoken and written), getting words in the correct order with the correct tenses



☐ EXPRESSING IDEAS

saying how they feel, telling a story, explaining their ideas



☐ ASKING AND ANSWERING QUESTIONS

talking in class discussions



☐ MATHS

understanding word problems and topics with a heavy language load



☐ READING

understanding what is happening in a story/narrative/factual text



☐ LITERACY

understanding and using sounds for spelling and reading (phonological awareness)



☐ SOCIAL INTERACTION

using language in social situations/making and maintaining friendships



Find out more about DLD and training for teachers at:
moorhouseinstitute.com/dld

Moor House Research & Training Institute, Mill Lane, Hurst Green, Oxted, RH8 9AQ

moorhouseinstitute.com/dld-resources
www.shapecoding.com

DEVELOPMENTAL LANGUAGE DISORDER

Children with Developmental Language Disorder (DLD) have significant, on-going difficulties understanding and/or using language which can affect their behaviour and progress at school.

What signs should parents/carers look out for?

If your child has DLD, they may struggle with...



Afasic
voice For life

☐ EXPRESSING IDEAS

sharing thoughts and feelings, talking about something that has happened, expressing their needs



☐ VOCABULARY

learning, remembering and using new words



☐ FOLLOWING INSTRUCTIONS

understanding and remembering what to do, particularly with non-routine instructions



☐ CONVERSATION

following and joining in with conversations, especially in a group



☐ MAKING SENSE

putting words together to make a spoken or written sentence that others can understand



☐ CONCENTRATION

maintaining attention, so may tire easily



☐ READING & WRITING

making links between letters, sounds, words and meaning for reading and writing



☐ BEHAVIOUR

managing emotions, which may lead to frustration, avoidance, anxiety and being unusually upset



☐ FRIENDSHIP & PLAY

making friends, joining in with play, following the rules of a game



☐ CONFIDENCE

using and understanding language without significant adult support



Further support and guidance for parents can be found at:

afasic.org.uk
moorhouseinstitute.com/dld
Moor House Research & Training Institute, Mill Lane, Hurst Green, Oxted, RH8 9AQ

Icon credit: Freepik



Lunch

13:00-14:00





Session 4: What needs to change?

14:00-15:30

Chair: Josep Quer

This panel will focus on the policies that need to change internationally to ensure timely identification of language needs, instrumental to improve full inclusion of children and young people.





Mind the Gap

British Academy, London, 27 March 2026



Bencie Woll

Deafness Cognition and Language Research Centre, UCL



OUTLINE

- The education picture for deaf children
- Mental health issues
- The language acquisition experiences of deaf children
- Cochlear implants and language outcomes
- Language, deafness and the brain
- Language deprivation and delayed and incomplete first language acquisition
- Policy implications and conclusions

In deaf children's language acquisition, ATYPICALITY IS TYPICAL

- Atypical learning environment
 - <10% of deaf children are native signers
 - Variable amount of exposure to spoken/signed language
 - Variable age of exposure to spoken/signed language
 - Variable quality of exposure to spoken/signed language
 - Variable accessibility of exposure
- Monolingualism or Bilingualism in input and output
 - Spoken language only
 - Signed and spoken language
- Individuals with late or incomplete L1
 - Long term effects

Education

CRIDE report - 2023 survey on educational provision for deaf children

- Around 48,000 deaf children across the UK
- 78% of school-age deaf children attend mainstream schools. 6% attend mainstream schools with resource provisions, 2% attend special schools for deaf children, whilst 13% attend special schools not specifically for deaf children.
- 25% of deaf children are recorded as having some form of additional or special need.
- 89% of severely or profoundly deaf children communicate using only spoken English, Welsh or Gaelic in school or other education settings. Of severely or profoundly deaf children, 9% use British or Irish Sign Language only; 25% use sign supported English; 34% use sign language alongside English or Welsh (i.e. 68% use signing). 14% of deaf children use an additional spoken language other than English or Welsh in the home.
- The most common post-school destination for deaf young people is further education (75%)

<https://www.batod.org.uk/information/cride-reports/>

- Between February 2022 and March 2023, there were 7053 children with cochlear implants in the UK, comprising 48% of severely deaf children and 83% of those with profound deafness.

	England	Northern Ireland	Scotland	Wales	UK
Supported at home – pre-school children	3,022 (7%)	135 (9%)	98 (4%)	142 (5%)	3,397 (7%)
Early years setting	2,618 (6%)	72 (5%)	161 (7%)	93 (4%)	2,944 (6%)
Supported at home – of school age and home educated	281 (1%)	<5 (0%)	<5 (0%)	8 (0%)	292 (1%)
Mainstream schools (including state-funded and independent schools)	26,674 (65%)	961 (62%)	1,745 (77%)	1,931 (81%)	31,311 (66%)
Resource provision in mainstream schools	2,209 (5%)	33 (2%)	107 (5%)	189 (7%)	2,538 (5%)
Special schools for deaf pupils	952 (2%)	33 (2%)	42 (2%)	11 ⁶ (0%)	1,038 (2%)
Other special schools, not specifically for deaf children	4,073 (10%)	318 (20%)	101 (4%)	239 (10%)	4,731 (10%)
All other post-16 provision (not including school sixth forms)	1,063 (3%)	0 (0%)	0 (0%)	16 (1%)	1,079 (2%)
Other (e.g. Pupil referral units, NEET)	129 (0%)	0 (0%)	0 (0%)	0 (0%)	129 (0%)
Total	41,021 (100%)	1,555* (100%)	2,255* (100%)	2,629 (100%)	47,459 (100%)

Languages used in education

	England	Northern Ireland	Scotland	Wales	UK
Spoken English or Welsh	6,035 (66%)	238 (82%)	585 (75%)	247 (64%)	7,105 (67%)
British/Irish Sign Language	701 (8%)	<5 (1%)	45 (6%)	25 (7%)	775* (7%)
Spoken English or Welsh together with signed support	1,898 (21%)	39 (13%)	150 (19%)	104 (27%)	2,191 (21%)
Other combination	459 (5%)	9 (3%)	5 (1%)	8 (2%)	481 (5%)
Total	9,093 (100%)	290* (100%)	785 (100%)	384 (100%)	10,550* (100%)

School attainment at ages 7 and 11

Figures for children reaching the expected standard in 2019: Key Stage 1 (age 7)

Year	Deaf children	Children with no identified SEN	All children
Reading	53%	84%	75%
Writing	48%	79%	70%
Maths	52%	84%	76%
Science	60%	90%	83%

Figures for children reaching the expected standard in 2019: Key Stage 2 (age 11)

	Deaf children	Children with no identified SEN	All children
Reading, writing and maths overall	43%	74%	64%
Reading	56%	83%	75%
Writing	59%	88%	78%
Grammar, punctuation and spelling	59%	87%	78%
Maths	56%	84%	76%

Department for Education's 2019 attainment figures

Year	Deaf children	Children with no identified SEN	All children
2018	39.2	49.8	46.5
2017	37.5	49.5	46.3
2016	42.5	53.2	49.9
2015	41	52	48.4
*Attainment 8 measures a student's average grade across eight subjects. English and Maths count twice.			

GCSE - Percentage of children achieving a grade 4/C or above in both English and Maths:			
Year	Deaf children	Children with no identified SEN	All children
2018	48%	70.6%	64.2%
2017	46.1%	70.4%	63.9%

Deaf children's educational attainment gap

- In 2019, deaf children's attainment gap was equivalent to 8.8 months of learning at key stage 1 (age seven), 12.0 months at key stage 2 (age eleven) and 17.5 months at key stage 4 (age sixteen). The deaf GCSE gap can also be expressed as a gap in the mean grades for GCSE English and maths of 1.3 grades per subject.
- The size of the gap in months is almost twice as large for GCSEs as at key stage 1, and this reflects larger learning gaps as children get older and the school curriculum expects a greater volume and complexity of knowledge.

Current practice

- Current practice in relation to speech training pre- and post-CI often stresses that exposure to non-auditory signals should be minimised because of its assumed deleterious effects on the dynamic development of auditory cortical circuits.
- In 'auditory-verbal' training regimes the adult is required to train the child's acoustic skills by reducing (hiding) the visibility of oral actions, and parents are advised not to use sign language prior to implantation (Chan et al., 2000; Rhoades & Chisholm, 2001; Yoshida et al., 2008).
- Clinical practice follows an incorrect neurological hypothesis which suggests that seeing speech or SL may disrupt auditory cortical development during the sensitive period.

Vulnerability to mental health problems

- Deaf children and young people are more vulnerable to mental health problems than hearing children.
- The prevalence of mental health problems in community samples of deaf children is approximately 40% (including children with transient and mild problems). They are 1.5–2 times more vulnerable to mental health problems than hearing children. Extrapolating from the latest ONS (National Statistics Online) data, this would suggest that 15–20% of all deaf children have clinically significant mental health problems.
- This reflects an increased prevalence of both emotional and conduct problems. In addition deaf children appear to be at greater risk of developing autism spectrum disorders and Attention Deficit Hyperactivity Disorder (ADHD).
- Children whose deafness is caused by factors that also cause pervasive brain damage, such as intrauterine viral infections, the complications of severe prematurity and neonatal meningitis, are more vulnerable to mental health problems generally but particularly to autism spectrum disorders and ADHD.
- A range of factors such as communication method, parents' communication competence and school type (residential versus mainstream) have been proposed as risk factors specific to deaf children.

Mental health and the deaf experience

Family communication issues

Inadequate emotion-related language – issues in benefiting from ‘talk’ therapies

Immature socially and emotionally when young (because of missing much of what is going on in classroom and at home)

Limited access to social and emotional information

Recipients of more active/controlling parenting than hearing peers

Anxieties about growing up and moving into the hearing world

Poor experiences in school

Poor learning

Poorer educational outcomes

Cochlear implants

- Cochlear implants (CIs) as early as 1y have been highly successful in restoring hearing in deaf children
- Successful language outcomes are less clear

Tamati, T. N., Pisoni, D. B., & Moberly, A. C. (2022). Speech and language outcomes in adults and children with cochlear implants. *Annual Review of Linguistics*, 8(1), 299-319.

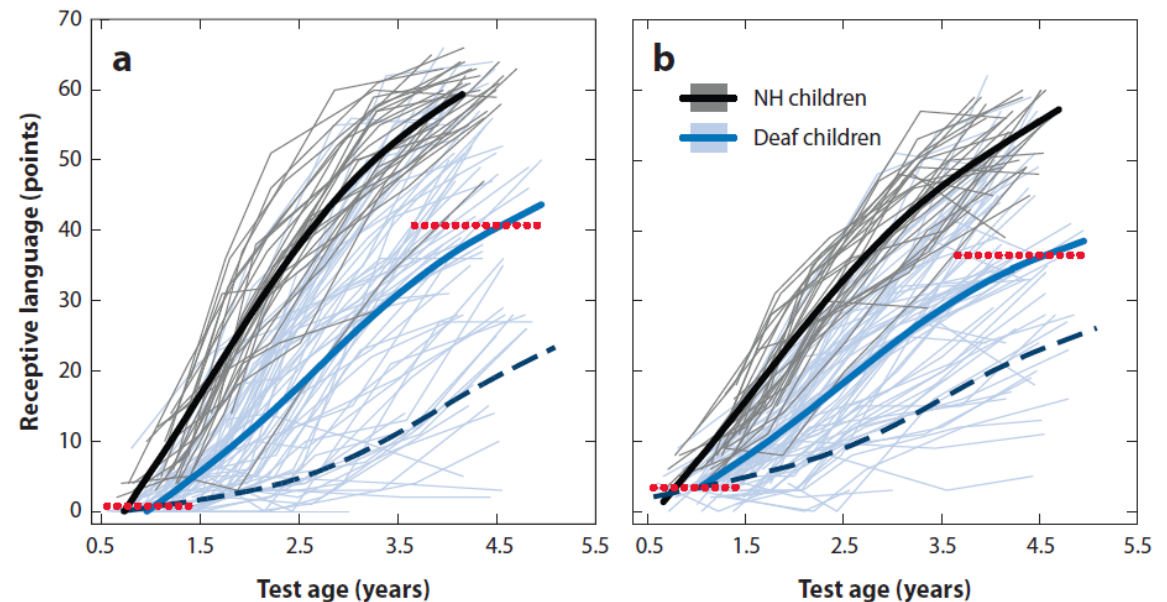


Figure 3

Individual trajectories for the development of (a) receptive and (b) expressive language, based on raw scores from the Reynell Developmental Language Scales, in normal-hearing (NH) (*thin gray lines*) and deaf children (*thin blue lines*) who obtained a cochlear implant (CI) before the age of 18 months. The thick black line indicates the developmental trajectory for NH children, the thick blue line indicates the trajectory for CI users, and the dark blue dashed line indicates the baseline (pre-CI) scores of children obtaining CIs at different ages. The horizontal red dotted lines indicate the mean scores pre-CI (*bottom*) and after 3 years (*top*) for the CI users; the width of the dotted lines relates to the range of ages at the time of testing. Figure adapted from Niparko et al. (2010).

Why aren't all CIs successful?

- Since early infancy is a critical period for the acquisition of language, deaf children born to hearing parents are at risk of developing inefficient neural structures to support skilled language processing (Mayberry et al., 2011).
- The cortical signatures for individuals showing poor outcome for CI may thus reflect the effects of impaired language experience and acquisition in the earliest years

Sensitive periods for language acquisition: late acquisition of a first language

- Deaf children cannot access the auditory component of spoken language input before implantation
- Most deaf children (90 – 95%) are born to hearing parents and do not experience a natural, language-rich environment
- The existence of sensitive periods suggests that if a child fails to learn language in early childhood s/he will never reach the normal level of mastery, with full command of syntax, phonology and verbal working memory.
- Evidence that late first language learners – who constitute the vast majority of prelingually deaf people - may show atypical structural and functional circuitry for language processing as adults

Infants treat sign language like any natural language

- Same milestones for sign and spoken language acquisition (e.g. Morgan & Woll, 2002; Newport & Meier, 1985)
- Babbling for both modalities: signing and speaking (Petitto & Marentette, 1991; Petitto, Holowka, Sergio, Levy, & Ostry, 2004)
- Preference for sign over non-sign gestures (Krentz & Corina, 2008)
- Categorical-like perception of phonetic sign differences at 4 months (Baker, Golinkoff, & Petitto, 2006)

What about CI outcomes in children with sign language as a first language?

- Two studies examining the impact of first (sign) language acquisition on CI outcomes (Hassanzadeh (2012) Davidson, Lillo-Martin, & Chen Pichler (2014)
 - deaf children from deaf families who were exposed to sign language early in life had *better* speech and language outcomes following implant than deaf children from hearing families with spoken language-only input.
- This suggests that linguistic development of the relevant cortical circuits is critical to successful outcome with CI – whatever the role of auditory-neural developmental processes.

But this study is of deaf children in deaf families. What about the vast majority: deaf children from hearing families?

Practical arguments against signing with deaf children

- Concerns about quantity of input
- Concerns about quality of input
- Family choice
- Families using languages other than the language of education
- Claims about negative impact of signing on the development of spoken language

Can hearing parents provide good enough sign language input?

Can parents provide good enough sign language input?

One worry is that hearing parents who learn sign language following a diagnosis of their child's deafness won't be fluent enough to help their child's language outcomes. But deaf children whose hearing parents are learning ASL have sign vocabularies comparable to deaf children raised by fluent signers

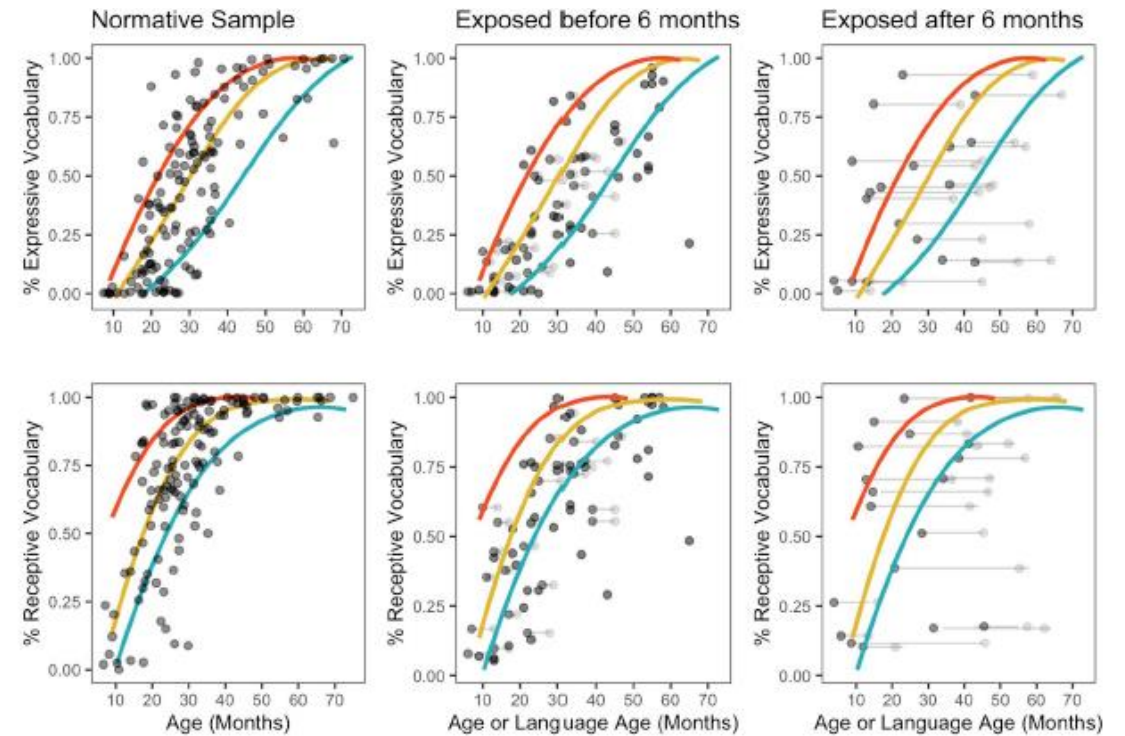


Figure 1. Deaf and hard of hearing children's ASL vocabularies by age (light grey) or language age (age – age of ASL exposure; dark grey). Red, yellow, and blue lines indicate the normal range (16th, 50th, and 84th percentile) for deaf and hard of hearing children with deaf, fluent signing parents. Points jittered for anonymity.

Caselli, N., Pyers, J., & Lieberman, A. M. (2021). Deaf children of hearing parents have age-level vocabulary growth when exposed to ASL by six-months. *The Journal of pediatrics*, 232, 229.

What about children's spoken language and cognitive development

- Studies of French and LSQ acquisition at ages 5-7 in 3 groups of deaf children from hearing families: those with only spoken input; those who had exposure to LSQ only before CI at c. 1y; and those with exposure to LSQ both before and following CI.
- Results:
 - even short-term exposure to sign input has positive effects on general language and phonological memory abilities as well as on nonverbal working memory
 - total length of exposure to sign input is the best predictor of deaf children's performance on these measures
 - access to early short-term non-native visual language input is beneficial for the language and phonological memory abilities of deaf children with cochlear implants

Delcenserie, A., Genesee, F., & Champoux, F. (2024). Exposure to sign language prior and after cochlear implantation increases language and cognitive skills in deaf children. *Developmental Science*, 27(4), e13481.

Comparisons with typically-hearing children

- On measures of spoken language abilities, deaf children with CIs in the Delcenserie et al. study who had had more exposure to sign language, including a few months post-implantation, did not differ significantly from typically-hearing children on any of the language measures
- Both of these groups scored significantly higher than deaf children who had had less exposure to signs, and children who had had no exposure to signs.
- On measures of phonological STM and WM, deaf children with CIs who had had more exposure to sign language, and typically-hearing , did not differ significantly from one another; both of these groups scored significantly higher than deaf children who had had less exposure to signs and children who had had no exposure to signs

Language, deafness and the brain

What advice is given to parents about sign language?

- A 2023 paper in the Journal of Speech, Language, and Hearing Research surveyed 105 American families with a deaf child who had cochlear implants or other assistive technology.
- The parents reported that they had been advised to use only spoken language with their deaf children by:
 - 43% of pediatricians
 - 44% of otolaryntologists
 - 47% of audiologists
 - 30% of speech-language pathologists
- What is behind this advice?

Language and communication assessment

- Often emphasis is on auditory speech perception (and not on multi-modal language perception)
- Limited availability of appropriate tools
- Sign language is often not assessed (or translated assessments are used)
- monolingual assessments – no recognition of bilingualism

Deafness as auditory deprivation

- Deafness changes the brain because of changed sensory experience
- Animal models of deafness and human neuroimaging studies have been used to propose that the functions of auditory cortex are compromised by crossmodal plasticity.
- This has been argued to result from the use of visual language – in the form of sign language, or speechreading - accompanying the auditory speech signal.
- Emotive terms such as ‘invasion of auditory cortex’ or ‘maladaptation’ suggest a pathological process related to visual language use.

Shockingly strong claims

Programmed critical periods in hearing may, however, interact with other factors, particularly with early sensory experience. As an illustration, we note the differences among born-deaf children between those raised by deaf parents using sign language and those raised by hearing parents. Although there might be a cultural advantage for a born deaf child being raised by deaf parents and taught language at a “normal” age, **exposure to sign language in the first three years of life locks the language system into a vision-only configuration that prevents possible future acquisition of auditory language. No matter how hard deaf signers try to use a cochlear implant, new auditory representations rarely connect with established visual language representations** (Nishimura et al., 1999). This is obviously true for late implanted children, but even young children experience difficulties with implants if they previously had good mastery of sign-language.

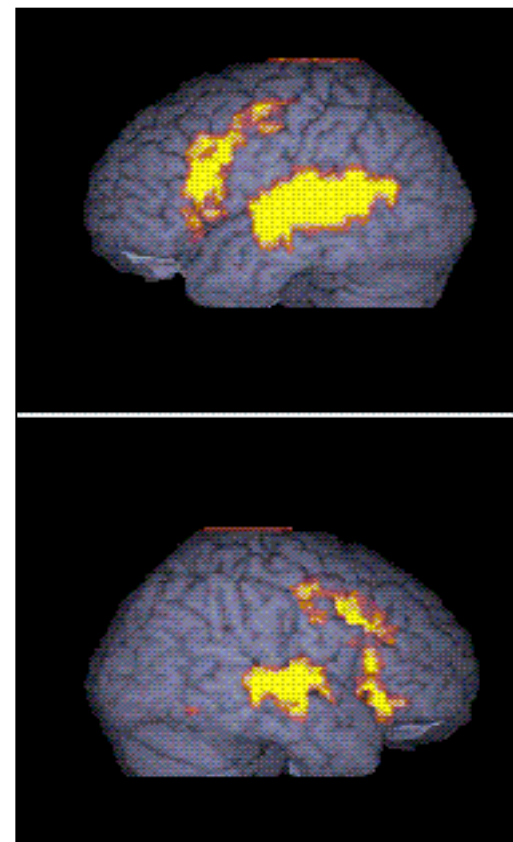
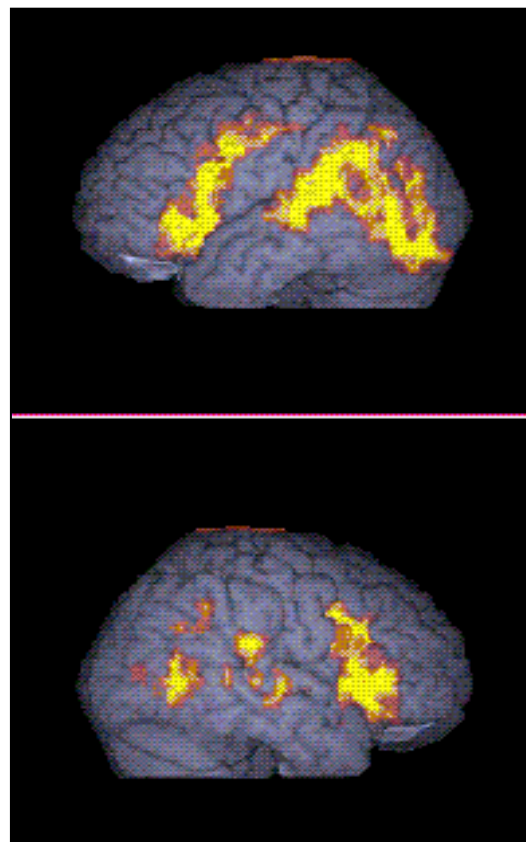
Giraud, A. L., & Lee, H. J. (2007). Predicting cochlear implant outcome from brain organisation in the deaf. *Restorative neurology and neuroscience*, 25(3-4), 381-390.

Restorative

Language and the brain

- as visual-spatial systems, sign languages might be thought to be processed primarily in the right hemisphere
- as language, they might be thought to be processed primarily in the left hemisphere

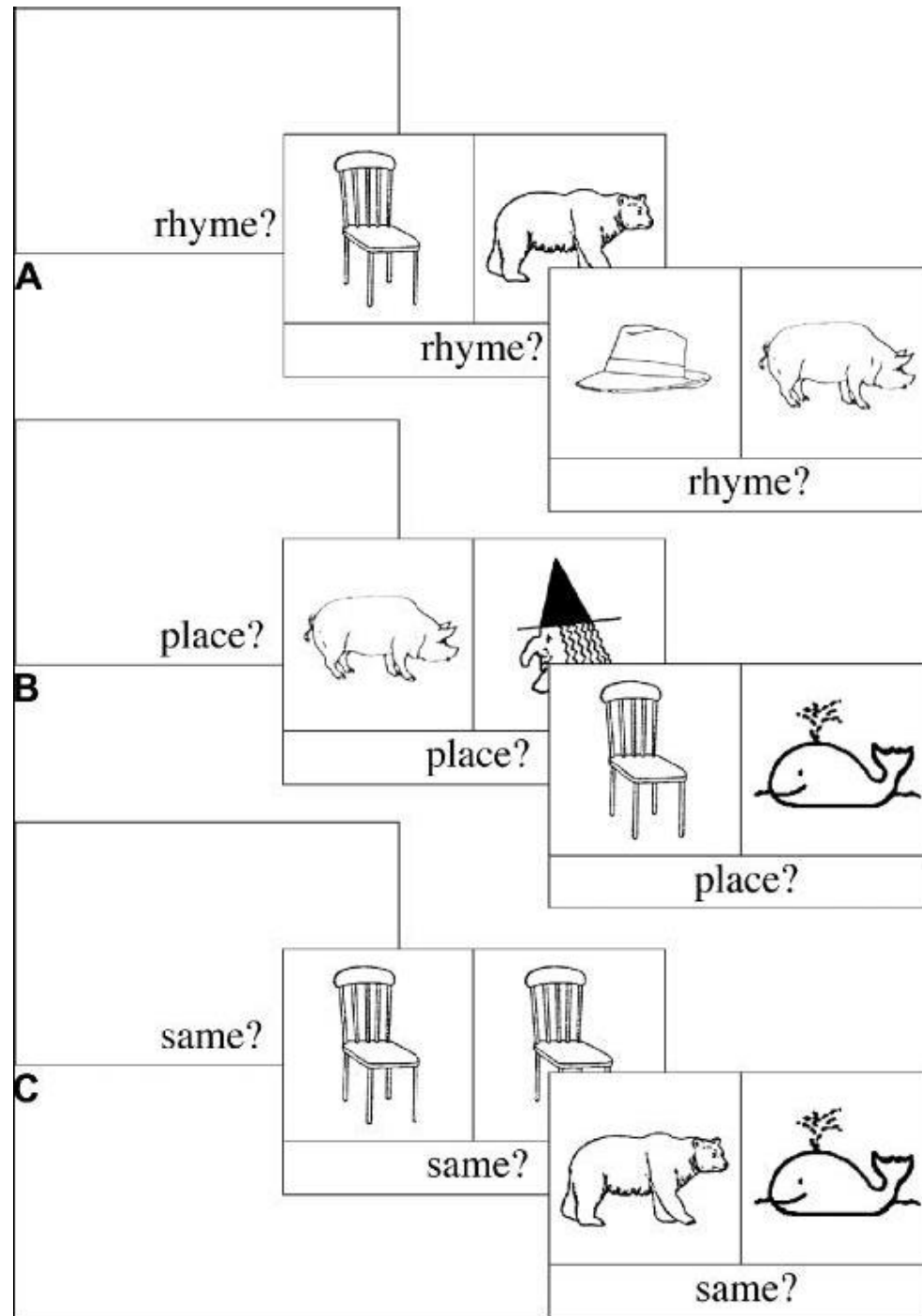
Comparing deaf native signers
processing BSL sentences and
hearing non-signers
processing audiovisual English



Comparing phonology in BSL and English

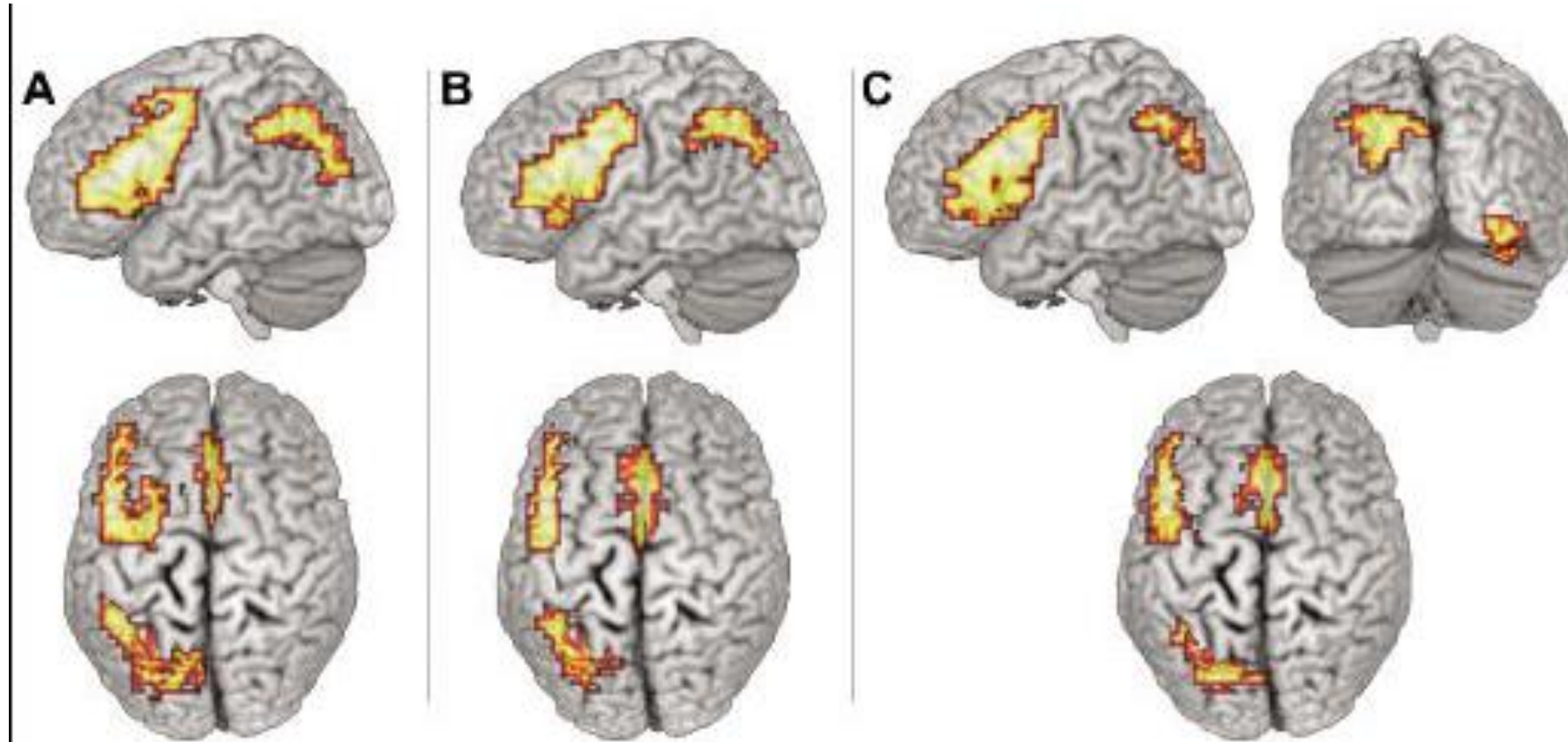
- In an English phonology task, hearing and deaf participants had to decide whether the English labels for two pictures rhymed
- In the BSL phonology task, deaf participants had to decide if the BSL labels for two pictures shared the same location

If similar processing is required to make phonological similarity judgments about BSL and English, similar brain areas should be recruited during both tasks



Activation relative to the 'same picture?' control task, during the:

- A) location task in deaf participants (n=20);
- B) rhyme task in deaf participants (n=20);
- C) rhyme task in hearing participants (n=24).

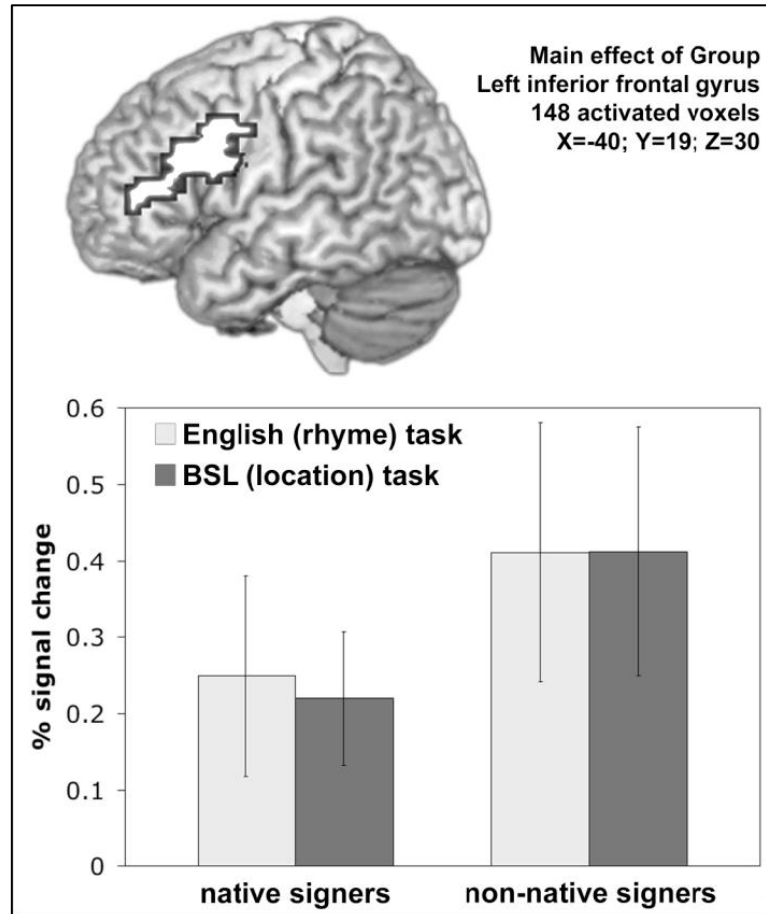


A network consisting of the medial portion of the superior frontal gyrus (SFG), the left superior parietal lobule (SPL) incorporating the superior portion of the supramarginal gyrus (SMG), and, most extensively, the left posterior inferior frontal gyrus (IFG)

The task is harder (in English as well as BSL) for those who acquired English as a first language

- Deaf non-native signers (with delayed L1 English) activated the left inferior frontal gyrus more than native signers during the BSL task, and also during the task performed in English
 - phonological processing required greater effort when first language acquisition is delayed

Non-native signers require greater effort on both rhyme and location tasks



Some points for thought:

- Does the general use of terms such as Oracy and Oral Language need to be reconsidered
- In the case of these signers, good 'oracy' skills are associated with good development of literacy – in a different language. What are the implications for children developing literacy in their L2?

What do these arguments mean for deaf children?

- Far from shielding the developing infant from visual communication, the deaf child awaiting CI needs language and communicative input of any and all sorts to enable effective cognitive development to proceed.
- The early months and years are crucial for the development of language – not just heard speech
- While auditory rehabilitation is necessary to enable effective functioning of the CI, there is no compelling evidence that the rehabilitation of hearing – *on its own* – predicts satisfactory speech and language progress.
- Early CI is an astonishing breakthrough in delivering hearing to the child born deaf, but its success should be measured in terms of language skills and cognitive development – not in terms of auditory impact.
- The best guarantee of success is good first language acquisition within the early years – however that may be achieved

American Academy of Pediatrics guidelines

In 2023, the American Academy of Pediatrics (AAP) published guidelines recommending American Sign Language (ASL) or another signed language for parents of deaf children to ensure early and unrestricted access to language, regardless of whether they have cochlear implants.

- **Early Language Access:** The AAP's guidelines emphasize the importance of early language acquisition for deaf children, regardless of whether they have cochlear implants.
- **Sign Language as a Tool:** The guidelines recognize the value of sign language as a primary or supplementary language for deaf children, providing them with a means of communication and language development.
- **ASL or Other Signed Languages:** The recommendation extends to ASL or other signed languages, acknowledging the diversity of communication methods and the importance of choosing what best suits the child and family.
- **Parental Role:** The guidelines encourage parents to actively learn and use sign language to communicate with their deaf children, fostering a language-rich environment.
- **No Restriction Based on Implants:** The recommendation is not contingent on whether a child has cochlear implants or not, ensuring that all deaf children have access to language regardless of their hearing technology.

Policy guidelines (adapted from Hall et al., 2019)

1. Identify whether a child is at risk for language deprivation, or has a developmental language disorder as well as deafness
2. Do not perpetuate misinformation about sign language.
3. Be prepared to support acquisition of a signed language.
4. Ensure curricula reflect best practice in relation to family guidance and in interventions that support spoken and sign language acquisition.
5. Seek guidance from deaf people across the lifespan and incorporate their perspectives.
6. Base policies on an evidence base. Know the difference between (empirically unfounded) scientific arguments against sign language and practical barriers to supporting sign language acquisition.
7. When a family expresses a preference for spoken language only, be prepared to discuss linguistic prejudices while supporting families' rights to make their own choices on behalf of their children. Do not advocate for the exclusion of sign language from the child's experience.
8. Explicitly discuss the importance of ensuring that the child master at least one natural language, and clearly explain that proficiency in either a sign language or a spoken language confers these benefits. The critical period applies to both.
9. Fully inform families about the current likelihood of their child developing mastery of spoken and written language.
10. Provide funding for deaf mentors and teachers, family sign language classes, and other resources.
11. Discuss family language planning, especially with families whose goal is to foster mastery of more than one language.
12. Include and monitor language goals. Assess the child's proficiency in both spoken language and sign language. If insufficient assessment tools exist, invest in their development.

THANK YOU

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Language matter for inclusive education - bridging the policy-practice gap -

João Costa, Director, European Agency for Special Needs and
Inclusive Education

director@european-agency.org

Overview of presentation

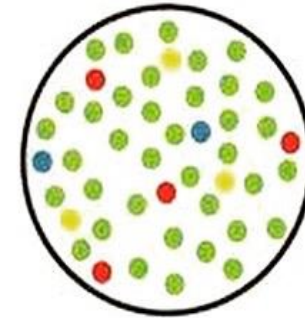
- Inclusive education: revisiting key concepts and principles
- Current challenges for implementation
- Recommendations for bridging the gap
- Language matters
- Call to action

Inclusive education: Key concepts and principles

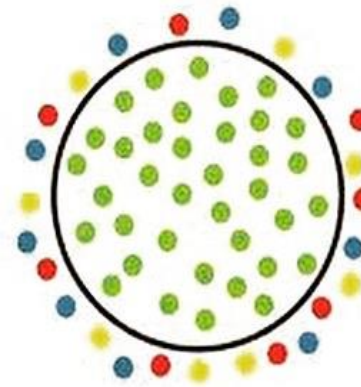
What is inclusive education?



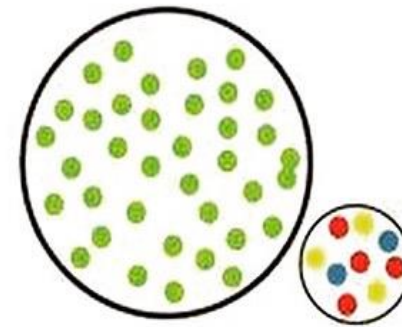
Continue to clarify concepts



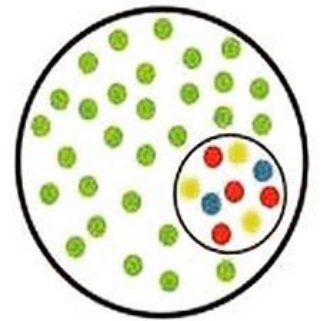
Inclusion



Exclusion



Segregation



Integration

Agency position on inclusive education systems

- An inclusive education system is, at its core, a ***preventative*** system
- Ultimate vision: ‘all learners of any age are provided with meaningful, high-quality educational opportunities in their local community, alongside their friends and peers’



Characteristics of inclusive education models

- Response-to-Intervention
- Non-referential models
- Multi-level approach
- Multidisciplinary work
- Commitment to partnerships
- Whole-school approach

Learners vulnerable to exclusion (SDG4)

- Acknowledges ***all* learners**, while recognising the need to specifically address the particular needs of some groups (i.e. migrants, refugees, those from disadvantaged socio-economic backgrounds, learners with disabilities)
- A focus on learners' **needs** in general, without labelling groups of learners: a move towards a **rights-based approach**
- A focus on the **system's capacity** to identify and remove barriers to learning.

Inclusive education benefits everyone



Learners:

- Improves **academic achievement**
- Enhances **social skills**
- Boosts **well-being**



Peers:

- Fosters **empathy** and **collaboration**
- Builds an **inclusive mindset**



Schools:

- More **cost-efficient** than segregated schools

Current challenges

Some facts...

- Decline in academic performance in EU countries (PISA, TIMSS)
- Growing early school leaving in some countries.
- Strong correlations with **well-being** and **belongingness**.
- Increase in diversity and awareness of diversity.
- Share of learners educated outside mainstream education: **ranging from 0.1% to over 7%** (ISCED 1+2, 2018/2019 academic year)
- Variations due to differences in:
 - Definitions of Special Educational Needs (SEN)
 - Assessment procedures
 - Financing mechanisms



I. Training and retaining teachers

- Teachers feel **unprepared** and report that they **need more training** to teach in multicultural/multilingual settings and learners with SEN (TALIS, 2018)
- **Key barriers:**
 - ✓ **Attractiveness of teaching profession**
 - ✓ **Teacher confidence and attitudes** that directly affect **learner outcomes** in inclusive settings.
 - ✓ Lack of **practical training** in inclusive methodologies.
 - ✓ Limited or fragmented **professional development opportunities** focused on inclusion

II. A context of polarization

- Inclusive education requires a societal consensus on the social and economic benefits of inclusion.
- Evidence-based approaches are challenged by the role of perceptions.
- “All means all” in a context of eroding democratic values.

DIVERSITY
EQUITY
INCLUSION

III. Financing systems for inclusive education

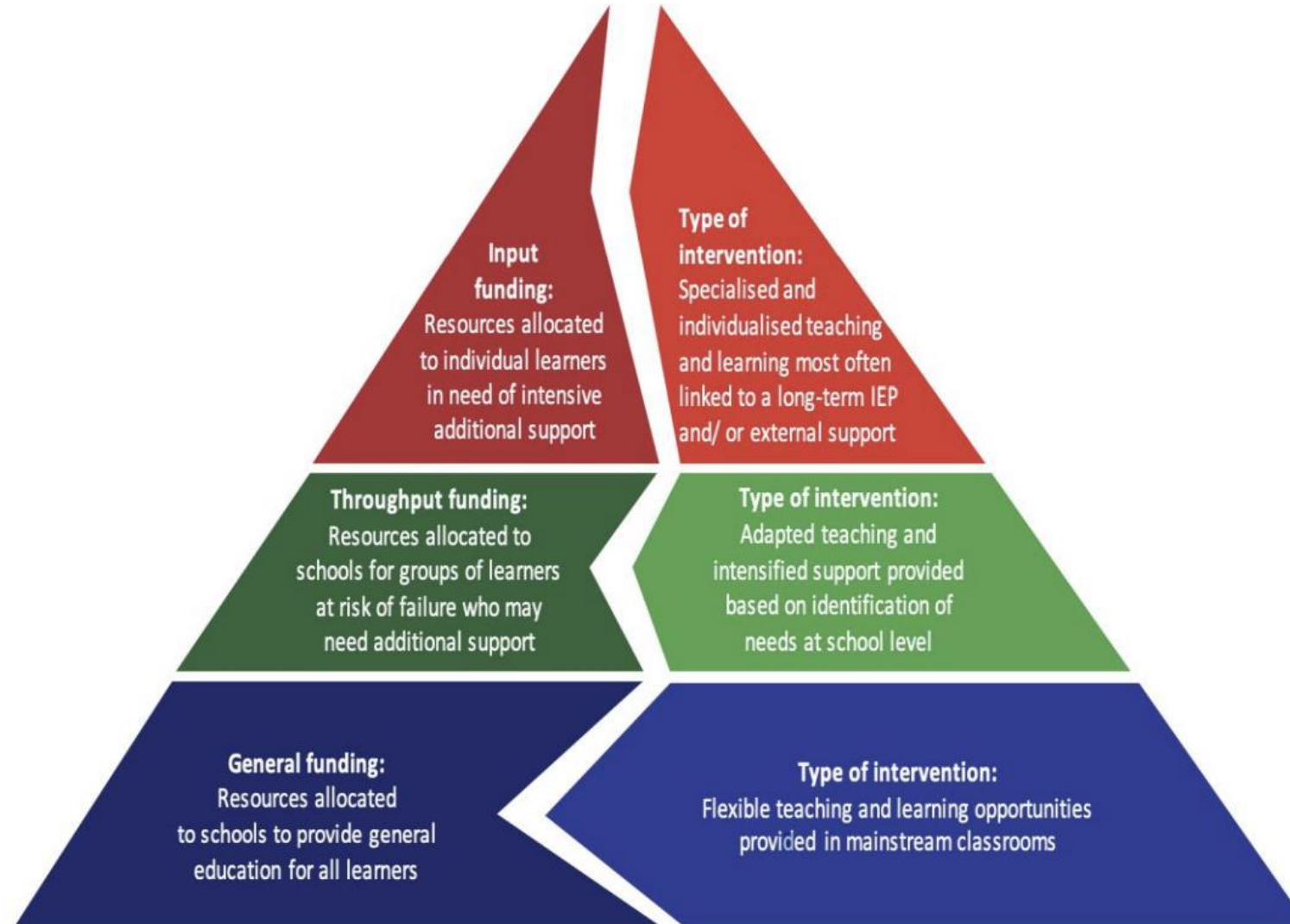


Figure 1. Resource allocation mechanisms for supporting learners in need



IV. Collecting data for inclusive education

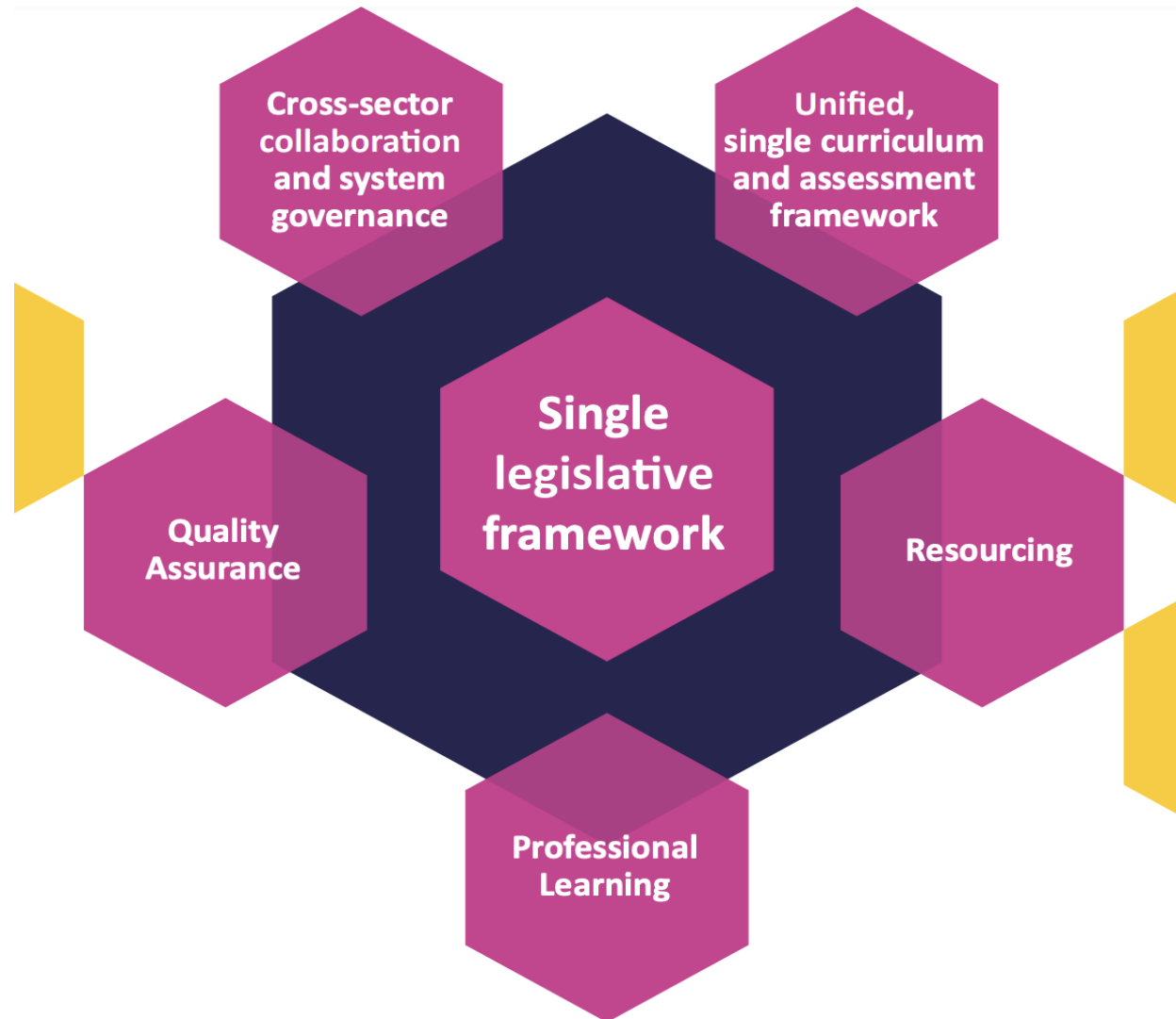
- **Lack of consistent monitoring frameworks** - when available, they often operate in **silos**
- Complexity of data collection due to learners' **diverse profiles and needs**
- **Limited resources** (i.e. trained professionals or accessible technology)
- Teacher **time constraints, overload**: difficulties in maintaining consistent and detailed records across schools
- **Resistance or a lack of awareness among stakeholders**

Recommendations to bridge the gap



Thinking about inclusive education integrated into global strategy

I. Key principles to support implementation



II. EASNIE: a body of evidence

Evidence of the Link Between Inclusive Education and Social Inclusion

A Review of the Literature

Preventing School Failure

Examining the Potential of Inclusive Education Policies at System and Individual Levels



Developing the *Profile for Inclusive Teacher Professional Learning*

Implementing the Teacher Professional Learning for Inclusion Phase 2 methodology

TPL4I

Financing Policies for Inclusive Education Systems

Financing Policy Self-Review Tool



Transforming Education in a Digital World to Enable Inclusive Learning Experiences

A think piece for education and technology stakeholders

Towards a Multi-Level, Multi-Stakeholder Quality Assurance, Monitoring and Accountability Framework

Thematic Country Cluster Activities Literature Review



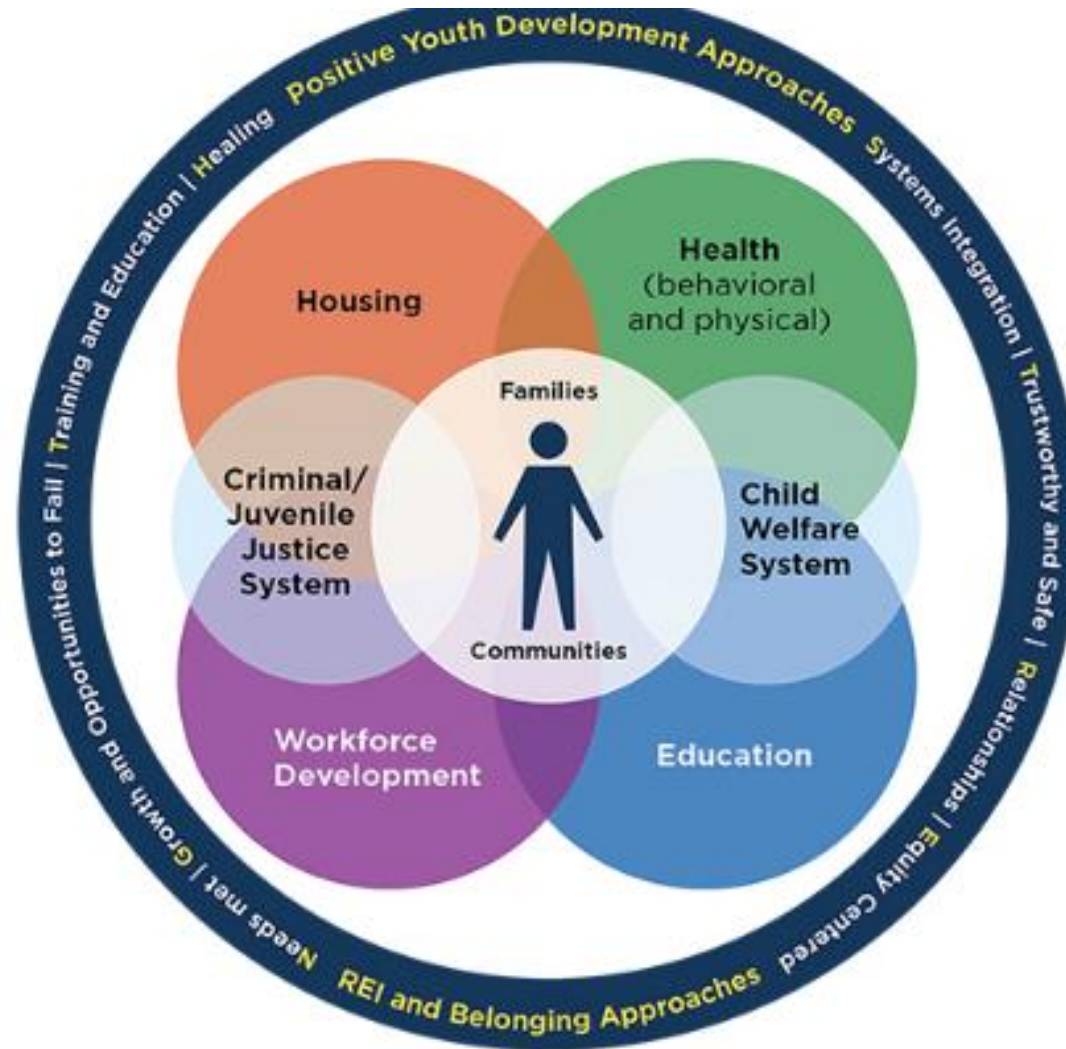
Voices into Action: Including the Voices of Learners and their Families in Educational Decision-Making

Final Summary Report

EUROPEAN AGENCY
for Special Needs and Inclusive Education



III. Cross-sectoral collaboration



IV. Cross-linking inclusive education with global issues

- **New demands for diversity:** increasing numbers of immigrant learners and learners with complex needs
- **Technological advancements and digital divide**
- **Environmental crisis and climate change**



V. Specialist provision specialists in mainstream schools

Challenges/opportunities:

- Development of resource centres in schools capitalising on the available specialty in special schools.
- Profile of initial preparation and professional development of teachers.
- Redesigning the 'grammar' of schools.

VI. The strength of parent/family engagement

- Work with parents. They have the best knowledge about their children.
- Capitalise on the experience of pre-school.
- Incremental and participatory change.
- Evidence-based approaches.

VII. Building societal consensus

- The role of testimonies from lighthouse cases around the world.
- The centrality of dialogue.
- Learning from historical cases of segregation.

VIII. Language matters – a research agenda

- Lack of practise support in contexts of superdiversity
- Lack of impact on specific didactics
- Lack of support materials for teachers/practitioners
- Lack of integrated approaches to multilingualism/multiculturalism/well-being

EASNIE's ongoing work

Current thematic activities

- Working with groups of countries, focusing on specific areas of interest
- Responding to country requests for more tailored activities to support their policy development needs
- Building on learning points from previous activities
- Using peer-learning approaches and implementing developmental activities
- Focus on continued synergies and alignment across all country groups and Agency work

Learner Participation in Inclusive Education (LPIE)



- Countries involved: Czech Republic, Estonia, Lithuania, Netherlands, Portugal and UK (Scotland)
- Collecting and using qualitative data on learner participation to improve inclusive education policy implementation

Monitoring and Evaluation Systems in Inclusive Education Policy (MESIEP)



- Countries involved: Croatia, Ireland, Malta, Serbia and UK (England)
- The role of evaluation and monitoring systems in inclusive education policy development

Learners and Families Shaping Action (LFSA)



- Countries involved: Bulgaria, Cyprus, France, Latvia, Slovakia and Switzerland
- Using information from learners and their families in monitoring and evaluation processes to improve inclusive education systems

Advancing Collaboration in Education (ACE)



- Countries involved: Finland, Iceland, Luxembourg, Norway, Poland and UK (Wales)
- Collaboration and cross-sector working at all system levels as a key factor in implementing inclusive policy

Collaborative Action for Inclusive Education (CAFIE)



- Countries involved: Belgium (French community), Denmark, Germany, Hungary, Slovenia and Sweden
- Collaboration and cross-sector working at all system levels as a key factor in implementing inclusive policy

Quality Assurance, Monitoring and Accountability (QAMA)



- Countries involved: Austria, Belgium (Flemish community), Greece, Italy, Spain and UK (Northern Ireland)
- Developing a single multi-stakeholder quality assurance and accountability framework

Recent thematic activities

Voices into Action (VIA)

- Involving the voices of learners and their families and effectively including them in decision-making

Building Resilience through Inclusive Education Systems (BRIES)

- Examining the impact of COVID-19 on education and identifying ways to build inclusive education systems that are more resilient to crises

Country System Mapping (CSM)

- Identifying the key features of all Agency member countries' education systems that impact on the effective implementation of legislation and policy for inclusive education in practice

Country Policy Development Support (CPDS)



CPDS is central to the Agency's role as an **agent for change**. It is an individualised activity for all Agency member countries and builds on the Country Policy Review and Analysis (CPRA) work (2014–2021).

CPDS aims to:

- gather available evidence of individual country policy and implementation across all the Agency's Key Principles;
- support countries **from where they are** in their policy development and implementation work;
- support countries to work towards their policy implementation goals.

European Agency Statistics on Inclusive Education (EASIE)



Aims to inform country policy priorities on inclusive education

Produces yearly numerical data and country background information to inform country-level work relating to all learners' access to and placement in inclusive education

In line with learners' rights, as outlined in:

- United Nations Convention on the Rights of the Child
- United Nations Convention on the Rights of Persons with Disabilities
- Strategic framework for European cooperation in education and training towards the European Education Area and beyond (2021–2030).

Technical Support Instrument (TSI)

The Agency acts as a technical provider for the TSI under the European Commission's Directorate-General for Structural Reform Support (DG REFORM)

The work includes:

- Analyses of existing education systems' strengths and weaknesses
- Recommendations for priority actions
- Support in developing legislative reforms for implementing inclusive education systems

Audits, country reviews

Call to action

- ✓ For a **paradigm shift** → **collective responsibility**
- ✓ Inclusion as a **core goal** of educational policy at national and European levels



Key messages

- Widen the understanding of inclusive education to include all learners
- Ensure cooperation across sectors, share expertise and resources
- Engage meaningfully with communities and parents/families
- Prepare, empower and motivate the teachers and education leaders
- Focus on monitoring and accountability: collect meaningful data on and for inclusive education
- **Support practitioners with research and practical deliverables**

More information

www.european-agency.org

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Coffee break

13:15-15:30





Discussion table: How to bring the change, policy and international cooperation

15:30-16:45

Chair: Lord Boateng

Dr Derek Munn

Dr Sarah Breslin

Dr Lisa Stephenson





**From evidence to change:
applying what we know
about child language to
influence policy and
outcomes**

20 March 2025

1945 - 2025

RCSLT AT 80



From evidence to change: applying what we know about child language to influence policy and outcomes



- The evidence about children's speech, language and communication and how barriers can be overcome needs to be reflected in law, policy, budgets and practice.
- This talk will reflect on successes and challenges in this space in the United Kingdom and what is needed going forward.

But first...

- Who are the Royal College of Speech & Language Therapists?
- Who am I?
- Why am I here?

The Royal College of Speech & Language Therapists

- The professional body for SLTs in the UK
- Marking our 80th anniversary
- 23,000 members
- 37 clinical areas across the life-course
- About 60% work with children, 40% with adults
- Who am I?
- Why am I here?

The Director of Policy & Public Affairs at the RCSLT Therapists

- Trained in linguistics (Celtic languages, feminist linguistics)
- Went into politics (advised the First Minister of Scotland on health and also language policy)
- At the Royal College, responsible for government and Parliamentary relations, external influencing, international, co-production with people with lived experience

People often ask me about evidence and influencing, and I say...

Evidence is not everything

- Scientists think 'but the evidence says...'

However, for decision makers:

- What am I legally required to do?
- What mandates have I been given?
- Can I afford it?
- What will my stakeholders think?
- There is a hierarchy of good things...

Who do you think our key stakeholders are?

How we influence: Key stakeholders and targets



Who do you think our key stakeholders are?

Politicians

- Sympathetic to local issues and can make representations to departments or ministers on behalf of constituents
- Distinguish between minister, backbencher and constituency roles

Commissioners / decision-makers / budget-holders

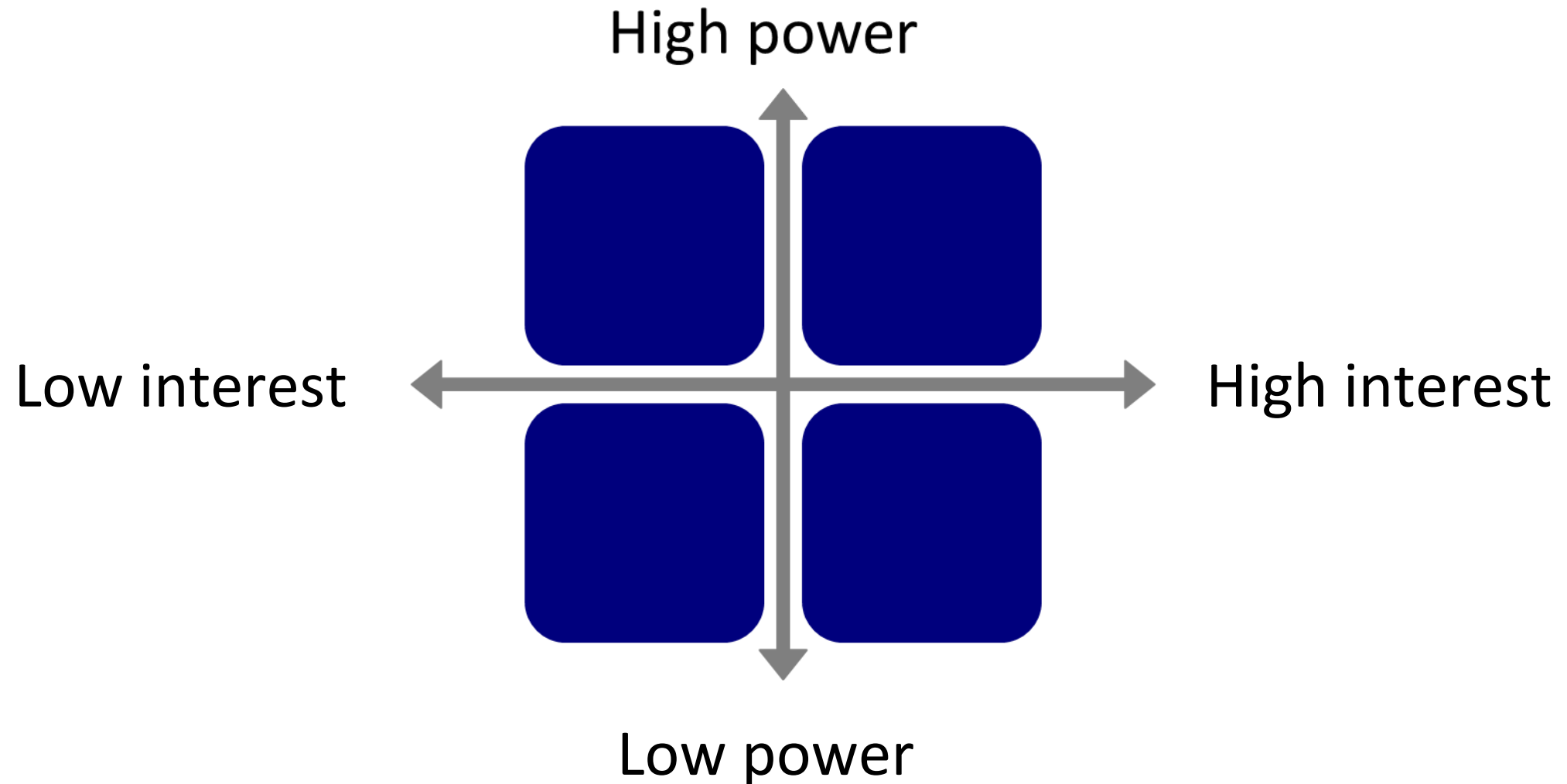
- Plan and pay for SLT services
- Ensure clear and positive knowledge of the work of SLTs

Councillors and local authorities

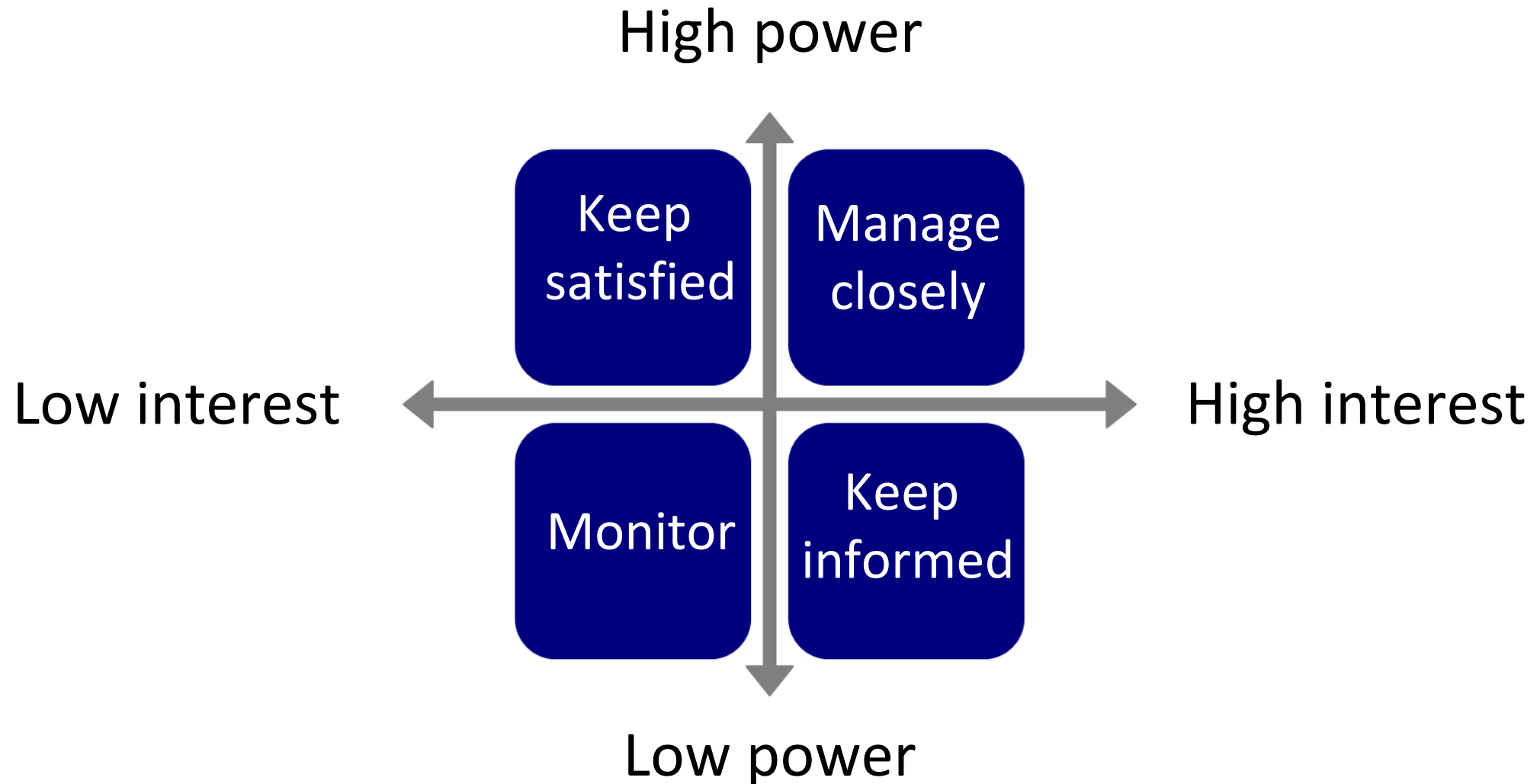
- Make key decisions about local services
- Leaders of each political group are vital to gaining cross-party support

Other stakeholders: service users and service user organizations, other professions, media and the public

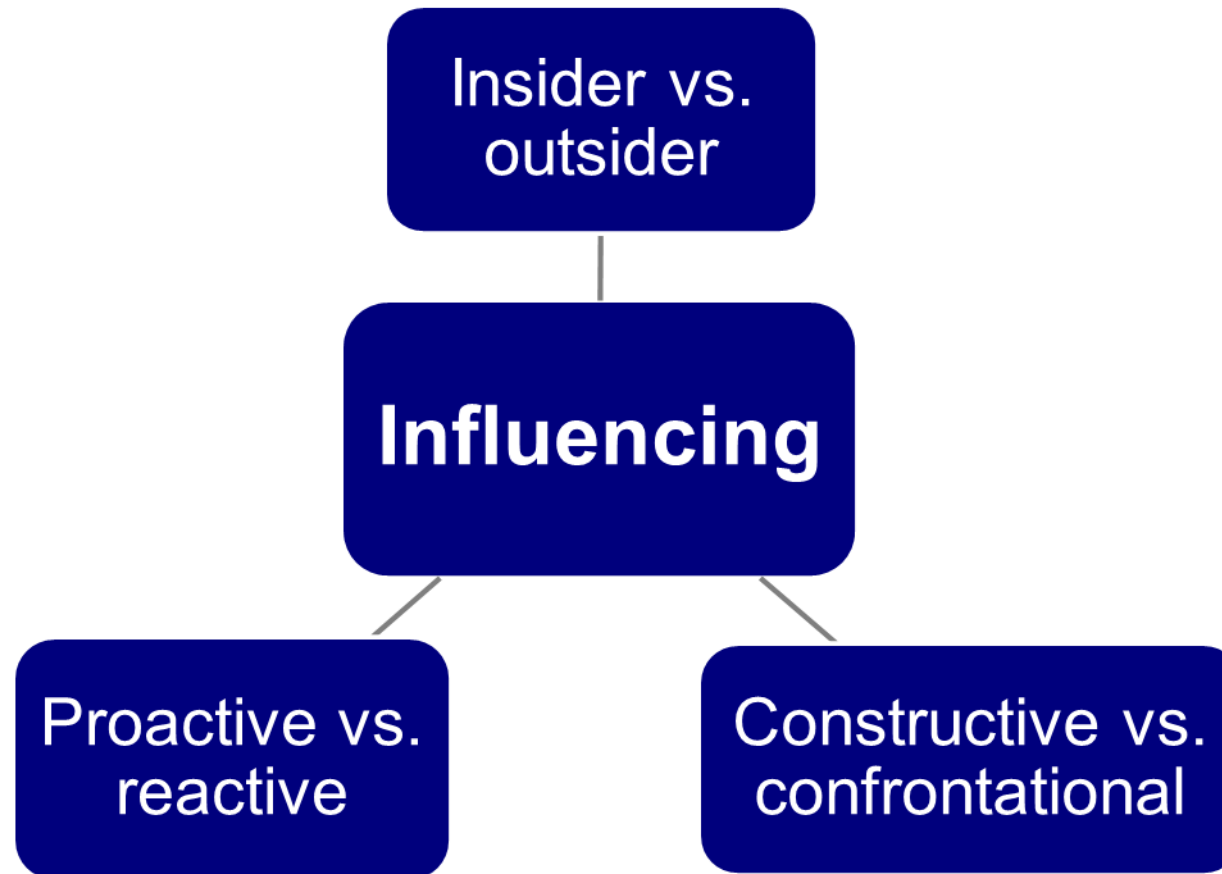
How we influence: stakeholder analysis



How we influence: stakeholder analysis



How we influence: style and tactics



Not all evidence is equal

- Your research world
- Quantitative and qualitative
- The RCT gold standard
- Evidence quality
- Think about outcome measures

- There are different sources of data, and for influencing bodies such as NICE only hard research will do. For government departments soft data, such as feedback, is acceptable.
- NICE for example in developing their guidelines still privilege the gold-standard big data and research studies.
- However, governments have been known to use science/scientists to justify their decisions.
- Increasingly different government departments are accepting different levels of research and evidence, and for influencing we need to know what will be accepted.

Evidence is not everything

- What's in a name?
- The power of numbers
- Human stories



- The Bercow Review – the Communication Champion, Year of Communication, Better Communication Research Programme
- Recognition of early language skills and links to social mobility (Social Mobility Action Plan, Hungry Little Minds, PHE work to develop ELIM and commissioning guidance)
- Increased awareness of language needs in the youth justice system leading to policy and service development changes
- SLC Co-ordinator within Welsh Government and Talk With Me Strategy

- The RCSLT Justice campaign was launched using Bryan 2004, Bryan et al 2007 research to develop our policy calls and campaign.
- Measuring impact 2021:
 - Led to more research on needs/intervention
 - Showed need - lots of new SLT justice posts
 - Changed national narrative – Ministry of Justice quotes 60% of young people may have communication difficulties
 - Changed policy, strategy and legislation

Bercow: Ten Years On – 1st Anniversary Update



Bercow: Ten Years On – 1st Anniversary Update

The Bercow Ten Years On report put provision for children's speech, language and communication needs (SLCN) in the spotlight. It described a fragmented system, which fails many children and young people with SLCN by not identifying their needs early enough, or putting in place effective support.

The report made 47 strategic recommendations aimed at decision-makers, accompanied by a range of practical, online resources to support people to take action, which can be found at www.bercow10yearson.com

In March 2019, one year on from the launch of the report, significant progress has been made: 17 recommendations have already been completely achieved, and several others are in progress.

Children's early language is high on the Government agenda, but for school-aged children, and those with long-term SLCN such as developmental language disorder, there has been little change. Progress in establishing a strategic approach to planning and commissioning support across the age range for children with SLCN is limited. Given the numbers of children and young people with SLCN, and its impact on their life chances, urgent action is needed.

THE SIZE OF THE ISSUE

10% of all children have long-term speech, language and communication needs.

This includes **7.6%** of children who have developmental language disorder.

Yet only **3%** of school pupils are identified with SLCN as their primary need (4.1% in primary schools and 1.4% in secondary schools).

Only **14%** of pupils with identified SLCN have an education, health and care (EHC) plan.

THE GOVERNMENT RESPONSE

- Theresa May responded to a question at Prime Minister's Questions, committing to look very carefully at the report and respond.
- In response to a petition on the Parliament website, the Government stated that it is firmly committed to ensuring that children with SLCN receive the support they need to reach their full potential.
- A joint written response by the Education and Health and Social Care Departments to Bercow Ten Years On reiterated that the Government is determined to help put in place the right framework of support for children with SLCN.

"We do not want to see any child held back from achieving their potential, and that includes ensuring that children with speech, language and communication needs are given the support they need."

Theresa May, Prime Minister's Questions 23 March 2018

THE YEAR IN NUMBERS

- 1** parliamentary debate
- 2** meetings with ministers
- 17** recommendations fully achieved
- 80+** parliamentary questions answered
- 11,622** signatures on the petition calling on the Government to implement the recommendations in the report
- 21,983** posts on Twitter using the #Bercow10 hashtags



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Workforce data

'I know from my granddaughter's experience of SLT support almost from birth—because she frequently used an oxygen mask and had a feeding tube down her throat for the first three years of her life—that SLTs can perform miracles with babies, toddlers and children who literally cannot use their voice for large parts of the day. Without more staff, though, they cannot work with more children. I hope the Minister will tell the House how the increasing speech and language workload can be managed without a corresponding increase in therapists.'

Baroness Brinton, House of Lords debate on the Schools Bill, 27 June 2022



- Sustaining gains in the face of austerity
- Making the case that language is a special case in the context of competing issues – for example in teacher training
- Recognition of the importance of language beyond the early years – particularly in secondary education
- Join up across government – health, care, education and justice

A Manifesto calling for better understanding, recognition and support of language difficulties: an invisible disadvantage



Our vision

Language is the gateway to lifelong wellbeing and educational fulfilment, and this can only happen if the ability to develop language is consistently supported.

Facts:

- Around 10% of the world's population have language difficulties, either on their own (so-called Developmental Language Disorder) or in combination with other diagnoses, such as autism or learning disabilities.
- About 95% of deaf children are at risk of delayed and atypical language development due to lack of early access to language; children from the most socio-economically disadvantaged backgrounds are twice as likely to experience language delay.
- An increasingly large number of children and young people face challenges associated with growing up with more than one language, even though multilingualism is positive in itself.
- About 60% of young offenders are found to have a language impairment when assessed. Severe language difficulties are frequently associated with behavioural problems, school drop-out or exclusion, mental health issues, unemployment and even criminality.
- Lack of recognition and support prevents children from fulfilling their educational potential, resulting in staggering costs for health and justice systems (about £1.2 bn for UK pre-school children with vulnerable language skills).

We call for:

- All types of language needs to be recognised and understood.
- Diagnosis of language difficulties that does not miss a single child.
- Every child to have access to adequate language support.
- The barriers that children and young people with communication difficulties face to be removed.

About us:

- We are the 60+ participants of a multi-sector international meeting that took place in Leiden during the week of 27th September - 1st October 2021 (Language Development, Diagnosis and Assessment in School Ages (6-16): Next Steps in Research and Practice).
- The Manifesto has been written by the ATLAS team (María J. Arche, Angeliek van Hout, Alexandra Perovic, Josep Quer, Jeannette Schaefer and Petra Schulz) and collaborators (Anne Baker, Karen Bryan, Ellen Gerrits, Jean Gross and Derek Munn).



Derek Munn
Director of Policy and Public Affairs

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 [@RCSLT](https://twitter.com/RCSLT)



COUNCIL OF EUROPE



CONSEIL DE L'EUROPE

HUMAN RIGHTS,
DEMOCRACY AND THE RULE OF LAW

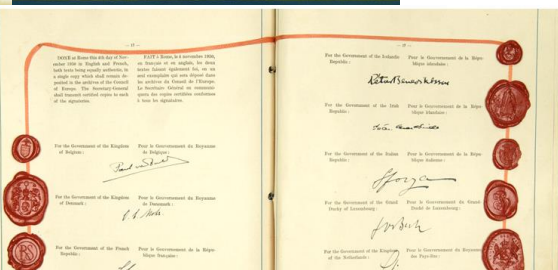
DROITS DE L'HOMME,
DÉMOCRATIE ET ÉTAT DE DROIT

The added-value of transnational cooperation in language education

Dr. Sarah Breslin

**Mind the gap: language development is key for
inclusive education and wellbeing
British Academy, 25-26 March, 2025**

Human rights, democracy and the rule of law



REYKJAVÍK SUMMIT May 2023

We, the Heads of State and Government, are committed to

- *invest in a DEMOCRATIC FUTURE*
- *ensure that everyone is able to play their role in democratic processes*
- *prioritise education about ... core democratic values, such as pluralism, inclusion, non-discrimination, transparency and accountability.*

Reykjavik Declaration – United around our values

(Council of Europe, 2023)

(Consejo de Europa, s.f.)

Education, including language education as a key priority for the Council of Europe

The answer to the question:

“What kind of education do we need?”

lies in the answer to another question:

“What kind of society do we want?”.

Tironi, E. (2005). *El sueño chileno*. In S. Bergan. *Not by bread alone*. (2011).



« *When it comes to democratic investment,
education is an essential element.*

*The Council of Europe is very committed in this area,
but we need to invest more in working with European
education systems and with the younger generations.
There is education and youth, but there is also culture,
which binds us together, sport, which enables us to
experience things together, **and languages and the
richness and diversity they convey.**»*

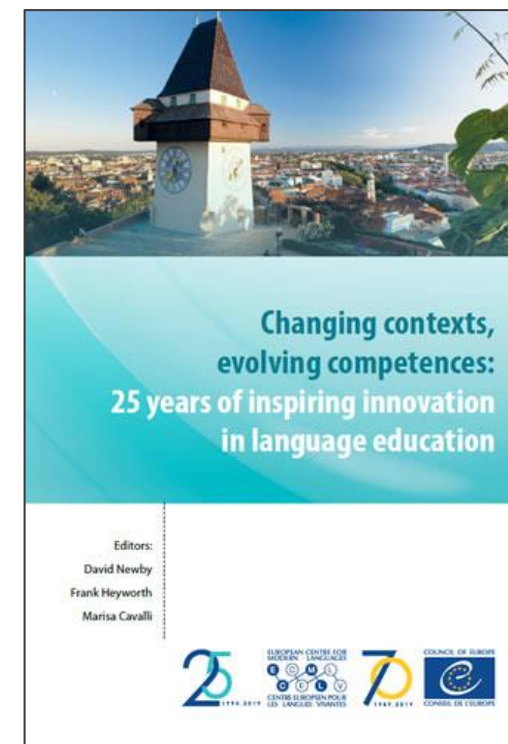
(translation Sarah Breslin)

The Council of Europe and language education: some fundamentals

- Social justice and inclusion (support for the most vulnerable)
- Promotion and preservation of cultural and linguistic diversity
- Democratic citizenship
- Lifelong learning

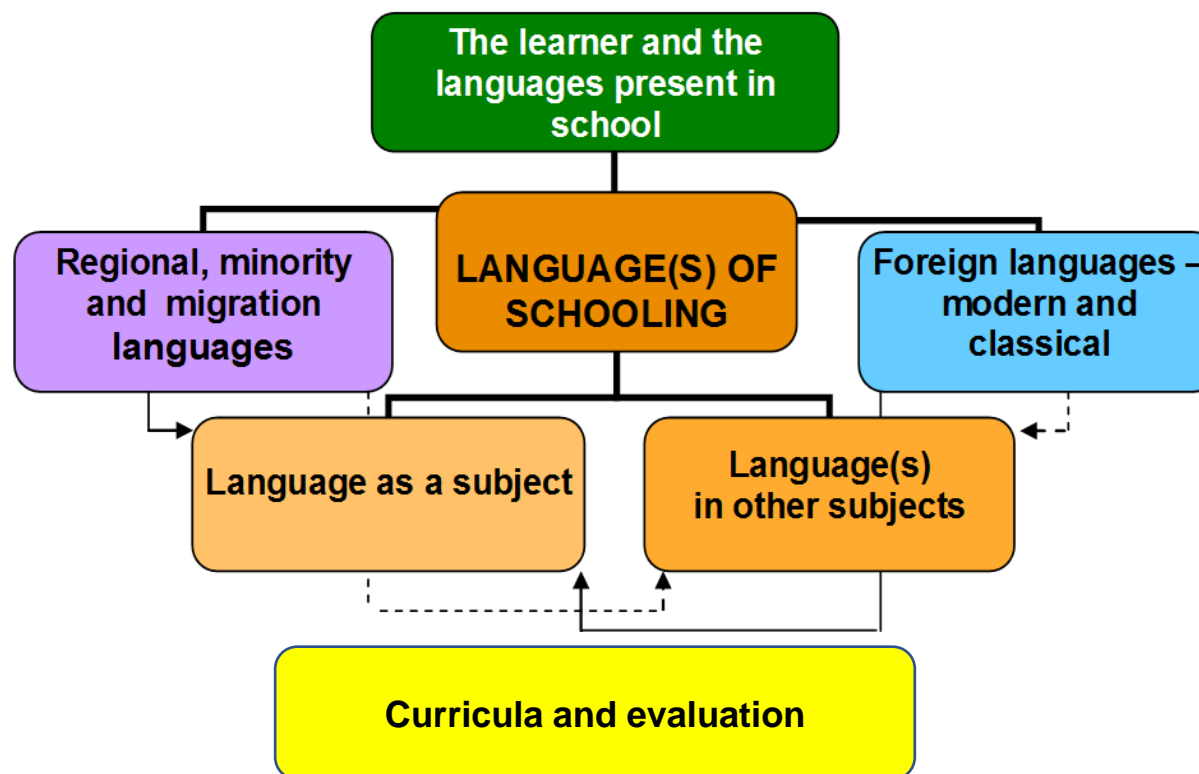
3 defining principles (Little, 2019, p.20-21):

- The individual learner/citizen is an autonomous social agent with rights and responsibilities
- Communicative purpose is prior to linguistic content
- Language education should be plurilingual and intercultural

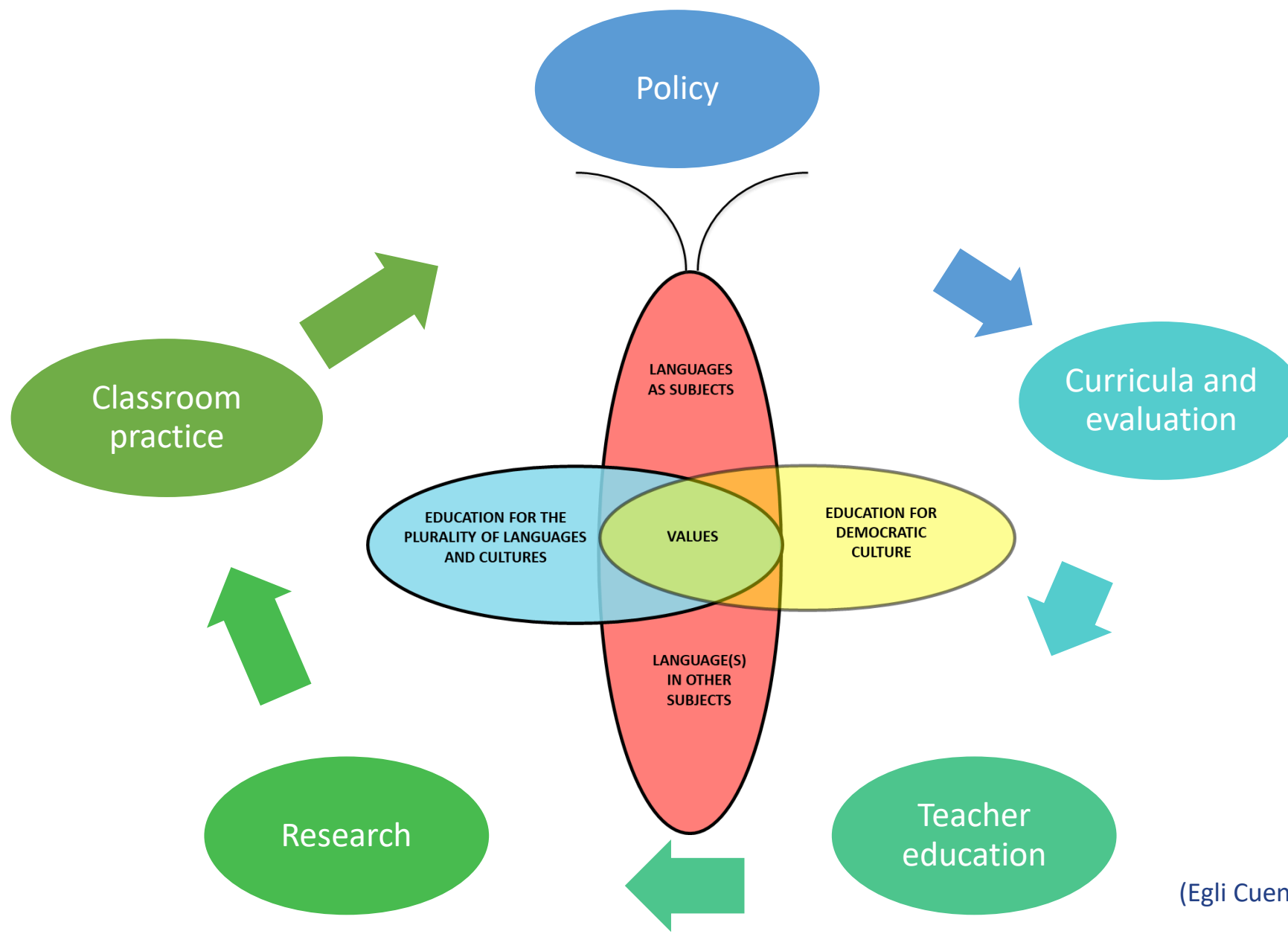


Plurilingual and intercultural education: an integrated, holistic and ethical vision for language education

CEFR 1.3 defines plurilingualism as “*a communicative competence to which all knowledge and experience of language contributes and in which languages interrelate and interact*”
(Council of Europe, 2001)



Each language reflects a particular way of thinking, carries a memory, a literary heritage, and is the legitimate basis of cultural identity. (Häggman, 2010)



Putting language education in the political spotlight

THE COMMITTEE
OF MINISTERS
Decision-making body



(Council of Europe, n.d.)

Recommendation (2022)1 on the
importance of plurilingual and
intercultural education for democratic
culture

Plurilingual and intercultural education: the why

PRINCIPLES

Plurilingual and intercultural education:

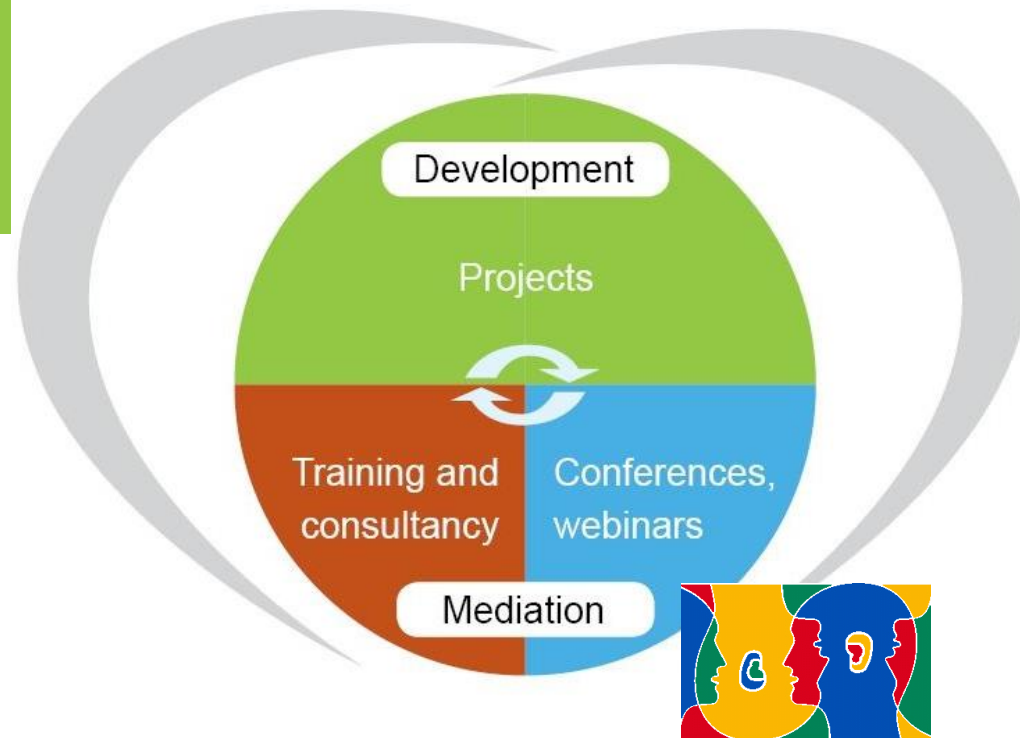
- I. is essential to education for democratic culture;**
- II. respects and values linguistic and cultural diversity;**
- III. promotes language awareness and language sensitivity across the curriculum;**
- IV. encourages critical reflection on cultural diversity;**
- V. helps to foster critical digital literacy and digital citizenship;**
- VI. encourages learner autonomy and values the learner's voice;**
- VII. supports the inclusion of disadvantaged and marginalized learners on an equal footing with other learners.**

(Council of Europe, 2022, paragraph 4)

The ECML: at the interface between policy, research, teacher education and classroom practice

An enlarged Partial Agreement
of the Council of Europe with 36
member states; founded in Graz,
Austria in 1994

Key target groups
decision-makers and language
professionals (teachers, teacher
educators, inspectors etc.)



Mission

innovation in language learning
and teaching; implementation of
effective language education
policies

4 year programmes

of international projects and
bilateral training and consultancy

Supporting multilingual classrooms



Four modules to choose from

- ❖ Supporting all language teachers
- ❖ Supporting teachers across the curriculum
- ❖ Developing language-aware schools
- ❖ Follow-up workshops in member states



Themes and sample teaching units

The Supporting Multilingual Classrooms team has developed a range of teaching units around 7 key themes listed below. A coherent structure is applied to each teaching unit: it begins with questions that together break down the issues to be considered in order to address the specific learning objective. This is followed by one example of classroom materials mostly taken from ECML, Council of Europe or European Commission projects and resources, all of which have been used in the workshop sessions. For each example, there is a short list of possible objectives that this resource might enable the learners to achieve. The unit concludes with reflective questions for the teacher, some additional food for thought and suggested links to further resources.

1. Challenging preconceptions
2. Implementing pluralistic approaches in language classrooms
3. Developing a plurilingual dimension in various subjects
4. Supporting children with the language of schooling across the curriculum
5. Developing whole-school policies/strategies
6. Creating democratic classrooms
7. Developing intercultural competence





[HOME](#) > [PROGRAMME](#) > [PROGRAMME 2020-2023](#) > [HOME LANGUAGE COMPETENCES](#)

FR EN

Resources for assessing the home language competences of migrant pupils



Why and how to assess home languages of students with a migrant background



Resources

- rationale and principles for formative assessment of learners' home languages
- Presentation of different types of learners, their educational contexts and assessment scenarios
- examples of assessment approaches and materials

Target groups

- language teachers
- individuals and institutions involved in the assessment of language competences
- decision-makers in language education

Thematic area: languages of schooling



Teaching the **language of schooling** in multilingual classes

Online study modules for pre-/in-service teacher education

Individual – Society – School (whole school approach):

- changing the mindset
- attitudes – knowledge – skills
- cooperation across subjects

Examples of good practice

- learner profiles
- experiences from pilot projects
- teaching interventions

For ALL learners

Foreign languages in school

Learners' first languages

Other language skills and varieties

Linguistic diversity as a resource & potential

film about Moises

language descriptors

language in subjects

- Planning
- Teaching
- Learning

ROADMAP



This resource contains



Web-based survey tool for self-assessment



Examples of promising practice



Information pack for coordinators involved in the school's development process

Thematic area: sign languages

PROSIGN

This resource contains



an assessment guide with test examples for classroom based and other types of testing



a European language portfolio (ELP) for sign languages learners



a Moodle e-ELP platform (guest access)



a list of teacher competences and curriculum guidelines for teacher training



sign language proficiency levels and background information about the CEFR



Unlocking educational opportunities in sign languages in Europe

The *DeafSign* project aims to promote sign language learning opportunities in Europe. It will provide guidelines and resources for policy makers and professionals working in the educational sector.

The ultimate beneficiaries of this project are vulnerable deaf, hard of hearing and hearing signers from linguistically and culturally diverse backgrounds including deaf children and their families, deaf refugees and migrants, and heritage signers.

Being Slovenian... By Kaja Bozi

Mom, with “KOSILO!” calls me to eat...
With sweet “NOČKO!” she puts me to sleep.
My friends greet me “ZDRAVO!” whenever we meet.
I would sing songs in Slovenian walking down the street...

When shocked, “KAJ?!” is what I say...
I still silently add “PROSIM” after “I may”
I still count in Slovenian, old habits stay
It’s weird because I used to never delay...
to laugh, speak, smile and play.

But sometimes picking out the right words in English
Seems like picking that needle out of hay..

I write poems to make my mind clear.
It’s been Slovenian for long. I can’t let it disappear...
Memories... I’d like to keep them all near.
And so, I’ve now written a line for my every year...

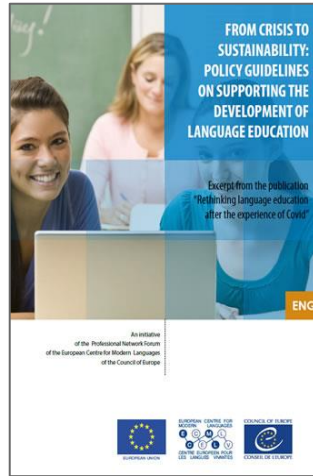
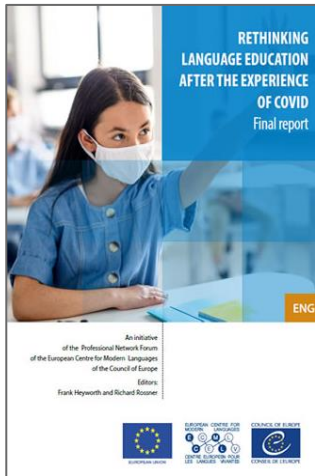
Livia Healy, Coláiste Nano Nagel

***“the enactment of
plurilingual and
intercultural education
demands [...] the ability to
[...] interpret and revise
previous mindsets”***

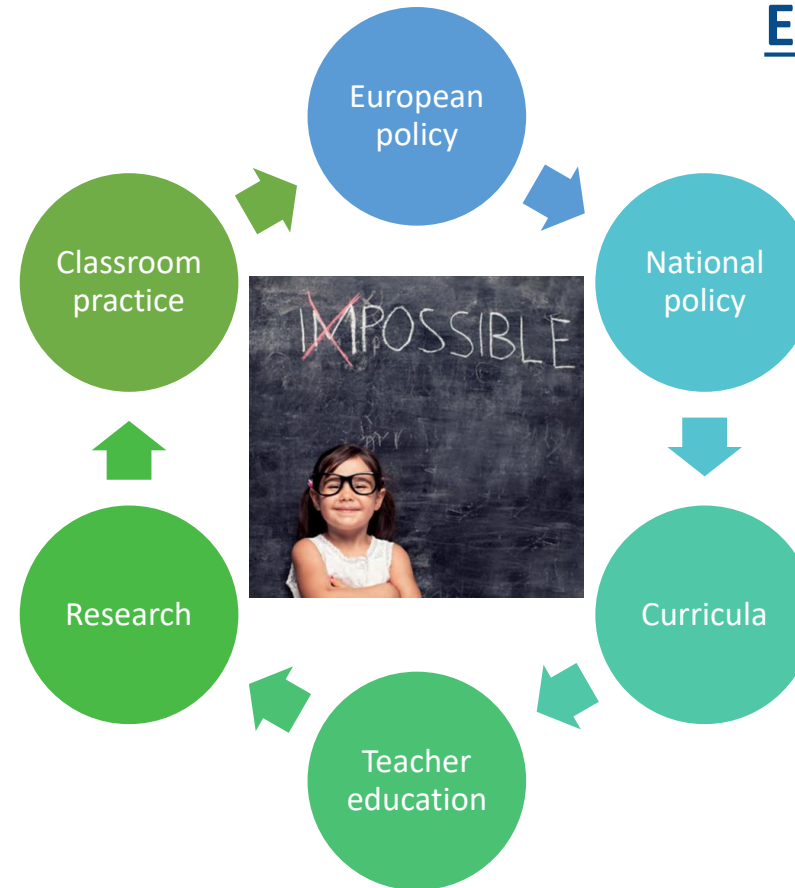
(Pinho and Andrade, 2015, p.22)

The added value of multilateralism: crossing linguistic, sectoral, pedagogical boundaries...

Joint response to crises: Covid; invasion of Ukraine



Webinar "Supporting the linguistic integration of young refugees from Ukraine"



ECML 25th Anniversary Declaration

Quality language education for a democratic, socially cohesive and peaceful Europe: nine ECML cornerstones



"... viewing languages as tools at the service of the development and education of the individual European citizen and do so with clearly defined and strongly justified political aims: human rights and quality education for all, but also peace, intercultural dialogue, democratic citizenship and a culture of democracy."

Research participant 1, individual interview April 2018
in Breslin, 2020

[illegible]

Organisation for Economic Co-operation and Development (OECD) Futures of Education and Skills 2030

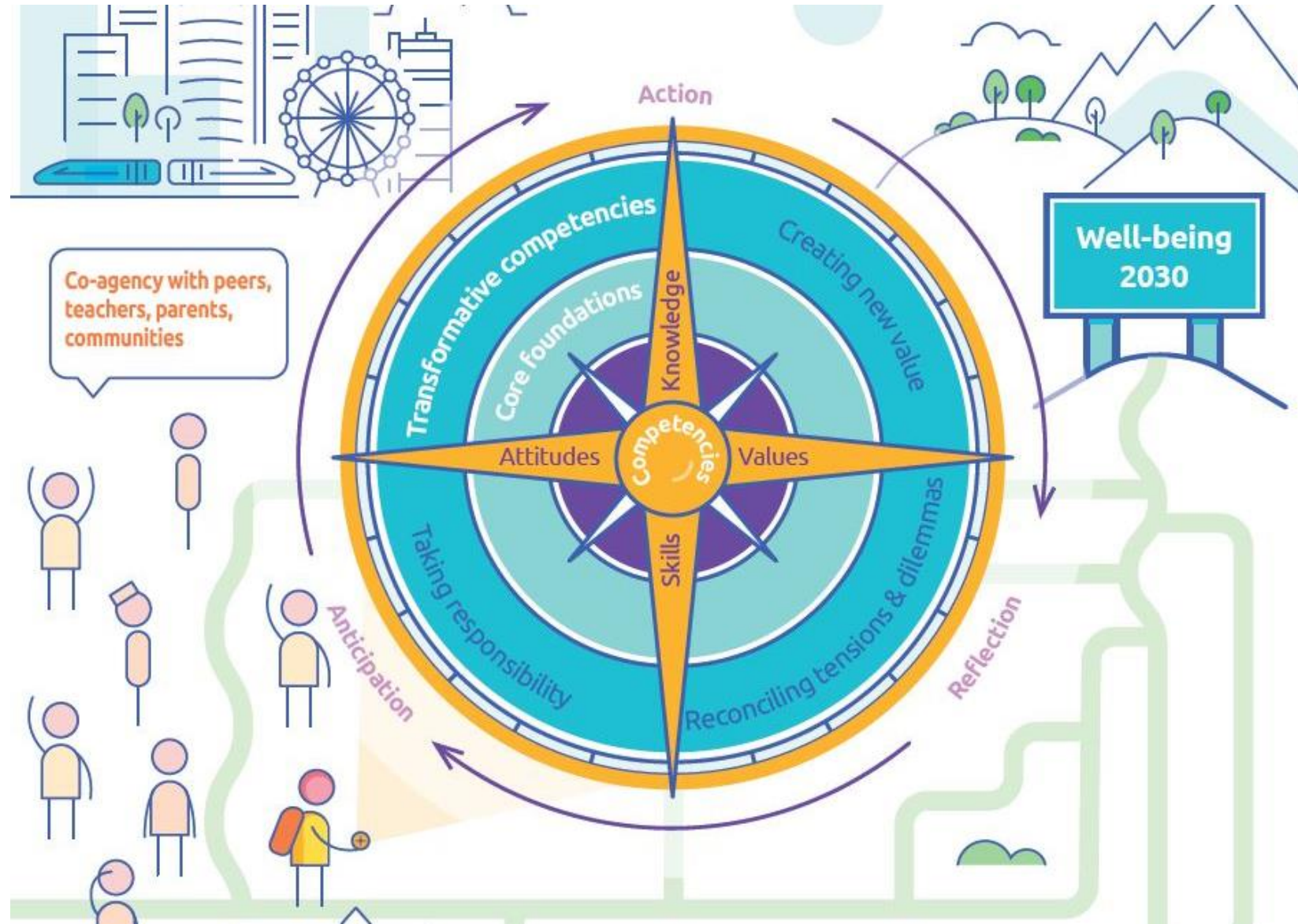
Learning Compass 2030/2040

The framework offers a broad vision of what students will need to thrive in 2030 and beyond, e.g. student agency, student well-being, and the types of competencies (knowledge, skills, attitudes, and values). It is globally informed, to be locally contextualized



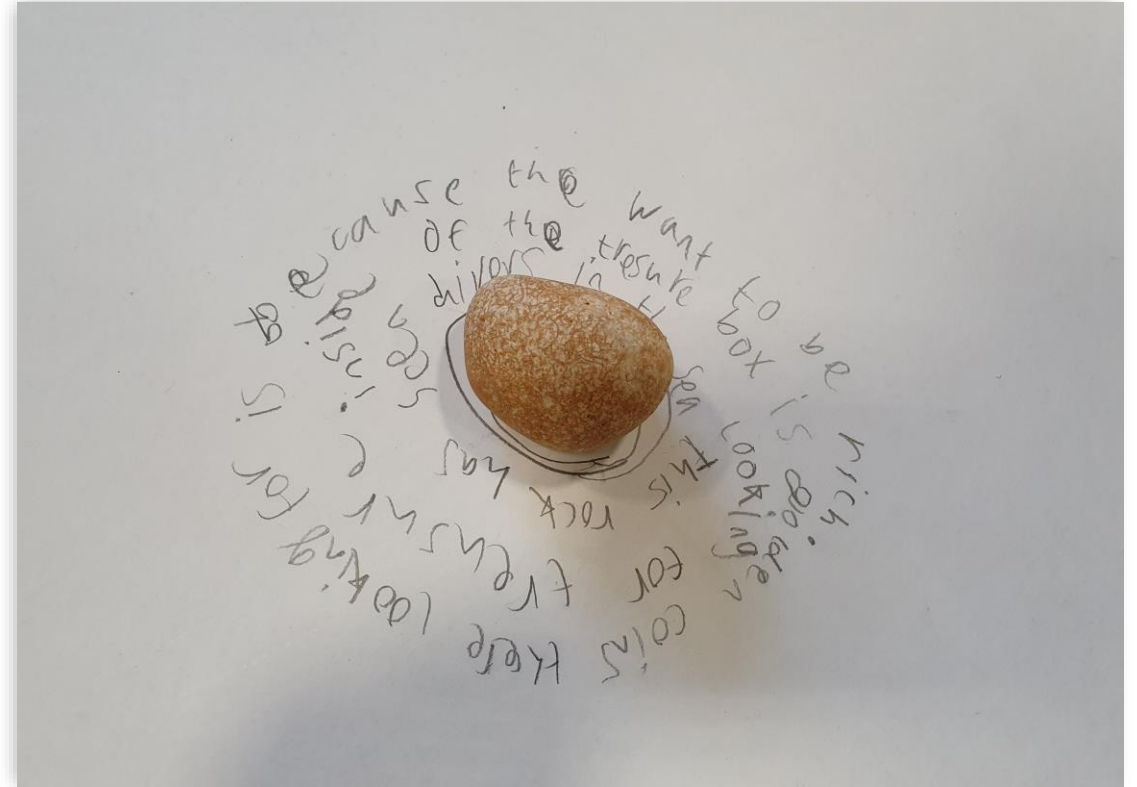
OECD Learning Compass 2030/2040

<https://www.oecd.org/en/data/tools/oecd-learning-compass-2030.html>



Creative pedagogies

“There is a lack of coherent research into what creative pedagogies are and what they do. There is an urgent need to understand creative pedagogies in order to enable the young to develop their creativity and handle the uncertainties of life; equally, teachers need to expand their repertoires of pedagogical practice in order to nurture young learners’ creativity” (Cremin and Chappell, 2021, p300)



Activating children's social-emotional learning, oracy and conflict resolution through creative pedagogies.

García and Otheguy (2016) argue that deficit narratives around language gaps are based on conceptual misunderstandings of language and how to assess its use and this failure has turned many children into limited language users.

Our project aimed to critically explore new visions of expressive language (oracy) education by centering the valued languages, practices and knowledge of the dynamic communities (Paris and Alim, 2017) in the school's localities.



What are the characteristics of creative pedagogies?

- Generating and exploring ideas
- A climate of openness
- Encouraging autonomy and agency
- Co-constructing and collaborating (teaching and learning in relationships)
- Playfulness
- Problem-solving
- Teacher creativity

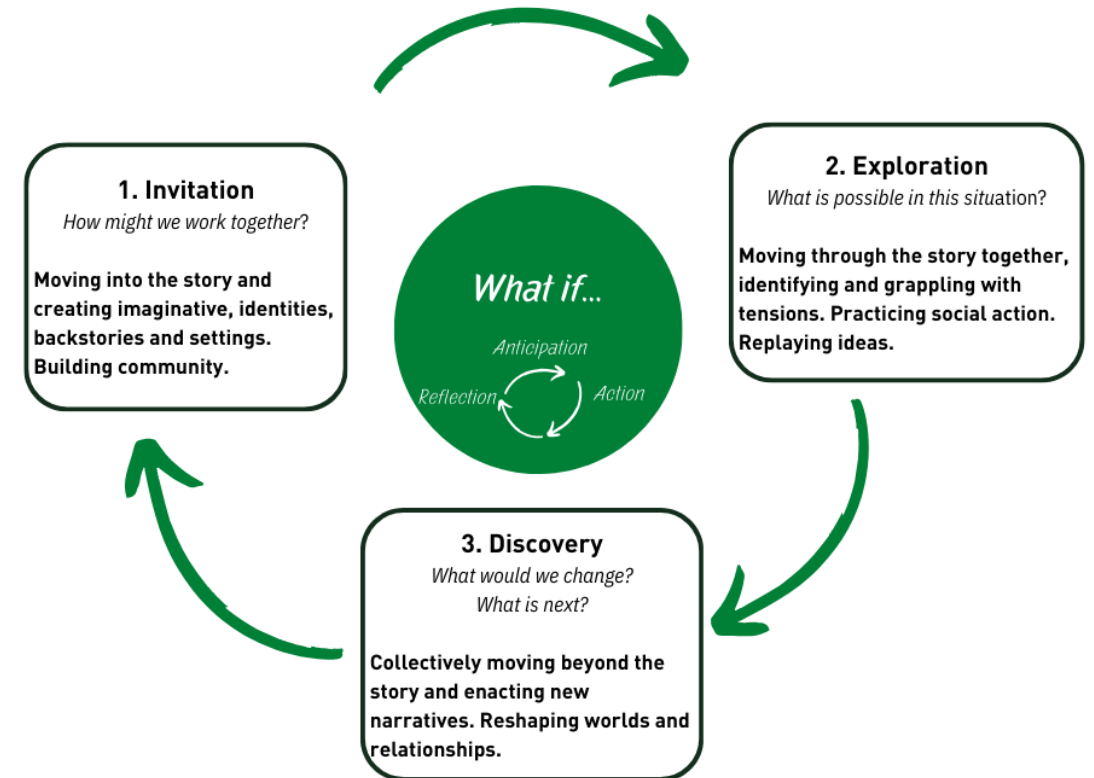
(Cremin and Chappell, 2021, pp. 311-319)



What constitutes a 'language rich' classroom environment?

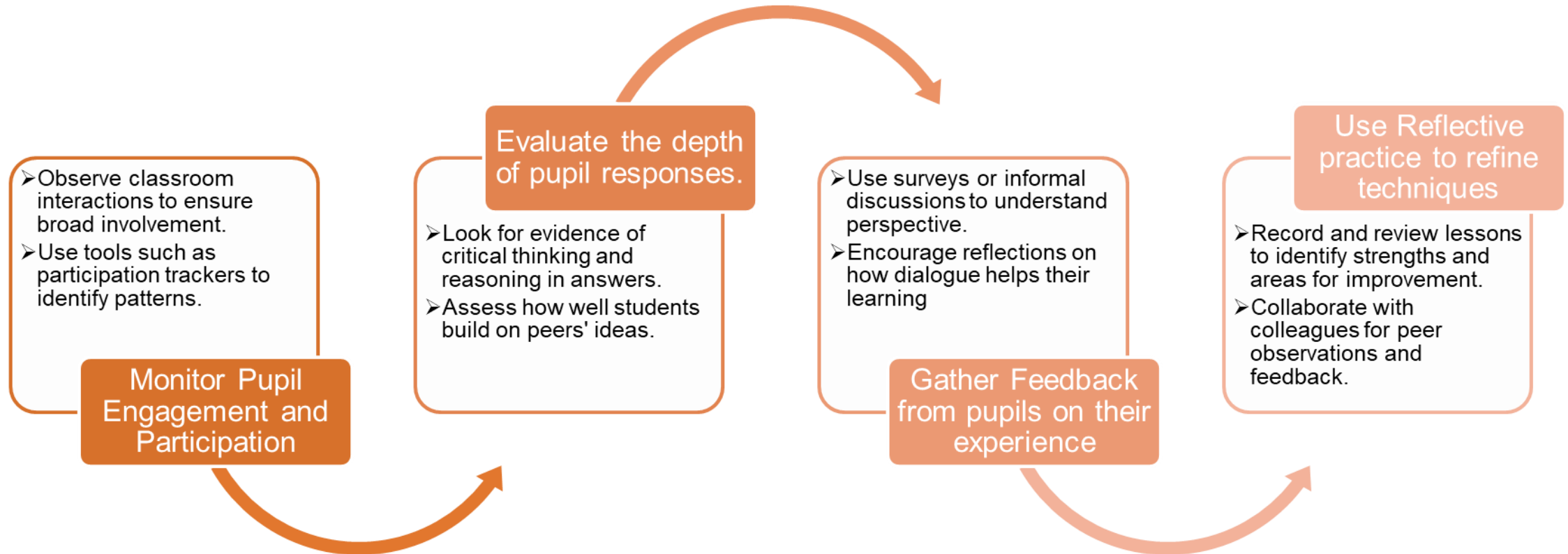


Creative Pedagogy and the language of possibility



Drama Worldbuilding (Stephenson, 2022)

Measuring Impact



Additional Metrics:

Improvement in academic outcomes tied to dialogical methods.
Changes in pupil confidence and willingness to participate.
Evidence of collaborative problem-solving skills during group activities.

Impact on Learning

100% felt that pupils' confidence and competence had increased in social-emotional communication

1. Impact on Social and Emotional Learning
 - a) Imaginative Freedom and Embodied learning
 - b) Emotional Inquiry and Critical Thinking
 - c) Teamwork and belonging
2. Impact on Pupils with Special Educational Needs and/or disabilities
 - a) Increased engagement, confidence and participation
 - b) Improved communication and inquiry
 - c) Improved memory and recall
3. Impact on Teacher Development
 - a) Enjoyment, engagement and increased confidence
 - b) Deepened knowledge and understanding of creative pedagogy

Children's perceptions of learning

"Their ability to articulate themselves we've noticed a difference in that. I think that is a direct result of them taking part in the project" Teacher.

"Child X and V could talk about their own life and what matters them and contribute to class with their own Gypsy stories and with their own Gypsy perception" Gypsy Roma Liaison.

"My children were more verbal at home" Parent.

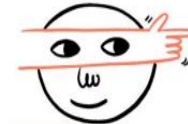
"I used to be a little scared because if I made one mistake, everybody would laugh at me but now I know that it doesn't matter what you do, it just matters to let out your imagination" Child.

8 Dispositions of Collective Creativity, Wellbeing and Co-agency



IMAGINATIVE
FREEDOM

AGENCY, AUTONOMY
& OPENNESS TO



THINKING-FEELING
WITH OTHERS

ADDRESSING STRUGGLE
& CONFLICT



COLLECTIVE PROBLEM
SOLVING



EMOTIONAL
INQUIRY

SELF-EFFICACY
& CONFIDENCE



EMBODIED
LEARNING



CRITICAL THINKING

POSSIBILITY THINKING



TEAMWORK &
BELONGING



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Cremin, T. and Chappell, K., 2021. Creative pedagogies: A systematic review. *Research Papers in Education*, 36(3), pp.299-331.

Stephenson, L., and Patel, N., 2024. Impact Report Story Exchange Project: Empowering pupil voice through drama worldbuilding <https://eprints.leedsbeckett.ac.uk/id/eprint/11403>

Stephenson, L., 2022. **Collective** creativity and wellbeing dispositions: children's perceptions of learning through drama. *Thinking Skills and Creativity*, p.101188. <https://doi.org/10.1016/j.tsc.2022.101188>



Closing words

ATLAS group

