Activities in toddler classrooms: A multilevel analysis of educator-child interactions

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Quality of educator-child interactions

15 to 36 months

Structural and Process quality

■ **Structural quality** → ■ **Process quality**

- Educator's qualifications
- Professional development
- Educator-child ratio

- Quality of educator-child interactions

> **Language development**
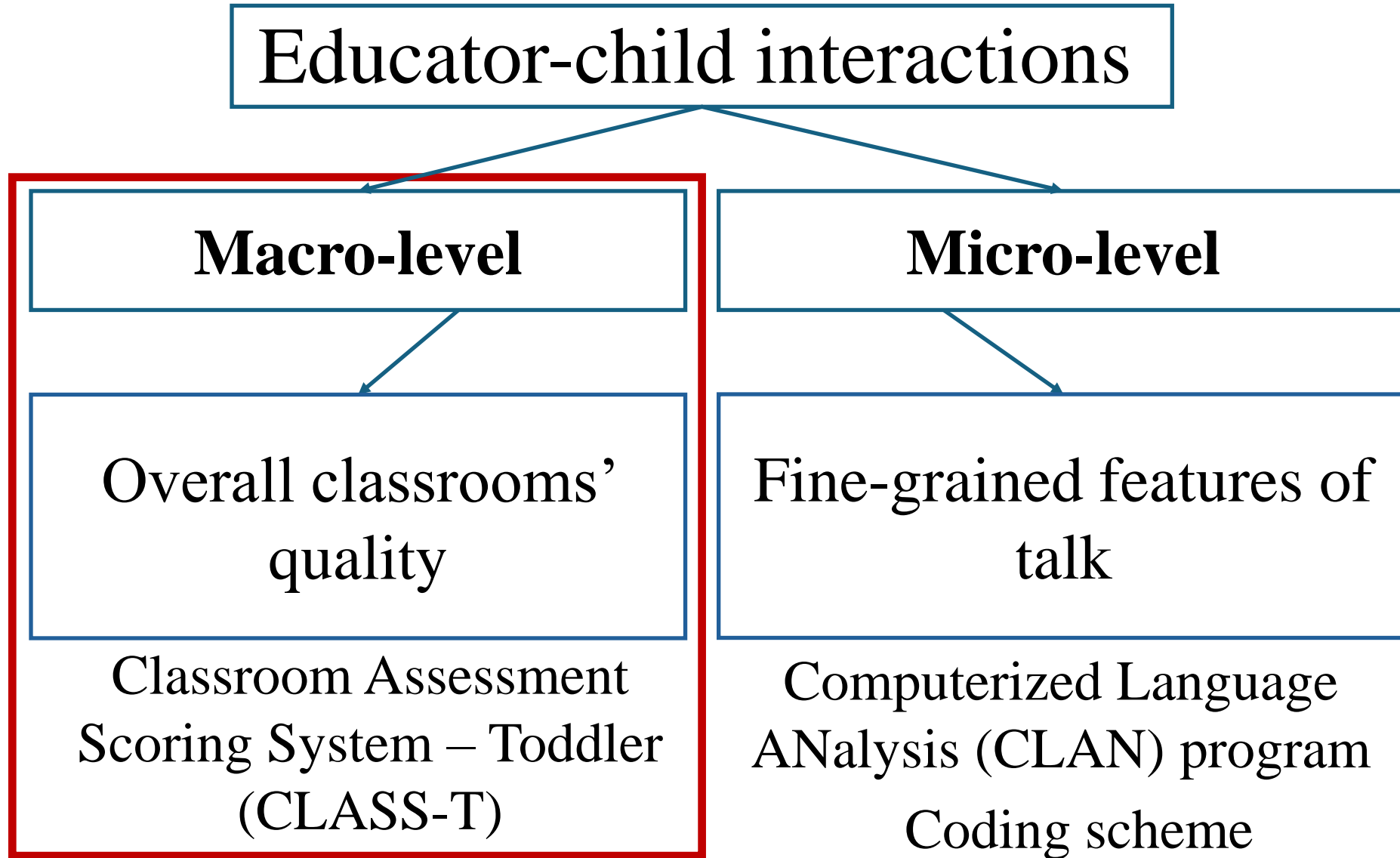> **Cognitive development**
> **Socio-emotional development**

Academic achievement

Schachter et al., 2016 ; Bigras et al. 2018 ; Slot et al., 2015 ; NICHD, 2002

Focus on Process Quality

Educator-child interactions

Macro-level	**Micro-level**

Overall classrooms' quality	Fine-grained features of talk

Classroom Assessment Scoring System – Toddler (CLASS-T)	Computerized Language ANalysis (CLAN) program Coding scheme

Hindman et al. 2021 ; Justice et al. 2018 ; La Paro et al. 2012 ; MacWhinney, 2000

Literature Findings

- Classroom Assessment Scoring System – Toddler (CLASS-T)

Domains :

Emotional and Behavioral Support

Engaged Support for Learning

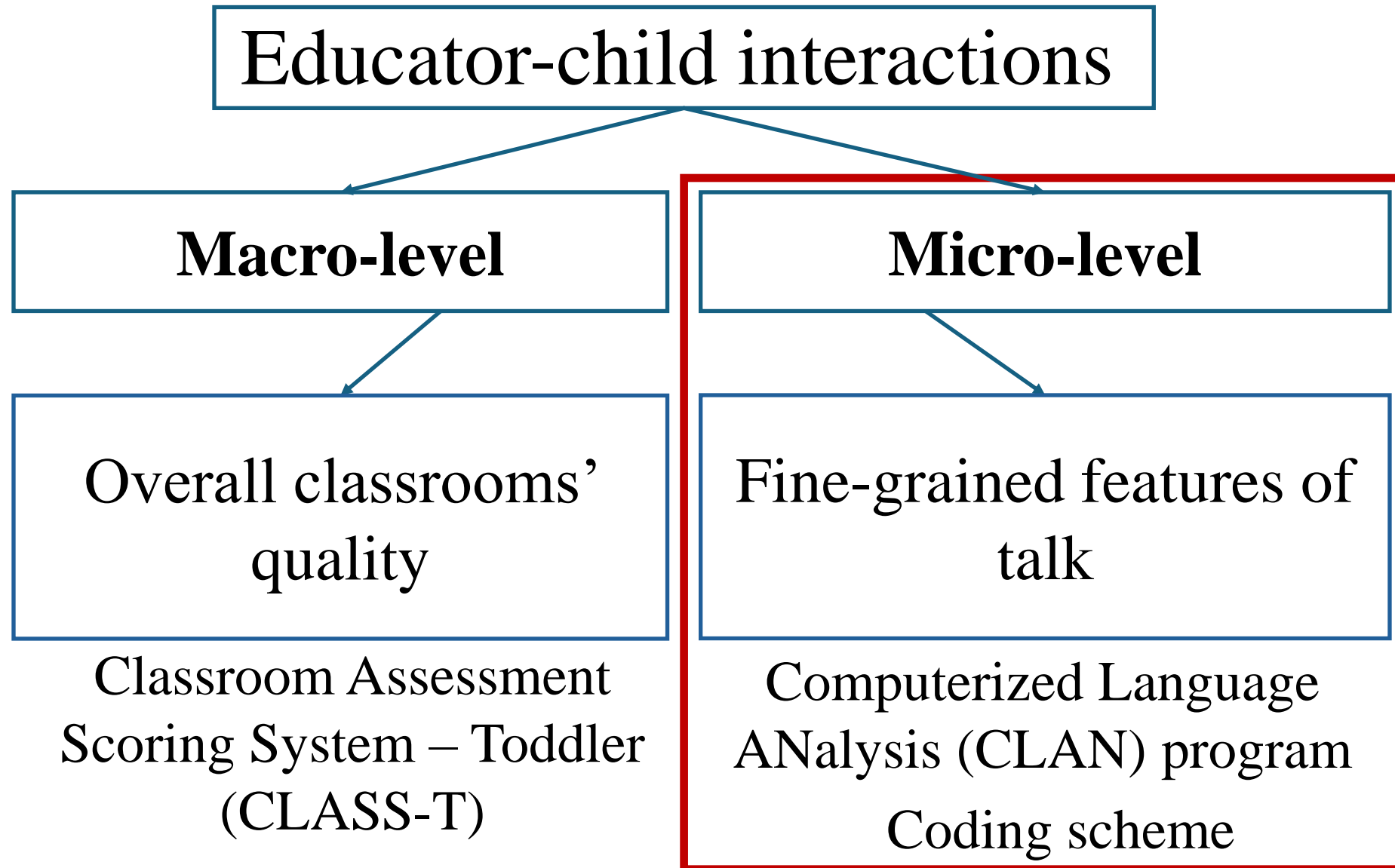❶ ❷ ③ ④ ⑤ ⑥ ⑦
LOW   MID   HIGH

❶ ❷ ③ ④ ⑤ ⑥ ⑦
LOW   MID   HIGH

Cadima et al. 2023

\> ACTIVITIES

Guedes et al. 2020 ; Cadima et al. 2023 ; Bandel et al. 2014

Focus on Process Quality

Educator-child interactions

Macro-level

Micro-level

Overall classrooms' quality

Fine-grained features of talk

Classroom Assessment Scoring System – Toddler (CLASS-T)

Computerized Language ANalysis (CLAN) program

Coding scheme

Hindman et al. 2021 ; Justice et al. 2018 ; La Paro et al. 2012 ; MacWhinney, 2000

Micro-level : fine-grained features of educator-child talk

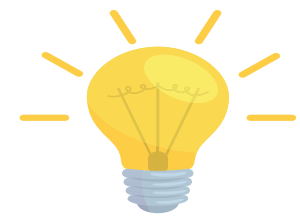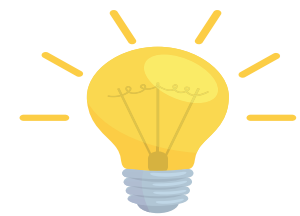| Linguistic dimension | MLU-w Lexical Diversity | **Computerized Language ANalysis (CLAN) program** |
| Interactive dimension | Responsive communication Expansions-recasts | Coding scheme |
| Conceptual dimension | Decontextualized talk Pretend talk | Coding scheme |

Literature Findings

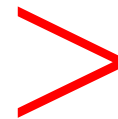|		
Linguistic dimension	MLU-w Lexical Diversity	**Computerized Language ANalysis (CLAN) program**
Interactive dimension	Responsive communication Expansions-recasts	Coding scheme
Conceptual dimension	Decontextualized talk Pretend talk	Coding scheme

ACTIVITIES

*Chaparro-Moreno et al. 2022 ; Gest et al. 2006*

Research Gap

Not much data on the overall classrooms' quality (macro-level) and fine-grained features of talk (micro-level) in childcare centers.

No studies that combine both types of analysis.

Guedes et al. 2020 ; Cadima et al. 2023

Research question and aims

To what extent do overall classrooms' quality (macro-level) and features of educator-child talk (micro-level) vary across activities ?

- <u>Aim 1</u> : Examine the overall classrooms' quality (macro-level) across activities.
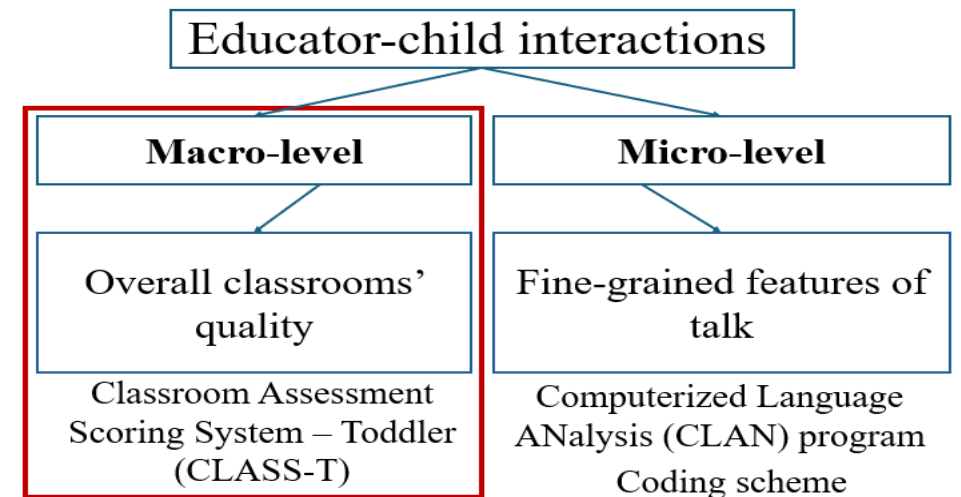
Overall classrooms' quality

Method : overall classrooms' quality

40 CLASSROOMS

Each toddler's classroom was visited once

15 to 36 months old

Ratio 1/8

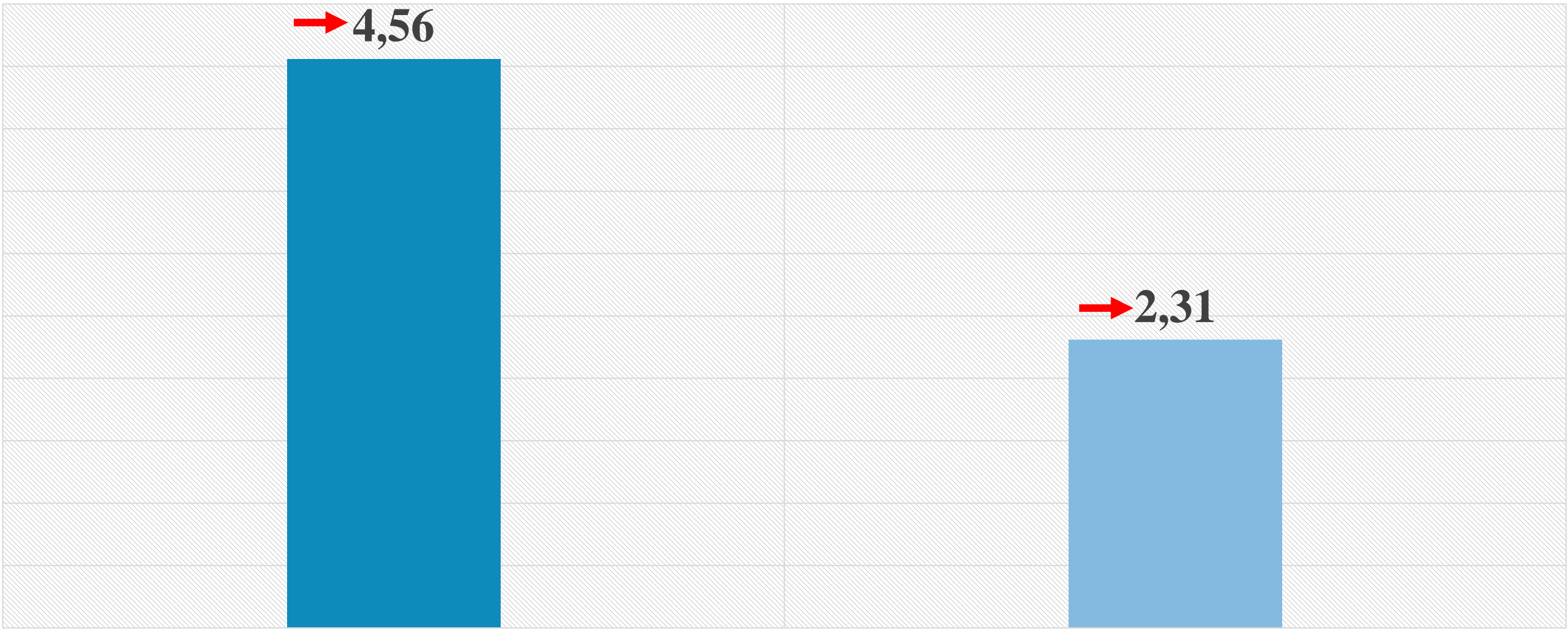Asked them to follow their daily routines

CLASS-TODDLER

40 global ratings

Four cycles of 20-min were randomly chosen from each videotaped observation to be rated

Descriptive statistics for overall classrooms' quality (CLASS-T)

→ 4,56

→ 2,31

Emotional and Behavioral Support   Engaged Support for Learning

❶ ❷ ❸ ❹ ❺ ❻ ❼
LOW   MID   HIGH

Overall classrooms' quality accros Activities

CLASS-TODDLER

Each rated cycle was 15 to 20 min
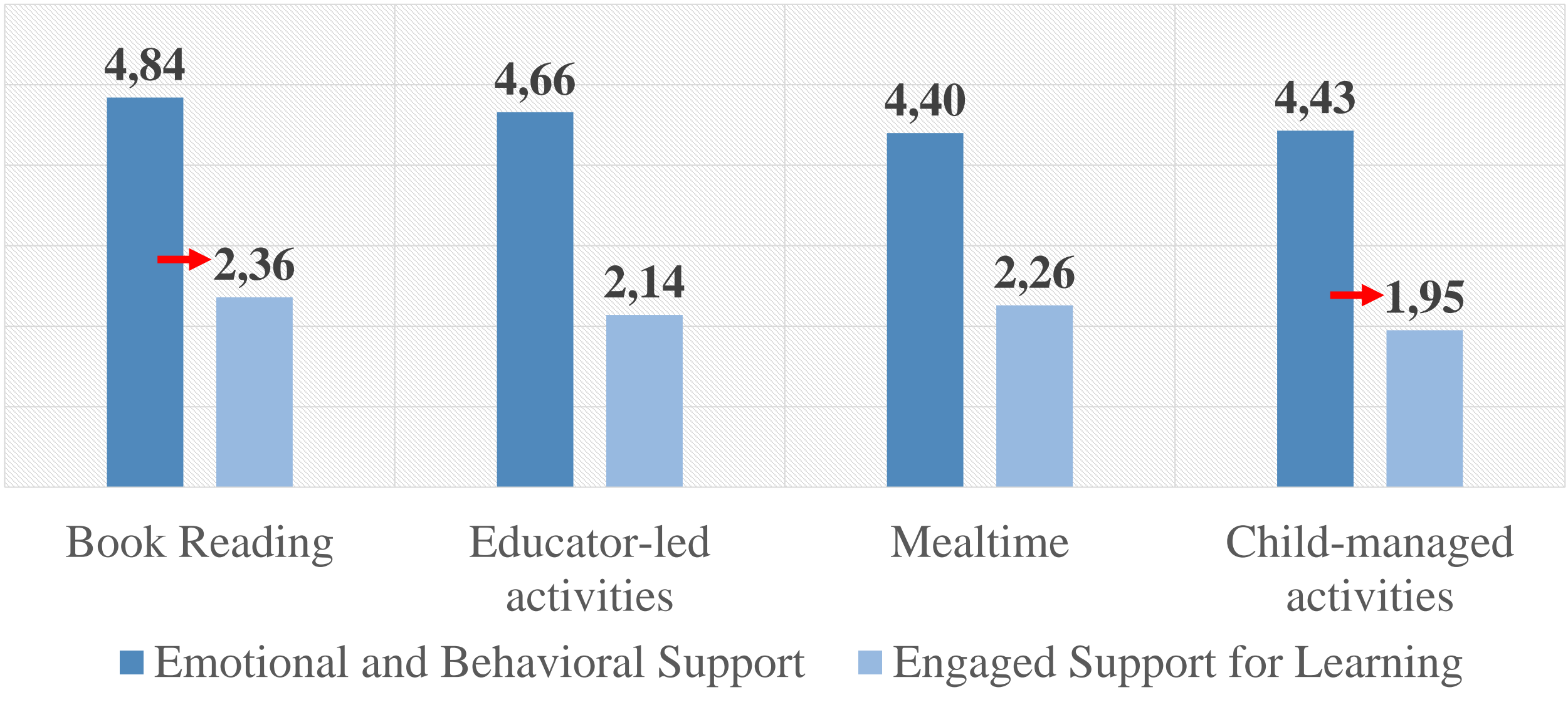
Extracted all observational cycles coded as :

- **Book Reading** (*N*=22)

- **Educator-led activities** (*N*=24)

- **Mealtime** (*N*= 39)

- **Child-managed activities** (*N*= 37)

Definitions of each activity

Specific criterion for start and end of observation for each activity

Descriptive statistics across activities (CLASS-T)

	Book Reading	Educator-led activities	Mealtime	Child-managed activities
Emotional and Behavioral Support	4,84	4,66	4,40	4,43
Engaged Support for Learning	2,36	2,14	2,26	1,95

■ Emotional and Behavioral Support   ■ Engaged Support for Learning

❶ ❷ ③ ④ ⑤ ⑥ ⑦

LOW   MID   HIGH

To what extent do overall classrooms' quality (macro-level) and features of educator-child talk (micro-level) vary across activities ?

- Aim 2 : Examine fine-grained features (micro-level) of educator-child talk during Book Reading and Child-managed activities.
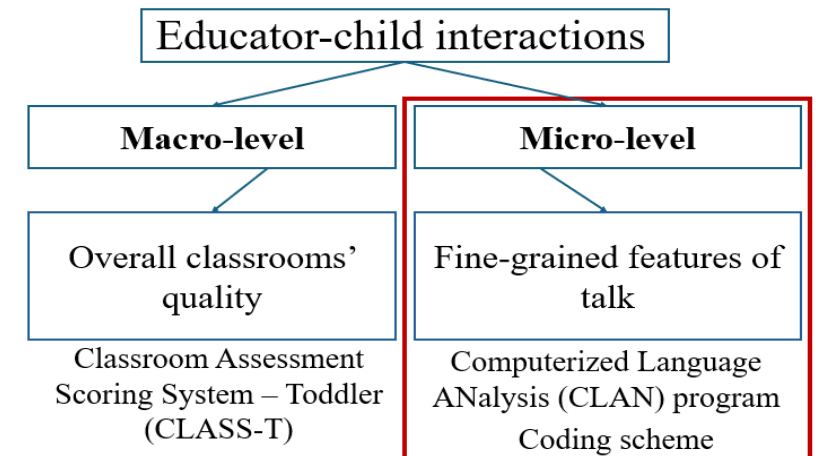
Method : fine-grained features of talk across activities

CLAN
Transcription

8 videos of **Book Reading**

8 videos of **Child-managed**

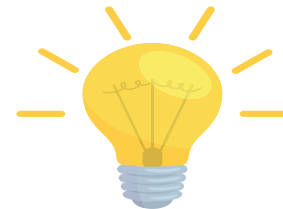15 to 20 min segments from each activity

CLAN
Linguistic dimension
(MLU-w, lexical diversity VOCD)

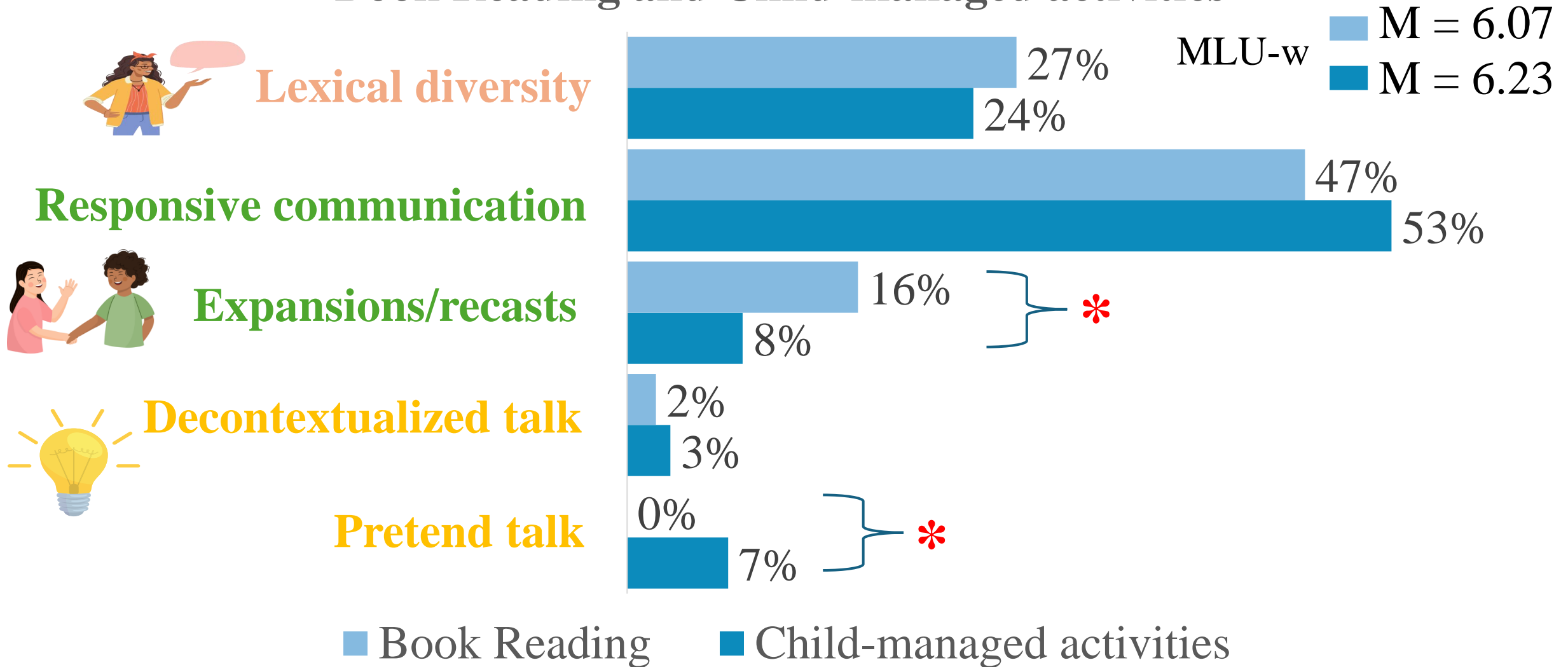## CODING SCHEME
Interactive dimension
(responsive communication, expansions/recasts)

Conceptual dimension
(decontextualized talk, pretend talk)

Linguistic, Interactive and Conceptual categories across Book Reading and Child-managed activities

Summary /Discussion

- **Overall classrooms' quality**

  - **Emotional and Behavioral Support** : mid-level quality ✓

  - **Engaged Support for Learning** : low to mid-level quality

  Room for enhancing educators' practices

Cadima et al. 2023 ; Guedes et al. 2020 ; Bandel et al. 2014

Summary /Discussion

- **Overall classrooms' quality across activities**

  - Overall, the average scores across the four activities are very similar.

  - **Engaged Support for Learning** : Book Reading (highest average score) + Child-managed activities (lowest average score). ✅

  Training should take advantage of specific activities
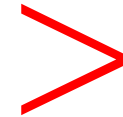
  Targeting all activities

Cadima et al. 2023 ; Cabell et al. 2013
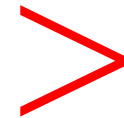
Summary /Discussion

- **Fine-grained features of educators' talk across Book-Reading and Child-managed activities**

  - **Linguistic**, **interactive** and **conceptual** dimensions : similarities.

    - **Linguistic dimension** : expansions-recasts

    - **Conceptual dimension** : Pretend-talk

  Training should focus on activity-specific, targeted strategies

Gest et al. 2006 ; Cabell et al. 2013 ; Girolametto et al. 2002

Thank you for your attention !

Thank you to my supervisors:

Caroline Masson

Christelle Maillart

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