

THE LANGUAGE INTERACTION SNAPSHOT (LISn): Examining Language Interactions in Linguistically Diverse Classrooms

**Presentation to the Society for Research in Child Development
Denver, Colorado
April 2, 2009**

**Susan Sprachman,¹ Margaret Caspe,¹ Sally Atkins-Burnett,¹
Michael L. López,² Deborah Parrish,³ Jamie Shkolnik,³ Patricia
Lozano,⁴ Katherine A. Fallin,⁴ John M. Love,¹ Barbara Schiff
Kennen,¹ Christine Ong⁴**

**¹Mathematica Policy Research, Inc., ²National Center for Latino Child &
Family Research, ³AIR, ⁴First 5 LA**

Research conducted as part of the Universal Preschool Child Outcomes Study (UPCOS), a descriptive study of the Los Angeles Universal Preschool Program (LAUP).

Special thanks to our clients at First 5 LA for giving us the opportunity to do some very interesting methodological work and to First 5 San Francisco for collaborating on this pilot

Overview of the Presentation

- Why we developed this measure
- What specific aspects of language use the measure captures
- Some preliminary findings from our pilot test
- Challenges



Language Environments

- Critical for language and literacy development
- More critical for dual language learners
- Preschool educators' decisions about language use



Available Measures

- Classroom level quality scores
- Few micro-coding systems
- None captures multiple language use

Language Interaction Snapsnot (LISn)?

- Observation of teacher-child language interactions
- Time-sampling procedure
- Language used
- Different types of language

Instrument Development Process

- Reviewed available measures
- Obtained input from experts including the UPCOS team of experts
- Reviewed literature on language and literacy development among DLLs
- Reviewed the codes used in the C-COS and CCAT-R



PROCEDURES

- **Time sampling- five minute periods**
 - 20 seconds observe,
 - 10 seconds record
 - 10 cycles per 5 minute period

- **At the end of 5 minutes the observer filled out information on child and classroom activities**

WHAT DOES LIS_n CAPTURE?



What the LISn Captures

- **Child Verbal Communication- to Whom and in What Language**
- **Language and Type of Language used by Teacher and Other Adult**
- **Child Activities and Classroom Setting**

Types of Teacher Verbal Communication

1. Repeats or confirms	E	O	M
2. Elaborates or builds (also code one of four below)	E	O	M
3. Requests language	E	O	M
4. Gives directions	E	O	M
5. Provides information, names, labels (objects present)	E	O	M
6. Provides information (objects not present)	E	O	M
7. Reads	E	O	M
8. Sings	E	O	M
9. Other Talk	E	O	M

Some coding examples for contextualized and decontextualized language

Contextualized –Provides Information About Things Present	Decontextualized—Provides Information About Things Not Present
“We are going outside” (children are in a line)	“We are going outside in a little while” (to a child who looks bored in the painting area)
“Here is a picture of the post office we went to last week.” (looking at a picture from the field trip)	“Do you remember when we went to the post office last week?” (while sitting at the snack table conversing)



Summary data about each 5 minute observation period



Content

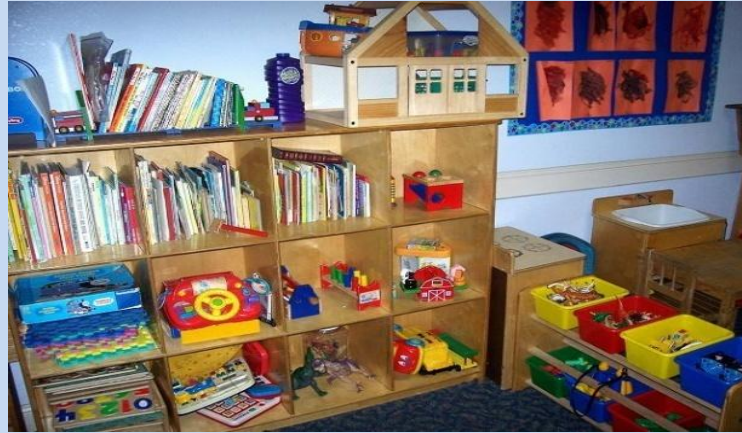
- Print
- Non-Print
- Sounds
- Writing/Copying
- Math, Colors, Numbers
- Singing
- Aesthetics
- Science/Nature
- Social Studies
- Fine Motor
- Gross Motor
- Other



Structure

- Whole Group
- Small Group
- Individual Time
- Routine
- Meals/Snacks
- Free Choice/Centers
- Recess/Outside





Pilot Study Sites

Los Angeles-Universal Preschool Child Outcomes Study (UPCOS) and San Francisco - Preschool for All

Pilot Structure

- **3 children per class, each child observed 3 times**
- **Fall language use**
 - English only/primarily,
 - Bilingual,
 - Other language only
- **Integrated with CLASS observations**
 - Observe child 1 – 5 minutes
 - Observe child 2 – 5 minutes
 - Observe child 3 – 5 minutes
 - CLASS – 20 minutes observe, 10 minutes code
 - Observe child 1.....

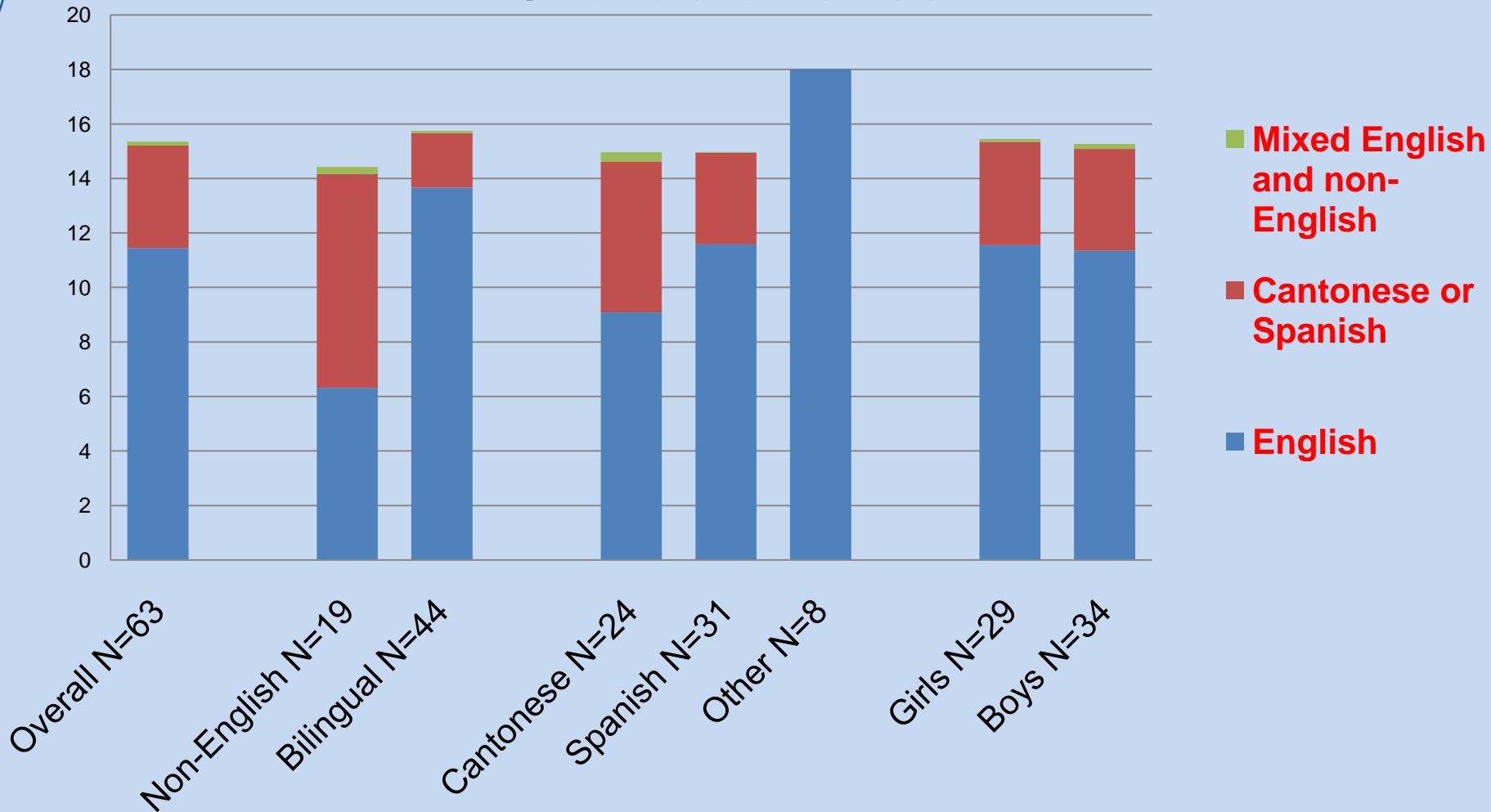
Training and Reliability of LISn

- 7 experienced classroom observers were trained over a 2-day period (one did not achieve reliability)
- Video reliability-overall inter-rater agreement was 96%
- Field reliability
 - Child component—88% inter-rater agreement
 - Teacher component-89% inter-rater agreement

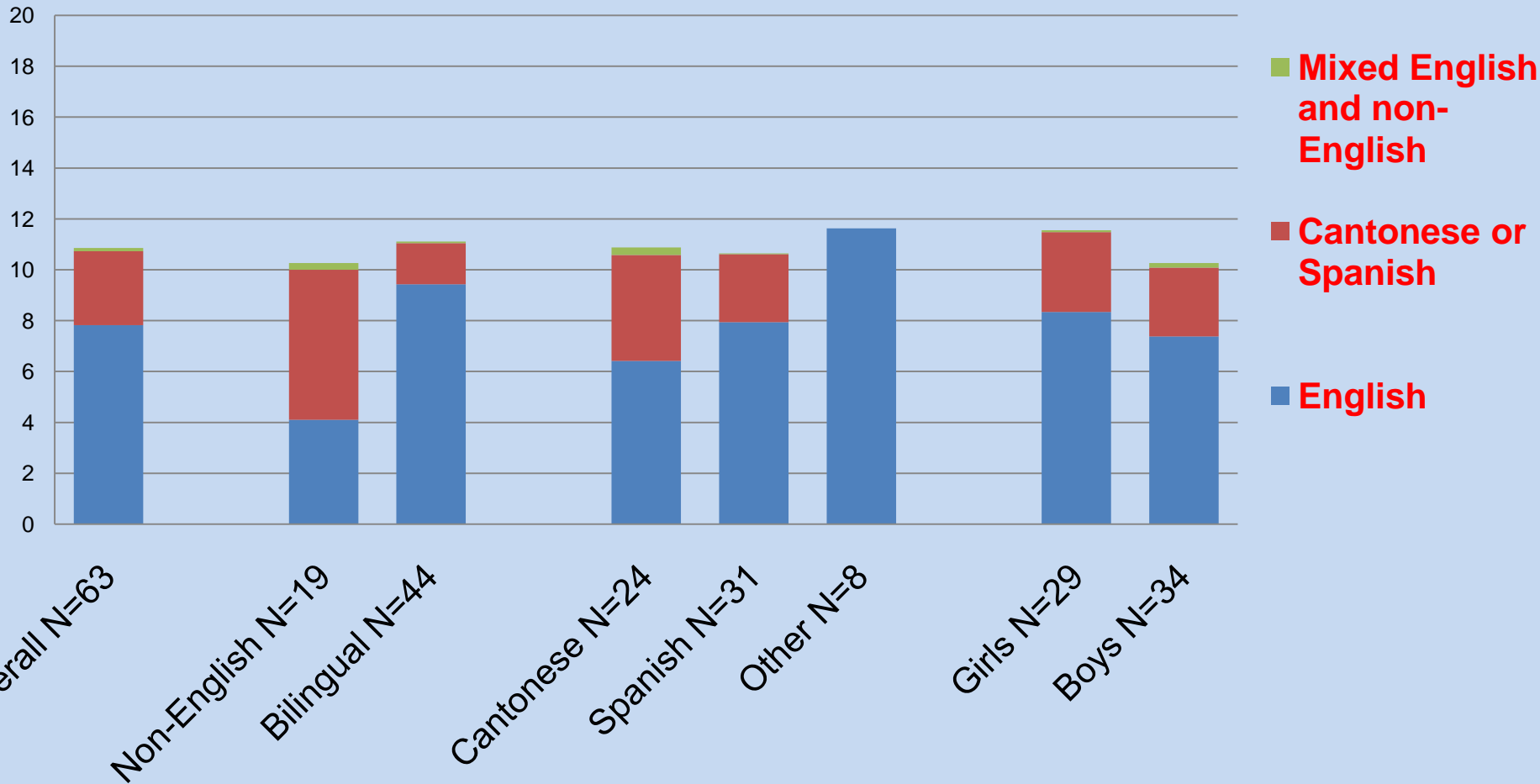
CHILD TALK



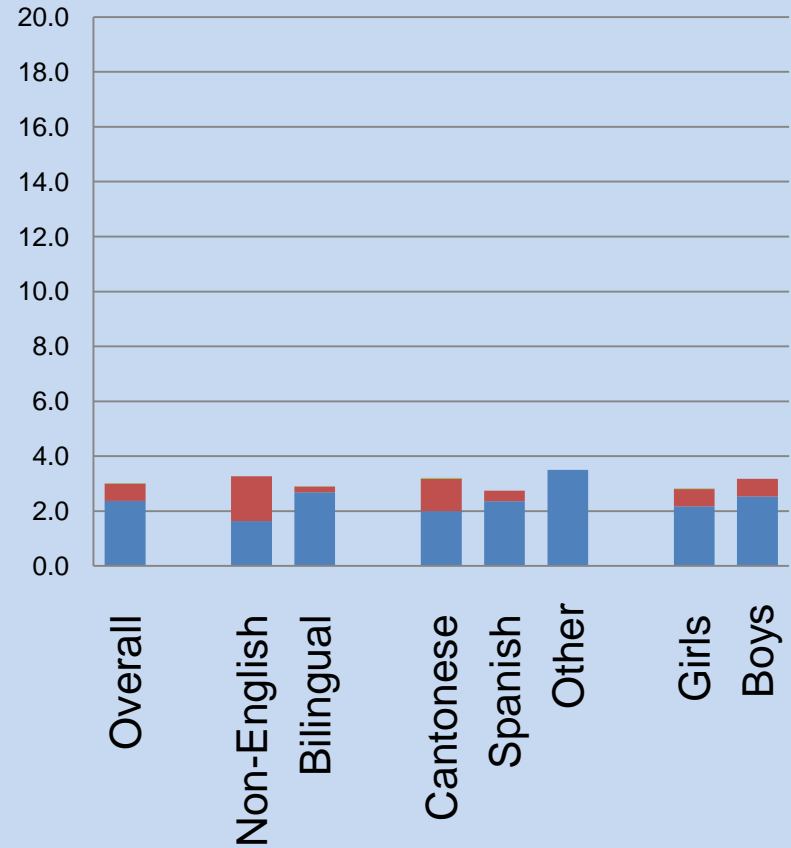
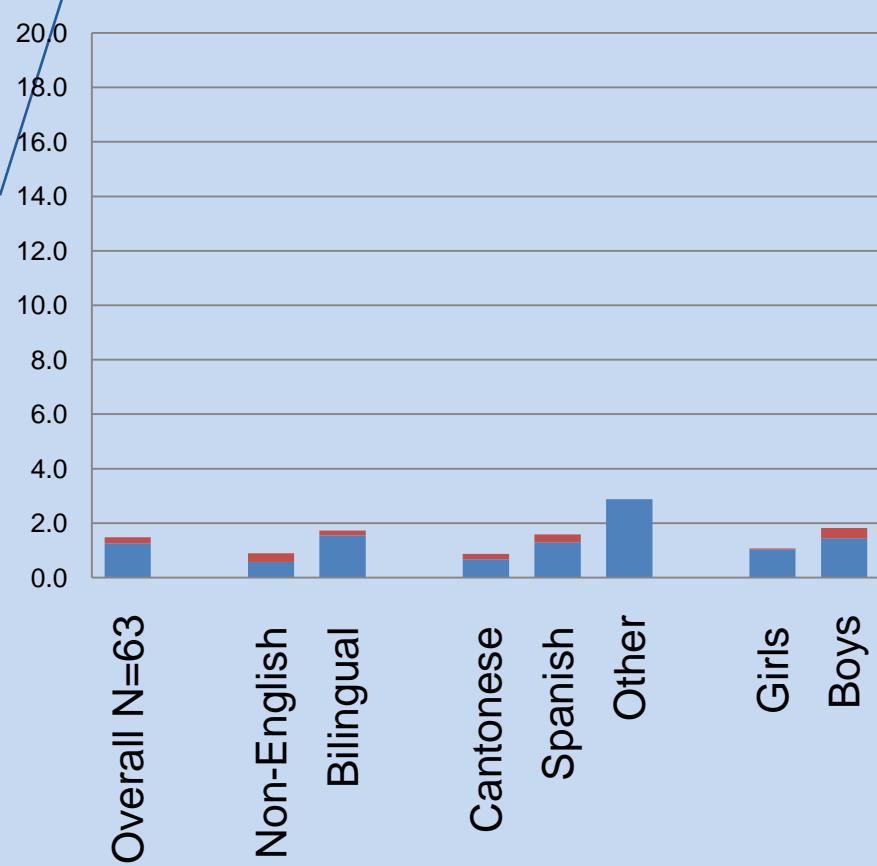
Total Child Talk, by Language and Child Characteristics



Child to Child Talk, by Language and Child Characteristics



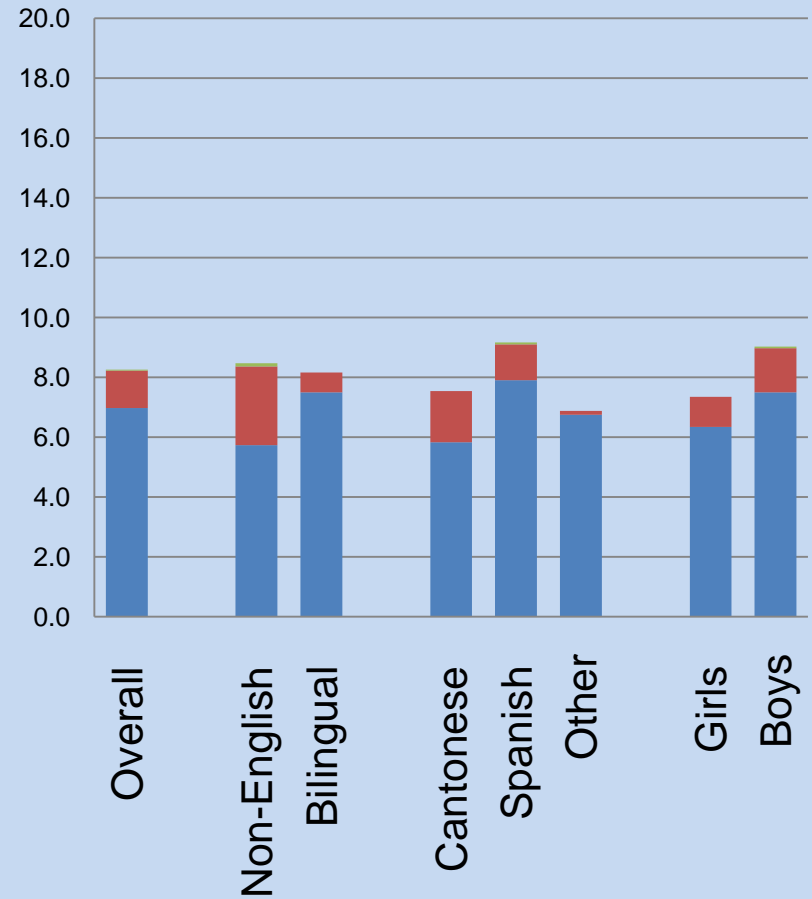
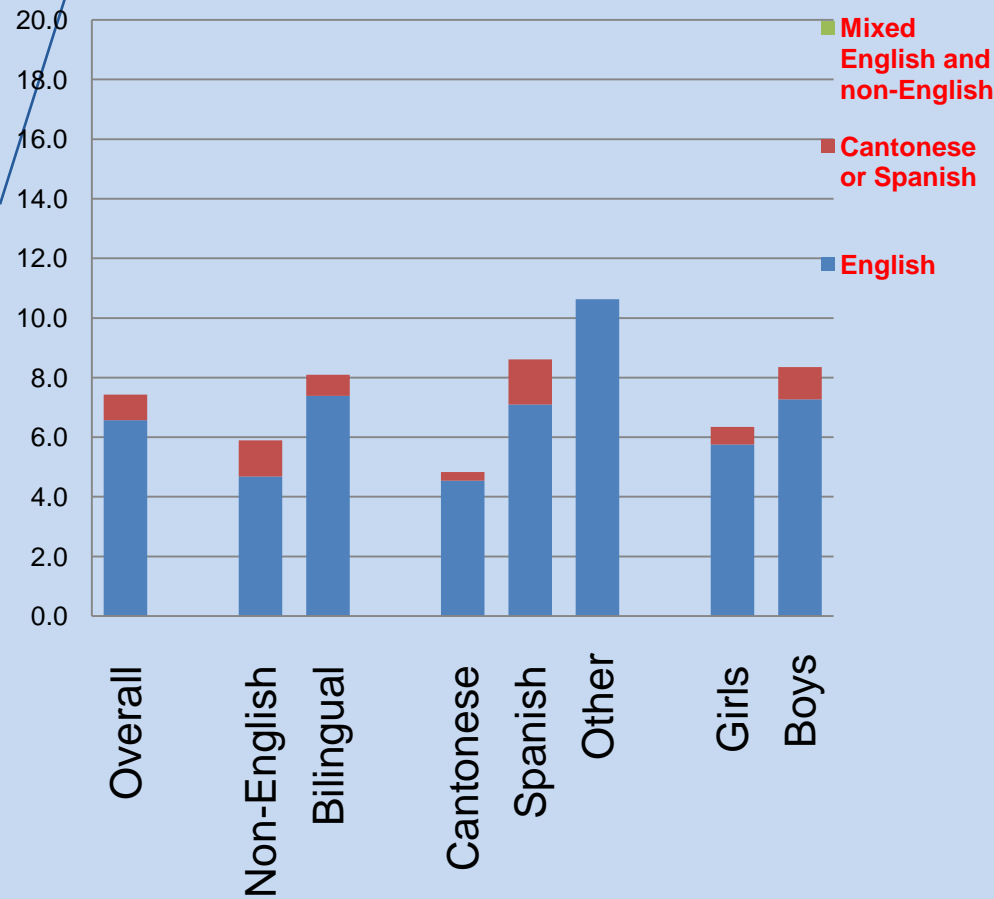
Child Talk to Teacher and Child Talk to Other Adult



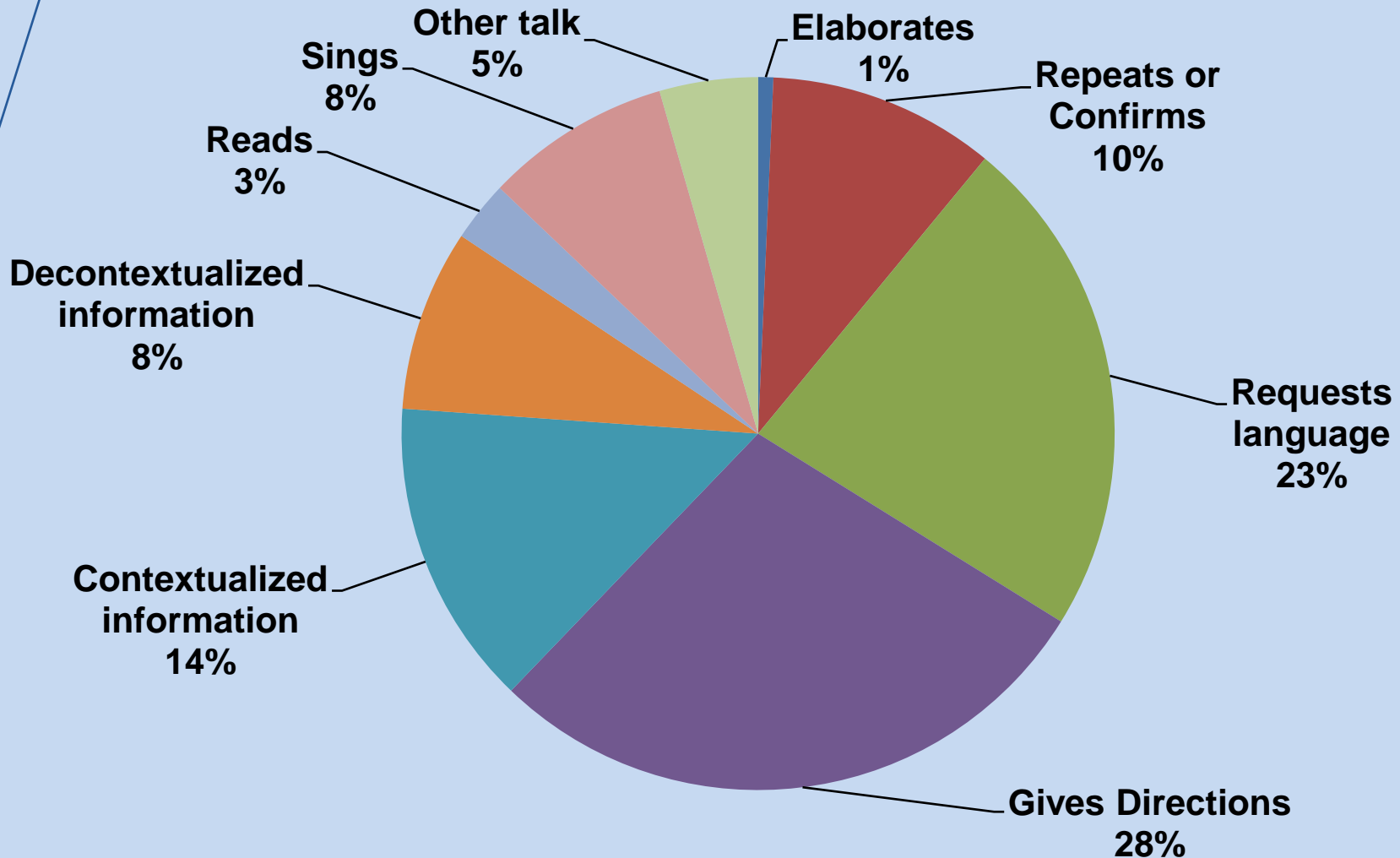
ADULT TALK



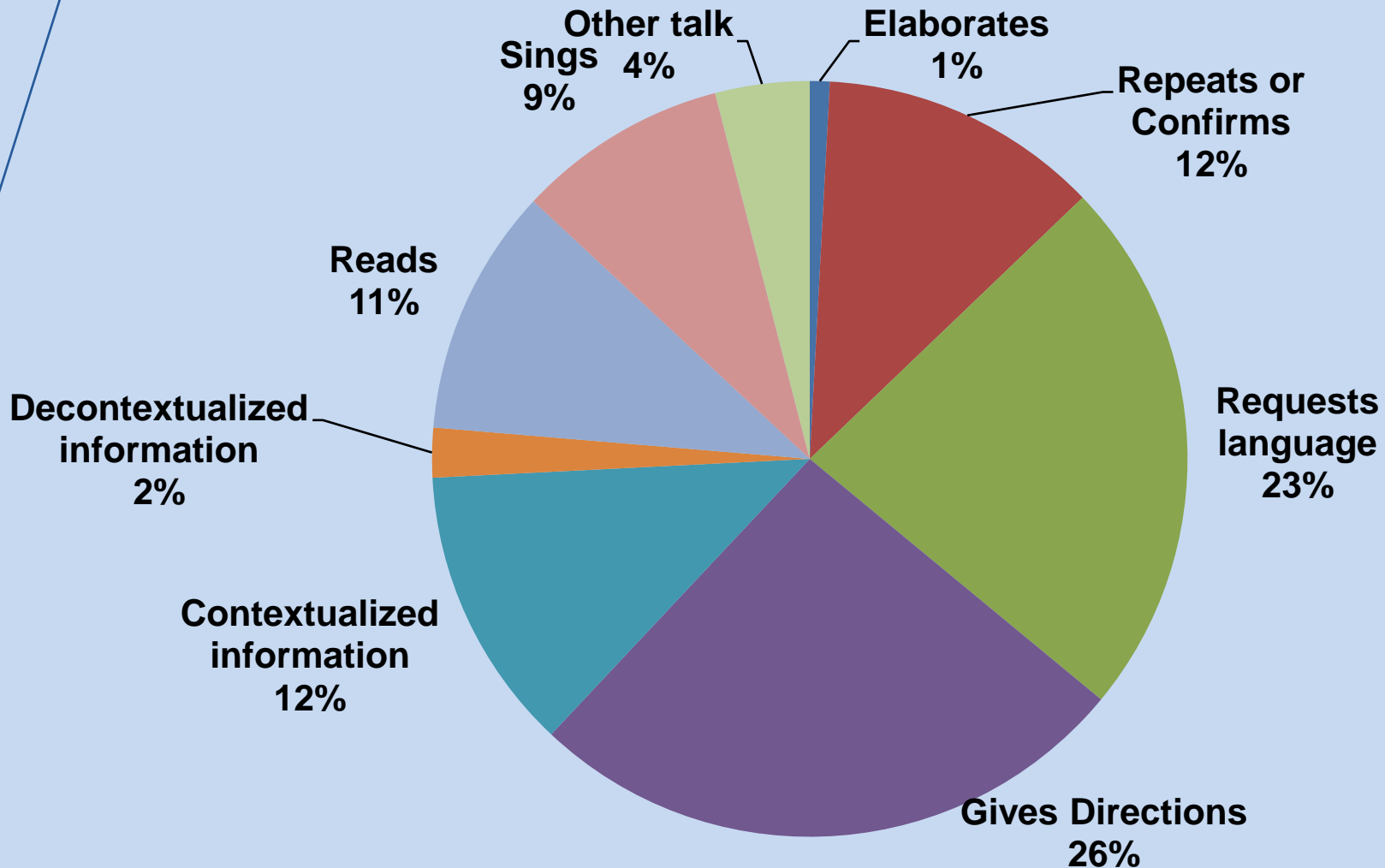
Lead Teacher Talk and Other Adult Talk



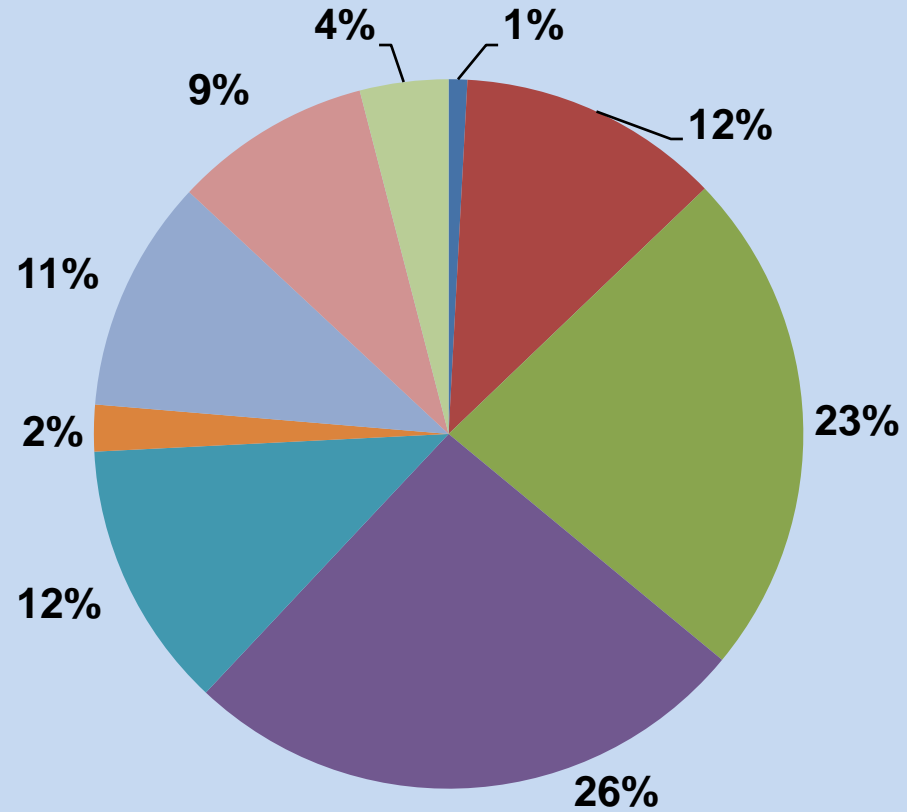
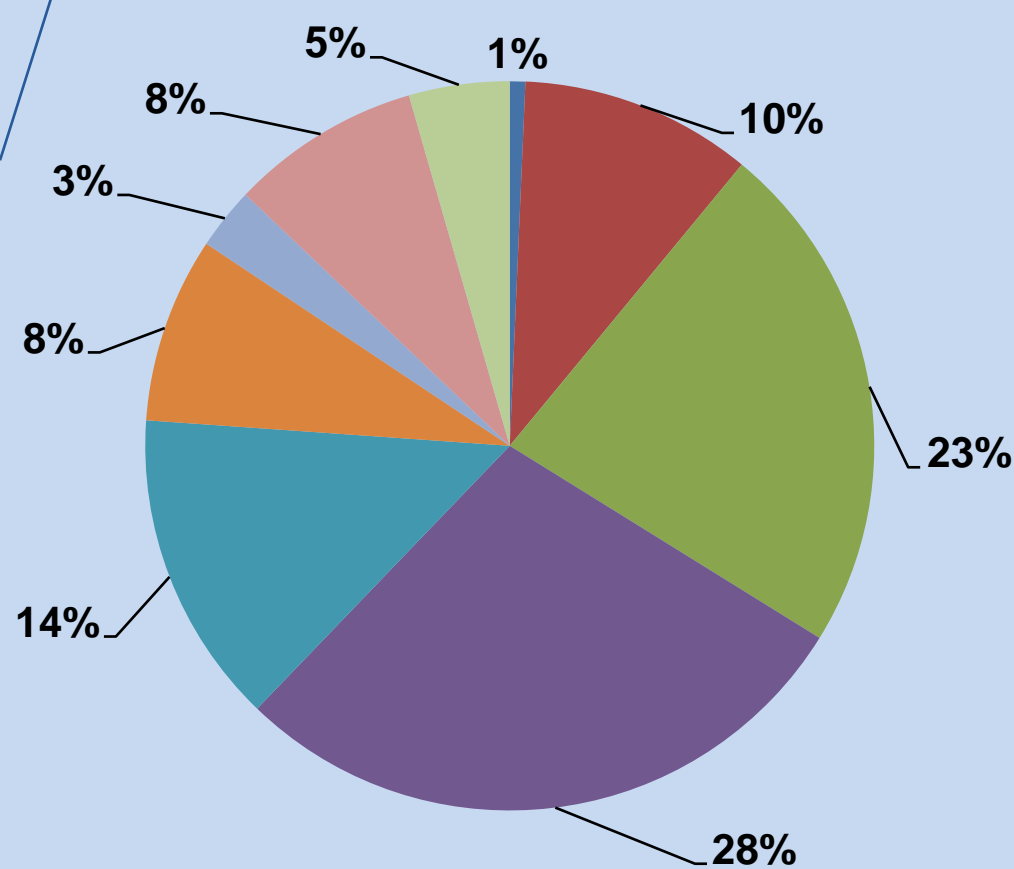
Types of Lead Teacher Talk in English



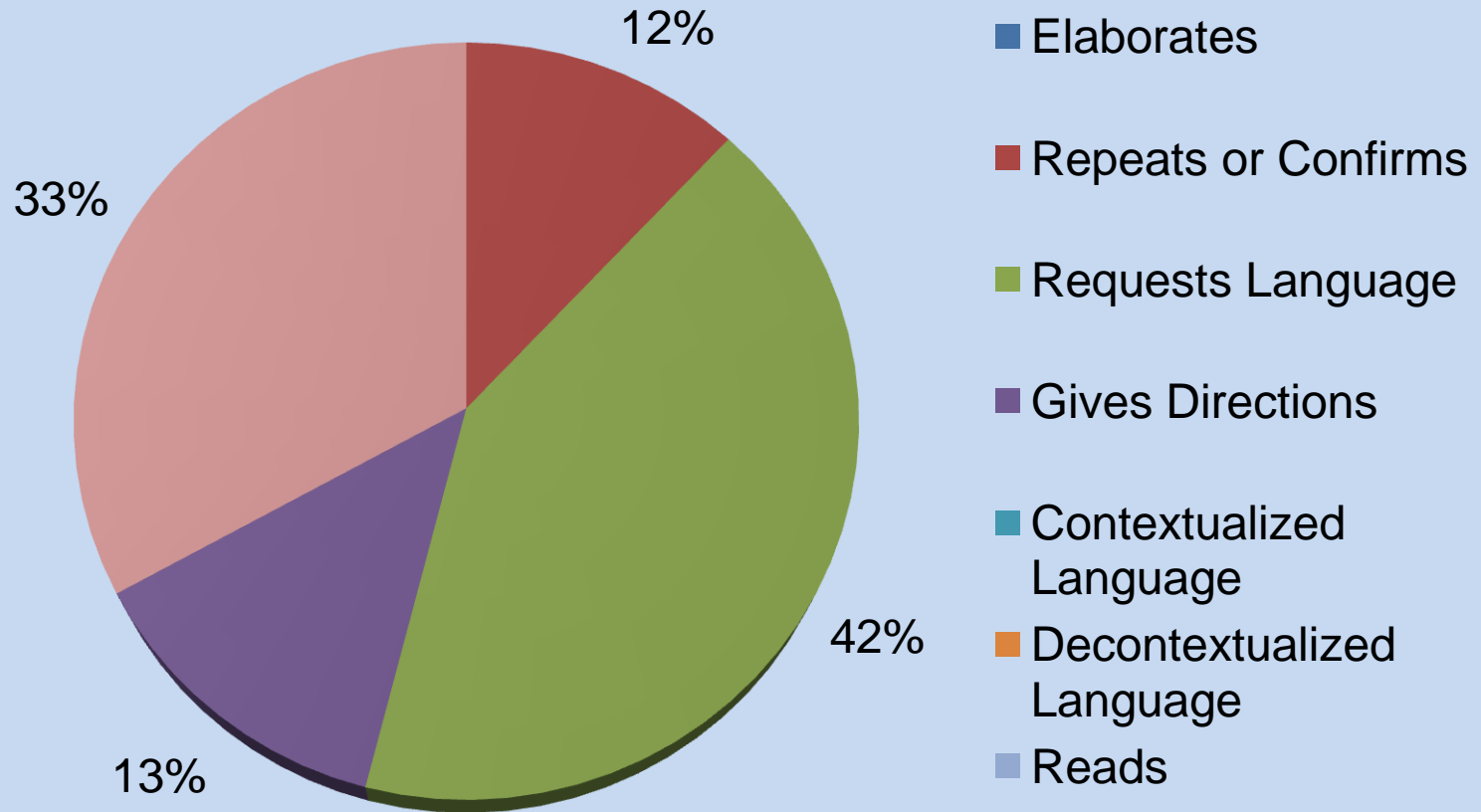
Types of Other Adult Talk in English



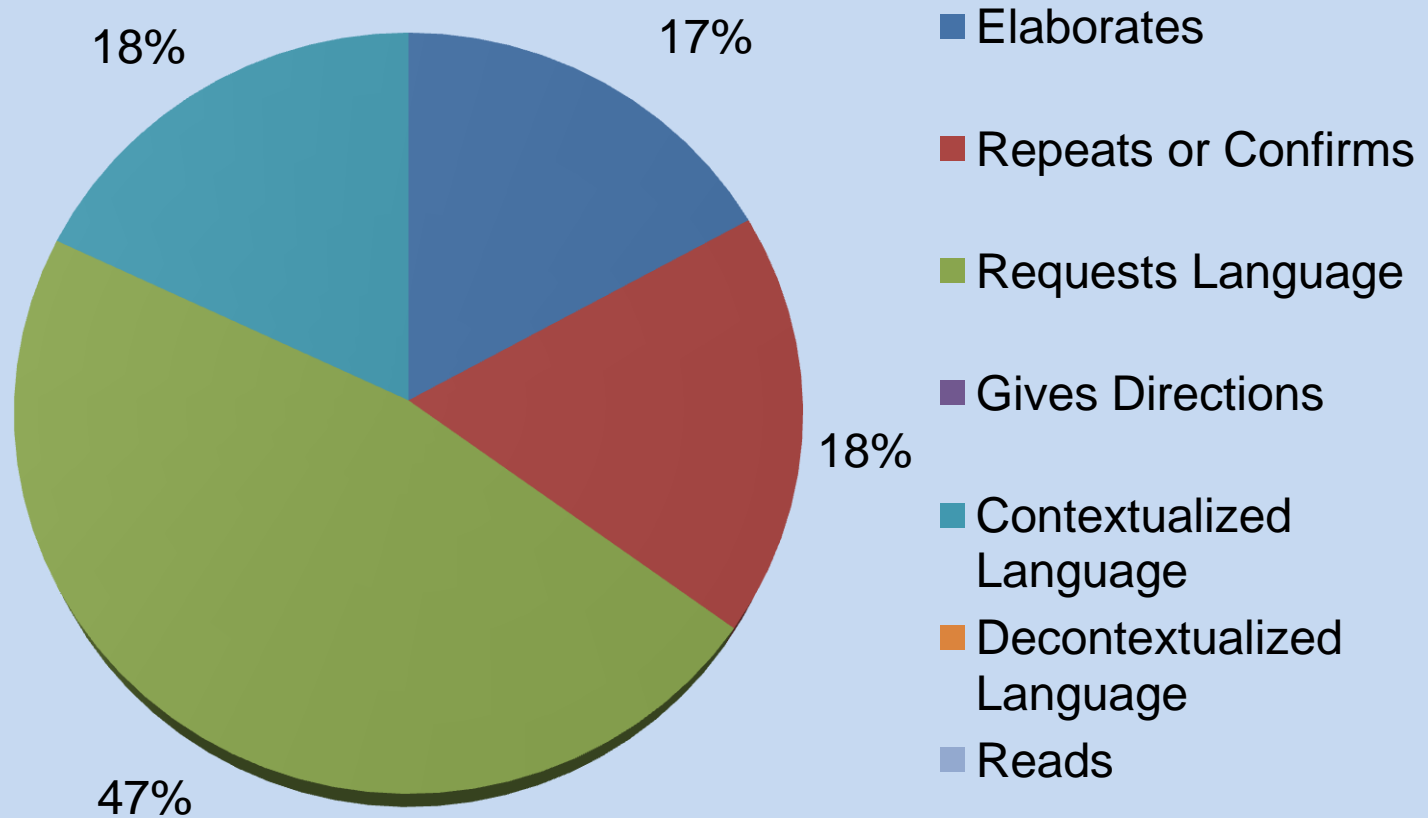
Comparing Adult Talk in English



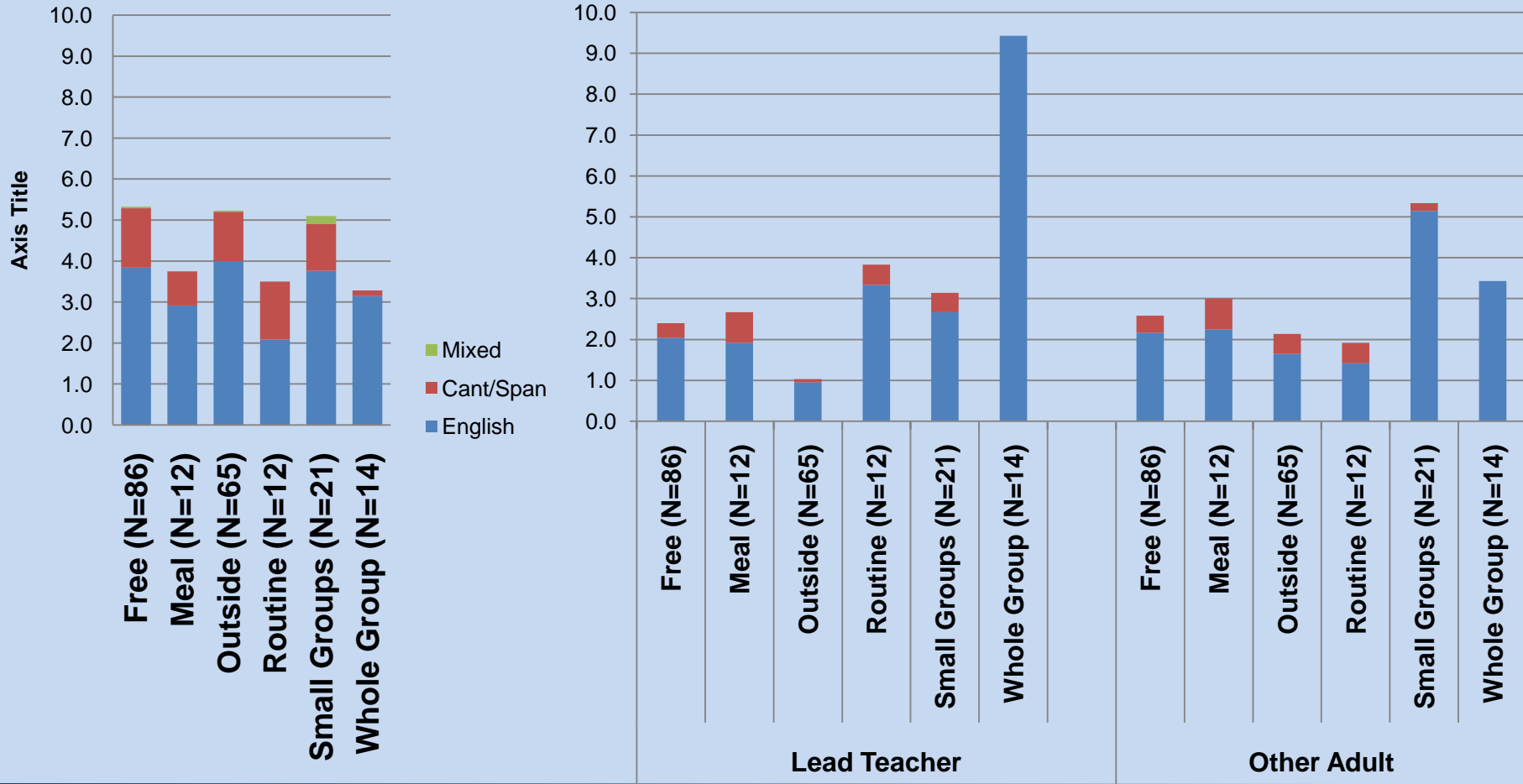
Lead Teacher Talk in Spanish



Other Adult Talk in Spanish



Who Is Talking When?



Relationship with CLASS

■ Instructional Support

- Teacher Total Talk in English ($r = .55$),
- Teacher Contextual information in English ($r = .63$)
- Teacher Gives Directions in Spanish or Other ($r = .56$)

■ Emotional Support

- Teacher Contextual Information in English ($r = .54$)
- Positive Classroom Climate is correlated with Teacher Total Talk in English ($r = .56$)

■ Classroom Organization

- Other Adult use of “other talk” in English ($r = - .62$)

CHALLENGES

- **Integration of LISn with other measures**
 - Training
 - Time
 - Focus
- **Child-focused observation may be intrusive**

