# Supporting oral language through talk moves

Theresa Pham & Lisa Archibald, University of Western Ontario

tpham62@uwo.ca tpham62

# Introduction------

- Classroom talk could provide a language-rich environment for language and literacy development<sup>1</sup>
- But, 'getting kids to talk' can be difficult
- Teacher-led discussion<sup>2</sup>
- Focused on recitation and right answers<sup>3</sup>
- Talk moves are conversational tools and sentence starters that teachers (and students) can use to promote academic conversations and equitable participation<sup>4</sup>:

Goal	Talk Move	S
1. Students <b>share</b> ideas	Say More	"Τ
2. Students listen carefully	Repeat	"V
3. Students <b>explain</b> their reasoning	Support	"⊢
4. Students think with each other	Agree/Disagree and Why	"C w

### **Research Questions:**

- Are teachers' using talk moves in their current practice?
- 2) Is the use of talk moves by teachers related to the quality of students' language skills and participation?

**Participants**: Secondary data analysis<sup>5</sup>. 209 math lessons from 21 teachers (15 primary grades; 8 female teachers)

### **Procedure**:

- Minimal professional development on talk moves (e.g., reading materials provided)
- Teachers involved in larger study to develop TalkBack application
- Teachers recorded and uploaded math lessons to TalkBack application Coding:
- Coded talk moves by goals<sup>4</sup> for teachers and students:

Goal	Talk Move(s)
1. Students share ideas	Say More; Wait; Partner Tall
2. Students listen carefully	Repeat
3. Students explain their reasoning	Support/Evidence; Challeng
4. Students think with each other	Agree/Disagree and Why; A
Evaluation moves	Evaluates response as corre

Students' responses

- Language: mean length utterance, mental state verbs, sentence complexity
- Participation: different students, relative participation

### entence Starter

- ell me more..."
- Vho can repeat that?"
- low do you know?"
- Do you agree or disagree, and

### ; Revoice

e/Counterexample dd On ect/incorrect

# Analysis-----

- Random effect = teacher

# 

### Variable Are teachers already using talk moves? Teachers (per 1 Teachers used more talk moves than evaluation moves Talk moves Goal 1 Goal 1 > Goals 3 and 4 > Goal 2 Goal 2 Goal 3 Are students' responses and participation influenced by Goal 4 **Evaluation** m teachers' talk moves? Students (per 1 Talk moves, especially from Goal 4, linked to students' use Mean length of mental state verbs, complex sentences, and different per turn Mean state students participating Sentence co Goal 2 was negatively associated with relative student Talk moves **Different stu** participation participating Age was negatively associated with different students **Relative stud**

- participating

# **Conclusion--**

### 1) Are teachers already using talk moves?

## 2) Is use of talk moves by teachers related to the quality of students' language skills and participation?

- sentences, but not longer sentences
- indexing equitable participation

**Clinical Implications:** Results from our study can help teachers as well as clinicians and parents encourage rich conversations with talk moves





# $SSHRC \equiv CRSH$

Bayesian linear mixed effects model<sup>6</sup>. Strong evidence would be indicated by a credible effect Fixed effects = talk moves type and age group

Separate analysis for each student response variable

• Yes! Teachers are using talk moves in their practices • We can encourage teachers to increase the frequency of and deliberate use of talk moves to promote rich conversations in class

• Yes! When teachers used talk moves, especially from goal 4 (e.g., Agree/Disagree; Add On), students used more complex words and

• Talk moves was also related to more different students participating,



riable	Younger group: Grades 4-5	Older group: Grades 6-12
achers (per 10 turns)	n = 15 teachers	n = 6 teachers
Talk moves	4.9 (4.0)	2.1 (0.7)
Goal 1	2.1 (1.8)	0.9 (4.0)
Goal 2	0.3 (0.2)	0.1 (0.1)
Goal 3	1.4 (1.4)	0.7 (0.2)
Goal 4	1.1 (0.7)	0.4 (0.3)
Evaluation moves	0.8 (0.6)	0.8 (0.5)
<i>udents</i> (per 10 turns)		
Mean length utterance	7.53 (2.26)	5.89 (9.2)
per turn		
Mean state verbs	3.2 (1.4)	2.3 (1.0)
Sentence complexity	3.1 (1.5)	2.3 (0.8)
Talk moves	1.0 (0.3)	1.3 (0.2)
Different students	2.2 (0.8)	1.4 (0.8)
participating		
Relative student	4.6 (0.4)	4.6 (0.2)
participation		

### References

1. García-Carri´on, R., & Villard´on-Gallego, L. (2016). Dialogue and interaction in early childhood education: A systematic review REMIE – Multidisciplinary Journal of Educational Research, 6(1), 51-76. https://doi.org/10.17583/remie.2016.1919. 2. Dickinson, D. K., Darrow, C. L., & Tinubu, T. A. (2008). Patterns of teacherchild conversations in head start classrooms: Implications for an empirically grounded approach to professional development. Early Education and Development, 19(3), 396–429. https://doi.org/10.1080/10409280802065403. 3. Mehan, H., & Cazden, C. (2015). The study of classroom discourse: Early history and current developments. In L. B. Resnick, C. Asterhan, & S. N. Clarke (Eds.), Socializing intelligence through academic talk and dialogue (pp. 13–36). Washington, DC: American Educational Research Association. 4. Michaels, S., & O'Connor, C. (2017). Supporting scientific and engineering practices through talk. In C. V. Schwarz, C. Passmore, & B. Reiser (Eds). Helping students make sense of the world using next generation science and engineering practices (pp. 311-336). National Science Teachers Association 5. Suresh, A., Jacobs, J., Harty, C., Perkoff, M., Martin, J. H., & Sumner, T. (2022). The TalkMoves Dataset: K-12 Mathematics Lesson Transcripts Annotated for Teacher and Student Discursive Moves. arXiv.Org. https://doi.org/10.48550/arxiv.2204.09652. 6. Morey, R. D., Hoekstra, R., Rouder, J. N., Lee, M. D., & Wagenmakers, E. J. (2016). The fallacy of placing confidence in confidence intervals. Psychonomic Bulletin & Review, 23(1), 103–123. https://doi.org/10.3758/s13423-015-0947-8

Disclosure Statement: All authors, no conflict of interest