

Optimizing Learning Opportunities for Students

Carol M. Connor
Ashley Adams
Deborah Vandell
University of California, Irvine

The Early Learning Network is funded by the Institute of Education Sciences.

Acknowledgements

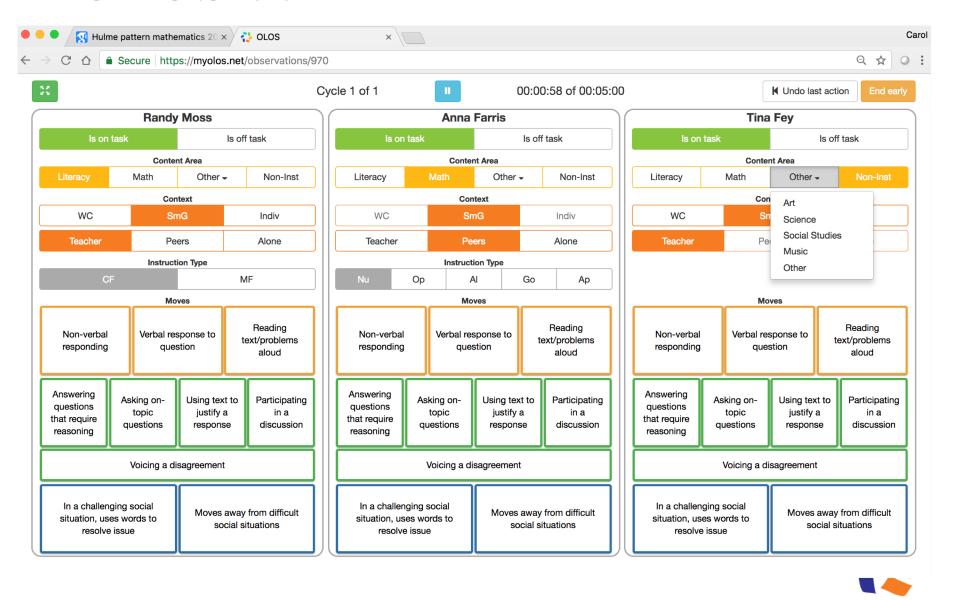
- NICHD, OIT and IES Grants: R305N160050, R305B070074, and R305A160399
- Parents and teachers
- ISI lab and collaborators
- Dr. Connor has an equity interest in Learning Ovations, a company that may potentially benefit from the research results. The terms of this arrangement have been reviewed and approved by the University of California, Irvine in accordance with its conflict of interest policies.

Overview

- Overview of Kindergarten Feasibility Findings
- Brief presentation of new teacher report graphs



OLOS beta



Kindergarten Literacy Findings

- 48 students in eight classrooms in two Title I Schools
 - Data for 6 students per classroom coded from video for the entire duration of the observation (average length: 1 hour, 11 minutes)
 - Children observed 3 times (Fall, Winter, Spring) for entire literacy block
 - 1 English immersion classroom
 - Approximately 70% of children classified by schools as DLLs
- Average class size = 21
- One teacher per classroom



Kindergarten Findings - Duration

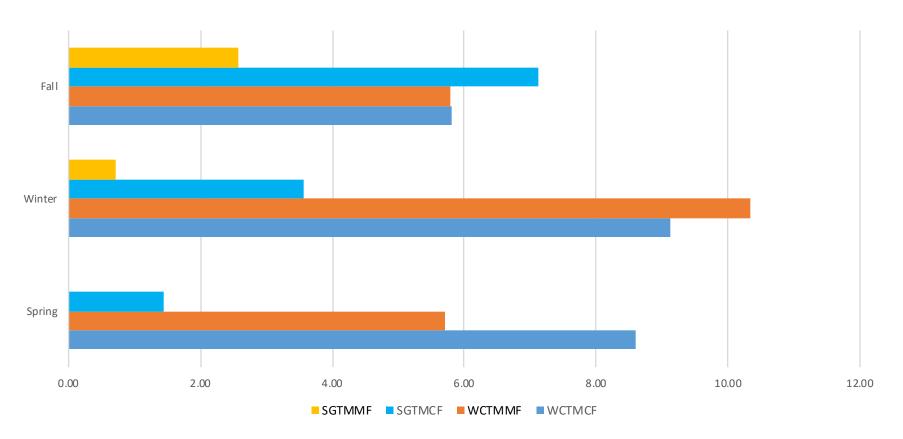
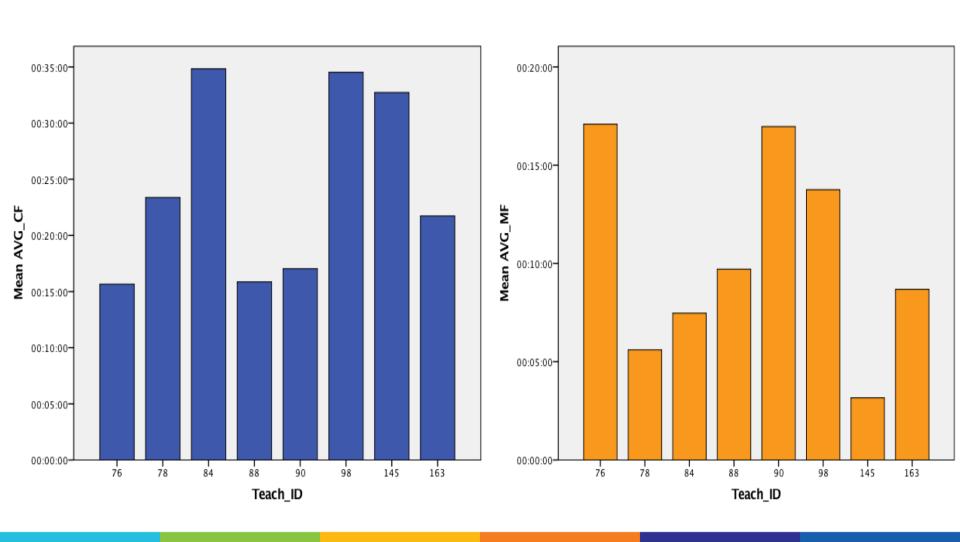
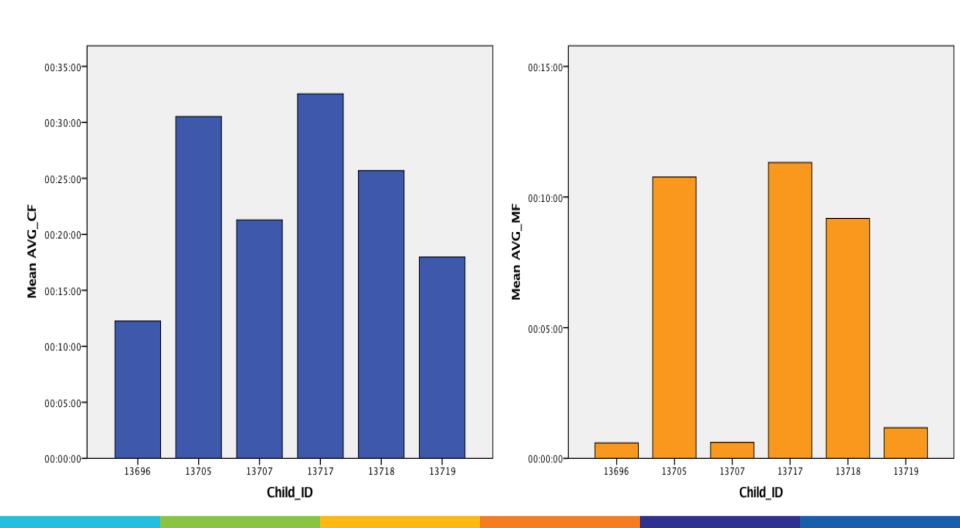


Figure 1. Mean amounts of children's literacy instruction with their teacher (TM) by context – Whole Class (WC) and Small Group (SG), content – Meaning focused (MF) and Code focused (CF), and season – fall, winter, and spring.

Kindergarten Findings – Duration Between Classroom Variation



Kindergarten Findings – Duration Within Classroom Variation



Kindergarten Findings – Talk Frequency

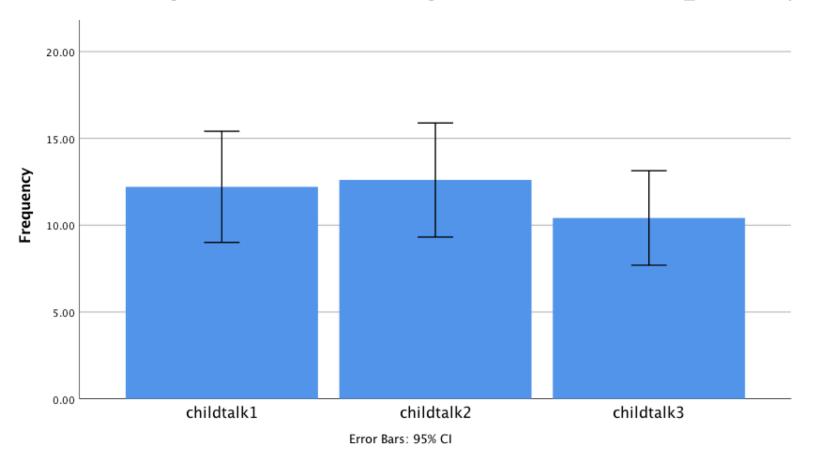


Figure 2. Mean frequency of child talk in the fall (childtalk1), winter (childtalk2) and spring (childtalk3).





OLOS Reports

Participation moves summary (mock up)

Content

Context

Management

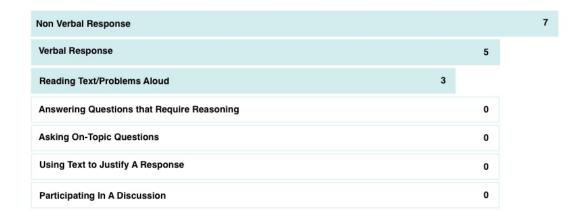
Participation

Need Help?

Summary:

Student was observed for 30 minutes last October 12, 2018. This is student's frequency in participation across all subjects.

Participation



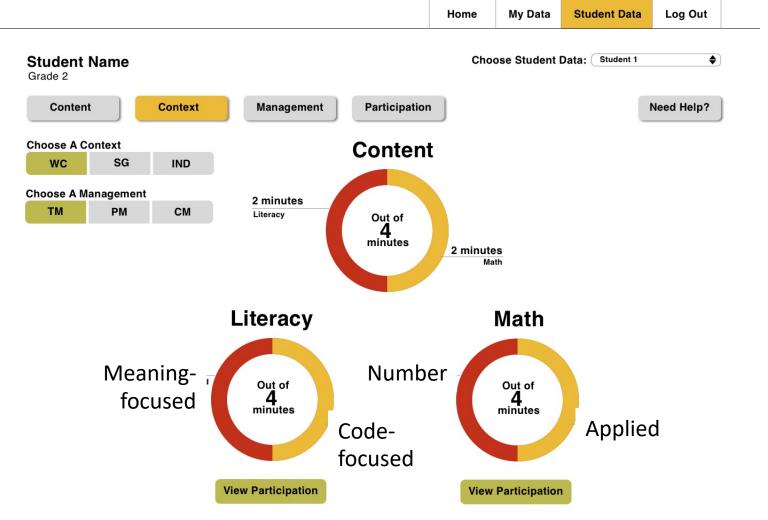
View More Data

Report by Content

Student Data Log Out My Data Home • **Student Name** Choose Student Data: Student 1 Grade 2 Participation Need Help? Content Management Context Content Summary: Student was observed for 30 minutes last October 10 minutes 10 minutes 12, 2018. This is student's Math overall breakdown in Literacy Out of content. 30 minutes 10 minutes Non-instruction **View More Data**

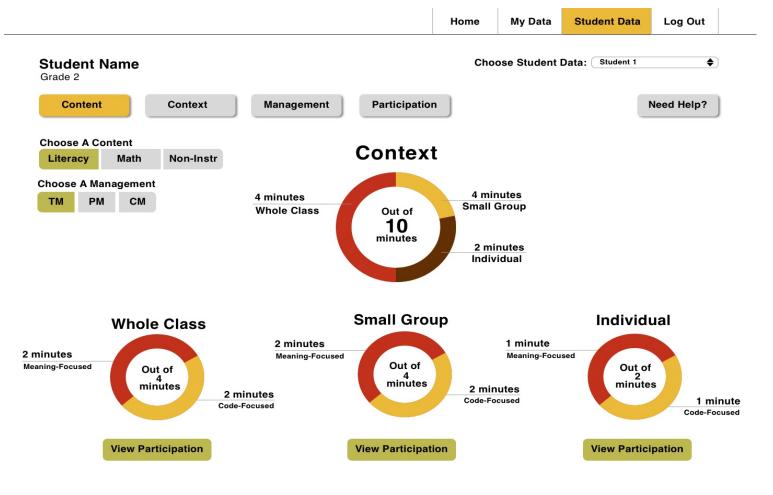


Report by Content



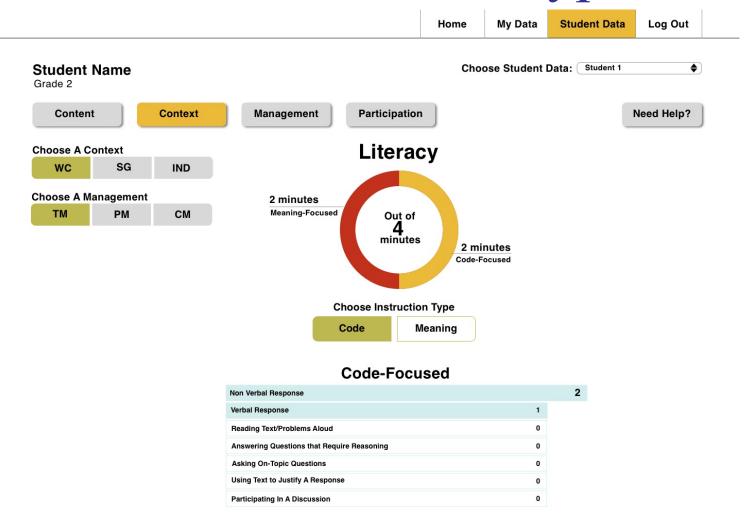


Report by Content (Literacy with teacher) and Context (Grouping)





Participation moves embedded in content/context type





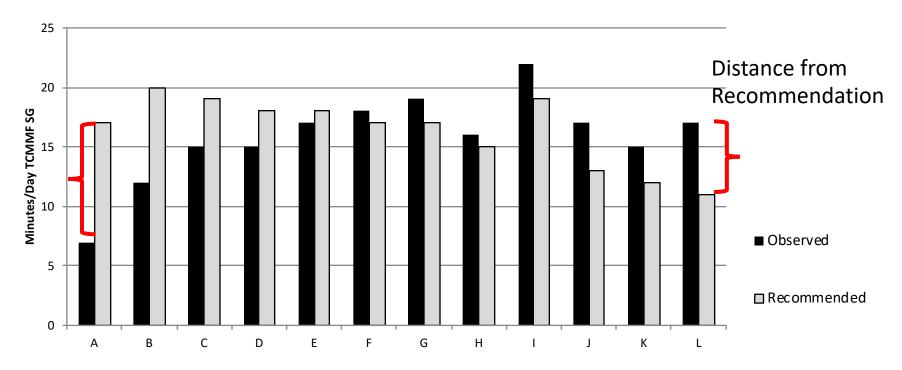
Summary

- Observing classroom with OLOS is feasible in kindergarten and observations pick up on substantial variability between and within classrooms
- Predictive Validity Study is ongoing and links to child outcomes are TBD
- Interactive report mockups are ready and next steps involve getting feedback from Network and School partners and then incorporating prototype versions into OLOS to test usability

Child Talk Codes – 2nd and 3rd Grade

	Frequency	Loadings		
Student Talk Type	of talk	Main	Part	Part2
Participating				
Non-verbal responding (raising hand, thumbs up/down,				
shaking head yes/no)	4.99 (5.92)	1	1	
Verbally answering simple "wh", yes/no, and choice				
questions (single child)	1.90 (4.29)	0.94	0.83	
Reading text aloud	0.59 (1.72)	0.76	0.20	
Generative				
Answering questions that require thinking or reasoning	0.35 (.90)	1.54		1
Asking simple, on-topic questions	0.09 (0.40)	1.33		-1.45
Using text to justify a response	0.03 (0.25)	1.81		1.60
Off-topic generative participation	0.07 (0.36)	1.95		-1.68
Participating in a discussion	0.08 (0.35)	1.55		0.13
Voicing a disagreement	0.00 (0.07)	2.60		0.03
TOTAL Mean Frequency Score (unscaled)	8.55 (0.22)			
Factor variance		0.26	0.29	0.10

3rd Grade TCM Small-group Meaning-focused DFR -ISI



Connor, C. M., Morrison, F. J., Fishman, B., Giuliani, S., Luck, M., Underwood, P., . . . Schatschneider, C. (2011). Classroom instruction, child X instruction interactions and the impact of differentiating student instruction on third graders' reading comprehension. *Reading Research Quarterly*, 46(3), 189-221.

Connor, C. M., Piasta, S. B., Fishman, B., Glasney, S., Schatschneider, C., Crowe, E., . . . Morrison, F. J. (2009). Individualizing student instruction precisely: Effects of child by instruction interactions on first graders' literacy development. Child Development, 80(1), 77-100.

First Grade: Distance from Recommendation Predicting Reading standard scores

