

### Introduction

- SLPs at the Upper Grand District School Board (UGDSB) developed a literacy based intervention program called Language Intervention Through Engaging Stories (LITES).
- Pilot study: standardized language pre and post-intervention measures did not capture the changes in language ability that SLPs were noticing in participants<sup>1</sup>. **A task more sensitive to short-term, iterative change in narrative skills was needed.**
- The program gathered a language sample during assessment using One Frog Too Many<sup>2</sup>. **An equivalent measure for re-test was needed.**
- **A practice-based research partnership was formed to address these questions.**

#### Substudy 1

- Are One Frog Too Many and Frog Goes To Dinner<sup>3</sup> equivalent measures of narrative retell?
- To what extent is performance on these narrative tasks related to measures of language and non-verbal cognition?

#### Substudy 2

- Are the narrative tasks sensitive to changes in language ability of children who have received the intervention?

### Methods

#### Substudy 1

##### Participants:

- Control: 11 participants ages 5;0 to 10;6
- LITES program: 16 participants ages 5;3 to 8;2

##### Standardized Measures:

- CELF<sup>4</sup>, the MASA<sup>5</sup> and the WASI<sup>6</sup>.

##### Narrative Retell Tasks:

- One Frog Too Many and the Frog Goes To Dinner, one week apart, order varied.

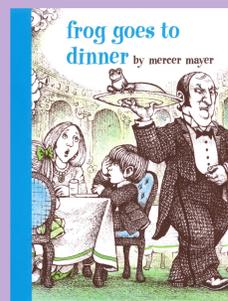
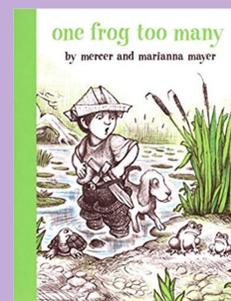
#### Substudy 2

##### Participants:

- Existing data from 66 participants ages 4;9 to 6;0 who participated in the LITES program was analyzed.

##### Narrative Retell Tasks:

- All participants had undergone a pre and post-intervention narrative retell task. (One Frog Too Many and Frog Goes To Dinner, order varied)



### Results

#### Substudy 1:

##### Comparing narrative retell tasks

Measure	OFTM Mean	FGTD Mean	t value	p value
% Main events	56%	49%	0.5	n.s.
% Supporting events	29%	31%	0.9	n.s.
Total number of utterances	21	24	0.9	n.s.
MLU	8.3	8.0	0.5	n.s.
% Grammatically correct utterances	88%	85%	0.5	n.s.
% Accuracy on questions	68%	72%	0.8	n.s.

##### Correlations between narrative retell and standardized measures

	CELF CLS	MAVA-E	MAVA-R	WASI-BD	WASI-MR
% Main Events	0.4*	0.7**	0.5*	0.3	0.3
% Supporting Events	0.4	0.6**	0.5*	0.1	0.2

\* $p < 0.05$ , \*\* $p < 0.01$

##### What does this mean?

- The narrative retell measures do not differ in terms of the type of language sample that they elicit.
- Performance on these tasks is correlated with standardized measures of oral language, expressive vocabulary, and receptive vocabulary.

#### Substudy 2:

##### Capturing change in language ability following intervention

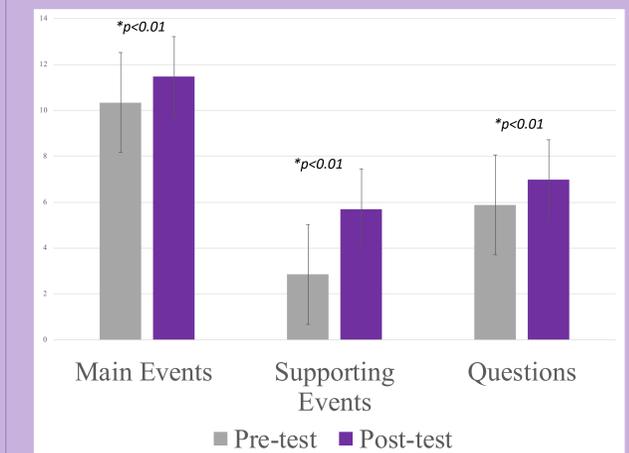


Figure 1. Comparing narrative retell task scores pre and post LITES intervention.

##### What does this mean?

- Participants performed significantly better on narrative retell tasks on post- compared to pre-intervention.
- Limitation: No control group or control measures.

### Implications

The results demonstrate the utility of narrative retell tasks as measures of change in language ability as a result of intervention. Additionally, results thus far indicate a positive improvement in language ability in children who participated in LITES, and lay the groundwork for additional studies evaluating the program.

### References

- Schouten, M & Counter, T. (2010). Literacy-based language intervention comparison project. Unpublished manuscript.
- Mayer, M., & Mayer, M. (1975). *One frog too many*. New York: Dial Books for Young Readers.
- Mayer, M. (1974). *Frog goes to dinner*. New York: Dial Books for Young Readers.
- Wiig, E.h., Semel, e., & Secord, W.A. (2013). Clinical evaluation of language fundamentals – fifth edition (CELF-IV). Bloomington, MN: NCS Pearson.
- Montgomery, J.K. (2008). MAVA: Montgomery assessment of vocabulary acquisition. *Super Duper Publications*.
- Stano, J.F. (2004). Weschler abbreviated scale of intelligence. *Rehabilitation Counseling Bulletin*, 48(1), 56.

