## MindUP with Kindergarten Children: Impacts on Behaviour, Executive Functioning, and Resiliency

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#### The MindUP Team

- Claire Crooks
- Karen Bax
- Andrea Delaney/Sue Kim
- Nicole Bullock
- Sarah Wells (Merrymount)
- Terry Spencer & Sandra Savage (LDCSB Project Leads)
- LDCSB primary division educators and elementary administrators
- Graduate students including (currently): Courtney Cadieux, Melissa Read, Emilia Pacholec







Public Health

Agency of Canada

## **Objectives**

Briefly review the MindUP program

Describe university-school board partnership to

evaluate MindUP

Share findings from evaluation





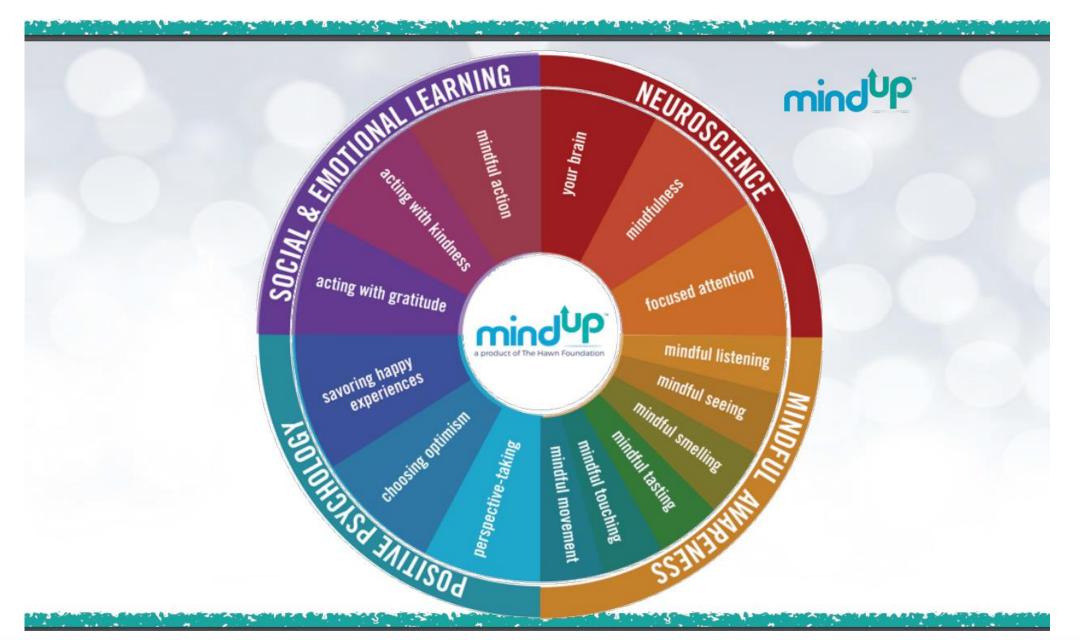




#### What is MIND ÜP™?

- Social emotional learning program
- 15 lessons
- Integration into daily teaching practice
- Importance of brain breaks





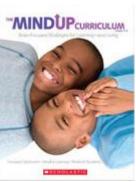




#### Research Base for MindUP

- Research-based and CASEL accredited
- Shown to:
  - reduce stress,
  - improve academic performance,
  - strengthen concentration abilities,
  - enhance perspective taking, empathy and kindness
- Supports growth mindset
- Most studies have been fairly small and focused on mid-late elementary years





# How did the university-school board partnership launch?

- Original identification of common interests
- Partnership building phase
- Engaging other stakeholders at LDCSB
- Complementary trauma-informed framework and MindUP
- Training offered each year to educators







## Research Design



	Intervention Classrooms	Comparison Classrooms
Pilot year (2016-2017)	15 JK/SK classrooms in 8 schools (235 students)	
Evaluation		
year (2017-2018)		



## Research Design



	Intervention Classrooms	Comparison Classrooms
Pilot year	15 JK/SK classrooms	
(2016-2017)		
Evaluation	35 JK/SK/Grade 1	
year	classrooms in 10 schools	
(2017-2018)	(n=467 students)	



#### Research Design



	Intervention Classrooms	Comparison Classrooms
Pilot year (2016-2017)	15 JK/SK classrooms	
Evaluation year (2017-2018)	35 JK/SK/Grade 1 classrooms in 10 schools (n=467 students)	19 JK/SK classrooms in 7 schools (n=323 students)

- Educators complete pre- and post- ratings for each child each year
- Measures for evaluation year include the BASC and the BRIEF
- Educators also complete additional surveys and participate in a focus group





#### Selection of schools

- Social Risk Index
- Interest from educators and administrators
- Other opportunities/burdens
- Considerations specific to comparison schools



#### Findings - Students

- Looked at pre-post ratings of:
  - Behavioural symptoms (BASC-3; two age versions)
  - Executive functioning (BRIEF-P and BRIEF 2)
  - Adaptive skills (BASC-3)
- Overall benefits in all three areas
- Educator surveys and focus groups helped provide the story behind the numbers!



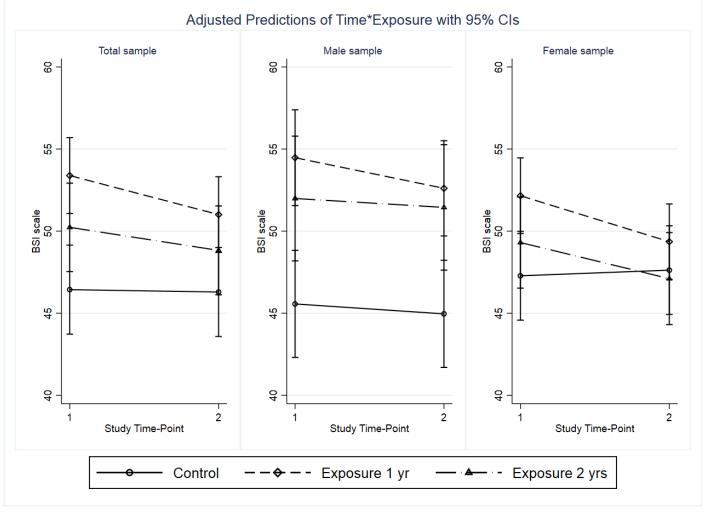
#### **Behavioural Symptoms Declined**

- Significant decrease relative to comparison classrooms
- Intervention classrooms started with much higher scores
- Boys start off with higher scores
- Decrease for both male and female students (but no interaction)
- Added value for 2<sup>nd</sup> year particularly for boys





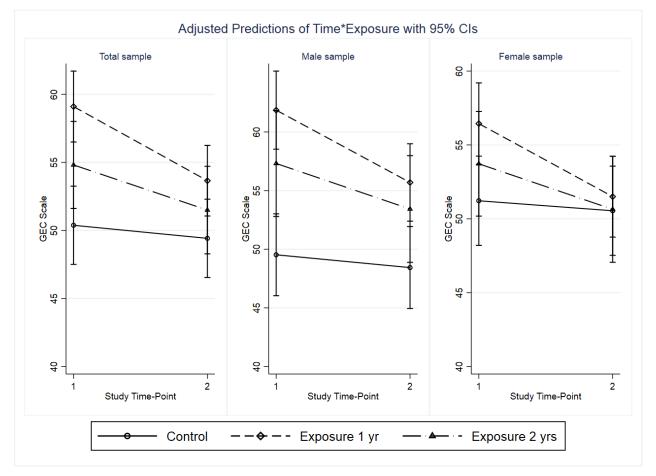
## Changes in Behavioural Symptoms







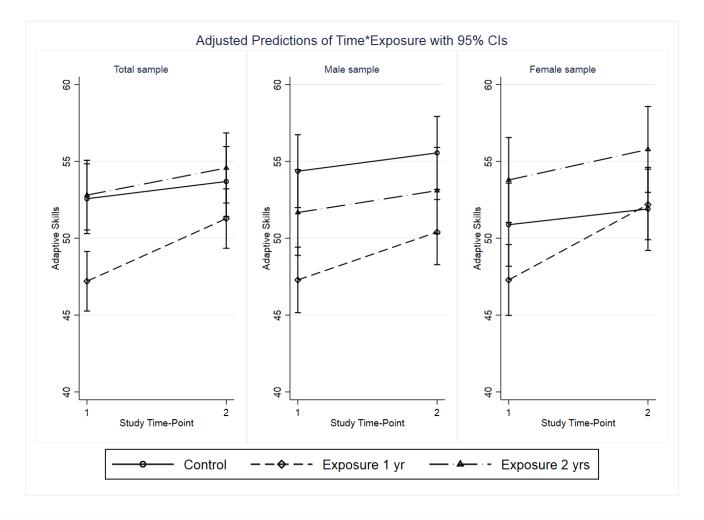
#### **Changes in Executive Functioning Deficits**







## **Changes in Adaptive Skills**





## Findings-Educators

"My students love the chime and it is like magic to calm them after lunch recess."

"There was tremendous change in the empathy that kids feel towards other kids with MindUP."



"I think it's really great in that think it's really great in that their own they can assess their own they can assess their own they can a different way." behaviour in a different way.

"Kids love learning about their brain and how it works. I even got some feedback from a parent that said their child has been discussing his amygdala with them."





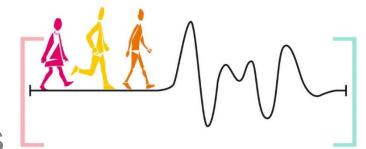






## Research & Evaluation Challenges

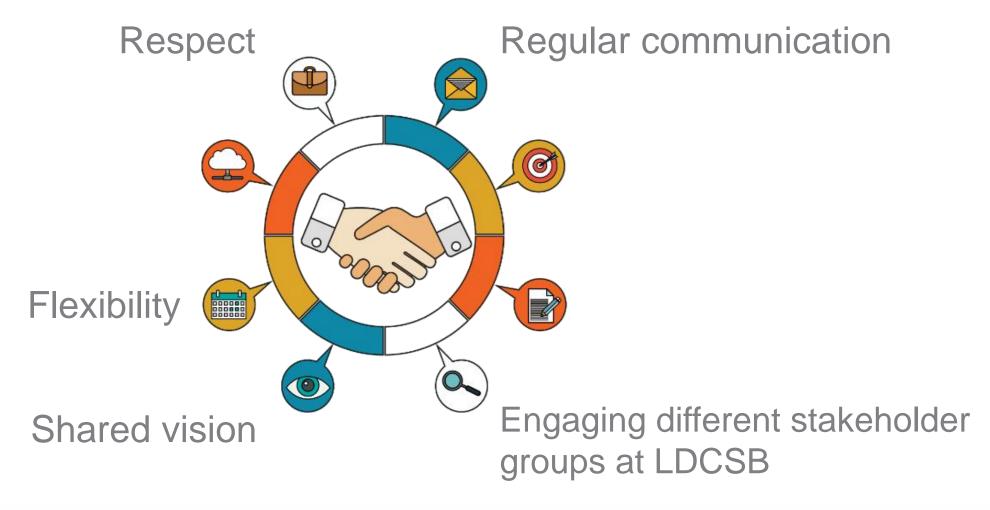
Implementation fidelity



- Tracking students across schools and districts
- Ensuring buy-in from subsequent cohorts of educators
- Easy to lose a whole class by having one teacher who is unavailable to complete measures
- Potential labour disruption for 2019-2020 year



#### Partnership Success Factors







## Summary

- First year demonstrated strong feasibility
- Second year decreases in behavioural symptoms and executive functioning deficits
- Added benefit of two consecutive years of programming
- Qualitative data from teachers helps tell the story







#### **The Path Ahead**

- Continuing to follow students this year and next
- Adding EQAO results and learning skills (from report cards)
- Adding self-report measures in grade 3
- Focus on building sustainability
  - Training for comparison schools
  - Development of video story
  - Development of local trainers







#### **Questions and Comments?**



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Research information: <a href="https://www.csmh.uwo.ca/">https://www.csmh.uwo.ca/</a>



