

Ready4K

**Text messages
to boost your
child's learning.**



Supporting summer learning and breaking new intellectual ground with evidence-based text messages for parents

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Large systematic differences

- Economically disadvantaged birth-to-two year olds
 - Experience less responsive and stimulating care than their more advantaged counterparts (Bradley, Corwyn, McAdoo & García Coll, 2001)
- From one to three years
 - 1/60th the amount of number talk (Levine, working paper forthcoming)
- By the age of four
 - These children hear 30 million fewer words at home (Hart & Risley, 1995)

Long-term consequences

- Strong links
 - Children's early experiences at home and their development of motor, social, emotional, literacy, and numeracy skills (Anderson, 2006)
 - Critical for success later in life (Heckman, 2006)

Existing approaches have strengths and limitations

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- Parenting workshops
 - Place significant demands on parents' time and effort
 - Participation rates below 50% and dropout rates as high as 50% (Brotman et. al, 2011)
 - Parents who likely need the most support drop out with the highest frequency (Prinz & Miller, 1994)
 - Parents receive a lot of information at once that is difficult to remember and put into practice
- Pediatric clinic-based programs are low touch
- Home visitation programs can cost upward of \$10,000 per family (Aos, Lieb, Mayfield, Miller & Pennucci, 2004)

We complement existing approaches

- Break down the complexity of engaged parenting into small steps that are easy to achieve
- Provide helpful information, encouragement, and support to parents every week, from birth to third grade
- Leverage technology to reach as many parents as possible

Text messaging is currently the ideal technology (see Pew Research)

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- 97% of American adults under 50 have cell phones
- 98% of cell phone owners can access texts
- Texts have a 98% open rate
- Traditionally under-served adults text with the highest frequency
- Easy to implement and scale
- The 160-character constraint ensures that information is broken down into bite-sized pieces

Texting also has proven efficacy in numerous applications

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- Healthcare
 - Weight loss (Patrick et al., 2009)
 - Medication regimen adherence (Petrie, Perry, Broadbent & Weinman, 2012)
 - Glycemic control (Yoon & Kim, 2008)
 - Smoking cessation (Rodgers et al., 2005)
- Education
 - College matriculation (Castleman & Page, 2013)
 - Grade point average (Bergman, 2014)

- Text messaging curriculum for parents
 - Support parents' default home engagement behaviors
 - Exploit everyday learning opportunities in fun and easy ways
 - Draws on research in child development, positive parenting, and adopting healthy behaviors
 - Well-established curriculum design principles, such as “shaping” and “spiraling”
 - Aligned to state early learning standards (including WMELS)
 - Addresses the whole child from birth to 3rd grade
 - Available in English & Spanish

3 texts per week

Monday:
FACT

Inform and
motivate
parents

Wednesday:
TIP

Activities that
build on family
routines

Friday:
GROWTH

Reinforce,
encourage
and extend

Example week of texts

- **FACT:** Before children can learn how to read and write, they need to know the letters of the alphabet. Letters are the basic building blocks of written language.
- **TIP:** At breakfast, hunt for the first letter in your child's name on the cereal box. Who can find it first? Can your child find all of the letters in their name?
- **GROWTH:** Keep hunting for letters to prepare your child 4K! Now after your child finds a letter, ask: What sound does it make? What else makes that sound?

Example “spiral” week

- **FACT:** The grocery store is great for building literacy skills. On the way to the store, ask: If you could only eat one food forever, what would it be? Why?
- **TIP:** When you're at the store, go on a letter hunt. Can your child find an "A" on a sign, box, or food label? What about a "B"? Can they go all the way to "Z"?
- **GROWTH:** Keep preparing 4K at the grocery store! As you walk by the eggs, ask: What rhymes with egg? Leg, peg, beg. Try it with cheese. Bees, knees, please!

Stanford randomized controlled trials (RCTs)

- First RCT study*
 - Half of parents received literacy-focused texts
 - Half of parents received “placebo” texts with general district reminders (one every two weeks)
 - Parents found the texts to be very helpful (0.30-0.60 SD)
 - Parents reported engaging in more home literacy activities with their children (0.20-0.30 SD)
 - Teachers reported increased parental involvement (0.10-0.20 SD)
 - Children gained 2-3 months in important areas of early literacy

Stanford randomized controlled trials (RCTs)

- Second RCT study*
 - Half of parents received literacy-focused texts
 - Half of parents received literacy-focused texts that were personalized to their child's development level (drawing on child formative assessment data)
 - Children of parents in the personalized group
 - 12 percent more likely to reach the district's "Exceeds Expectations" benchmark than control group children
 - 50 percent more likely to advance a reading level than children in the general texting group

Breaking new ground in Wisconsin

- The role of the Wilson Sheehan Lab for Economic Opportunities (LEO), a research center at the University of Notre Dame
 - LEO's vision: Reduce poverty and improve lives through evidence-based programs and policies
 - We **partner** with social services agencies, to conduct academic-quality **evaluations**, and ultimately **inform** policymakers and service providers



WILSON SHEEHAN
LAB FOR ECONOMIC
OPPORTUNITIES



UNIVERSITY OF
NOTRE DAME

LEO Match

What providers are looking for

Programs that help those in need

Ways to improve programming

Evidence of program impact

What researchers are looking for

Programs that help those in need

Ways to improve programming

Evidence of program impact

Excess demand for services

Measurable outcomes

Scalable and replicable



Critical features

- **Scale**
 - Are there enough 4K and Head Start settings, and enough families, to run a rigorous study?
- **Design**
 - Can we randomly assign families within 4K and Head Start settings (or geographic areas) to the intervention?
- **Data**
 - Can we identify families for participation?
 - Can we link study records to outcomes data?



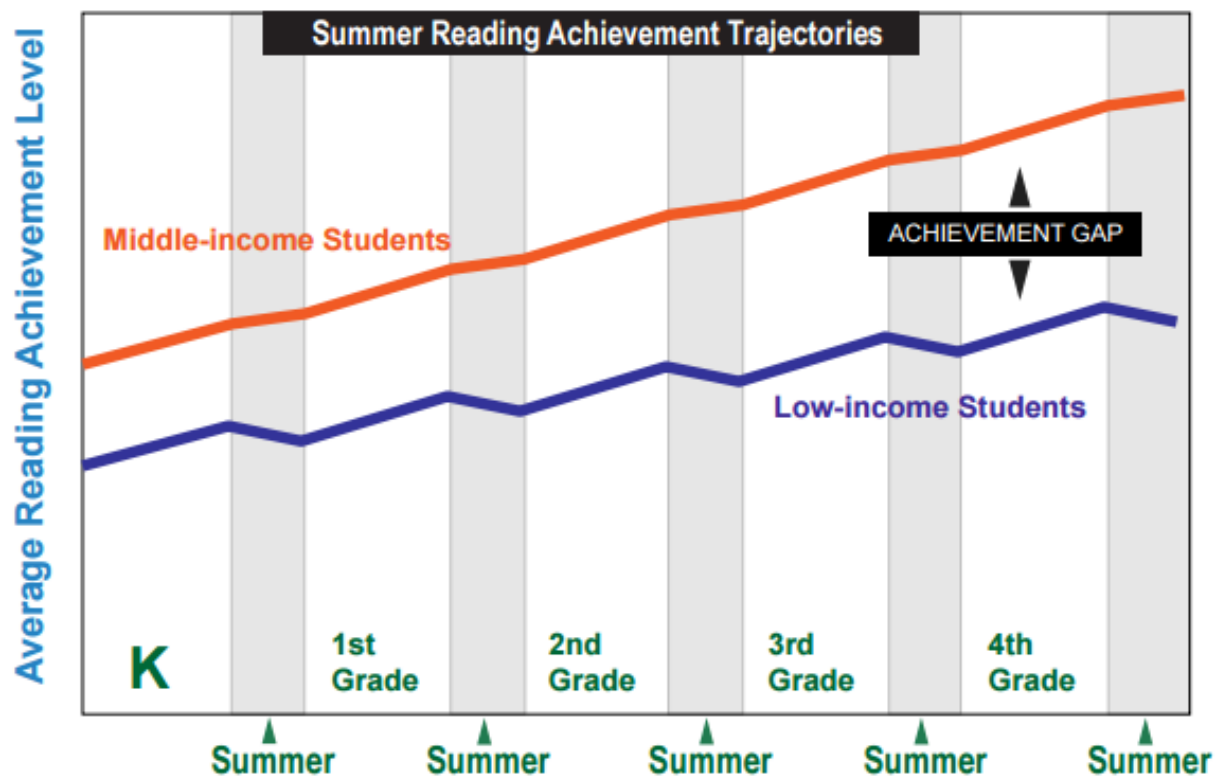
Contributing to new knowledge

- We know that children arrive at school with pronounced achievement gaps by socioeconomic status and race/ethnicity, and that early childhood matters.
- Remaining questions:
 - Can parenting interventions work at broader scale and in diverse places?
 - Do intervention effects differ across early childhood settings?
 - Do intervention effects differ by parents' beliefs or prior practices?
 - Are intervention effects persistent?



Summer learning loss

Summer Learning Loss Increases the Achievement Gap



Source: Adapted from Borman, G.D. (2000). The effects of summer school: Questions answered, questions raised. *Monographs of the Society for Research in Child Development*, 65 (1, Serial N. 260).

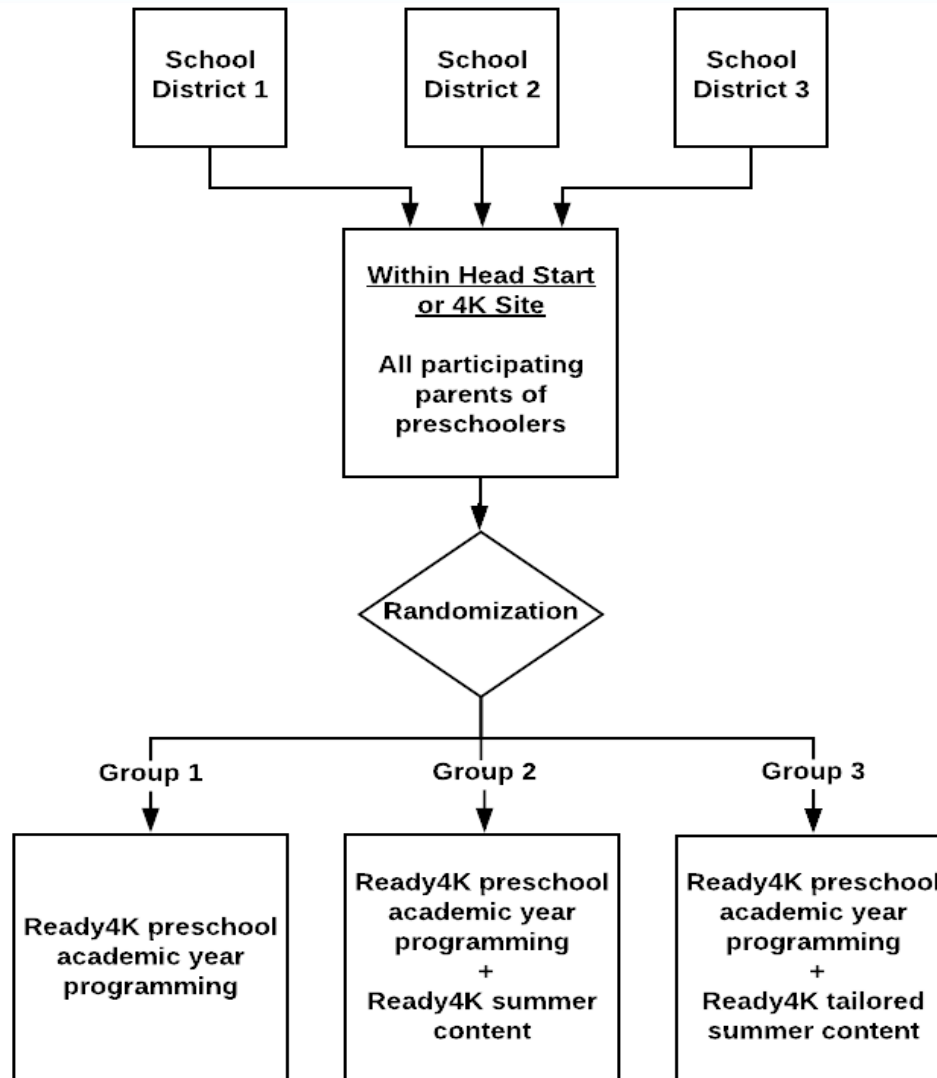


Study questions

- Innovative, new summer programming in the Ready4K model, including a tailored version
 - Does parent participation in a text-messaging program in the summer months before kindergarten impact parents' home literacy behaviors and children's kindergarten entry literacy skills?
 - Does a tailored summer program, with specific content for the geographic area, affect parents' behaviors and kindergarten entry literacy skills differentially from a general summer program?
- A large, diverse sample across large Wisconsin districts
 - Is there variation in program impact by characteristics of the preschool setting or characteristics of the child and family?
- Also, the ability to follow students' longer-term outcomes
 - Do the effects of parent participation in the program persist into the later grades?



Study design



Study components

- LEO contributes resources for staffing and travel to conduct the study with existing data sources
 - School readiness assessments administered by school districts
 - Standardized assessments in grade 3 and beyond
- LEO seeks external funding to support a parent survey
 - Home literacy practices and beliefs



Timeline

Activities	Timeframe
<i>Pre-Study Activities</i>	
Secure IRB approval, complete data agreements, and complete and register pre-analysis plan	Spring 2018
Conduct Ready4K program enrollment	Summer 2018
Conduct randomization	Summer 2018
Pilot study procedures and Ready4K summer programming supplements with rising K cohort	Summer 2018
<i>Year 1 (August 2018–July 2019)</i>	
Deliver Ready4K core program to all participating families	Fall 2018–Spring 2019
Deliver supplemental summer programming to families assigned to the two treatment conditions	Summer 2019
<i>Year 2 (August 2019–July 2020)</i>	
Collect kindergarten readiness assessment (PALS) results for entering K cohort and match to study records	Fall 2019
Conduct data analysis	Fall 2019–Spring 2020
Write, present, and disseminate study findings	Spring–Summer 2020



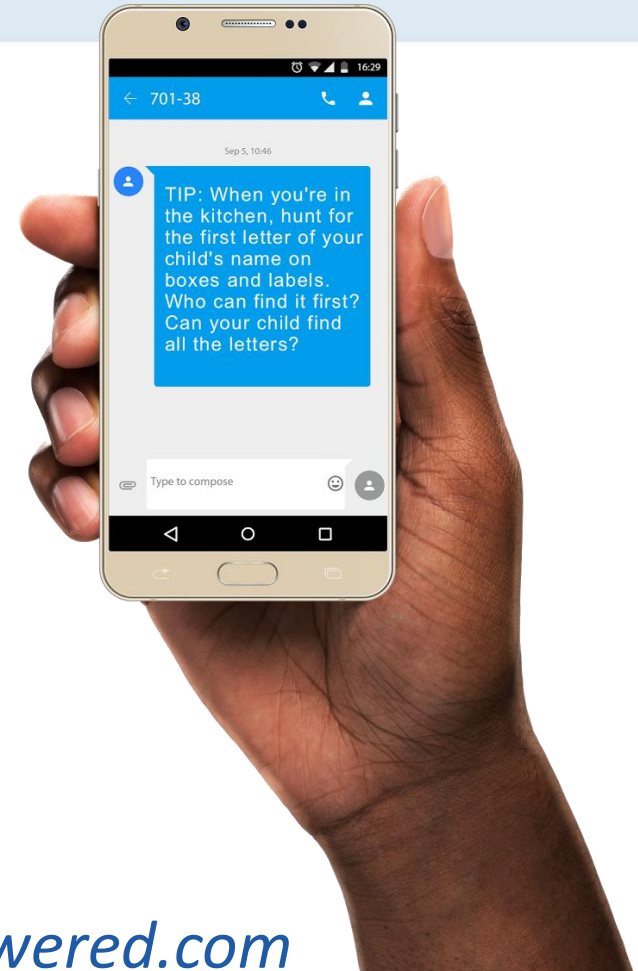
Benefits to Wisconsin families, districts, and the State

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- Families will receive valuable activity ideas and links to local resources during summer, when achievement gaps often grow, at no costs
- Each district will get comprehensive implementation support, on-going support, and a customized Ready4K program with localized links at no cost
- After the study period, districts will continue to have free access to the core version of the Ready4K program
- The State and districts will be helping to break important new research ground on how to support families during the critical summer months before kindergarten entry
- LEO and ParentPowered will provide over \$415,000 in pro bono support

Thank you!

We deeply appreciate your time and are happy to answer your questions!



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Ready4K is a program of ParentPowered Public Benefit Corporation