

# Otago

Better Serving All Children:
Partnering Parents and Teachers to
Tailor Strategies to Support Individual
Learner Needs in Reading Acquisition

Philippa Struthers, Elizabeth Schaughency, & Elaine Reese schaughe@otago.ac.nz

#### 4th Educational Psychology Forum

Massey University - Albany Albany, New Zealand 22 - 23 November 2011



# Acknowledgments – Contributors to my Knowledge Base

#### Research partners

- Academic
  - Colleagues
  - Students
- Agencies & Practitioners
   Research participants
- Children
- Families
- Staff of participating schools & agencies





Pip

### Today's Presentation

- 3 Themes
  - Theme 1. Families and schools working together to foster important developmental outcomes.
  - Theme 2. The developmental and educational research literatures as resources for practice.
  - Theme 3. Assessment informed differentiation of home support strategies.

The research literature as resource...

The Dimensions of Effective Practice Expectations Knowledge Instructional literacy strategies le arning **Effective** practice Engaging Knowledge learners of the learner with texts Partnerships

The research literature as resource...

Assessment for differentiated instruction...

Ministry of Education 2009; 2003; 2006

Families and schools working together...



### Family School Partnerships

- Big ideas from the research literature...
  - Big Idea 1. Fostering family-school partnerships is considered effective educational practice.



Alton-Lee 2003; Ministry of Education 2009



## General findings regarding family influence on achievement in New Zealand:

- Status variables (e.g., ethnicity and SES) correlate with outcome
- Structural variables less important than process and cultural capital resources

Biddulph, Biddulph, & Biddulph 2003

### Families: A natural resource





## Family School Partnerships



- Big ideas from the research literature...
  - **Big Idea 1**. Fostering family-school partnerships is considered effective educational practice.
  - Big Idea 2. Initiatives in which caregivers and school personnel collaborate to address a specific target tend to be more effective than more general initiatives.

Alton-Lee 2003; Cox 2005; Fishel & Ramirez 2005

#### Ko te reo te taikura o te whakaao marama

Literacy is the key to understanding

**Hobbs** 2003

### **Literacy:**

An Important Developmental Outcome in Today's Society

New Zealand's young people generally fare well in educational attainment, compared to other countries

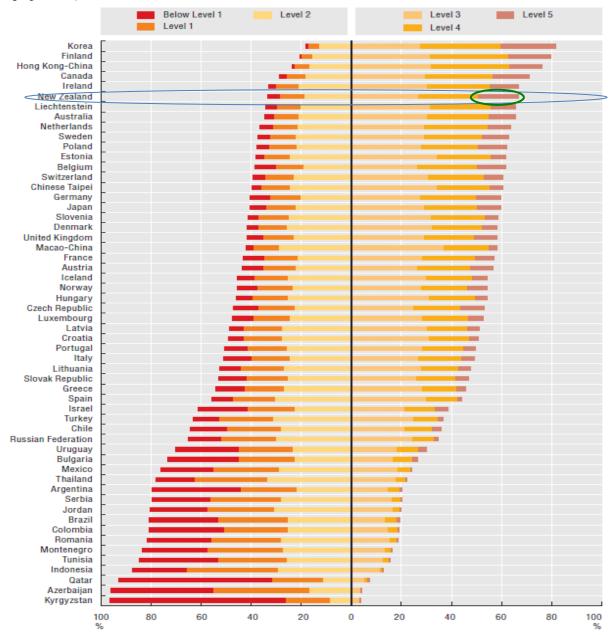
Organisation for Economic Development [OECD] 2010

### The Good News



Figure S.2. Student performance in reading in PISA 2006

This figure shows the percentage of students at each performance level in reading; students with scores at Level 5 are the strongest performers, those at Level 1 and below are the weakest.



NZ •6th from the top ·Similar proportion of young people reading at the highest levels as Finland & Canada (14.5%)



Source: OECD (2007), PISA 2006, Science Competencies for Tomorrow's World, Volume 1: Analysis, Table 6.1a, available at http://dx.doi.org/10.1787/142046885031.

Not all New Zealand's young people achieve successful literacy, educational, and social outcomes

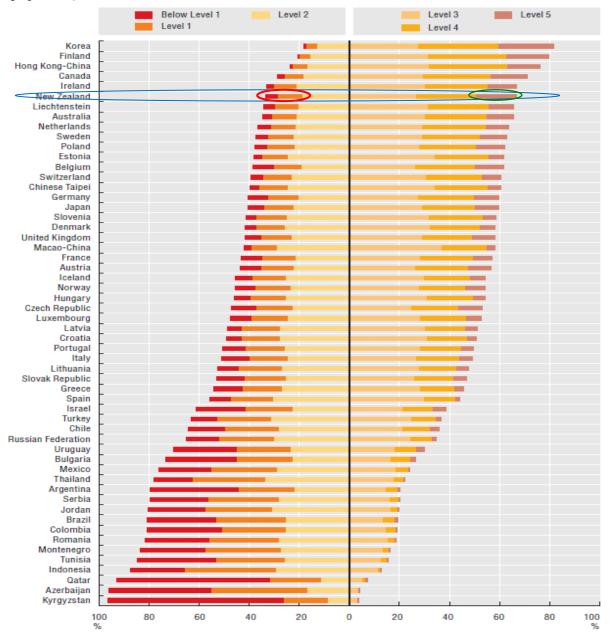
OECD, 2010; Tunmer, Chapman, & Prochnow, 2004, Wilkinson, Freebody, & Elkins, 2000

The Bad News



Figure S.2. Student performance in reading in PISA 2006

This figure shows the percentage of students at each performance level in reading; students with scores at Level 5 are the strongest performers, those at Level 1 and below are the weakest.

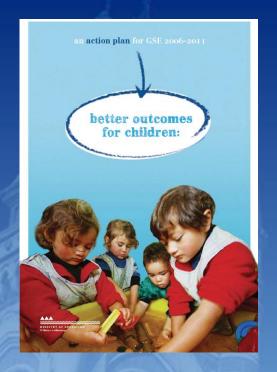


NZ ·Similar proportion of young people reading at the **lowest level** (14.5%) Leading to lower mean score than higher ranking countries (e.g., **Finland: 4.8% lowest level**)



Source: OECD (2007), PISA 2006, Science Competencies for Tomorrow's World, Volume 1: Analysis, Table 6.1a, available at http://dx.doi.org/10.1787/142046885031.

### The Goal





Ministry of Education 2006

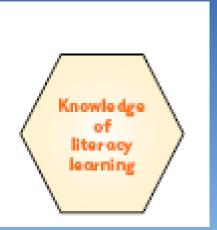
How do we get there?



### **Enhancing Literacy Outcomes**

Big ideas from the research literature...

Big Idea 1. Language and literacy skills are moving targets across the early years.





# The *Moving Target* of Literacy Development

Year 1
Year 2
Year 3
Year 4
Year 5
Year 6

Learning to read
→ Reading to learn







## **Enhancing Literacy Outcomes**



- Big ideas from the research literature...
  - **Big Idea 1**. Language and literacy skills are moving targets across the early years.
  - Big Idea 2. Because learning and development imply change over time, how to support that development will also change

At school entry, New Zealand children differ significantly in early literacy skills predictive of successful reading acquisition.

Nicholson 2003

The Bad News





### **Enhancing Literacy Levels**

- 8 claims with a significant body of supporting evidence
  - Focus on early preventive intervention.
    - Instruct in phonological awareness and phonics at an early age
    - Detect early
    - Maximize chances of detection for early identification of all at-risk students
    - Intervene early





### **Enhancing Literacy Levels**

- 8 claims with a significant body of supporting evidence
  - The remaining claims...
    - Determine a student's strengths and weaknesses
    - Teach focused on individual learner needs
    - Increase intensity
    - Provide on-going assessment and support

Cacknowledge one size doesn't fit all...



# The Moving Target of Literacy Development

Year 1 Year 3 Year 2 Year 4 Year 5 Year 6 Learning to read Reading to learn





#### One size doesn't fit all in beginning reading...

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Learning to read ————————————————————————————————————					
	Reading in c	onnected text	─────────────────────────────────────		

Some children may benefit from more explicit supports in:

- •code related skills
- · language related skills
  - •Or both



See Connor et al. 2007; Morrison & Connor 2009



Early home literacy environment is correlated disparities in literacy achievement among New Zealand's young people

Tunmer et al. 2004

### Families: A natural resource







## **Enhancing Literacy Outcomes**



- Big ideas from the research literature...
  - **Big Idea 3**. The ways that adults support skill development may be nuanced and *specific*.
  - Big Idea 4. Parents/caregivers typically want to support their children's learning and development but some may not know how best to do this.

## The Steps to Reading Knowledge of



Reading with fluency and comprehension:



Blending: Knowing how to blend letter sounds together to say words



Letter Sounds: Knowing the sounds of the letters



Print awareness: Knowing about letters and words



Across the transition to schooling the nature of home literacy activities shift -From: **parent**→child book reading To: **child**→parent book reading To: Child as independent reader



## Working with Families to Foster Language and Literacy Skills in Beginning Reading

- The research:
  - Parent involvement can have a positive impact on reading acquisition.
  - How parents support that development matters;
    - In general...parents helping children learn specific skills tends to be more effective than...
      - Listening to children read...
      - Reading to children...Senechel 2006



## Working with Families to Foster Language and Literacy Skills in Beginning Reading

- The recommendations
  - Use <u>reading</u>
  - Be <u>easy</u>, <u>efficient</u>, and <u>enjoyable</u>
  - Provide connection between home and school
  - Enlist ongoing rather than single- or short-lived activities

See Fiala & Sheridan 2003



## Working with Families to Foster Language and Literacy Skills in Beginning Reading

- Putting research and recommendations together...
  - Child > parent book reading is a typically occurring practice in beginning reading instruction in NZ
  - Time may be a potential barrier to more parental involvement for NZ parents

c.f. Struthers & Schaughency 2011

Could providing parents with guidance on how they could foster developing literacy and language skills in the context of child parent book reading help support reading acquisition?

## Fostering Literacy & Language Skills in Beginning Reading Through *Child* → Parent Book Reading

- Fostering print-related skills by
   "Calling Attention to Print" (c.f., Justice et al. nd)
  - Adapted for, and tailored to, children's developing literacy skills
    - To reinforce school teaching

For a child who has not yet mastered letter sounds, this might include **prompts** to practice a target letter sound in nightly reading.

Tommy has been learning about these

#### Letter Sounds: P

- •Help him to find these letter/s in this book
- •Practise saying the letter sound/s
- •Practise reading words with the letter sound/s in them



## Fostering Literacy & Language Skills in Beginning Reading Through *Child* → Parent Book Reading

- Fostering *language* skills
   through parent ↔ child *conversations*\*
  - Consistent with 'distancing' prompts in dialogic reading
    - May support development of narrative skills
    - May convey acknowledgment of expertise of parents/caregivers,
      - with oral language resources to share with their children
    - May support the connection between school and home life
      - For children and parents

At the end of the story, you and Tommy could talk about the story.

You could help Tommy retell the story.

Does the story remind you or Tommy of anything?







### The Model

Reflection & Collaborative Homework Planning

#### Baseline

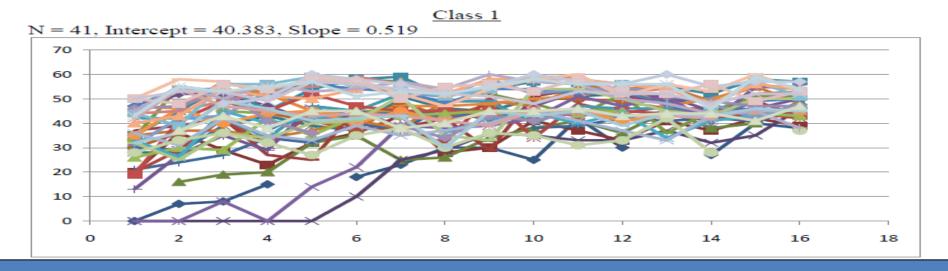
- Progress
   Monitoring on
   Developmentally
   Relevant Early
   Literacy Skills
- Dynamic Assessment

#### **Practice Rationale:**

- To reduce false positives in risk identification<sup>1</sup>
- •To inform instruction<sup>2</sup>
- <sup>1</sup>Compton et al. 2006, 2010;
- <sup>2</sup>Fuchs & Fuchs, 2008, 2007



## 2 Classes for First Sound Fluency (Awareness of Onset Phonemes)



Growth mixture modelling suggests 2 developmental patterns for phonological awareness skills across Term 2.

Schaughency, Clarke, Struthers & Beretvas in progress

- Frowth mixture modelling suggests three developmental patterns or letter sound fluency across Term 2:
- . Children who are learning these skills and show growth across the term *(typical/below)*
- . Children who already display these constrained skills at a high level so don't show much growth (not shown)
- . Children who display low levels of these skills and who display less progress across the term...

#### Reading is more than letter-sound correspondence.

Yet, response to such tasks may matter in beginning reading: Event-related potential data in response to a letter-sound matching task predict growth in word reading skills among first grade student Lemons et al., 2010

## The Steps to Reading Knowledge of



Reading with fluency and comprehension:



Blending: Knowing how to blend letter sounds together to say words



Letter Sounds: Knowing the sounds of the letters



Print awareness: Knowing about letters and words



Dynamic Assessment\*:

OTÁGO

Te Whare Winnings o Dringo
N.E.W. Z.E.A.L.A.N.D

\*Caffrey et al., 2008; Daly et al. 2010



#### The Model



Reflection & Collaborative Homework Planning

#### Baseline

- Progress
   Monitoring on
   Developmentally
   Relevant Early
   Literacy Skills
- Dynamic Assessment

Tailored Home Literacy Support

Progress
 Monitoring on
 Developmentally
 Relevant Early
 Literacy Skills

Tailored/Revised Home Literacy Support

Progress
 Monitoring on
 Developmentally
 Relevant Early
 Literacy Skills

#### **Practice Rationale:**

- To reduce false positives in risk identification
- To inform instruction

#### **Practice Rationale:**

Systematic Formative

**Evaluation** 



# The Initial Trial 2010 3 schools, 9 teachers, 25 children



Model as modified for initial implementation...

## The Children N = 25

### Gender

- 15 Boys
- 10 Girls

### Ethnicity

- 21 New Zealand European
- 3 Māori
- 1 Samoan

## Participating Caregivers

- 22 Mothers, 2 Fathers, 1 separated Mother and Father
- Average educational achievement: 5<sup>th</sup> 7<sup>th</sup> form (Year 11 13); range = primary school postgraduate qualification



Performance of Participants and Their Classmates **Before** Parent HW Support Intervention

	HW Support Sample		
	Beginning $(n = 12)$	Middle ( <i>n</i> = 19)	
Phonological Awareness			Children ident
First Sound Fluency	14 0 - 39	30 0 - 59	participation ir home work intervention:
Phoneme Segmentation Fluency		22 1 - 47	
Alphabetic & Decoding			•Displayed a learly literacy a
Letter Naming Fluency	13 0 - 25	<b>23</b> 5 - 72	reading skills • <i>Increased in</i>
Nonsense Word Fluency		<b>18</b> 0 - 46	performance
Word Reading			the first half of school year
Word Identification Fluency		<b>8</b> 0 - 32	Sonoon your
Oral Language			
Word Use Fluency	7 0 - 25	17 0 - 38	
Book Level	1 <	5	

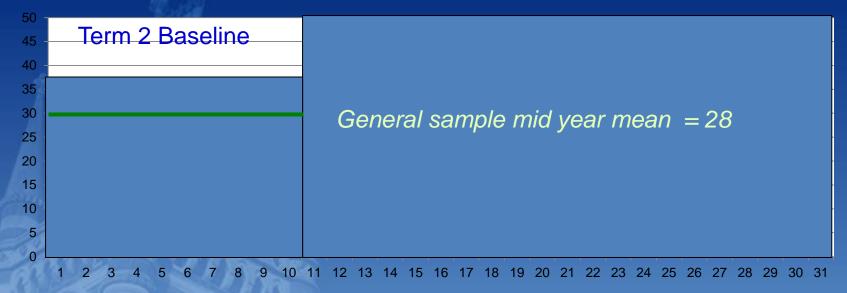
Children identified for participation in the home work intervention: •Displayed a *range* of early literacy and

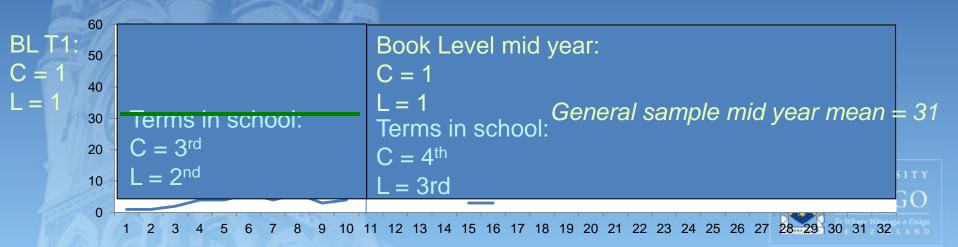
· Increased in average **performance** across the first half of the school year

1 - 15

1 - 4

# Fostering Literacy & Language Skills in Beginning Reading Through *Child*→Parent Book Reading Sample Results − Progress Monitoring





- Preliminary results\*
  - Parents/caregivers welcomed opportunity to learn how to support their children's learning
    - And most seemed to readily learn strategies taught
  - Children generally show improvements on targeted skills ...

\*Struthers in progress



### Performance at End of Year 1

	HW Support Sample (All means higher at end)	General Sample (All but WUF higher)
Phonemic Awareness		
Phoneme Segmentation Fluency		
Alphabetic and Decoding Skills		
Letter Naming Fluency		
Nonsense Word Fluency		
Language Skills		
Word Use Fluency		
Reading Skills		
Word Identification Fluency		
Highly Decodable Passages		
Book Level		

- Fostering print-related skills by
   "Calling Attention to Print" (c.f., Justice et al. nd)
  - Adapted for, and tailored to, children's developing literacy skills
    - Supporting children beyond learning letter sounds...
      - Considerations...
        - » Word 'coaxing' may be more effective than word 'supplying'

Evans & Shaw 2008

» But difficult tasks are potentially aversive...



- Some definitions
  - Prompting and fading provides a means to support success from the beginning
    - Providing more help when skills are not known,
      - then fading that help to promote independence
    - Adaptation of paired reading\* as a possible strategy to support transition to decoding?
      - In response to a miscue, parent and child simultaneously identify letter sounds, with child invited to join in as parent models blending the letter sounds to read word
      - Child invited to provide signal readiness to fade to more independent responding

- Some definitions
  - Prompting and fading provides a means to support success from the beginning
    - Providing more help when skills are not known,
      - then fading that help to promote independence
    - Adaptation of pause prompt praise\* as a possible strategy to support transition to independent decoding?
      - Following the child's lead, the parent prompts use of decoding strategies..

\*See Fiala & Sheridan 2003 for discussion of Pause, Prompt, VERSITY OTAGO

Praise, see Daly et al 2004 on teaching blending skills OTAGO

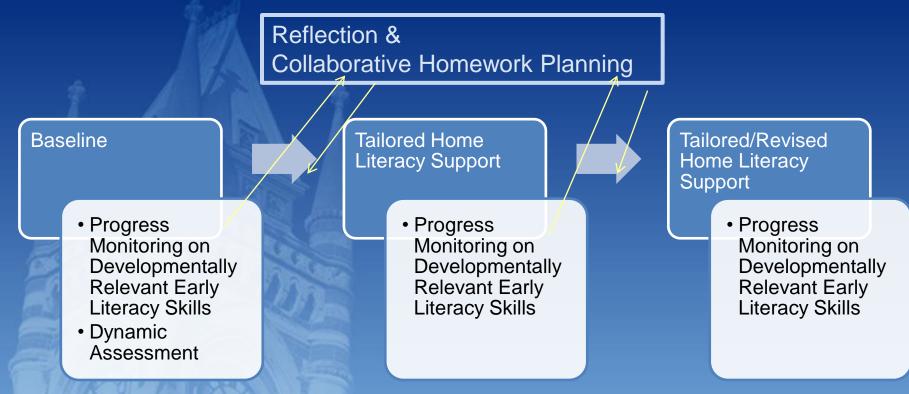
- Preliminary results\*
  - Parents/caregivers welcomed opportunity to learn how to support their children's learning
    - And most seemed to readily learn strategies taught
    - With evidence that home reading increased in families in which it hadn't been occurring or had been problematic
  - Children generally show improvements on targeted skills
    - Parents reported that children enjoyed activities, especially parent child conversations
    - Teachers observed improved narrative skills in classroom activities
  - Principals observed increased presence at school for some participating parents

\*Struthers in progress



- And some lessons learned
  - Need for adaptations to better serve some families
  - Importance of recognition that one size doesn't fit all in beginning reading
  - Recognition that "the actions needed to initiate the path to success and sustain resilience processes may be different."
    - "Once resilience processes begin to produce success, these processes and gains need to be sustained."

### Field-Testing the Model with Teachers 2011 (4 schools, 11 teachers, 14 students)



#### **Practice Rationale:**

- •To reduce false positives in risk identification
- To inform instruction

#### **Practice Rationale:**

Systematic Formative

**Evaluation** 

## The Children N = 14

### Gender

- 9 Boys
- 5 Girls

### **Ethnicity**

- 9 New Zealand European
- 4Māori
- 1 Fijian Indian

## Participating Caregivers

- 13 Mothers, 1 Father
- Parental educational achievement: Ranged from intermediate postgraduate qualification



#### Sample Results 2011

Student Tipene Baseline Progress Monitoring Term 1

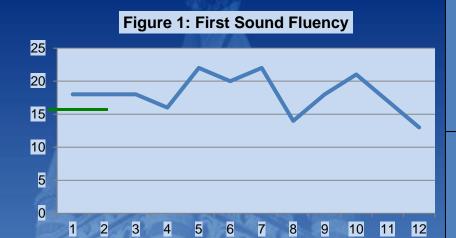


Figure 2: Letter Sound Fluency

BL = 1



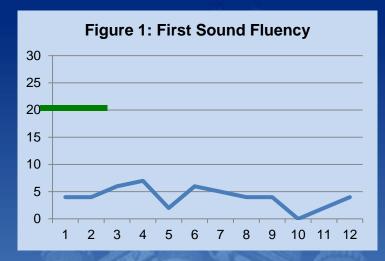
Teacher-Parent Collaborative HW Support Term 2

$$BL = 2$$

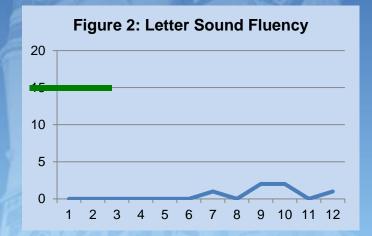
$$BL = 4$$

### Sample Results 2011

#### Student Blake Baseline Progress Monitoring Term 1



#### **Book Level = 1**



# Partnering Parents and Teachers to Tailor Strategies to Support Individual Learners' Needs in Reading Acquisition 2011

- Preliminary results\*
  - Replicate and extend findings from 2010
    - Replications of enhanced growth trajectories coincident with tailored homework intervention for many of the participants
      - With potential benefits for reading and broader school outcomes
         McIntosh, Sadler, & Brown in press
  - Document potential utility as part of response-tointervention framework for accessing services
    - For those children with continuing learning needs, results
       were incorporated and supported referrals for specialist of services

# Partnering Parents and Teachers to Tailor Strategies to Support Individual Learners' Needs in Reading Acquisition 2011

- Preliminary results\*
  - Indicate that teacher-parent reflection & collaboration can happen
    - Facilitated by professional psychology
  - Potential benefits of conjoint collaboration with parents & teachers, allowed for:
    - Better alignment of home support activities with classroom learning
    - Facilitated engagement of teachers, in:
      - Meetings with families of target children
      - Uptake of resources/processes with other children



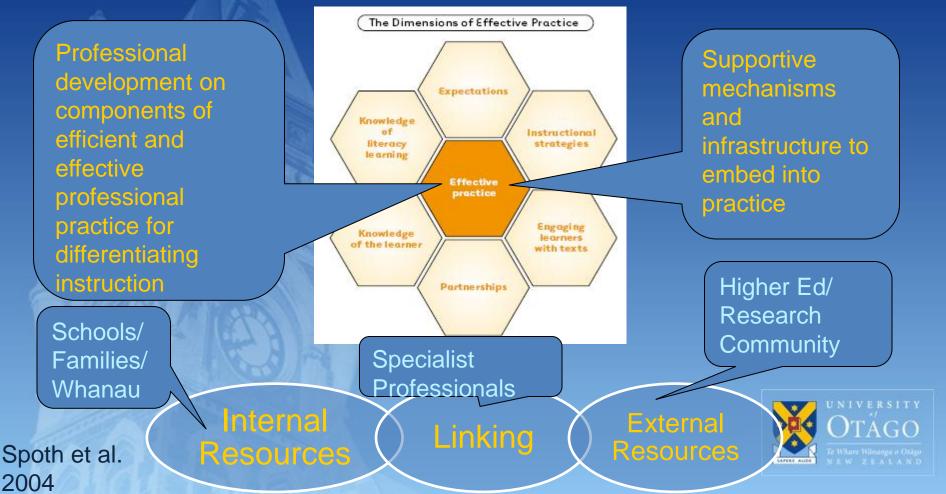
# Partnering Parents and Teachers to Tailor Strategies to Support Individual Learners' Needs in Reading Acquisition 2011

- Preliminary results\*
  - Potential benefits of conjoint collaboration with parents & teachers, allowed for:
    - Building relationships between parents and teachers
    - Inviting children into the process in some cases
  - Parents reported:
    - Liking the process
    - Liking learning how their children were doing
    - Appreciating learning how they could help at home



# Partnering Parents and Teachers to Tailor Strategies to Support Individual Learners' Needs in Reading Acquisition 2011

Remaining needs



With dedicated, caring staff we do make a difference anyway, but with parents on board our waka is more stable and our paddling strokes way stronger.

-Principal, Kura Kaupapa Māori

Families: A Natural Resource



"Mā te whiritahi, ka whakatutuki ai ngāpūmanawa ātāngata" Together weaving the realisation of potential



## Acknowledgments – Financial Support

- Work referred to in this presentation was supported in part by:
- TEC Top Achiever Doctoral Fellowship
- Freemasons Scholarship
- University of Otago Research Grants
- Department of Psychology

 Opinions expressed herein do not necessarily reflect the position of funding agencies, and such endorsements should not be inferred.



## Acknowledgments — Contributors to my Knowledge Base

### The participants:

- Children
- Families
- Staff of participating schools

Faculty colleagues, especially:

Elaine Reese

Mele Taumoepeau

Student researchers, including:

Kristina Clarke

Kathryn McLennan

Philippa Struthers

Research assistants, including:

Ryan Abraham



- Alton-Lee A. (2003). Quality teaching for diverse students in schooling: Best evidence synthesis. Wellington, NZ: Ministry of Education.
- Biddulph F, Biddulph J, & Biddulph C. (2003). The complexity of community and family influences on children's achievement in New Zealand: Best Evidence Synthesis. Wellington, NZ: Ministry of Education.



- Caffrey, E., Fuchs, D. & Fuchs, L. S. (2008). The predictive validity of dynamic assessment. A review. The Journal of Special Education, 41, 254 – 270.
- Compton DL, Fuchs D, Fuchs LS, Bouton B, Gilbert JK, Barquero LA, Cho E, & Crouch RC (2010). Selecting at-risk first-grade readers for early intervention: Eliminating false positives and exploring the promise of a two-stage gated screening process. *Journal of Educational Psychology*, 102, 327 340.



- Connor CM, Morrison FJ, Fishman BJ, Schatschneider C, & Underwood, P (2007). Algorithm-guided individualized reading instruction. Science, 315, 464 – 465.
- Cox, DD (2005). Evidence-based interventions using home-school collaboration. School Psychology Quarterly, 20, 473 – 497.



- Daly EJ III, Chafouleas SM, Persampieri M, Bonfiglio CM & LaFleur K (2004). Teaching phoneme segmenting and blending as critical early literacy skills: An experimental analysis of minimal textual repertoires. *Journal of Behavioral Education*, 13, 165 – 178.
- Evans MA & Shaw D (2008). Home grown for reading: Parental contributions to young children's emergent literacy and word recognition. *Canadian Psychology, 49*, 89 95.



- Fiala CL & Sheridan SM (2003). Parent involvement and reading: Using curriculum-based measurement to assess the effect of paired reading. *Psychology in* the Schools, 40, 613 – 626.
- Fishel M & Ramirez L (2005). Evidence-based parent interventions with schoolaged children. *School Psychology Quarterly, 20, 371 402.*



- Fuchs LS & Fuchs D (2007). The role of assessment in the three-tier approach to reading instruction. In D. Haager, J. Klingner, & S. Vaughn (Eds.). Evidence-based Reading Practices for Response to Intervention (pp. 29-42). Maryland: Paul H. Brookes Publishing Co., Inc.
- Fuchs LS & Fuchs D (2008). Best practices in progress monitoring in reading and mathematics in the elementary grades. In A Thomas & JP Grimes (Eds), Best Practices in School Psychology V (pp 2147 – 2164). Bethesda, MD: National Association of School Psychologists.

- Justice L & Sofka AE (2010). Engaging children with print: Building early literacy skills through quality read-alouds. New York, NY: Guilford. See also resources available at: <a href="http://preschoollab.osu.edu/people/">http://preschoollab.osu.edu/people/</a>
- Lemons CJ; Key APF, Fuchs D, Yoder PJ, Fuchs LS, Compton DL, Williams SM & Bouton B (2010). Predicting reading growth with event-related potentials: Thinking differently about indexing "Responsiveness." *Learning and Individual Differences*, 20, 158 -166.



- McIntosh K, Sadler C & Brown J (in press). Kindergarten reading skill level and change as risk factors for chronic problem behavior. Journal of Positive Behavior Interventions
- Ministry of Education (2006). Better outcomes for children: An action plan for GSE 2006-2011. Wellington: Ministry of Education.



- Ministry of Education (2003). Effective literacy practice in Years 1 – 4.
   Wellington: Learning Media.
- Ministry of Education (2006). Effective literacy practice in Years 5 – 8.
   Wellington: Learning Media.



- Ministry of Education (n.d.) Literature review: An international perspective on dyslexia. Retrieved from http://www.tki.org.nz/r/literacy\_numeracy
- Ministry of Education (2009). The New Zealand Curriculum Reading and Writing Standards for Years 1 8. Wellington: Learning Media.



- Morrison FJ & Connor CM (2009). The transition to school: Child-instruction transactions in learning to read. In A Sameroff (Ed.), The transactional model of development: How children and contexts shape each other (pp. 183 201). Washington, DC, US: American Psychological Association.
- Nicholson T (2003). Risk factors in learning to read. In B. Foorman (Ed), *Preventing and remediating reading difficulties: Bringing science to scale* (pp. 165-193). Timonium, MD: York OTAGO Press. NICHD 2002

- OECD (2007). PISA 2006, Science competencies for tomorrow's world. Vol. 1: Analysis.
- Pianta RC & Walsh DJ (1998). Applying the construct of resilience in schools: Cautions from a developmental systems perspective. *Journal of School Psychology*, 27, 407 - 417.



- Raffaele LM & Knoff H (1999). Improving home school collaboration with disadvantaged families: Organizational principles, perspectives, and approaches. School Psychology Review, 28, 448 – 466.
- Reese E, Sparks A & Levya D (2010). A review of parent interventions for children's language and emergent literacy. *Journal of Early Childhood Literacy*, 10, 1 – 21.

- Ritchey, K. D. & Speece, D. (2004). Early identification of reading disabilities:
   Current status and new directions.

   Assessment for Effective Intervention, 29, 13 24.
- Schaughency E & Reese E (2010).
   Connections between language and literacy development. In J Low & P Jose (Eds.), *Lifespan Development: New Zealand Perspectives* (2<sup>nd</sup> ed.) (pp. 59-71). North Shore, NZ: Pearson.

- Senechal M (2006). The effect of family literacy interventions on children's acquisition of reading from kindergarten through grade 3. A meta-analytic review conducted for the National Center for Family Literacy.
- Spoth, R., Greenberg, M., Bierman, K., & Redmond, C. (2004). PROSPER community-university-partnership model for public education systems: Capacity-building for evidence-based, competence-building prevention. *Prevention Science*, 5, 31 39.



- Struthers, P (in progress). Parent involvement and learning and children's reading acquisition. PhD research in progress, Department of Psychology, University of Otago.
- Struthers, P & Schaughency, E. (2011, June July), The relationship between parent involvement, perceptions of school and child invitations, and parental perceptions of available time, energy and efficacy for involvement in New Zealand. Paper presented at the 8th International Conference of the European Research Network about Parents in Education (ERNAPE). Milan, 29th June 1st July 2011.

- Tunmer, W. E., Chapman, J. W., & Prochnow, J. E. (2004). Why the reading achievement gap in New Zealand won't go away: Evidence from the PIRLS 2001 International Study of Reading Achievement, New Zealand Journal of Educational Studies, 39, 127-145.
- Wilkinson, I. A. G., Freebody, P., & Elkins, J. (2000). Reading research in Australia and Aotearoa/New Zealand. In M. L. Kamil, P. B. Mosenthal, P. D. Pearson, & R. Barr (Eds.), Handbook of Reading Research Vol. III. (pp. 3 16). Mahwah, NJ, US: Lawrence Erlbaur OTAGO