



Literacy Development and the Challenge of Equitable Achievement

Stuart McNaughton

Contact: s.mcnaughton@auckland.ac.nz



Research programme contributing to solving:

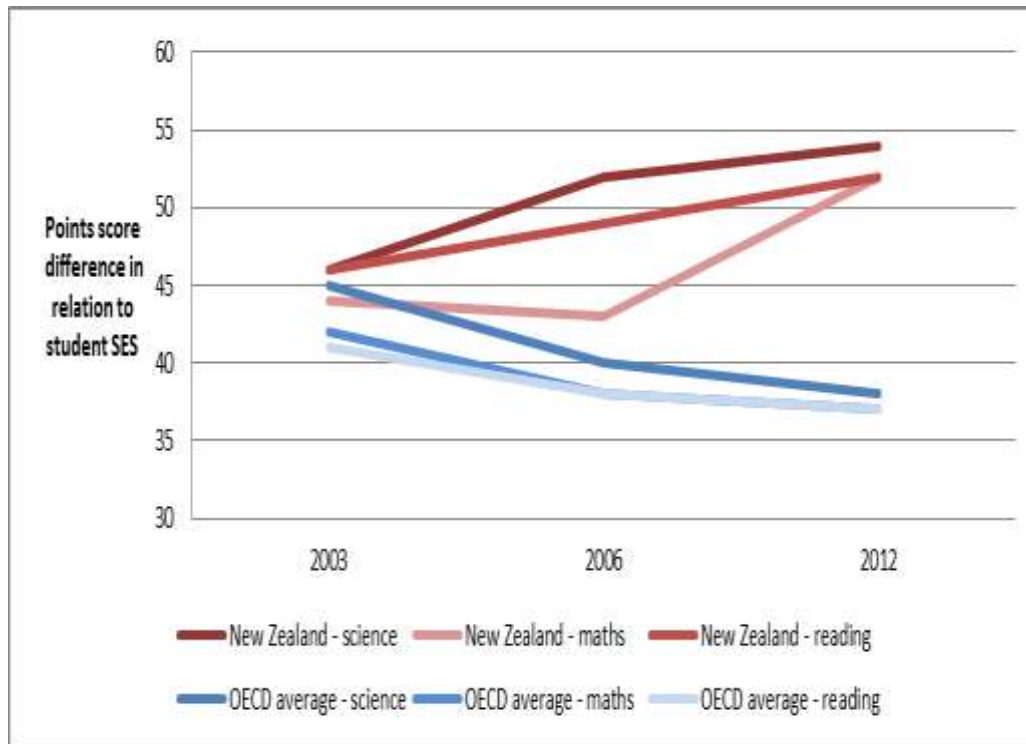
Theoretical challenges:

An integrated model of children's development – in families and schools in proximal and distal (including policy) contexts, which can adequately represent the interactions of culture, living conditions, schooling and child agency as they each support literacy development.

Systemic challenges:

Equitable outcomes and increased quality- in a 'High Quality / Low Equity' system (OECD, 2010). A long standing pattern in a system 'Fair' to 'good' - not 'great' or 'excellent' at improvement (McKinsey Report, 2010).

Achievement more closely linked to SES than the OECD average and other high performing countries. One sixth of the difference in students' performance (17%) is explained by SES, (compare 9% in Canada) PLUS achievement of low SES children appears to be worsening and the relationship between SES and achievement in New Zealand is strengthening (across the OECD it is weakening)



NZ Context (includes)

1. Cultural

- recognition of indigenous (Māori) rights (including bilingual / cultural provisions)

2. Educational

School population: 2013 (n=767,258 ; 2,500 schools)

- 53% Anglo/ European (Pākeha)
- 23.3% Māori
- 10.2 % Asian
- 9.8% Pacific Islands communities (Pasifika)

3. Geographic (long and narrow)

- 11,600 kms (15,000 km of coastline)



And 40 million sheep

In NZ always the
year of 羊 yáng

Research foci

- ❖ Child agency as learner
- ❖ Family socialisation and cultural practices
- ❖ School socialisation practices (including nature of teaching expertise)
- ❖ Connections between each
- ❖ Enablers and constraints in wider systems

All of the above used to try to increase effectiveness of schools

Learner agency across settings

❖ Self regulation:

- studies demonstrating role (eg activating self corrections in early oral reading effects on accuracy, fluency, word learning¹)

❖ Experimental conditions basis for parent programme and connecting settings :

- ‘*Pause, prompt and praise*’ (1987)
- Māori version *Tatari, Tautoko, Tauawhi* (1994)
- High ES on reading progress when linked (*Best Evidence Synthesis*, Robinson et. al. 2009)

¹eg McNaughton, S. (1981). The influence of immediate teacher correction on self-corrections and proficient oral reading. *Journal of Reading Behaviour*, 13, 376–381.

Family literacy and language practices and culture¹

- ❖ Analyses of inter and intra group variability in practices and testing 'match' hypothesis with school literacy:
 - fixed and dynamic properties (eg authority of text)
- ❖ Basis for designs for parent programmes for reading books (English, Māori, Pacific):
 - culturally additive (eg recitation and narrative dialogue)
 - Interaction styles added for development at school

¹ eg McNaughton, S. (2005). Considering culture in research-based interventions to support literacy. In D. Dickinson & S. Neuman (Eds.), *Handbook of early literacy research*, (Vol. 2, pp. 229–242). New York: The Guilford Press.

School practices

- ❖ Redesign of school instruction to better connect needs of low SES, culturally diverse learners to school practices¹
 - eg² intensive PLD for more explicit and deliberate focus on *needed* knowledge, skills (mostly ‘unconstrained’) and participation in instructional activities in first 6 months
 - high but variable implementation
 - demonstrate *accelerated* learning to within expected levels after a year (effect sizes from 0.27- 0.71 on range of measures)

¹ McNaughton, S. (2002). *Meeting of minds*. Wellington, New Zealand: Learning Media.

² Phillips, G., McNaughton S., & MacDonald, S. (2004). Managing the mismatch: Enhancing early literacy progress for children with diverse language and cultural identities in mainstream urban schools in New Zealand. *Journal of Educational Psychology*, 96(2), 309–323.

Designing Better Schools?¹

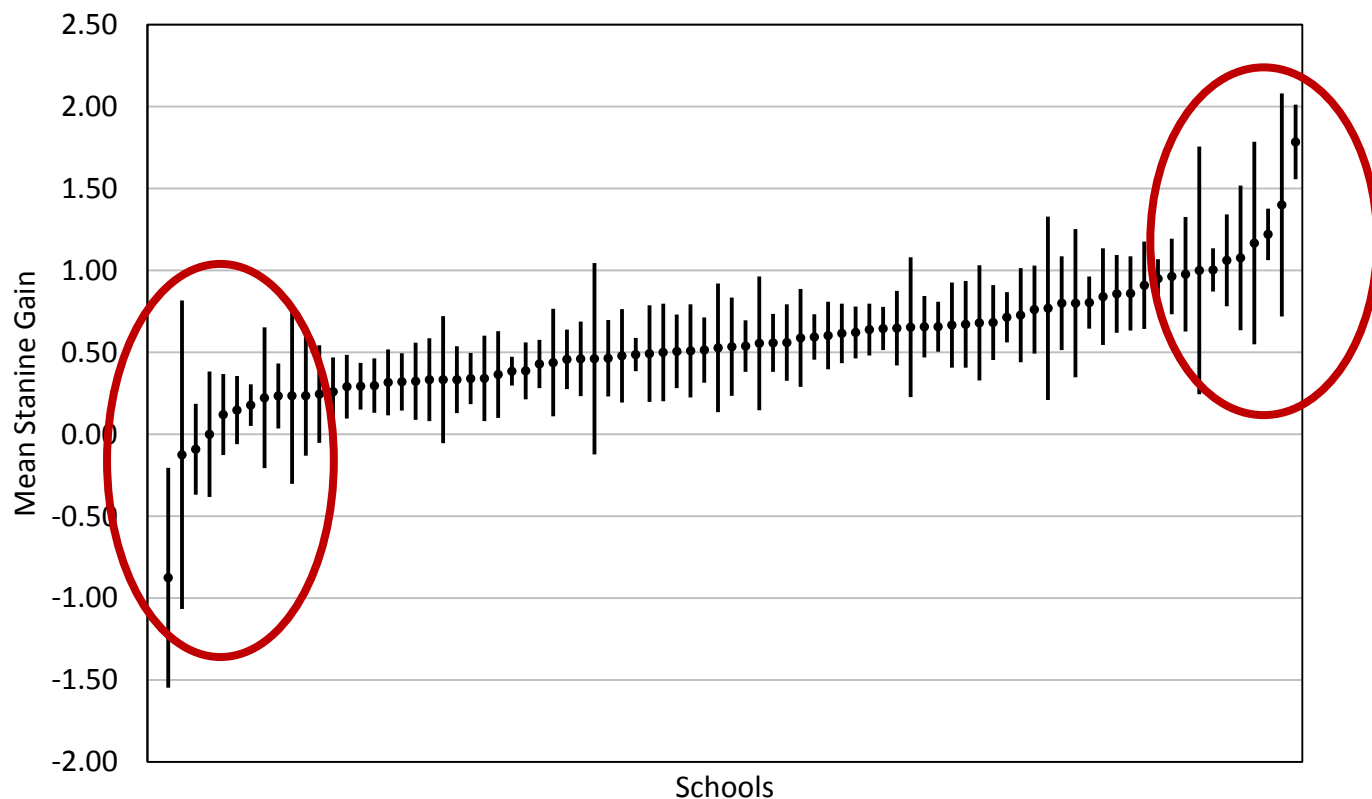
- ❖ Despite all the above...an epiphany:
 - national patterns largely intractable
 - need better ‘programmes’ ?

No – change the approach

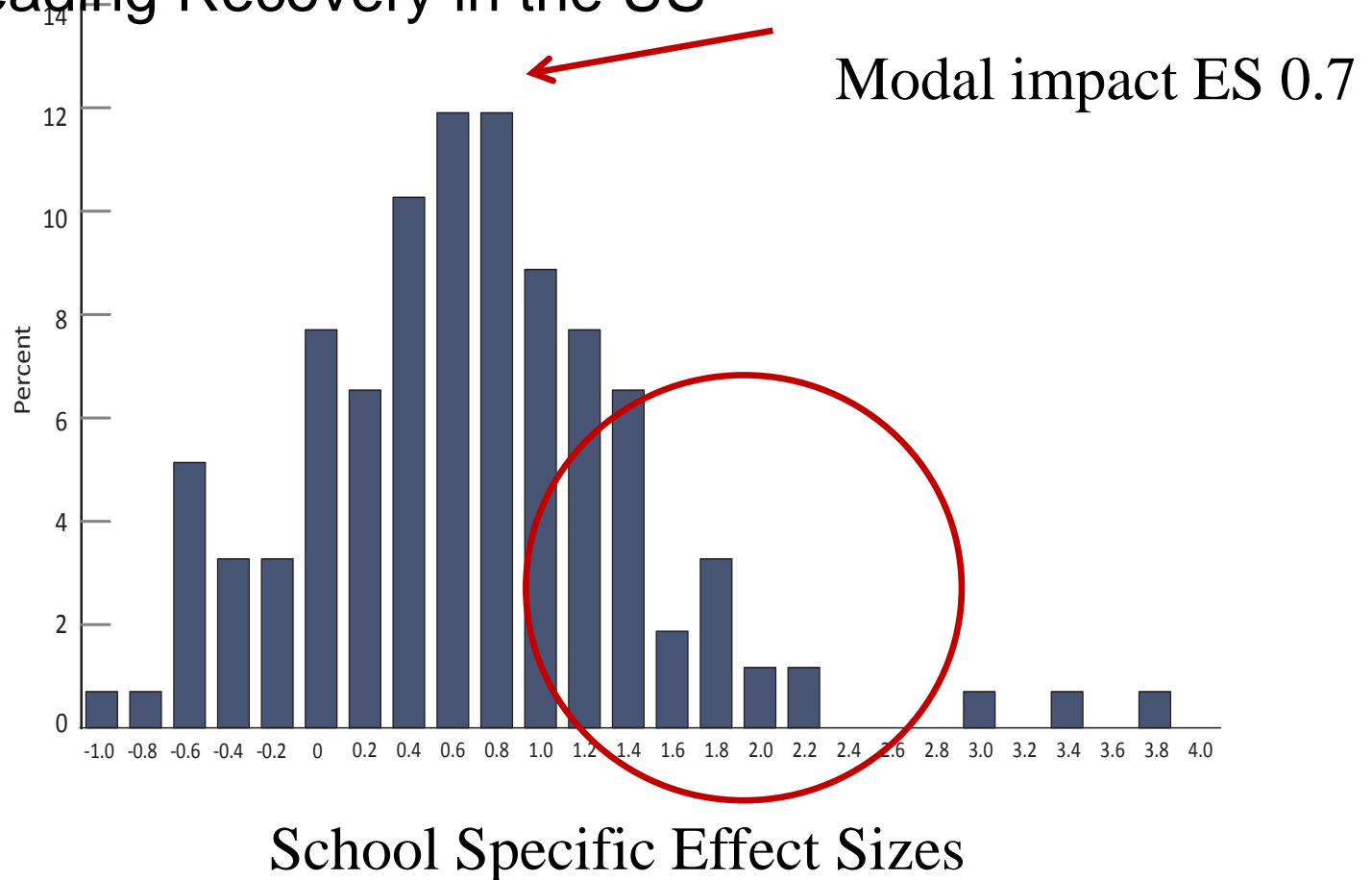
- ❖ eg Not ‘What works’ but:
 - “What works for whom under what set of conditions... at scale?” (Bryk et. al. 2015)
 - “How do we build the capability for schools to do X?” (Shonkoff & Fisher 2013)
 - What do systems constrain and enable?

¹ McNaughton, S. (2011). *Designing better schools for culturally and linguistically diverse children: A science of performance model for research*. New York NY: Routledge.

Variability in NZ School Improvement: Average Gains by Schools (n=83), over 2009 (n= 8,610 students).



School Specific Impact (n=147 schools, 866 students) of Reading Recovery in the US¹



¹From Consortium for Policy Research in Education (2013)

Designing Better Schools?

- ❖ Design based approaches in partnerships with schools (similar to Improvement Science – Bryk et. al. 2015; and Snow et. al. 2012)
- ❖ Series of studies focused on different ‘urgent problems of practice’ (recently summer learning or use of digital environments¹) in different contexts. Where *redesign* is built into the capability of schools.

¹ Jesson, McNaughton & Wilson (2015): Raising literacy levels using digital learning: a design-based approach in New Zealand, *The Curriculum Journal*, DOI: 10.1080/09585176.2015

Partnership model applied in three phases of iterative design and development

1. *Profiling urgent 'problem'*

- to identify potential 'solutions' and exclude unproductive foci

2. *Building capability*

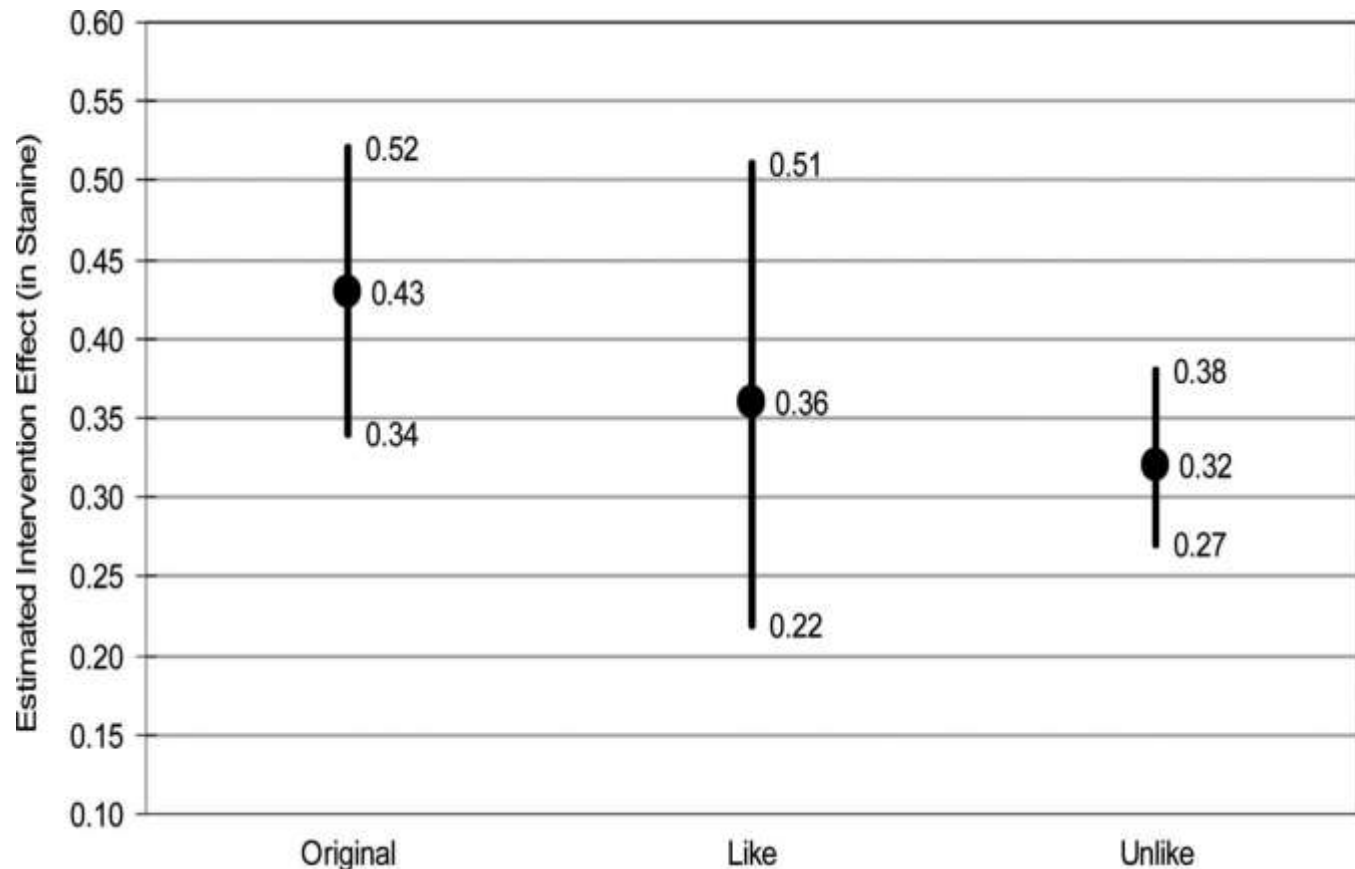
- bringing resources such as professional development to bear on the 'problem'

3. *Sustaining focus and specifically problem solving (process) focus*

Intervention logic. Outcomes via:

1. Professional Learning communities engaged in systematic ongoing inquiry to solve 'problems' in *valued student outcomes* (using variability)
2. Contextualised ongoing use of evidence (*teaching , learning and other*) to identify practice challenge and for redesign of practices.

Can get gains sustainable at scale- eg annual *acceleration* in Reading Comprehension¹



‘Original’ and ‘Like’ clusters—urban, low SES high cultural diversity ‘Unlike’ cluster—rural, mixed SES

¹ McNaughton, S. & Lai, M. (2012). Testing the effectiveness of an intervention model based on data use: a replication series across clusters of schools. *School Effectiveness and School Improvement*. 23 (2), 203-228.

On-going larger queries

1. Enablers and constraints: Balancing school and teacher autonomy
 - In New Zealand more collective learning needed (cf Shanghai or Singapore)
2. How do we take research partnerships / collaborations to scale?
3. New / extended roles for researchers
 - What are the theories, skills (including social skills) and knowledge needed to collaborate in change with schools?