Appendix I: SLP Analysis - Feedback to Schools

Feeding Back from Research and Evaluation in SLP: Two ONGOING Questions

1. Ongoing Effectiveness?
2. What are We Learning?

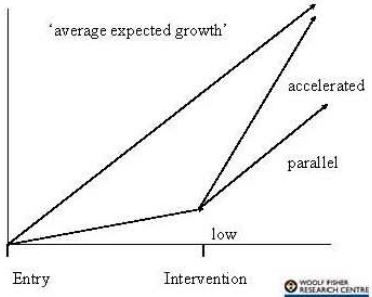
Stuart McNaughton and Aaron Wilson

February 2011

Judging Effectiveness (Outcomes):

- Valued outcomes (Ka Hikitia)
- For achievement: 3 criteria
  - Acceleration (how much?)
  - Matched (national) achievement distribution (how close?)
  - Sustained (developmentally)
- For multi school programmes: within a cascading and regional model- where there will be variability

The Acceleration Criterion

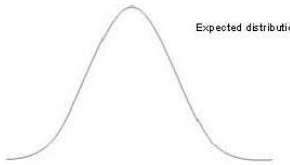


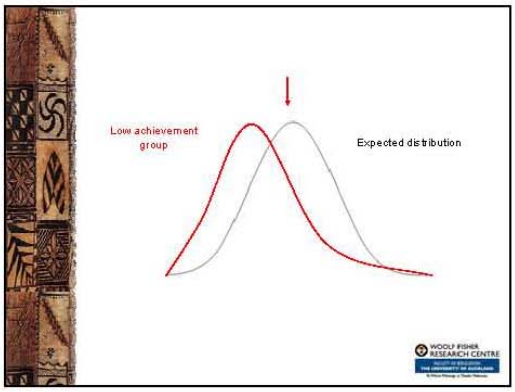
How Much Acceleration?

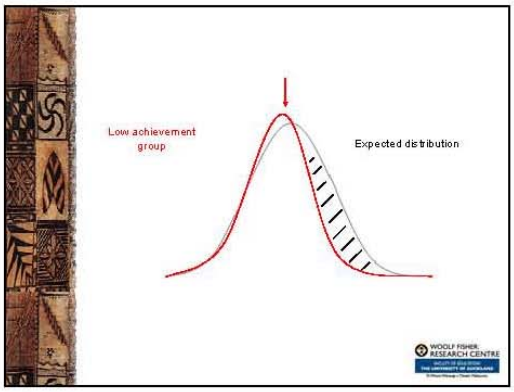
- Given progress and curriculum level goals - How long to catch up? (e.g. in Reading Recovery goal is after 15-20 weeks to get to middle bands of functioning in the classroom)
- So: what is educationally significant and achievable?

The Matched Distribution Criterion

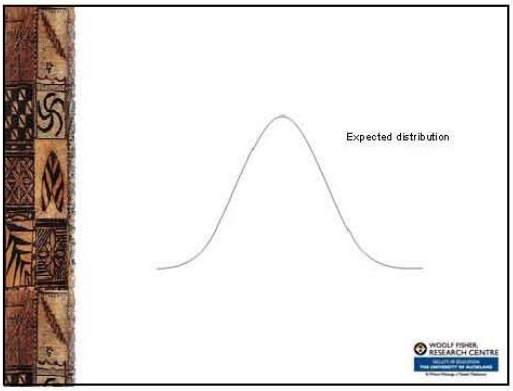
A problem in 'Raising the Tail', 'Closing the gap'

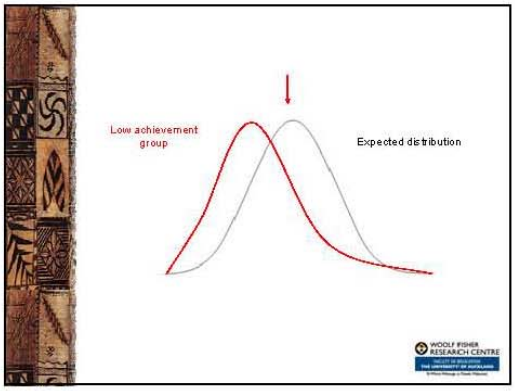


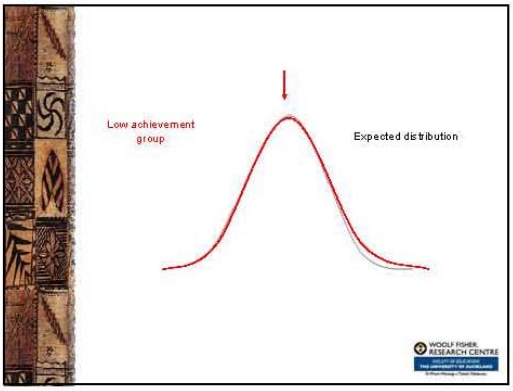




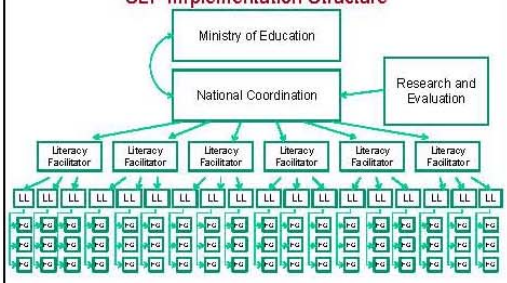
Matching the Distribution







SLP Implementation Structure



Overall Effectiveness (Achievement)

- Considerations - importance of:
  1. Focus -Māori and Pasifika
  2. Judgments- Acceleration AND levels
  3. Duration / intensity (Cohorts of schools)
  4. Understanding variability

How to Judge Acceleration?

2010 National Norm after recalibration:

Year Level	First Quarter Norm (Term 1)			Fourth Quarter Norm (Term 4)		
	Mean Overall Score	Mean Curriculum Level	Curriculum Expectation	Mean Overall Score	Mean Curriculum Level	Curriculum Expectation
Year 9	1497	4P	4P	1519	4A	5B
Year 10	1529	4A	5B	1567	5B	5A

So: Expected gain = 22 aRs at Y9 and 38 aRs Y10

Two approaches: e.g. at least 22 points to assume "statistical significance" so *Marked acceleration*: 44 aRs and 60 aRs?

Judging Effectiveness - 2010 Only

- SOME summary evidence (represents both Cohorts):
- Y9 Māori students (averaged by school) across both cohorts gained
  - 28 aRs, and1 sub level reaching 4P
- Y9 Pasifika students
  - 23 aRs 1 sub level, reaching 4B

Judging Effectiveness - 2010 Only

- Evidence for acceleration for both cohorts at Y9. Māori students within 1 sub level of expected level.
- Is the acceleration sufficient if sustained to get students (now) at 4P at end of Y9, to 5B at end of Y10 (i.e. 2 sub levels) ?
- For Māori students and for Pasifika students?

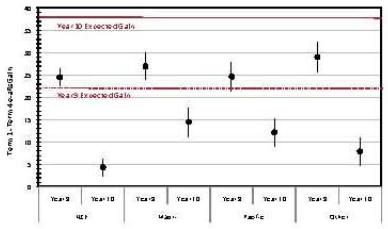
Answer – Probably in These Schools:

- 15 out of 54 schools at Y9 accelerated *by double* the rate of expected gain) for Māori (28%) and 9 schools out of 39 (23%) for Pasifika.
- 30 schools within 1 sub level of expected for Māori (56%) and 21 schools for Pasifika (54%)

And What About Y10?

- **May need more focus?**
  - no schools for Māori and 3 schools for Pasifika had such high rates (7 schools and 3 schools had greater than expected).
  - 14 schools had average Māori student within 1 sub level of expected; 19 schools had Pasifika students within 1 sub level
- **At Y10 (like Y9) Māori and Pasifika students accelerated more than Pakeha.**

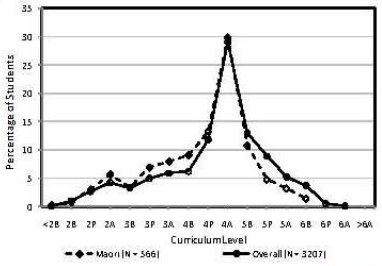
Judging Effectiveness - 2010 Only



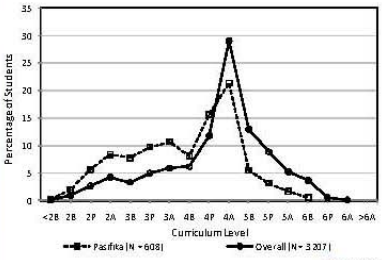
Judging Effectiveness: 2010 Only

- Matching Distributions?
- NOTE the SLP data bases:
  - Y9 n=4539
  - Y10 n =6399
- While getting close for Māori (note high curriculum levels) there are still gaps for Pasifika

Y9 Māori students Term 4



Y9 Pasifika students: Term 4



What are We Learning? #1

- Optimal model (still emerging and still evaluating)

What are We Learning? #2

- The significance of 'Focus Groups'
- NOTE: FG teachers likely to teach 'non Focus' students
- NOTE: the importance is using evidence about specific students-schools organise in various ways to achieve this.
  - Evidence and issues

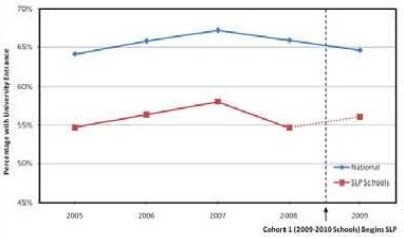
Some Evidence Across Cohorts

- Y9 FG Māori students (n=351) gained 32 aRs, (21 aRs in nonFG)
- Y10 FG Māori students (n=243) gained 28 aRs (8 aRs in nonFG)
- Y9 FG Pasifika students (n=156) gained 26 aRs and in nonFG 25
- Y10 Pasifika students (n=135) gained 18 aRs and in non FG classes 14.

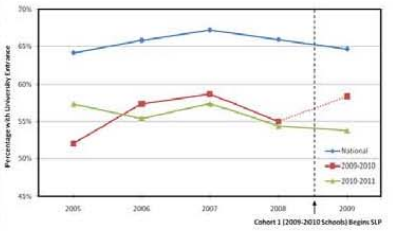
What Do We Need to Learn - Sustaining?

- The significance of the Y 9-10 focus?
- Relationships with Level 1 NCEA?
- But HARD CRITERION: UE?
- Is there any relationship between effectiveness in SLP at Y9 and Y10 and UE ?(% UE gain at Y13, ie gains per Year 13 cohort in each school).

Cohort 1 and 2: UE over time



Cohort 1 (2009-2010) versus Cohort 2 (2010-2011)



2009 C1 vs C2, d=0.23

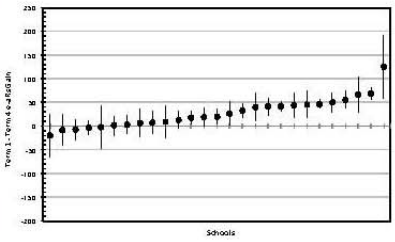
What are We Learning? #4

Know some of the sources of *variability*:

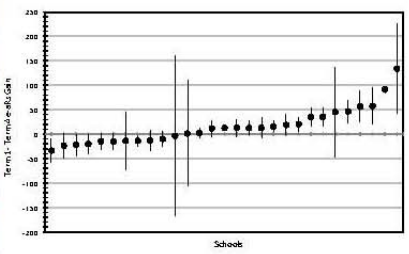
1. (considered Focus Group)
2. School
3. Region

Big question going forward- What factors are related to the variability?

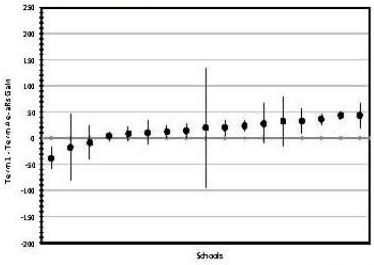
Gains by School: Year 9 Māori, Cohort 2



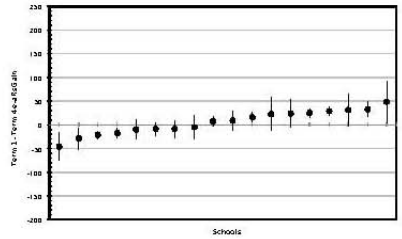
Gains by School: Year 10 Māori, Cohort 2



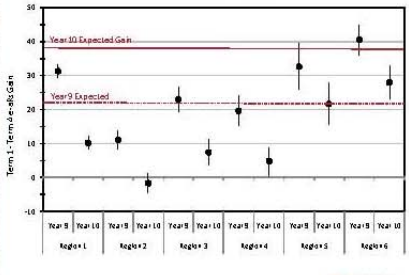
Gains by School: Year 9 Pasifika Cohort 2



Gains by School: Year 10 Pasifika, Cohort 2



Mean Gain by Region



Mean Achievement Level by Region