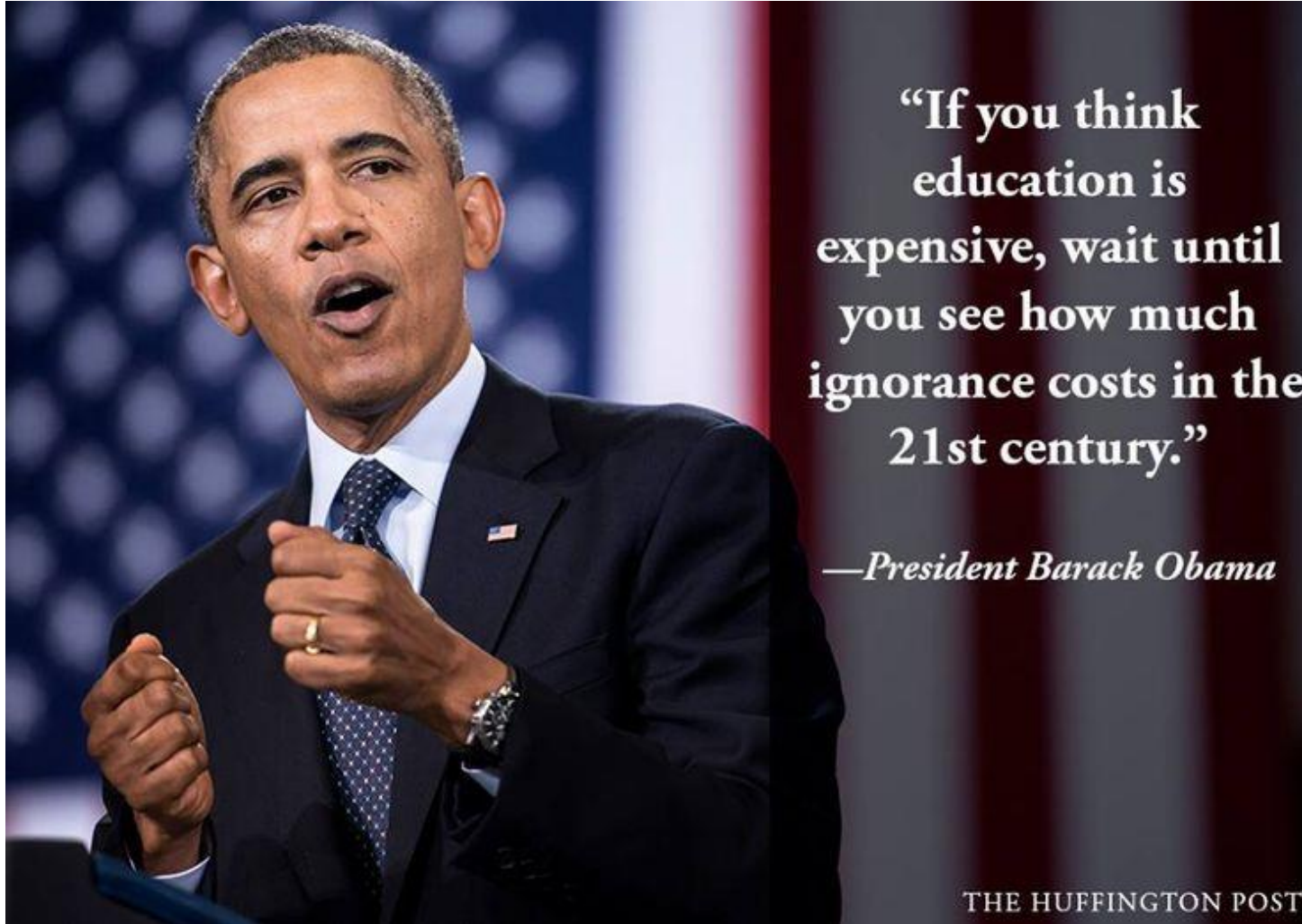


Social outcomes from Education

MOE: Investing since 1877

Presenter: Damian Edwards

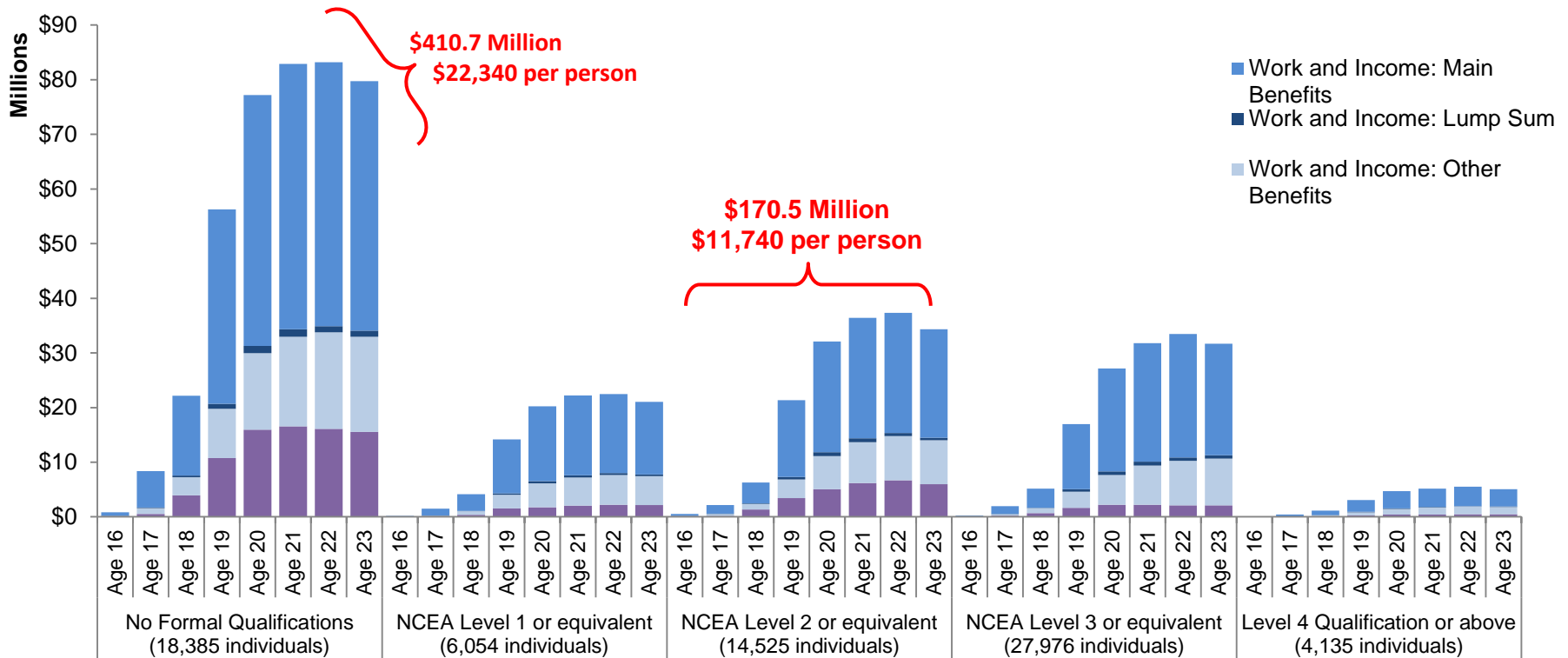
The cost of education...



The cost of not being educated



The cost to the state of non-achievement increases as those who have left the education system with no qualifications progress through their lives



Total 90/91 cohort: 71,075 individuals, \$810.5 Million in Welfare & Corrections costs between Ages 16 & 23

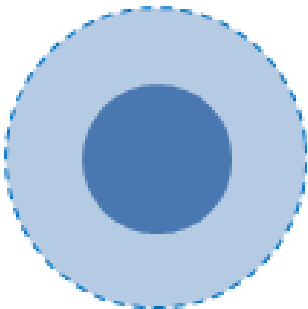
Education: The great equaliser.



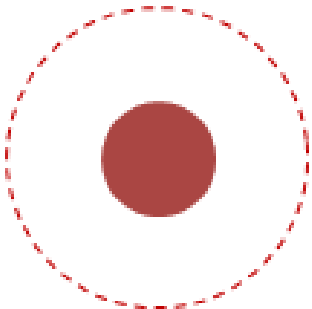
“Education then, beyond all other devices of human origin, is a great equaliser of the conditions of men – the balance wheel of the social machinery”

- *Horace Mann, pioneering American educator, 1848*

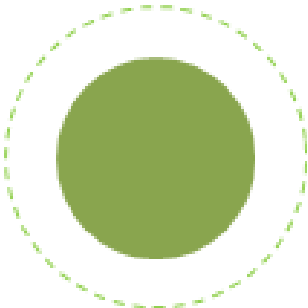
Where are we at?



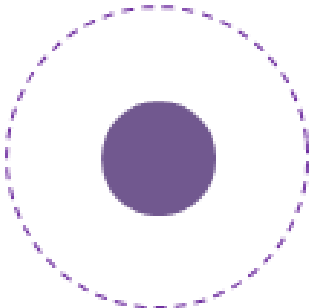
1. Outcomes



2. Data



3. Analysis



4. Use

For Example: We carefully formulate school funding...



...and give it to schools.



Schools choose how to spend it...



...many different ways!

Using IDI admin indicators, can we better identify those “at-risk” of not achieving?



High Marginal Contribution	Medium Marginal Contribution	Low Marginal Contribution
<ul style="list-style-type: none">• Proportion of time spend supported by benefit since birth• Child has a CFY care and protection notification• Sex• Mother’s age at child’s birth• Father’s offending and sentence history	<ul style="list-style-type: none">• Asian (positive factor)• Benefit Mother unqualified• Proportion of time spend overseas since birth• Mother’s average earned income over previous five years• Maori• Country of Birth• Father’s average earned income over previous five years	<ul style="list-style-type: none">• Migrant category / NZ born• Number of children (Mother)• Mother received third tier benefits• Most recent male caregiver is not the birth father• Pacific

School achievement by size and “at-risk” – secondary schools



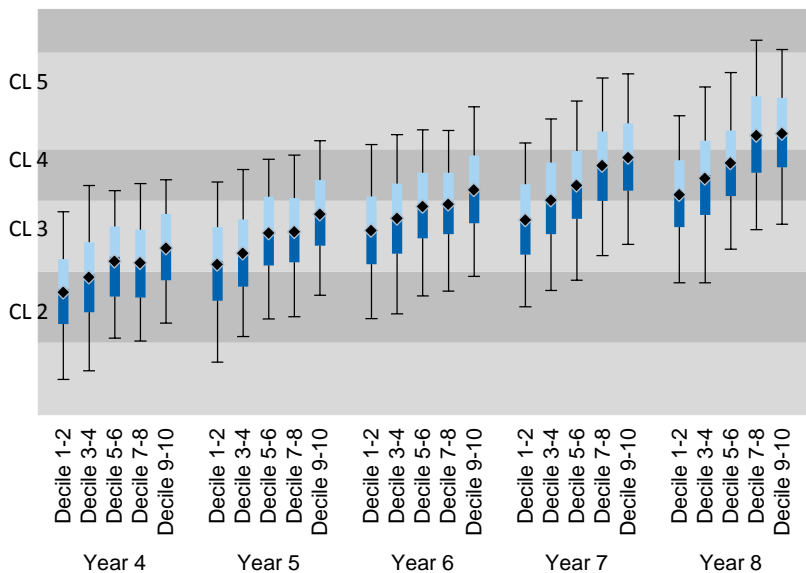
School size	% of “at-risk” students in school												Total
	0-5%	5-10%	10-15%	15-20%	20-25%	25-30%	30-35%	35-40%	40-45%	45-50%	50-55%	55%+	
1-200		3/5		0/2		0/1	0/1	0/1	1/1		1/2	1/4	6/17
201-400	6/6	3/6	0/2	3/11	2/3	0/7	0/5	1/5	1/4	0/3	0/4	0/6	16/62
401-600	5/5	8/14	2/7	0/5	0/9	0/3	0/3	0/1	0/2	0/4	0/1	0/3	15/57
601-800	10/10	6/6	3/6	3/6	0/5	0/6	0/6	0/5	0/3	0/2		0/1	22/56
801-1000	3/3	3/5	5/7	0/9	1/3	1/1	0/1	0/2	0/2	0/1			13/34
1001-1200	5/5	3/4	2/6	0/1	0/1	0/1	0/2						10/20
1201-1400	2/2	5/5	0/4	4/8	0/2	0/3		0/1					11/25
1401-1600	2/2	0/1	3/5	3/4	0/1		0/2	0/2			0/1		8/18
1601-1800	2/2	1/2	3/3	0/2									6/9
1801-2000		3/4	0/3		0/2								3/9
2001-2200	2/2			0/1					0/1				2/4
>2201	3/3	2/2	1/1	1/2									7/8
Total	40/40	37/54	19/44	14/51	3/26	1/22	0/20	1/17	2/13	0/10	1/8	1/14	119/319

Legend	0%	1%-33%	34%-65%	66-99%	100%
---------------	----	--------	---------	--------	------

Achievement is not equitable, but progress is similar...

Achievement

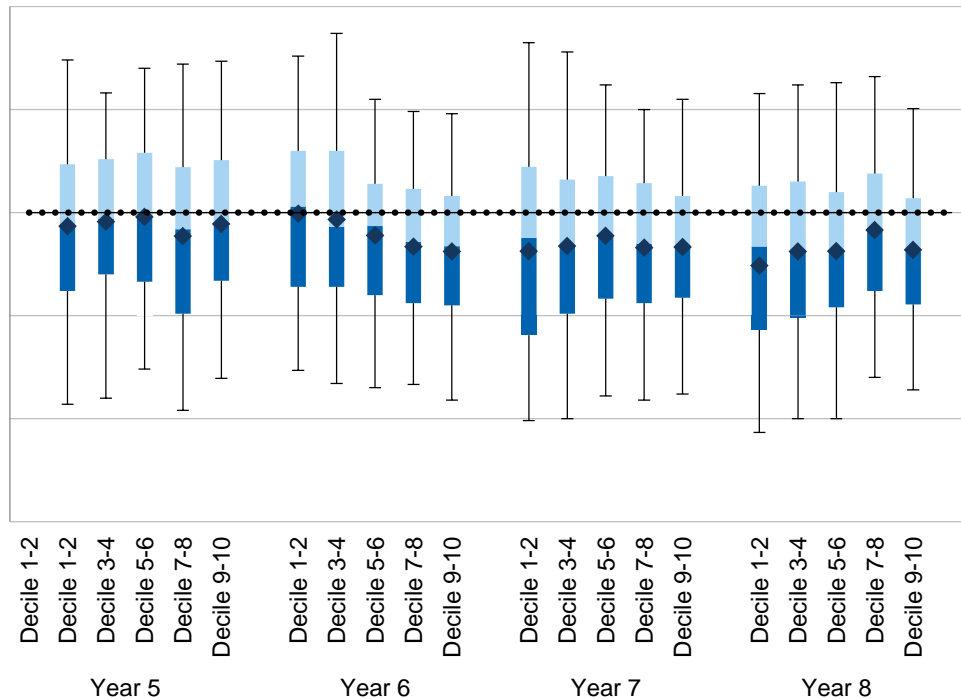
(e-asTTle research dataset 2015)



The difference in average achievement between students in deciles 1-2 schools and students in deciles 9-10 schools is more than half a curriculum level.

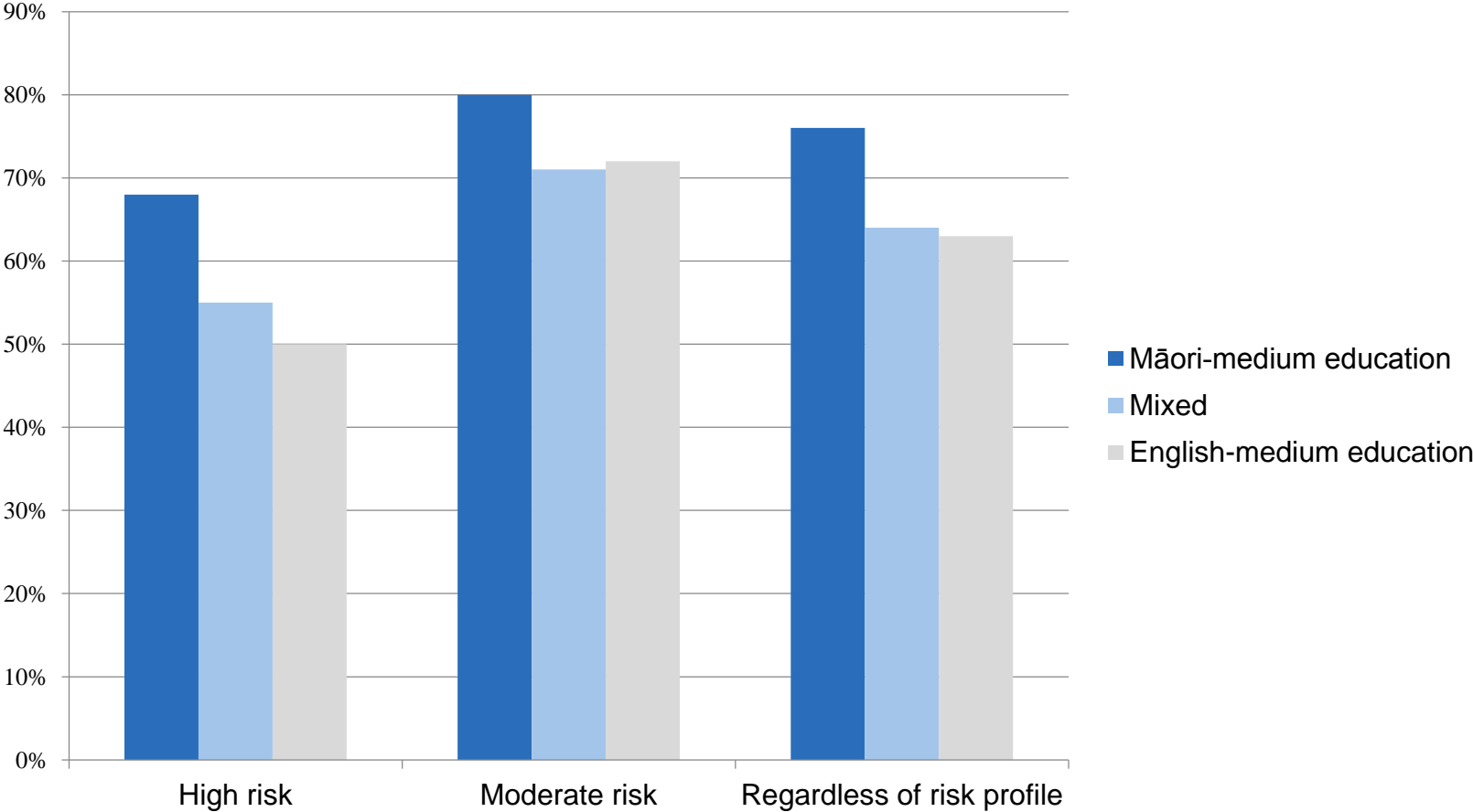
Progression

(e-asTTle research dataset 2014-15)



The differences seen in the distribution of achievement between student subgroups cannot be observed in the progress distributions

Maori students NCEA L2 attainment by risk profile

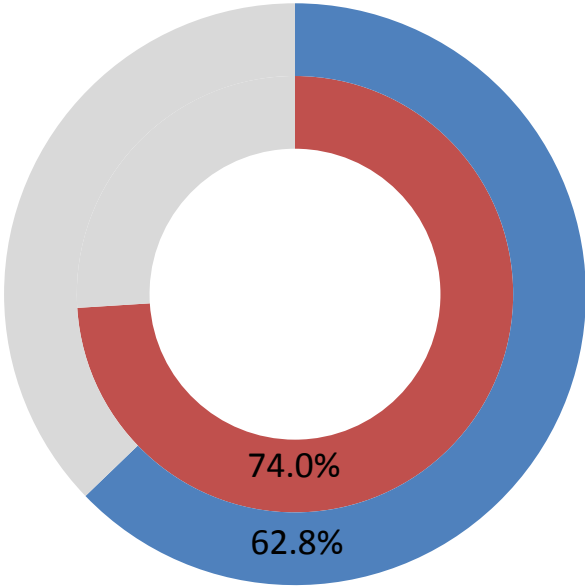


1994-96 cohort



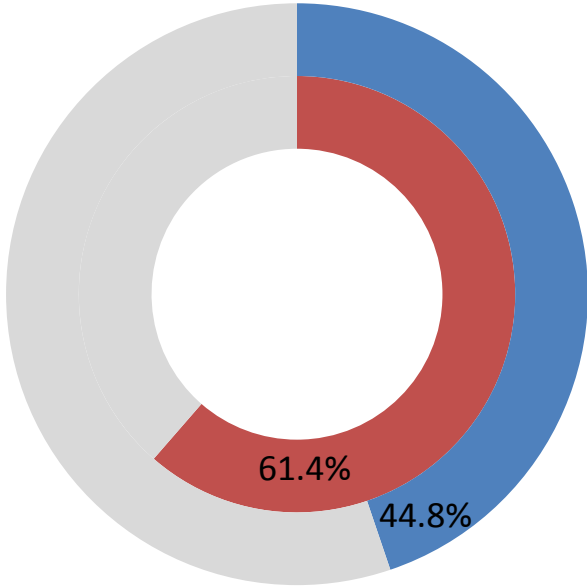
Maori attendance

The diagram below shows the percentage of primary school learners attending school 90% or more of the time in Term 2 of 2015



■ Māori Learners ■ Total Learners

The diagram below shows the percentage of secondary school learners attending school 90% or more of the time in Term 2 of 2015

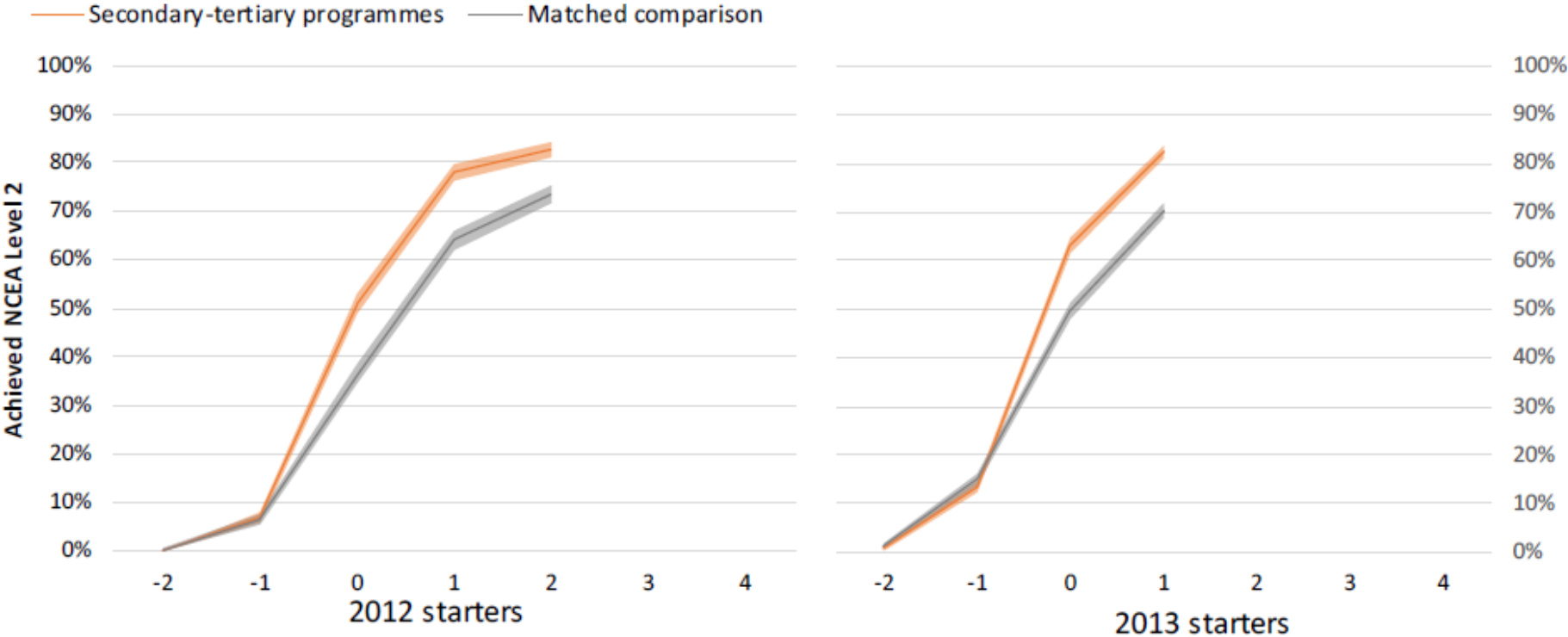


■ Māori Learners ■ Total Learners

Our interventions are making a difference...

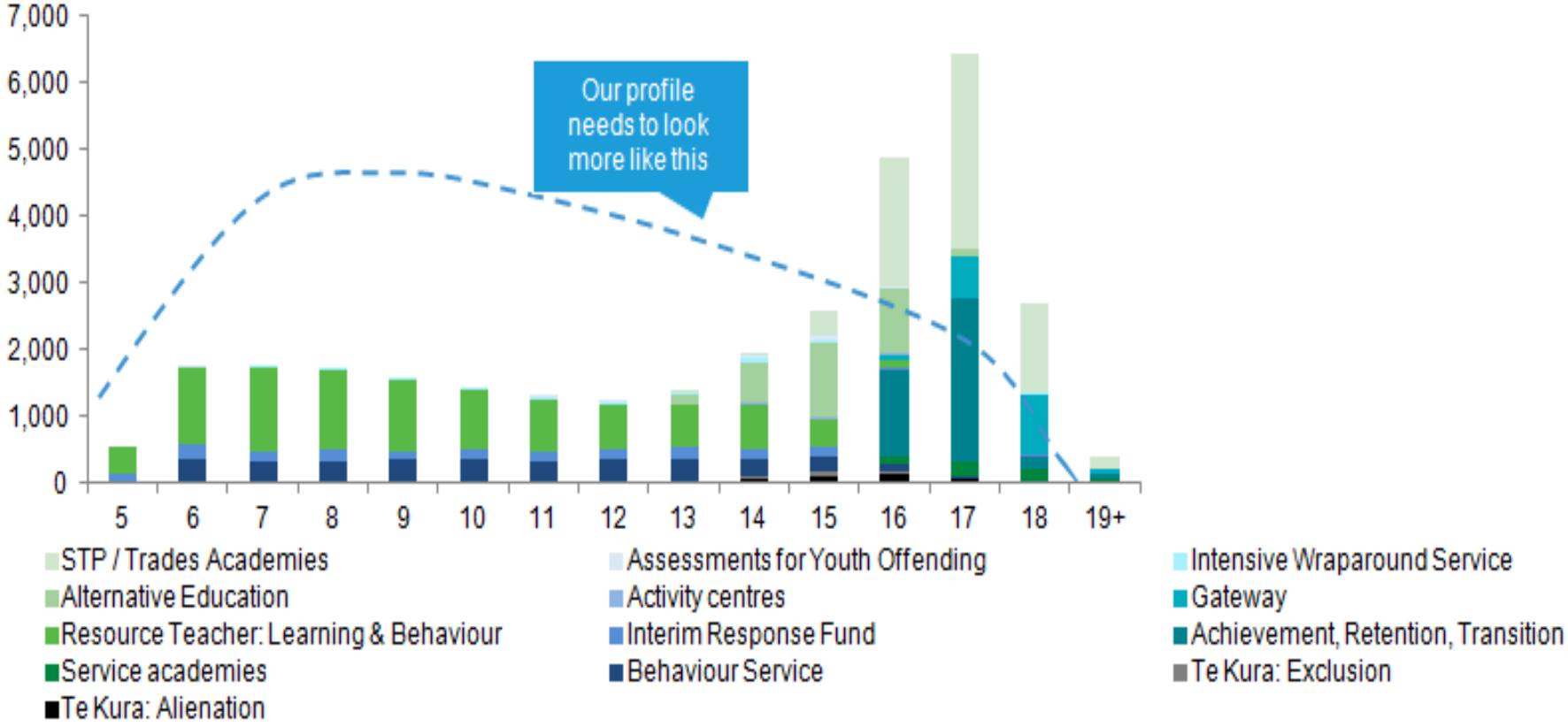


Do secondary-tertiary programmes improve NCEA Level 2 achievement?



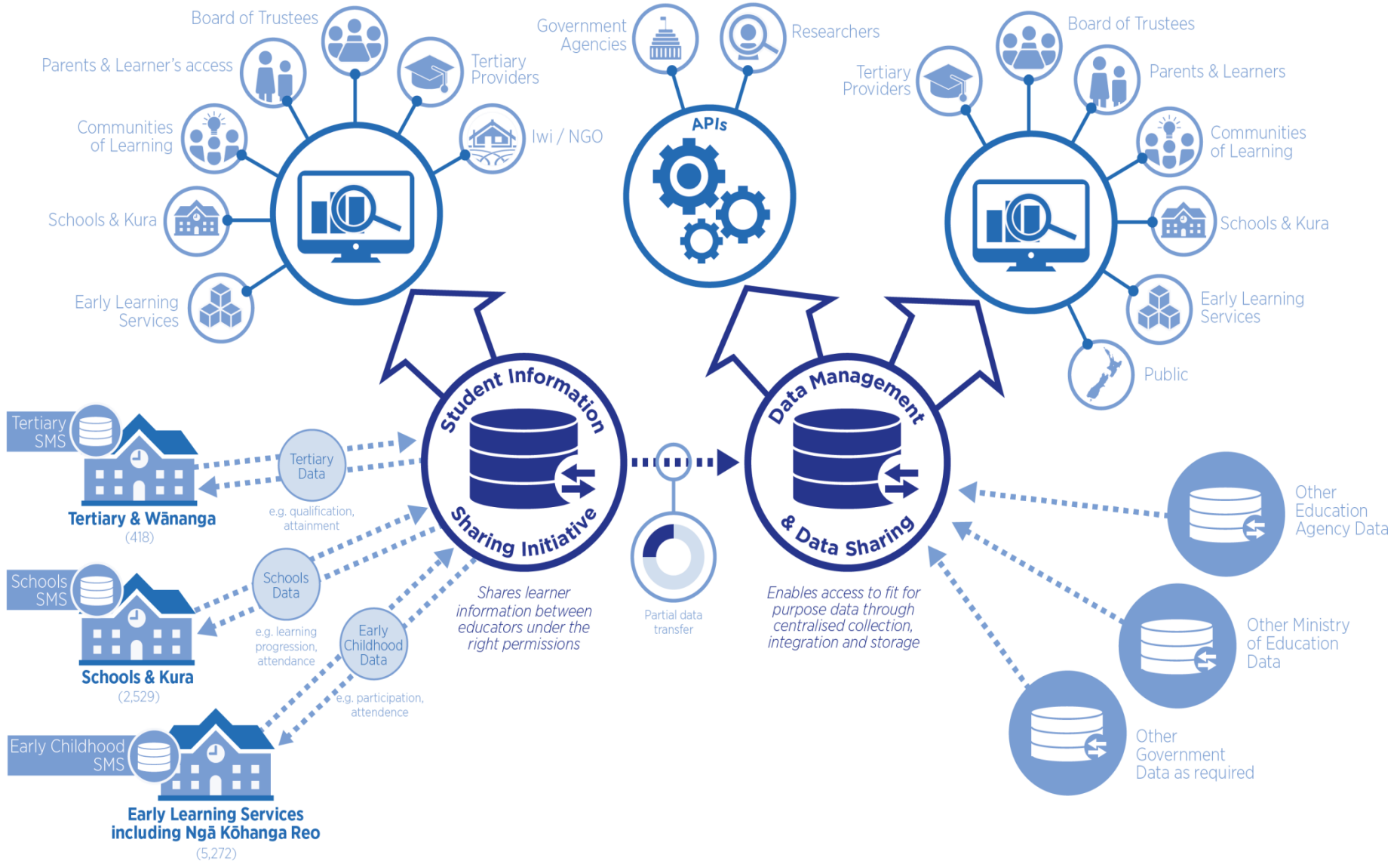
1. The graphs show time in years before and after starting a secondary-tertiary programme, where zero is the first year.
2. The shaded areas show the 90% confidence interval

...but we need to invest earlier to make a bigger difference!



Integrated Education Data

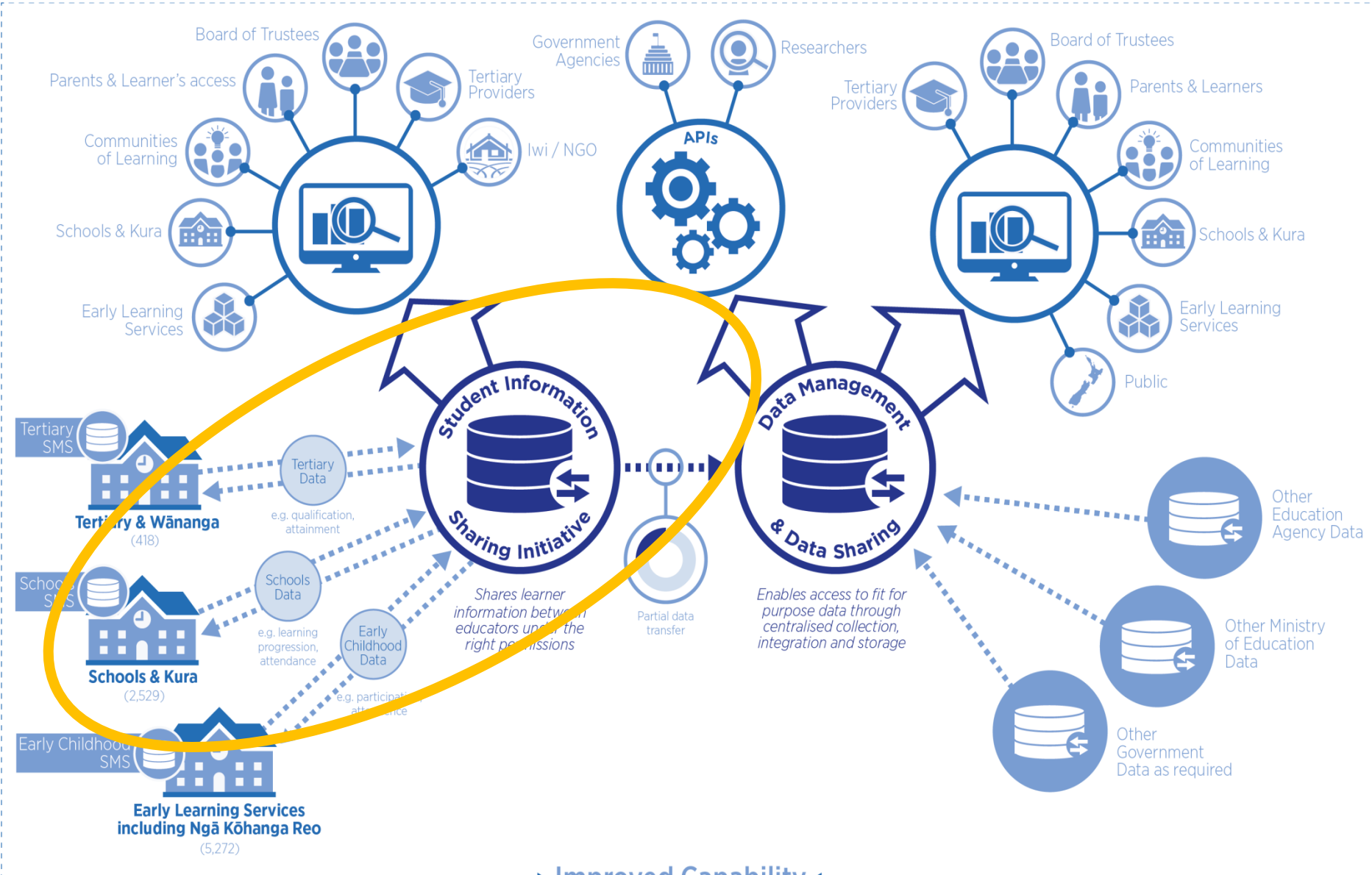
The right information, to the right people, at the right time



→ Improved Capability ←

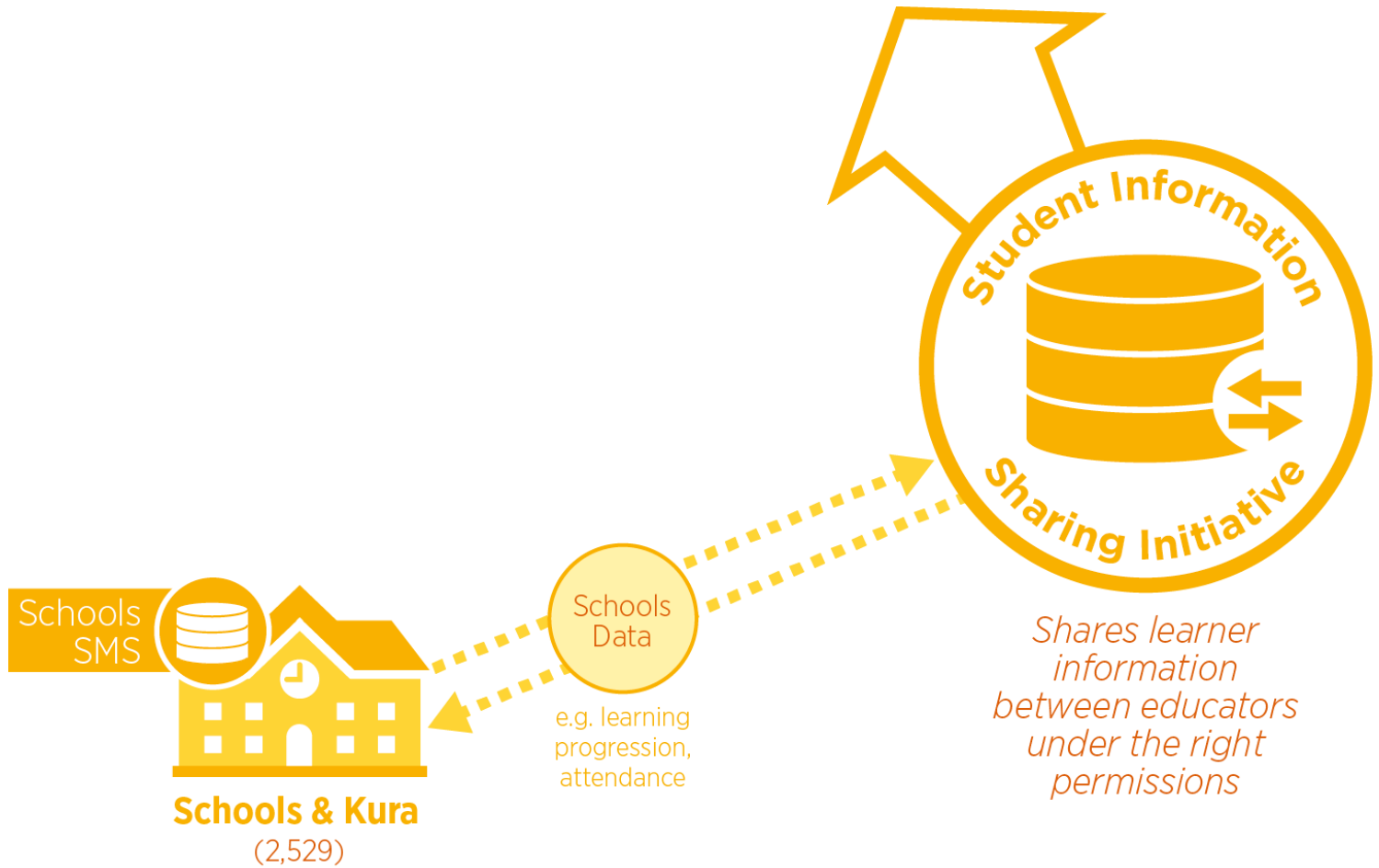
Integrated Education Data

The right information, to the right people, at the right time



→ Improved Capability ←

Student Information Sharing Initiative (SISI)





Lifting aspiration and educational
achievement **for every New Zealander**