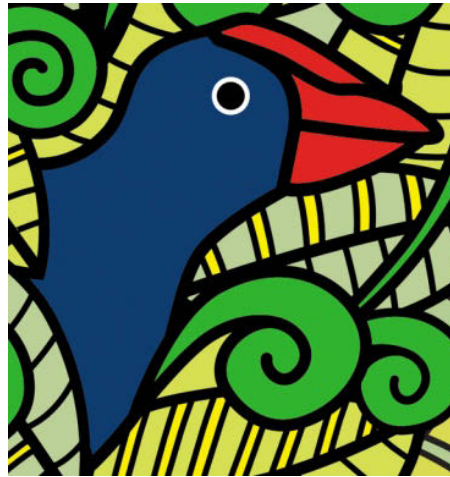
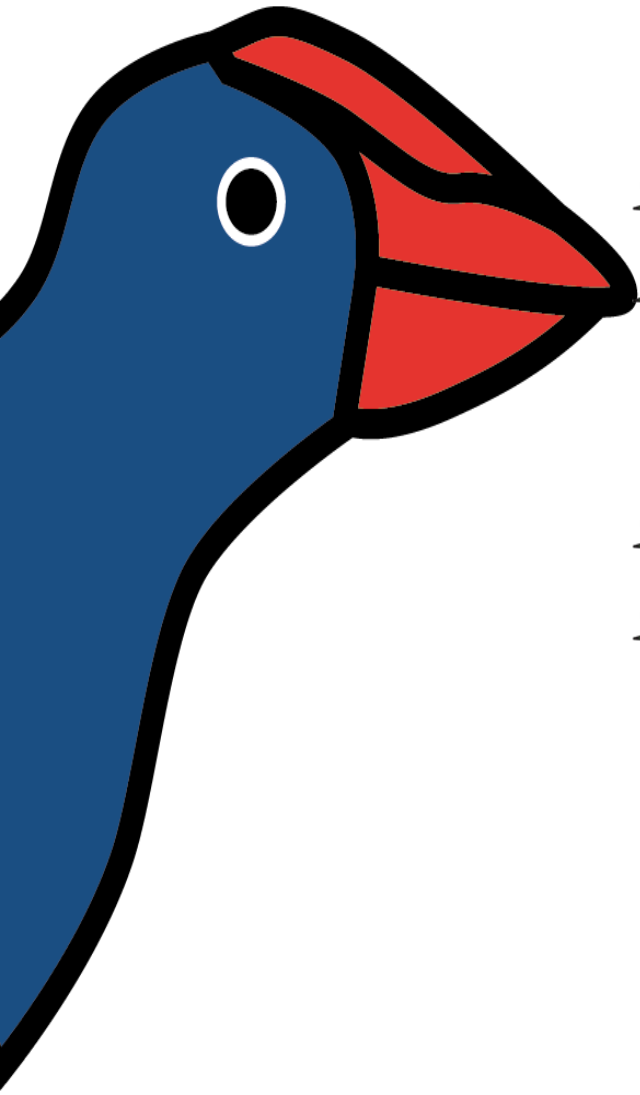


Who achieves what in secondary schooling? A conceptual and empirical analysis



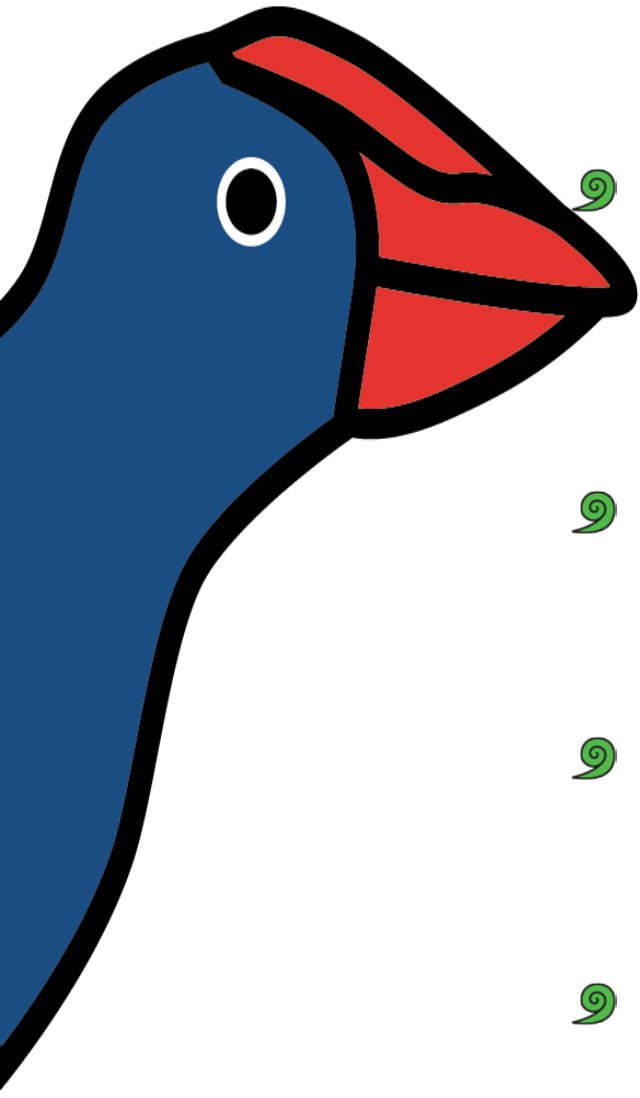
Liz Gordon

Overview



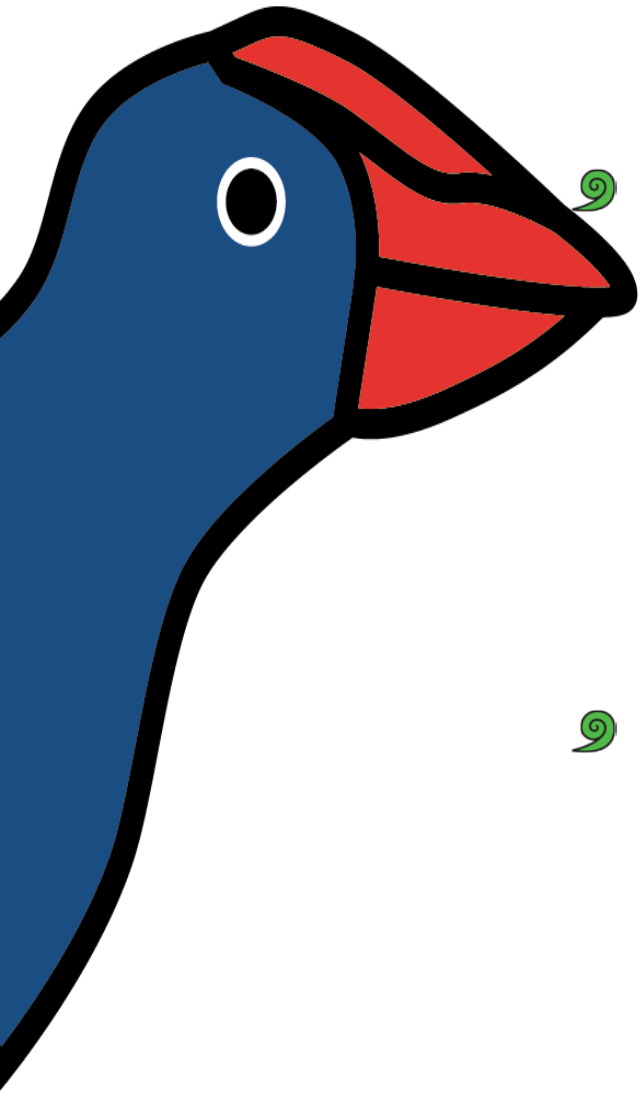
- About me
- About the project – do one in five fail in school? What are the numbers? What does it mean?
- Partnering with Brian
- Our approach –
 - Historical
 - Comparative
 - Economic
 - Empirical
 - Social
 - Policy

Historical approach



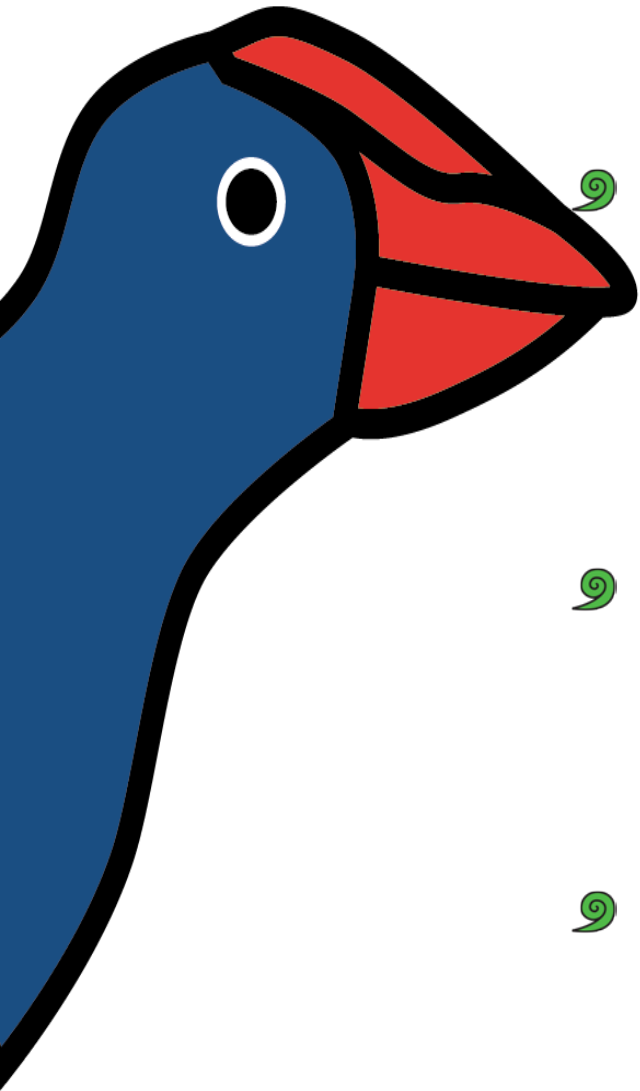
- To understand what is currently happening in New Zealand school assessment, an historical perspective is crucial.
- Credentials were used from 1877 onwards to enable, ration and deny access to higher levels of education.
- The history of schooling in the 20th century was of provision following demand for higher levels of education.
- The introduction of the NCEA has been transformative, especially for Māori and Pasifika learners: process, subjects, outcomes

Illustrations



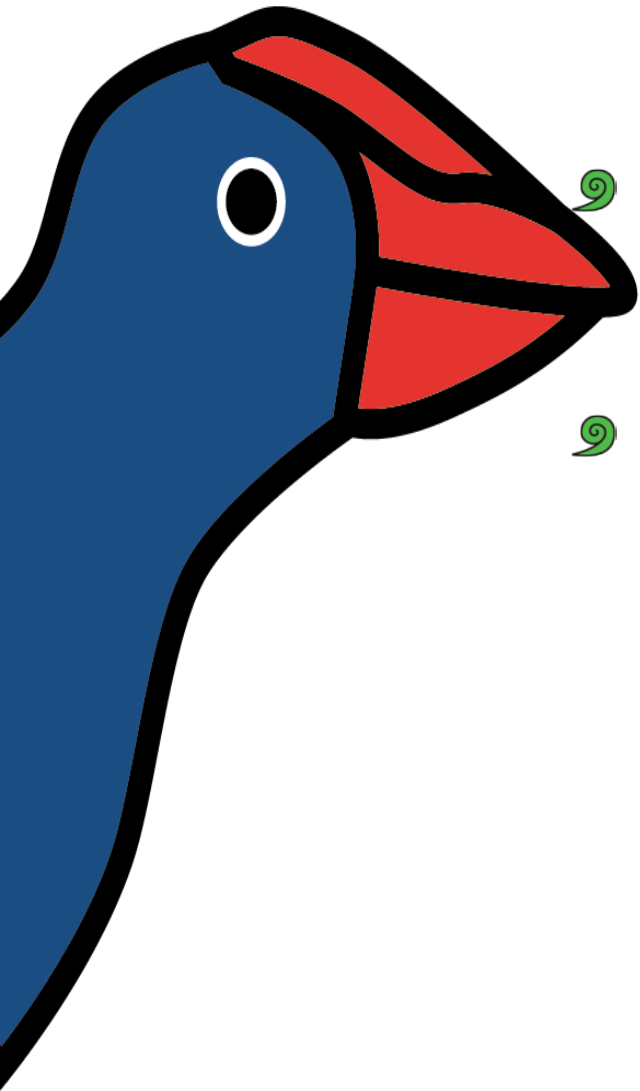
- 🌀 The proficiency exam:
 - Standards had to be continually raised
 - All groups exceeded expectations: Māori from a low base (and often very poor provision)
 - Led to free places in secondary education, then secondary education for all.
 - Attempts at rationing during depression were futile – pass rates dipped for one year only!
- 🌀 School Certificate: A move to norm-referencing – only a certain proportion of the population could pass each year. School Certificate limited the achievement and aspirations of NZ children for more than half a century, and especially Māori .

Lessons from history



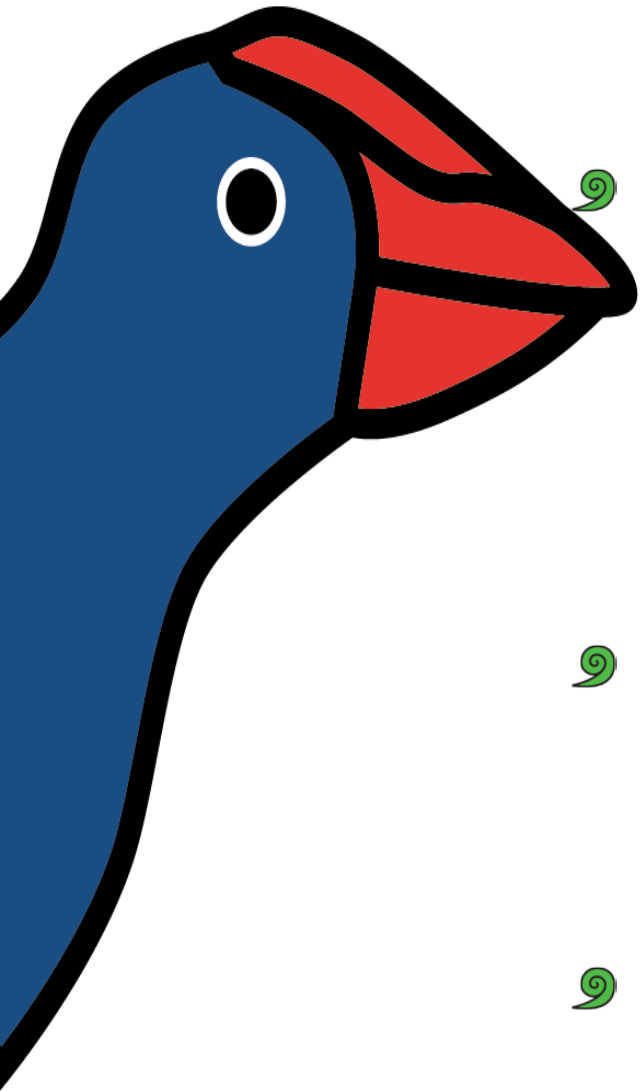
- Assessment systems are not neutral. They are used to ration access to social and economic goods and as instruments of social differentiation and control at various periods.
- School Certificate was probably a highly biased assessment system, requiring complex scaling that disadvantaged Maori and girls.
- Various changes were made to address these problems, but none had the effect that replacement with the standards-based NCEA has had.

Looking internationally



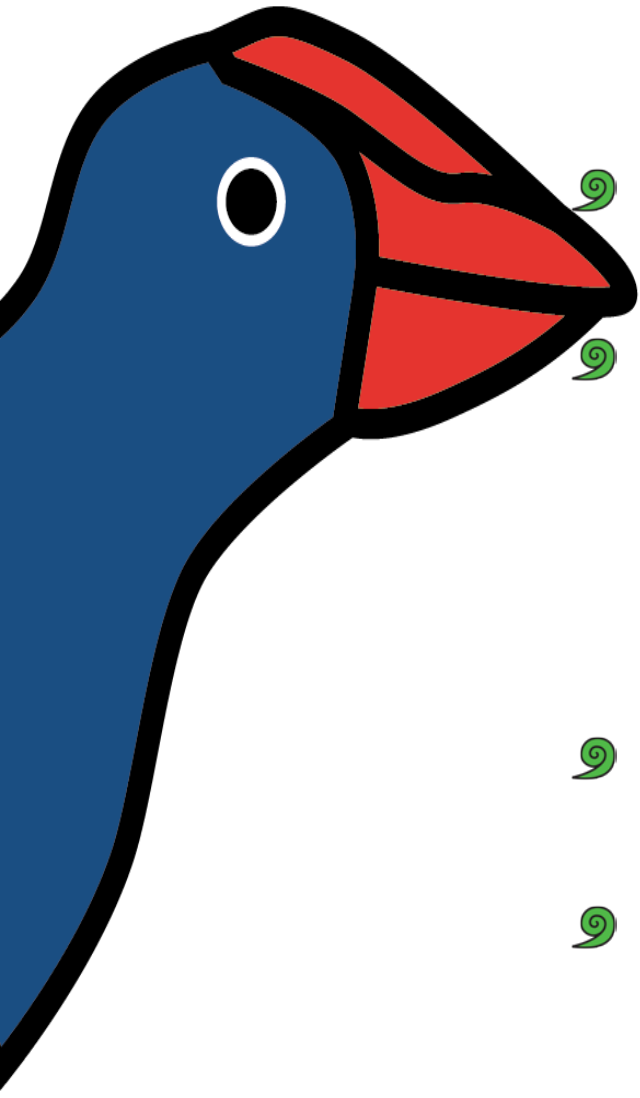
- Different countries have very different systems of senior school assessment, which reflect their history and culture
- Emerging from a differentiated system, the English system has become more integrated in recent years. Rising pass rates have led to political concerns about falling 'standards' and proposals for a revised system where more would fail. Interesting issues include whether allowing units to be achieved on second or third attempts is a good or bad thing.
- Why would a nation go back to a system where most fail?

Looking internationally



- Each State runs its own assessment system, and we looked at Victoria. Assessment takes place across Years 11 and 12 (our years 12 and 13) and is multi-year. There is internal assessment only at Year 11 with dual/external at Year 12.
- This relatively minimalist system raises the question of why New Zealand has three separate years of assessment – do we over-assess?
- Completion rates for non-indigenous Australians at Year 12 hover around 87%. But are much lower – around 50%, for indigenous groups.

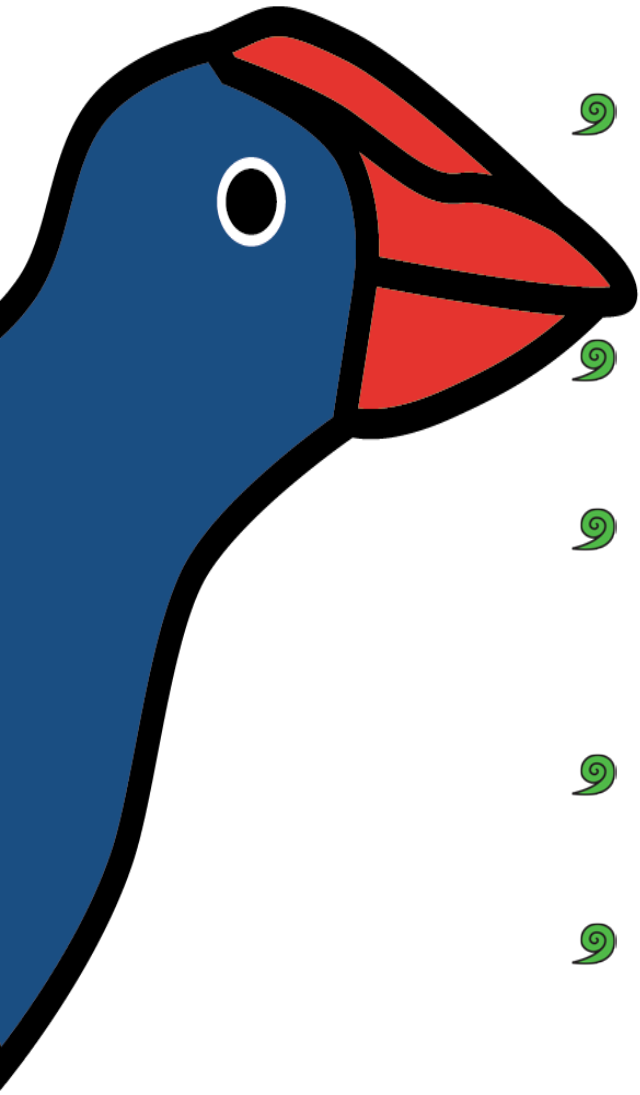
Looking internationally



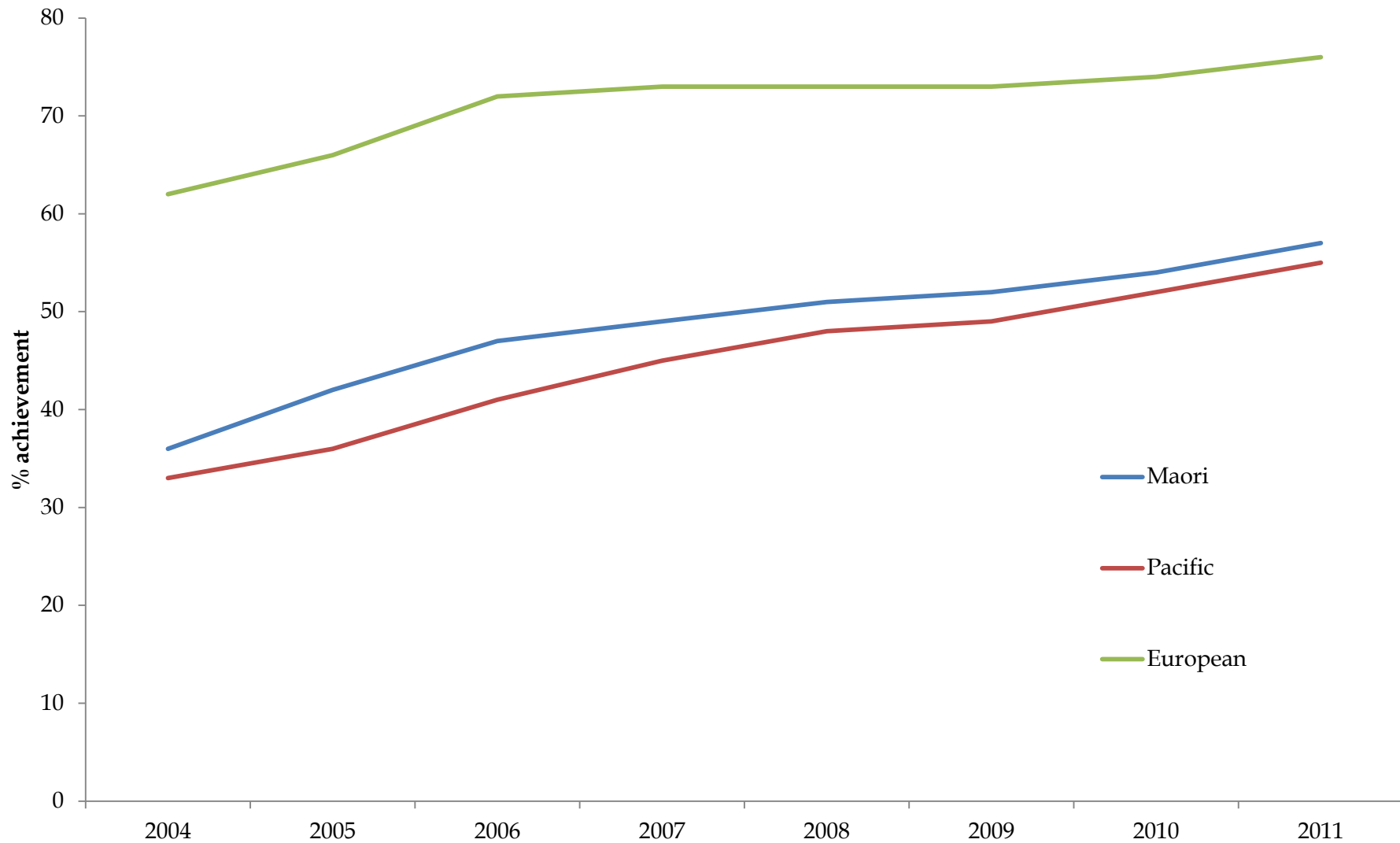
- The American 'graduation' model was briefly considered
- Ontario's model was briefly outlined. This model specifies a required mix of subject learning, civics, career studies, community involvement, literacy standards and optional work.
- The aim appears to be to foster a 'good citizen' by a variety of learning options.
- Graduation rates are at around 80% in Canada and around 75% in the USA, with significant differences between states.
- Other systems were examined briefly

NCEA

- NCEA has been remarkably successful in broadening learning and increasing achievement.
- Participation in senior school assessment has risen sharply
- The number of students achieving the 'benchmark' NCEA2 has increased each year
- Māori achievement, in particular, has risen at unprecedented rates.
- There is a gender gap, an ethnic gap and an ethnic/gender gap apparent in the NCEA assessments.
- Pasifika achievement has also lagged



NCEA2 achievement rates

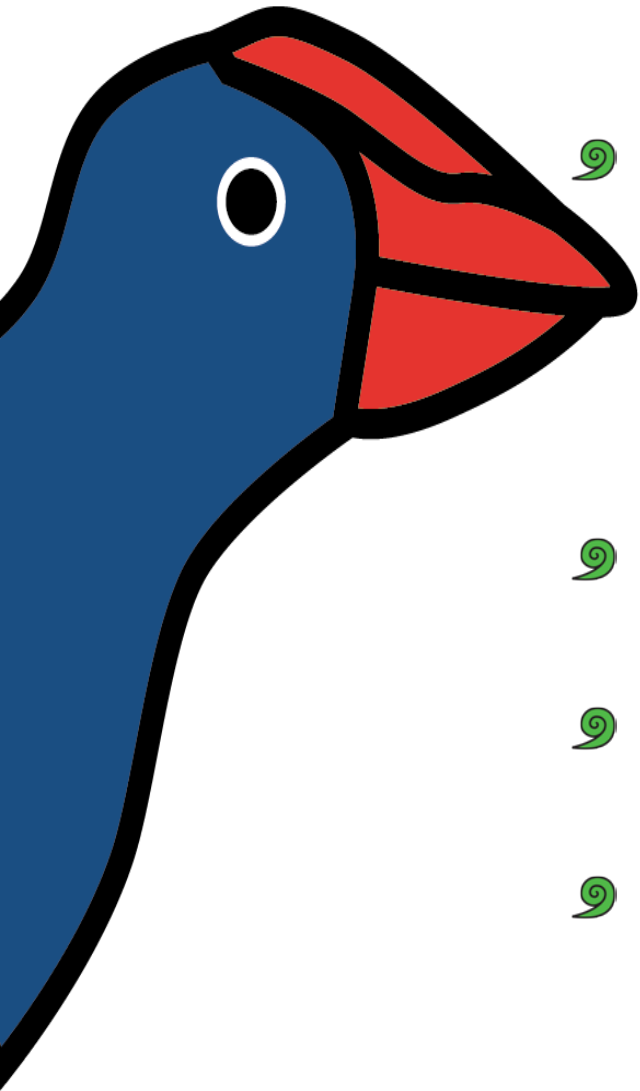


Will SSC targets for 2017 be met?

Learner group	2011(%)	Current gap (%)	2017 projection (%)	Remaining gap (%)
All 18 year olds	74.3	10.7	78.9	6.1 (3,650)
Māori	57.1	27.9	66.2	18.8 (2,420)
Pasifika	65.5	19.5	71.6	13.4 (950)
Pākehā	79.3	6.2	84.2	.8 (320)
Male	70.9	14.1	75.3	9.7 (3,000)
Female	77.9	7.1	82.7	2.3 (650)

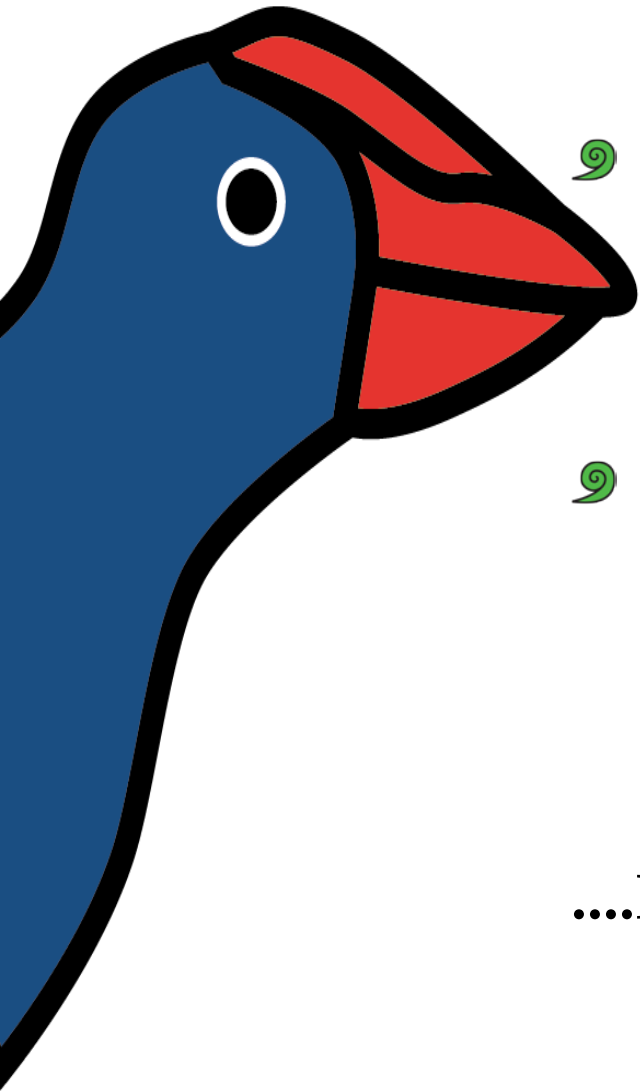
Table 4. Estimate of 2011 achievement at level 2, NCEA for 18 year olds, plus 2017 projections and gap to SSC targets⁴².

PISA 2009

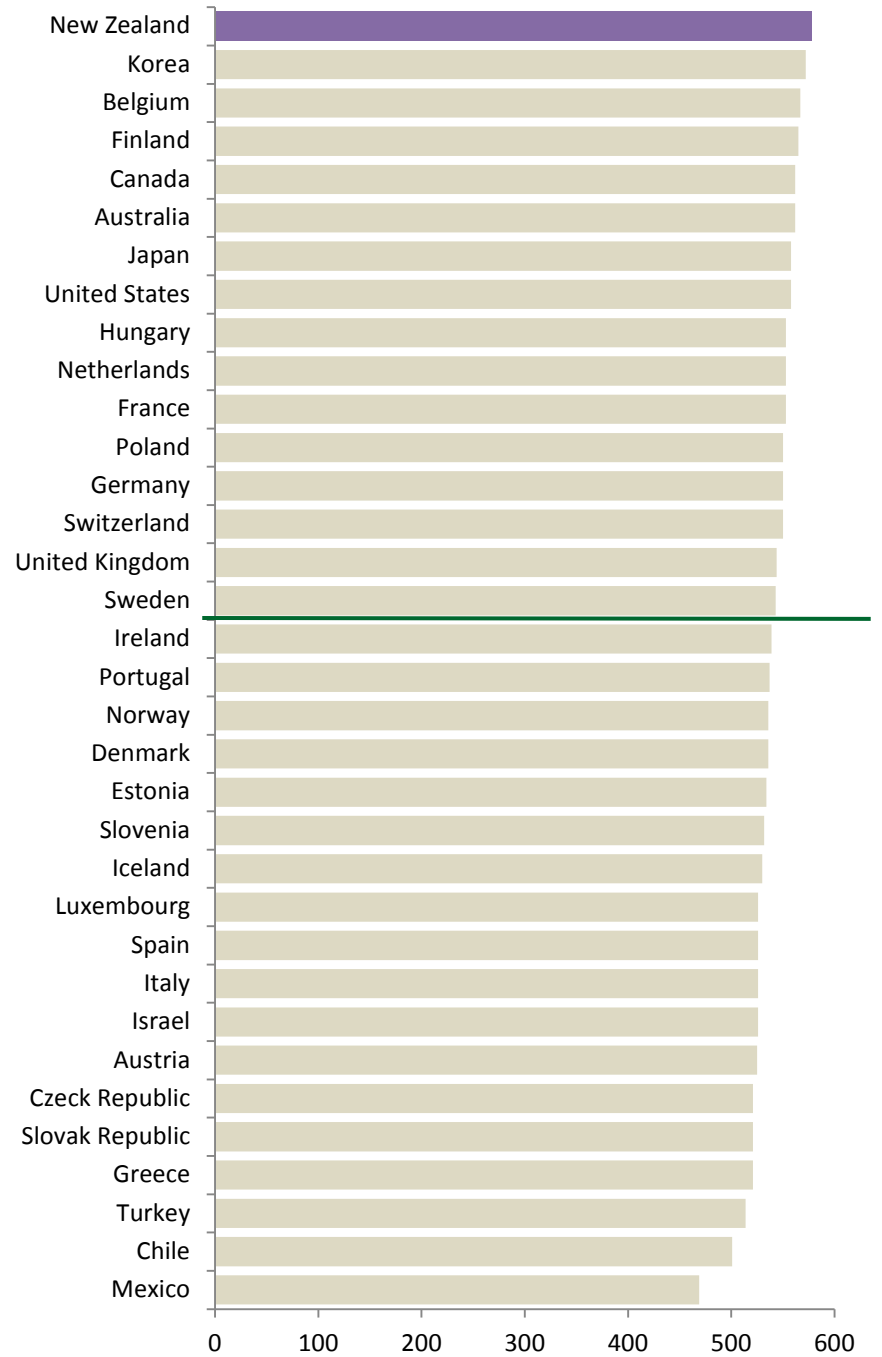
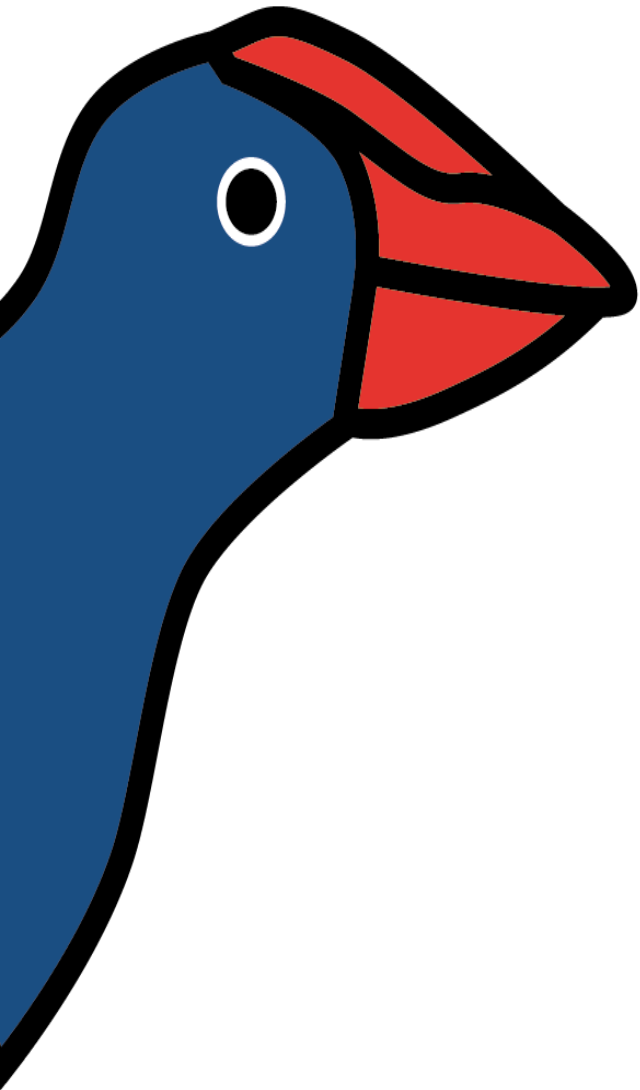


- PISA – an OECD study undertaken every three years. Best known for ranking countries on various characteristics of student learning – but much more than that:
- What things matter, and what don't, when it comes to student achievement?
- What kind of class, school etc factors make a difference (or not), and
- Given that educational outcomes tend to be distributed unequally in societies, what can be done...?

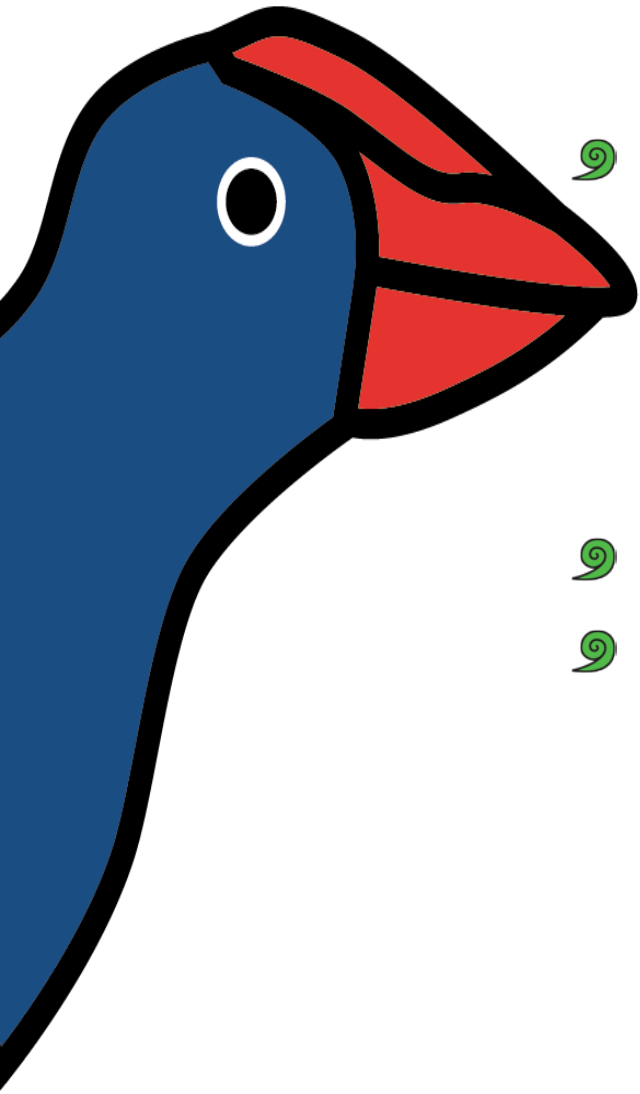
PISA 2009



- How did NZ do in 2009? PISA begins from the premise that there are socially based educational inequalities across all countries.
 - Ranking the top 25% of New Zealand's students using a scale of socio-economic status called the ESCS, and comparing with all other countries' top 25%,
-New Zealand's top learners in 2009 outperformed the top learners of all other countries.**

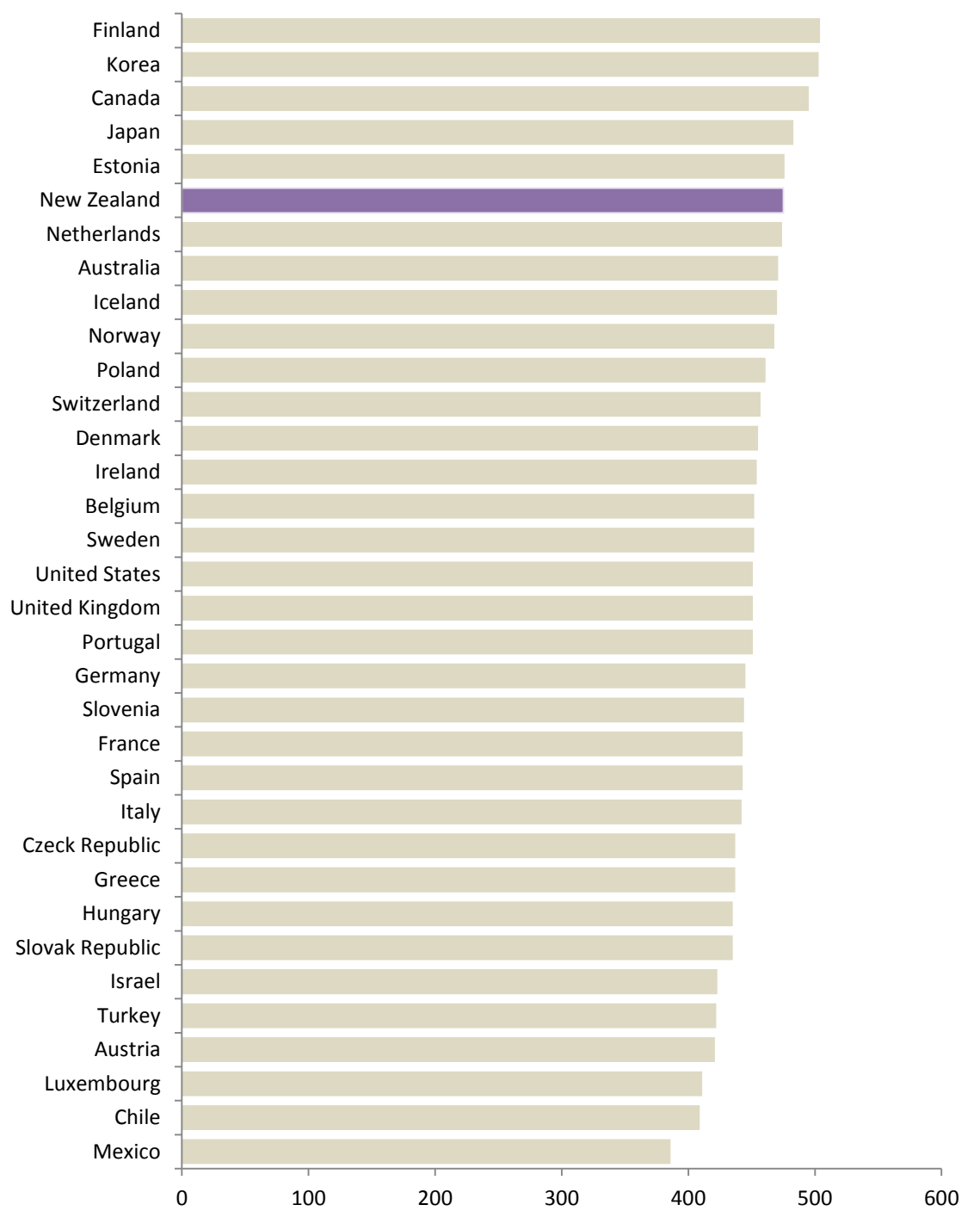
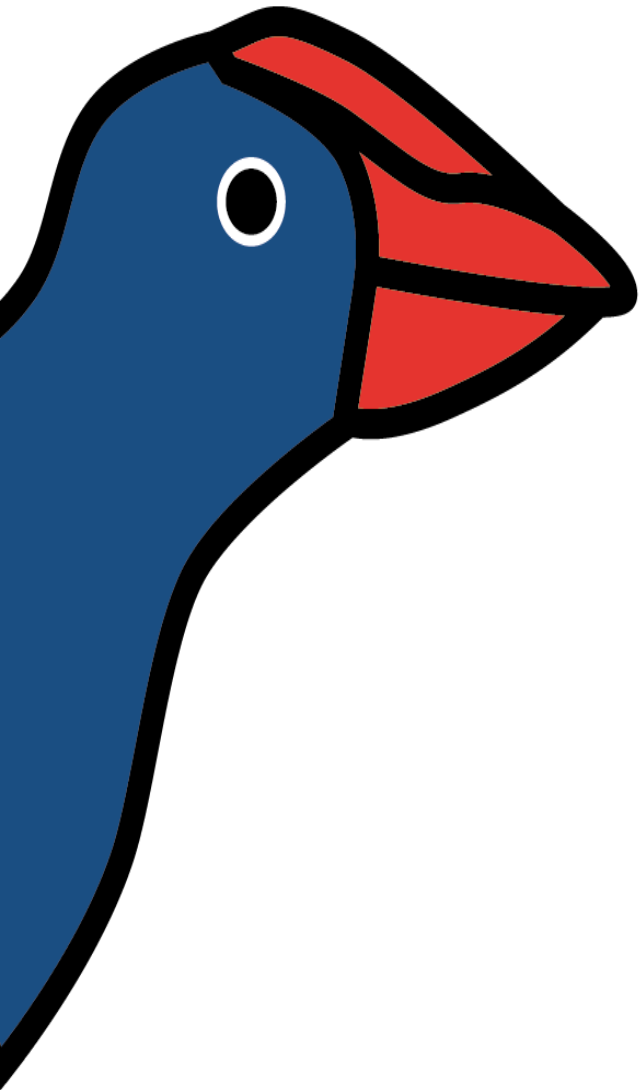


PISA 2009

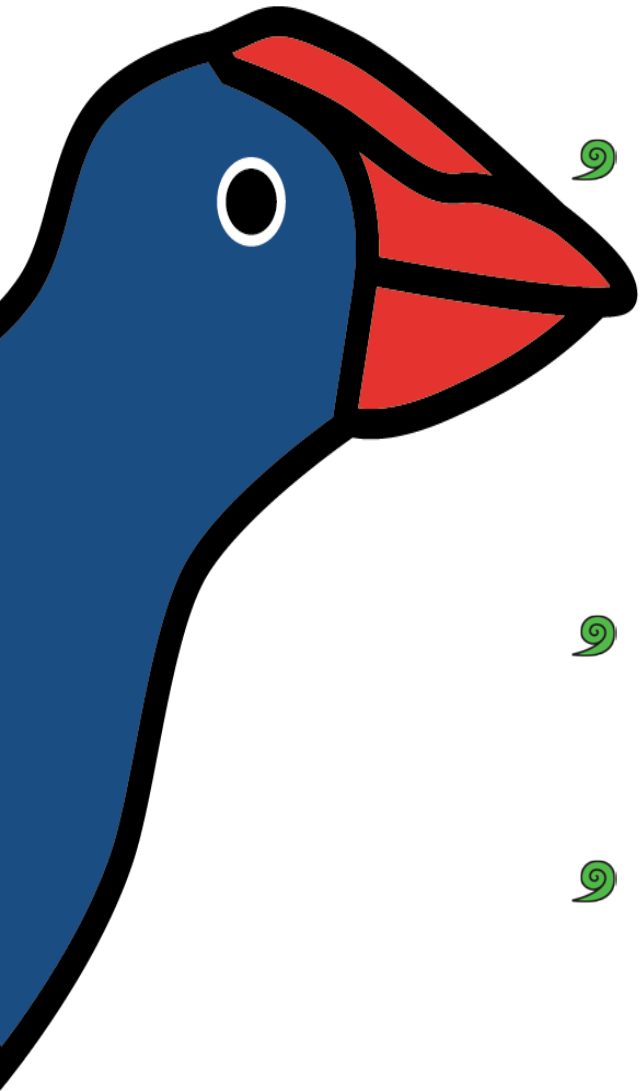


- What about our bottom 25%? Didn't the Secretary for Education – not this one, his predecessor – say that we were the worst in the world at adding value to students at the bottom?
- And are we?
- Well, comparing our bottom 25% with everyone else's bottom 25%, socio-economically speaking, we came...
6th.

Which is not bottom, not worst, not even bad....

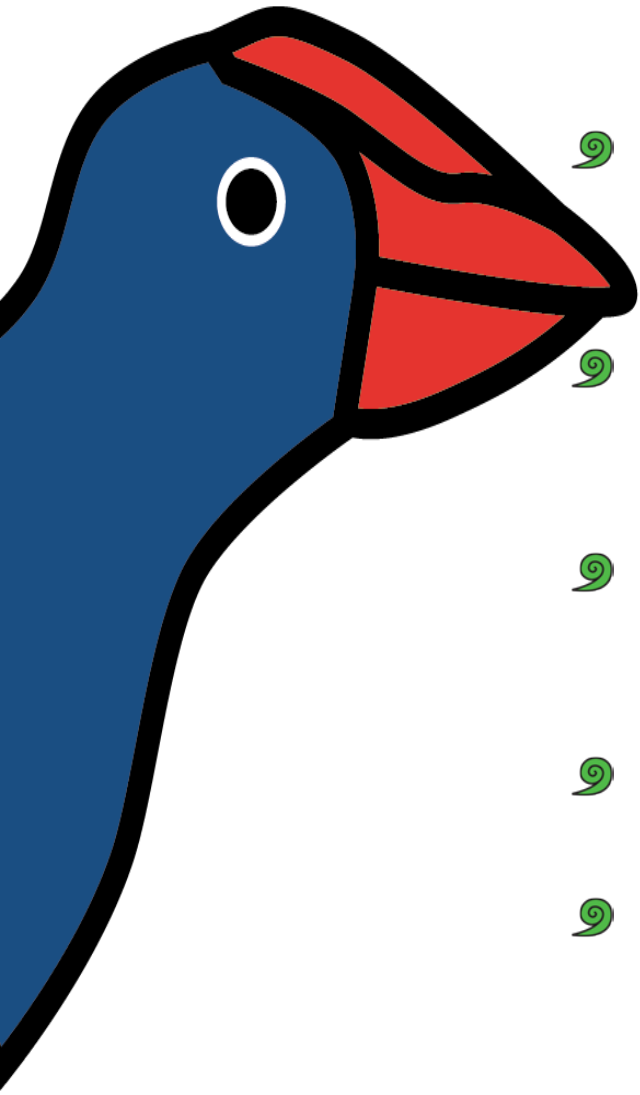


PISA 2009



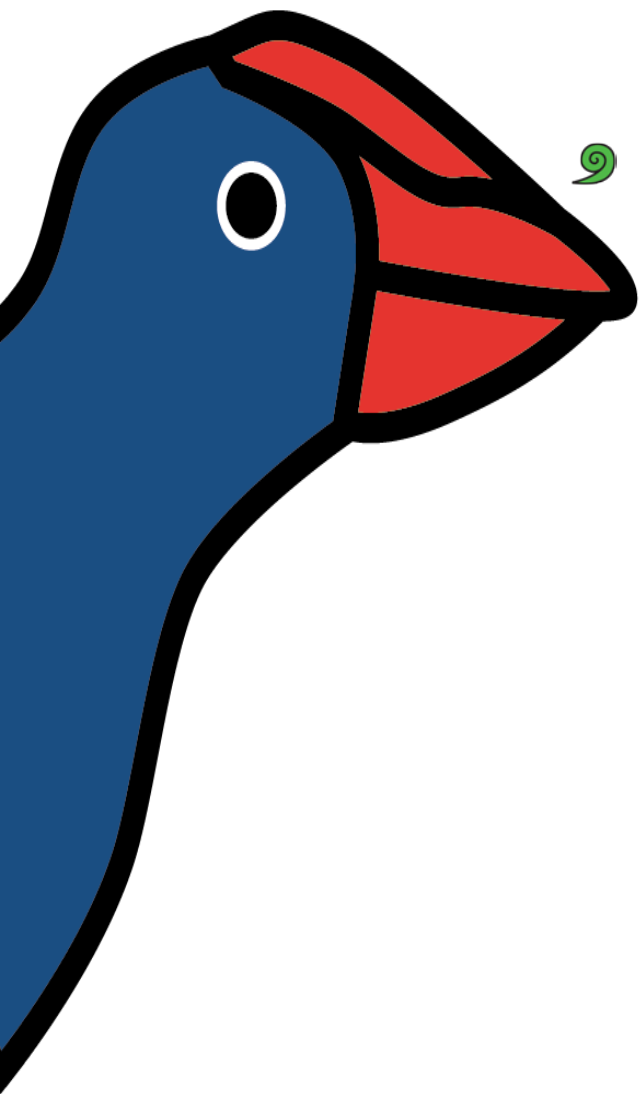
- New Zealand did in 2009 have a bigger than average reading gap between the top and bottom quartile – of around a 2.5 year reading gap, compared with 2.2 for the OECD on average, and 2.3 years in Australia and the UK.
- But our bottom quartile still read better than all but five other countries, including both of these.
- **The gap is larger because of our stellar performance in the top quartile.**

PISA 2009



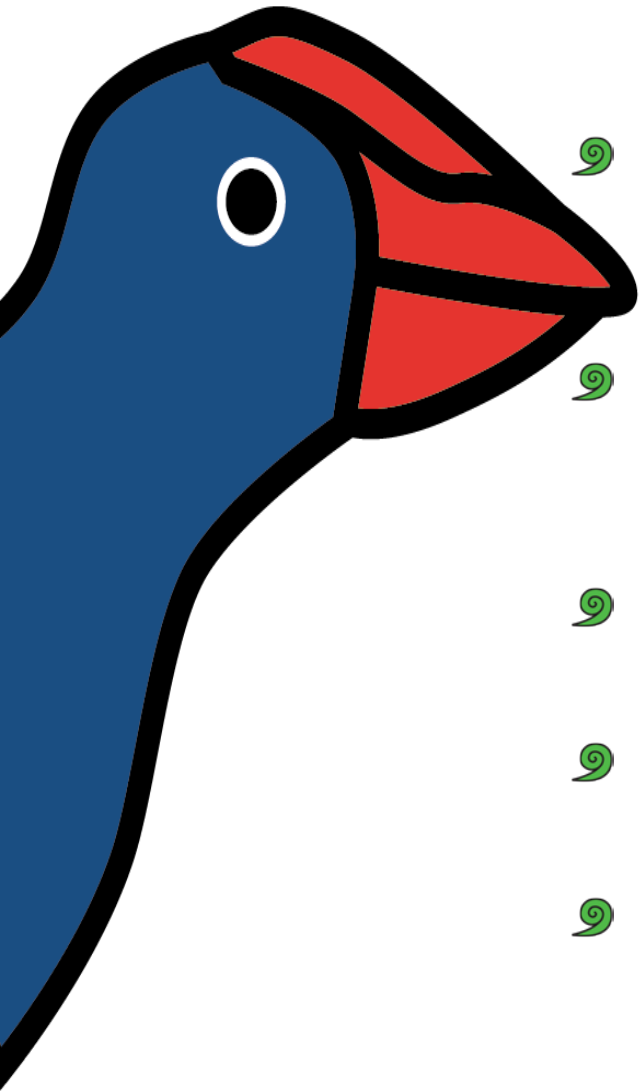
- *A variety of other measures are explored in the full report.*
- What makes a good reader? Using the reported characteristics of learners, can we say what things are associated with the best learners?
- The answer is yes. In New Zealand, the biggest predictor of reading success is the number of books in the student's home.
- Second, roughly equal, is father's and mother's educational attainment.
- Third is the amount spent on education in households, although spending more than \$5000 appears to be counter-productive – reading results reduce to zero benefit at that level. Spending \$200 is a good investment.

PISA 2009



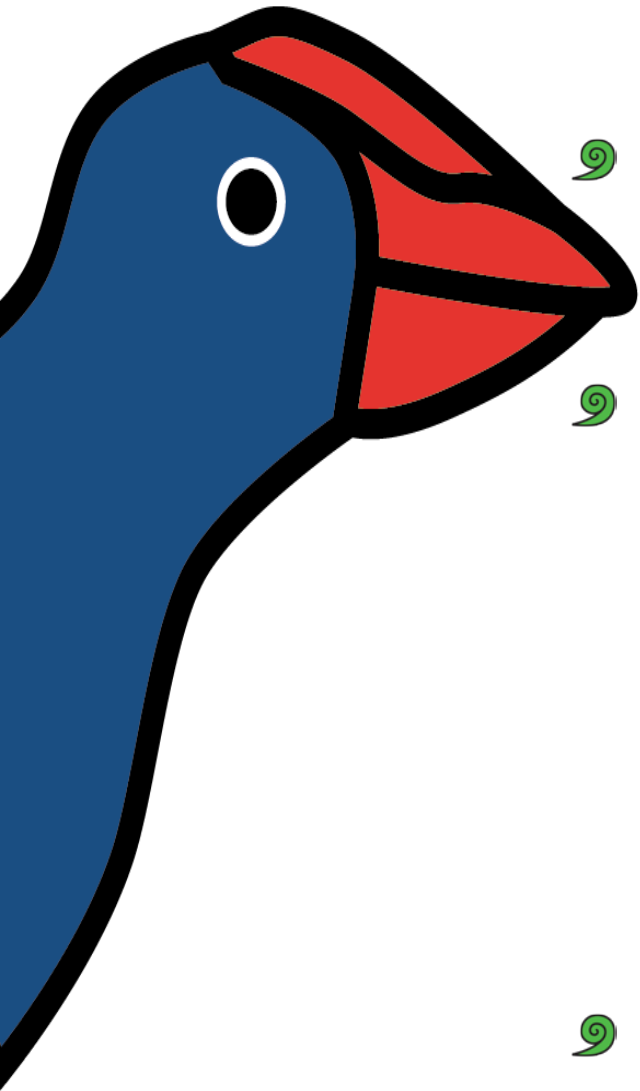
- Other strong factors include homework completed on a computer, use of home computer, number of bathrooms in the home, family income and classic literature in the home.

Proficiency Level 1



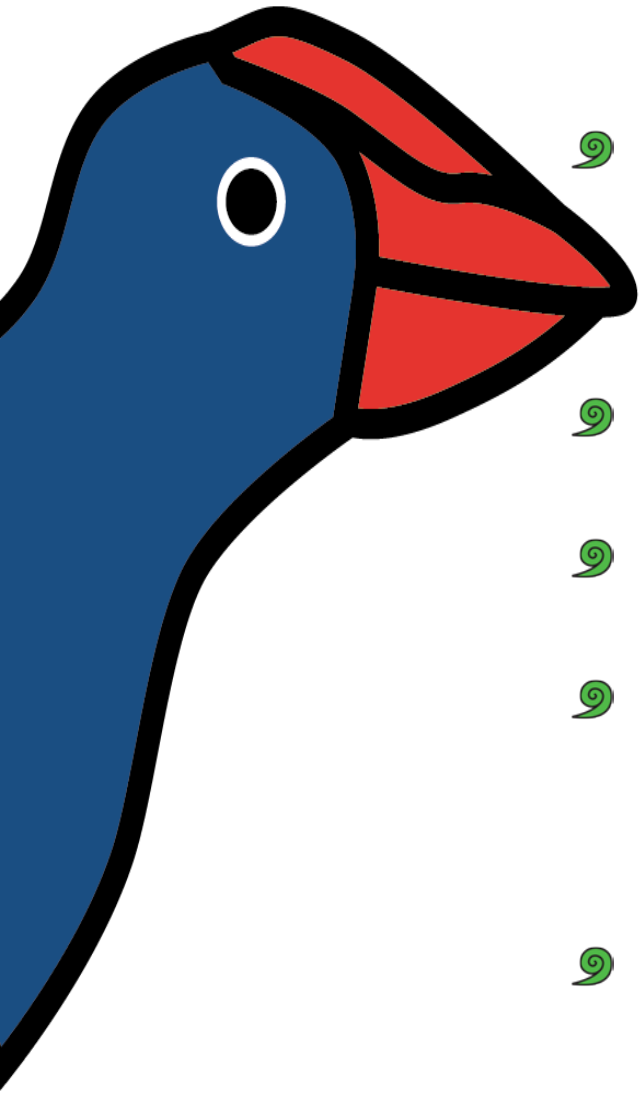
- PISA has its own scale of success, as a tool to provide universal comparisons across countries.
- Proficiency Level 2 is considered to be the benchmark at which students may succeed in education or the labour market.
- 14.3% of NZ students in 2009 failed to reach Level 2, compared with 18% across the OECD.
- If we are looking for a 'fail' group, it is probably this group.
- It is 74% male, 25% Māori , 35% Pasifika and concentrated (2/3rds) in low income households.
- $\frac{3}{4}$ of this group come from homes with fewer than 100 books.

Proficiency Level 1



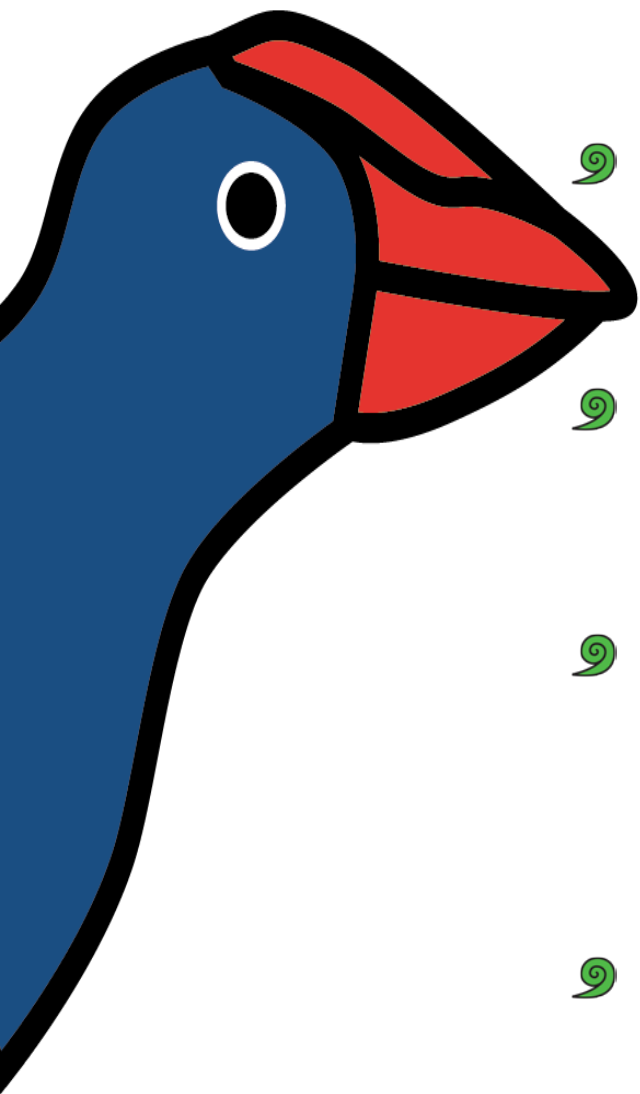
- The patterns of liking for and engagement in school and with teachers are little different than for all students.
- This group is made up of a mix of children with a range of physical and cognitive disabilities as well as those who are disadvantaged rather than disabled. If this is the real 'failing' group in New Zealand schools, more work should be done on analysing and providing remedial support for its diverse members.
- As far as we know, no such work has been done.

Seven stellar students



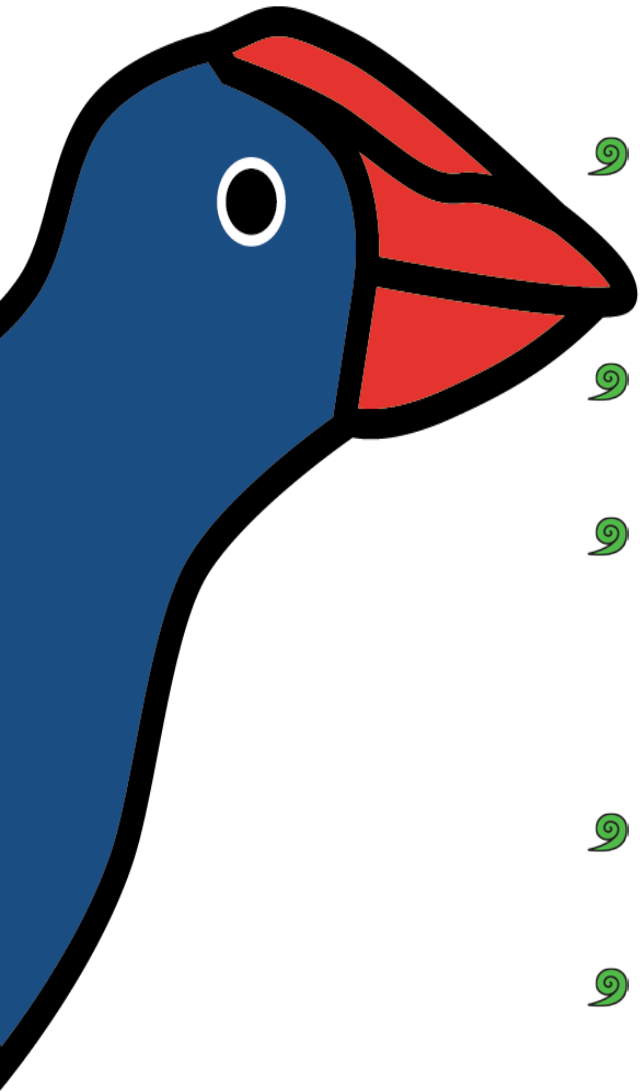
- Seven students scored about 750 points on the PISA reading scale. This is an extraordinarily high score. Modal characteristics of the seven are:
- Female and pākehā, lives with parents and a sibling.
- Both parents have post-school qualifications and both work full time.
- Born in NZ, they have good facilities in their house, internet access, and more than 500 books. The students read for pleasure an hour or more per day.
- They go to state schools, either co-ed or single sex, and have not changed schools except to progress.
- Want a degree but not post-graduate quals.

Other analysis



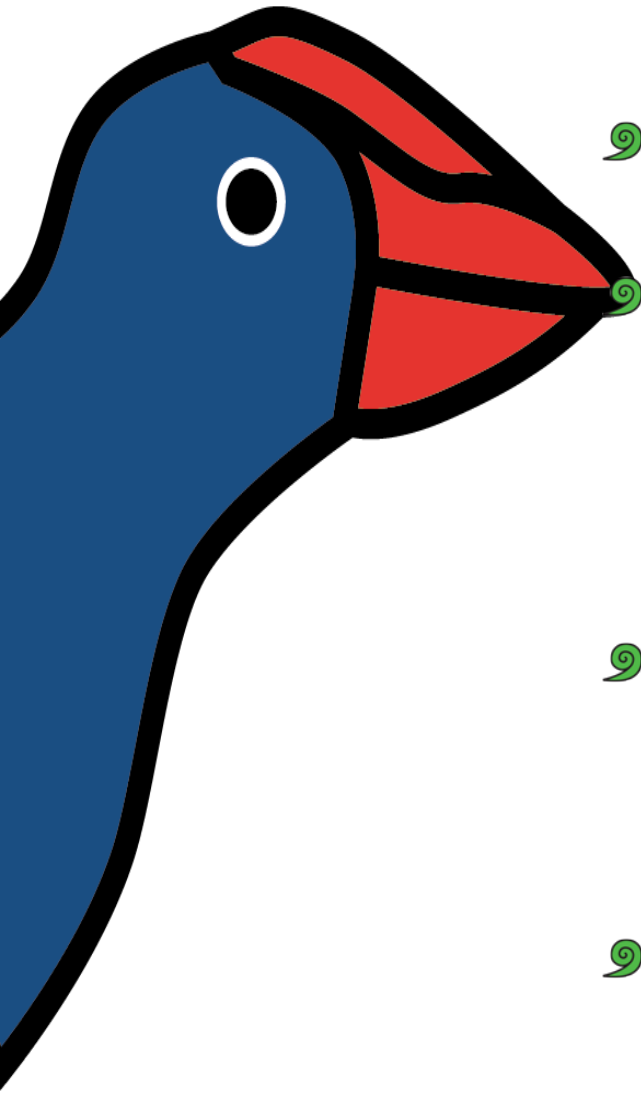
- The report goes on to discuss Māori and Pasifika learners and other issues – Brian’s work.
- The PISA data contains information on students’ family life, their schools, and student views on their education.
- The OECD has analysed this data and come up with a detailed overview of the characteristics of successful and unsuccessful schooling systems.
- The Ministry of Education has not done any work on the policy implications of this analysis.

Good schools



- Good schooling systems have relatively high levels of autonomy, with local and parental voice important.
- Strong investment in teachers, with good salaries, links to better school performance.
- Schools are inclusive, and advantaged and disadvantaged students attend the same schools. There is no advantage in private schooling, once SES is allowed for.
- Choice and competition makes no difference to overall school system achievement.
- There is little relationship between age of starting school, or number of hours per day spent in school, or hours of instruction in particular subjects, and school outcomes.

Finally



- Success is an artefact of assessment policies and a range of internal and external influences. Just last week the Minister noted that too many people were going to university, and not enough into the trades. In the past, that kind of view had led to pathways being restricted for some people.
- Raising student achievement will increase social and economic aspirations and cause problems of political management in a low-paid, low opportunity society.
- The NCEA system operating now is high quality and transformative. Secondary schools in NZ are great places where most young people do really well and enjoy their learning, despite the unequal social context.