



Education Report: Regional Engagement on the Equity Index

To:	Hon Chris Hipkins		
Date:	11 September 2019	Priority:	Medium
Security Level:	In Confidence	METIS No:	1202233
Drafter:	s 9(2)(a)	DDI:	s 9(2)(a)
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Messaging seen by Communications team:	No		

Purpose of report

The purpose of this paper is for you to:

- Note that the Ministry of Education is planning to undertake engagement across New Zealand to socialise the Equity Index with sector stakeholders from September to November 2019.

Summary

1. The Ministry of Education has been developing the Equity Index (the index) for several years. The index is intended to replace the decile system in identifying the distribution of learners facing socio-economic barriers, and allocating resources to support them.
2. The decile system is of high interest to parents, teachers, principals, early learning providers, the media, and other stakeholders. Any replacement of this system is likely to generate interest. The Ministry intends to hold an initial series of meetings across New Zealand during September and October 2019 to inform principals and key sector stakeholders about the potential new system. This engagement process has a number of objectives:
 - informing the sector about the need for resourcing to address socio-economic barriers
 - generating understanding and trust in the equity index for allocating resourcing to mitigate socio-economic barriers
 - reducing and mitigating the potentially stigmatising impacts of the index and new resourcing system
 - seeking feedback from stakeholders on the use of the equity index, including how resources should be allocated to and used by schools – how should equity information be used in broader resource allocation?

3. Attached at Annex One is the indicative presentation we plan to give to sector audiences.
4. The Ministry also plans to undertake two further rounds of public engagement in early and mid-2020. The first round will be to engage the wider public about the planned changes, and the second will be when school-level funding implications and implementation detail is available. The Education Report focuses on the engagement planned for 2019.
5. We expect the announcement of replacing deciles and our engagement to generate further interest in the early learning sector. With the development of an equivalent model now under way, we propose establishing an early learning Sector Reference Group to support our work and our future engagement with early learning services.

Recommended Actions

The Ministry of Education recommends you:

- a. **note** that the Ministry of Education is planning a series of engagements during September and October 2019 on the Equity Index and its potential application as a replacement for the decile system
Noted
- b. **note** the attached engagement materials
Noted
- c. **agree** that the Ministry of Education establish a Sector Reference Group to support the development of an Equity Index for Early Learning Services
Agree / Disagree

Proactive Release Recommendation

- d. **agree** that this Education Report is proactively released as part of the next publication, following the in-principle Cabinet decision to replace the decile system with the Equity Index


Damian Edwards
Associate Deputy Secretary
Education System Policy

10/7/19


Hon Chris Hipkins
Minister of Education

20/9/19

Background

1. The Ministry of Education has been developing a potential replacement for the decile system for several years. In September 2019, you will take a paper to Cabinet seeking a new decision to replace deciles with the redeveloped and refined Equity Index. Previous advice [METIS 1203462] outlines the significant changes to the Index since May 2018.
2. You have spoken publicly about a desire to replace the decile system. Deciles are of significant interest to parents, teachers, principals, early learning providers, the media, and other stakeholders. Replacing the decile system will have impacts for all these groups. Ensuring they understand the new index and have an opportunity to provide their thoughts and insights on how this tool might best support schools, will be crucial to a successful implementation.

The Ministry of Education values public insight and feedback

3. Our key purposes in engagement and communication with the public and stakeholders are:
 - informing the sector and the public about the need for resourcing to address socio-economic barriers – this will support the case for the equity index as a concept
 - generating understanding and trust in the equity index for allocating resourcing to mitigate socio-economic barriers - supporting people to understand our proposed methodology and being clear on what it does and does not tell us
 - reducing and mitigating the potentially stigmatising impacts of the index and new resourcing system – dispelling some of the myths around decile, and highlighting the confidentiality and privacy protections of the equity index
 - seeking feedback from stakeholders on the use of the equity index, including how resources should be allocated to and used by schools – what should we do with equity information?
4. Principals and sector leaders are a crucial group for ensuring a successful transition to the equity index. Principals in particular are frequently the first point of contact for parents, students, and other community members who have questions about new education initiatives. We heard very clearly from our Sector Reference Group members that engaging principals early and in advance of other public engagement (as opposed to alongside it) is their recommended approach. They also noted that principals would then be able to support our wider public engagement as advocates.
5. To achieve these aims, we plan to first hold a series of meetings across New Zealand (one in each Education region, with three in Auckland) to ensure that principals and key sector stakeholders have opportunities to hear directly from the Ministry about the new system, and to provide feedback. Following this, we will prepare for wider public engagement in early 2020.
6. Members of our Sector Reference Group have also invited us to hold small focus groups in their schools to speak directly with students. The Group represents a broad range of schools in size, decile, and location across New Zealand. We consider their support in

this will be invaluable, and the insights from students will be important in understanding what they consider makes the difference in addressing socio-economic barriers.

7. We also met with the Ministerial Youth Advisory Group on 22 August, to seek their views on:
 - the current decile system,
 - how decile-related stigma or discrimination affects young people, and
 - how they feel resources could best be targeted to address socio-economic barriers.
8. Feedback from this group was extremely helpful, with members clearly articulating the effects of socio-economic challenges they see in schools and communities. Members also expressed views that schools should be held accountable for the way they use funding intended to address socio-economic barriers. We plan to report back to the Youth Advisory Group in 2020 with an update on our implementation planning.

Engagement will support a successful transition to a new system

9. Transitioning to a new funding system carries some risks. There will be some schools who receive less money through the index than they received under the decile system. However, resources will be redirected to where the index indicates they are most needed, and in a far more nuanced method. This redistribution will result in a far more effective use of funding than is currently possible. It is vital that the education sector understand why this will occur, and how the Ministry will manage this transition.
10. A complicating factor is that the index will still be under refinement during our planned engagement, and key decisions will not yet have been made around funding levels or resource allocations. While we are confident that the broad trends identified by the current version of the index are accurate, we will not be able to discuss school-level transitions or equity indicators in any detail.
11. Our key message to the sector during this initial stage of engagement will be that we plan to model distributional impacts as the index is further developed, and ensure we seek appropriate funding from Government to undertake a well-managed transition, just as occurs after every decile recalculation. We will also be seeking feedback from the sector, as outlined above, on how best to prioritise the use of equity-focused resources.

12. **s 9(2)(f)(iv)**

A new system also presents significant opportunities

13. Throughout the engagement process the Ministry will hear from stakeholders about their views on socio-economic challenges, and how schools and agencies can best support students. This feedback will inform the development of an 'Equity Package', for which funding will be sought through Budget 2020. As mentioned, this will include engaging with students at schools to understand their perspectives on addressing socio-economic barriers.

14. We will advise you of the outcomes of the engagement and they will inform how we develop this package. **s 9(2)(f)(iv)**
s 9(2)(f)(iv)

Risks

15. It is highly likely that principals will be particularly interested in the redistributive impacts for their local schools. However, as funding levels and resource allocation methods are still to be decided, and as the funding version of the index will include up-to-date roll data from March 2020, it will not be possible to provide this information.
16. This lack of detail in the current round of engagement may lead to further questions and pressure from stakeholders for commitments to taking a 'no losers' approach or similar. Attempting to ensure no schools lose funding would be both extremely expensive, and highly inequitable, effectively locking in advantages for schools with lower levels of disadvantage who are currently misrepresented under the decile system.
17. As noted above, our messaging will include a strong focus on our plans to carefully manage transitions, limit losses, and a clear case for why the redistribution of funds is necessary.
18. The Ministry will hold a second round of engagement in early 2020 to inform the wider public about the equity index. We will also provide opportunities for people to identify their own ideas.
19. A further third series of engagements in mid-2020 (approximately July-September) will then provide more specific advice on local impacts across New Zealand from the planned implementation of the index. At this time we will be able to support schools to understand their own equity challenges, and any funding implications they may face.

Beginning sector engagement on an index for the early learning sector

20. The Ministry will redesign the current systems of targeted funding for use in the early learning sector (Equity Funding Components A and B and Targeted Funding For Disadvantage) in order to better target this funding using individual level data. Our work in developing the index for schooling will inform this project.
21. With your agreement we will establish a sector reference group to support the development of this index, and will consult with you on prospective members for this group. This group will be used to contribute expertise and knowledge from across the early learning sector in order to inform our advice to you on implementation.

Annex 1: Regional Engagement Slides

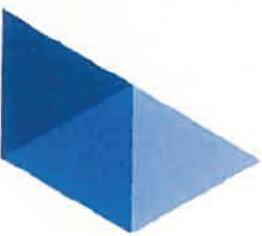
Proactively Released



The Equity Index and what it tells us about socioeconomic disadvantage

Presentation to Secondary Principals in Northland

12 September 2019



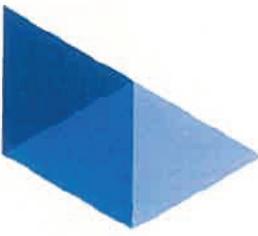
Why we're thinking about equity

- Socio-economic status has a very significant impact on educational and life outcomes
- OECD: “Equity does not mean that all students obtain equal education outcomes, but rather that differences in students’ outcomes are unrelated to their background or to economic and social circumstances over which students have no control.”
- New Zealand has an education system to be proud of and most young people achieve excellent results. However, we still have a challenge ahead in achieving equity for students who face socio-economic barriers. This is not a new challenge.
- There are costs to all of us when the system fails to mitigate the impact of socio-economic challenges

Deciles

How we currently measure socio-economic challenges in schools

- Deciles are based on census meshblocks that children from the school live in. This means that they look at **neighbourhood characteristics**, rather than recognising differences between households within neighbourhoods.
- Deciles are determined by **5 equally-weighted factors**:
 - Income in the lowest 20% nationally
 - Parents in low-skilled occupations
 - Parents who have no qualifications
 - Parents who receive income support benefits
 - Household overcrowding
- Meshblocks are then weighted by how many students from the school live in them. So if few students from the school live in the meshblock it contributes very little to the decile calculation.



The decile system has some weaknesses...

- Deciles can only be updated after each census
- Deciles do not represent the average income of the school community
- Deciles don't take identify whether the schools in a decile band face the same challenges
- Deciles use neighbourhoods and do not take each student's individual situation into account
- Deciles are commonly misunderstood and used as a measure of school quality
- The 10 deciles have roughly the same number of schools, but not the same numbers of students

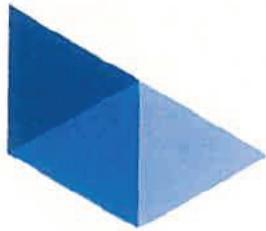
Current Funding for Equity

Current equity-based funding

- Funding for equity currently totals \$150m a year and makes up **2.9% of all schools' resourcing** (more than \$4 billion).
- Funding for equity is made up of **4 funding streams** in schools' operational grant:
 - 3 of these streams use decile to determine the funding level
 - 1 is related to parental benefit history

Current Equity Funding Split (2018)	
Decile Based	
Decile Funding (Targeted Funding for Educational Achievement)	\$125m
Special Education Grant (SEG)	\$12m
Careers Information Grant (CIG)	\$2m
Benefit dependency related	
Targeted At-Risk Grant (TARGET)	\$12m
Total Equity related funding	\$150m

- Decile-based funding is a flat rate per student depending on the decile level of the school, with the rate of funding increasing as school decile decreases. It is stepped so there can be large shifts in funding when a school's decile changes.



What is the equity index and how can it help?

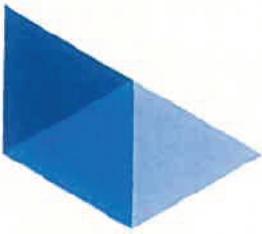
The equity index estimates the extent to which **each child at a school** is from **socio-economic circumstances** that we know to be associated with their likelihood of achieving in education.

The index uses the circumstances and results of past students ...

- This gives us an index made up of a large basket of socio-economic characteristics. The index looks at a large combination of a child's circumstances, not just any one factor, so reflects the varied and complex needs of learners across New Zealand.

... to understand the barriers current students are facing based on their circumstances

- We can apply the index to all children currently in the school-aged population and estimate the socio-economic challenge in **each school**, relative to other schools. This is a more learner-centred approach than the current neighbourhood-based system.



What is the equity index and how can it help?

The index isn't used to predict educational outcomes or identify 'at-risk' children

- the index is not intended to "predict" the chance that a child will not achieve in education.
- the aim of the index is to highlight whether there are socio-economic factors present in the lives of groups of children that require the education system to be structured and resourced in a way that gives all children an equitable chance of success.
- we identify these factors at a school level, and never know or release any information about individuals

We are confident in our new model

We have been developing the index for more than three years....

- And we have worked closely with Statistics New Zealand, the Office of the Privacy Commissioner, other government agencies, and an external independent Technical Reference Group to ensure our use of data is appropriate and well-tested
- We have also set up a Sector Reference Group of principals and union leaders who have tested our approach and provided robust and independent feedback on our work
- Our methodology and use of data has developed significantly and now reflects the socio-economic situation of all students in each school

We don't use or need Census data

- Our Index is built using the Statistics New Zealand Integrated Data Infrastructure (IDI). This is made up of administrative data provided by other government agencies, and does not rely on Census data.

The IDI contains anonymised data about individuals...

- We link anonymised individuals to the school they go to and get information at a school level

The index includes a wide range of variables

There are 26 variables in the current version of the index

Each variable is linked to socio-economic status, and we have a research document on this we will release as part of our implementation of the index.

Variables used in the Equity Index analysis
Care and protection family group conference of the child, ever NZ-born/not
Care and protection investigation of the child, ever Proportion of life on the benefit (child)
Care and protection notification of the child, ever Proportion of life overseas (child)
Care and protection placement of the child, ever Proven charges of the father/mother after 5 years before birth
Community service of the father/mother after 5 years before birth of child of interest ^[1] The cumulative mean ^[2] first-tier-expenditure benefit income of the father/mother
Father/mother in prison custody after 5 years before birth of child of interest The cumulative mean salary income of father/mother
Fathers/mothers education level The cumulative mean second-tier-expenditure benefit income of the father/mother
Mothers age at her first child The cumulative mean self-employed income of father/mother
Mothers/Fathers age at birth of child of interest Youth justice family group conference, ever
Number of children mother had at birth of child of interest Youth justice notification, ever
Number of home changes, lifetime Youth justice placement, ever
Number of non-structural ^[2] school changes, lifetime Number of school changes, lifetime
Number of school & home changes, lifetime Number of structural school changes, lifetime

^[1] Child of interest: i.e. this child, not his/her siblings

^[2] Cumulative mean: this means that we take the lifetime average at that age, from the birth of the child.

^[2] A structural school change is one that is caused by the first school not offering the next year level. E.g. from primary to intermediate or secondary school. Structural moves are usually at the start of year 7 and/or year 9. A non-structural change is a movement between schools at any other point in a child's schooling.

Disclaimer

The results in this presentation are initial findings based on the current version of the index. The index is being further refined and future results could differ slightly.

The results in this presentation are not official statistics, they have been created for research purposes from the Integrated Data Infrastructure (IDI) managed by Statistics New Zealand.

The opinions, findings, recommendations, and conclusions expressed in this presentation are those of the authors, not Statistics NZ. Access to the anonymised data used in this study was provided by Statistics NZ in accordance with security and confidentiality provisions of the Statistics Act 1975. Only people authorised by the Statistics Act 1975 are allowed to see data about a particular person, household, business or organisation and the results in this presentation have been confidentialised to protect these groups from identification.

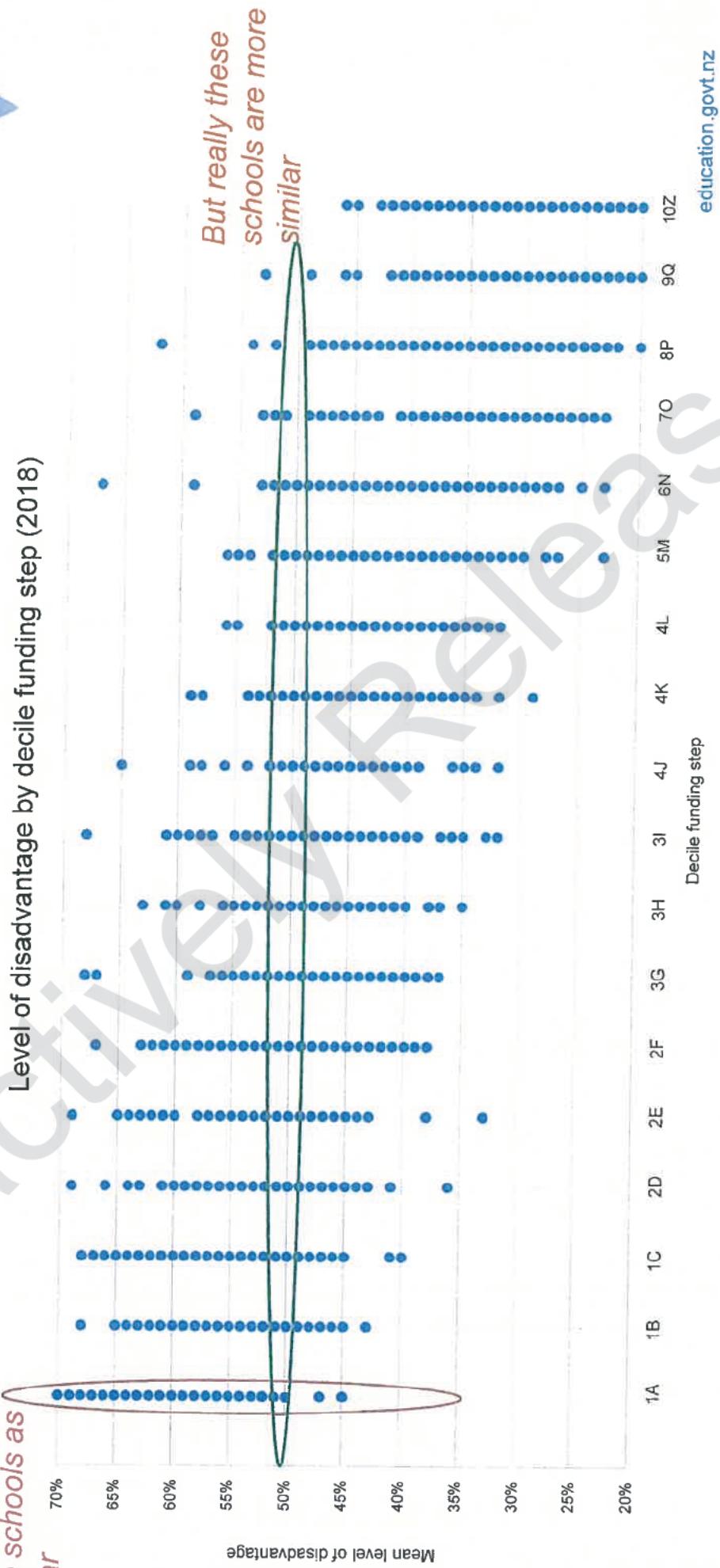
Careful consideration has been given to the privacy, security and confidentiality issues associated with using administrative and survey data in the IDI. Further detail can be found in the Privacy impact assessment for the Integrated Data Infrastructure available from www.stats.govt.nz.

The results are based in part on tax data supplied by Inland Revenue to Statistics NZ under the Tax Administration Act 1994. This tax data must be used only for statistical purposes, and no individual information may be published or disclosed in any other form, or provided to Inland Revenue for administrative or regulatory purposes.

Any person who has had access to the unit-record data has certified that they have been shown, have read, and have understood section 81 of the Tax Administration Act 1994, which relates to secrecy. Any discussion of data limitations or weaknesses is in the context of using the IDI for statistical purposes, and is not related to the data's ability to support Inland Revenue's core operational requirements.

The index provides a better understanding than decile of the level of disadvantage a school may face

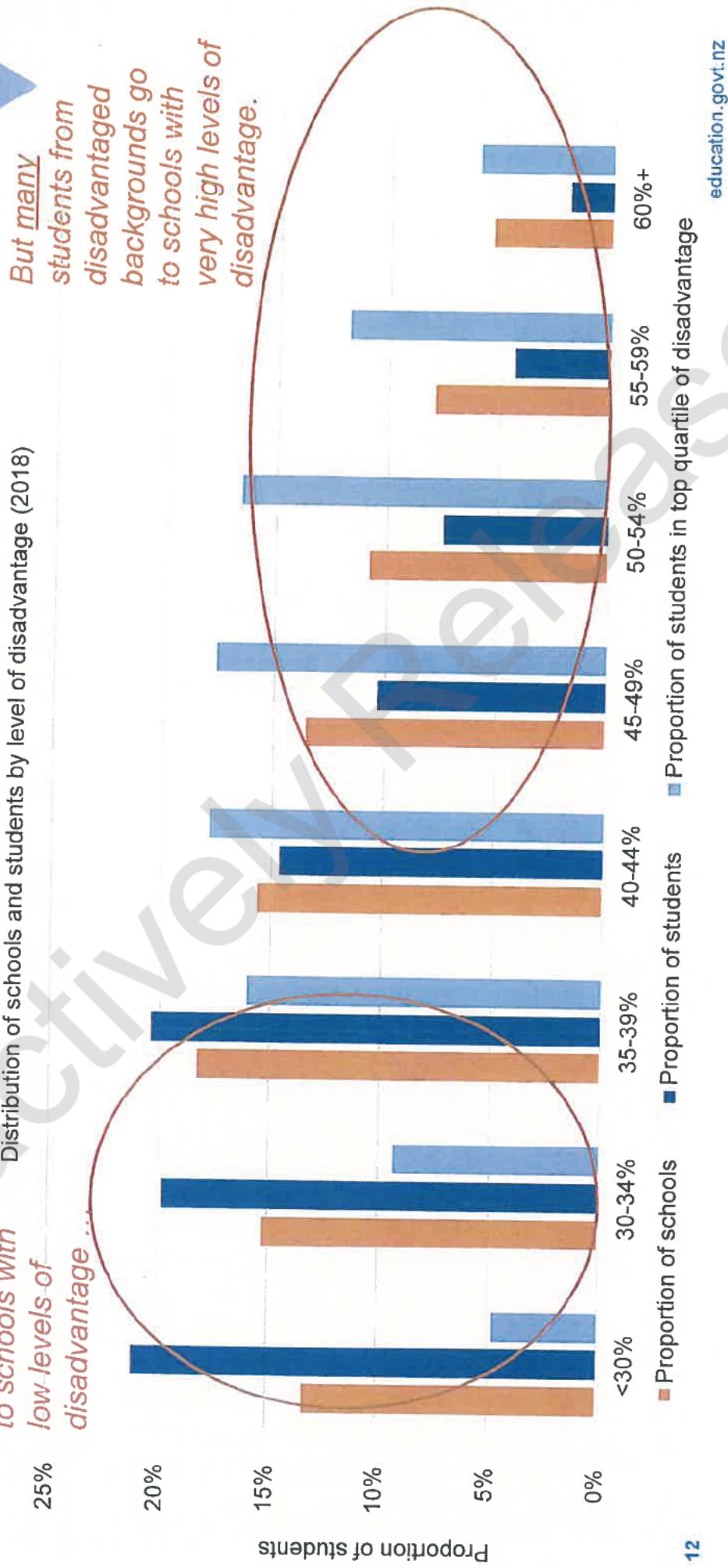
We currently see
these schools as
similar

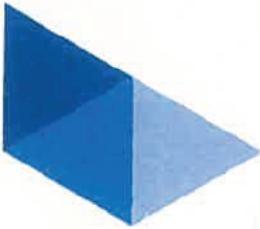


Disadvantage is spread throughout our schools

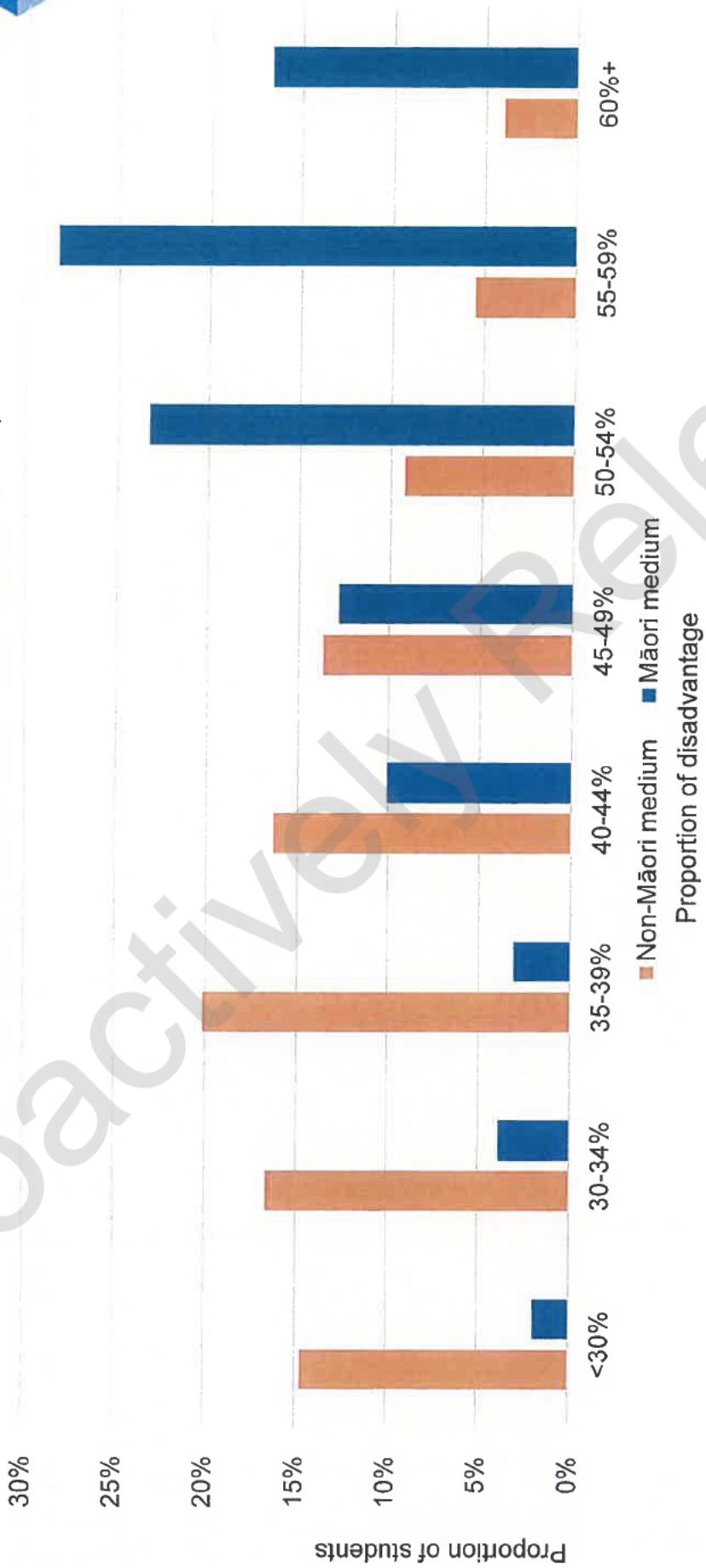
Most students go to schools with low levels of disadvantage

Distribution of schools and students by level of disadvantage (2018)





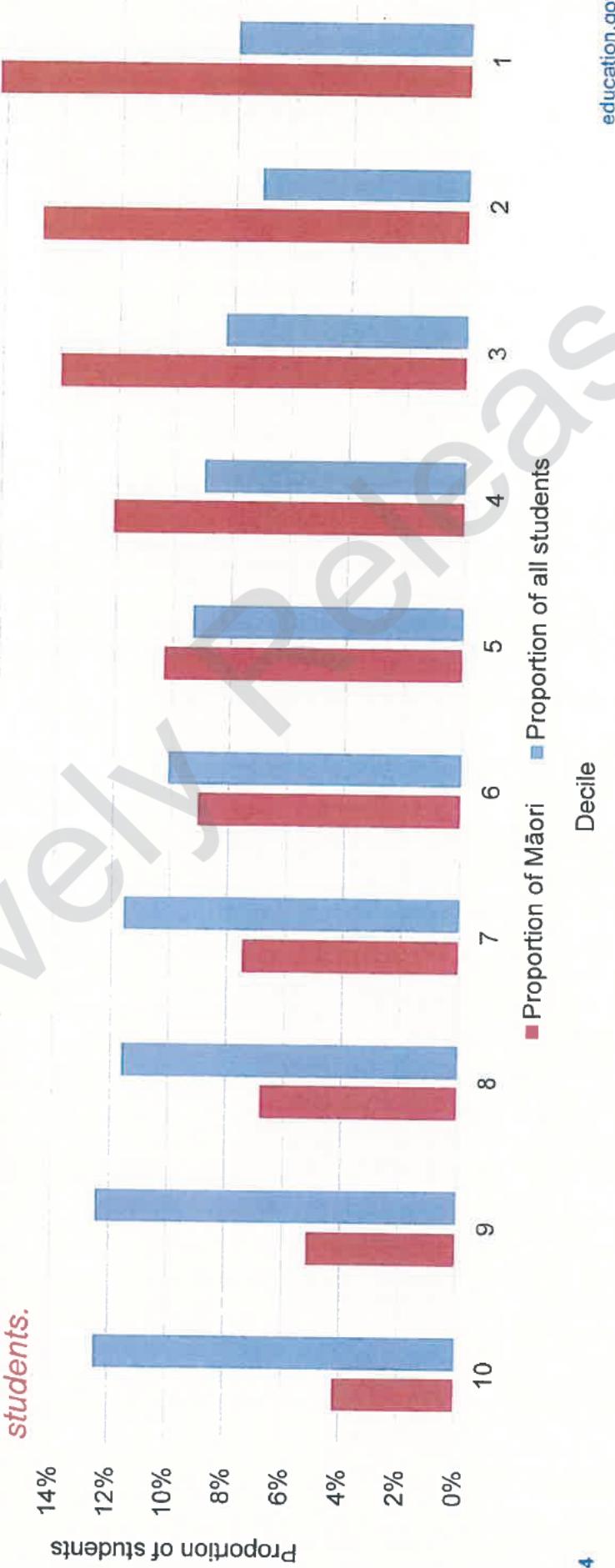
Māori medium v non-Māori medium schools (2018)



- There are higher levels of disadvantage in Māori-medium schools

Proportion of Māori students by decile

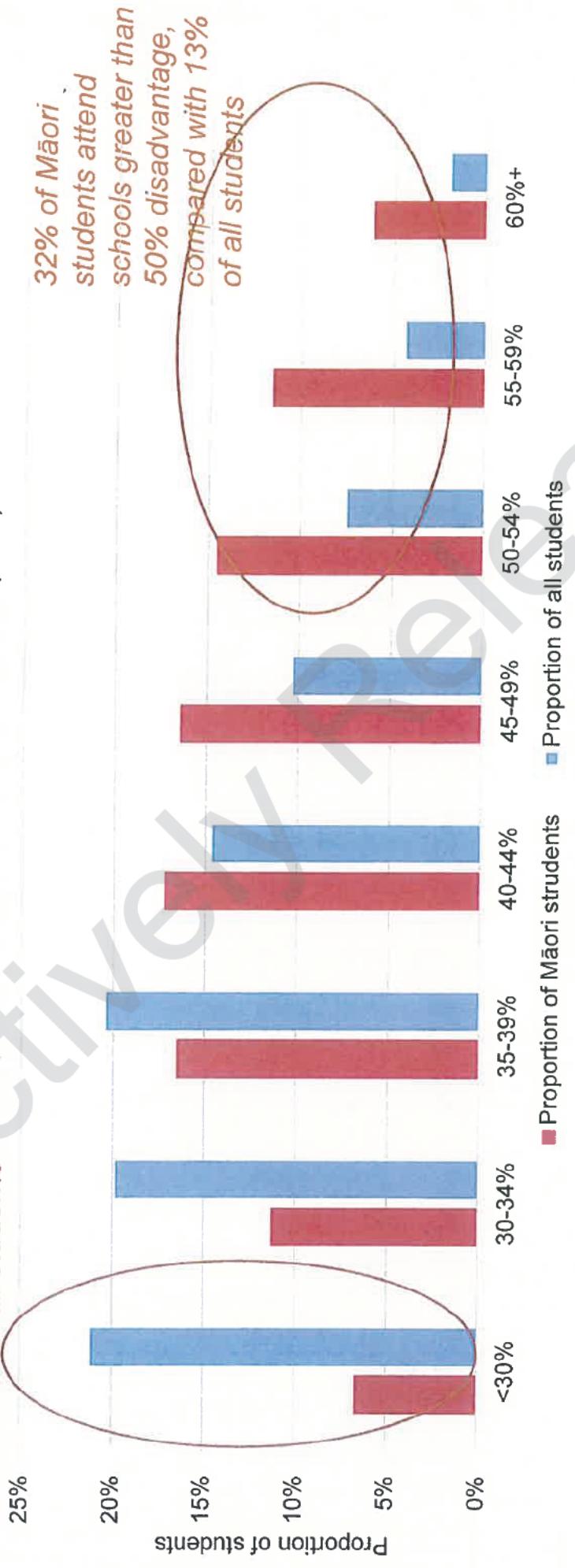
Māori students are enrolled across all school deciles with an inversely proportionate relationship compared to all students.



Proportion of Māori students by equity index

6% of Māori students attend schools with less than 30% disadvantage, compared with 21% of all students

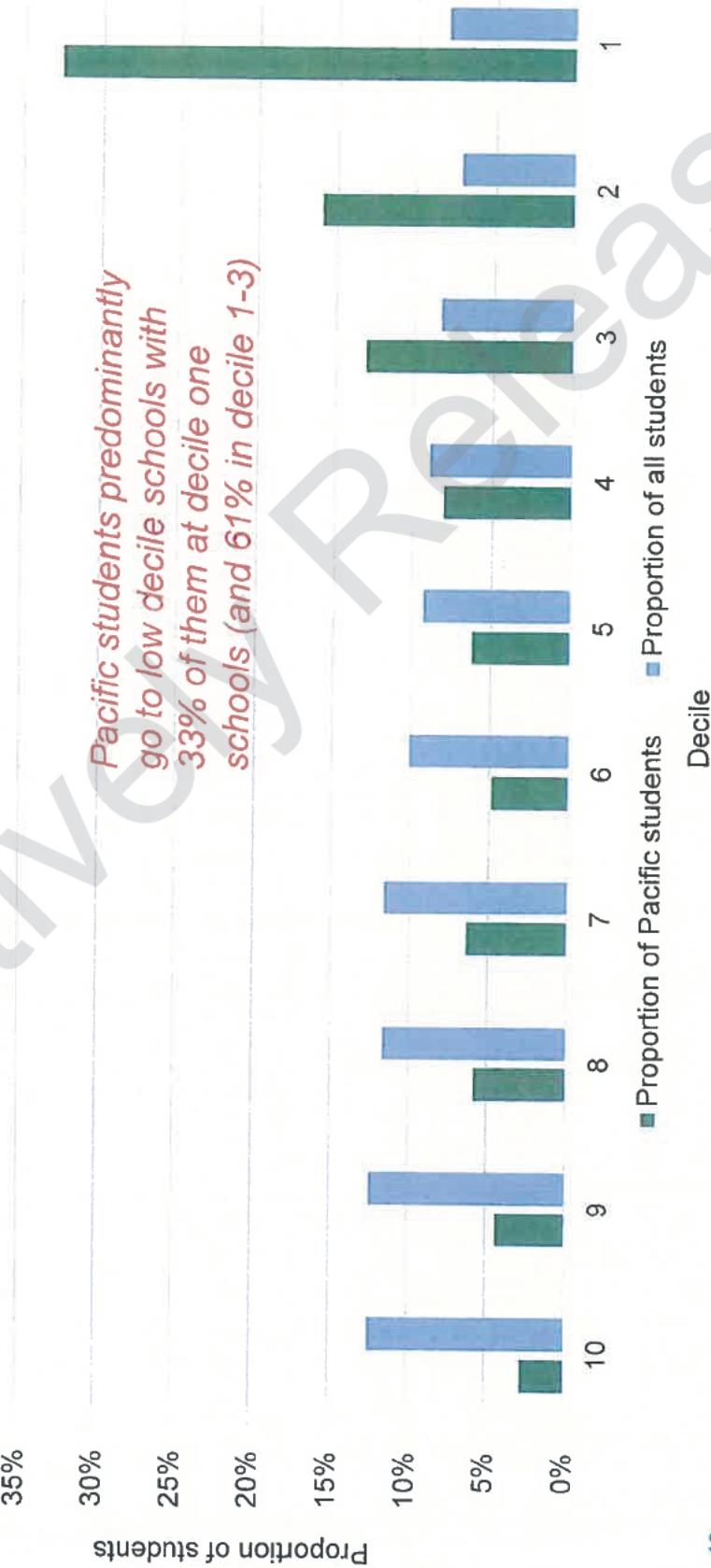
Distribution of Māori students v all students (2018)



- Māori students are more likely to go to schools with high levels of disadvantage

Pacific students by decile

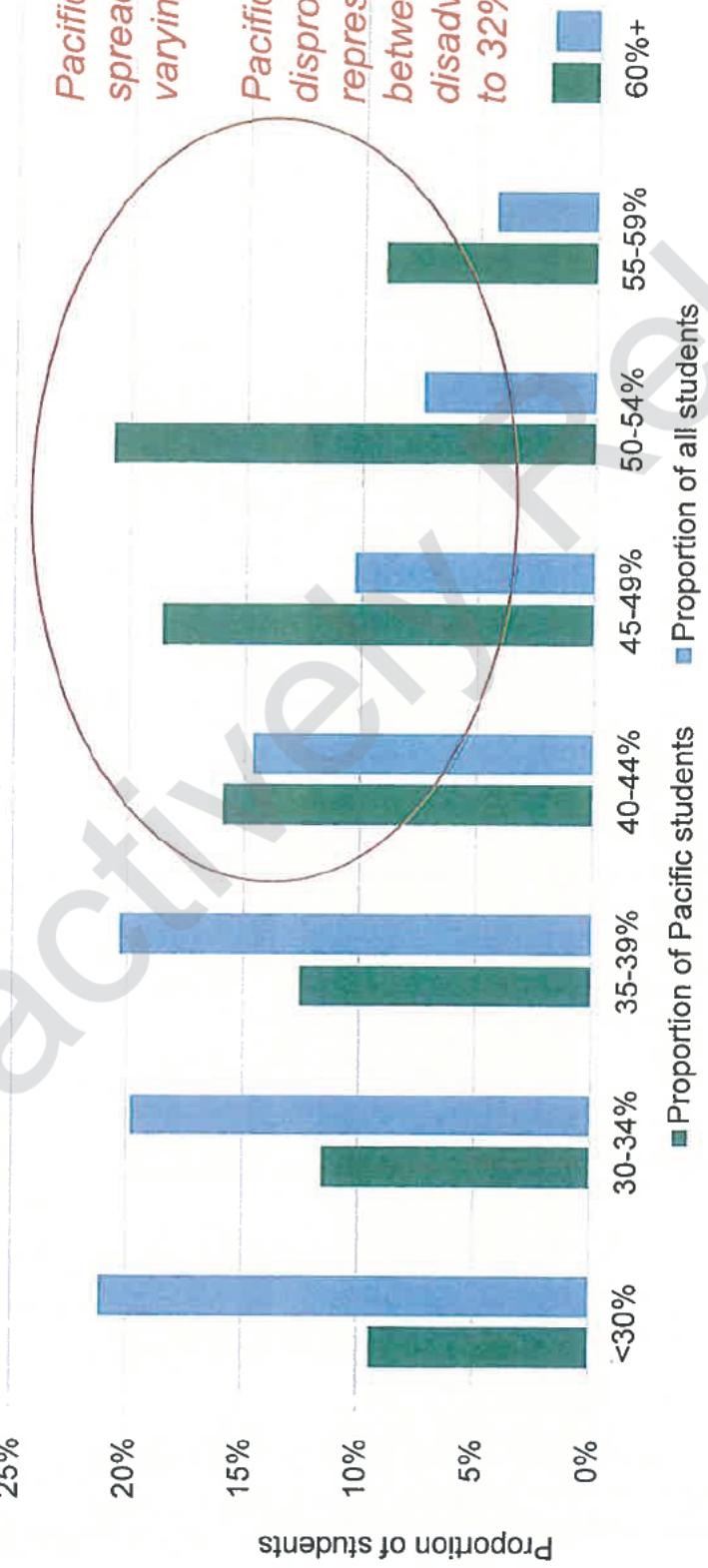
Pacific student distribution by decile (2018)



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Distribution of Pacific students v all students (2018)



Pacific students are also spread across schools with varying levels of disadvantage.

Pacific students are disproportionately over-represented in schools between 40%-55% disadvantage (55% compared to 32% for students overall).

- Pacific students are more likely to go to schools with medium to high levels of disadvantage

Transition planning

- Much like after a decile recalculation, there will be some distributional consequences of the proposed move to equity resourcing
- We will ensure that this is well-managed and clearly signalled to all schools.
- We plan to visit each region in mid-2020 when the final index output and funding implications for the 2021 school year are available, to ensure the impacts for each school and community are understood

What are your views?

While replacing decile funding (cash in the Operational Grant) is one part of our work, the Equity Index could be used for a lot more.....

- what other resources (decile-related or other) could be targeted using the Equity Index?
 - what services / supports / resources do you need to support learners who face socio-economic barriers?
- how could / should schools be held accountable for supporting learners who face socio-economic barriers?
 - how can the Ministry support schools to use resourcing effectively?
 - how can accountability mechanisms be practical but not burdensome?
- how can we reduce the risk of stigma from the Equity Index?

We **shape** an **education** system that delivers
equitable and **excellent outcomes**

He mea tārai e mātou te mātauranga
kia rangatira ai, kia **mana taurite** ai ōna huanga



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