

Schools

Overview

- 1 On 21 June 2023, the Commission issued a [consultation paper](#) on the draft schools assessment. The Commission considered changes since the 2020 Review and their implications for the assessment method.
- 2 The Commission proposed a minor change to the 2020 Review assessment method.
- 3 A summary of state responses to each consultation question is included below, as well as the Commission's draft position and the draft 2025 Review assessment method.
- 4 State submissions can be viewed [here](#).

Consultation questions

Q1. Do states support a differential assessment of primary and secondary school students and, if so, support including in the regression model variables to account for differences in the fixed cost of secondary schools and the additional costs of secondary school students?

State views

- 5 Most states agreed that the fixed costs of secondary schools and the additional per student cost of secondary students should be differentially incorporated into the assessment.
- 6 Victoria considered that the regression results for secondary schools were implausibly large given its experience, and that school size is affected by state policy choice.
- 7 South Australia raised a concern around the classification of year 7 students, being the final state to complete the transition towards a nationally consistent classification of primary and secondary. It recommended the Commission backcast this classification to the entire 2025 Review assessment period for consistency.
- 8 Tasmania supported the conceptual case. However, it said that retention rates and age structures may not be sufficiently different between states to materially impact GST relativities. It highlighted that the Commission should maintain simplicity where possible.

Commission response

School size: primary vs secondary

- 9 The inclusion of the secondary school size variable significantly improves the regression's explanatory power. The school size coefficient and standard error remain similar with and without secondary school size. This indicates that school size alone does not capture the additional fixed costs associated with secondary schools, highlighting the need for the inclusion of secondary school size.
- 10 The Commission acknowledges the concerns raised by Victoria given that its operational funding model produces a substantially lower fixed cost for secondary schools and higher cost per secondary student than the national average. The Commission found that a regression run on Victorian schools estimated fixed costs for government secondary schools to be approximately \$1.3 million. This is well above the fixed costs in Victoria's operational funding model and marginally below the national model's \$1.6 million. This suggests that Victoria's policy is to have slightly lower fixed costs than the national average, and that Victoria's school funding model includes additional adjustments that tend to direct funding towards smaller schools. The Commission's simpler model attributes these additional costs to the fixed costs of all schools. Consequently, while Victoria may observe that it has lower fixed costs of secondary schools than reflected by the Commission's model, this is not evidence that the Commission's model does not reflect average policy. While school size is influenced by individual state policies, the national average school size in different remoteness areas reflects average policy.

School students: primary vs secondary classification

- 11 The Commission recognises that historically there have been differences across states regarding the classification of year 7 students. The Commission ensures consistency by directly defining year 7 students or above as secondary students, ensuring consistency in all assessment years. In the 2020 Review, this was not an issue, because there was no differential treatment between primary and secondary schools or students.
- 12 Secondary schools (and students) are more expensive than primary schools. Disadvantaged groups, especially First Nations students, have lower retention rates to high school. As such, the introduction of this variable improves the explanatory power of the model. As this change has a valid conceptual case and materially improves the regression model, the Commission considers the added complexity is justifiable.

Commission draft position

- 13 The Commission proposes to include variables in the schools regression reflecting the differential cost of:
- primary and secondary schools
 - primary and secondary school students.

Q2. Do states agree that, if relevant school level data are available and determined fit for purpose, an assessment of needs for educating students with a disability should be included in the schools assessment?

State views

- 14 All states expressed in-principle support for assessing needs for students with a disability. Several noted the need for comparable data.
- 15 States had conflicting views on whether the data from the Nationally Consistent Collection of Data on School Students with Disability are of sufficient maturity and quality.
- 16 Noting the Commonwealth uses these data within the Schooling Resource Standard, New South Wales considered the data fit for purpose. Victoria said that the data for its schools are accurate.
- 17 Queensland expected the data would not be comparable until the next review period as the Commonwealth is still working towards improving quality. Tasmania did not consider the data fit for purpose and added that the lack of comparability is supported by the Productivity Commission's *Report on Government Services*.
- 18 Victoria said that, if students with a disability and special schools are excluded from the Commission's regression, then spending on students with disability (in special and mainstream schools) should be assessed equal per capita.

Commission response

- 19 The Commission recognises the strong conceptual case for assessing needs for students with a disability and has explored whether there are fit for purpose data with which to develop a robust assessment. Such data would need to provide:
 - the national average of the higher costs faced by schools
 - the number of students in each state requiring different levels of support.
- 20 Since both measures are required for the Commission to assess needs, the only potential dataset is the Nationally Consistent Collection of Data on School Students with Disability. There is no alternative data source that would enable the Commission to quantify both the higher per student costs of supporting students with disability and each state's need to do so. It is important that data are comparable between states.
- 21 The Commission's testing of publicly available data from the Nationally Consistent Collection of Data on School Students with Disability indicated that states' data are not yet sufficiently comparable for the objective of horizontal fiscal equalisation. The Commission was unable to establish that the current data would robustly capture states' different needs. Of particular concern were the difficulties in a comparable measure of the number of students in each state requiring different levels of

support. The publicly available data strongly suggest that students with similar levels of need are being identified differently in different states in the Nationally Consistent Collection of Data on School Students with Disability.

- 22 Experiences and perceptions of disability can vary. Differences in the way states identify the needs of students may reflect a range of factors. The Australian Institute of Health and Welfare has noted that:

People experience different degrees of impairment, activity limitation and participation restriction. Disability can be related to genetic disorders, illnesses, accidents, ageing, injuries or a combination of these factors. Importantly, how people experience disability is affected by environmental factors – including community attitudes and the opportunities, services and assistance they can access – as well as by personal factors.¹

- 23 The Commission tested the comparability of the data by posing the following questions:

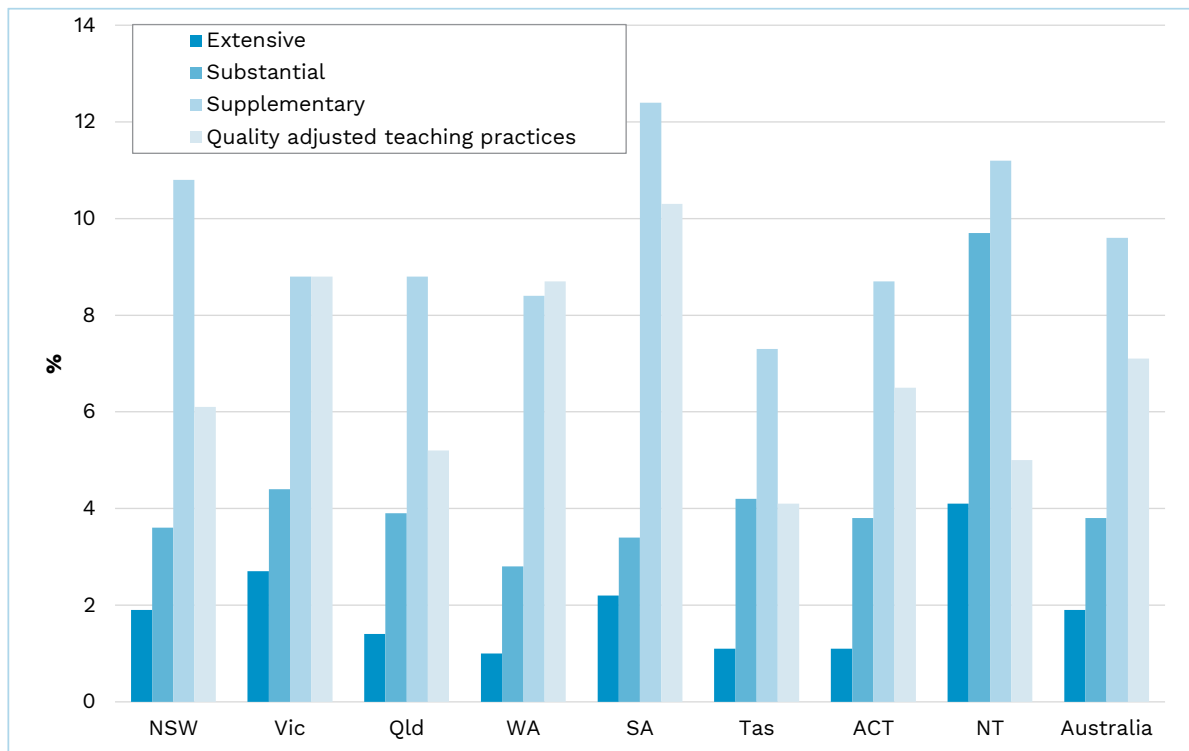
- Are relationships between different levels of disability consistent between states?
- Are data consistent with other indicators of students with disability?

Are relationships between different levels of disability consistent between states?

- 24 If data are nationally consistent, the relationships between different levels of disability should also be broadly consistent across states. In decreasing order of severity, the levels are extensive, substantial, supplementary, and quality adjusted teaching practices. Figure 1 shows that South Australia has about half as many students requiring substantial support as extensive support, while Tasmania has nearly 4 times as many. Victoria has 40% more students requiring extensive support than the national average but is much closer to the national average for other levels of support. Western Australia has only 7% fewer students with disability than the national average, but around half the proportion of students requiring extensive support. These discrepancies imply a lack on national consistency in the data.

¹ [Australian Institute of Health and Welfare, *People with disability in Australia: Defining disability*, Australian Institute of Health and Welfare, 23 April 2024, accessed 12 June 2024.](#)

Figure 1 Proportion of students with a disability by level of support required

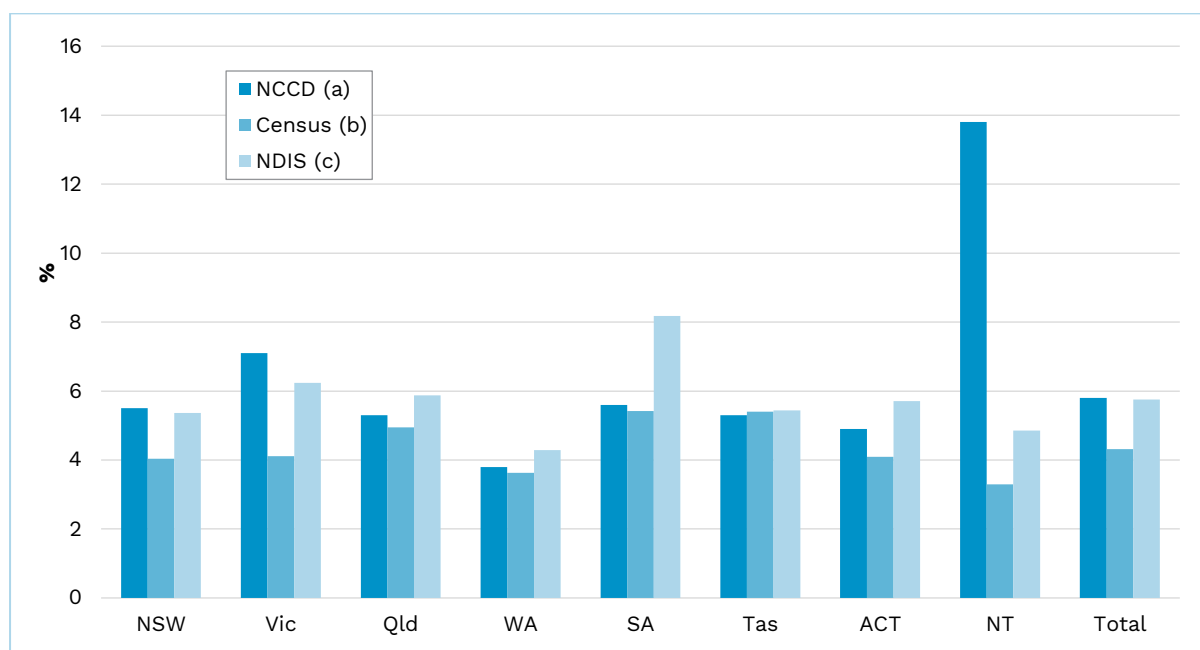


Source: Australian Curriculum Assessment and Reporting Authority data on Nationally Consistent Collection of Data on School Students with Disability.

Are data consistent with other sources?

25 While the Nationally Consistent Collection of Data on School Students with Disability is the only dataset with the necessary information to assess the cost to states of providing such services, there are other data sources that can be used to validate interstate shares of students with a disability. Both the Census and the National Disability Insurance Scheme provide such estimates (Figure 2). On the simplest measure of whether a state has an above-average or below-average share of students with a disability, only 3 of the 8 states show consistency between the Nationally Consistent Collection of Data on School Students with Disability and the other 2 measures.

Figure 2 Proportion of students with a disability, various data sources



(a) Nationally Consistent Collection of Data on School Students with Disability is the only available source collected in a manner which could be used in this assessment.

(b) 2021 Census of Population and Housing measure of the proportion of people who attend school who have a need for assistance with self-care, mobility or communication due to a long-term health condition or disability.

(c) Proportion of 7–14-year-olds who receive support from the National Disability Insurance Scheme.

Source: Australian Curriculum Assessment and Reporting Authority, Australian Bureau of Statistics and National Disability Insurance Agency.

- 26 Neither of these tests support a conclusion that the data would provide a sound basis on which to quantify the cost impacts of supporting students with disability or the different incidence of disabilities between states.
- 27 These tests also highlight, for 2 reasons, the difficulty of combining different data sources to impute a nationally comparable population of students with a disability. The first is that it is not possible to determine which of the different data sources is the most appropriate. The second is that each data source measures a different concept of childhood disability, making it difficult to reconcile or map each source's concept of disability to another without significant arbitrary judgement.
- 28 The Commission has been unable to identify data that would enable it to assess the additional needs of students with disability. However, there is ongoing work in this area, including the Australian Government investing \$20 million over 4 years (2021–22 to 2024–25) to improve the quality and consistency of data under the Nationally Consistent Collection of Data on School Students with Disability Continuous Quality Improvement Measure.²

² Department of Education, *What is the Australian Government doing to support students with disability in schools?* Australian Government, 12 July 2017, accessed 12/06/2024.

- 29 The National Disability Data Asset will link the de-identified data on individuals from various sources across state and Australian governments, including data on school students. Once established, this should be able to provide an additional approach to validating data from the Nationally Consistent Collection of Data on School Students with Disability.
- 30 The Commission also notes that the costs and incidence of disability are partially considered by the current methodology. In all states, First Nations students are considerably more likely than non-Indigenous students to have a disability. Socio-educationally disadvantaged students are also substantially more likely to have a disability than socio-educationally advantaged students. This means that the Commission's regression model already attributes some of the spending on students with a disability to these groups of students, and thus partially allocates GST between states to reflect this cost driver.
- 31 The Commission recognises that policy on students with a disability in schools is evolving rapidly. In September 2023, the Royal Commission into Violence, Abuse, Neglect and Exploitation of People with Disability released its final report.³ The report addressed the need for more consistent and detailed data on students with a disability and recommended that states have a uniform minimum data standard that they require from schools around students with disability. The Royal Commission further proposed a national project to develop specific data definitions and define improved, specified collection methods for students with a disability.

Consideration of treatment of funding of students with a disability

- 32 Special schools are not included in the Commission's regression. Including these schools, without incorporating a variable for students with a disability, would introduce very high levels of omitted variable bias and would reduce the reliability of the model.
- 33 Victoria suggested that funding for students with disability, in both mainstream and special schools, be assessed equal per capita.
- 34 As noted above, First Nations students and socio-educationally disadvantaged students have much higher rates of disability than other students. As such, states with more First Nations and socio-educationally disadvantaged students would likely have greater enrolments in special schools if all states followed a consistent policy for special schools. Influences such as service delivery scale and remoteness are likely to affect the cost of delivering education in special schools. Given these factors, an assessment using patterns in mainstream schools would be a more reliable reflection of state needs for special school funding than an equal per capita assessment.

³ [Royal Commission into Violence, Abuse, Neglect and Exploitation of People with Disability, *Final Report*, Royal Commission, Australian Government, 2023.](#)

- 35 The Royal Commission into Violence, Abuse, Neglect and Exploitation of People with Disability highlighted that this is an area that is continuing to develop and change. Its final report noted that the number of students with a disability in schools was increasing and in response, schools are requiring higher adjustment levels.⁴

Commission draft position

- 36 The Commission considers that the Nationally Consistent Collection of Data on School Students with Disability is not yet sufficiently consistent across states to use in the Commission's regression model. The Commission will monitor this dataset, with a view to incorporating it into the regression in a future review if it becomes comparable.
- 37 In the meantime, the Commission considers the regression-based model is likely to better reflect actual needs of states for special schools than an equal per capita assessment. It proposes to apply the model, calculated only on mainstream schools, to state spending on both mainstream and special schools.

Q3. Do states agree that the average state funding of schools is not sufficiently based on the Schooling Resource Standard funding model to be adopted in place of the Commission's funding model?

State views

- 38 New South Wales, Queensland, ACT, South Australia and Tasmania agreed with the Commission's draft position that the Schooling Resource Standard funding model does not adequately reflect what states do and should not be used to determine assessed spending for either government or non-government schools.
- 39 The Northern Territory said that most other states' actual funding comes reasonably close to the Schooling Resource Standard's funding levels. It said it is working towards this benchmark. It said the Schooling Resource Standard model should replace the current assessment because it includes additional drivers of need.
- 40 Victoria said the Schooling Resource Standard model better reflects the range of drivers of state spending needs. It proposed that the Commission adopt characteristics from the Schooling Resource Standard model, such as the inclusion of a variable for additional costs to educate students from non-English speaking backgrounds.

⁴ [Royal Commission into Violence, Abuse, Neglect and Exploitation of People with Disability, *Final Report*, Royal Commission, Australian Government, 2023.](#)

- 41 Western Australia supported the implementation of Schooling Resource Standard cost weights to assess state spending on government and non-government schools. It said that this is a more accurate representation of what states do as it is built on school data and ensures consistency across the different assessment components.

Commission response

Non-government schools

- 42 The Commission has considered whether the Schooling Resource Standard is the appropriate driver for state funding of non-government schools.
- 43 According to Government Finance Statistics data, it is not yet the average policy of states to implement their commitment to fund non-government schools at 20% of the Schooling Resource Standard. Similarly, states do not typically fund each non-government school according to the Schooling Resource Standard.
- 44 The Commission uses a regression approach to reflect what states do. This ensures that states have the capacity to provide students in comparable circumstances with comparable levels of support, at levels reflecting the average of what states do. The Commission notes that the regression includes socio-economic status and Indigenous status. However, unlike the Schooling Resource Standard, it does not include disability, concentration of First Nations students in schools, or language background other than English. As discussed elsewhere in this chapter, the disability data are not consistently defined between states. The Commission has not been able to develop a regression model with significant positive coefficients for the other groups of students.

Government schools

- 45 The Commission notes that states are negotiating with the Commonwealth to increase their funding shares to reflect a higher proportion of the Schooling Resource Standard.
- 46 For example, Western Australia announced in January 2024 that all its government schools will be funded at 100% of Schooling Resource Standard needs by 2026,⁵ including 77.5% from Western Australia and 22.5% from the Commonwealth. The Northern Territory also signed a statement of intent in March 2024 with the Commonwealth, ensuring its public schools will be funded at 100% of Schooling Resource Standard needs by 2029. This includes an increase from 20% to 40% contribution from the Commonwealth between 2025–29, contingent on the Northern Territory increasing its share to 60% of the Schooling Resource Standard.

⁵ [Ministers of the Education Portfolio, *Australian and WA Governments agree to fully and fairly fund all Western Australian public schools*, Ministers of the Education Portfolio, 31 January 2024, accessed 12 June 2024.](#)

- 47 Not all states fund the same share of the Schooling Resource Standard. The proportion of the Schooling Resource Standard that states have committed to fund currently varies from less than 60% in the Northern Territory, to around 70% in Queensland and Victoria, and 80% in the ACT. The actual level of funding may differ from this. The Schooling Resource Standard does not reflect ‘what states do’, either in aggregate or at the individual school level. As such, the Commission considers that the Schooling Resource Standard currently does not provide a relevant benchmark for assessing GST needs.
- 48 The Schooling Resource Standard funding model includes additional drivers of need beyond those included in the Commission’s regression. Each state has a different needs-based funding model with similar drivers to those in the Schooling Resource Standard, but with unique loadings and definitions for those drivers. The potential inclusion of those drivers in the Commission’s assessment is considered in the following section.

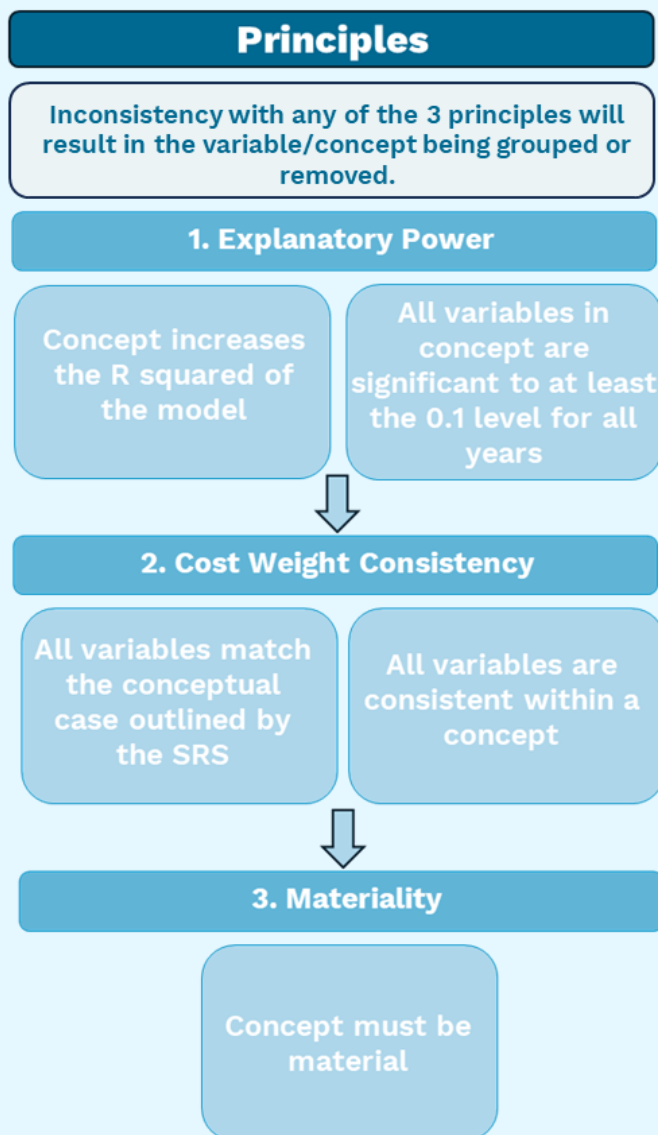
Commission draft position

- 49 States do not use the Schooling Resource Standard for their total funding level, or their allocation to schools. As such, the Commission proposes to continue to use a regression to reflect what states do in their funding of schools.

Other issues raised by states

- 50 States have suggested the inclusion of various concepts in the Commission’s assessment. The Commission has developed a set of criteria to determine whether each concept is, or could be, reflected in its government and non-government school regressions. These principles are outlined in Box 1. These principles provide a framework for the discussion below on the treatment of the states’ proposals involving socio-educational advantage, First Nations students, cultural and linguistically diverse students, and schools in different remoteness regions. The principles also relate to the earlier discussion on primary and secondary school students.

Box 1 Model selection principles



Each potential variable is considered within the broader context of the concept to which it belongs. For example, the inner regional, outer regional, remote and very remote variables all belong to the concept of remoteness. To be included in the model, a concept must add to the explanatory power of the model by increasing the R squared and all variables within a concept must be statistically significant for all assessment years. All variables must match their conceptual case as outlined in the Schooling Resource Standard. In addition, the coefficient of each variable must be consistent with others within that concept. For example, if one variable within a driver is expected to have a higher cost weight than another, then this should be reflected within the model. Finally, the effect of the variable needs to be material.

If principles are not met, variables within that concept are aggregated or removed until all principles are satisfied.

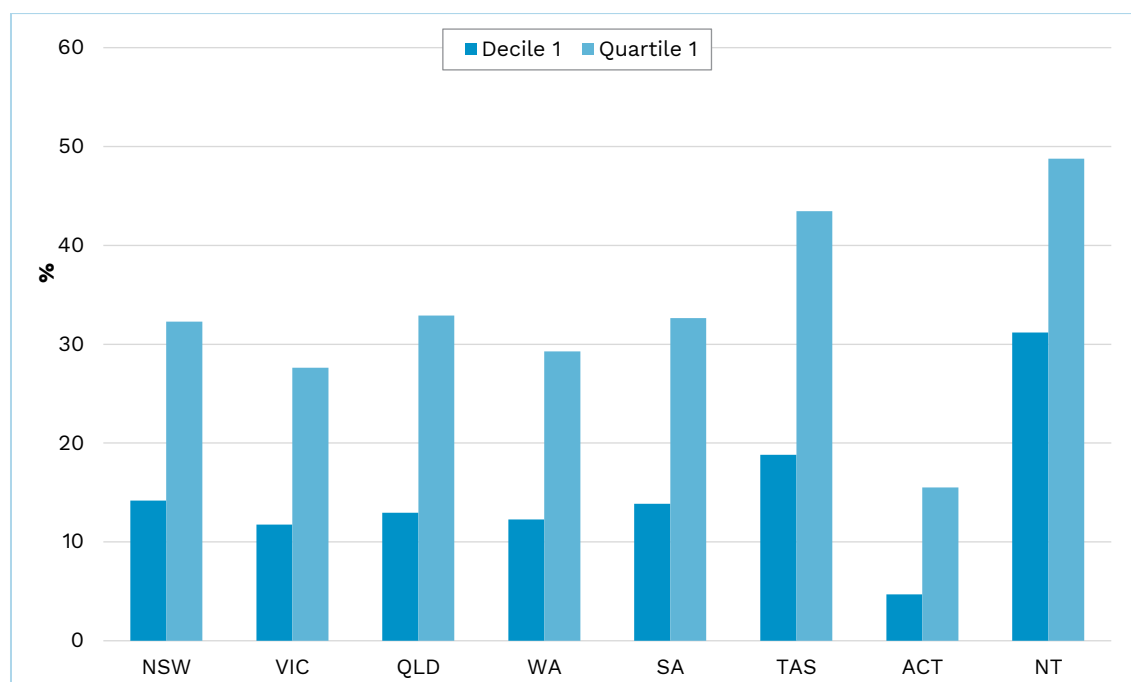
Socio-educational disadvantage

- 51 The Northern Territory said the current model, which uses the proportion of student enrolments in a school within the lowest socio-educational disadvantage quartile, understates the disadvantage experienced by its students. It proposed a more granular consideration of socio-educational disadvantage.
- 52 Western Australia was concerned that the Commission's model does not include the second most disadvantaged quartile, unlike the Schooling Resource Standard.

Commission response

- 53 Socio-educational disadvantage informs the Schooling Resource Standard funding model. It also informs the Commission’s model, albeit using different specifications. The 2020 Review method uses the bottom quartile of socio-educational advantage.
- 54 The Commission has found that in government schools, the most disadvantaged 10% of students attract considerably higher funding than the 11th to 25th percentiles of students. This supports the Northern Territory’s contention that the current method underestimates the needs of the most disadvantaged students. Adopting a more granular measure of socio-educational disadvantage would better reflect the needs of states due to substantial differences in state shares of these students (Figure 3).

Figure 3 Proportion of students in the most disadvantaged socio-educational decile and quartile, government schools, 2021



Source: ACARA schools data.

- 55 In examining the impact of socio-educational disadvantage, the Commission investigated 2 approaches.
- Using the bottom 2 quartiles of socio-educational advantage. In this case, the second most disadvantaged quartile has an unexpected negative cost weight in government schools.
 - Including the bottom 3 deciles. In this case, the third decile has an unexpected negative cost weight and the second decile is insignificant in government schools.
- 56 Both these approaches have findings inconsistent with the funding outlined in the Schooling Resource Standard’s formula (which has positive cost weights for the bottom 2 quartiles). Hence, neither approach to measuring moderate levels of disadvantage aligns with the Commission’s model selection principles (as described

in Box 1). The Commission agrees with Western Australia that if states consistently followed the Schooling Resource Standard, this coefficient could be expected to be positive.

- 57 For non-government schools, the second most disadvantaged quartile has a positive and significant coefficient. It is also larger than the most disadvantaged quartile. Following its model selection principles, the Commission considers it appropriate to aggregate the 2 most disadvantaged quartiles into a lower half in the non-government model.
- 58 Because non-government schools receive a substantial proportion of funding from tuition fees, state funding formulas and the Schooling Resource Standard take into account the capacity of parents to contribute to the cost of their child's education. Capacity to contribute is not directly measured in the Commission's regression but is partially captured with socio-educational advantage.
- 59 In the government sector, only the most disadvantaged students appear to drive state spending. However, in the non-government sector the bottom half of socio-educational disadvantage appears to drive spending. This likely reflects that, in the government sector, it is the educational need of the most disadvantaged that is most important, while in the non-government sector, the capacity of parents to contribute to the cost of education is also important.
- 60 The Commission accepts that funding needs in government schools arising from socio-educational disadvantage may not be limited to the most disadvantaged decile. However, spending on the 11th to 25th percentile of disadvantaged students cannot be reliably measured.

Commission draft position

- 61 The Commission proposes to use the lowest decile of socio-educational advantage for government schools. For non-government schools, the Commission proposes to use the most disadvantaged half of students.

First Nations students

- 62 Western Australia suggested applying the First Nations cost weight from the government schools regression to the non-government schools regression. It said there is a conceptual case that First Nations students require more support, regardless of school sector.
- 63 The Northern Territory said the higher cost of delivering education in schools with high proportions of First Nations students should be accounted for in the regression. Conversely, Victoria said it has the most dispersed First Nation populations and the assessment should recognise the additional costs in providing culturally appropriate education to highly dispersed First Nations students.

Commission response

Non-government schools

64 The Commission investigated the inclusion of First Nations cost weights in the non-government model. Models with either regional cost variables or First Nations variables have significant and positive coefficients. However, models with both do not. The Commission selected the model with First Nations variables as it had a higher explanatory power.

Government schools

65 The Commission's 2020 Review method includes higher costs associated with First Nations students, but not the concentration in a school of First Nations students. The Schooling Resource Standard does both.

66 School data for New South Wales, Victoria and Western Australia showed evidence of increasing per student costs as First Nations proportions increase. In Queensland, differences in the concentration of First Nations students have a very small effect on state funding. For the Northern Territory, the Commission observed decreasing per student costs as the First Nations proportion increased.

67 Each state has its own approach to funding First Nations students. The regression indicates that the average of what states collectively do does not incorporate an increase in funding per student with increasing concentration of First Nations students.

68 Reflecting the approach outlined in the Commission's model selection principles to use variables that are consistent with their conceptual case reflected in the Schooling Resource Standard, the Commission does not use negative coefficients for Indigenous concentration in government schools. The Commission will continue to monitor this variable.

69 Under the current model, between calendar years 2019 and 2021, the coefficient for First Nations students fell from a 46% cost weight to a 24% cost weight, with coefficients for disadvantaged and remote students increasing. First Nations student numbers grew by 8%, compared with 2% for total student numbers over this period. It appears that newly identified First Nations students, on average, may attract less additional funding from correlated attributes. For example, the high cost that states actually spend on students with a disability is attributed to the variables within the Commission's model. With the data suggesting a changing profile of First Nations students, these costs may be attributed more to disadvantaged students and less to First Nations students. While a 24% cost weight is broadly consistent with the cost weight for First Nations students in the Schooling Resource Standard, the Commission is alert to the possibility that changes in Indigenous status identification by students may have unexpected implications for the schools assessment. This is an area the Commission will continue to monitor.

- 70 Victoria noted that schools face costs associated with First Nations students regardless of the number of such students. To the extent that states provide a fixed amount to schools for such expenses, the Commission's regression would capture these expenses associated with establishing support for First Nations students as part of its fixed costs coefficients.

Commission draft position

- 71 The Commission proposes applying the First Nations cost weight to the non-government schools regression.
- 72 The Commission considers the proposed 2025 Review methods incorporate the additional costs of First Nations students. The precise specification of this in its regression model may adapt to changes in state funding and changes in Indigenous status identification. The Commission proposes to run regressions each year that will include variables reflecting First Nations concentrations and interaction between First Nations students and remoteness or other variables. Any changes in the specification of the regression model will be made in consultation with states.

Students from non-English speaking backgrounds

- 73 Victoria said the Commission should update the assessment to account for students with English as an additional language as a driver of need.
- 74 The Northern Territory also supported including this driver of need, adding that it has a larger share of First Nations students who do not speak English as a first language.

Commission response

- 75 The Commission has tested whether what states do is to spend more on students who speak a language other than English. The group of students who have a language background other than English is not homogenous and may not attract the same funding levels.
- 76 Some students who come from a language background other than English are First Nations students. These students tend to live in remote or very remote communities and attend schools with a high proportion of First Nations students. These associated attributes also have the potential to attract significant cost weights. The Commission's regression model may assign some of the funding this group receives to the associated attributes of these students.
- 77 Another group of students who come from a language background other than English are socio-educationally advantaged children of migrants. These students can have a high proficiency in English but speak a second language at home. These students may not attract the same funding as more disadvantaged students who speak a language other than English at home. The Schooling Resource Standard incorporates this potential difference and provides a loading for students who speak a language

other than English at home and who have at least one parent who did not complete schooling to year 9.

- 78 The Commission has therefore divided the population of students who speak a language other than English at home into 4 groups. Students have been separated by Indigenous status and by whether or not at least one of the student's parents completed year 9 (students where at least one parent did not complete year 9 are classified as disadvantaged). This derives the following distinct groups: disadvantaged First Nations students, non-disadvantaged First Nations students, disadvantaged non-Indigenous students, and non-disadvantaged non-Indigenous students.
- 79 Of these 4 groups, only disadvantaged non-Indigenous students who speak a language other than English at home had a positive coefficient.
- 80 Following the Commission's model selection principles (see Box 1 above), negative coefficients for funding students with languages other than English were not included in the regression model.
- 81 Although non-Indigenous, disadvantaged students who come from a language background other than English produced a positive coefficient, the variable became insignificant in 2021 and so, following the model selection principles, was removed from the regression. In addition, given the small numbers of affected students, and that state shares are broadly similar, the cost weight for these students was not material.

Commission draft position

- 82 The Commission proposes not to include a variable for students who speak a language other than English. The Commission proposes to consider how cultural and linguistic diversity affects state service costs as part of its proposed forward work program.

Early childhood education

- 83 Victoria suggested that the Commission create a separate component in the schools category for early childhood education and assess it equal per capita. Victoria saw this as warranted because early childhood education would likely grow considerably during the 2025 Review period, with Victoria, New South Wales and Queensland announcing substantial commitments to kindergartens and early education centres. Victoria stated that it does not fund socio-demographic groups differently in preschools but does in schools. Thus, the differential cost identified in schools should not be applied to preschools.

Commission response

- 84 The Commission notes that this is a rapidly evolving area where policy changes are being implemented and spending is growing. Under the preschool reform agreement,

the Australian Government and all states committed to further funding for early childhood education.⁶ More broadly, the Australian Government is consulting on an overarching Early Years Strategy that will focus on providing a framework to improve outcomes for young children.⁷

- 85 States are expanding access and increasing quality of early childhood education, with some states introducing an additional year of free universal preschool.⁸ While there is a conceptual case for isolating these costs and assessing needs, there is an absence of national data on costs for key groups. The diversity of service delivery models between states would make it difficult to produce comparable data.
- 86 Victoria stated that it does not fund socio-demographic groups differentially. However, the fact that the Northern Territory spends 50% more per student than the national average provides evidence that having a large number of remote and/or First Nations students increases the cost of providing early childhood services. This suggests that the schools assessment is likely to be a more reliable proxy for pressures on the early childhood sector than an equal per capita assessment.
- 87 There is no readily available data upon which to determine the state spending needs for preschools. With only \$86 per capita spent on preschools in 2021–22, developing such an assessment is unlikely to be material.

Commission draft position

- 88 The Commission proposes to continue to include spending on early childhood education with school spending. It will continue to monitor state spending in this area.

Regional costs

- 89 Western Australia said that the current assessment structure does not sufficiently account for the impact of distance from capital cities in its classification of remoteness.

Commission response

- 90 The choice of classification for measuring remoteness is considered in the geography chapter.

⁶ [Department of Education, *Preschool Reform Agreement*, Australian Government, 8 May 2024, accessed 12 June 2024.](#)

⁷ [Department of Social Services, *The Early Years Strategy 2024-2034*, DSS, Australian Government, 2024.](#)

⁸ For example, [Victorian Government, *Best start best life reform*, Victorian Government, 28 May 2024, accessed 12 June 2024](#); [ACT Education Directorate, *Set up for Success: An Early Childhood Strategy for the ACT*, ACT Government, 2020](#); [NSW Government, *Start Strong program for preschool children*, NSW Government, 12 March 2024, accessed 12 June 2024.](#)

Commission draft position

91 The Commission proposes to retain the ABS' classification of remoteness as the basis for its assessment of the impact of remoteness on state expenses. As in the 2020 Review, the Commission has grouped remote and very remote schools into a single remote grouping and has a cost weight for outer regional schools.

Draft 2025 Review assessment method

92 Following consideration of state views, the Commission proposes to:

- change the threshold for socio-educational disadvantage in both the government and non-government schools components
- include cost weights for secondary students and fixed costs for secondary schools
- monitor and, if necessary, amend the measures associated with First Nations students.
 - In the proposed 2025 Review method, a First Nations students variable is included. Future updates using the proposed 2025 Review method would allow for a change to reflect potential changes in the funding of First Nations students and the interaction with funding of other groups. For example, if appropriate, the Commission could include a variable for concentration of First Nations students in a school or a variable for First Nations students in remote schools.

93 No new data are required from states to support this change.

94 Table 1 shows the proposed structure of the 2025 Review schools assessment.

Table 1 Proposed structure of the schools assessment

| Component | Driver | Influence measured by driver | Change since 2020 Review? |
|--|-------------------------------|--|---------------------------|
| State spending on government schools | Socio-demographic composition | Recognises that student numbers, adjusted for Indigenous status, low socio-economic status, remoteness, and primary or secondary school, affect the use and cost of providing services. | Yes |
| | Service delivery scale | Recognises the diseconomies of smaller schools with increasing remoteness and differences between primary or secondary school. | Yes |
| | Wage costs | Recognises differences in wage costs between states. | No |
| State spending on non-government schools | Socio-demographic composition | Recognises that the number of students in non-government schools, adjusted for low socio-economic status, Indigenous status, and primary or secondary school, affect the use and cost of providing services. | Yes |
| | Service delivery scale | Recognises the diseconomies of smaller schools with increasing remoteness and differences between primary or secondary school. | Yes |
| | Wage costs | Recognises differences in wage costs between states. | No |
| Commonwealth funding of government schools | Schooling Resource Standard | Recognises the educational disadvantage inherent in the Department of Education's needs-based funding. This includes additional funding for students with disability, First Nations students, socio-educationally disadvantaged students, students with low English proficiency, students that attend more remote schools and students that attend smaller schools. ⁹ | No |
| | Wage costs | Recognises the differences in wage costs between states. | No |

Indicative distribution impacts

95 The impact on the GST distribution in 2024–25 from the proposed method changes is shown in Table 2.

⁹ [Department of Education, *Schooling Resource Standard*, Australian Government, 15 May 2024, accessed 12 June 2024.](#)

Table 2 Indicative impact on GST distribution (difference from an equal per capita distribution), 2024–25

| | NSW | Vic | Qld | WA | SA | Tas | ACT | NT | Total Effect |
|---------------------------------|------|--------|------|------|------|------|------|-------|--------------|
| | \$m | \$m | \$m | \$m | \$m | \$m | \$m | \$m | \$m |
| U2024 using R2020 methods | -354 | -1,058 | 933 | 358 | -209 | 19 | -77 | 388 | 1,699 |
| U2024 using draft R2025 methods | -332 | -1,051 | 895 | 353 | -234 | 18 | -64 | 415 | 1,681 |
| Effect of draft method changes | 23 | 7 | -38 | -5 | -25 | -2 | 13 | 27 | 70 |
| | \$pc | \$pc | \$pc | \$pc | \$pc | \$pc | \$pc | \$pc | \$pc |
| U2024 using R2020 methods | -41 | -150 | 167 | 121 | -111 | 33 | -161 | 1,510 | 62 |
| U2024 using draft R2025 methods | -39 | -149 | 160 | 119 | -124 | 30 | -134 | 1,615 | 61 |
| Effect of draft method changes | 3 | 1 | -7 | -2 | -13 | -3 | 28 | 105 | 3 |

Note: Based on no change to the wage costs assessment. The effect of these changes is shown in the wage costs chapters. The GST pool and population estimates are equivalent to those used in the 2024 Update. The data included in the table have not been subject to full quality assurance processes and, as such, should be treated as indicative only. Indicative GST impacts are provided for illustrative purposes only and should not be used to predict impacts on GST distribution for 2025-26.

- 96 The most significant aspect of the change in methods was in the state funded government schools component, where the Commission proposes using the most disadvantaged 10% of students. The Northern Territory has a greater share of the most disadvantaged students, increasing its assessed GST needs. South Australia has a greater share of moderately disadvantaged students, reducing its assessed GST needs.
- 97 The total spending allocated to disadvantaged students is less under the new approach. This increases the assessed GST needs of the ACT, which has a below-average proportion of disadvantaged students.

Table 3 Indicative impact on GST distribution of proposed method changes (disaggregated), 2024–25

| | NSW | Vic | Qld | WA | SA | Tas | ACT | NT | Total Effect |
|---------------------------------|-----------|----------|------------|-----------|------------|-----------|-----------|------------|--------------|
| | \$m | \$m | \$m | \$m | \$m | \$m | \$m | \$m | \$m |
| State funded Government Schools | 36 | 35 | -68 | -20 | -26 | -3 | 17 | 29 | 117 |
| Non-government schools | -14 | -27 | 30 | 14 | 1 | 1 | -4 | -2 | 47 |
| Total | 23 | 7 | -38 | -5 | -25 | -2 | 13 | 27 | 70 |
| | \$pc | \$pc | \$pc | \$pc | \$pc | \$pc | \$pc | \$pc | \$pc |
| State funded Government Schools | 4 | 5 | -12 | -7 | -14 | -5 | 36 | 112 | 4 |
| Non-government schools | -2 | -4 | 5 | 5 | 0 | 2 | -8 | -7 | 2 |
| Total | 3 | 1 | -7 | -2 | -13 | -3 | 28 | 105 | 3 |

Note: The GST pool and population estimates are equivalent to those used in the 2024 Update. The data included in the table have not been subject to full quality assurance processes and, as such, should be treated as indicative only. Indicative GST impacts are provided for illustrative purposes only and should not be used to predict impacts on GST distribution for 2025-26.

Attachment A: Model underpinning schools assessment

- 98 The Commission considers the optimal model is the one with the greatest explanatory power where all variables are significant and have a sign consistent with that expected if states followed the Schooling Resource Standard. The model selection principles outlined provide a framework that describe how the final model was selected to meet these requirements. Each variable must satisfy each of the 3 principles to be included in the regression.
- 99 Although each variable is described in isolation in this attachment, the nature of regressions means that changing one variable will impact others and, therefore, the analysis throughout this attachment relates to analysis on the whole model.
- 100 The Commission started with a detailed model and removed or aggregated variables until all variables satisfied the Commission's principles. Each variable that remained in the regression had to be statistically significant for all assessment years to the 0.1 level and increase the explanatory power of the model. If these conditions were met, the consistency of the cost weight was considered. The variable's cost weight had to align with the conceptual case outlined in the Schooling Resource Standard and be consistent with the other variables within the same concept. If these conditions were also satisfied, the materiality of the variable was considered.
- 101 The Commission then tested the re-inclusion of each variable separately to see if it became a significant addition to the model. If the addition of the variable led to a higher explanatory power and all variables still met the model selection principles, it was included in the regression.
- 102 The Commission acknowledges that the order in which these changes are made may have an impact on the final model specification, and the order in which the Commission has removed or aggregated variables does not necessarily lead to the optimal model. Due to confidentiality constraints made by the Australian Curriculum and Assessment and Reporting Agency, the Commission is unable to share the raw data. However, Commission staff are available to any state to test alternative model specifications.

Model selection

- 103 The Commission began the model selection process by starting with a highly specified model comprised of all variables that had a conceptual case as a potential policy-neutral driver of cost for a school. The results from this model can be seen in Table A-1. Details on each of the variables included in the full model are outlined below.
- Cost per student: The dependant variable in each regression. This variable represents the total annual cost faced by states for a particular school divided by its number of full-time equivalent enrolments.

- Intercept: The intercept term represents the annual base cost to provide education to a student.
- Secondary: This represents the additional cost for students attending secondary schools.
- Inverse school size and inverse secondary: Inverse school size represents the fixed annual cost of running a school. Inverse secondary represents the additional quantum for secondary schools.
 - In a model predicting total costs per school, this concept would be captured by the intercept. In a model predicting total costs per student, all variables (including this) are divided by student numbers. The average size of schools is largely a policy choice by states. These coefficients are assessed by assuming that all states have the same national average school size in each remoteness area (service delivery scale assessment).
- Remoteness dummy variables: For all remoteness categories, the Commission tested the additional cost per student attending schools in each category, relative to the base costs of major city schools. These categories include:
 - Inner Regional
 - Outer Regional
 - Remote
 - Very Remote.
- Socio-educational advantage reflects a range of attributes of a student's parents. It is individual-based rather than area-based like other socio-economic indicators used by the Commission. Students are ranked from most educationally advantaged to least educationally advantaged, then grouped into deciles or quartiles.
- Indigenous status: This represents the additional per student cost of providing education to First Nations students.
 - The Schooling Resource Standard includes a sliding scale, where the cost per First Nations student increases linearly with an increase in the proportion of First Nations students in the school. Each First Nation student in a school with 90% Indigenous students would attract a higher cost weight than each First Nations student in a school with 10% Indigenous students. In the regression model, this is captured by including 'proportion of First Nations students', and 'proportion of First Nations students squared' variables.
- Cultural and linguistic diversity (CALD): The Commission tests the implications and significance of students from culturally and linguistically diverse backgrounds as a driver of cost. The school-level variables tested are as follows:
 - CALD: This is the proportion of students in a school that have a language background other than English.
 - CALD disaggregated by Indigenous status and disadvantage: The proportion of all students who speak a language other than English at home and have at least one parent who did not complete year 10 in school. This concept is divided by First Nations and non-Indigenous students.

Government schools

Table A-1 Full (starting) model specifications for government schools, 2022

| | 2019 | | | 2020 | | | 2021 | | |
|-----------------------------------|-----------|-----------|------|-----------|-----------|------|-----------|-----------|------|
| | Est. | Std Error | Sig. | Est. | Std Error | Sig. | Est. | Std Error | Sig. |
| (Intercept) | 8,156 | 122 | *** | 8,549 | 125 | *** | 9,055 | 130 | *** |
| Secondary | 981 | 77 | *** | 957 | 76 | *** | 865 | 79 | *** |
| Inverse school size | 307,293 | 5,940 | *** | 317,752 | 5,951 | *** | 316,711 | 6,011 | *** |
| Inverse secondary | 1,235,910 | 45,095 | *** | 1,261,872 | 45,248 | *** | 1,347,979 | 46,651 | *** |
| Inner regional | -103 | 76 | | -7 | 77 | | -18 | 79 | |
| Outer regional | 391 | 103 | *** | 509 | 104 | *** | 651 | 107 | *** |
| Remote | 3,028 | 229 | *** | 3,267 | 231 | *** | 3,662 | 238 | *** |
| Very remote | 4,419 | 343 | *** | 4,580 | 348 | *** | 5,457 | 359 | *** |
| Decile1 | 10,442 | 1,221 | *** | 13,085 | 1,225 | *** | 13,873 | 1,206 | *** |
| Bottom SEA Q1 | -2,420 | 714 | *** | -3,051 | 705 | *** | -2,829 | 694 | *** |
| Lower-middle SEA Q1 | 592 | 529 | | 1,362 | 528 | ** | 867 | 529 | |
| Indigenous | 9,811 | 723 | *** | 6,712 | 730 | *** | 4,202 | 746 | *** |
| Indigenous squared | -5,519 | 900 | *** | -3,155 | 928 | *** | -1,790 | 951 | |
| Indigenous disadvantaged CALD | -14,701 | 1,151 | *** | -15,834 | 1,177 | *** | -13,815 | 1,224 | *** |
| Non-Indigenous disadvantaged CALD | 1,248 | 712 | | 997 | 716 | | 1,163 | 751 | |
| CALD | -55 | 160 | | -361 | 158 | * | -537 | 160 | *** |
| Adjusted R squared | 0.66 | | | 0.67 | | | 0.675 | | |
| Sample size | 6,221 | | | 6,244 | | | 6,275 | | |

- 104 The Commission began with the government sector and started aggregating or removing variables step by step until each concept met the criteria identified in Box 1.
- 105 Having developed a model which only contains variables which meet the Commission's principles, there is a risk that the order in which variables were removed could influence the outcome. The Commission then tested the re-inclusion of each concept that had been removed in previous steps to see if they would now add meaningful explanatory power. No concept being added met the Commission's principles. The final model specification is shown in Table A-2.

Table A-2 Final model specifications for government schools, 2022

| | 2019 | | | 2020 | | | 2021 | | |
|---------------------|-----------|-----------|------|-----------|-----------|------|-----------|-----------|------|
| | Estimate | Std Error | Sig. | Estimate | Std Error | Sig. | Estimate | Std Error | Sig. |
| (Intercept) | 8,223 | 43 | *** | 8,617 | 43 | *** | 8,887 | 44 | *** |
| Secondary | 915 | 78 | *** | 910 | 78 | *** | 863 | 80 | *** |
| Inverse school size | 304,357 | 5,582 | *** | 314,059 | 5,511 | *** | 322,502 | 5,609 | *** |
| Inverse secondary | 1,260,613 | 46,201 | *** | 1,279,506 | 46,511 | *** | 1,349,181 | 47,913 | *** |
| Outer regional | 633 | 97 | *** | 679 | 98 | *** | 717 | 102 | *** |
| All remote | 2,914 | 204 | *** | 3,084 | 205 | *** | 3,661 | 211 | *** |
| Decile 1 | 7,523 | 277 | *** | 8,717 | 276 | *** | 9,719 | 283 | *** |
| Indigenous | 4,512 | 359 | *** | 3,502 | 361 | *** | 2,391 | 371 | *** |
| Adjusted R squared | 0.654 | | | 0.667 | | | 0.672 | | |
| Sample size | 6,287 | | | 6,317 | | | 6,342 | | |

Non-government schools

106 In selecting the non-government model, the Commission began with the final government model and followed a similar process of eliminating and aggregating variables until a final model was selected. The output of the government model on the non-government sector can be seen in Table A-3.

Table A-3 Full (starting) model specifications for non-government schools, 2022

| | 2019 | | | 2020 | | | 2021 | | |
|---------------------|----------|-----------|------|----------|-----------|------|----------|-----------|------|
| | Estimate | Std Error | Sig. | Estimate | Std Error | Sig. | Estimate | Std Error | Sig. |
| (Intercept) | 1,693 | 34 | *** | 1758 | 33 | *** | 1825 | 34 | *** |
| Secondary | 348 | 45 | *** | 279 | 44 | *** | 303 | 44 | *** |
| Inverse school size | 56,541 | 6,016 | *** | 62,751 | 5,657 | *** | 54,416 | 5,801 | *** |
| Inverse secondary | 114,373 | 19,495 | *** | 137,243 | 19,251 | *** | 82,701 | 15,987 | *** |
| Outer regional | 157 | 58 | ** | 70 | 57 | | 39 | 60 | |
| All remote | 315 | 154 | * | 285 | 154 | | 345 | 160 | |
| Indigenous | 783 | 285 | ** | 617 | 281 | * | 858 | 285 | ** |
| Decile1 | -4488 | 471 | *** | -4592 | 488 | *** | -5640 | 509 | *** |
| Bottom SEA Q1 | 5565 | 236 | *** | 5704 | 243 | *** | 6635 | 246 | *** |
| Adjusted R squared | 0.412 | | | 0.428 | | | 0.456 | | |
| Sample size | 2,616 | | | 2,641 | | | 2,702 | | |

107 Both outer regional and remote areas were excluded as they were not significant to at least the 0.1 level for all assessment years. The coefficient for decile 1 remained negative and, thus, is the next variable to be removed as it does not align with the conceptual case outlined by the Schooling Resource Standard. In this simpler model, the proportion of First Nation students becomes insignificant and so it is excluded.

- 108 Next, the Commission investigated the possibility of adding variables back into the model in an aim to increase explanatory power. Each variable that was included in the original full model in Table 1 was individually tested. Only the inclusion of the lower-middle quartile of socio-educational advantage significantly improved the adjusted R squared of the model whilst satisfying the model selection principles. The cost weights were similar to that of the bottom quartile and, therefore, the bottom and lower-middle quartiles were combined, creating the bottom half of socio-economic advantage (SEA) as a new variable. The results of this aggregation lead to highly significant, positive cost weights and is therefore included in the non-government model.
- 109 After the addition of this variable to the model, each variable was again tested to see if its inclusion would add value. The only variable that produced significant positive cost weight was the proportion of First Nations students and therefore it was reincorporated into the model. The final model for non-government schools is outlined in Table A-4.

Table A-4 Final model specifications for non-government schools, 2022

| | 2019 | | | 2020 | | | 2021 | | |
|---------------------|----------|-----------|------|----------|-----------|------|----------|-----------|------|
| | Estimate | Std Error | Sig. | Estimate | Std Error | Sig. | Estimate | Std Error | Sig. |
| (Intercept) | 1,383 | 37 | *** | 1,424 | 36 | *** | 1,454 | 37 | *** |
| Secondary | 422 | 43 | *** | 353 | 42 | *** | 373 | 42 | *** |
| Inverse school size | 62,720 | 5,774 | *** | 67,441 | 5,375 | *** | 62,188 | 5,528 | *** |
| Inverse secondary | 79,633 | 19,014 | *** | 95,770 | 18,577 | *** | 52,078 | 15,420 | *** |
| Bottom half SEA | 2,330 | 69 | *** | 2,414 | 67 | *** | 2,712 | 68 | *** |
| Indigenous | 962 | 210 | *** | 755 | 208 | *** | 869 | 209 | *** |
| Adjusted R squared | 0.448 | | | 0.475 | | | 0.499 | | |
| Sample size | 2,617 | | | 2,641 | | | 2,702 | | |