

National School Resourcing Board Secretariat
Submitted via email: Education-NSRBSecretariat@education.gov.au
cc. Dr Peter Nolan, Director, NSRB Secretariat
21 February 2018

Dear National School Resourcing Board Secretariat,

Re. Updated Grattan Institute submission to the Review of the SES score methodology¹

I welcome this opportunity to contribute to the Review of the socio-economic (SES) score methodology, which focuses on one of the two elements of the funding model most immediately in need of attention; the other is funding for students with disability.

Australia must shift our collective focus beyond funding in order to address the three big challenges in school education: improving learning outcomes in core academic areas; better preparing young people for adult life; and doing so in a way that is fair for all. But for the debate to move beyond funding, the underlying model must be good enough — and accepted as such.

Despite pressure from some stakeholders to broaden its scope, this Review should remain tightly focused on the SES score methodology. While debate will continue about the underlying policy goals of school funding, and many different ways to structure school funding models, all major political parties support the current policy framing — needs-based funding with parents of students in non-government schools expected to contribute towards base funding. This Review is taking place in the context of this framing, and the long years of school funding wars, and it should not be seen as an opportunity to go back to a first principles debate that ignores history. And even if there were appetite to do so, there is not the time: the review must report by June 2018, in time to secure the next funding agreement in late 2018 which has important changes to be passed.

Even if scope is kept tight, it would take a major research effort to analyse every issue that has been raised about the SES score methodology and the capacity to contribute element of funding in which the SES score sits. In our view, this Review should not be exhaustive. Instead, we propose two priorities.

First, the Review should clarify the policy goal of the capacity-to-contribute element of the funding formula and make it explicit, given that different stakeholders appear to have different views on what its goals are at present.

For example, the goal of the capacity to contribute element of funding might be defined as:

- To set the expectation that families with the means to do so contribute substantially to their children's education if they choose non-government schools;

¹ Original submission date 21 February 2018

- To provide adequate government funding to non-government schools that educate a high proportion of students from families with limited means to pay fees, so that the school can keep its fees low and still deliver a high quality of education; and
- To achieve these outcomes without determining the level of fees that schools charge.

The Review should also be explicit about the broader policy implications on whatever definition they recommend, given that stakeholder views differ about the ultimate goals of government funding for non-government schools.

Some of these goals are mutually incompatible, and to the extent that they are affected by the SES score and capacity-to-contribute parts of the funding formula, the Review should explain how they fit.

Second, the Review should aim to confirm — or refute — the argument about bias against Catholic schools. If such bias exists, the review should propose a way to remove it.

Beyond this, there are difficult trade-offs. For example, using tax-return data to estimate income might make SES scores more accurate and timely, but could also make school funding more volatile, as well as raising privacy issues. Where there are direct trade-offs, the Review should prioritise funding stability over accuracy. Good enough is the key.

Yours sincerely,



Dr Peter Goss
School Education Program Director
Grattan Institute

Context

Far too often, funding issues dominate the debate about school education policy in Australia. But funding is a means, not an end. We need to shift our collective focus to the three big challenges in school education: to improve learning outcomes in core academic areas; to better prepare young people for adult life; and to do so in a way that is fair for all.²

Money does matter in education — when spent well.³ Grattan Institute's school education program has consistently argued that *how* money is spent in Australia's schools is more important than *how much*. But there are two steps involved in spending money effectively:

- First, governments must allocate funds sensibly across schools and school systems.
- Second, schools and school systems must spend their available funds wisely.

There has been progress on both fronts since the start of 2017.

Australia is now committed to a national needs-based funding model built around an agreed target for each school, the Schooling Resource Standard (SRS), even if not all parties agree with the quantum of funding, the specifics of each part of the SRS, or the contribution of the Commonwealth. As I wrote late last year:

*Bipartisan agreement on this model is a triumph for the original architects of Gonski. In my opinion, it is also a tribute to Labor and the Australian Education Union, who won the policy argument about needs-based funding even though they opposed the 2017 legislation.*⁴

Further, Australia has overcome the mindset that no school can ever lose a dollar. There is now a realistic plan to deliver the Commonwealth proportion of the SRS target, in a way that is consistent across states and territories. And the creation of this National School Resourcing Board will at least partly separate funding from politics.

Many steps remain before the 2017 Education Act is embedded: a new national education agreement; rebalancing of state funding models; reallocation of funding within government, Catholic and independent school systems; and changes to individual school budgets. But on balance, our view is that the 2017 Education Act will improve how funding is allocated across schools and school systems.

Looking towards the future, the *Review to Achieve Education Excellence in Australian Schools* has been commissioned to examine evidence and make recommendations on how school funding should be used to improve school performance and student outcomes.⁵ Success in this endeavour will mean moving the public and political debate beyond funding amounts and allocations. To do this, the underlying model needs to be good enough – and accepted as such. It is not enough that justice is done; justice needs to be seen to be done.

While no funding model is or can be perfect, and the SRS model will need ongoing refinement over time, two elements need particular attention in the short term:

² See Goss (2017) *Towards an adaptive education system in Australia*, Grattan Institute, pp.8-9

³ See Goss and Sonnemann (2016) *Circuit breaker: a new compact for school funding*, Grattan Institute, pp.9-10

⁴ <https://austparents.edu.au/2015/wp-content/uploads/APCO-Review-3-Peter-Goss-1.pdf>

⁵ <https://www.education.gov.au/review-achieve-educational-excellence-australian-schools>

- The parental capacity-to-contribute measure for non-government schools, which % continues to rely on school catchment SES scores; and %
- Funding for students with disability.

The Review of the SES score methodology addresses the first of these, and we welcome the fact that the second NSRB review will focus on the loading which delivers additional funding for students with disability.⁶

Funding principles

(This section addresses submission question 3)

The funding principles suggested in the NSRB issues paper — that the SES formula be **fit for purpose, transparent, and reliable** — are broadly sensible and workable. We make three suggestions that would improve the way they are implemented in the context of this Review and consideration of alternative approaches to the SES score.

First, the Review should clarify the policy goal of the capacity-to-contribute model. Second, the Review should distinguish between two different types of inaccuracy: systematic bias and idiosyncratic measurement error. Third, funding stability has inherent value and the review should be explicit about the trade-offs between stability, accuracy and timeliness.

1. %Clarify the policy goal and make it explicit

In Australia, with limited exceptions, parents (or carers) who send their children to non-government schools are expected to contribute to the cost of their schooling. Yet the policy goal of the capacity-to-contribute element of the SRS model is not clear. Is it to keep fees low? To make non-government schools affordable? To encourage parents to contribute to the cost of their childrens' educations, thereby reducing pressure on the budget? Or something else?

The Review should clarify the policy goal of the capacity-to-contribute approach and make it explicit. For example, the goal might be:

- To set the expectation that families with the means to do so contribute substantially % to their children's education if they choose non-government schools; %
- To provide adequate government funding to non-government schools that educate a % high proportion of students from families with limited means to pay fees, so that the % school can keep its fees affordable and still deliver a high quality of education; and %
- To achieve these outcomes without determining the level of fees that schools charge.

Such a goal would broadly align with a means-testing view of public policy.⁷ However, we note that the capacity-to-contribute measure has also been conceptually linked to the anticipated level of a school's private contribution,⁸ which may be driven more by historical factors (e.g. a tradition of low fees) than by the capacity of the current school community.

The distinction between the *anticipated level* of a school's private support and the expectation that parents will contribute *broadly in line with their means* is subtle but important. It goes to

⁶ <https://www.education.gov.au/national-school-resourcing-board>

⁷ The capacity-to-contribute element of the SRS is not a traditional means test, because the government contribution goes to the school, even though the means notionally being tested are those of individual families. It is also an estimate of the average capacity to contribute for families at a school, rather than a government contribution that varies family by family.

⁸ "The SRS amount for non-government schools would be adjusted according to the anticipated level of a school's private contribution", [Australian Government funding for schools explained](#), citing the *Review of Funding for Schooling*, 2011, pp.177-9

the heart of the policy aims of the financial support (via government funding to the school) that families should expect if they choose a non-government school. Our view is that a sensible goal is to ensure that there are *affordable* non-government schools, i.e. where fees are low for schools serving families with limited capacity to contribute, but higher for schools serving families with moderate or high capacity to contribute. We further note that all major political parties support the current approach where base funding for non-government schools is reduced by an estimate of parental capacity to contribute, and this should be the basis of discussion for the Review.

However, we acknowledge that different approaches to school funding are possible and have their own merits and goals. Just a sample of the differing goals of funding for non-government schools would include: targeting funding purely according to student need; allocating each incremental dollar to where it would have most impact; maximising parental choice and school diversity; supporting social diversity within schools by keeping fees low; or maximising parental contributions to reduce pressure on the budget.

In this context we note that the latest Catholic Education Commission of Victoria publication (*The need to rethink need*, CECV, 2018) talks extensively about getting means-testing right at the same time as arguing that low-fee Catholic schools are being systematically disadvantaged. This conflates two very different concepts: means-testing is about affordability, while low-fee status is about price regardless of ability to pay.

Low-fee status has been conflated with affordability several times during the debate over the past year. For example, eight Victorian Catholic primary schools were highlighted in a major 2017 article in *The Australian* as facing steep fee increases under the Gonski 2.0 funding model.⁹ They had low fees (average per student fee income of about \$2,400 in 2015) yet were far from disadvantaged: 75 per cent of their students were in the top SES quartile, and the schools had an average ICSEA of 1169, a score which places them roughly in the most advantaged 2 per cent of schools in Australia.¹⁰ Under any reasonable means-test, their fees should go up.

2. Distinguish between systematic bias and idiosyncratic measurement error

Separately from the policy objective, it may well be correct that the SES metric systematically disadvantages Catholic systemic schools, if their students typically come from families that are less advantaged than might be expected given where they live. This issue is discussed in detail later in this submission.

At the level of principles, it is important to distinguish between systematic bias, which involves a predictable pattern of error, and idiosyncratic measurement error which is random.

If there is systematic bias at the level of school sectors, schools in a given sector will consistently get less (or more) government funding than they should, or than they would if the metric was more accurate. Stated another way, knowing which sector a school belongs to would indicate whether its SES score was likely to under- or over-estimate the level of advantage of the families whose children attend the school. This is a major issue, not only

⁹ [Catholics declare war on the Libs](#), Simon Benson, *The Australian*, 20 May 2017. %

¹⁰ Unpublished Grattan Institute analysis, provided to journalists on 21 May, 2017. Note that ICSEA scores and the distribution of students by SES quartile both use individual family data, so don't suffer from the same ecological fallacy issues as the SES % score. %

because of considerations of fairness but also because it undermines confidence in the funding model and politicises it.

Idiosyncratic measurement error, which by its nature cannot be predicted based on which group of schools a particular school belongs to, is much less problematic.¹¹

3. Be explicit about the trade-offs between stability, accuracy and timeliness

The NSRB principles recognise the importance of providing stability and certainty for a defined time. This focuses on the stability of the measured SES score for a school or group of schools, which is important. Another important form of stability is that funding policy and practice does not change more than necessary. This helps school systems and individual schools predict their future funding. The 2011 Review of Funding for Schooling noted the importance of “*a governance framework that gives certainty and stability around expected future funding levels for schools*”.¹²

In practice, stability may conflict with other elements of the proposed NSRB principles, including to accurately estimate the relative capacity to contribute, to draw on the best possible and relevant national data, and to be recognised by the public as robust, up-to-date and reliable. The Review should be explicit in recognising these trade-offs.

Scope of the Review

(This section addresses submission question 2)

Despite pressure from some quarters to broaden the scope of this Review, we support a review that restricts its scope to the measurement of capacity to contribute. This Review should be focused largely on the technical characteristics of different potential approaches to estimating capacity to contribute (currently done by the SES score), which can be addressed analytically.

For example, the Review should not revisit the ‘system-weighted average’ SES score that operated under previous legislation. The original Gonski panel supported the continued use of the system-weighted average until a more precise measure of the SES of a school is available.¹³ This review is the opportunity to develop that more precise measure.

Some stakeholders have argued that the Review should be broadened further, for example to address whether high-fee independent schools should get any government funding.¹⁴ In our view, this would derail the review and risks dragging Australia back into the funding wars at the very time when we should be moving on from them.

First, changing the broader structure of the SRS model (as opposed to the metric used to calculate the capacity to contribute) would slow or stop the implementation of the various changes that must flow the 2017 Education Act, discussed in the section on context.¹⁵ Even the perception that different elements of the SRS model are ‘on the table’ would give stakeholders the incentive to try to influence the rules, and an excuse to postpone implementation.

Second, the longer the Review takes, the greater the risk that the final model is affected by political expediency. With a federal election expected in late-2018 or early-2019, there is a risk

¹¹ The existing mechanism to review SES scores partly addresses the issue of idiosyncratic measurement error.

¹² Recommendation 22 of the *Review of Funding for Schooling*, 2011.

¹³ See *Review of Funding for Schooling*, 2011, p.177

¹⁴ See, for example, <https://www.theaustralian.com.au/national-affairs/education/catholics-attack-sham-school-funding-inquiry/news-story/f2f628290befe37ec23378f987766f70>

¹⁵ See <https://austparents.edu.au/2015/wp-content/uploads/APCO-Review-3-Peter-Goss-1.pdf>

that Labor might try to ‘buy votes’ by proposing a new formula designed more to appease some vocal Catholic school leaders than for the broader national interest. Indeed, some stakeholders might see advantage in expanding the scope of the review, for just this reason.¹⁶ However, additional funding for Catholic schools would not necessarily indicate a special deal, if the changes apply consistently across sectors and are in line with the principles of needs-based funding.

Finally, the question of whether high-fee independent schools should receive any government funding cannot be resolved analytically. While it is a legitimate topic to discuss, the current answer represents a political settlement, and any change would require a new settlement that must address genuine philosophical differences as well as practical implications.

Broader issues in school funding will not go away, including those that affect the residualisation of some state schools. But this Review is not the right forum given its resources and timeframe.

Proposed priorities for refinements or alternative methodologies

(This section addresses submission question 2)

Many issues have been raised with the current SES model. These are well-described in the recent report, *The Socio-economic status score methodology used in recurrent school funding arrangements*, commissioned by the NSRB from the Centre for International Research on Education Systems (CIRES). We also acknowledge the analysis published by CECV in a series of recent reports.

It would take a substantial research effort to fully analyse every issue that has been raised, and even more effort to explore the policy implications of all the potential alternatives. In our view, this Review should not aim to be exhaustive. Different measures of socio-economic status tend to be highly correlated, so the final outcomes may change relatively little even if a more sophisticated metric is developed. There is also a high risk that more substantial changes to the capacity-to-contribute formula will create unintended or unforeseen consequences.¹⁷

In our view, the Review should lean strongly towards pragmatism. With that in mind, we recommend that the Review prioritise removing systematic bias, if it exists. Beyond this, there are difficult trade-offs, particularly between stability and accuracy.

Remove systematic bias

Our biggest concern with the SES model is that it may be systematically biased in favour of some independent schools and against some Catholic schools. This is the main reason that we consistently advocated for a review of the SES model during the funding discussions in 2017.¹⁸

The potential for systematic bias arises because of what the CIRES paper describes as the ecological fallacy. Families are characterised by the neighbourhood they live in, even though the socio-economic characteristics of households can vary significantly within the relatively

¹⁶ See, for example, <http://www.abc.net.au/news/2018-02-07/750m-goes-to-private-schools-that-dont-need-it-says-catholic/9402782>

¹⁷ For example, while it is intuitively appealing to take parental wealth into account in estimating capacity to contribute, doing so may increase the incentives for some families to create trust structures to reduce their apparent wealth. As another example, linking government contributions to school fees provides incentives for higher-fee schools to re-categorise different sources of funding. Of course further legislation or regulation can address these issues, but there are always loopholes. Closing these loopholes is likely to lead to an ‘arms race’ between legislators and school bursars over how income is classified.

¹⁸ See, for example, <https://www.theguardian.com/commentisfree/2017/may/09/catholic-schools-say-we-should-trust-them-on-funding-this-is-not-good-enough>

small statistical areas (SA1) used in the SES formula. If the family characteristics of students attending a non-government school are materially different to that of other residents within the same SA1s, the school's SES score will be inaccurate.¹⁹

But systematic bias requires much more than inaccurate measurement at a single school — not least because a single school can appeal against an SES score. Systematic bias implies a consistent pattern of mis-estimation across multiple schools.

The CECV has argued that it has evidence of such a consistent pattern.²⁰ The components of the argument can broadly be summarised as follows:

1. Catholic schools on average have lower fees and charges than independent schools, and therefore attract families with lower incomes.
2. Many of the families who send their children to Catholic schools live in the same statistical local areas as families with higher incomes who send their children to independent schools.
3. Using the average SES of the local area as a proxy for each family's SES systematically under-estimates the SES of families who send their children to high-fee independent schools, and over-estimates the SES of families who send their children to lower-fee Catholic schools.
4. Given how the capacity-to-contribute formula works, Catholic schools get systematically less funding than they would if family SES were estimated more accurately, while high-fee independent schools systematically get more funding than they should.

This logic is supported by analysis that shows that the proportion of students in the top socio-economic quartile is higher for independent schools than Catholic schools with the same SES score,²¹ which is what would be expected if the SES scores were systematically biased. The biggest discrepancies in this figure are for scores in the middle of the SES score range (96-120), where changes in SES score make a meaningful difference to the level of funding a school receives.

The argument made by the CECV is clearly plausible, and the analysis is compelling enough that the issue of systematic bias warrants further work. While we have not done detailed analysis that could confirm or refute the CECV claims, our high-level unpublished analysis suggests that it may be directionally correct.²²

In our view, the Review's top priority should therefore be to identify whether this argument about systematic bias can be independently confirmed, and if so to propose a mechanism to remove it.

Prioritise stability when there are trade-offs between accuracy, timeliness and stability

Once systematic bias (if it exists) is dealt with, the Review will have a choice about whether to prioritise greater accuracy and more timely measurement, or greater stability over time. In our

¹⁹ *The Socio-economic status score methodology used in recurrent school funding arrangement*, CIRCES, 2016, pp.31-33

²⁰ See *Capacity to contribute and school SES scores*, CECV, 2016, pp.23-27

²¹ See Figure 13 of *Capacity to contribute and school SES scores*, CECV, 2016, p.27

²² Specifically, we informally explored the relationship between SES scores and ICSEA scores, which were developed by ACARA for comparing school performance in NAPLAN. While the two scores are highly correlated across schools, Catholic schools with a given SES score tend to have lower ICSEA scores than independent schools with the same SES score. Given that ICSEA scores are based more on individual family characteristics than the characteristics of the SA1 in which each family lives, this suggests that SES scores may be systematically biased up for Catholic schools and down for independent schools.

view, stability should get priority. Trying to maximise the accuracy of the SES measures could create more problems than it solves.

For example, imagine a revised SES measure that provided a highly accurate and timely estimate of the capacity to contribute of each family in every school, which directly flowed through to the level of base funding the schools receive. Because of changes in each school's student body, and changes in individual family circumstances, the level of government funding would fluctuate over time. In turn, school budgets would be harder to predict, and schools would have an incentive to increase fees to cover this uncertainty. This upwards pressure on fees — driven by random fluctuations but exacerbated by the ratchet-nature of fees²³ — would tend to make non-government schools less affordable over time, via a reinforcing dynamic of reduced affordability, an increasingly advantaged student body (whose families could afford the fees), and resulting increases in the estimated capacity to contribute.

The alternative — accepting a somewhat less accurate but more stable level of government funding — would be expected to put downward pressure on fees.

Where there are direct trade-offs, the Review should prioritise stability over greater accuracy and timeliness. Where there are few trade-offs, improve the accuracy of the measure as much as possible given the readily available data. Even here, we caution about the predictable issues of increased reporting burden, individual privacy and greater complexity.

As I told the Senate Committee on the Australian Education Amendment Bill 2017: "Our national discussion on school education is stuck in the mire of school funding. The only way we can move past it is by creating a funding deal that is good enough so that we can move on. Good enough is the key — we must not let the perfect be the enemy of the good."

²³ School fees tend to operate like a ratchet: regularly increased but rarely decreased.