TARGET30

REDUCING THE BURDEN FOR FUTURE GENERATIONS

School Funding on a Budget

Jennifer Buckingham

THE CENTRE FOR INDEPENDENT STUDIES

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- Expenditure on primary and secondary education has risen from 2.6% of GDP in 1987–88 to 3.1% in 2012–13, and is projected to reach 3.4% in 2024–25.
- Expenditure on primary and secondary education more than doubled in real terms between 1987–88 and 2011–12, while enrolments increased by only 18%.
- The largest increases have been in federal funding, particularly to government schools.
- Federal funding to schools will increase by 8% each year over the next four years, far exceeding expected growth in enrolments of 2% each year.
- Funding projections do not suggest a current budget 'emergency' in education, but they do show the need to review and rein in future spending increases. It is far simpler, politically and practically, to avoid excessive spending earlier than reduce funding later.
- Funding for schools must be reviewed for the following reasons:
  - Previous funding increases have not led to improved student achievement at the system level. This is a robust and durable finding in Australia and internationally.
  - Education funding cannot be quarantined from efforts to reduce government debt.
  - Education funding must be used in the most productive ways—every dollar spent on ineffective policies and programs is a missed opportunity to improve the quality of schooling.
- It is difficult to find and quantify immediate large savings in education budgets, partly because state and territory budgets are not sufficiently detailed, and partly because of the complexity of unravelling funding arrangements. It is, however, possible to identify measures to reduce future spending and improve productivity.

  This report proposes eight ideas and estimates the savings to government and the impacts on schools.

  1. revise the federal government funding model
  2. abolish the federal Department of Education
  3. reduce the cost of state and territory bureaucracy
  4. remove mandatory class sizes and eschew class-size reduction policies
  5. provide bursaries for low-income students to use at non-government schools
  6. charge high-income families to attend government schools
  7. reduce the oversupply of teachers by elevating entry standards to teaching degrees
  8. decentralise teacher employment and make it easier for principals to dismiss ineffective teachers.

Introduction

Growth in expenditure by Australian governments has exceeded growth in both population and GDP over the last three decades. Government expenditure has increased from 24% of Gross Domestic Product (GDP) in 1972 to 34% in 2012, and shows no sign of receding. The inaugural TARGET30 report by The Centre for Independent Studies predicted that if unchecked, government expenditure could reach 50% of GDP by 2050.[1] To help avert the crisis, the TARGET30 campaign has been putting forth a series of research reports looking at ways to reduce the size of government to 30% of GDP by 2023.

School funding is a significant component of government expenditure, and government plays a major role in the delivery of education. Sixty-five per cent of Australian students attend state schools that are fully funded by government, and the remaining 35% attend Catholic or independent schools that are partly funded by government.[2] Expenditure on primary and secondary school education represented 7.4% of all government expenditure in 2011–12.[3]

Expenditure on schools has risen faster than student numbers over several decades, with the result that per student expenditure has also grown substantially, even after adjusting for inflation. Increased expenditure has been driven by an expanding teaching force, higher teacher salaries, and rising infrastructure spending, particularly for new technology. These increases are not always intrinsic to the cost of education provision; they are the consequences of government policy decisions, such as reducing class sizes, with political agendas.

Demands for increased government funding for school education are a persistent feature of the public debate on education policy, even though there is little evidence that previous funding increases have improved educational quality and outcomes.

An objective and rigorous examination of government spending on school education is essential for a number of reasons.

- Public debt in Australia is reaching high levels as a result of slow growth in taxation revenue and high government spending. Education is a major component of government expenditure and cannot be quarantined from efforts to bring the accounts back into balance.
- The disconnection between expenditure and educational outcomes suggests that previous funding increases have been misdirected—and largely wasted. Each dollar spent on ineffective policies and programs is a missed opportunity to improve the quality of schooling.

To question the amount, allocation and effectiveness of school funding has, therefore, both economic and educational imperatives. This report describes historical and recent trends in government funding for schools. It then analyses funding patterns and cost-drivers, and lastly identifies areas for reform and savings to create a more efficient and effective school sector.

A brief history of government funding for schools

The first schools in Australia were established in the early days (the late 1700s) of British settlement in NSW by the Church of England. Free 'charity schools' run by other denominations appeared in the following decades, as well as private commercial schools catering for middle-class boys, and schools offering instruction for girls in etiquette, art and 'polite accomplishments.' These schools were not government funded.[4] Charity schools run by clergy remained the major providers of education until the 1840s, when a dual system of state government-funded denominational schools and national schools was established.[5]

In 1872, Victoria became the first Australian state to pass an Education Act providing for free, secular public education; other states followed suit in the next two decades. Some states withdrew funding to religious denominational schools as new public schools opened. The Catholic church was the most strongly opposed to secular public education, and maintained its schools with great financial difficulty for almost a century—until 'state aid' for non-government schools was restored in 1964. This marked the beginning of direct federal funding for schools in addition to state funding, a relatively recent development in the history of school funding.

In 1964, the federal government began funding capital works in schools—initially science laboratories in Catholic schools but expanded to libraries and other capital works from 1969. Federal provision of recurrent funding to non-government schools was introduced in 1970 and extended to government schools in 1974. In more recent decades, the federal Department of Education has devised and administered education programs to promote its own education agenda.[6]

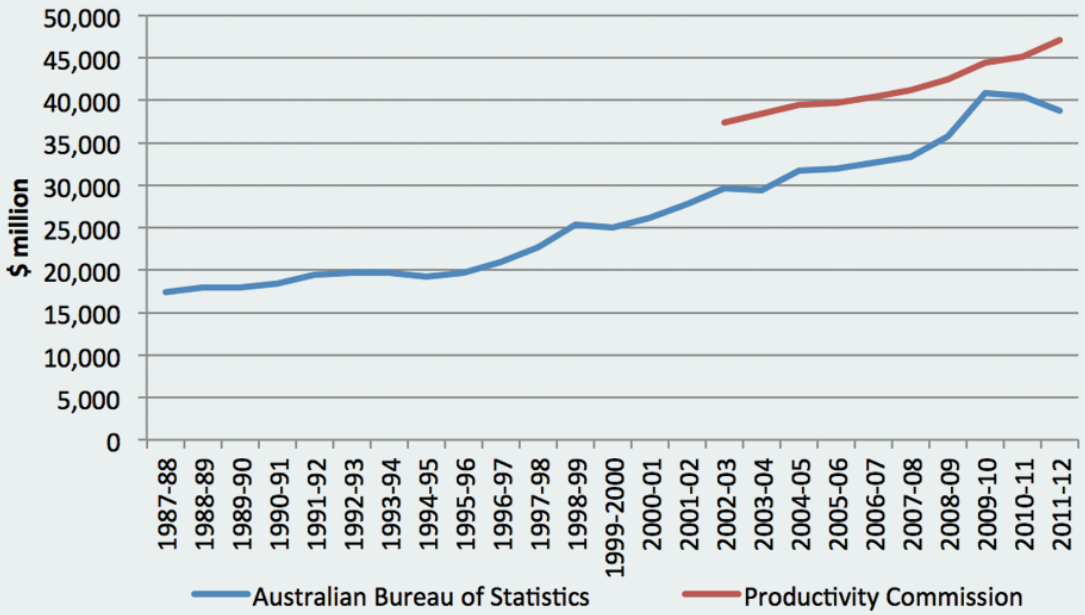
Growth of government funding for schools

Total general government spending on primary and secondary education

The Australian Bureau of Statistics (ABS) and the Productivity Commission are the two main publishers of statistics on funding for school education in Australia—but their data differ substantially. As the reasons for the differences cannot easily be reconciled, both sets of data are shown in Figure 1.*

From 1987–88 to 2011–12, total federal and state government spending on primary and secondary education more than doubled in real terms, according to ABS figures, a period in which enrolments grew by only 18%.[7] Total general government spending on primary and secondary education in 2011–12 was between $38.8 billion (ABS) and $47.1 billion (Productivity Commission[8]).

Figure 1: Government expenditure on primary and secondary education, 1987–88 to 2011–12, real (adjusted for 2011–12 dollars)



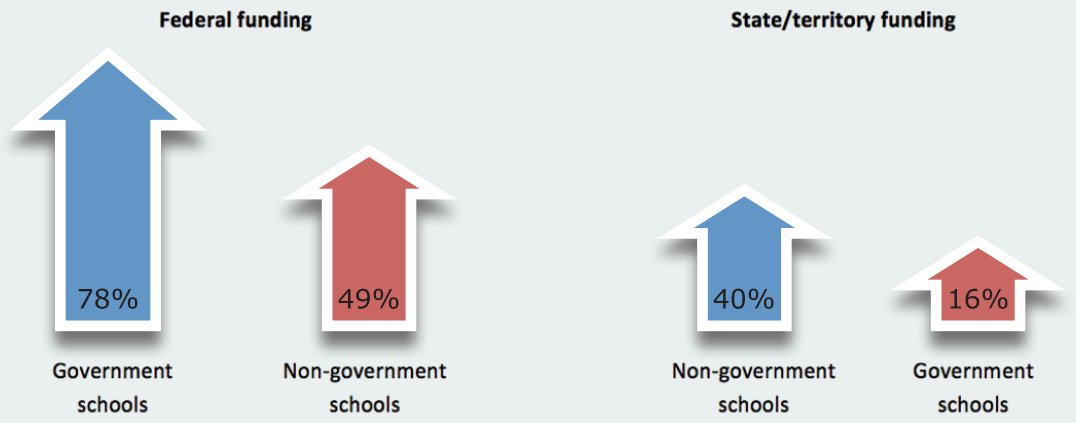
Source: Australian Bureau of Statistics (ABS), *Government Finance Statistics, Australia* (various years); Productivity Commission, *Report on Government Services 2014*.

* ABS data comes from state/territory and federal treasuries and includes all recurrent and capital outlays from all levels of government. Productivity Commission data comes from the state and federal departments of education and is recurrent outlay only. Federal government capital funding is also published by the Productivity Commission, but not state/territory capital funding. Even though the commission's figures are recurrent funding only, they are much higher than the ABS figures ($9 billion higher in 2011–12). One major difference is that the commission includes User Cost of Capital in its recurrent funding figures, estimated at $7.1 billion in 2011–12. This would account for a large proportion of the difference in the funding figures. Representatives of both organisations agreed with this explanation when contacted directly via phone and email but said they could not offer any further details.

Funding to government and non-government schools

The largest proportional real increase in recurrent (excluding capital) spending on schools in the last 10 years was from the federal government, especially to government schools. Figure 2 shows the proportional increases in funding from both levels of government to both school sectors.

Figure 2: Real funding growth, 2002–03 to 2011–12



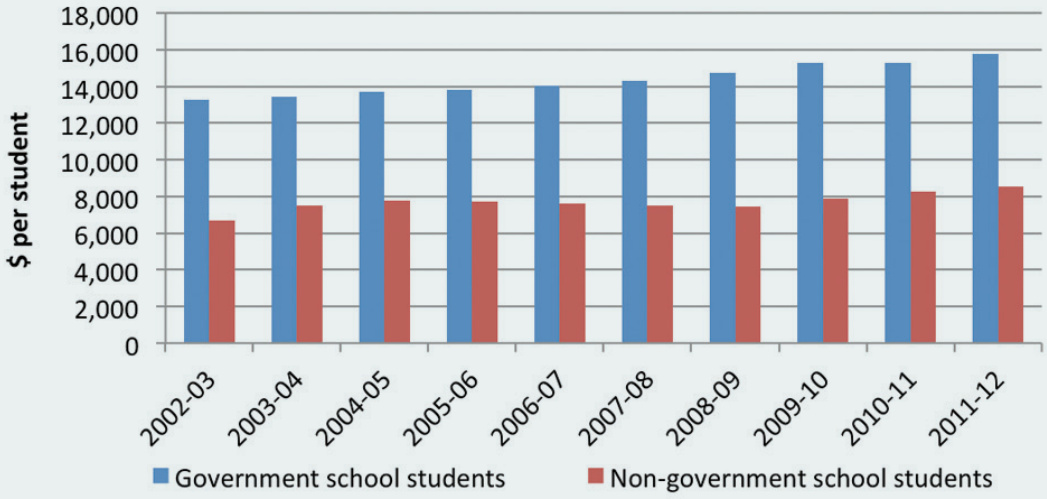
Source: Productivity Commission, *Report on Government Services 2014*, Table 4A.7.

Per student funding

With government expenditure increasing faster than student enrolments, per student funding has grown substantially. In the decade from 2002–03 to 2011–12, per student funding in government schools grew by 19% and in non-government schools by 28%, in real terms. The relatively higher increase in non-government schools most likely reflects changing demographics in the non-government school sector—a growth in low-fee independent schools enrolling students from lower socioeconomic backgrounds (who are eligible for higher levels of government funding).[9] These include remote Indigenous schools that attract substantial additional federal funding.

Non-government school per student funding did not exceed 57% of government school per student funding in this period. In 2011–12, total government per capita recurrent funding to government school students was $15,768, and $8,546 to non-government school students.

Figure 3: Total government per student recurrent funding for government and non-government schools, real (adjusted for 2011–12 dollars), 2002–03 to 2011–12



Source: Productivity Commission, *Report on Government Services 2014* (Tables 4A.12 and 4A.15).

The 'Gonski,' 'Better Schools,' and 'Students First' policies

A new system of federal funding for schools has been implemented in 2014. Developed as a result of the Gonski review, the new funding system is a variation on the six-year Better Schools policy developed by the federal Labor government and legislated in the *Australian Education Act 2013*. The Coalition government elected in 2013 retained the funding model, now called Students First.

The Students First model uses student data to determine an overall funding entitlement for every individual school. Funding entitlements are based on a national Schooling Resource Standard (SRS) for each enrolled student, with extra funding ('loadings') allocated according to student need (socioeconomic status, Indigenous, English language proficiency, and disability) and school characteristics (size and location). All government schools receive the full SRS for each student, while non-government school students are entitled to a proportion of the SRS, adjusted according to the average socioeconomic status of the school community—essentially a means test. Loadings are not subject to this adjustment.

This funding model differs from the one that operated up to 2013 in three key ways.

1. Federal funding is determined independently of state funding. Previously, federal funding levels were driven by state funding levels, calculated as a percentage of average government school recurrent costs (AGSRC).
2. Funding for non-government schools is no longer annexed to funding for government schools. Previously, changes in funding for government schools affected funding for non-government schools.
3. Almost all federal funding will be incorporated into block recurrent funding for schools. There will be relatively few programs administered by the federal Department of Education.

Some features of the previous funding system have been preserved.

1. Funding allocations to state school systems and Catholic school systems will still be provided as block grants to state education departments and state Catholic education authorities to administer using their own funding formulas.
2. Funding to independent schools will be provided directly to schools.

A common misconception about the Better Schools/Students First funding model is that it determines the actual funding each school will receive. This is not the case. For government schools, the target funding allocations for individual schools are totalled, and the federal government's share of funding is given to the relevant state or territory governments, which in turn add their share and then allocate the funding to schools based on their own formulas. The same procedure exists for systemic Catholic schools, whose funding is administered by the state and territory Catholic education offices. There are in theory different funding systems for government schools and Catholic schools in each state and territory. Indeed, this was a recommendation of the Gonski review, with the rationale that state and territory governments are better placed to make decisions about funding distribution than the federal government.

Another misconception about the model is that it is a uniform, national funding system. Again, this is not the case. Separate and different funding arrangements for each state and territory were established through bilateral negotiations with the federal government. These National Education Reform Agreements (NERAs) specify base levels of funding from both federal and state governments, their rates of annual increase, and the additional funding to eventually bring schools to their new target funding level as determined by the Better Schools funding formula. The objective

Table 1: Funding commitments in state and territory National Education Reform Agreements (NERAs)

	State/territory			Commonwealth		
	Base funding 2014 ($million)	**Indexation of base funding 2014–19**	**Total extra Better Schools funding 2014–19 ($million)**	**Base funding 2014 ($million)**	**Indexation of base funding 2014–19**	**Total extra Better Schools funding 2014–19 ($million)**
VIC	$5,632	1.35% in 2014 and 2015 3% from 2016	$1,318	$3,231	4.7% pa	$2,491
NSW	$8,264	2.62% in 2014–15 3% from 2016	$1,761	$4,025	4.7% pa	$3,270
SA	$1,956	3% from 2016	$230	$1,004	4.7% pa	$427
TAS	$755	3% from 2015	$134	$316	4.7% pa	$248
ACT	$483.7	3% from 2015	$21.5	$231.6	4.7% pa	$16.1

Source: Derived from Heads of Agreement Between the Commonwealth of Australia on National Education Reform and the individual states and territories.

was to have 95% of schools at their target funding level by 2019, but the additional funding required to attain the level determined by the Better Schools model was to be phased in gradually. Only 28.6% of the total Better Schools funding was budgeted in the first four years, from 2014 to 2017.

When there was a change in federal government in September 2013, only five out of eight jurisdictions had signed NERAs—NSW, Victoria, South Australia, Tasmania and ACT (Table 1). After some prevarication, the Coalition government committed to delivering its promised funding under the Schools First model for 2014 to 2017, but with some important changes:

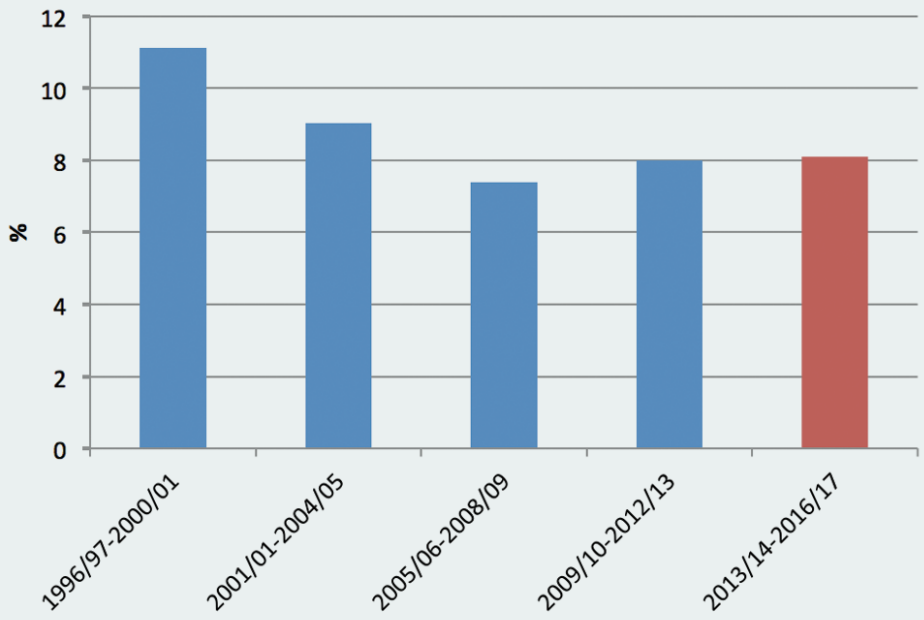
- Only the first four years (2014–17) of the original six-year funding deal will be delivered.
- All states and territories will receive the additional federal funding allocated to them by the model, not just the states and territories that signed an NERA with the previous Labor government.
- States and territories that have signed an NERA are no longer obliged to deliver the funding increases stipulated in the agreement.

The base rates of state and federal funding for 2014 (Table 1) are not significantly higher than those for 2013. Rates of annual indexation on the base funding specified in the NERAs are lower than historical rates of growth in the AGSRC.

The federal government's 2013 Mid-Year Economic and Financial Outlook (MYEFO) provides estimates of federal funding for schools for 2014–17, and includes all states and territories. When compared to federal funding since 1996–97, it appears that the Students First policy will not lead to substantially greater increases in federal funding in the four years to 2017.

Figure 4 indicates that the federal government will restrain the increases in spending on schools, at least till 2017. Given federal Minister for Education Christopher Pyne's stated intention to review the federal funding model, as well as the continuing pressure on budgets, it is likely that the original six-year Better Schools funding model will never be implemented in full, and the anticipated large increases in government funding to schools in 2018–19 will never eventuate. Even so, increases in federal government spending of 8% on average each year far exceed expected growth in the student population of less than 2% each year.[10]

Figure 4: Annual average increase in federal funding to schools, 1996–97 to 2016–17



Source: Productivity Commission, *Report on Government Services* (various years); DEEWR (Department of Employment, Education and Workplace Relations), 'Portfolio Budget Statements 2012–13 and 2013–14'; *Mid-Year Economic and Financial Outlook 2013–14 (MYEFO)*.

Funding projections to 2025

Projections of funding for school education beyond budget forward estimates are difficult to calculate because historical data vary substantially depending on the source. There is therefore no single authoritative source of government expenditure figures to provide evidence of a trend.

Furthermore, due to recent major changes to federal and state funding through the Students First model, projections cannot be made by simply extrapolating historical growth trends. Federal budgets and financial outlooks contain forward estimates for the four years up to 2016–17, which provide some basis for projecting beyond those estimates, yet these figures are not complete. For example, they do not take into account an estimated $2 billion in additional funding for students with disabilities.

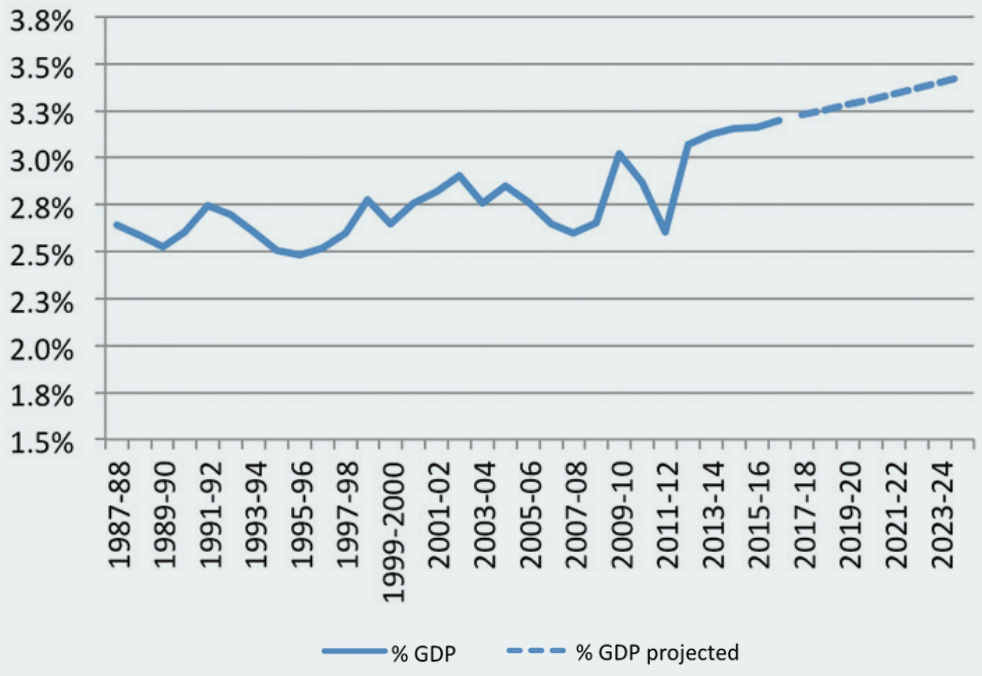
Long-term state and territory spending is even more difficult to predict. State and territory budgets contain only the estimates for the current budget year (2013–14), making projections tentative. Figures 1–3 show that state and territory government funding to schools has increased both in total and per capita over the last few decades. History suggests that it is highly unlikely that state and territory budgets for school education will shrink, but with no pressure from the federal government to increase funding, there is at least the potential for restraint.

Figure 5 presents past and future school funding as a proportion of GDP. In calculating the funding projections, the following assumptions were made:

1. The federal government's share of the Gonski/ Better Schools funding for 2017–18 and 2018–19 (approximately $5 billion over two years, excluding indexation of existing funding) will not be delivered.
2. Federal funding beyond 2016–17 (the last year of the MYEFO forward estimates) will increase in real terms at a rate of growth similar to the rate of growth in the MYEFO estimates from 2014 to 2017.
3. State and territory funding beyond the current budget year (2013–14) will increase at the same annual rate as the annual average growth rate in state and territory spending over the previous 10 years (4.9% each year according to ABS statistics).[11]
4. GDP will increase at the rates estimated in the MYEFO 2013–14 forward estimates. Beyond 2016–17, nominal GDP will increase at 5% each year, a rate consistent with the estimates in the 2010 *Intergenerational Report*.[12]

The single unbroken line in Figure 5 shows that from 1987–88 to 2011–12, government expenditure on schools was between 2.5% and 3.2% of GDP. Although the percentage fluctuated over this period, there is a general upward trend.[13] The dotted line shows forecasted government expenditure on schools.[14] If government expenditure increases at the rates of growth implied by historical trends and budget forward estimates, it will constitute 3.4% of GDP by 2025—however, if GDP growth is lower than predicted the proportion represented by education expenditure will be higher.

Figure 5: Government expenditure on schools as a percentage of GDP, 1987–88 to 2024–25



Sources: See Appendixes 1 and 2.

TARGET30: Why review government spending on schools

Projections of school funding to 2025 show an inexorable rise in government expenditure on schools that far exceeds both growth in GDP and growth in student numbers. While they do not suggest a current budget 'emergency' in education spending, they do show the need to immediately rein in past spending commitments made based on incorrect revenue forecasts, and make policy decisions designed to ensure spending does not reach unsustainable levels in the years to come. It is far simpler, politically and practically, to avoid excessive spending earlier than reduce funding later.

Budget imperatives

The budget imperatives for spending restraint are obvious. Overall government spending has increased from 24% of GDP to 34% of GDP in 2014, a situation that has been exacerbated by the recent economic downturn.[15] A combination of elevated government spending, lower than expected taxation revenues, and slow economic growth has taken Australia from a strong budget surplus ($44 billion in 2007–08) to a high level of public debt ($280 billion in 2016–17) within a decade. Interest payments alone on this debt are estimated at more than $10 billion in 2014–15.[16]

The aim of the TARGET30 campaign is to reduce government spending from 34% of GDP to 30% by 2023 by reducing, or at least maintaining, government expenditure as the economy grows. If education spending projections are correct, and it increases by approximately 0.5 percentage points over the next decade relative to GDP, this will not help achieve the TARGET30 goal. Keeping education spending at its current proportion of GDP will help realise TARGET30 and reduce public debt, while still allowing for growth in education expenditure in real terms.

Productivity

Another important economic reason to review education spending is productivity. When governments consistently increase education budgets without rigorously reviewing the way funding is spent or questioning the significance of the outcomes achieved, there is little incentive to improve productivity. In the long term, improvement in productivity—the output of each person working in education—is the key to improving the system. Failure to make schools as productive as possible creates opportunity costs both within education provision (by denying students the best education possible) and beyond it (by curtailing the beneficial effects of education on economic growth).[17]

Educational and moral imperatives

Just as important as the economic imperatives for reviewing school funding are the educational and moral imperatives. Governments and schools have a responsibility to students and their families directly, and to Australian taxpayers more broadly, to ensure that expenditure on schools is used in the most effective way and achieves the best possible education for every student. Each dollar spent on schools is a dollar that could have been spent on aged care, infrastructure, or any number of other worthy causes. Each dollar that is wasted on unnecessary bureaucracy in the education system is a dollar that could have been spent on providing support to a student with learning difficulties. Each dollar spent on a literacy program that doesn't help children learn to read is a dollar that could have been spent on a literacy program that does.

Funding and student achievement

Improving school education is not as simple as putting more money into school systems. Not all spending provides a return on investment. Resistance among education analysts to the idea of large additional outlays on school education is not just because of current economic constraints, but also because the dividends of increased spending appear to be minimal at best.

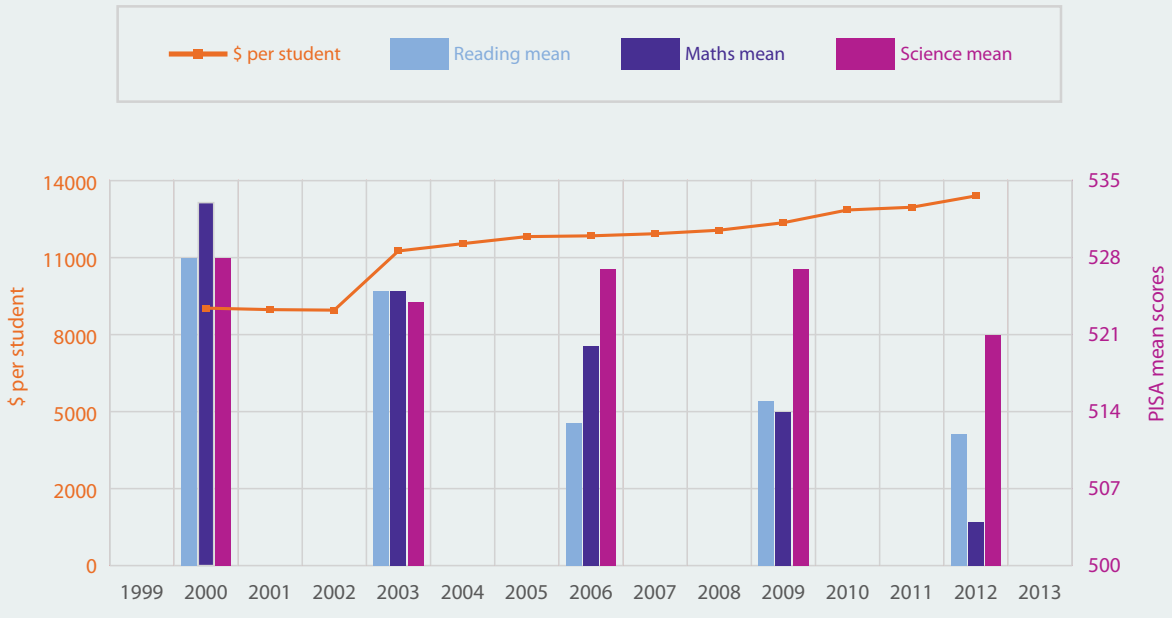
Cross-country analyses of international tests have consistently found no correlation between spending on education and student performance—countries that spend more on school education do not always perform better.[18] Furthermore, when a country increases funding to its schools, there is no guarantee of a corresponding improvement in performance.[19] Therefore, at a system level at least, there is no evidence that increasing spending on schools leads to improved performance.

Figure 6 shows a time series of per student funding (to all schools) and mean scores on the reading, maths and scientific literacy scales of the Programme for International Student Assessment (PISA). Increases in spending in one year are not expected to show benefits in the same year, but Figure 6 shows nine years of increases in spending with no concurrent change in mean scores.

Nor has there been improvement in the performance of students of different ability levels. The proportion of students in the lowest performance bands for reading in PISA was 12% in 2000 and 14% in 2009. For the highest achieving students, the trend was in the opposite direction. The proportion of students in the highest achievement band was 18% in 2000 and 13% in 2009.

The fact that increased funding has not translated into improved student outcomes in the past does not mean funding has no effect on educational quality. It simply means expenditure on education is a poor predictor of quality. It is a question of how money is spent, rather than how much money is spent. The multibillion-dollar National Partnership Program implemented by the Rudd-Gillard government is a good example of this. Overall, there was little impact of the national partnerships on aggregate literacy and numeracy scores. In some schools, however, the partnership funding had a strongly positive effect on school and student performance.[20] The relationship between extra funds and learning was highly variable and depended on the way schools used the resources. There is no guarantee and no precedence for increased system funding to yield the same benefits.

Figure 6: Per student funding (real 2010–11 dollars) and PISA mean scores, Australia



Source: Productivity Commission, *Report on Government Services 2014*, Table 4A.11. Figures adjusted using CPI price deflator data from ABS (Australian Bureau of Statistics), *Australian Economic Indicators, 2012*, Cat. 1350.0 (Canberra: ABS, 2012); OECD, *PISA 2012 Results, Volume 1: What Students Know And Can Do* (Paris: OECD, 2013).

Finding savings in education budgets

The difficulty of identifying ways to reduce education budgets is apparent: Only one report on education funding in recent years has made a specific recommendation of how to reduce expenditure—the Grattan Institute recommended increasing class sizes and therefore reducing the number of teachers employed, with an estimated saving of $3 billion.[21] The Institute of Public Affairs—an organisation in favour of smaller government—proposed a voucher system requiring billions of dollars a year in *increased* government funding for schools.[22]

In a welcome move, many programs that were being funded and/or delivered by the federal government as part of the school education budget have been terminated. A large proportion of federal spending is being remitted to the states for recurrent funding for schools. More than 40 funding items were listed in the 2012–13 Budget. In the 2013–14 Budget, only 20 of these programs were included in the forward estimates beyond 2014, and fewer still beyond 2015. There is little point recommending abolishing programs that are already in the process of being phased out. Of the remaining continuing programs, a few stand out as being outside of the core role of a federal education department, including a financial education program, trade cadetships and training centres, language teacher fellowships, and youth engagement programs—but these represent a relatively small proportion of the budget.

State education budgets are scarce on detail. Typically, they provide total figures for recurrent and capital spending on state schools and non-government schools. For state schools, there is no annual breakdown of the way funding is distributed into salaries, professional development, maintenance, resources, utilities, curriculum and assessment, or program funding. This makes it impossible to identify specific areas for potential savings. A perusal of education departments' annual reports is only slightly more enlightening.

Just as important as finding savings in the overall budget is finding ways to make existing funds work harder and thereby increase productivity.

Tips to TARGET30

In what follows, eight ideas for restraining or reducing expenditure and/or increasing productivity are presented. They are not big-ticket multibillion-dollar spending cuts, nor are they all politically and practically challenging. It is not an exhaustive list: There are many other aspects of schools and school systems worthy of attention, and which would arguably elevate educational standards in the long term. The intention here is to present some relatively simple ideas that are rationally grounded and have a sound policy basis.

1. revise the federal funding model
2. abolish the federal Department of Education
3. reduce the cost of state and territory bureaucracy
4. remove mandatory class sizes and eschew class-size reduction policies
5. provide bursaries for low-income students to use at non-government schools
6. charge high-income families to attend government schools
7. reduce the oversupply of teachers by elevating entry standards to teaching degrees
8. decentralise teacher employment and make it easier for principals to dismiss ineffective teachers.

Tip 1: Review the federal funding model

Maintain the rationale of the existing model with a new school funding model but with a re-assessed base component and more tightly targeted equity components.

Total government recurrent expenditure on schools increased by 26% in real terms in the decade to 2011–12. The federal government was largely responsible for this growth—federal government expenditure increased by 70%, while state and territory expenditure increased by only 16%, albeit from a higher base. The implementation of the new Students First funding model will produce further increases in federal funding for schools over the next four years.

As described above, the Students First funding model was inherited by the current federal government. Education Minister Pyne has already stated his intention to review the model. There are good reasons for this decision, including:

- To be fully implemented, the model would require the federal and state/territory governments combined to increase school funding by around $10 billion over 2017–18 and 2018–19 alone, and by several billion dollars a year in perpetuity.
- The rationale for the funding model—a minimum student entitlement (Schooling Resource Standard or SRS) plus extra funds according to student need (equity loadings)—was sound, but the development and application of the model were highly questionable. Economist Henry Ergas argues that the methodology used to calculate the SRS at the core of the model was flawed, and liable to overestimate the real per student base cost.[23] The equity loadings proposed in the Gonski report were expanded by the former Labor government to include more students in more schools, further inflating the cost of implementing the model.
- The Gonski/Better Schools model tried to create more uniformity and transparency by standardising school funding across the nation. A nominal 'target' funding figure was calculated for each school, to which the federal and state/territory governments would each contribute a share. The model does not achieve this objective. Separate and different agreements were negotiated with each state and territory government. The Catholic education system has a different agreement again. Independent schools (10% of Australian schools) are the only schools that are funded based on the model.

The federal government intends to implement a new funding model from 2017–18. The ideal funding model is one that is student-centred and portable, that is, the funding allocated to each student should be determined by their educational needs and circumstances, not the type of school they attend. It should be available to them in any school of their choice; they should not get less funding in one school than any other.[24] Studies of school systems that provide students with greater choice have shown increased achievement and attainment for both the students exercising choice, and for the system as a whole.[25]

Creating such a system is easier said than done in the Australian context. School funding from the federal and state/territory governments would have to be combined and distributed to each student and school (government and non-government) from a single authority. Preferably, this would be done at a state and territory level, so each jurisdiction could allocate funds as it deems appropriate. Administering funding at the state level also removes the necessity for all states and territories to participate in implementing such a model. Unfortunately, there has been little appetite for a system such as this among Australian politicians at either level of government.

Given the likelihood that the existing multi-level and multi-sector funding arrangement, where the Commonwealth and the states have different funding models, will continue to exist in the short to medium term, a new federal funding model should have the following features.

- It should still be predicated on a standard level of funding for each student, with a base component and equity loadings. This will provide the groundwork and create the potential for a student-centred, portable funding system to be implemented by any state or territory that decides to do so in future.
- The base component should be calculated using a methodology that more accurately estimates the minimum cost of providing an adequate education.
- The equity loadings should be more tightly targeted on areas of high student need rather than spread across a large number of schools.
- Funding for state and territory school systems should still be delivered as bulk grants so they can distribute funds to schools according to their own funding models.
- Federal government funding should not be conditional on state and territory government funding to schools.

Tip 2: Abolish the federal Department of Education

Terminate or transfer all the functions of the federal Department of Education to other departments. Savings = $100 million each year.

Many programs administered by the federal Department of Education duplicate or supplant the role of state governments, and should be terminated. The few remaining programs could be administered through other federal departments or agencies, removing a layer of bureaucracy in school education and saving millions of dollars every year.

Table 2 shows that in the last 25 years, recurrent and capital funding from the federal government to schools has increased markedly, both in real dollar terms and as a proportion of all government spending on schools.

Much of this new spending was on federal government-developed, targeted programs that supplement general recurrent and capital spending, such as the National Partnerships, the Building the Education Revolution, and the Digital Education programs. These programs are now finished, and the funding associated with them has been incorporated into the new funding package from 2014.

The majority (60%) of the current federal budget comprises recurrent funding for non-government schools. A further 30% is in grants to government schools. The remaining 10% is made up of a number of federally administered programs, some of which are due to finish in the next year or two, and some of which are funded through the budget forward estimates at least to 2016–17.

Table 2: Federal government outlays on primary and secondary education, real (adjusted for 2011–12 dollars)

	1987–88	1991–92	1996–97	2001–02	2006–07	2011–12
$million	$4,652	$5,329	$5,986	$7,642	$9,609	$13,849
Per cent of all government outlays on primary and secondary education	26%	27%	29%	27%	29%	36%

Source: *Government Finance Statistics*, Cat. No. 5512.0 (ABS, various years).

Now that the existing round of school funding reforms has been finalised, 90% of the federal budget—recurrent and capital funding to schools—can be administered through Treasury. With the removal of accountability requirements in the Students First policy, this aspect should not prevent a transfer of administration. The review of the federal funding model can be conducted by a separate, temporary taskforce—it does not require a whole department.

Many of the other ongoing programs administered through the Department of Education exceed the role of federal government and can be terminated. The few that have significant impacts—for example, ABSTUDY—can be transferred to other agencies or departments.

Table 3 presents a proposal for how the Department of Education can be dismantled and estimates the associated savings. Only programs that have not

already been cancelled by the Coalition government are calculated as a net saving to government. Programs nominated to be transferred would be administered through a different budget, but because they remain as a cost to government, they are not counted as savings per se.

This is a conservative treatment of the budget. Several large-ticket budget items, including Trade Training Centres have already been cancelled since the publication of the 2013–14 Budget, with the expenditure redirected within the federal budget to offset additional funding in the Students First program.[26]

As a result, the identified savings from ending existing budgeted programs are not large in proportion to the overall schools budget. Furthermore, some of the programs are already being phased out over the budget forecasts (for example, Youth Support programs were funded at $127 million in 2012–13 but fewer than $4 million is budgeted for them in 2016–17).

The unmeasured potential future savings of such a reform are substantial, however. Abolishing the federal education department would remove the opportunity and incentive to create new programs to justify employing 1,000 staff who have no responsibility for schools or teachers.

Australia did not always have a federal Department of Education. The Department of Education and Science was established in 1966.[27] So there is precedence for the country not having a federal education department. And the idea of abolishing the department is not new. Australian researchers Brian Caldwell, Julie Novak, and Bronwyn Hinz, as well as US sociologist Charles Murray, have all made the case for devolving education back to the states.[28] As Caldwell points out, Canada does not have a federal department of education, but is a high-performing, high equity country on international assessments.

However, the savings of around $100 million each year from abolishing the Department of Education underestimates future savings, given the historical precedence of an expanding role of federal government schools. It also sets a significant precedent that no federal government department or function, once formed, is necessarily permanent.

Table 3: Federal education programs to be terminated or transferred and their associated savings

Budget measure	Proposed action	Saving 2014–15 to 2016–17
Program 2.1 and 2.2 *Recurrent funding to schools* (ongoing)	Transfer to Treasury	NA
Program 2.3 *School support* (ongoing)	Terminate all programs except Indigenous Education, which could be moved to another department or dedicated unit.	$304 million
Program 2.4 *Trade training*	Cancelled in the Mid-Year Economic Forecast	NA
Program 2.5 *Digital education* (terminating)	Finishes in 2013–14	NA
Program 2.6 *NP—Teacher Quality* (terminating)	Finishes 2014–15	NA
Program 2.7 *Support for Students with Disabilities* (ongoing)	Phased into Better Schools equity funding	NA
Program 2.8 *Youth Support* (ongoing)	Terminate all programs except research. Transfer research to another agency (e.g. MCEECDYA)	$75 million
Program 2.9 *Student Assistance* (ongoing)	Transfer all functions to another department (e.g. Department of Human Services)	NA
Program 2.10, 2.11, 2.12, 2.13 National Partnerships	Finishes 2012–13	NA

Source: DEEWR (Department of Employment, Education and Workplace Relations), 'Portfolio Budget Statements 2013–14.'

Tip 3: Reduce the cost of state and territory bureaucracy

Reduce per student out-of-school costs to 4% in jurisdictions with high out-of-school costs (Victoria, Queensland, South Australia, and the ACT) similar to NSW and Tasmania. Savings = $465 million each year.

Most government funding for government schools (87% in 2011–12) comes from state and territory governments, each of which has a different funding system.[29] Table 3 shows that spending on government school students in the ACT and the Northern Territory in 2011–12 was 50% higher than in Victoria, the lowest spending state.

The Productivity Commission reports expenditure on schools separated into 'in-school' and 'out-of-school' spending. In-school costs include all expenses directly incurred on teaching and non-teaching staff, resources, books, utilities and general operations. Out-of-school costs include departmental and regional office staff and expenses, research and curriculum, assessment, and program development.

Table 4 shows large differences between states and territories in out-of-school costs, which are separated into staff-related and other costs. The large land expanses and the number of remote schools in the Northern Territory, Western Australia, and even Queensland are reason to expect higher out-of-school costs. Yet Western Australia's out-of-school costs are much lower than those of some other states.

The relatively high out-of-school cost of $1,262 per student in the ACT—almost three times as high as NSW—does not have any obvious explanations, however. Likewise, given that more than 95% of funding to Victorian schools is devolved to the schools, along with responsibility for staffing, out-of-school costs would be expected to be lower in that state.

Table 4: State/territory government funding per FTE student, states and territories, real (adjusted for 2011–12 dollars)

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
Total spending per FTE student	$13,688	$11,911	$13,677	$16,859	$14,238	$13,666	$18,972	$19,555	$13,792
Out-of-school costs	$509	$686	$994	$934	$1,219	$563	$1,262	$2,013	$781
Out-of-school percentage of total cost	3.7%	5.8%	7.3%	5.5%	8.6%	4.1%	6.6%	10.3%	5.7%

Source: Productivity Commission, *Report on Government Services 2014*, Table 4A.12.

Tip 4: Remove mandatory class size maximums and eschew further class size reductions

Reduce staffing entitlements by numbers proportional to school size. Savings = $891 million each year.

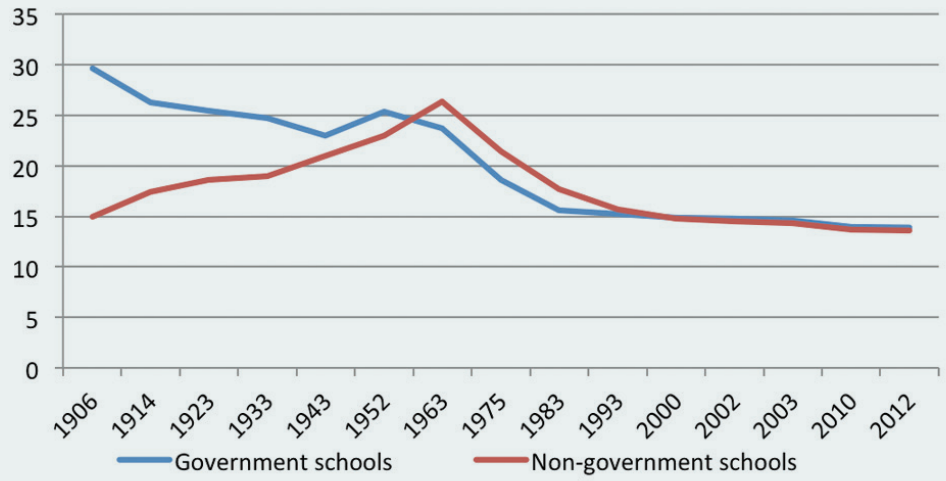
In Australia, as in most Organisation for Economic Co-operation and Development (OECD) countries, the major component of education expenditure is teaching staff, and changes in education expenditure largely reflect changes in teacher salary costs—a function of the size of the teaching labour force and how much they are paid.[30]

The AGSRC, a benchmark measure of the cost of educating a child in a government school each year, grew from $5,378 in 2001 to $9,697 in 2011. The majority of this growth (60%) was driven by teacher-related expenses, which were in turn driven by higher wages and increases in the number of teachers employed.[31]

Since the 1960s, the number of teachers has grown faster than the number of students. Figure 7 shows this as the student-teacher ratio (the number of students per full-time equivalent (FTE) teacher). This trend slowed but continued in the decade from 2002 to 2012, with the ratio dropping from 14.8 to 13.9 in government schools, and 14.5 to 13.6 in non-government schools.

Lower student-teacher ratios are largely the result of class-size reduction policies aimed at improving educational outcomes. There is a downside to this policy, however. Deliberate and substantial expansion of teacher employment can have adverse consequences for both teacher salaries and teacher quality.[32] Education budgets are not limitless, so increases in teacher

Figure 7: Student-teacher ratios, 1906–2012



Source: ABS (Australian Bureau of Statistics), *Year Book*, Cat. No. 1301.0 (various years), *Schools Australia*, Cat. No. 4221.0 (various years).

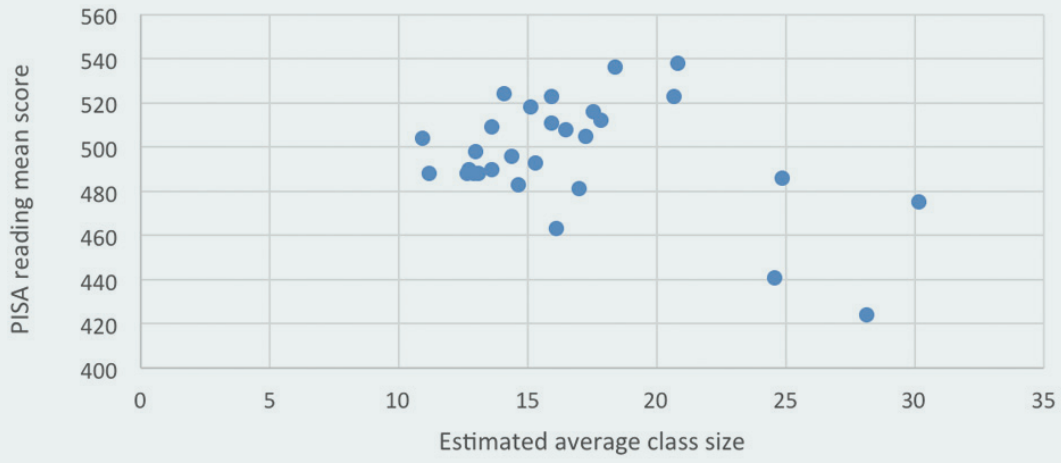
numbers can, and often do, come at the expense of increases in teacher salaries.[33] This trade-off has occurred for primary school teachers, who were paid 12% more in real terms in 2011 than in 2000—lower than the OECD average growth for primary teachers of 20%, and lower than the growth in Australian average weekly earnings (AWE) of 17%.[34]

Expanded teacher employment and low wage growth have further flow-on effects on teacher quality. These trends have contributed to the creation of a teacher labour force that recruits from the lower end of the academic performance scale.[35] Given the trade-off between the quantity and quality of teachers, it is not surprising that the majority of studies undertaken over the last two decades have found little relationship between class size and student outcomes, within certain parameters.[36] A recent OECD analysis concluded that 'systems prioritising higher teacher quality over smaller classes tend to perform better.'[37]

Within a wide range—10 to 22 students—there is no clear pattern of association between class size and reading literacy performance in PISA (Figure 8). It is, if anything, a positive relationship; countries with higher average class sizes tend to have higher mean reading scores. Only four countries sit outside this cluster: Chile, Israel, Mexico and Turkey.

Class size reduction is one of the most expensive but least effective educational reforms. Research shows that the effect of class size reduction on student achievement is 'small' compared with other strategies.[38] The question is not so much whether smaller classes benefit students, but whether there are more effective ways to spend money on schools. The answer is yes.

Figure 8: Class size and PISA reading mean score, 2012



Source: OECD (Organisation for Economic Co-operation and Development), *What Students Know and Can Do: Student Performance in Mathematics, Reading and Science—Volume 1* (Paris: OECD, 2013); Simon Rogers, 'Class size, teacher's pay and spending: Which countries spend the most and pay the least in education?' Data summary, *The Guardian* (11 September 2012).

Class-size reduction policies also have potentially negative educational ramifications at the school level. Mandatory maximum class sizes reduce the ability of schools to form classes according to educational criteria. NSW, for example, has mandatory maximum class sizes of 20 students in Kindergarten, 22 in Year 1, and 24 in Year 2. If 62 students enrol in Kindergarten in a given year, very few schools would have the capacity to create a fourth Kindergarten class. They would have to create a composite class of Kindergarten and Year 1. The same problems occur across other grades with composite classes being formed not for educational reasons but because arbitrary class maximums leave schools no other option. This inflexibility does not benefit schools or students.

The Grattan Institute estimates that increasing average class sizes by four students per class (hence, reducing the number of teachers in schools across the entire school sector) will save approximately $3 billion each year in teacher pay alone (assuming that teacher salaries do not change for the remaining teachers). This figure does not include the significant capital savings to be achieved by requiring fewer classrooms to be built in the future.

If this scenario is based on teacher-student ratios, it appears straightforward. Increasing the teacher-student ratio from 14 to 18 seems entirely reasonable. In practice, however, as is characteristic of education reforms, increasing average class size is more complex than it appears. In primary schools, class sizes are generally small only in the first three years. Class sizes in upper primary are often more than 30 students; adding four students to classes of this size is a tough ask. In secondary schools, drastically reducing the number of teachers would reduce the number of subjects the school can offer in some schools.

A more defensible and feasible approach, even though it may not involve large savings immediately, is for state and territory governments to change staffing entitlements in proportion to the size of the school, to remove any mandatory maximum class sizes, and to eschew any further class-size reduction policies.

Removing mandatory maximums will allow schools to make class formation decisions based on educational criteria rather than be restricted by an arbitrary limit on numbers. Table 5 shows that an initial small reduction in staff numbers would save an estimated $891 million. A decision by governments not to pursue further reductions in class size will achieve further savings gradually over a number of years; if enrolments are allowed to grow faster than teacher numbers, the student-teacher ratio will naturally increase.

Table 5: Savings from increasing class sizes

School size (FTE enrolments)	Number of schools	Teacher reduction per school	Number of teachers
<200 students	4,150	NA	NA
200–400 students	2,639	1	2,639
400–600 students	1,665	2	3,330
600–1,000 students	1,402	3	4,206
>1,000 students	427	4	1,708
		Total teachers reduced	11,883
		Mid-career teacher salary in 2013	$75,000
		Annual saving to government	$891 million

Source: ABS (Australian Bureau of Statistics), *Schools Australia 2012* ABS Cat. 4221.0; AEU (Australian Education Union), Classroom teacher salary/remuneration rates at October 2013.

Tip 5: Education bursaries for low-income students to use at non-government schools

Ten per cent of (the almost one million) low-income students in government schools use a $10,000 bursary to enrol in a non-government school. Saving = $500 million each year.

Government schools receive almost all their funding from governments, while non-government schools receive a fraction of this amount, making up the shortfall from fees paid by parents. In 2011–12, the average total recurrent government funding for students in government schools was $15,768 per student. For students in non-government schools, it was an average of $8,546, but there was a large range of funding entitlements around this average, according to the Productivity Commission's *Report on Government Services 2014*.

Although there is a range of family incomes in each school sector, low-income students are most likely to go to government schools (Table 6). In many

Table 6: Students in government, Catholic and independent schools, by household income, 2011

	Low income <$64,999 pa	%	Medium income $65,000–$129,999 pa	%	High income >$130,000	%
Government school students	967,588	76%	852,399	66%	483,794	50%
Catholic school students	188,322	15%	289,727	22%	246,268	26%
Independent school students	115,326	9%	155,439	12%	230,652	24%
		100%		100%		100%

Source: Barbara Preston, *The Social Make-Up of Schools* (Canberra: Barbara Preston Research, 2013); ABS (Australian Bureau of Statistics), *Schools Australia 2011*, Cat. No. 4221.0 (2011).

cases, this is by choice, but sometimes it is because parents cannot afford the tuition fees charged by non-government schools. For their part, many non-government schools would like to enrol more students from low-income families, but government funding levels do not allow them to reduce their fees sufficiently.

The cost to government of each student in a non-government school is, on average, a little over half the cost of each student in a government school. Moving more students into non-government schools would, therefore, result in a saving for the government.

Students in medium- to high-income families have the financial means to make schooling choices. It is then reasonable to believe that most of the students in these income categories who would prefer a non-government school are already enrolled in one. Students from low-income families are the largest group available to be targeted to increase non-government school enrolment.

Low-income students could be offered an education bursary valued above the average per student expenditure on non-government schools but below the average cost of attending a government school (say $10,000). For each student who moved out of a government school into a non-government school, the government would save the difference—approximately $5,000. The bursary may not cover the full cost of the student's education in a non-government school, and the family may still have to pay some tuition fees, but schools with a usual funding rate of less than the bursary amount would be able to reduce their fees for low-income students considerably.

Not all parents would be willing or able to take up this option, and the non-government school sector would not immediately have the capacity to accept a large number of extra students, but the transfer of even a minority of students would result in substantial net savings. Over time, the non-government sector would expand to accommodate more students, with greater savings as a consequence, as well as the potential educational benefits of a more diverse and inclusive non-government school sector.

Tip 6: Charge high-income families to attend government schools

Charge $1,000 per student from high-income families attending government schools, and reduce their government funding by 50 cents for each dollar of fee revenue. Saving = $250 million each year.

Students in government schools receive almost all their funding from the federal and state governments. Students in non-government (Catholic and independent schools) receive a proportion of the government funding provided to students in government schools. The amount of government funding to non-government schools depends on the average socioeconomic status of the school community.

Almost all non-government schools charge compulsory fees decided by the school. There is no regulated limit. In some schools, fees are set at a minimum level to cover the shortfall between government funding and sufficient operating costs; in other schools, fees are set to provide exceptional facilities. Whatever the case, families of students in non-government schools (except those who have been awarded scholarships at the school's expense) usually pay between $1,000 and $30,000 per year in fees from their after-tax private family income. Government schools cannot charge compulsory fees, preventing those schools from accessing a significant source of revenue.

There are almost 500,000 students in government schools from families with a household income that

might be considered 'high'—50% of all students from high-income families (Table 6). It is reasonable to assume that families with incomes of this level can afford to send their child to a school of their choice, and are therefore making a deliberate choice to send their child to a government school. Their choice of a government school entitles them to $15,000 per year in funding. Had they chosen a non-government school (as many lower-income families do), they would receive less government funding and be expected to pay fees.

Charging $1,000 for each high-income student in government schools would increase funding to those schools by almost $500 million per year. However, this does not represent a saving to the government unless public funding is reduced accordingly. There would be little incentive for government schools to charge fees if it meant an equal transfer from public to private revenue; however, if public funding were reduced as a proportion of private funding, it may be an attractive option. Schools choosing not to take up this option would forfeit the opportunity to obtain extra funding of $500 per student.

The quantum of savings achieved depends on uptake by schools and could be increased by raising the compulsory fee level and/or adjusting the proportion of government funding withdrawn. In addition, there is a possible positive consequence of such a scheme on enrolments. If government schools in high-income areas opt to charge fees, while government schools in lower-income areas opt not to charge fees, there may be a movement of high-income students into schools in low-income areas, reducing socioeconomic segregation.

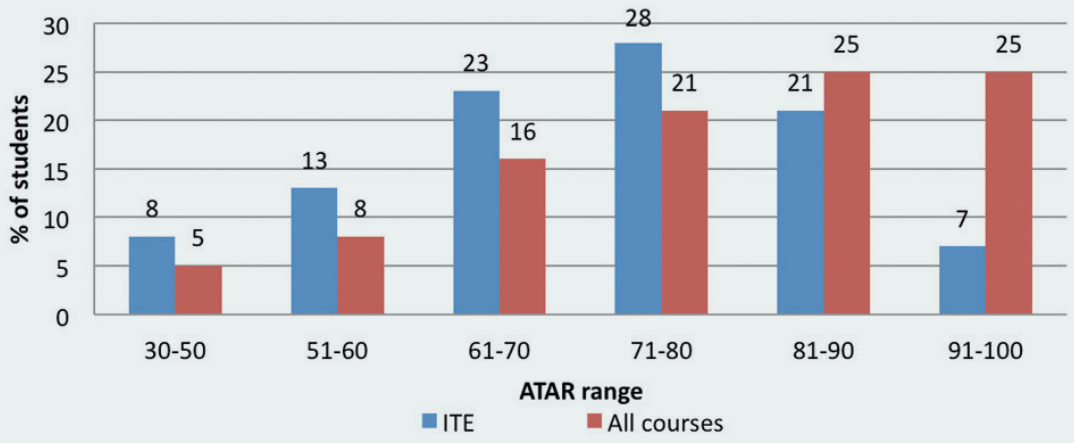
Tip 7: Reduce the oversupply of teachers by elevating entry standards to teaching degrees

Increase cut-off scores for teacher education courses to an ATAR 70 or the equivalent (with second-chance entry options for strongly motivated students) to save higher education costs and elevate the quality of candidates. Savings = $256 million each year.

As noted above, the expansion of the teaching workforce has coincided with a fall in the 'quality' of teachers, as measured by their academic achievement. A study of Australian teachers found that in 1983, the average new teacher was at the 70th percentile rank in prior academic achievement; in 2003, the average had dropped to the 62nd percentile.[39] In the 2014 round of university offers, the minimum Australian Tertiary Rank (ATAR) required for entry into undergraduate education degrees ranged from 58.55 to 83, with most courses having cut-off scores between 60 and 75.[40] The highest performing education systems in the world tend to draw teachers from the top 30% of school graduates.[41]

Low entry scores for teacher education courses are cause for concern. Teachers' own academic aptitude is one of the few attributes found to consistently correlate with teacher effectiveness.[42] If students in teacher education courses are not capable of mastering rigorous academic content, courses will naturally become less demanding, with a consequent fall in exit standards

Figure 9: Proportion of students commencing university courses in each ATAR band, initial teacher education (ITE) and all courses, 2011



Source: Australian Institute of Teaching and School Leadership, *Initial Teacher Education: Data Report* (Carlton South: Standing Council on School Education and Early Childhood, May 2013).

as well. New teachers who have not been high academic performers themselves may be faced with the challenge of teaching students who are potentially very high academic performers.[43]

Figure 9 shows that 44% of students commencing teaching degrees in 2011 using their ATAR score had ATARs below 70. This compares with 27% of students commencing degrees in all disciplines. The difference is just as great at the other end of the distribution—28% of students commencing teaching degrees had ATARs over 80, compared with an average of 50% of students commencing all degrees. Around 40% of teacher education students enter using their ATAR scores; others gain entry using a variety of other methods. It is difficult to know how rigorous alternative entry standards are in comparison, but by these estimates, approximately 20% of total teacher education entrants have ATARs lower than 70.

Cut-off scores for university courses are largely determined by supply and demand. If universities have a large number of places available, they are able to take students from the lower end of the graduate rankings to fill those places. Over a number of years, this has created a mismatch in the number of graduates and the employment market. The number of people graduating with primary teaching degrees far exceeds the number of jobs available, while there are shortages of senior secondary science teachers.[44] As a result, large numbers of trained teachers are waiting for permanent employment. In NSW alone, 40,000 teachers are on the government employment list. Up to 2,200 permanent placements are made to NSW public schools each year.[45] The number of teachers seeking employment is growing each year due to high numbers of teaching graduates and low rates of turnover in the teacher workforce. As a result, a significant proportion of these people, particularly those with primary teaching degrees, will not find permanent employment in schools.[46] A survey of teaching graduates in 2011 found that only half were employed full-time in schools and another quarter of graduates were employed part-time. Of these part-time teachers, the majority were seeking full-time work.[47]

Allowing an oversupply of teachers to continue is not only unfair to the graduates who cannot find work after investing in years of study, it is also an inefficient use of the money spent on university teacher education courses. An imbalance in the supply and demand for teachers creates considerable costs to government. Table 7 shows the cost of oversupplying teaching degrees at more than $250 million each year, based on numbers of teaching graduates and their employment rates.

Around 20% of students commencing teaching degrees have ATARs lower than 70, and the majority of these students are in primary teaching courses. There is also an oversupply of teacher graduates of around 25%, most of whom are trained primary teachers. These figures suggest that restricting the number of teacher graduates by increasing cut-off scores to a minimum of ATAR 70 or the equivalent (with second-chance entry options for strongly motivated students) would result in considerable savings to government as well as elevating the quality of candidates entering teacher education courses, without affecting teacher supply in areas of demand.[51]

Table 7: Estimated cost of oversupply of teaching degrees each year

Number of teaching graduates each year[48]	16,000
Approximate number of teaching graduates not employed in schools[49]	4,000 (25%)
State and territory funding for each teaching degree[50]	$64,000
Cost of excess teaching degrees each year	$256 million

Source: Author's calculations.

Tip 8: Decentralise teacher employment and make it easier for principals to dismiss ineffective teachers

Allow principals to be selective in teacher appointments and decisive in dismissals to ensure the best available teachers are in every classroom.

It is well established that the strongest in-school influence on student achievement is the quality of teaching.[52] The difference in student learning between the least effective and the most effective teachers is as much as one full year of achievement growth. Studies of teacher effects on school performance suggest that raising the average level of teacher quality by just 10% would have substantial pay-offs in the short term in the form of improved student achievement, and add billions of dollars to the economy in the long term.[53]

The best strategy to improve education is to ensure a highly effective teacher in every classroom. To achieve this, teacher quality must be elevated at every key stage of the career pathway[54]—from entry into university teacher education courses to the ongoing evaluation and management of long-serving teachers.

People selected into teaching must be those who are most likely to succeed as teachers, and be provided with the best possible preparation in teacher education courses. But this will only influence the future teaching profession and will take years to yield significant benefits. It will have little impact on the existing 290,000 teachers. To advance educational outcomes among current students, average teacher effectiveness must also be addressed in schools.

One way to improve average teacher effectiveness is to be selective in teacher recruitment and decisive in teacher dismissals. Non-government schools are able to do this, giving them a distinct advantage, yet many principals in public schools have little discretion in staffing decisions. The extent to which teachers are selected at the school level in public schools varies from state to state. In Victoria, all teacher recruitment takes place at the school level. In NSW, staffing of schools is still relatively centralised, with only every second teacher vacancy being filled by 'merit selection' at the school level. There is support among principals for greater discretion in staff selection and it is a key aspect of the Independent Public Schools model.[55]

Even when public schools can select teachers, their ability to attract the best teachers for the position available is limited by uniform teacher salary schedules. Public schools cannot offer higher salaries to staff positions such as senior secondary science and maths teachers, where there are significant shortages of qualified teachers. Public schools cannot negotiate higher salaries in return for longer teaching hours, special expertise, or teaching larger classes. Salary differentials are largely based on years of experience or progression into executive roles. While teachers are not motivated by money alone, schools must have the flexibility to offer competitive salaries to attract better candidates, especially those with skills that are more highly compensated in other industries. The opportunity cost of choosing teaching over other professions needs to be minimised.[56]

The other way to elevate teacher quality in a school is to remove ineffective teachers. Studies of teaching effects have estimated that replacing the least effective 5% of teachers with even an average teacher has long-term benefits for students. Removing ineffective teachers is difficult for all schools but particularly so for public schools, including Independent Public Schools. Only 29% of teachers report that teachers in their school would be dismissed because of sustained poor performance.[57] Removing ineffective teachers is difficult, not least because it can be distressing for the principal and teacher, and cause unease among other staff. This aspect of teacher performance management is unavoidable, but is made worse by onerous discipline and dismissal processes that prolong the outcome. Furthermore, unless teachers are found guilty of serious professional misconduct, they do not leave the school system, they just move to a different school—transferring the problem rather than resolving it.

The problem of removing ineffective teachers affects not only principals and students but also has negative impacts on other teachers. Ineffective teachers reflect negatively on the teaching profession as a whole; when poor performance is tolerated, the status of teaching is diminished. At a more practical level, it affects the permanent employment prospects of new teachers in the teaching workforce. When they have the opportunity, principals are choosing to bring in casual and temporary teachers to fill vacancies rather than appoint teachers into permanent positions.[58]

There is, therefore, a strong case for extending the ability of public school principals (and school councils) to select teaching staff, and to remove them more quickly and easily if they prove to be ineffective. Opponents of increasing principals' power over staffing decisions argue that principals might not be objective, that they will hire teachers they like and fire those they don't. There is no absolute guarantee against this, but one way to mitigate the possibility is to provide incentives for principals to make staffing decisions that positively affect student and school performance, such as through financial bonuses for improved performance. Merit-pay or performance pay for teachers is often discussed as a way to raise the quality of teaching, but rarely is it raised in the context of principal performance. Rewards for principal performance would not just be an incentive to make good staffing decisions but also to ensure that teachers in the school are as effective as possible, by providing relevant professional development and using good performance management strategies.

Indeed, good performance management by principals is vital for decentralised staffing to benefit students. It is necessary but not sufficient to reduce the number of incompetent teachers; the remaining teachers must also be given the impetus to excel. Fundamental to this process is teacher evaluation, but survey evidence presented suggests that this aspect of school management is not being done effectively (Table 8).

There are a number of ways to conduct teacher evaluation, including value-added test scores, student feedback, principal evaluation, peer reviews, classroom observation, and assessment against professional standards. Each of these methods is effective, if accompanied by detailed and timely feedback to teachers, but none of them alone is perfect. Teacher evaluation should, therefore, be done by a combination of objective and subjective methods including test scores, classroom observation by peers and mentors, and principal judgment.[59] The best context for this to take place is at the school level, not at the system level.[60] Principals and school staff know which teachers are doing well and which teachers are struggling. They now have good data at their disposal and there is growing awareness that the data can be used to identify areas of strength and weakness in teaching.

Table 8: Percentage of Australian teachers who agree or strongly agree with the following statements about more general appraisal and/or feedback in their school

Statement	%
The school principal takes steps to alter the monetary rewards of a persistently underperforming teacher	7.1
The sustained poor performance of a teacher would be tolerated by the rest of the staff	42.8
Teachers will be dismissed because of sustained poor performance	29.2
The principal uses effective methods to determine whether teachers are performing well or badly	48.7
A development or training plan is established for teachers to improve their work as a teacher	54.5
The most effective teachers receive the greatest monetary or non-monetary rewards	9.2
If I improve the quality of my teaching I will receive increased monetary or non-monetary rewards	8.2
The review of teacher's work is largely done to fulfil administrative requirements	63.4
The review of teacher's work has little impact upon the way teachers teach in the classroom	61.4

Source: TALIS (Teaching and Learning International Survey) (Paris: OECD, 2008); Chris Freeman, Kate O'Malley, and Frances Eveleigh, *Australian Teachers and the Learning Environment: An Analysis of Teacher Response to TALIS 2008* (Melbourne: Australian Council for Educational Research, 2010).

Conclusions

This TARGET30 report is not a blueprint for education reform. It is an analysis of trends in government expenditure on school education, and the persistent failure of spending growth to translate into better educational outcomes. This report makes the case for reviewing the way government funding for schools is spent, and for seeking ways to increase productivity, that is, to maximise the educational outcomes achieved within the limits of reasonable funding parameters.

The impetus for reviewing expenditure is not simply to do with budget sustainability. It is also a moral issue to ensure that people's taxes are spent prudently. That there is no relationship between expenditure on school systems and the level of student achievement is undisputed. This is not to say that resources are inconsequential in education—money does matter in schools, but *how* it is spent is the crucial factor. Even so, there is a point beyond which the benefits of further spending become marginal. Class-size reduction is a prime example of this relationship.

It is impossible to imagine making deep cuts in school spending without disrupting the operation of schools and therefore the students in them. Schools can absorb small reductions in funding in the short term. There are ways of reducing school expenditure and increasing school productivity immediately. But the best strategy for restricting government expenditure is to resist the idea that education spending is a proxy for education quality, and make responsible budgetary decisions now that will avoid having to confront this problem in the future.

Appendix 1: Projections of education spending, nominal $million

	State/territory $million	Commonwealth $million	Total $million
2013–14	34,818	14,390	–
2014–15	36,524	14,971	51,495
2015–16	38,314	15,738	54,052
2016–17	40,191	17,091	57,282
2017–18	42,161	18,475	60,636
2018–19	44,226	19,972	64,198
2019–20	46,393	21,590	67,983
2020–21	48,667	23,338	72,005
2021–22	51,051	25,229	76,280
2022–23	53,553	27,272	80,825
2023–24	56,177	29,481	85,658
2024–25	58,930	31,869	90,799

Sources (states/territories): Projections calculated using aggregated 2013–14 Budget estimates for each state and territory as the base figure, plus an annual 4.9% increase (annual average increase in state/territory spending on all schools 2002–03 to 2011–12 from Report On Government Services 2014).

Sources (Commonwealth): Figures for 2013–14 to 2016–17 are taken from the *Mid-Year Economic and Financial Outlook 2013–14 (MYEFO)* (Table 3.25).

Projections for 2017–18 to 2024–25 are calculated using the 2016–17 estimates from the MYEFO as the base figure plus annual 8.1% increase (annual average increase in federal spending on all schools 2012–13 to 2016–7 from federal budgets and MYEFO).

Why use different average annual increases for state/territory and federal spending?

Federal spending has been increasing at a higher rate than state and territory spending, so an average of the increases in the two funding sources would be less accurate.

Current state and territory budgets do not forecast spending past 2013–14, so projected annual average growth rates have to be calculated from prior spending growth rates.

The federal MYEFO estimates spending to 2016–17. Annual average growth rates for the relatively short forecast period in the MYEFO have been use to project spending growth beyond it, rather than using longer-run prior spending growth, as the MYEFO forecasts take into account the new federal model in effect from 2014.

Appendix 2: Government spending on school education, nominal amount in $million and as percentage of GDP

	Spending $million (ABS)	Spending $million (budgets)	Spending $million (projected)	GDP $million (ABS)	GDP $million (projected)	Past spending as % of GDP	Projected spending as % of GDP
1987–88	8,582			324,590		2.6%	
1988–89	9,521			368,131		2.6%	
1989–90	10,221			404,735		2.5%	
1990–91	10,836			415,606		2.6%	
1991–92	11,625			423,384		2.7%	
1992–93	11,989			444,497		2.7%	
1993–94	12,172			467,502		2.6%	
1994–95	12,455			496,424		2.5%	
1995–96	13,145			529,705		2.5%	
1996–97	14,016			556,982		2.5%	
1997–98	15,307			589,345		2.6%	
1998–99	17,242			621,524		2.8%	
1999–2000	17,540			662,037		2.6%	
2000–01	19,490			706,895		2.8%	
2001–02	21,283			754,948		2.8%	
2002–03	23,264			800,911		2.9%	
2003–04	23,722			859,487		2.8%	
2004–05	26,232			920,899		2.8%	
2005–06	27,477			994,803		2.8%	
2006–07	28,653			1,083,060		2.6%	
2007–08	30,544			1,175,949		2.6%	
2008–09	33,217			1,252,218		2.7%	
2009–10	39,099			1,293,380		3.0%	
2010–11	40,150			1,399,070		2.9%	
2011–12	38,737			1,486,071		2.6%	
2012–13		46,707		1,522,825		3.1%	
2013–14		49,209		1,576,124		3.1%	
2014–15		51,495		1,631,288		3.2%	
2015–16		54,052		1,708,774		3.2%	
2016–17		57,282		1,789,941		3.2%	
2017–18			60,636		1,879,438		3.2%
2018–19			64,198		1,973,410		3.3%
2019–20			67,983		2,072,081		3.3%
2020–21			72,005		2,175,685		3.3%
2021–22			76,280		2,284,469		3.3%
2022–23			80,825		2,398,692		3.4%
2023–24			85,658		2,518,627		3.4%
2024–25			90,799		2,644,558		3.4%

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