

Assessing existing funding models for schooling in Australia

Department of Education,
Employment and
Workplace Relations

June 2011

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Glossary

ATSI	Aboriginal or Torres Strait Islander
ABS	Australian Bureau of Statistics
ACER	Australian Council for Education Research
ACARA	Australian Curriculum, Assessment and Reporting Authority
AGSRC	Average Government School Recurrent Costs
BER	Building the Education Revolution
CCD	Census Collection District
COPE	Commonwealth Own Purpose Expense
COAG	Council of Australian Governments
DGR	Deductible gift recipient
DEEWR	Department of Education, Employment and Workplace Relations
EMA	Education Maintenance Allowance
ERI	Education Resource Index
ESL	English as a second language
FAM	Financial Assistance Model
FBT	Fringe benefits tax
FTE	Full-time equivalent
GST	Goods and services tax
IEA	International Association for the Evaluation of Educational Achievement
IPS	Independent Public School
ICSEA	Index of Community Socio-Educational Advantage
LBOTE	Language Background Other Than English
LSAY	Longitudinal Survey of Australian Youth
MCEECDYA	Ministerial Council for Education, Early Childhood Development and Youth Affairs
NAPLAN	National Assessment Program – Literacy and Numeracy
NEA	National Education Agreement
NP	National Partnership
OECD	Organisation for Economic Cooperation and Development
PISA	Programme for International Student Assessment
SEIFA	Socio-Economic Indexes for Areas

SES	Socio-economic status
SPP	Specific purpose payments
SFO	Student family occupation
SWD	Students with disability

Executive Summary

The overarching objective of Australia's schooling system is to deliver a high quality education for Australian students, that leads to high quality student outcomes. The benefits of high quality student outcomes are wide-ranging and well established.

A myriad of factors interact to determine the performance of schooling systems and, therefore, the extent to which the goal of delivering high quality education is achieved. Among these factors is government funding and the means and mechanisms by which it is allocated across and within schools – that is, *funding model design* (as distinct from *the level of funding*). However, the impact of funding model design on the performance of schooling systems is heavily influenced by the complex policy and regulatory environment which governs activity in the schooling system, as well as a range of external factors (such as student background).

Nevertheless, adequate, appropriately allocated funding underwrites the capacity of school systems to deliver high quality education programs. Well crafted funding models can support – and indeed shape – the system toward optimal operation. At the same time, poorly designed funding models compromise the education system's capacity to deliver high quality education, particularly to students with greatest need (such as students from an Indigenous background, students in remote locations and students from a low SES background).

Optimally designed funding models are a necessary but not sufficient condition for creating an educational environment conducive to achieving high quality student outcomes.

The relationship between funding model design and educational outcomes

While the evidence relating the design of funding models directly to student outcomes is weak, many of the factors which have been demonstrated as among the most significant determinants of student outcomes can – at varying levels – be influenced by funding model design. Most notable among these are:

- **Teacher quality.** While many of the determinants of teacher quality are outside the direct realm of funding model influence (e.g. the quality of training and graduates), funding nevertheless has a potential role to play in (i) rewarding high calibre teachers; (ii) shaping the allocation of teachers across and within schools; and (iii) increasing teacher quality over time (i.e. supporting professional development).
- **Autonomy.** Educational systems successful in improving student performance have progressively moved towards decentralised models of management. Decentralised funding models, or at the very least funding models that incorporate sufficient local information in the decision making process, are more conducive to strong educational outcomes.
- **Socio-economic status.** Social and economic disadvantage is a significant barrier to educational achievement and funding models play an important role in ensuring disadvantaged students have the additional resources they require to overcome these barriers.

What constitutes optimal funding model architecture?

In light of the role played by funding in facilitating student performance as well as the broader principles which have been identified as pertinent to funding model design, optimal funding model architecture is characterised by the following features:

1. Optimal funding models are designed with direct reference to public policy objectives.
2. Funding is based on the efficient cost of meeting students' educational need, taking into account the characteristics of the school they attend.
3. Empirical research underpins funding rates and their variation across student cohorts and schooling settings.
 - i Cost analyses inform base funding rates and variance based on differences in service delivery costs (e.g. based on remoteness or school size).
 - ii Performance data (broadly defined) informs assessment of educational need, and the associated funding rates.
 - iii Targeting based on increasingly granular data in preference to broad proxy measures.
4. Funding formulae are reviewed – and as appropriate recalibrated – on a periodic basis, drawing on cost and outcome data (noting the limitations on the use of these data in this context).
5. Funding is designed to keep pace with both increasing enrolments and growth in efficient service-delivery costs.
6. Tradeoffs among adequacy and efficiency; simplicity and specificity are shaped by policy priorities and in light of improvements in the quality and availability of data.
7. The basis for funding allocations (i.e. funding formulae) are publicly available, except in instances where there is a privacy or other public interest case against such openness.
8. Mechanisms are in place to both support schools in their deployment of resources and to ensure that deployment is consistent with the policy intent (i.e. the underlying funding rationale) – especially in devolved models.
9. Optimal funding models incentivise private contributions where this is not at odds with the underlying philosophy; and at the very least do not create barriers to the procurement of private funds under appropriate circumstances.

Current funding models

At a structural level, Australia's current funding models for schooling bear many similarities. Primary public funder models¹ broadly comprise recurrent, capital and targeted funding components, with base funding rates supplemented with specific loadings or initiatives for defined student or school characteristics. In general, these types of models are sophisticated in design and tend to be premised on facilitating optimal student outcomes –

¹ Primary public funder models are those where the funder is the major source of government funds for the funding recipient (i.e. the school or system). They include state and territory funding models for government schools and the Commonwealth funding model for non-government schools (when the full suite of funding initiatives is taken into account and noting that some schools are largely funded by private sources). These models represent the lion's share of school funding in Australia.

for example, some of these models draw on student performance data to shape funding allocations.

However, underlying this high-level similarity is considerable nuance and variation. These differences partly reflect local circumstances – historic, geographic and demographic characteristics – however, they also reflect the propensity for funding models to evolve at different rates and in different directions over time. Funding models which have been recently reviewed align more closely to optimal funding model design.

The extent to which the architecture of Australia's current funding models accords with the principles of optimal design varies (although this variation is in many cases at the margin). Among the more significant variations are:

- their complexity (particularly insofar as targeted funding is concerned);
- the efficacy of targeted initiatives (both in terms of the appropriate targeting of educational need and the evidence base underlying this component of the funding model's design); and
- the rigour and effectiveness of funding model review processes (and in particular, the utilisation of performance data in this process).

When a system-wide perspective is taken, and hence the interactions between discrete funding models are considered, a range of further issues emerge. Most significant among these is that inadequately prescribed lines of demarcation and poor coordination among different streams of funding lead to potentially inefficient overlap of funding and the potential compromise of funding model objectives.

Concluding comments

While clearly some of the existing models are performing better in certain areas than others, there is no 'best model' among the current variants. Jurisdictional differences in funding model design can often be attributed to the local schooling context, which limits comparability across states and territories. Moreover, many of the differences revealed in this review reflect the varying states of funding model evolution (particularly insofar as those models which have recently been reviewed are concerned). Certainly there are improvements – of varying degrees – that could be made to most, if not all, of the current models based on the considerations outlined above.

In practice, high calibre funding models are those which combine different features in a complementary and effective fashion – given local demographic, historical and geographic factors – and draw on the highest quality available evidence to inform their design and periodic review.

Deloitte Access Economics

1 Introduction

As part of a suite of analyses commissioned to inform the Review of Funding for Schooling (the Review), Deloitte Access Economics has been engaged to conduct a detailed assessment of the current funding models for schooling for the Review Panel. The assessment considers features of all state and territory and federal government funding models as they relate to both government and non-government schools.

Purpose and scope

Announced by the Australian Government in April 2010, the Review has been tasked with providing recommendations on future funding arrangements for schooling for the period beyond 2013. Among other things, the Review has been asked to consider current funding mechanisms and the role of funding arrangements in supporting educational outcomes.

The purpose of Deloitte Access Economics' study is to assist the Review Panel in understanding what constitutes an optimal school funding model from a public policy perspective, through: (i) an analysis of the relationship between funding models and educational outcomes; and (ii) an assessment of existing funding models in Australia, based on the extent to which they align with optimal funding model design principles.

Deloitte Access Economics has not been requested to canvass new funding models or to explore the appropriateness of resourcing levels – these issues will be examined in other Review research streams.

The analysis focuses on funding models rather than funding systems. A *funding model* relates to the means and mechanisms through which funding is allocated from a given source to a defined group of recipients. It encompasses individual funding distribution channels (where relevant), the formulae that underpin allocations, as well as funding administration and any conditions governing use by funding recipients.

In contrast, a *funding system* may be comprised of a single funding model or – as is the case with schooling in Australia – multiple discrete funding models that interact, given the regulatory and policy environment, to determine ultimate funding outcomes. Funding systems are examined in this report at a broad level, in terms of the interactions between state/territory and Commonwealth funding models.

The ultimate aim of Deloitte Access Economics' analysis is to identify strong funding model features and effective ways of balancing the tradeoffs inherent to funding model design. It is not the intention to attempt to determine which jurisdiction has a superior funding model in comparison to other jurisdictions, but rather to reach general conclusions regarding how funding models might optimally be designed.

Approach

Deloitte Access Economics' approach to the assessment of existing funding models for schooling has comprised three components:

1. Development of a funding model assessment framework.
2. Characterisation and consolidation of funding models.
3. Application of the assessment framework.

Collectively, these three components were informed by a review of the Australian and international policy and academic literature on funding models and educational outcomes; an analysis of data relating to schooling and school outcomes; and discussions with education authorities (including both government and non-government entities) in each jurisdiction. A list of the education authorities that participated in these discussions is included in Appendix A.

An overview of each stage of Deloitte Access Economics' study is outlined below.

1. Development of a funding model assessment framework

The first phase involved the development of a structured assessment framework, in order to provide a rigorous, methodical and transparent basis for analysis. The assessment framework was derived from:

- an understanding of key public policy principles that relate to funding model design in a broad sense;
- an analysis of government policy objectives and recent state and territory, federal and overseas school funding model reviews, which provided an indication of principles that are considered important to optimal school funding model design; and
- a workshop with a small group of education sector experts, which explored the appropriate parameters for the assessment framework.

During discussions with government and non-government education authorities throughout Australia, the assessment framework principles and indicators were also open to comment. The assessment framework outlined in Section 4 of this report received general endorsement by stakeholders and hence was modified only marginally through the consultation process.

2. Characterisation and consolidation of funding models

During the second phase of the study, school funding models were examined in detail and then characterised into broad types to ensure the tractability of the assessment. This component of the analysis is presented in Section 5.

The mapping of school funding and regulatory arrangements recently undertaken as part of the Ministerial Council for Education, Early Childhood Development and Youth Affairs (MCEECDYA) process to realise the National Education Agreement (NEA) commitment to review school funding and regulation provided the foundation for this phase.

3. Application of the assessment framework

The final phase involved the application of the assessment framework to the consolidated set of school funding models. This stage of the study was informed by data analysis, desktop research and information obtained from discussions with government and non-government education authorities in each state and territory.

The funding model assessment has been undertaken with direct regard to the particular school and student characteristics of each jurisdiction. From a broader perspective, the interaction between different funding models was also considered and analysed in the context of the regulatory and policy environment.

The synthesised findings are presented in Sections 6 and 7 of the report.

Report structure

The report is structured as follows:

- Section 2 provides an overview of schooling in Australia – including its structure and delivery – as background and context to the assessment of current funding models.
- Section 3 examines the relationship between funding model design and educational outcomes.
- Section 4 details the funding model assessment framework that has been developed specifically for this study.
- Section 5 describes the key characteristics of the various funding models for schooling in Australia and consolidates them into several broad types for the purpose of the assessment.
- Section 6 presents the findings of the funding model assessment, incorporating examples of funding models that are particularly strong or limited in relation to each principle.
- Section 7 identifies some key lessons for future funding architecture that can be drawn from the assessment.
- Appendix A lists the education authorities who participated in the consultation process.
- Appendix B outlines education sector characteristics on a jurisdiction-by-jurisdiction basis.
- Appendix C provides some further information on Commonwealth tax concessions available to schools.
- Appendix D includes technical information and analysis that supports the assessment in Section 6.
- Appendix E provides case studies that support the assessment in Section 6.

2 Background

This section provides a high-level overview of schooling in Australia – including its structure, delivery and the funding framework – as background to the subsequent assessment of current funding models against key public policy principles. It is not intended to provide a detailed description of the nuances of schooling delivery or the historical development of funding arrangements – rather, this section provides important context to an understanding of funding model design, by outlining key characteristics of schooling delivery and funding.

2.1 Schooling in Australia

Schooling can be broadly defined as the provision of primary and secondary education. This sub-section provides an overview of schooling in Australia, including its structure, delivery, the policy environment and outcomes.

It should be noted that not all schooling is delivered through schools (defined as formal institutions that deliver primary and secondary education). Schooling can also be delivered through other means such as home schooling and distance education. However, the focus of this report is on schooling that occurs in schools.

2.1.1 Structure

Under the Australian Constitution, education is a state and territory government responsibility, encompassing the regulation of school education, administration and funding. Schooling is therefore structured on a jurisdictional basis, with legislation in each state and territory providing the framework for the delivery of education through government schools (with non-government schools also registered by jurisdiction).

Schooling is also structured on a sectoral basis, comprising government and non-government sectors. The non-government sector is further divided into Catholic and independent sectors.

- **Government schools** have the responsibility of ensuring universal education for all young Australians, with state and territory legislation generally requiring that schooling should be provided for free and open to any child that is eligible to attend (although most jurisdictions allow government schools to charge a small fee).
- **Non-government schools** provide parents with choice in schooling for their children, as they offer an alternative to the government school system. However, the principle of universality does not apply to non-government schools.
 - **Catholic schools** are generally organised into systems at either state/territory or diocesan levels and are characterised by their religious commitment to the Catholic faith. Most Catholic schools charge moderate fees and are open to students from families who support Catholic principles.²

² Approximately 50 Catholic Church affiliated schools are not systemic schools. References to 'Catholic schools' and the 'Catholic sector' throughout this report include these non-systemic schools (unless otherwise specified).

- **Independent schools** tend to be autonomous and are managed by a school principal in conjunction with a governing body. Fee levels range from low to high and most independent schools are affiliated to churches or religious bodies. Access to independent schools often depends on ability to pay the designated fee and the extent to which a student's values align with those of the school.

Formal schooling is 13 years in length, although there are some differences between jurisdictions in the division of years between preparatory, primary and secondary schooling. In Queensland, Western Australia and South Australia, for example, year 7 is included within primary schooling. Tasmania, the Northern Territory and the Australian Capital Territory have separate senior secondary schools for years 11 and 12. Some jurisdictions, such as Western Australia and the Australian Capital Territory, include pre-school education within primary schooling.

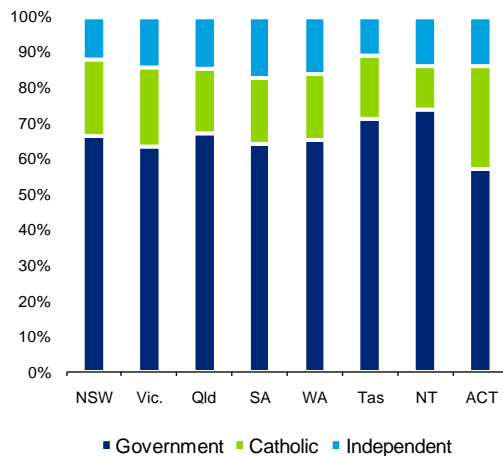
In addition to primary schools and secondary schools, other types of schools include combined schools and special schools (which generally enrol students who have an intellectual or physical disability or impairment, learning disability and/or social or emotional problems).

In 2010, there were 9,468 schools in Australia in total, comprising 6,743 government schools (71% of the total), 1,708 Catholic schools (18%) and 1,017 independent schools (11%). The distribution by school type was 6,357 primary schools (67% of the total), 1,409 secondary schools (15%), 1,286 combined schools (14%) and 416 special schools (4%) (ABS, 2011).

2.1.2 Delivery

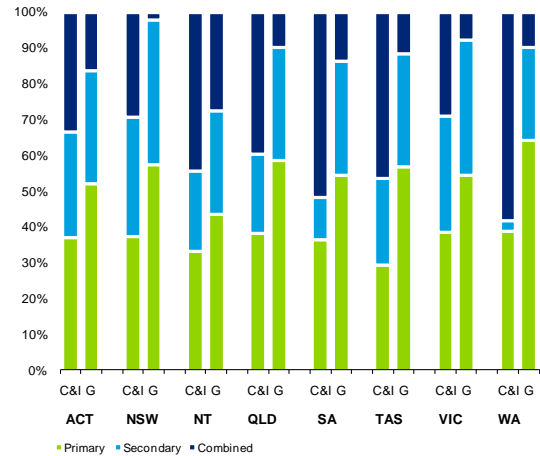
Enrolment patterns vary across jurisdictional boundaries, due to the unique historical, demographic and geographic characteristics of each state and territory. Differences in enrolment patterns relate to sectors, school types and student characteristics (see below charts).

Chart 2.1: Student enrolments by sector, 2010



Source: ABS (2011)

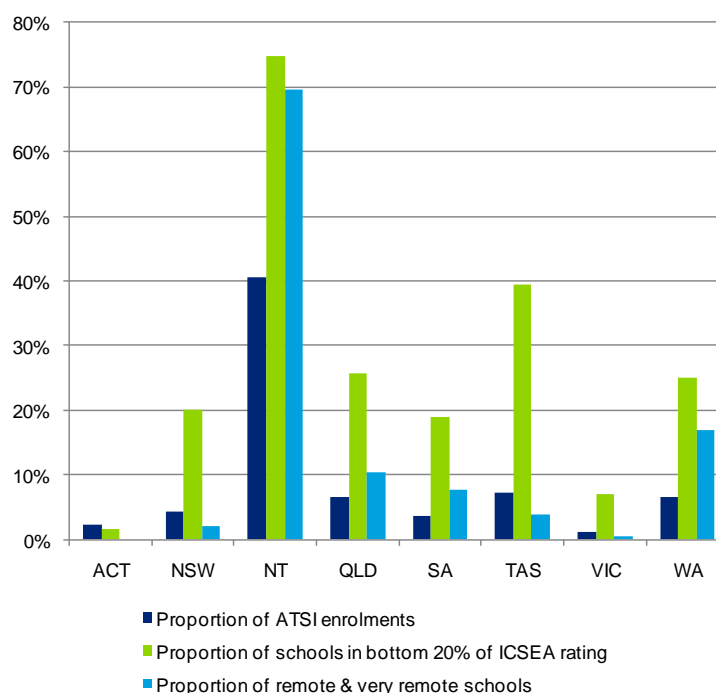
Chart 2.2: Student enrolments by school type, 2009 and 2010



Source: ACARA

Note: Chart 2.1 shows proportion of full-time equivalent students by sector. In Chart 2.2: C&I refers to Catholic and independent schools; G refers to government schools.

As these charts show, in every jurisdiction the majority of student enrolments are in the government sector – although the proportion of government sector enrolments is highest in the NT and Tasmania and lowest in the ACT. Tasmania and NSW have the lowest proportion of enrolments in the independent sector, compared to other jurisdictions. The proportion of Catholic sector enrolments is highest in the ACT, Victoria and NSW. In terms of school type, combined schools are noticeably more prominent in the non-government sector, especially in WA, SA and Tasmania. In every jurisdiction, primary schools are more prevalent in the government sector.

Chart 2.3: Student/school characteristics by ATSI, ICSEA & remoteness, 2009 & 2010

Source: ACARA

Note: Chart includes all students and schools within both the government and non-government sectors. Chart based on ACARA data (mixture of 2009 and 2010 school profiles). ICSEA (Index of Community Socio-Educational Advantage) data is 2010.³ 'Remote' refers to an area considered spatially distant from the capital city of that state/territory; 'very remote' refers to an area considered spatially very distant from the capital city.

The above chart highlights the particular challenges faced by certain jurisdictions in the delivery of education to all students, as characteristics such as Indigenous background and remoteness have been shown to affect both student performance and education costs (lower baseline performance generally means that higher levels of resources are required to educate these students).⁴

For example, analysis of student achievement in 2009 NAPLAN tests shows that reading outcomes nationally for Indigenous students were lower than those for non-Indigenous students and that outcomes for Indigenous students generally declined as remoteness increased. For year 3 students, between 37.8–49.0% of very remote Indigenous students achieved at or above the reading national minimum standard, compared to 51.2–65.6% for remote Indigenous students, 79.9–83.1% for provincial Indigenous students and 82.3–85.3% for metropolitan Indigenous students (Productivity Commission, 2011: 64).

³ ICSEA is a measure of educational advantage/disadvantage. It incorporates a range of variables – such as family background (e.g. parental occupation) and school characteristics (e.g. geo-location and proportion of Indigenous students) – and was developed for the My School website to enable the comparison of statistically similar schools. ICSEA values range from around 500 (representing schools with students from extremely disadvantaged backgrounds) to about 1300 (representing schools with students from very advantaged backgrounds).

⁴ Other characteristics that impact on student performance and/or the cost of delivery include disability, non-English speaking background (although this is less clear-cut and can vary depending on a student's particular circumstances) and school size (with smaller schools generally unable to achieve economies of scale).

Some key points in relation to student characteristics are outlined below.

- The Northern Territory has substantially more Indigenous students, schools in low socio-economic areas and remote and very remote schools than any other jurisdiction. This has significant implications for per-student costs and the ability to attract and retain teachers, particularly for very remote schools (for example, some of these schools are only accessible by helicopter during the wet season). Western Australia and Queensland face similar challenges to the Northern Territory, but not to the same extent.
- Tasmania has a large proportion of low socio-economic schools, which can affect the capacity to raise private revenue, either through fees or fundraising (notably, Tasmania has the lowest proportion of independent school enrolments in Australia).
- Compared to other jurisdictions, the ACT and Victoria have relatively more homogenous student populations.

Enrolment patterns also affect schooling delivery. For example, Queensland has a growing student population, with student numbers increasing by 31.9% from 1993 to 2009. This can lead to school infrastructure pressures and increased demand for teachers. In contrast, Tasmania has a declining student population – falling by 5.3% over the same period – which can manifest in under-utilised infrastructure and loss of economies of scale, eventually leading to school closures or amalgamations.

Further details on the education sector characteristics of each jurisdiction are provided in Appendix B.

Some themes and trends in the delivery of schooling that are common across jurisdictions are provided in Box 1 below.

Box 1: Themes and trends in Australian schooling delivery

- Overall, there has been a gradual decline in the number of schools, largely due to amalgamations within the government sector although this is somewhat offset by an increase in the number of independent schools (an increase of about 27% from 1993 to 2009).
- Secondary schools are generally larger than primary schools, although the non-government sector has a greater proportion of small secondary schools (100 students or less) compared to the government sector.
- Over 50% of schools are located outside the major capital cities, with a higher number of government schools in remote and very remote areas, compared to non-government schools.
- Over the last 30 years, there has been a significant shift in enrolments from the government sector to the non-government sector, with the proportion of full-time student enrolments in the government sector falling from 78% in 1970 to 65% in 2010.
- Generally, there has been a decrease in the number of students per teacher since 1993, with this trend particularly evident in primary schools. Catholic schools have a higher average number of students per teacher compared to government and independent schools.
- In recent years, unmet demand for teachers has been especially pronounced in rural and remote areas, and in maths and science subjects, which has been further compounded by concerns about the ageing profile of the teaching profession.

Source: Summary prepared by DEEWR based on ABS and other data

2.1.3 Policy environment

The key policy statement for Australian schooling is the *Melbourne Declaration on Educational Goals for Young Australians* (the Melbourne Declaration). Released by MCEETYA in 2008, the Melbourne Declaration states that improving educational outcomes for all young Australians is central to the nation's prosperity and specifies two national goals for schooling:

- Australian schooling promotes equity and excellence.
- All young Australians become successful learners, confident and creative individuals and active and informed citizens.

The *MCEECDYA Four Year Plan 2009-2012* supports these national goals by outlining a number of government strategies and initiatives such as supporting quality teaching and school leadership, improving educational outcomes for Indigenous youth and disadvantaged young Australians, and strengthening accountability and transparency.

Education policy developed through MCEECDYA closely aligns with the Council of Australian Governments (COAG) reform agenda. Key policy directions under the National Education Agreement (NEA) include improving teacher and school leader quality, greater accountability and better directed resources, and integrated strategies for low SES school communities. Three specific COAG targets have been identified:

- Lift the Year 12 or equivalent attainment rate to 90% by 2015.
- Halve the gap for Indigenous students in reading, writing and numeracy by 2018.

- At least halve the gap for Indigenous students in Year 12 or equivalent attainment rates by 2020.

Other reform priorities under the NEA include implementing a national curriculum, improving transparency and accountability of schools for student and school performance, and providing support to students with additional needs.

These intergovernmental agreements have a significant impact on the delivery of schooling, by setting the policy agenda and strongly influencing the types of educational programs that are developed and implemented across jurisdictions.

Generally, funding does not have a direct relationship with intergovernmental agreements. However, states and territories are provided with Commonwealth funding (through separate arrangements) on the basis that it will be used to achieve education policy objectives outlined in these agreements (although states and territories have a large degree of flexibility regarding the best means to achieve policy objectives).⁵ Details on funding arrangements are provided in Section 5 of the report.

2.1.3.1 State and territory government policy

An overview of state and territory government schooling policy for each jurisdiction is provided below.⁶ Although the descriptions are high-level and do not fully capture the complete range of policy initiatives within each jurisdiction, they nevertheless demonstrate some of the key contemporary policy responses being implemented at the state and territory level. Examples of specific policy initiatives are provided throughout Section 6 and Appendix E of the report, in relation to the funding model assessment.

For all jurisdictions more broadly, factors related to the supply and quality of teachers also impact on the delivery of schooling. These factors encompass:

- Higher education policy, including selection, entry and qualifications.
- Teacher registration and accreditation.
- Industrial relations agreements, which can affect the allocation of teachers within and across schools.

Australian Capital Territory

The ACT Department of Education's Strategic Plan 2010-2013 promotes the equal distribution of educational benefits across the ACT community. This has been supported by a new model of school improvement involving four networks, intended to improve flexibility, partnerships and school performance. Departmental plans have also been launched to address *Excellence in disability education in ACT Public Schools* and *Aboriginal and Torres Strait Island Education Matters*. The ACT Teacher Quality Institute has also been created and will be responsible for teacher registration, accreditation of pre-service teacher education programs, and certification of teachers in the ACT against national standards.

⁵ Some funding arrangements (such as National Partnerships) do link the implementation of specific policies and programs to the provision of funding i.e. funding is tagged and schools must spend the funds on particular objectives.

⁶ The descriptions are based on comments provided by jurisdictions in the Productivity Commission's *Report on Government Services* (2011).

Principals will also be provided with greater flexibility in the management of school resources and staffing decisions, following a review of School Based Management.

New South Wales

The NSW State Plan includes priorities to ensure that all children are engaged in and benefiting from schooling. Recent initiatives include assistance and resources to close the attainment gap between Aboriginal and non-Aboriginal students, and reform through the Low Socio-Economic Status School Communities National Partnership. These reforms are targeted towards highly disadvantaged communities and focus on increased school-based innovation, strengthened school leadership and accountability and strengthened partnerships between schools and their communities.

Northern Territory

As part of the NT Government's Smart Territory strategy, a Literacy and Numeracy Taskforce has been formed to drive improvements in outcomes and is supported by Charles Darwin University, local businesses and stakeholders. To improve attendance, the Every Child Every Day Strategy has been launched to encourage community, school and parental involvement. Graduates with the new NT Certificate of Education and Training in 2011 will be required to plan their transition from school to work, training or higher education through a Compulsory Learning Plan. Remote schools have also been supported through the 200 Teachers program to re-engage Indigenous students. Centres of Excellence are also being established over the next four years at existing senior secondary sites, to provide opportunities for eligible students to gain access to innovative curriculum programs, industry experience and fast-tracked university entry.

Queensland

Queensland is progressing with a range of initiatives, including the transition of Year 7 to secondary school, establishment of an oversighting authority for educational standards and recruiting volunteers to promote reading in schools. Significant reforms are being implemented to improve literacy and numeracy outcomes – such as summer schools and intensive teaching for students not meeting national minimum standards and ongoing professional development for teachers in this area. Teaching Centres of Excellence are also being established and a review of teacher pre-service preparation is being undertaken.

South Australia

Focused on improving the transition from education to the workforce, the updated South Australian Certificate of Education (SACE) commenced in 2010. Curriculum priorities include mathematics, science and literacy, with a particular emphasis on primary schools. Associated professional development for teachers is a strong element of these curriculum priorities. To support flexible education in regional areas, the Innovative Community Action Networks (ICAN) initiative was expanded, in conjunction with broadened Student Mentoring strategies and Country Teaching scholarships. SA has also introduced a new system for rewarding its most experienced teachers – the Step 9 pay increment, based on submission of performance development plans and annual reviews of teacher performance.

Tasmania

The Department of Education's strategic priorities include early years, literacy and numeracy, retention and building a knowledge-based society. Targeted funding intends to address disadvantage and close the economic gap by delivering services to communities and schools in greatest need. The Raising the Bar Closing the Gap initiatives have addressed literacy and numeracy in primary schools, with these programs to be extended to secondary and combined schools in 2011. Early childhood learning has been supported through the Launching into Learning program to increase school readiness. Further, reforms are in place to improve participation in education post Year 10 and in achieving qualifications to start on a career pathway.

Victoria

The Victorian schooling policy aims to support an independent, autonomous and diverse school system. There is a policy focus on ensuring school leaders are provided with sufficient resources and support, based on expectations of high standards from teachers and principals. Victoria has embraced the Ultranet, which connects teachers, parents and students on an online learning platform. Koorie Pathway Schools have been implemented to assist Aboriginal students in achieving learning outcomes while the Smarter Schools National Partnerships address socio-economic and teacher quality considerations. Ties between schools and business have been strengthened through the Business Working with Education Foundation, which aims to facilitate increased support for public education.

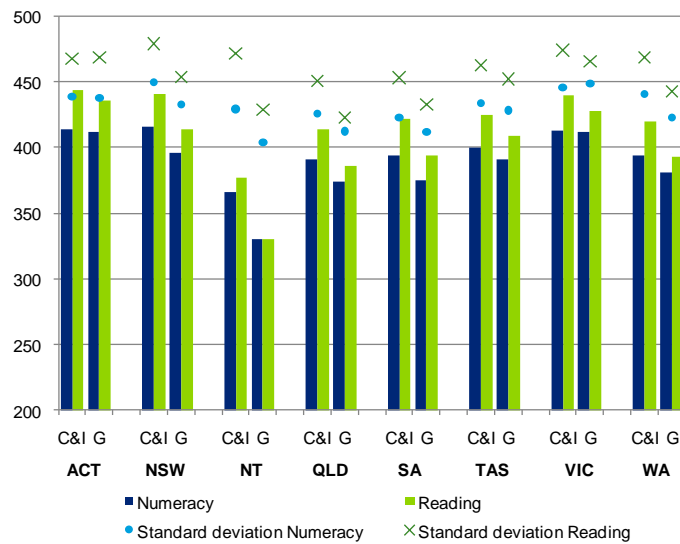
Western Australia

School policy in Western Australia focuses on equipping students for their future in civic and economic life. Priority areas include early childhood development and learning, literacy and numeracy, student behaviour and development of the workforce. In 2010, 34 government schools commenced as Independent Public Schools as part of the Australian Government's empowerment agenda, allowing greater flexibility in key areas to support improved performance. Other initiatives include the *Better attendance: Brighter futures* strategy and the creation of a School Innovation and Reform Unit to manage the local and national education reform agenda. Another key policy focus area is improving literacy and numeracy outcomes of 'at risk' students.

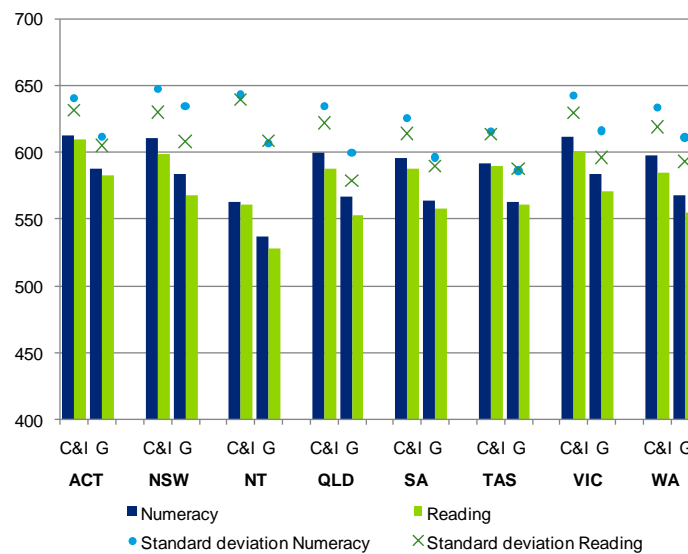
2.1.4 Outcomes

Student outcomes provide an important indication of the effectiveness of the education system as a whole. Outcomes can be measured through a number of variables such as student test achievement, school attendance and year 12 attainment (see below charts).

It should be noted that the overall effectiveness of the education system cannot be captured solely through these types of student outcomes. Social outcomes (as outlined in the Melbourne Declaration) and other measures such as enhanced workforce productivity also reflect the level of effectiveness of education delivery.

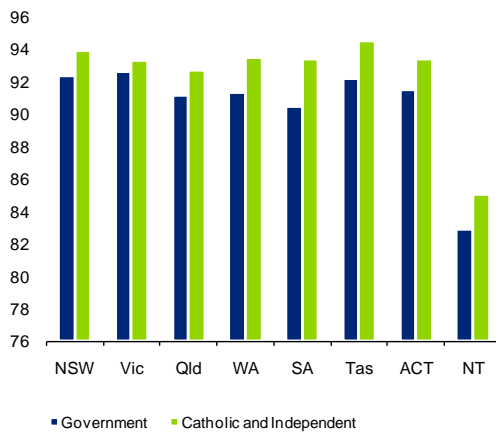
Chart 2.4: Year 3 NAPLAN numeracy and reading mean scores, 2010

Source: ACARA

Chart 2.5: Year 9 NAPLAN numeracy and reading mean scores, 2010

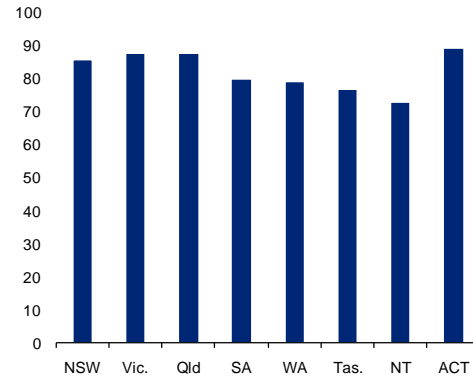
Source: ACARA

The above charts show the mean scores and standard deviations for year 3 and year 9 NAPLAN tests in numeracy and reading. The NT has noticeably lower average achievement levels than other jurisdictions, related to its high proportion of Indigenous and remote students. It also has significantly more variation in student achievement, whereas there is less dispersion in student results in the ACT, Victoria and NSW. Broadly, average achievement levels are higher in the non-government sector compared to the government sector.

Chart 2.6: Student attendance rates, 2009 (%)

Source: Tables 4A.135, 4A.137 and 4A.139, Productivity Commission (2011)

Note: Includes attendance rates for years 1-10, primary ungraded and secondary ungraded. Data are not directly comparable as they are not collected uniformly across jurisdictions and sectors.

Chart 2.7: Year 12 (or equivalent) attainment, persons aged 20-24 years, 2010 (%)

Source: ABS (2010)

Note: Chart also includes attainment of formal qualification at Certificate II level or above.

School attendance provides an indication of the accessibility of schooling and of student engagement. Chart 2.6 shows that the NT faces significantly greater challenges in this area compared to other states and territories. In terms of year 12 attainment, the NT also has the lowest proportion of 20-24 year olds who have completed year 12 or equivalent, although it is not far behind Tasmania. As noted above, lifting year 12 attainment rates is a key policy objective under the NEA.

2.2 Funding framework

Funding for schooling is a shared responsibility between state and territory governments, the Commonwealth Government and private sources, with the government and non-government sectors each receiving a mix of funding from all three sources. However, the burden of primary funding responsibility varies depending on the school sector, largely as a consequence of constitutional arrangements. This has resulted in a complex funding environment, with an array of funding models that interact to provide the total level of funding to individual schools. Complexities in funding arrangements are further compounded by indirect funding of schooling that occurs through the taxation system.

2.2.1 Government funding responsibility

Governments can be categorised as either *primary public funders* or *supplementary public funders*, based on their level of responsibility for funding particular sectors. This categorisation is important to ensuring a tractable assessment of all school funding models, as it enables the otherwise complex nature of school funding mechanisms to be consolidated into several broad types.

A high-level overview of funding arrangements is provided below, with the key features of individual funding models described in further detail in Section 5 of this report.

State and territory governments

State and territory governments bear primary funding responsibility for the government sector. This relates to the constitutional responsibility of state and territory governments to deliver schooling on a universal basis. This commitment, whereby states and territories must ensure all young Australians receive an education regardless of their physical location or family income level, is met through the government school system. Consequently, based on the quantum of funding provided and level of involvement, states and territories could be described as the *primary public funders of government schools* and *supplementary public funders of non-government schools*.

Each state and territory government has a unique funding model for its government schools, with its design reflecting the historical, demographic and geographic characteristics of the jurisdiction. Each funding model comprises recurrent, capital and targeted components but there are variances across jurisdictions in the level of complexity and decentralisation of budgetary responsibility.

Commonwealth Government

In comparison, the Commonwealth Government is the primary public funder of non-government schools (relative to the funding responsibility of state and territory governments and setting aside the proportion of private funding received by non-government schools⁷). As such, the Commonwealth could be described as the *primary public funder of non-government schools* and *supplementary public funder for government schools*. The Commonwealth is able to fund schools under section 96 of the Constitution, which allows the Parliament to make payments to the states on such terms and conditions as it thinks fit. The current balance of funding is the result of various historical and political circumstances.

Commonwealth funding arrangements do not vary by jurisdiction, however. The Commonwealth has one set of funding arrangements for non-government schools and another set for government schools.

Catholic school systems within each jurisdiction have their own funding allocation mechanism which determines the level of funding ultimately received by individual schools. In general, these mechanisms are relatively similar to state and territory funding models for

⁷ The proportion of private funding varies substantially between schools, and for some schools it is the primary source of funding.

government schools, as they incorporate funding formulae and a range of needs-based measures.

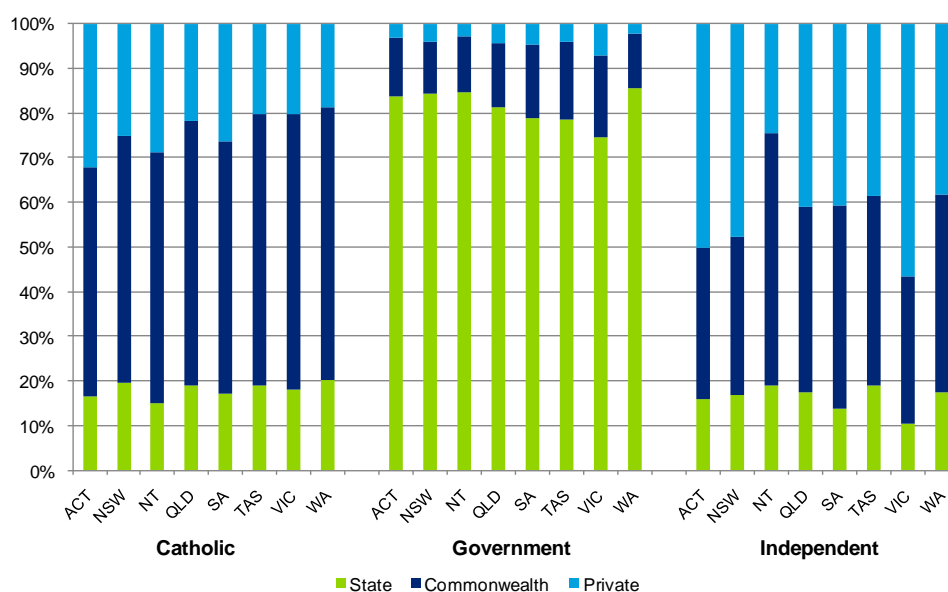
2.2.2 Types of funding

Schools receive three types of funding: recurrent, capital and targeted funding. These funding types are briefly overviewed below.

Recurrent funding

Chart 2.8 below shows the proportion of gross recurrent income received by government, Catholic and independent schools by source. Consistent with the discussion above, government schools receive a greater proportion of their funding from state and territory governments, and non-government schools receive a greater proportion from the Commonwealth. Compared to independent schools on average, the Catholic sector receives relatively more Commonwealth funding and less private funding, however within the independent sector the proportion of funding from private and government sources varies greatly.

Chart 2.8: Proportion of recurrent income by funding source, 2009



Source: ACARA

Note: This chart shows averages and does not illustrate the variation between low SES and high SES schools within sectors i.e. low SES schools receive a lower proportion of recurrent income from private sources compared to high SES schools (particularly in the independent sector).

The table below details the level of recurrent income received by each sector in 2009, according to data collected from schools by the Australian Curriculum, Assessment and Reporting Authority (ACARA). Government schools received the lion's share of recurrent income from government sources, comprising \$24 billion in total. Recurrent income from private sources (including fees) totalled \$1.4 billion, equating to about 5.5% of total recurrent income.

In contrast, Catholic schools received \$5.4 billion in recurrent income from government sources and \$2.2 billion as recurrent private income. Independent schools received a higher proportion of recurrent income from private sources – \$4.3 billion in total – compared to government sources – \$3 billion in total.

Table 2.1: Level of recurrent income by funding source, 2009 (\$b)

Sector	Common-wealth	State/territory	Fees	Private (other)	Total
Government	3.6	20.4	0.9	0.5	25.5
Catholic	4.0	1.4	1.8	0.4	7.7
Independent	2.2	0.8	3.9	0.4	7.4
Total	9.9	22.6	6.7	1.4	40.5

Source: ACARA

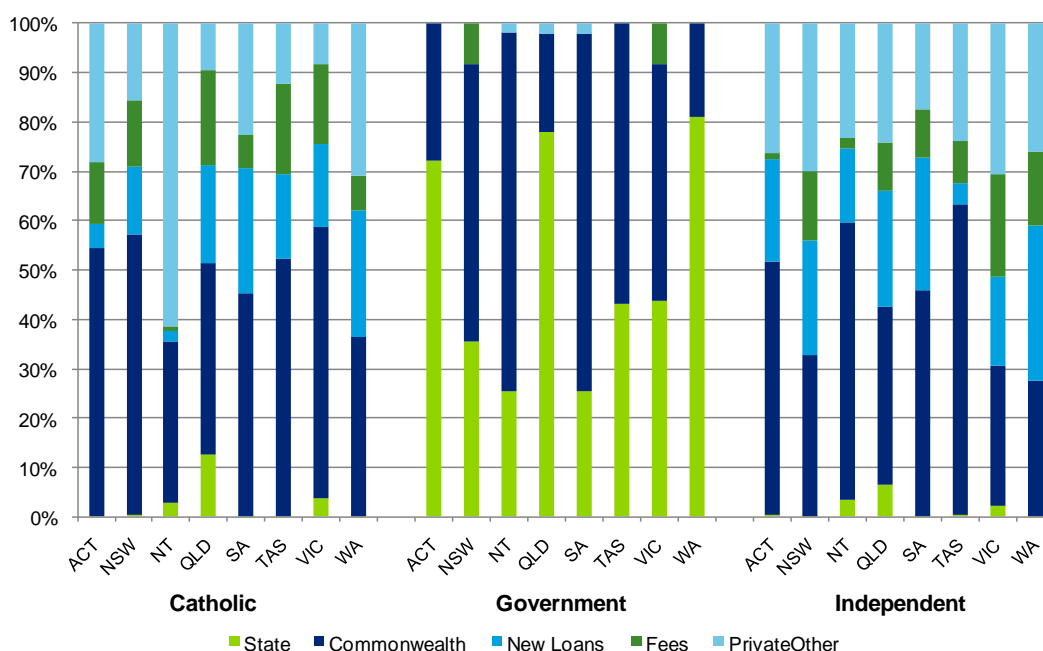
Capital funding

Capital expenditure provides an indication of the level and distribution of capital funding. The proportion of capital expenditure for government, Catholic and independent schools by funding source is shown in Chart 2.9 below. Governments are the predominant capital funders for government schools across all jurisdictions. State and territory government funding is almost entirely directed towards government schools, with the Western Australian, Queensland and ACT governments providing a significantly greater proportion of capital funding compared to other jurisdictions.

Capital funding patterns are broadly similar across the Catholic and independent sectors, with about half of all capital expenditure funded by government sources (although there are variances between jurisdictions e.g. in the NSW, Western Australian and Victorian independent sectors, only about 30% of capital expenditure is funded by government sources).

Significantly, the Commonwealth Government funded a substantial proportion of capital expenditure in almost all sectors and jurisdictions. However, this reflects funding distributed to schools under the Building the Education Revolution (BER) program and is therefore anomalous (compared to a standard year).⁸

⁸ Under the BER program, \$16.2 billion in Commonwealth funding was allocated to schools for new infrastructure and refurbishments. The four year program commenced in 2008-09.

Chart 2.9: Proportion of capital expenditure by funding source, 2009

Source: ACARA

Note: New Loans refers to funding from capital loan drawdowns; Private Other refers to funding from other private sources including retained earnings from previous years.

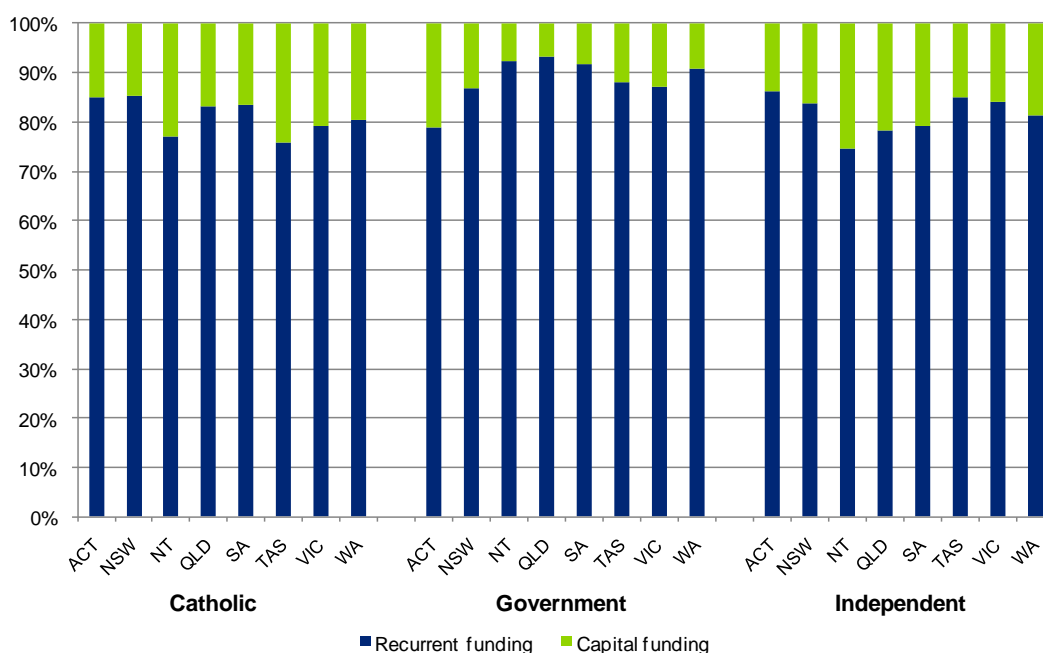
The table below details the level of capital expenditure by funding source in 2009, according to data collected from schools by ACARA. In total, approximately \$3.1 billion in capital expenditure was undertaken by the government sector (with expenditure from government sources split relatively evenly between Commonwealth and state/territory government sources). In the Catholic sector, about \$0.8 billion in capital expenditure was funded from private sources, compared to just over \$1 billion for the independent sector.

Table 2.2: Level of capital expenditure by funding source, 2009 (\$m)

Sector	Common-wealth	State/territory	New loans	Fees	Private (other)	Total
Government	1,447	1,520	0	170	12	3,150
Catholic	814	58	288	230	248	1,638
Independent	551	36	371	224	432	1,614
Total	2,811	1,615	659	624	693	6,402

Source: ACARA

Chart 2.10 below illustrates that recurrent funding (based on recurrent income) comprises the lion's share of funding received by schools, in comparison to capital funding (based on capital expenditure).

Chart 2.10: Total recurrent and capital funding proportions, 2009

Source: ACARA

2.2.3 Targeted funding

Targeted funding is provided for specific educational objectives or outcomes, generally related to addressing educational disadvantage. Targeted funding often includes some form of accountability, such as ongoing reporting requirements.

One way the Commonwealth provides targeted funding to government and non-government schools is under National Partnerships (NPs). These funding arrangements are designed to provide flexibility in the achievement of outcomes and financial controls are not used. Accountability mechanisms relate to the linking of payments with: (a) the achievement of milestones as agreed in implementation plans (for project and facilitation payments); or (b) meeting performance benchmarks (for reward payments). Under the NP for Smarter Schools – Low SES School Communities, for example, \$1.16 billion was provided to both government and non-government schools.

State and territory governments also provide targeted funding to schools. Examples include the Priority Schools Funding Program in NSW and the Raising the Bar Closing the Gap program in Tasmania.

The Australian Council for Education Research (ACER) estimates that programs seeking to address educational disadvantage provided minimum national aggregate funding of \$4.4 billion during 2009-10 (ACER, 2011).

2.2.4 Indirect funding through the taxation system

In addition to direct funding, governments provide indirect funding to schools through tax concessions at the federal and state/territory level and rate exemptions at the local level.

However, data limitations mean that the level of funding provided through these mechanisms cannot be readily quantified (see Box 2 below).

Box 2: Challenges of measuring indirect funding

Although the types of tax concessions available to schools can readily be identified, the value of these tax concessions cannot be measured with any certainty. Primarily, this is due to a lack of sufficiently detailed data.

Some data limitations relate to:

- the nature of some tax concessions, where liabilities are not directly incurred by the recipient and therefore exact data cannot be collected by the Australian Tax Office; and
- the unavailability of disaggregated data for some tax concessions, which means that estimates cannot be determined for schools (in isolation from other recipients).

Federal Treasury has indicated that further detail on the value of tax concessions provided to, and utilised by, the not-for-profit (NFP) sector may be collected by the proposed new national NFP regulator.

Commonwealth Government

Under the Commonwealth tax system, government and non-government schools are able to apply for deductible gift recipient (DGR) status for certain purposes, such as school building funds, educational scholarship funds and public libraries. This enables donors to claim an income tax deduction for their donation towards these specific purposes.

Government and non-government schools are also entitled to goods and services tax (GST) exemptions. Under these exemptions, some education supplies are GST free and schools can elect to have school canteens and fundraising treated as input taxed.⁹

Non-government schools, as not-for-profit institutions, are also eligible for income tax exemptions and the fringe benefits tax (FBT) rebate. Under the FBT rebate, non-government schools can receive a 48% rebate of the FBT that would otherwise be payable on up to \$30,000 of the gross taxable value of fringe benefits per employee. According to the Federal Treasury, however, the FBT rebate is rarely used by non-government schools as it is only beneficial for employees who are on, or just below, the top marginal tax rate (i.e. employees must earn above \$180,000 per year – a salary level that is beyond the range of most teacher salaries).

The total value of indirect funding to schools cannot be determined with any precision. Estimates and orders of magnitude for various tax concessions are provided in the *Tax Expenditures Statement* published by Federal Treasury, but these cannot be disaggregated to indicate the cost of providing tax concessions to schools. Appendix C includes the overall estimates for each relevant tax concession.

However, the total value of indirect funding via the taxation system is likely to be significant. As an example, the GST exemption for education (which includes school

⁹ Input taxed means that GST is not charged on sales and, conversely, GST credits cannot be claimed for purchases.

canteens) was estimated to be \$2.4 billion in 2009-10. Treasury notes that an increase in the value of this GST exemption, in addition to the introduction of the Education Tax Refund, has driven growth in education tax expenditure for all levels of education in recent years (Commonwealth of Australia, 2011).

State/territory and local government

Across jurisdictions, non-government schools are generally entitled to payroll tax and land tax exemptions. In contrast, government schools in most jurisdictions do not receive payroll tax exemptions (with the exception of Western Australia and the ACT). Government and non-government schools are also exempt from payment of local government rates (with the exception of Tasmania, where local government rates for government schools are paid centrally by the Department of Education).

As is the case for Commonwealth tax concessions, a robust estimate of the overall value of indirect funding to schools through state and territory tax concessions cannot be determined. Estimates of payroll tax exemptions for schools are published by some jurisdictions. For example, NSW estimates the 2009-10 payroll tax exemption for schools and colleges was \$160 million (NSW Government, 2010).

2.3 Conclusions

In total, there are 18 individual school funding models in Australia (eight state and territory funding models for government schools, eight state and territory funding models for non-government schools, one Commonwealth funding model for non-government schools and one Commonwealth funding model for government schools). This figure does not include the mechanisms for funding allocation used by Catholic systems or Commonwealth funding that applies to both the government and non-government sector (i.e. National Partnerships). To determine total funding outcomes, there is clearly a complicated mix of funding arrangements, even at the individual school level.

As noted in Section 1, individual funding models interact within funding systems (which can be viewed through a number of prisms – in other words, funding systems can be sectoral, jurisdictional or national). In each case, however, funding systems are built upon the relationships between primary and supplementary public funders.

Funding models and funding systems also operate within different educational contexts. Varying enrolment patterns and student outcomes are evident across jurisdictions and sectors, reflecting the unique historical, demographic and geographic characteristics of each jurisdiction and sector.

3 Funding models and educational outcomes

This section provides an overview of the Australian and international evidence on the role of funding model design in determining students' educational outcomes. The literature on the determinants of schooling outcomes is extensive and the intention here is not to provide an exhaustive review of this research. Rather, the focus is on studies that have attempted to isolate and analyse the direct role of funding model design and – given the paucity of research in this narrow field – studies that have assessed the impact of factors which are amenable to influence via funding model design.

The analysis in this section provides an important foundation to the assessment of Australia's schooling funding models and demonstrates how effective funding model design can contribute to enhanced educational outcomes.

3.1 How does funding model design influence educational outcomes?

There is an extensive body of literature analysing the relationship between the **quantum of funding** and educational outcomes (this issue is not the primary focus of this piece of analysis). For example, researchers have examined the relationship between educational outcomes and class size, which is linked to the level of funding provided to education systems. An overview of this evidence is provided in the box below.

However, there is considerably less evidence regarding the direct impact of **funding model design**. Indeed, there are few studies that have analysed this issue in any depth. While a number of factors likely underlie this, it primarily reflects that: (i) the role of funding models in schooling is not to directly influence student outcomes, but rather to underwrite the appropriate resourcing; and (ii) funding models operate within a complex environment, where their effects cannot readily be isolated or distinguished from other factors (explored in Section 3.2).

Nevertheless, there is a raft of research analysing the impact of education program characteristics on student outcomes. To the extent that funding model design can influence such characteristics, inferences can be drawn regarding the potential links between funding and outcomes.

Box 3: Class size and educational outcomes

Evidence on class size is mixed. Generally, Australian and international research suggests that increases in spending per pupil resulting in class size reduction do not provide a *proportional* improvement in educational performance.¹⁰ Cross-country studies also show that class size is a relevant variable only in settings with low teacher quality.¹¹

An analysis of four Longitudinal Surveys of Australian Youth (LSAY) cohorts and five mathematics surveys from the International Association for the Evaluation of Educational Achievement (IEA) show a small but statistically significant fall in numeracy over 1964-2003 in numeracy and in both literacy and numeracy over the period 1975-1998 for young Australian teenagers. This is despite a substantial increase in real per-child school expenditure over this period, and the average class size decreasing from 36 in 1964 to 26 in 2003.¹²

Furthermore, a synthesis of meta-analyses and other class size studies from 1978 to 2004 from a large variety of countries across all grades of schools found that the typical effect of reducing class size from 25 to 15 had a mean positive effect-size of about 0.13 (standard deviations above average educational achievement). Although this effect is positive, it is relatively small when compared to the average of many other educational interventions on student achievement (0.40).¹³

In contrast to the above studies, Project STAR (the Tennessee Student/Teacher Achievement Ratio experiment) found that performance on standardised tests increased by four percentage points the first year students attended small classes (13-17 students compared to 22-26 students) and the test score advantage of students in small classes increased by about one percentile point per year in subsequent years.¹⁴ The benefit for students of a minority background of class size reduction was almost double that for white students.¹⁵ However, gains over time for all students indicate that after students return to regular classes, the effects begin to decrease.¹⁶

Although there is no single factor which explains why some schools generate better results than others, evidence from Australia and overseas suggests that several factors which are amenable to funding model design – in particular average socio-economic status of the school, teacher quality and school autonomy – are potentially significant determinants of educational outcomes.

The importance of these factors is reflected in current Australian education policy directions. For example, the *MCEECDYA Four Year Plan 2009-2012* and the NEA focus on priorities such as supporting quality teaching and improving educational outcomes for low SES students. The Smarter Schools National Partnerships for 'Improving teacher quality' and 'Low SES school communities' are specific examples of funding programs that have been informed by the evidence on drivers of educational outcomes.

¹⁰ For example, Hanushek and Woessmann (2010); Leigh and Ryan, (2009); Hattie, (2005); Hanushek, (2006); Hanushek et al. (1996); Hoxby (2000); Woessmann, (2003).

¹¹ Hanushek and Woessmann (2010).

¹² Leigh and Ryan, (2009).

¹³ Hattie (2005).

¹⁴ Krueger (1999).

¹⁵ Finn and Achilles (1990).

¹⁶ Tomlinson (1990).

*In summary, while there may not be a **direct** link between funding model design and students' educational outcomes, there are likely a range of **indirect** links.*

3.1.1 Socio-economic background

It is well established that the socio-economic background of students (measured by parent's occupation and level of educational attainment, place of residence, attitude and outlooks) has a significant impact on their educational outcomes.¹⁷

An analysis of PISA 2009 for Australia found that the gap in reading literacy between students in the highest and lowest socio-economic quartile was equivalent to nearly three years of schooling (or more than one proficiency level).¹⁸ Further to this, in 2000, the mean tertiary entrance score obtained by Year 12 students in the bottom quintile of SES was 22 points below the mean score achieved by students in the highest quintile of SES.¹⁹

Analysis of PISA 2009 results across OECD countries also found that 18% of the variation in student performance is attributable jointly to spending on education and the socio-economic and demographic background of students and schools, whereas only 5% of the variation is attributable solely to differences in the educational resources available to schools.²⁰

There is also a body of research describing how concentrations of disadvantage can have a strong, additional impact on student performance. An array of Australian and international studies demonstrate that the results for students from all socio-economic backgrounds tend to improve when they attend schools with larger proportions of students from high SES backgrounds, and decline when there are larger proportions of low SES students.²¹

PISA 2003 revealed that in OECD countries where schools differed significantly in their socio-economic intake, the percentage of variation in student performance that could be attributed to individual student's socio-economic background was smaller than the variation in performance that could be attributed to socio-economic background of the whole school.²² Lamb et al. (2004) suggest that "Like physical resources, pupils provide a resource which helps some schools organise their teaching and other programs in ways which help raise levels of achievement".

Furthermore, using Australian data from PISA 2003, Perry and McConney (2010) found that, on average, low SES background students achieved 57 points more on the PISA reading, mathematics and science scales in high SES schools compared to low SES schools - this is equivalent to one and a half years of schooling. Students from high SES backgrounds displayed a similar difference in performance between high SES schools and low SES schools.

¹⁷ OECD (2004a).

¹⁸ Thomson et al. (2010).

¹⁹ Lamb et al (2004).

²⁰ OECD (2010).

²¹ For example Southworth (2010); Rumberger and Palardy (2005); Borman and Dowling (2010); Williams (2010); OECD (2004a); Lamb et al. (2004); Holmes-Smith (2006); NSW DET (2011).

²² OECD (2004a).

Some international evidence suggests that pursuing equity in educational achievement by reducing the variance in average socio-economic status between schools does not appear to come at the cost of achievement levels for students from a higher socio-economic background. Countries participating in PISA with less stratified national education systems such as Finland and Canada record a greater proportion of students achieving higher proficiency levels alongside low between-school variance in educational achievement (about one-tenth of the OECD average in Finland) compared to countries with more segregated systems.²³ In general, these countries also appear to have higher overall achievement²⁴ and correspondingly, the relationship of parents' socio-economic status with students' school achievement appear to be small when compared to other OECD nations.²⁵

In contrast, recent analysis undertaken by NSW DET (2011) found that the highest SES students show the largest change in performance depending on whether they are enrolled in a low SES school compared to a high SES school. In addition, relatively high SES students experienced particularly negative impacts by attending a school with higher levels of average disadvantage.

3.1.2 Teacher quality

The existing evidence suggests that educational effectiveness is strongly related to the provision of quality teaching and learning experiences.²⁶ For example, findings from an analysis of Queensland test results revealed that a teacher at the 90th percentile of performance can achieve in half a year what a teacher at the 10th percentile can achieve in a full year.²⁷ Teacher qualities, such as full certification and a major in the field being taught – rather than educational level (e.g. a Master's degree) – have been found to be a stronger influence on student achievement compared to student background factors such as poverty, language background and minority status.²⁸

An analysis of Australian schools by Lamb et al (2004) found that several factors helped produce better student educational achievement:

- higher concentrations of teachers satisfied by their jobs;
- the use of innovative rather than traditional teaching styles;
- the academic climate of schools reflected in the broad aspiration levels of students;
- students' views on teachers; and
- engagement in school life.

Darling-Hammond and Bransford (2005) suggest that to deliver effective education, teachers must be equipped with evidence-based teaching strategies that are supported by instructional leadership.

²³ Sahlberg (2007).

²⁴ OECD (2004a); OECD (2010).

²⁵ Valijarvi and Malin (2003) in Sahlberg (2007).

²⁶ For example, Lamb et al. (2004); Darling-Hammond (2000); Hattie (2005); Rowe (2003).

²⁷ Leigh (2007).

²⁸ For example, Rowe (2002); Darling-Hammond (2000); Cuttance (1998).

In Australia, teacher allocation within schools has also been found to have an impact on educational outcomes. Analysis undertaken by the University of Melbourne for the Victorian Department of Education and Early Childhood Development, which led to changes in the design of its funding model for government schools, noted that more effective schools have found a balance of experienced and inexperienced teachers across all year levels.²⁹

Specifically, the Victorian research found that:

- Secondary schools which allocate their most experienced (and higher cost) teachers more evenly between Year 7 and Year 12 are significantly more likely to promote higher levels of student engagement and student retention. In terms of VCE achievement, however, schools which concentrate experienced teachers in the senior years tend to promote higher levels of VCE achievement. This may indicate that schools which allocate teacher resources more evenly across year levels have more diverse student populations in the senior years (due to higher retention rates), which can impact on the ability to deliver high VCE achievement.
- Primary schools that are less effective in promoting student engagement tend to concentrate the most experienced (and costly) teachers in Year 6, whereas more effective schools deploy experienced teachers in the entry years as well as the senior years. In terms of achievement, primary schools which concentrate their most experienced teachers in the earlier years are significantly more likely to promote higher levels of achievement in Year 5, highlighting the importance of early intervention.

Analysis conducted as part of Tasmania's current funding model review also highlighted the importance of teacher allocation in enhancing student achievement. It found that under-performing schools tend to be inefficient in their use of teaching resources. In these schools, highly experienced teachers were most likely to be teaching year 10, whereas in best-performing schools the highly experienced teachers were teaching either year 7 or the 'difficult' classes.

²⁹ Effective schools were identified using a regression procedure which included controls for student family occupation, achievement, size, percentage of students with disabilities and location.

Box 4: Teacher quality – the Finnish experience

In Finland, teaching has always been a highly respected profession that attracts some of the nation's best secondary school graduates - only 10% of students pass the rigorous selection procedure to enter teacher training. Canada has also increased the status of the profession recently by selective admission into teacher training and development of professional teaching standards.³⁰

Finnish teacher education programs are distinguished by their depth and scope which enables graduates to master a theoretical and practical understanding of various teaching and learning methods making them highly competent professionals. Professional development of teachers has become a right rather than an obligation of teachers with school or municipality-based longer term professional development programs replacing compulsory, traditional in-service training. The increased professionalism of teaching has resulted in teachers and schools being given greater responsibility for their work and greater capacity to solve problems and engage in school development projects, nationally and internationally³¹.

Improving quality teaching and learning experiences was identified as the most prevalent intervention in the improvement of student performance across 20 school systems from around the globe, in a study by McKinsey & Company in 2010. From different starting points, all systems achieved significant, sustained and widespread improvement as measured by national and international assessment standards.³² Systems with characteristics most similar to Australia (for example, systems within the United States and England) focused on increasing the professionalisation of teaching through self-led, peer-led and center-led learning; coaching and mentorship opportunities; raising the calibre of entering teachers and professionals by raising the entry bar for new teacher candidates; and raising the quality of pre-service training and certification requirements.

Decentralisation of the delivery of professional development and other specialised programs was also found to be an important driver of continuing improvement in student performance. This method of empowering the profession through school-led exchange of ideas and practices was used successfully in Ontario, Canada to cause a sustained rise in primary literacy.

In successful and improving education systems, the importance of attracting top-performing students to the profession is recognised through remuneration and reward systems – salaries are increased when system goals are reached or required progress had been made in achieving those goals. Overseas education systems with educational outcomes relevant to the Australian context provide teachers with competitive base salaries, with the final level of remuneration related to the individual teacher's professional position in their career. Systems achieving outcomes above Australia's provide teacher salaries significantly above the national GDP per capita enabling them to recruit the best and brightest students to the profession. Bonus schemes are also in place – for example, in Singapore top-performing teachers can receive bonuses equivalent to 3 months salary.³³

³⁰ OECD (2004b).

³¹ Sahlberg (2007).

³² McKinsey & Company (2010).

³³ Ibid.

3.1.3 Autonomy

Positive correlations have been found between student achievement and schools that have autonomy in decision making in areas such as purchasing of supplies, budget allocations within schools, hiring and rewarding teachers (within a given budget), choosing textbooks and instructional methods.³⁴ This is particularly strong where there is also accountability in the form of external lesson inspections and comparison of schools to national performance levels and external school exit exams.³⁵

However, some Australian research has found that a high level of autonomy is less effective for schools in remote locations, due to the difficulties in recruiting teachers to work in isolated and/or highly disadvantaged settings.³⁶ Some international evidence suggests that school autonomy over teacher salaries and course content is only effective in school systems that have external exams in place and is negatively associated in systems without external exams.³⁷ Moreover, Woessmann et al. (2009) found that in general, all types of accountability systems combined with autonomy were effective in increasing student's cognitive skills whether they were aimed at the teacher, school or student. This finding is contentious, with prominent research from the United States indicating that extensive testing systems linking school performance to rewards and penalties is ineffective in improving student performance.³⁸

In most of the countries that performed well in PISA 2000, local authorities and schools had substantial freedom to adapt and implement educational content.³⁹ The Finnish experience – which highlights the importance of tailoring education delivery to local circumstances – is outlined in the box below.

Box 5: Autonomy in Finland's education system

The success of Finland's education system in PISA 2000 was partially attributed to its high level of autonomy in terms of the courses offered by schools. In addition, accountability is based on teacher-made tests rather than standardised external tests.

The belief that teachers, principals, parents and their communities know how to deliver the best possible education for their children is founded upon high levels of social capital and trust for public institutions in Finnish society. It has encouraged the adoption of innovative teaching methods without the fear of failure and enables schools to organise the teaching of the national curriculum framework in a manner which will optimise their resources.⁴⁰

Interestingly, the best performing OECD countries on PISA 2003 (Finland, Japan, the Netherlands and Korea) have no form of national assessment for consequential accountability purposes but use comparative school performance data as an internal guide

³⁴ For example, Fuchs and Woessmann (2007); Woessmann et al. (2009).

³⁵ Hanushek and Woessmann (2010).

³⁶ Educational Transformations (2007).

³⁷ Hanushek and Woessmann (2010).

³⁸ Darling-Hammond (2000).

³⁹ OECD (2004b).

⁴⁰ Sahlberg (2007).

for teaching practices, internal ranking of schools or monitoring the achievement of curriculum objectives. It appears that in advanced educational systems, the collaborative practice amongst teachers (as outlined above) serves as an accountability mechanism and can substitute for formalised teacher appraisal: “By developing a shared concept of what good practice looks like, and basing it on a fact based inquiry into what works best to help students learn, teachers hold each other accountable to adhering to those accepted practices”.⁴¹

3.2 Broader systemic context

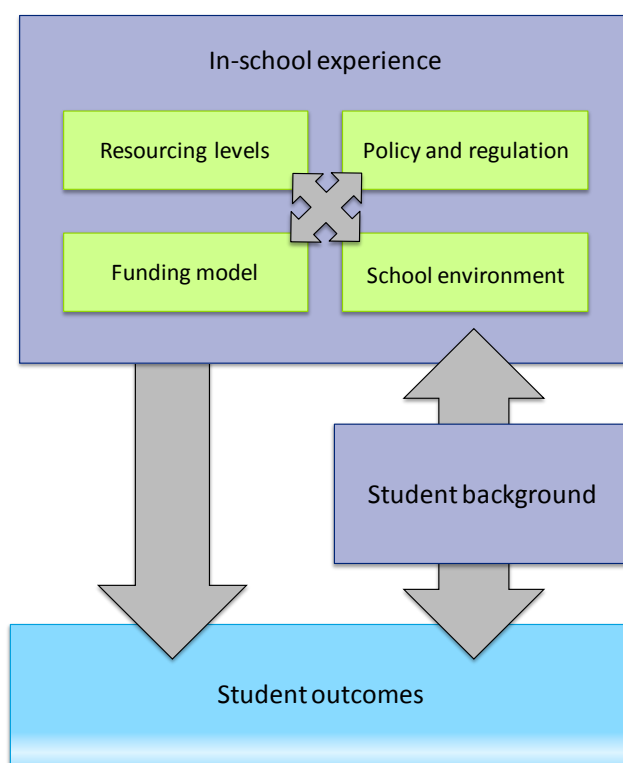
It is recognised that a complex array of variables interact to ultimately determine a student’s educational outcomes. Drawing together the information presented in Sections 2 and 3, Figure 3.1 below illustrates the causal relationships that impact on, and determine, student outcomes.

In-school experience encompasses a number of factors: resourcing levels; the funding model (through its indirect influence on factors such as teacher quality and autonomy); policy and regulation (which includes industrial relations and teacher supply and quality); and the school environment (which includes school type and sector, teaching staff, curriculum, peer effects and community engagement).

Student background refers to family background, prior student achievement and inherent ability. It is an exogenous variable that impacts on the in-school experience and student outcomes but cannot be directly addressed through policies or programs. This means that efforts to improve educational outcomes need to be directed toward in-school variables, taking into account where possible the impact of student background.

This mapping of determinants of student outcomes accords broadly with Grubb (2011), who posits that school outcomes are a function of school resources (classified as simple, compound, complex and abstract), various dimensions of family background, student connectedness to schooling and other external policies. Grubb also argues that funding only has an indirect effect on outcomes, through its potential rather than direct influence on school resources and student connectedness to schooling.

⁴¹ McKinsey and Company (2010) p. 75.

Figure 3.1: Impacts and determinants of student outcomes

3.3 Implications for this analysis

Despite at times conflicting findings in the documented empirical research, it is evident that researchers have been able to identify many of the key determinants of educational outcomes. Moreover, while there is a dearth of evidence directly linking funding model design to outcomes, the findings of the literature survey suggest that several factors significant to student outcomes are at least partially influenced by funding model design. In this sense, optimally designed funding models are a necessary but not sufficient condition for the achievement of high quality student outcomes.

Among the most significant implications in this regard are:

- Social and economic disadvantage is a significant barrier to educational achievement and overcoming this through effective supplementary resourcing is key to improving student performance among these groups, and hence overall.
- Teacher quality is paramount and while many of the determinants of teacher quality are outside the direct realm of funding model influence (e.g. attractiveness of the profession, leading to the selection and recruitment of high quality teachers, or the quality of training), funding nevertheless has a potential role to play in (i) rewarding high calibre teachers; (ii) shaping the allocation of teachers across and within schools; and (iii) increasing teacher quality over time (i.e. supporting professional development).
- Internationally, educational systems successful in improving student performance have progressively moved towards decentralised models. This has allowed schools and municipalities to focus on the unique needs of their students and the ways in

which education can be delivered most effectively given local circumstances. Importantly, the effectiveness of decentralisation has hinged on the presence of appropriate accountability mechanisms.

The overarching implication for funding model architecture is that funding must at the very least support – and ideally promote – the delivery of schooling in a manner that recognises these factors and augments improvement over time. Of course, the efficacy of funding as a vehicle to shape design and delivery toward optimality is constrained by the broader policy framework in which the sector operates. Funding is one element among an array of variables – such as schooling policy and regulation, the school environment and student background – that impact on student outcomes. Nevertheless, the resources delivered to schools through funding models provide a vital foundation for the achievement of enhanced educational outcomes for Australian students. Ensuring the optimality of funding model design is therefore a critical public policy issue for government.

4 Funding model assessment framework

According to the literature canvassed in Section 3, there are several key factors that not only have a significant role in determining educational outcomes, but are also open to influence by funding model design: socio-economic background; teacher quality; and autonomy. Current Australian education policy reflects the importance of these factors, with funding model design also being shaped by these drivers of high quality education (explored in Section 6).

To maximise the potential for delivering enhanced educational outcomes, funding models must align with key public policy funding principles such as equity and effectiveness (which capture drivers of educational outcomes such as socio-economic background and teacher quality). Other principles which are integral to best-practice funding model design include efficiency, certainty, transparency and accountability. Ideally, an optimal funding model is designed with reference to all of these principles, to ensure that funding architecture is not only consistent with the pursuit of government policy objectives, but also adheres to best-practice design more broadly.

Collectively, these public policy principles – informed by an understanding of the drivers of educational outcomes – comprise the funding model assessment framework which has been developed specifically for this study. The funding model assessment framework, based on ten key principles and related indicators, is outlined below. Several additional principles that relate to an analysis of funding systems have also been identified.

4.1 Assessment framework

The development of a robust assessment framework comprised an initial and important component of this study. It also provides a transparent and objective mechanism for undertaking the assessment and ensures that all relevant considerations are canvassed in a structured, systematic fashion.

The assessment framework was derived from three main sources:

- an understanding of key public policy principles that relate to funding model design in a broad sense;
- an analysis of government policy objectives and recent state and territory, federal and overseas school funding model reviews, which provided an indication of principles that are considered important to optimal school funding model design; and
- a workshop with a small group of education sector experts, which explored the appropriate parameters for the assessment framework.

The assessment framework also received general endorsement by stakeholders during the consultation process.

4.1.1 Funding model principles

The ten funding model principles are outlined below.

1. **Equity:** The extent to which the funding model works towards reducing the impact of differences in wealth, income, power or possessions on educational outcomes.⁴²
2. **Effectiveness:** The extent to which the funding model supports and encourages the provision of high quality educational programs and hence high levels of educational outcomes. Teacher quality is a fundamental component of effectiveness and hence the role of funding models in influencing the calibre of teaching staff and their allocation across schools is pertinent in this regard.
3. **Adequacy:** The extent to which the funding levels produced by the model are sufficient to support the delivery of high quality education, given the cost of providing this service. Therefore, adequacy underwrites both equity and effectiveness.
4. **Efficiency:** The extent to which the funding model allocates funding across students (and schools) based on efficient unit costs of service delivery and encourages innovation and enterprise (i.e. augments dynamic efficiency).
5. **Incentive:** The extent to which the funding model does not generate disincentives for schools/school systems to procure other sources of funding.
6. **Certainty:** The extent to which the funding model provides funding recipients with confidence regarding the predictability of future funding levels.
7. **Flexibility:** The extent to which the funding model provides funding recipients with the capacity – or autonomy – to utilise funding in the most effective way given their individual circumstances, and the frameworks and support mechanism that foster this.
8. **Transparency:** The extent to which information relating to the determinants of funding allocations (that is, the characteristics of the funding model) is clearly and openly articulated, and available and accessible to the public.
9. **Accountability:** The extent to which recipients of funding are accountable for the way in which that funding is utilised (where flexibility exists) through reporting processes or other governance mechanisms.
10. **Simplicity:** The extent to which the process of funding administration imposes a reporting burden on schools or education authorities (either via complexity or merely the extent of reporting obligations) and/or creates an administrative burden for government agencies (via overseeing the appropriate allocation of funding).

For each principle, a number of indicators have been identified (see the table below). Indicators provide a consistent and – to the extent possible – objective means of gauging the performance of funding models in relation to each principle.

⁴² This description is based on the definition agreed by the Review of Funding for Schooling panel.

For some principles, the indicators can be categorised as either direct or indirect, with the direct indicators clearly more instructive in the assessment of funding model design and performance. In fact, the extent to which a given funding model can be held to account against indirect indicators – such as student outcomes – is minimal, because changes in student performance may be due to a range of factors that are unrelated to funding allocations (such as the quality of the curriculum). Nevertheless, outcomes data has an important role to play in informing funding model design (explored in Section 6 – see Box 10 in particular).

Table 4.1: Funding model assessment principles and indicators

Principle	Indicators
Equity	<p><i>Direct indicators:</i></p> <ul style="list-style-type: none"> • Extent to which equity funding is targeted toward, and accrues to, areas of identified educational need (i.e. equity groups such as low SES) • Extent to which educational need is accurately identified <p><i>Indirect indicators:</i></p> <ul style="list-style-type: none"> • Student outcomes <ul style="list-style-type: none"> • Involvement (e.g. attendance) • Performance (e.g. NAPLAN results) • Year 12 attainment • Participation in post-school education, training and employment
Effectiveness	<p><i>Direct indicators:</i></p> <ul style="list-style-type: none"> • Funding model support of best-practice education delivery (e.g. teacher allocation) • Use of performance data and program evaluations to inform funding model design <p><i>Indirect indicators:</i></p> <ul style="list-style-type: none"> • Student outcomes <ul style="list-style-type: none"> • Involvement (e.g. attendance) • Performance (e.g. NAPLAN results) • Year 12 attainment • Participation in post-school education, training and employment
Adequacy	<ul style="list-style-type: none"> • Relationship between funding rates and service delivery costs
Efficiency	<ul style="list-style-type: none"> • Extent to which funding rates reflect efficient unit costs and their variation across students and schools
Incentive	<ul style="list-style-type: none"> • Relationship between funding rates and private contributions
Certainty	<ul style="list-style-type: none"> • Method of indexation • Duration of funding period • Funding review process
Flexibility	<ul style="list-style-type: none"> • Level of devolvement of financial/budgetary decision making • Frameworks and systems to support decision making
Transparency	<ul style="list-style-type: none"> • School and public availability and accessibility of information about the funding model

Accountability	<ul style="list-style-type: none"> • Extent of governance mechanisms, reporting obligations and review processes
Simplicity	<ul style="list-style-type: none"> • Complexity of funding model design (e.g. number of components to funding formulae) • Compliance requirements (scope and detail)

4.1.2 Funding system principles

In addition to the funding model principles listed above, there are several other principles relevant from a funding system perspective. Although these principles are not the primary focus of the analysis, they provide an important reference point when examining the interactions between individual funding models.

Key funding system principles include:

- **Neutrality:** the extent to which the system creates a level competitive playing field between providers of different ownership structures.
- **Fairness:** to what extent funding arrangements treat schools and students equally across sectoral or system boundaries.
- **Sustainability:** the extent to which total government outlays are sustainable given fiscal conditions and other policy priorities.
- **Choice:** the extent to which funding supports diverse school provision able to respond to the range of parental preferences and student needs.
- **Coherence:** the extent to which funding arrangements at all levels of government complement one another and reinforce the capacity of schools to achieve agreed goals across sectors and systems.

4.2 Prioritisation

From a public policy perspective, the ultimate aim of schooling funding models is to maximise student outcomes – broadly defined – in the most cost-effective fashion, given the resources available. In this respect, all ten funding model principles are important at some level. However, clearly some are more imperative than others and hence should be afforded greater attention in policy design deliberations.

This notion is also highlighted in the relevant policy statements (refer to Section 2.1.3), where the principles of equity and effectiveness (excellence) are consistently emphasised (for example, the Melbourne Declaration and the National Education Agreement). The Terms of Reference for the Review of Funding for Schooling themselves provide further indication of the key principles that should be reflected in school funding model design, with an emphasis on principles such as fairness, financial sustainability and effectiveness.

The importance of prioritisation among policy design criteria is further underscored by the inherent tradeoffs that exist among several key principles. For example, a trade-off is generally faced between efficiency and equity – improving outcomes for students with disadvantage may require greater resourcing, which may in turn undermine the efficiency of the funding model. Achieving effectiveness may conflict with simplicity, for example

where a complex array of initiatives must be funded and implemented to deliver improved educational outcomes for a variety of students with different needs.

An instructive way to determine the significance of the various principles is through an examination of their impact on funding outcomes. On this basis, the funding model principles can be divided into primary and secondary principles.

Primary principles

Several principles could be regarded as integral to funding outcomes, as they directly impact on the level of funding that is allocated to schools and the means and effectiveness with which funds are allocated. These primary principles are:

- Equity
- Effectiveness
- Adequacy
- Efficiency
- Incentive

This categorisation is also consistent with the public policy emphasis accorded to certain principles, as noted above.

Secondary principles

In contrast, the other principles could be considered secondary in terms of their relationship to funding outcomes, as they are process-oriented and their role is to support the primary principles. These principles also help underwrite the delivery of high-quality education by schools and, therefore, assist in delivering on the ultimate aim of the education system – that is, the achievement of high educational outcomes. These secondary principles are:

- Certainty
- Flexibility
- Transparency
- Accountability
- Simplicity

This classification suggests that primary principles should be emphasised in the funding model assessment process and this is reflected in the analysis that follows in Section 6. Ultimately, however, finding an appropriate balance between all principles (primary *and* secondary) is important to optimal funding model design and performance assessment.

5 Funding model characteristics

This section describes the key features of the various funding models for schooling in Australia, as a precursor to the assessment of funding models in Section 6. The funding models are also consolidated into two broad types, as foreshadowed in section 2.2: (i) primary public funder models and (ii) supplementary public funder models.

5.1 Overview of funding models

The funding model descriptions in this section are based on the mapping of funding arrangements that has recently been completed on behalf of MCEECDYA (Keating et al, 2011). This work was commissioned by MCEECDYA in order to realise the commitment under the NEA to review school funding and regulation. The descriptions of funding models in the mapping work have been endorsed by each jurisdiction.

As funding model design is often premised on the historical, demographic and geographic characteristics particular to each jurisdiction (as previously noted), these characteristics provide important context to the funding model descriptions. Please refer to Section 2.1.2 and Appendix B for an understanding of the education sector characteristics that prevail in each jurisdiction.

5.1.1 Funding for government schools

State and territory funding models

Broadly, state and territory funding models for government schools comprise three types of funding:

1. **Recurrent funding** – provides staffing and non-staffing resources to schools, generally through base and/or per capita allocations. Recurrent funding also usually includes an equity component, with mechanisms aimed at addressing educational need – such as loadings, weightings and multipliers – built into recurrent funding allocations.
2. **Capital funding** – generally covers minor capital works, with major capital works and upgrades usually funded through the state budget (although they may be administered at the regional level in some of the larger systems).
3. **Targeted funding** – provides for specific educational objectives or outcomes, generally related to addressing educational disadvantage and delivered through defined programs or initiatives. Targeted funding can be tied or untied, and often includes some form of accountability.

In some cases, it can be difficult to draw a clear distinction between targeted funding and equity mechanisms within recurrent funding (for example, funding available under a specific targeted program may be delivered to schools as a component of the recurrent staffing allocation).

High-level descriptions of the funding models are provided in Table 5.1 below. As noted above, these descriptions are based on the information presented in the MCEECDYA mapping work (Keating et al, 2011). Each individual funding model is highly complex – therefore, the below descriptions are necessarily broad and capture only the key features of each model.

One of the main points of distinction between funding models is whether resources are allocated to schools centrally or whether schools are provided with a budget to purchase resources. The New South Wales funding model most closely represents the type of funding model where resource decisions are made at a central level, with the Victorian funding model at the opposite end of the spectrum (with schools provided with a global budget for staff and non-staff resources).

However, the extent of decentralisation in terms of autonomy in resource-related decision-making can vary within the one model, depending on the type of resource. For example, allocation of staff resources may be centralised but non-staff resources may be purchased by schools through their school budget. The Queensland funding model provides an example of a ‘hybrid’ funding model, with various resource-related decisions made at central, regional and school levels:

- Funding for staff allocation is determined centrally, based on per capita formulae.
- Using this funding amount, regions allocate staff to schools using a combination of per capita minimum quotas and knowledge of local circumstances.
- Schools are able to purchase non-staff resources through School Grants, with schools responsible for the management and budgeting of this grant.

Even within the New South Wales and Victorian funding models, there are nuances – in New South Wales, schools are able to purchase some non-staff resources and in Victoria, staff are paid centrally through the credit component of the global budget package. Table 5.2 below provides a high-level overview of the level of autonomy within each funding model.

Several funding models are in a state of transition or currently under review. South Australia is in the midst of transitioning to a more devolved model, with schools being granted greater autonomy over the use of allocated resources. Western Australia and Tasmania are currently reviewing their funding models and have indicated that they intend to move towards simplified models that also provide greater flexibility to schools.

For example, Western Australia anticipates that its revised funding model will consolidate various multipliers for different categories of educational need and give schools greater autonomy over the allocation and configuration of resources. Tasmania has also indicated that it intends to move towards a simplified model that streamlines needs-based funding distribution (by increasing base allocations and focusing on SES and location) and provides schools with more autonomy over staffing configurations.

Table 5.1: State/territory funding models for government schools

State/ territory	Recurrent			Capital	Targeted
	Staffing	Non-staffing	Equity		
NSW <i>Resources allocated to schools through central allocations</i>	<ul style="list-style-type: none"> Centralised allocation of teaching staff through formulae based on student enrolments Formula for allocating teaching staff based on enrolment numbers and distribution across years, school type, school characteristics and student enrolment profiles Non-teaching staff allocated centrally based on school enrolments 	<ul style="list-style-type: none"> Grant allocations ('global funding') generally based on state-wide formulae, comprising base and per capita components 	<ul style="list-style-type: none"> Mostly built into staffing allocations, plus multipliers and weightings for school grants E.g. formulae for allocation of teaching staff varies based on school type, school characteristics, and student characteristics Smaller Schools' Supplement available 	<ul style="list-style-type: none"> Allocations to schools for capital works and maintenance based on regular condition assessments and planning related to population growth 	<ul style="list-style-type: none"> Support for low SES schools provided through Priority Schools Funding Program and Priority Action Schools Program Learning Assistance Program supports students with learning difficulties
VIC <i>Resources allocated to schools through the Student Resource Package (SRP)</i>	<ul style="list-style-type: none"> SRP provides schools with global budget Main component of SRP is 'core student learning allocation' – includes tapered school base allocations and student per capita allocations 	<ul style="list-style-type: none"> Cash component of SRP is managed by individual schools and can be used for a wide variety of cost items 	<ul style="list-style-type: none"> Most equity allocations occur through loadings built into student per capita allocation within SRP, which are based on: <ul style="list-style-type: none"> -school disadvantage measured by Student Family Occupation (SFO) 	<ul style="list-style-type: none"> Schools receive allocations for minor maintenance through SRP (based on formulae and school specific loadings) 	<ul style="list-style-type: none"> Allocations for targeted initiatives mostly built into SRP but includes audit and accountability requirements Targeted initiatives generally directed towards student

State/ territory	Recurrent			Capital	Targeted
	Staffing	Non-staffing	Equity		
	<ul style="list-style-type: none"> • Student per capita allocations based on different rates for different year levels and includes credit and cash components • Staffing resources linked to credit component of SRP 		<ul style="list-style-type: none"> • -student characteristics such as disability and ESL • School base allocations adjusted for small schools and rural schools • Funding for some equity-related school specific programs also allocated through SRP, based on particular school needs 		engagement and at risk students
QLD <i>Resources allocated to schools under tiered approach (central, regional and school level)</i>	<ul style="list-style-type: none"> • Funding for staff allocation centrally determined based on per capita formulae • Regions then allocate staff to schools using a combination of per capita minimum quotas and application of local knowledge of particular school's staffing needs • School size factored into the formulae • Non-teaching staff generally funded through staff 	<ul style="list-style-type: none"> • Recurrent operating costs met through grant-based system (with grants calculated through formulae against multiple purposes) • Core funding provided to meet day-to-day costs – 54 separate elements, classified as either 'general operating grants' and 'other grants' • School Grant is the largest core funding 	<ul style="list-style-type: none"> • Equity allocations mostly built into staffing and grant allocations to schools • E.g. weightings in school staff allocations include an SES factor; an adjustment to the formula for core grants to rural and remote schools 	<ul style="list-style-type: none"> • Funding can be centrally managed, allocated to a region for distribution based on local needs or provided directly to schools • Schools receive grants for minor works (which may be accumulated over a period of time) and maintenance funding 	<ul style="list-style-type: none"> • Targeted funds provided through grant system – about 25 targeted programs in total • Programs are a mixture of QLD and Commonwealth funding • Examples include Behaviour Management and Priority Country Area Program

State/ territory	Recurrent			Capital	Targeted
	Staffing	Non-staffing	Equity		
	allocations at regional level based on state-wide formulae	grant and is provided without reporting conditions			
WA <i>Resource allocation method currently under review</i>	<ul style="list-style-type: none"> Staff allocations based on state-wide formulae, comprising a base allocation, per capita student allocation and School Administrators allocation Non-teaching staff allocated through various school support staff formulas For Independent Public Schools (IPS), same resource allocation method as above, but FTE generated by formula is converted to notional dollar allocation and school receives one line budget 	<ul style="list-style-type: none"> Funding provided through annual School Grant, which comprises a base allocation, per student allocation and site specific allocations For IPS, school grant allocation included in one line budget 	<ul style="list-style-type: none"> Most equity allocations delivered through multipliers and weightings for staff and school grant allocations E.g. per capita element of staffing formula determined by: school's socio-economic index (based on school location); student characteristics such as disability and ESL; and school characteristics (type of school) 	<ul style="list-style-type: none"> Schools are allocated minimal funds through the school grant for maintenance and minor capital works 	<ul style="list-style-type: none"> Special purpose payments provided to eligible schools under several needs-based programs, including: <ul style="list-style-type: none"> -School Support Programs Resource Allocation -Aboriginal Education Programs -ESL Programs -Participation Programs (student engagement) Funding allocated based on number of eligible students or schools
SA <i>Resources allocated to schools through a Resource</i>	<ul style="list-style-type: none"> Main mechanism for resource allocation under the RES is through Student Centred Funding Model 	<ul style="list-style-type: none"> School Support Grant comprises base and per student capita components – includes materials, equipment, 	<ul style="list-style-type: none"> Resources allocated mainly under Commonwealth and State Government Initiatives component 	<ul style="list-style-type: none"> Funding for basic maintenance and some minor works through formula based grants 	<ul style="list-style-type: none"> Targeted funding provided through 'Whole Site Literacy and Numeracy Funding' – about 9

State/ territory	Recurrent			Capital	Targeted
	Staffing	Non-staffing	Equity		
<i>Entitlement Statement (RES)</i>	<p>(SCFM), with funding allocation for each student enrolment</p> <ul style="list-style-type: none"> Tier 1 funding provided under SCFM includes teaching and non-teaching staff allocations, which comprise per student rates and base funding Per student rates vary according to year level and include targeted allocations e.g. for disadvantaged schools Base funding differs depending on school type and small school base (and is also tapered) Staffing allocations also adjusted for items that are paid as supplementations (approx 17 in total) e.g. Graduate Support 	<p>grounds maintenance, etc</p> <ul style="list-style-type: none"> Range of other grants are also provided e.g. for ICT support and furniture replacement 	<p>of RES, in the form of grants or Tier 2 funding (which may be formula based or needs based)</p> <ul style="list-style-type: none"> Main recipients are Indigenous students, SWD, ESL students, student from low SES background, rural and isolated students Some equity allocations through loadings and staff formulae adjustments e.g. number of grants contain a loading for country schools 	<p>allocated under RES</p>	<p>components which variously comprise per capita allocations and other formulae-based allocations</p> <ul style="list-style-type: none"> Majority of low SES background funding provided through targeted allocations based on Index of Educational Disadvantage (combines parental economic resources, parental education and occupation, Aboriginality and student mobility) Numerous other targeted programs and grants e.g. ESL New Arrivals Program, Social Inclusion Supplement
<i>TAS Resource allocation</i>	<ul style="list-style-type: none"> Staff allocations based on formula, comprising 6 major components 	<ul style="list-style-type: none"> School Resources Package (SRP) is grant-based mechanism, with 	<ul style="list-style-type: none"> Different weightings in the staff allocation formula (educational 	<ul style="list-style-type: none"> Maintenance and minor works funding allocated to schools 	<ul style="list-style-type: none"> Range of targeted programs, including: -English as an

State/ territory	Recurrent			Capital	Targeted
	Staffing	Non-staffing	Equity		
<i>method currently under review</i>	<p>including per capita allocations, needs allocations and school characteristic allocations</p> <ul style="list-style-type: none"> Two staffing supplementations to address policy priorities in early and later years of schooling Non-teaching staff allocated through formulae that give different weightings for different school types, enrolment size and needs 	<p>different formulae for different components</p> <ul style="list-style-type: none"> Major component of SRP is General Support Grant – global funding pool which can be used at school's discretion 6 other components to SRP (such as energy and water), plus numerous other miscellaneous items (some of which are needs-based) 	<p>needs index, distance, size and small school) and through different SRP allocations (e.g. funds to support SWD)</p>	<p>as one component of SRP</p> <ul style="list-style-type: none"> Funding programs available for minor works and capital investments – works subject to approval through Department of Treasury and Finance 	<p>Additional Language Program</p> <ul style="list-style-type: none"> -various programs to support Indigenous students -Launching into Learning (early years needs-based) -Raising the Bar Closing the Gap (to improve literacy and numeracy achievement in schools where there is most need)
ACT <i>Resources allocated through staffing points and School Based Management (SBM) payments</i>	<ul style="list-style-type: none"> Centrally controlled through allocation of staffing points Staffing points based on minimum staffing structure, enrolments, school type, targeted additional resources for student characteristics and other specific purpose requirements Allocation of a business 	<ul style="list-style-type: none"> Operational costs covered by SBM payments Allocations made on basis of different formulae, including per capita basis, historical usage and weightings based on student and school characteristics 	<ul style="list-style-type: none"> Most equity allocations delivered through staffing points and SBM, using multipliers and other adjustments Targeted staffing points allocations primarily relate to disability and ESL -resources for SWD derived from SCAN, which assesses individual resource 	<ul style="list-style-type: none"> SBM payments cover minor and scheduled maintenance Schools can use accumulated SBM funds for minor capital works 	<ul style="list-style-type: none"> Targeted funding grants for disadvantaged schools and students include Schools Equity Fund Program and Student Support Fund

State/ territory	Recurrent			Capital	Targeted
	Staffing	Non-staffing	Equity		
	manager is only base non-teaching allocation – other non-teaching staff funded through staffing points		needs of each student		
NT <i>Resource allocations have needs-based focus, given school and student characteristics</i>	<ul style="list-style-type: none"> Staffing allocations comprise base and equity allocations Base allocations use a staffing formula, primarily based on student enrolment adjusted for attendance, with adjustments made for small schools Equity allocations based on funding from targeted programs Non-teaching staff allocated in a similar way to teaching staff 	<ul style="list-style-type: none"> Base funding in form of grants provided to schools to meet operational costs (excluding infrastructure), derived from enrolments and per capita rates School Council Grants provided to run targeted programs and purchase curriculum resources – includes base and equity components 	<ul style="list-style-type: none"> Mostly incorporated into staffing allocations, to recognise challenges for small and isolated schools Allocations for target populations of students mostly funded by Commonwealth Equity components of grant funding based on weighted enrolments, calculated using ICSEA and NAPLAN risks Range of boarding and travel-related allowances for remote students 	<ul style="list-style-type: none"> Schools allocated funding for essential services e.g. water, electricity, cleaning 	<ul style="list-style-type: none"> Extra teaching and non-teaching staff allocated to schools under 4 targeted programs: <ul style="list-style-type: none"> -Special Education -New Arrivals -ESL (Indigenous focus) -High Needs

Table 5.2: Autonomy in state/territory funding models for government schools

State/ territory	Level of devolvement				
	Teaching staff	Non-teaching staff	Non-staff resources	Capital works/ maintenance	Targeted programs
NSW <i>Mostly centralised</i>	<ul style="list-style-type: none"> Centralised configuration and appointment (with some capacity for variation through negotiation between school and DET) Centralised appointment and payment Schools can request additional staff if they have a budget surplus 	<ul style="list-style-type: none"> Centralised configuration, appointment and payment 	<ul style="list-style-type: none"> Centralised allocation and payment of costs (with some school-based purchases) 	<ul style="list-style-type: none"> Central management of capital works, cleaning and maintenance (centralised contract management and procurement) 	<ul style="list-style-type: none"> Schools accountable for use of targeted funds
VIC <i>Mostly devolved</i>	<ul style="list-style-type: none"> School-based configuration and appointment of teaching staff (apart from some leadership positions) Centralised payment of staff (through credit component of SRP) 	<ul style="list-style-type: none"> School-based configuration and appointment of non-teaching staff Centralised payment of staff (through credit component of SRP) 	<ul style="list-style-type: none"> School-based management and payment (through cash component of SRP) Schools able to accumulate cash funds 	<ul style="list-style-type: none"> School-based management of minor maintenance Regional management of major maintenance and emergency repairs Central management of major capital works 	<ul style="list-style-type: none"> Schools accountable for use of targeted funds

State/ territory	Level of devolvement				
	Teaching staff	Non-teaching staff	Non-staff resources	Capital works/ maintenance	Targeted programs
QLD <i>Mostly centralised, with some discretion at regional and school level</i>	<ul style="list-style-type: none"> Regional responsibility for configuration of teaching staff, based on central allocations Centralised appointment and payment 	<ul style="list-style-type: none"> Some capacity for school-based appointment of non-teaching staff Centralised payment 	<ul style="list-style-type: none"> School-based management and budgeting of School Grant 	<ul style="list-style-type: none"> Combination of central, regional and school-based responsibility for minor works and maintenance Central management of major capital works and upgrades and works contracts such as cleaning 	<ul style="list-style-type: none"> Schools accountable for use of targeted funds
WA <i>Combination</i>	<ul style="list-style-type: none"> School-based configuration (central FTE allocation not linked to teacher levels) Centralised appointment and payment IPS – school-based configuration within school budget; central payment of staff 	<ul style="list-style-type: none"> Some flexibility for schools to convert teaching staff allocation to non-teaching staff and vice versa Centralised payment IPS – school-based configuration within school budget; central payment of staff 	<ul style="list-style-type: none"> Centralised allocation and payment of costs IPS – school-based management and budgeting 	<ul style="list-style-type: none"> School-based management of maintenance and minor capital works Central management of major capital works and upgrades and works contracts such as cleaning 	<ul style="list-style-type: none"> Schools accountable for use of targeted funds

State/ territory	Level of devolvement				
	Teaching staff	Non-teaching staff	Non-staff resources	Capital works/ maintenance	Targeted programs
SA <i>Combination</i>	<ul style="list-style-type: none"> School-based configuration Mostly centralised appointment and payment 	<ul style="list-style-type: none"> School-based configuration Mostly centralised payment 	<ul style="list-style-type: none"> Centralised allocation and payment of costs 	<ul style="list-style-type: none"> School-based management of maintenance and some minor capital works Central management of major capital works and most minor capital works 	<ul style="list-style-type: none"> Schools accountable for use of targeted funds
TAS <i>Combination</i>	<ul style="list-style-type: none"> Mostly school-based configuration Mostly centralised appointment and payment 	<ul style="list-style-type: none"> Mostly school-based configuration Mostly centralised appointment and payment 	<ul style="list-style-type: none"> School-based management of resources Centralised payment of costs 	<ul style="list-style-type: none"> School-based management of maintenance and minor capital works Central management of major capital works 	<ul style="list-style-type: none"> Schools accountable for use of targeted funds
ACT <i>Combination</i>	<ul style="list-style-type: none"> School-based configuration Flexibility to purchase additional staff with surplus staffing points or through SBM cash budgets Centralised appointment and payment 	<ul style="list-style-type: none"> School-based configuration Centralised appointment and payment 	<ul style="list-style-type: none"> School-based management of resources Centralised payment of costs 	<ul style="list-style-type: none"> School-based management of maintenance and minor capital works Central management of major capital works 	<ul style="list-style-type: none"> Schools accountable for use of targeted funds

State/ territory	Level of devolvement				
	Teaching staff	Non-teaching staff	Non-staff resources	Capital works/ maintenance	Targeted programs
NT <i>Mostly centralised, with some discretion at school level</i>	<ul style="list-style-type: none"> • Mostly centralised configuration • Flexibility for schools to negotiate staffing structure • Centralised appointment and payment 	<ul style="list-style-type: none"> • Mostly centralised configuration • Flexibility for schools to negotiate staffing structure • Centralised appointment and payment 	<ul style="list-style-type: none"> • School-based management of resources • Centralised payment of costs 	<ul style="list-style-type: none"> • School-based management of maintenance • Central management of capital works 	<ul style="list-style-type: none"> • Schools accountable for use of targeted funds

Commonwealth funding model

Under the Intergovernmental Agreement on Federal Financial Relations framework, Commonwealth funding for government schools is derived from several sources:

- General revenue assistance, including the provision of GST revenue grants, to be used by states and territories for any purpose.
- National specific purpose payments (SPPs).
- National Partnership (NP) payments.

Some funding is also provided under Commonwealth Own Purpose Expenses (COPEs), such as the National Asian Languages and Studies in Schools Program.

In terms of a Commonwealth ‘funding model’ for government schools, however, the majority of schooling-related funding is provided through the National Schools SPP and NPs.

The National Schools SPP provides general recurrent funding for government schools on a per capita basis (with previously separate capital and targeted funding streams rolled into the National Schools SPP in 2009). The National Schools SPP is indexed annually, based on a growth factor reflecting variation in enrolments and movement in the Average Government School Recurrent Costs (AGSRC).⁴³ Primary students are funded at 10% of the primary school AGSRC and secondary students are funded at 10% of the secondary school AGSRC. Funding is allocated to states and territories based on their share of FTE government school enrolments, with payments made to state and territory treasuries on a monthly basis. States and territories are provided with discretion over the distribution of this funding.

NPs provide targeted funding to government schools (and non-government schools), comprising fixed payments for specified periods. There are eight major schools NPs, including three Smarter Schools NPs for Improving Teacher Quality, Low SES School Communities and Literacy and Numeracy. NPs generally have a co-investment requirement that obliges states and territories to continue their own expenditures. The method of allocating funds varies depending on the structure of the NP e.g. under the Low SES School Communities NP, funding is allocated based on the percentage of enrolments in schools in the most disadvantaged areas. Payments under NPs are not indexed.

5.1.2 Funding for non-government schools

State and territory funding models

Generally, state and territory funding models for non-government schools provide recurrent funding to schools through per capita allocations. The total funding pool under each model is generally derived from either: (i) a fixed percentage of the state/territory

⁴³ The primary and secondary AGSRC amounts are national averages based on total public expenditure per student. Capital-related costs such as user cost of capital and depreciation are excluded, and accrual expenses are adjusted to a cash basis.

AGSRC⁴⁴; or (ii) an overall quantum of funding that has been agreed with the non-government sector, based on the previous year's allocation (and often indexed). Equity elements tend to be built into the per capita recurrent funding allocations, in the form of a needs-based component e.g. funding may be distributed based on Education Resource Index (ERI) categories or weightings for characteristics such as SES may be incorporated in the allocation mechanism.⁴⁵

Capital funding is minimal and tends to be provided through capped interest subsidy schemes. Eligibility to receive funding through these schemes is generally based on school need. Most targeted funding is directed towards students with disability.

High-level descriptions of the funding models are provided in Table 5.3 below, based on the information presented in the MCEECDYA mapping work (Keating et al, 2011).

⁴⁴ The state or territory AGSRC is a measure of the cost of delivering education to students in government schools in that specific state or territory. Typically, under state/territory funding models for non-government schools, the AGSRC is adjusted, with various costs included or excluded from the bucket (sometimes based on negotiation with non-government education authorities).

⁴⁵ The Education Resource Index (ERI) was the precursor to the Commonwealth SES funding model for non-government schools. It is a needs-based measure that is premised on a school's capacity to generate private income.

Table 5.3: State/territory funding models for non-government schools

State/ territory	Recurrent (including equity mechanisms)	Capital	Targeted
NSW	<ul style="list-style-type: none"> Per capita grants from pool of funds equal to 25% of NSW AGSRC Distributed based on 12 categories of former Commonwealth ERI, with weighting scale of 1.0 for category 1 to 2.3 for category 11 (Catholic schools funded at category 11) Separate rates for primary and secondary 	<ul style="list-style-type: none"> Capped interest subsidy scheme for schools in ERI categories 4-12 who contribute at least 15% of project cost (replaced an open-ended scheme that provided a subsidy for all applications received) 	<ul style="list-style-type: none"> Supervisor Subsidy Scheme - subsidies for teachers and supervisors who work with children with autism and intellectual disabilities
VIC	<ul style="list-style-type: none"> Funding allocations from pool of funds equal to historical amount that is indexed annually In 2010, pool estimated to be 17% of Victorian AGSRC – new government has stated this will increase to 25% Funding allocations based on Financial Assistance Model (FAM), comprising per capita component (41% of funding pool) and needs component (59% of funding pool) Core per capita component includes Stages of School factor and Wealth Modifier factor (previously based on school's SES level, now based on Financial Questionnaire data) Needs component includes student family 	<ul style="list-style-type: none"> Interest subsidy scheme for eligible schools, capped at \$1 million annually 	<ul style="list-style-type: none"> Support services grant for students with special learning needs

State/ territory	Recurrent (including equity mechanisms)	Capital	Targeted
	background (will incorporate SFO data from 2012), SWD, Indigenous, rurality and isolation factors		
QLD	<ul style="list-style-type: none"> Per capita grants from pool of funds equal to 21.2% of QLD AGSRC About 75% of pool is allocated as base per student amount, with different rates for primary and secondary Remaining 25% of pool distributed on needs basis, with various weightings for 8 elements (school resource element and school SES score given greatest weighting, other elements include isolation, ESL and SWD) Needs component to be increased to 40% of total funding pool in future years 	<ul style="list-style-type: none"> Capital Assistance Scheme – direct grants provided to schools for capital projects on a needs basis External Infrastructure Subsidy Program - helps schools meet other capital works-related costs Capital Interest Assistance Scheme – helps eligible schools to provide/upgrade educational facilities or boarding accommodation 	<ul style="list-style-type: none"> About 6.5% of recurrent funding pool allocated to State Special Needs Program – funding allocated to schools based on numbers of SWD by non-government education authorities
WA	<ul style="list-style-type: none"> Per capita grants from pool of funds no less than 25% of WA AGSRC Per capita rates vary by school level (primary and secondary) with 10 funding categories based on the ERI Higher levels of funding provided to remote schools and schools catering for students at risk Supplementary per capita funding approved from time to time to help bridge gap between delivery of teacher salary increases (which must occur at same time 	<ul style="list-style-type: none"> Low Interest Loan Scheme for capital developments and land acquisitions, capped at \$25 million annually Interest subsidised at varying rates according to project priority e.g. whether it provides places for students in population growth areas 	<ul style="list-style-type: none"> Additional funding allocations provided to 'high support needs' students

State/ territory	Recurrent (including equity mechanisms)	Capital	Targeted
	<p>as government sector) and resulting increase in AGSRC indexation</p> <ul style="list-style-type: none"> Special education per capita funding, through loadings to base grants according to student's level of severity 		
SA	<ul style="list-style-type: none"> Funding pool based on previous year's allocation adjusted for Treasury inflation rate for non-salary component, 25% of cost of salary movements, annual enrolment variations and offset for 'in kind' assistance provided by Department of Education and Children's Services Per capita component (47.5%) based on enrolments, with higher rates for secondary than primary Remainder allocated based on need according to 8 elements, including a six scale school Index of Disadvantage (linked to student address), social equity and special needs 	<ul style="list-style-type: none"> Interest subsidy available under needs component of recurrent funding – available for eligible amounts spent on capital projects, rent and leases (total amount equals 4.5% of available needs funding) 	<ul style="list-style-type: none"> Additional discretionary funding provided to support students with special needs
TAS	<ul style="list-style-type: none"> Per capita grants from funding pool equal to 19.11% of adjusted Tasmanian AGSRC (costs not applicable to non-government schools are excluded), with the AGSRC based on ROGS data Allocations delivered under the General Education Grant scheme – distributed to schools based on enrolments, level of schooling (primary, secondary, senior 	<ul style="list-style-type: none"> Loan Interest Subsidy Scheme currently being phased out Replaced by Capital Assistance Scheme which provides block funding to non-government education authorities to deliver a mix of loan interest subsidies and capital grants Funding indexed in line with Hobart's Building Price Index 	<ul style="list-style-type: none"> Discretionary State Budget allocations for special needs students

State/ territory	Recurrent (including equity mechanisms)	Capital	Targeted
	secondary) and Commonwealth-determined SES score <ul style="list-style-type: none"> Costs associated with educating special needs students in the government sector are left in the AGSRC bucket i.e. notional special education component 		
ACT	<ul style="list-style-type: none"> Historical grant (based on previous year's per capita rates), with funding pool indexed annually against budget growth Per capita allocations based on ERI (with schools established since 2000 based on Commonwealth SES measure) 	<ul style="list-style-type: none"> No specific capital funding mechanisms 	<ul style="list-style-type: none"> Targeted funding includes Equity Fund; SWD funding provided through SCAN; and an SWD payment based on relative needs established by the Department
NT	<ul style="list-style-type: none"> Per capita grants from funding pool equal to 21% of NT AGSRC, with separate rates for primary, secondary and remote sectors 	<ul style="list-style-type: none"> Capital Assistance Scheme assists repayments on capital loans and includes 3 levels: <ul style="list-style-type: none"> (1) up to 50% capital assistance for up to 10 years, plus up to 5% interest subsidy on outstanding loan principal for up to 10 years; (2) up to 25% capital assistance for up to 10 years, plus up to 5% interest subsidy on outstanding loan principal for up to 10 years; and (3) up to 5% interest subsidy on outstanding loan principal for up to 10 years 	<ul style="list-style-type: none"> Severely Disabled Child subsidy – ongoing financial assistance, provided on a per capita basis Isolated Student's Education Allowance – student-based boarding subsidy Subsidies to assist boarding schools or schools in remote areas

Commonwealth funding model

Commonwealth Government funding for non-government schools is provided through three main sources:

- National Schools SPP under the Schools Assistance Act 2008 (comprising recurrent, capital and targeted funding components).
- NP payments.
- COPEs.

Unlike Commonwealth funding for government schools, the National Schools SPP for non-government schools is provided under separate legislation – the Schools Assistance Act – which enables the Commonwealth Government to retain a direct funding relationship with the sector. Recurrent funding under the Schools Assistance Act is distributed to schools through an SES funding model. Under this model, schools are attributed an SES score based on the socio-economic profile of the ABS Census Collection Districts in which its students reside. Recurrent funding is provided on a per student basis, with a sliding scale based on SES scores. Funding rates range from 70% of AGSRC for schools with an SES score of 85 and below, to 13.7% of AGSRC for schools whose SES score is 130 and above.

Funding maintenance and funding guarantee arrangements are in place under the SES model:

- Funding maintained schools – these are schools which would have received less funding when joining the SES funding system, compared to what they received previously. They retain their previous higher per student level of funding (indexed by AGSRC), unless their SES score results in increased overall funding for the school. Funding maintained schools do not transition to their actual SES funding score over time, as their previous funding levels are fully indexed by AGSRC. Approximately 40% of non-government schools are funding maintained.
- Funding guaranteed schools – this applies to schools whose SES scores increase from one funding quadrennium to the next. They have their per student dollar amounts frozen in dollar terms until the value of their entitlements based on their new SES score (indexed by AGSRC) is equal to, or greater than, their previous entitlements. Just over 1% of non-government schools are funding guaranteed.

Loadings for remoteness and Indigenous Supplementary Assistance are also included as part of recurrent grants.

Capital funding is provided under the Capital Grants Program, with funding primarily aimed at educationally disadvantaged students. Funds are allocated to Block Grant Authorities (BGAs) based on student enrolments and need, with the BGAs then distributing these funds to schools that have applied for grants on a needs basis. Capital grants are supplemented annually in line with movements in the Producer Price Index Non-Residential Construction Australia.

Targeted funding is provided under programs such as the Literacy, Numeracy and Special Learning Needs Program and the School Languages Program. Funding is allocated to non-government sector education authorities rather than directly to schools. This funding is indexed annually using the AGSRC index.

Please refer to the discussion on Commonwealth funding for government schools in Section 5.1.1 for a description of NP funding.

Generally, Commonwealth recurrent funding for independent schools is provided at a school level. However, funding for systemic schools is provided to system authorities, which have their own funding allocation mechanisms. Therefore, the quantum of funding ultimately received by systemic schools (mainly Catholic) is affected by these allocation mechanisms. The box below provides an overview of Catholic system funding allocations (noting this applies only to Catholic systemic schools).

It should also be noted that although Catholic systems account for the vast majority of systemic schools, there are smaller systems e.g. for the Lutherans and Seventh Day Adventists.

Box 6: Catholic system funding allocations

Recurrent funding is provided to Catholic system authorities in each jurisdiction (generally state/territory Catholic Education Commissions, although in New South Wales funding is allocated at a diocesan level through Catholic Education Offices). The system authority then distributes funds to schools using its own allocation mechanisms, which are relatively sophisticated and typically incorporate staffing formulae and a needs-based component.

For example, Queensland allocates funding based on a range of criteria including the number of FTE students (with a weighting for secondary students), teacher costs, school SES and school resource expenditure. In South Australia, there are separate funding allocation mechanisms for primary schools and secondary/combined schools. The mechanism for primary schools includes: (1) a staffing formula which recognises school size; and (2) various loadings, including a needs allocation which comprises just over 15% of the funding pool. The needs allocation includes per capita funding based on the number of School Card recipients (i.e. students from low income families), with additional support for rural schools. Under the secondary/combined schools mechanism, 70% of funding is allocated on a per capita basis, 15% on the number of School Card recipients and 15% on a school's SES score. Loadings for regional and remote schools are provided separately.

Catholic funding allocation mechanisms are therefore akin to state and territory funding models for government schools, as they attempt to provide funding to schools based on a more comprehensive assessment of educational need. Consequently, the recurrent funding received by individual Catholic schools is not necessarily a function of SES, as is generally the case for independent schools (noting the proportion of funding maintained schools). They also provide proxy base funding for Catholic schools, by cross-subsidising small schools, rural schools and schools that have low fee income.

5.2 Consolidation of funding models

Setting aside the mechanisms for funding allocation used by Catholic systems, there are 18 individual school funding models in Australia. As the above descriptions demonstrate, each funding model is unique in its detailed design.

However, the funding models can be categorised into two broad types, based on government funding responsibility. As canvassed in Section 2.2, a distinction can be drawn between primary and supplementary public funders. State and territory governments bear primary funding responsibility for the government sector, whereas the Commonwealth

Government has primary funding responsibility for non-government schools.⁴⁶ Funding models can therefore be consolidated as follows:

- **Primary public funder models**
Primary public funder models include state and territory funding models for government schools and the Commonwealth funding model for non-government schools (when the full suite of funding initiatives is taken into account). These models represent the lion's share of school funding in Australia.
- **Supplementary public funder models**
Supplementary public funder models include state and territory funding models for non-government schools and the Commonwealth funding model for government schools.

Although this categorisation enables the otherwise complex nature of school funding mechanisms to be consolidated into several broad types – in turn providing a tractable basis for the assessment – the nuances between funding models are important in terms of drawing out the features that most strongly adhere to optimal funding model design. The analysis of these differences (within the broad categories of primary public funder models and supplementary public funder models) forms the basis of the following section.

⁴⁶ In the case of high SES non-government schools, it should be noted that the main source of funding is private income, rather than Commonwealth Government funding. Nevertheless, in comparison to state/territory governments, the Commonwealth still retains primary funding responsibility (even though the amount of funding received may be nominal).

6 Assessment of funding models

The preceding chapters of this report have laid important foundations for the analysis presented in this section in relation to the performance of the current funding models. Section 2 outlines some of the unique characteristics of the schooling sector in each state and territory; many of which impact directly on funding model design and outcomes. Section 3 explores the linkages between funding and students' educational outcomes, identifying several key roles for funding model design. Section 4 articulates the framework which underpins the assessment in this section, while Section 5 overviews the current funding models as a descriptive precursor to this analysis.

On the basis of the discussion in these sections, this chapter draws on a range of research and evidence to analyse the performance of Australia's current schooling funding models. Reflecting their majority role in distributing funding, the principal focus is on primary public funder models (as defined in Section 5). Supplementary public funder models are discussed in broad terms at the end of the section and interactions between models are explored thereafter.

The assessment is undertaken with direct reference to the framework articulated in Section 4; with particular emphasis on equity, effectiveness, adequacy, efficiency and incentive given their focus in the policy framework (refer to Section 4.2). The other principles are analysed at a relatively higher level, with supporting case studies provided in appendices. While the structure of the discussion is based around the ten individual assessment principles, it should be reiterated that the overarching assessment must consider these principles in unison (i.e. only limited conclusions can be drawn from assessing them in isolation). Section 7 takes this view. In addition, while the indicators for each principle – as outlined in Section 4 – form the basis for the assessment, the focus of the analysis is on areas where the available data and research is sufficiently robust to support an analysis of this nature (see Box 7, below).

Box 7: Utilisation of the available evidence base

Ideally, robust and comprehensive evidence would be available in relation to each individual indicator identified in Section 4. However, this is not always the case. For example, there is at present only limited data available in relation to the unit cost of delivering schooling and its variation across school settings and student characteristics. Similarly, the unavailability of some data – such as time-series student-level outcomes data – limits the conclusions that can be drawn with respect to several principles, such as equity. In relation to some indicators, the available evidence is largely anecdotal.

In applying the assessment framework, therefore, the depth and strength of the analysis is a function of the available evidence base. That is, while the assessment is systematically underpinned by the indicators outlined above, the ultimate constraint is the availability and quality of the requisite data.

As such, the assessment concentrates on those indicators where the available data and research is sufficiently reliable and comprehensive to robustly support the analysis – at several points throughout the analysis, it is also noted that more granular data would enable even stronger conclusions to be drawn in relation to key principles.

Furthermore, the emphasis throughout this section is principally on recurrent and targeted aspects of funding. Not only do these components represent the vast majority of funding (refer to Chart 2.10), much of the capital expenditure in education occurs outside the domain of the funding model. For example, under state/territory funding models for government schools, funding for major capital works is generally included in the state budget and other major works tend to be central or regional responsibilities (even in the most devolved funding models). Generally, schools only receive funding for maintenance and minor works – hence, where capital funding under primary public funder models is canvassed, it is these elements that are most prominent.

Evidence garnered through desktop analysis and consultations is drawn on to inform the assessment, and a range of strong and weak examples are cited to support the findings. The analysis does not seek to undertake a discrete assessment of each of the 18 models employed across the sector, but rather to explore the variability in performance that currently exists and to illuminate lessons for future funding system architecture.

Box 8: The evolution of funding models over time

An important characteristic of Australia's school funding models is that they are in a near-constant state of evolution. State and territory governments review their funding models on a semi-regular – though in some cases ad hoc – basis, with often wholesale changes stemming from these deliberations. Between such reviews, however, funding models tend to evolve based on changes in policy and political views and priorities.

Consequently, an assessment conducted at a given point in time will reflect the position of each model within this cycle. Models which have recently been through a review process tend to be more streamlined and transparent, provide more autonomy to schools and their design has been informed by the latest data and empirical research. Conversely, those models which have not been reviewed for some time tend to be more complex (reflecting the ongoing addition of programs and initiatives over a number of years) and often less sophisticated in their approach. These trends bear important context to the analysis in this section.

Across jurisdictions, funding model reviews are generally informed by academic analysis commissioned by state or territory education departments. Stephen Lamb and Richard Teese, both connected to the University of Melbourne, are prominent academics in this field and are currently reviewing Western Australia's resource allocation methodology. Lamb is also undertaking some analysis for Tasmania, where a revised school funding model will be introduced in 2012. Modifications to Victoria's government school funding model in recent years have also been premised on analysis conducted by the University of Melbourne.⁴⁷

6.1 Primary public funder models

To reiterate, **primary public funder models** are those models which govern the allocation of funding where the funder is the major source of government funding for schools. Hence, the analysis below relates to models employed by state and territory governments to deliver funding to government schools and the model employed by the Commonwealth Government in its funding of non-government schools.

6.1.1 Equity

The extent to which the funding model works towards reducing the impact of differences in wealth, income, power or possessions on educational outcomes.

All funding models attempt to identify, and fund based on, student need and therefore to reduce the impact of student background on educational outcomes. The current approaches aim to redress disadvantage presented by factors such as socio-economic status; Indigenous status; disability; language barriers; and remoteness (noting that many of these factors are interrelated) via either recurrent funding mechanisms such as loadings/weightings/multipliers or targeted funding (defined as funding provided for specific educational objectives or outcomes and delivered through defined programs or initiatives).

⁴⁷ Deloitte Access Economics was ultimately unable to obtain access to these analyses, with the exception of some work undertaken by the University of Melbourne for Victoria in relation to school effectiveness (which was used to calibrate Stages of Learning weightings under its government school funding model). However, significant findings to emerge from these analyses were discussed with Deloitte Access Economics during the consultation phase of this study – examples of these findings are included throughout this section.

While in principle either of these approaches (recurrent funding mechanisms such as loadings or targeted funding) could serve as a standalone approach to equity funding (indeed in theory, a system of loadings and a system of targeted initiatives could achieve an equivalent funding outcome), in practice funding models tend to be characterised by a mix of the two. Loadings serve to provide a base level of funding for equity groups, with targeted initiatives providing supplementary support for specific objectives or outcomes.

Due to the complementary nature of these two approaches, both types of funding are likely to continue to be provided within individual funding models. However, there appears to be a trend towards the overall consolidation of equity funding. For example, student family occupation (SFO) is used in Victoria as the single basis of equity allocations within its model, noting that Indigenous and mobility funding continues to be provided separately (SFO is discussed in more detail below). Tasmania is also streamlining its needs-based funding distribution and Western Australia plans to consolidate various multipliers for different categories of educational need. This trend is likely to be a function of the increasing sophistication in the targeting of equity funding and enhanced awareness of the factors that have the greatest impact on educational outcomes (also explored in more detail below).

An example of a targeted program – Tasmania’s Raising the Bar Closing the Gap program – is described in the box below.

Box 9: Tasmania’s Raising the Bar Closing the Gap program

Tasmania’s Raising the Bar Closing the Gap program highlights how, via capacity building, equity can be addressed from a long term perspective. The program aims to improve literacy and numeracy achievement in schools most in need, with the goal of building capacity within these schools and in doing so, reducing the amount of additional resources (equity funding) that would otherwise be allocated to these schools in future years.

The program supports a small group of schools which are identified for inclusion in the program based on failure to achieve literacy and numeracy benchmarks, low SES or nomination by a regional office. A senior staff member within the school is appointed to run the program (drawing on local knowledge and experience) and a feature of the program is its focus on professional development of teachers, recognising the crucial relationship between teacher quality and student outcomes.

In addition to the primary schools program, a secondary schools program has recently been introduced (approximately \$10 million in funding is allocated through this program).

The specificity with which equity funding is currently targeted varies, but in general the proxies used are crude (i.e. funding is allocated based on the typical characteristics of broad equity cohorts rather than individual students).

- **Socio-economic disadvantage.**

Under some models, socio-economic disadvantage is determined via the region in which students reside, rather than the students’ actual characteristics.⁴⁸ The SES model, for example, provides funding to schools based on the socio-economic profile

⁴⁸ Victoria is a key exception, with socio-economic disadvantage determined by individual characteristics (an individual student’s family occupation is derived from school census data). In New South Wales, the school SES index is also based on individual student characteristic measures. South Australia, Western Australia, Tasmania and the NT currently use a mix of ABS and individual-level data.

of the ABS Census Collection Districts (CCDs) in which its students reside. While there is evidence to suggest this is a good proxy, it nonetheless overlooks the variation in family circumstances that exists within geographic boundaries – even at the CCD level. In Queensland and the ACT, socio-economic disadvantage is measured through ABS Socio-Economic Indexes for Areas (SEIFA) data aggregated up to the school level, and is therefore determined by the average SES of the geographical area in which a student resides, rather than individual characteristics.

- **Language barriers.**

Similarly, language barriers are generally addressed via a uniform loading or targeted programs for students for whom English is their second language (ESL). For example, Victoria funds schools to provide ESL programs based on data collected through its Language Background Other Than English (LBOTE) census. Eligibility parameters relate to the number of students who come from a language background other than English, do not speak English as their main language at home and have been enrolled in an Australian school for less than five years. New South Wales operates an ESL Targeted Support Program and an ESL New Arrivals Program – these programs provide specialist ESL teachers in addition to a school's normal staffing allocation, based on the number of identified ESL students.

However, while many ESL students face a genuine learning disadvantage, NAPLAN data shows that, across all schools, students from a language background other than English performed as well as, or better than, students whose language background is English (NSW DET, 2011). Although LBOTE by itself may not be an indicator of educational disadvantage, analysis by NSW DET does suggest that English proficiency and refugee status (and a combination of these factors) are potential indicators. This analysis provides strong evidence for distributing equity funding based on more granular data, rather than broad proxies.

Of course, the use of proxies reflects the inherent trade-off between specificity and simplicity; a point canvassed at greater length below.

With some exceptions and anomalies, schools at the disadvantaged end of the spectrum generally receive greater levels of per-student funding (refer to Appendix D). This indicates, at a broad level, that funding models are generally achieving the threshold objective of providing additional funding to areas of educational need. However, the extent of this gradient varies across jurisdictions and across equity indicators – in some cases the differential is pronounced; in others it is considerably more moderate. Notwithstanding cross-jurisdictional differences in student and school characteristics, the lack of a consistent gradient indicates uncertainty regarding the appropriate resourcing requirements across the equity spectrum and suggests that in at least some cases, equity funding is not appropriately aligned with the variation in student need.

Analysis of equity funding *in government schools* reveals that:

- In relation to ICSEA, there is a clear pattern of higher per-student government funding for government schools at the lower end of the spectrum in NSW, QLD, SA and WA, with a differential of up to 400% between the highest and lowest sextile. Such a pattern is less pronounced in the ACT, NT, Tasmania and Victoria.
- Per-student government funding is generally higher in government schools with a higher proportion of students of ATSI background, with the most systematic pattern demonstrated in NSW and QLD.

- In relation to geography, NSW, the NT, QLD, SA, Tasmania and Victoria provide – subject to some anomalies – higher levels of government funding (on a per student basis) as schools become more remote. While this pattern is reflected in WA between metropolitan and remote schools, very remote schools receive, on average, a lower per-student allocation.

In *non-government schools*, these patterns are somewhat less pronounced – however, this partly reflects the mix of enrolments (students from disadvantaged backgrounds are represented at considerably greater levels in the government school sector). Nevertheless, greater levels of per-student funding are evident in Catholic and independent schools as remoteness increases and ICSEA decreases. In the case of independent schools this is purely a reflection of the SES model; in the case of Catholic systemic schools, it reflects the reallocation models employed by the Catholic education authorities in each state and territory.

The available evidence does not permit a more sophisticated analysis of whether funding models are achieving the critical equity objective of reducing the impact of differences in wealth, income, power or possessions on educational outcomes. The unavailability of time-series student-level outcomes data means it has not been possible to determine the degree to which additional funding for equity groups has led to an improvement in outcomes for students (noting some of the inherent limitations in using student outcomes to assess funding model performance, described in Box 10 below).

Box 10: Assessing funding model performance based on student outcomes

With the collection of comprehensive, nationally consistent data through NAPLAN, the opportunities for analysing the performance of schooling systems have expanded considerably. However, in and of themselves, these data offer limited insight in relation to the performance of funding models. The effectiveness of schooling systems is a function of a myriad of factors, of which the funding model is just one (see Figure 3.1). For example, performance is impacted by a combination of factors including teacher recruitment, training and professional development; industrial relations legislation; the quality of the curriculum; and infrastructure and teaching resources.

Given this range of variables, a funding model cannot reasonably be held to account against student performance outcomes. A decline or improvement in student performance may be a function of factors which are entirely extraneous to funding allocations. This means that *funding models should be held to account for funding outcomes rather than student outcomes*.

This is not to say that this information does not have a major role to play in funding model design and review. In particular, student outcomes play a vital role in identifying the existence and extent of educational need (as the discussion in this section demonstrates). Moreover, in general terms, funding model design must underpin the delivery of schooling in a manner that supports and ideally promotes improved educational achievement. In this sense, there is a fundamental (although indirect) link between funding model design and review and student outcomes.

Emerging trends in equity funding

As data and information systems improve and the understanding of educational need expands, there is a trend toward increasing sophistication in the targeting of equity funding (ACER, 2011). This is most pronounced in relation to funding for students with a disability. There are examples in several jurisdictions where disability is assessed on an individual student basis and resources directed accordingly (e.g. the ACT SCAN system, which not only involves student assessment but also consultation with parents and health professionals). Again, particularly given the increasing prevalence of disability, the trade-off here is with simplicity.

More generally, funding administrators are beginning to draw more extensively on outcomes data to inform funding model design – or, more specifically, to inform their understanding of the variation of educational need and to increase the efficacy with which this need is targeted through funding allocations.

For example, analysis by the University of Melbourne undertaken on behalf of the Victorian Government found that SFO, defined as the occupation of the parent in the highest employment category, was the best predictor of student outcomes. Consequently, Victoria has adopted this as the basis for equity allocations in its government school funding model.

Previously, equity funding in Victoria had been allocated under the Special Learning Needs Index, which comprised six elements: family occupation; family status (whether single or dual parent); receipt of Education Maintenance Allowance (EMA); language background other than English; student mobility; and Indigenous background. The University of Melbourne research found that these measures did not target student need in an optimal fashion.

Importantly, it also found that SFO alone is the major determinant of student achievement, as shown in Table D.3 in Appendix D. It presents the relative contributions made by various categories of need towards predicting year 5 student achievement levels. The results show that seven factors – including family occupation, receipt of EMA and family status – account for 40% of the impact on student outcomes, with family occupation by itself accounting for 38.3% of the 40%. As a result, Victoria adopted SFO as a single measure of equity within its funding model (with Indigenous and mobility funding provided separately, given the specific needs of these students).⁴⁹

By way of further example, the Northern Territory has developed a new model for the needs-based component of its staffing allocation (likely to be implemented in 2012). Previously, the needs-based component was derived from allocations available under various targeted programs. However, under the new model, allocations will be determined based on three factors, one of which is a ‘needs component’ derived from ICSEA and NAPLAN results.

The Victorian and Northern Territory models are examples of where individual student performance data has been utilised to inform the most appropriate basis upon which to allocate equity funds. However, while the underlying basis is individual student outcomes, funding allocations are not provided on the basis of individual student need (i.e. while the empirical analysis finds SFO to be the most appropriate broad measure of need, it is a broad measure nonetheless).

However, there is growing recognition that student performance in assessments can provide a basis for determining with greater precision the resource needs of students and the schools they attend. As these data systems and the sector’s understanding of them improves, the opportunities for targeting equity funding in a more sophisticated fashion without generating unacceptable levels of complexity or administrative burden will be enhanced.

6.1.2 Effectiveness

The extent to which the funding model supports and encourages the provision of high quality educational programs and hence high levels of educational outcomes.

Effective schooling systems generate high quality student outcomes – and high calibre funding models are a critical aspect of the effectiveness of schooling systems. Indeed, adequate and appropriately administered funding underwrites the system’s capacity to generate high levels of educational outcomes.

The performance of schooling systems can be measured over time with respect to changes in student outcomes. However, the impacts of individual aspects of the schooling system – including funding model design – cannot readily be isolated in such an analysis. Limited conclusions can therefore be drawn from student outcomes data regarding funding model performance. The variability in student outcomes that exists today across Australia’s schooling systems (refer to Section 2.1.4) reflects a variety of interrelated factors. Accordingly, in assessing the performance of funding models with respect to effectiveness, more direct measures are required.

⁴⁹ The occupational categories and their weightings are outlined in Table D.2 in Appendix D.

The literature review presented in Section 3 identifies several factors which are instrumental to student outcomes and upon which funding model design can have a bearing: (i) teacher quality and its allocation across and within schools; (ii) socio-economic background; and (iii) school autonomy. School autonomy is discussed below under the heading of ‘flexibility’ and socio-economic background is discussed at some length under ‘equity’. Hence, the discussion here focuses on teacher quality and the extent to which its optimisation is supported and encouraged by the current funding models.

In relation to teaching staff, the challenge for funding models is to shape, or at the very least support, their effective allocation across and within schools. The number of teachers in the system and their quality are, for the most part, outside the control of the funding model.⁵⁰ The emerging evidence base suggests that in high performing schools – in terms of student engagement and retention – experienced teachers are allocated more evenly within schools, rather than being concentrated in senior years (refer to examples in Tasmania and Victoria outlined in section 3). As Section 5 outlines, and as the analysis presented in the MCEECDYA mapping work by Keating et al (2011) canvasses in considerably greater detail, the current funding models vary markedly in relation to how resource allocation decisions are made. Indeed, they vary along a spectrum from highly centralised, where the allocation of staff and other schooling resources is determined by a central agency, to decentralised models, where these decisions are largely made at the school level.

In the case of centralised models, such as the NSW model for government schools, the funder bears responsibility for ensuring each school has the mix of teaching resources required to deliver a high quality educational program given its enrolment base. In the case of more decentralised models, such as the Victorian model for government schools, the funder’s role is less direct. Indeed, in fully decentralised models, its remit is limited entirely to funding rates. In these circumstances, effectiveness hinges on the extent to which these rates are calibrated against optimal teacher allocation (both across and within schools) and therefore provide schools with suitable resources to attract and deploy an appropriate teaching staff.

In this regard, the funding models vary from effectively no evidence underpinning funding rates (i.e. funding levels are determined primarily on a historical basis), to funding rates being calibrated against the findings of detailed empirical analyses.

There are several examples where current funding allocations are inconsistent with identified patterns of best practice. For example, analysis undertaken by Stephen Lamb as part of Tasmania’s current funding model review found that the staffing allocation mechanism (incorporating the base and needs components) did not provide appropriate staffing levels for some low-need schools. In these instances, the Department of Education was required to ‘top up’ the staffing allocation.

Under the future funding model, this outcome will be ameliorated. The base staffing allocation has been recalibrated to ensure the provision of sufficient minimum staffing

⁵⁰ Of course greater levels of funding allow for a larger teaching workforce, but this relates to overall resourcing levels rather than funding model design. Effectiveness of the teacher workforce relates to quality rather than quantity.

levels and the needs-based supplementary allocation will only apply to a fixed cohort of high-need schools, ensuring that it is a genuine supplementation beyond the base.

At the same time, there are instances – especially among states that have recently completed funding model reviews – where funding rates are directly calibrated against the latest empirical research. The Victorian model is a clear example of this. The analysis of effective schools undertaken by the University of Melbourne, described in Section 3, revealed the quantity and cost of resources used by these schools across all year levels. These findings, which provided a benchmark for resourcing costs, were used to inform weightings for per-student rates (called Stages of Learning) within the Core Student Learning Allocation component of the Victorian funding model (see Chart D.65 and Chart D.66 in Appendix D for further detail).

Although teacher quality cannot be directly influenced by funding mechanisms, these mechanisms can nevertheless be designed to support the building of teacher capacity within schools. In NSW, targeted funding (derived from its Priority Schools Programs and the Low SES School Communities NP) is provided to schools in low SES areas to improve educational outcomes for students. Clearly, this funding has a strong equity focus – however, it also recognises the importance of teacher quality in enhancing student outcomes.

For example, some eligible NSW schools have utilised this funding to implement in-school professional learning models to build teacher capacity in literacy and numeracy. This may include: the implementation of a flexible timetable structure for teachers, with time allocated to complete professional learning tasks; the creation of additional school-based leadership positions with defined responsibilities to lead and coordinate professional learning; and the introduction of team teaching structures to support and mentor teachers in developing quality teaching practices. This example of the interaction between primary and supplementary public funding is explored further in Section 6.3.

Augmenting effectiveness over time

A final facet of effectiveness relates to the rigour and frequency of the funding model review process – i.e. there is a dynamic element to effectiveness.

Noting the discussion above regarding the limitations in the use of student outcomes data in this context, funding model performance is nonetheless correlated with the calibre of the funding model review, and in particular, the use of student outcomes information to assess and, as appropriate, re-fashion funding model characteristics. This is particularly pertinent in relation to equity initiatives – gauging the level of disadvantage among specific groups and the change over time – as well as the overall effectiveness of the system.

In this regard, several of the recent reviews provide good examples. In the Victorian example discussed in detail above, a broad array of individual student performance indicators were utilised to empirically gauge the resourcing requirements of students at different year levels and with different backgrounds. These empirical findings were in turn used to inform the determination of funding rates under their new model, which will be reviewed on a periodic basis.

As another example of good practice, Victoria has also committed to revalidating SFO as a predictor of variances in outcomes between schools. Similarly, South Australia monitors the effectiveness of funding provided under its Disadvantaged Schools Program (Literacy, Numeracy and Special Learning Needs) by analysing of a range of student achievement data at a school, regional and central office level.

The Northern Territory has also utilised student outcomes data to inform the design of its funding model. Mechanisms are in place to address the Territory's local challenges in relation to student attendance rates – the funding formula incorporates an attendance component, whereby a 10% loading is added for schools with attendance rates in excess of 90%. In this instance, the funding model is being used to drive performance outcomes through a performance incentive.

More generally, there is widespread use of performance assessment tools. While these are not necessarily targeted directly at funding (but more broadly as a means of driving and measuring individual school performance), they nonetheless provide a basis upon which the suite of policies and initiatives relating to school systems are reviewed. Box 11 below provides an example of the interaction between school performance assessment and funding.

Box 11: Teaching and Learning Audits in Queensland

In 2010, Queensland introduced Teaching and Learning Audits for government schools. The audits examine key curriculum, teaching, learning and assessment practices of a school. Following an audit, the school is provided with a detailed report relating to their progress against system expectations and accountabilities. This report is designed to inform future developmental needs of each school as well as developmental needs for the system.

Funding is not directly distributed from the central education authority on the basis of any school's performance in the audit. Nevertheless, there may be additional funding or resources that regional offices provide to schools as part of the follow-up work that is done in response to the audit. This support, however, is part of each region's continuing focus on school improvement and is not captured centrally in a way that is uniquely identifiable.

The audit instrument itself indirectly examines utilisation of funding at a school level. One component of the audit focuses on 'targeted use of school resources' – with an emphasis on whether there has been an appropriate response to the needs of individual students. Examples of measures included within this component are:

- 'staff are deployed in ways that address the learning needs of all students in the school and that make best use of available staff expertise and interests'; and
- 'discretionary school funds are applied to initiatives aimed at improving outcomes for students'.

Source: Queensland Department of Education and Training

6.1.3 Adequacy

The extent to which the funding levels produced by the model are sufficient to support the delivery of high quality education, given the cost of providing this service.

As the description above highlights, adequacy is closely related to equity and effectiveness. However – at least as defined here – its focus is somewhat different. Adequacy is concerned principally with the extent to which funding rates reflect service-delivery costs and student resourcing needs and their variation across students and school settings.

Certainly, virtually all models have mechanisms that attempt to address cost drivers such as size, location and student characteristics (with the exception of the SES model, which compensates neither for school size or, at least explicitly, remoteness⁵¹).

Funding related to location and student characteristics was canvassed in Section 6.1.1. In relation to school size, all state government funding models recognise the economies of scale associated with the provision of schooling and fund accordingly (subject to some anomalies).

However, as the charts at Appendix D demonstrate, the gradient of the funding profiles vary across jurisdictions. Implicitly, there are different views regarding the variation in unit costs across school size (and indeed potentially actual differences e.g. reflecting differences in geography). These disparities reflect a general characteristic across funding models – that there is not a clear understanding of service-delivery unit costs and their variance across students and settings. While outcomes data are increasingly informing funding rates and formulae (refer to the Victorian example in Section 6.1.3), the use of cost data is considerably less pervasive – notwithstanding the fact that, given prescribed wage rates, staffing costs can be inferred from staffing levels.

Given a reliable measure of unit costs, the adequacy of funding rates could reasonably be assessed. However as other parts of this report discuss, the cost indices which currently exist have significant limitations, or at the very least are designed for alternative purposes. Moreover, they do not contain the level of detail required to assess adequacy across a variety of settings and needs (i.e. to analyse whether the shape of the curves presented in Appendix D is optimal).

In terms of minor capital funding, the adequacy scorecard is mixed. Moreover, it is blurred by the interaction between funding from different sources (refer to Section 6.3) . Some models have a fixed annual capital allocation, from which distributions are made to schools based on a grants application process. Adequacy is often a concern under these models. Alternatively, other states employ an un-capped allocation process which, while faced with challenges of efficiency and transparency, tends to perform better in relation to adequacy.

Issues relating to the adequacy of minor capital funding were identified as being particularly pronounced in the Northern Territory (and to a lesser extent Western Australia), where local demographic, geographic and economic circumstances (for example

⁵¹ Remoteness is addressed through other types of supplementary recurrent funding provided by the Commonwealth to non-government schools e.g. Indigenous Supplementary Assistance, which has per capita rates that vary by remoteness.

the need to provide teacher housing) significantly increase costs. Consequently, there is heavy reliance on Commonwealth Government initiatives.

6.1.4 Efficiency

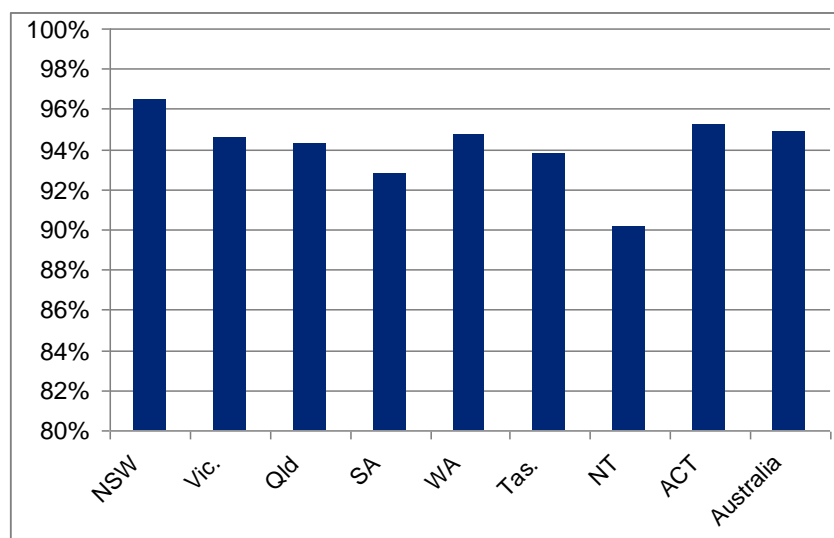
The extent to which the funding model allocates funding across students (and schools) based on efficient unit costs of service delivery and encourages innovation and enterprise (i.e. augments dynamic efficiency).

Efficiency is a challenging concept to assess in education given vast differences across schools (in terms, for example, of size, location, enrolment characteristics, etc) and the variety of schooling outcomes. It also has different dimensions in different jurisdictions. In centralised models, for example, it relates to the efficiency of the resource procurement process (including capturing any economies of scale). Of course, with staff accounting for up to 80% of service delivery costs and salaries generally prescribed, the opportunities for achieving efficiencies in the procurement of services is somewhat limited. Nevertheless, benchmarking and competitive tender processes provide opportunities for purchasing efficiency in areas such as cleaning, maintenance and grounds-keeping.

In decentralised models, schools have greater discretion over their use of resources and hence school-level decisions directly impact efficiency. In these instances, factors such as transparency and accountability bear heavily on efficiency (a point discussed at greater length below). Hence, while efficiency may at times be difficult to observe, it can be to some extent implied by the robustness of the model's governance arrangements.

While it is not without its limitations, an indicator of the efficiency with which schooling resources are employed is the proportion of funding which is expended on in-school activities (refer to Chart 6.1, below). As Chart 6.1 shows, the proportion of expenditure dedicated to in-school activities is greatest in NSW (96.5%) and the ACT (95.3%) and lowest in the Northern Territory (90.2%).

The proportion of spending by the bureaucracy also depends on the roles and responsibilities of government education authorities and the local challenges associated with administering funding and governing the sector more broadly (e.g. demography and geography). Nevertheless, the data in Chart 6.1 provide additional insight into the functioning of the current funding models.

Chart 6.1: Proportion of in-school expenditure by gov. education systems, 2007-08

Source: Table 19, National Report on Schooling in Australia 2008 - Additional statistics on Australian schooling

In a dynamic sense, efficiency is also related to the manner in which funding rates move over time (i.e. the method of indexation). While funding rates under the state/territory models are indexed primarily with reference to wage inflation as stipulated in the relevant EBAs (with some minor adjustments for smaller cost items), it is less clear that indexation under the SES model has mirrored efficient growth in costs. Over the period 1998-99 to 2007-08, the AGSRC indexation factor increased by 59%, compared to cumulative change in the CPI of 35% and the Labour Price Index (education and training) of 43% (internal DEEWR analysis). However, it must be noted that the rate of growth of the AGSRC also reflects deliberate policy decisions by government, including a commitment to maintain some degree of parity in the level of funding support provided across sectors.

6.1.5 Incentive

The extent to which the funding model does not create barriers for schools/school systems to procure other sources of funding.

The current funding models vary markedly in the extent to which they incentivise private contributions toward the cost of education, due in large part to the different philosophies underpinning public and private education. As Section 2 describes, the public school system is responsible for ensuring universal access to primary and secondary education. As such, private fees have played a relatively minor role in financing education in the sector. While current state government funding models do not directly incentivise private contributions, they in general aim not to discourage them. Most notably in this regard, none of the current models see a withdrawal of public funds as private funding increases (i.e. schools are not penalised for attracting private income). Nevertheless, approaches to fee-setting vary, illustrated in Box 12 below.

Box 12: Fees in government schools

Generally, school fees charged by government schools are termed ‘voluntary contributions’ and the school must still educate the student even if the parents do not pay the fees.

- In WA, for example, under the School Education Act 1999 and relevant regulations school principals are allowed to set non-compulsory contributions of no more than \$60 for primary students and \$235 for lower secondary students.
- Generally, parents are strongly encouraged to pay the fees and in some instances they are legally recoverable (e.g. SA).
- However there are exemptions e.g. in Tasmania, a means test is applied to determine whether families are exempt from payment and schools are provided with payments to compensate for the non-receipt of fees from exempt low income families; in WA, schools located in low SES communities may elect not to request voluntary contributions from parents.

The MCEECDYA mapping work by Keating et al (2011) also notes that there does not appear to be a substantive link between the specificity of the legislation that permits the collection of fees and the quantum of revenue received in each jurisdiction. For example, Victoria has the highest level of fee revenue (see Section 2.2) yet less legislative prescription about voluntary contributions (and the reverse is true for WA and Tasmania).

Conversely, in the private schooling sector, where universality is not part of the education charter, the Commonwealth funding model has removed disincentives for private investment and indeed actively encourages contribution by parents with greater financial means. This is achieved via the diminishing scale of funding against socio-economic status which underpins the Commonwealth Government’s SES model (which also serves as an educational equity device, given the greater resourcing required among students from disadvantaged backgrounds). Evidently, by purposely funding high SES schools at a rate which is below service delivery costs, the SES model encourages the procuring of private funds among independent schools, particularly at the higher end of the SES spectrum (see ICSEA charts for non-government schools in Appendix D).

6.1.6 Certainty

The extent to which the funding model provides funding recipients with confidence regarding the predictability of future funding levels.

As Section 4 outlines, certainty is characterised here primarily as relating to funding model review processes and the duration of the funding model. The discussion under the heading of ‘adequacy’ and in particular the dynamic relationship between funding and enrolment numbers (and characteristics) and service-delivery costs is also a pertinent one.

Consultations revealed the importance of certainty in funding for education sector participants. Although the duration of current funding arrangements was not viewed as a material concern (with the transition between funding agreements generating little instability), there was nevertheless a view that the duration of funding agreements is generally less than what might be deemed optimal from a planning perspective. At a federal level, school funding operates on a quadrennial cycle. Non-government education authorities indicated that a longer funding period would provide even greater certainty for

schools (e.g. some suggest funding duration should align with the school cycle – 12 years – with a review every four years).

For states and territories, funding periods tend not to be strictly defined – rather, the imperative for reform is driven by the emergence of new evidence, stakeholder lobbying or the political cycle (which means that funding models are almost constantly in a state of evolution, as previously noted). However, major funding model reforms are generally premised on the collation of a significant evidence base, which means that these types of reforms occur over longer time intervals rather than on an annual basis.

The theme of change management emerges as an important one more generally, especially in the context of funding model reviews. As with reforms stemming from any review, there are almost invariably winners and losers. In states which have recently navigated such processes, the success of the reforms has been underwritten by a transitioned implementation of the changes and strong communication with schools (Victoria, for example, conducts extensive road shows communicating the rationale for, and impacts of, major funding model changes which are being introduced).

An example of an attempt to minimise adverse impacts on schools following the transition to a new funding model can be found under the Victorian funding model for non-government schools – known as the Financial Assistance Model (FAM).⁵² Details are provided in Appendix E.

The impact of funding maintenance arrangements under the SES model, whereby approximately 40% of non-government schools are funding maintained and are therefore not technically funded under the model, provides an example of how the prioritisation of certainty during the funding model reform process – above all other principles – can compromise the intent of any reforms. Indeed, the effect of funding maintenance is to entirely negate the SES model for those funding maintained schools, with funding simply tied to historical factors.

6.1.7 Flexibility

The extent to which the funding model provides funding recipients with the capacity – or autonomy – to utilise funding in the most effective way given their individual circumstances, and the frameworks and support mechanisms that foster this.

As has been noted elsewhere in this report, the current state and territory funding models vary across a spectrum of flexibility, from largely centralised to relatively devolved.⁵³ While the literature cited in Section 3 supports the contention that systems where schools have greater flexibility to respond and adapt to changing local circumstances generally perform better, the successful application of a variety of approaches across Australia (i.e. the broad similarities in outcomes across jurisdictions) demonstrates that no single approach is superior.

⁵² Noting that the FAM is not a primary public funder model, it still provides some useful lessons on change management.

⁵³ See the MCECDYA mapping work.

What it does demonstrate, however, is that complementarity among funding model features is important.

Therefore, high calibre decentralised models are those where local-level decision making is supported by advisory resources and overarching operational frameworks; where resource deployment is transparent; and where effective accountability mechanisms are in place. Similarly, high calibre centralised models are those which draw on local-level information and on-the-ground knowledge to guide resource allocations, given that ultimate accountability is held centrally. Appendix E presents a case study illustrating the relationship between autonomy, transparency and accountability (Independent Public Schools in WA).

Subsidiarity also guides the extent of devolvement within funding models.⁵⁴ All state and territory funding models incorporate this concept, with responsibility for certain areas retained centrally by education authorities, even in more decentralised systems (as shown in Table 5.2). For example, employment and payment of teaching staff, major capital works and ICT infrastructure and networking are central responsibilities in all government systems.

Generally, under these models, devolvement of autonomy – in terms of resource-related decision-making – to the local (school) level is also guided by local capacity. In line with the broader trend towards devolvement, most models provide schools with autonomy over the management of non-staff resources (even though payment of these costs may be centralised). However, there has not been a wholesale move across all jurisdictions to provide schools with a global budget – in Tasmania, for example, the decision not to move towards a one line budget package is premised on a recognition of the limited capacity of schools that operate in low SES areas (see the case study in Appendix E).

6.1.8 Transparency

The extent to which information relating to the determinants of funding allocations (that is, the characteristics of the funding model) is clearly and openly articulated, and available and accessible to the public.

Among the state government funding models, funding formulae and rates are generally well documented and, particularly with the advent of NAPLAN, interested parties are able to readily review funding model outcomes through the My School website. Accordingly, few transparency-related issues arose throughout this analysis. Nevertheless, there is a spectrum of transparency across jurisdictions, ranging from models where detailed, accessible information is available via the State Government website, to New South Wales, where detailed information in relation to funding allocations is not published. In some respects, these differences reflect differences in philosophy across these jurisdictions. In a largely decentralised model, transparency is an important element of ensuring accountability; whereas in a more centralised model, the drive to transparency is not as strong.

⁵⁴ Subsidiarity is a fundamental principle of the Catholic school sector, but can also be used more broadly to describe the important relationship between autonomy and (decision-making) capacity. In this sense, it refers to responsibility for funding-related decisions being devolved to the lowest yet most appropriate level (i.e. autonomy must be linked to capacity).

Concerns in relation to transparency are most commonly related to capital funding, where the allocation mechanisms are generally less clearly prescribed. While there may be a case for greater publication of grants processes and outcomes, the concerns that exist in this area reflect a level of confusion regarding funding responsibility and general uncertainty about the roles of different funders.

6.1.9 Accountability

The extent to which recipients of funding are accountable for the way in which that funding is utilised (where flexibility exists) through reporting processes or other governance mechanisms.

Processes for performance review and accountability are installed in all school systems to some degree (i.e. via state governments' through ACARA; in connection with NP funding). The focus of these processes, however, is generally on the performance of the system generally, rather than the performance of the funding model specifically.

Nevertheless, particularly in decentralised models, a range of mechanisms are employed to hold schools to account for their use of funds (refer, for example, to the Western Australian IPS case study cited in Appendix E). Targeted funding programs also generally include strong accountability mechanisms, particularly where schools are provided with discretion over the use of funds to achieve specific objectives and outcomes (highlighting the link between flexibility and accountability). Under the NSW funding model for government schools, for example, targeted funding is provided to schools serving the highest densities of low SES families through the Priority Schools Program. This funding incorporates several accountability requirements – details are presented in a case study in Appendix E.

While these processes are in most cases robust, there are also examples where the accountability mechanisms are deemed overly burdensome by the sector – particularly in relation to Commonwealth Government targeted initiatives (e.g. the National Schools Chaplaincy Program).

An area of concern which arose commonly in discussions regarding accountability was the potential for schools to manipulate self-reported eligibility tests so as to obtain additional funding. For example, to encourage/classify students into higher categories of disability, so as to attract higher per-student rates. Similarly, while SFO has been demonstrated to have its strengths as a measure of disadvantage, its reliance on parent self-selection of occupation has been suggested to create scope for manipulation.

In this respect, effective models are those which utilise metrics that are by design not open to manipulation (regional SES status, for example – noting the trade-off with specificity, explored below) or which install independent, arm's length assessment and verification.

6.1.10 Simplicity

The extent to which the process of funding administration imposes a reporting burden on schools or education authorities (either via complexity or merely the extent of reporting obligations) and/or creates an administrative burden for government agencies (via overseeing the appropriate allocation of funding).

The current funding models vary markedly in their simplicity, reflecting, among other things, the point they are at in their respective lifecycle (i.e. how recently they have been reviewed). Complexity most commonly manifests in equity or targeted funding, with in some cases tens of individual initiatives governing the allocation of funds to disadvantaged groups (the outgoing Tasmanian model, for example).

However, models which have recently been reviewed, particularly those which have drawn on empirical research to inform their design, tend to pursue their equity objectives in a considerably more streamlined and integrated fashion, with resourcing directed towards disadvantage elements that are key predictors of student achievement levels as revealed by the empirical research (e.g. the analysis related to SFO in Victoria).

As the discussion in relation to equity notes, there is a strong trade-off between simplicity and specificity in the allocation of targeted funds. While individual student assessments are leading to more appropriate funding and support for disabled students, these processes nevertheless add a layer of complexity to the system. Conversely, while the SES model may be relatively crude in its targeting of educational need (also noting that it is supplemented by targeted initiatives), it is simple and administrable (and for that matter transparent).

Recent funding reviews have revealed a clear shift toward simplification. In addition to the changes in Victoria (where targeting was simplified through the introduction of SFO), both Western Australia and Tasmania are in the process of moving toward more simplified models. In the case of Tasmania, a new funding allocation for students with challenging behaviour or learning difficulties is being phased in over the next two years, under which 40% of the available resource pool will be allocated towards all schools on a per capita basis. The approach is based on the recognition that every school is likely to have challenging students that require support. The remaining 60% of funding is allocated on the basis of need, using socio-economic disadvantage as a proxy for the incidence of high and additional needs.

Also of note in relation to simplicity is the changing nature of the simplicity trade-off as data availability and quality improves. Whereas the targeting of equity funding has historically run rapidly into tensions with simplicity, technology and data enhancements are diminishing these trade-offs.

6.2 Supplementary public funder models

Supplementary public funder models employ a varied set of allocation techniques to provide partial resourcing of schooling. The total funding pool under each model is determined via either a fixed percentage of the state/territory AGSRC or merely on a historical basis. The distribution of these funding pools across schools occurs with varying degrees of sophistication, ranging from uniform per-student allocation (e.g.

Commonwealth recurrent funding for government schools) to fully-fledged funding models (the Victorian FAM, for example).

In assessing the performance of these models, regard must be had to the role of supplementary funders in the schooling system. Supplementary public funder models do not seek to fully fund schooling provision, as primary models in many cases do. Rather, they seek to provide a defined contribution to the cost of schooling in the nominated sector. As partial funders, these models are not capable of achieving many of the principles described in Section 4. Of course, this varies from model to model. Where funding is allocated to specific purposes or programs, it can more reasonably be assessed against the full suite of principles. However, where it is provided effectively as a variable block grant to top up other funding sources, considerations such as adequacy and efficiency are less relevant.

The models employed by state governments to allocate funding across non-government schools are considerably less sophisticated than those utilised in the government school sector. While most follow a similar underlying philosophy (a base level of funding with various loadings or targeted initiatives), the rates and formula are generally engineered with less precision. Similarly, the Commonwealth Government's allocations to government schools (via the National Schools SPP) comprise uniform per capita allocations. The performance of these models with respect to the individual criteria is canvassed below.

- **Equity:** Other than the SPPs, all supplementary models provide for equity funding of some form, although the proportion of funding allocated to equity, the groups targeted and the targeting mechanism varies.
 - The equity measures (proxies) used are generally crude (equally or in many cases more so than primary funder models). For example in NSW, Tasmania, ACT and NT, equity mechanisms are related to the distribution of funding according to SES or ERI, and generally do not account for factors such as remoteness. That said, most states do provide targeted funding for SWD.
 - There is little evidence that the magnitude of the equity allocations is evidence-based. That is, loadings are generally determined on a historical basis or related to loadings within government school funding models rather than with regard to empirical research regarding the additional resource needs of equity cohorts in non-government schools.
 - There is common reliance on the ERI (for example, Western Australia, New South Wales and the ACT employ this measure), despite it being widely regarded as a poor indicator of educational need. While the reasons for its ongoing use are less than clear, reliance on the ERI appears largely due to historical factors and the transition impacts that any change would generate.
- **Effectiveness:** supplementary funder models have little direct regard for effectiveness (as defined narrowly in this report). However, this reflects their role more so than any design weakness (i.e. their remit is in most cases not sufficiently substantive to have a tangible impact on service-delivery models).
- **Adequacy:** the pool of funds available to be allocated via supplementary models is determined largely based on policy decisions and, as noted above, is generally only a modest component of total funding. That said, calibration and indexation against the AGSRC (noting the recognised limitations of this metric) provides a cost basis to ongoing funding levels.

- **Efficiency:** supplementary funder models have little direct regard to efficiency; although, again, this is consistent with their role in the system. As funds provided through supplementary funding models generally represent a modest contribution to an overall pool – and are in most instances not directed toward a discrete program or initiative – supplementary funding models have limited capacity to drive efficiency.
 - Indexation against AGSRC sees funding grow more rapidly than service delivery costs (see Section 6.1.4).
 - One area where some supplementary funder models have historically performed particularly poorly in relation to efficiency is in capital funding. Uncapped, indefinite interest subsidies – now effectively phased out – led to inefficient outlays, by dampening the incentives for capital to be repaid.
- **Certainty:** indexation against AGSRC – which, as Table 5.3 outlines, applies to both the Commonwealth Government funding model for government schools and most state government funding models for non-government schools – provides an underlying certainty to future funding outlays/receipts, although there are instances where funding is reviewed – and indeed negotiated – on a year-by-year basis (such as in the NT).
- **Transparency:** the level of transparency varies across funding models, with the more sophisticated models also generally being more transparent (e.g. the Victorian FAM), whereas other models are regarded as being less transparent (such as the NT model, although the content of the NT AGSRC bucket is currently under review, with the non-government sector invited to participate in this process).
- **Flexibility:** supplementary funder models are characterised by high levels of flexibility, with schools in the independent sector generally free to determine the most appropriate utilisation of funds provided by state/territory governments. Funding allocated to Catholic systemic schools is usually channelled through system authorities, who then distribute funding to schools based on their own allocation mechanisms. In relation to Commonwealth recurrent funding for government schools, this is provided to state/territory treasuries, with state/territory governments given discretion over the distribution of this funding.
- **Accountability:** the level of accountability underpinning supplementary funder models ranges from relatively weak mechanisms (i.e. the absence of a formal agreement between funders and funding recipients) to robust auditing programs (such as the Western Australian Grants Auditing Program, where schools are forensically audited approximately once every five years).
- **Simplicity:** supplementary funder models are generally relatively simple in design when compared with primary funder models. Equity funding is generally allocated via a smaller number of individual initiatives and loadings for factors such as school size or location not incorporated. With a uniform per capita allocation, the National Schools SPP is highly simplified.

In relation to capital funding, adequacy is a consistently raised concern, particularly among non-government schools with limited capacity to raise fees or generate income through other sources (e.g. non-government schools in low SES areas, where the ability to procure funds through donations or fundraising is often low). As with primary funder models, this is due in large part to the widespread application of fixed capital funding buckets (which may not necessarily reflect the sector's capital spending needs). Again however, issues of adequacy as they relate to funding quantum cannot be considered in terms of discrete

models; they must be analysed across the funding system more broadly – that is, taking account of all sources of funds. Since these issues form the central theme of another piece of research being conducted, they are not analysed in detail here.

6.3 Interaction between funding models

The preceding discussion focuses solely on discrete funding models, and draws on the funding model criteria outlined in Section 4 to inform an assessment of current performance. As Section 4 further outlines, several other considerations – or design principles – are relevant from a funding system perspective. That is, when interactions between funding models are taken into account. To reiterate, funding system criteria include:

- **Neutrality:** the extent to which the system creates a level competitive playing field between providers of different ownership structures.
- **Fairness:** the extent to which funding arrangements treat schools and students equally across sectoral or system boundaries.
- **Sustainability:** the extent to which total government outlays are sustainable given fiscal conditions and other policy priorities.
- **Choice:** the extent to which funding supports diverse school provision able to respond to the range of parental preferences and student needs.
- **Coherence:** the extent to which funding arrangements at all levels of government complement one another and reinforce the capacity of schools to achieve agreed goals across sectors and systems.

The focus of this study, and the research, analysis and discussions underpinning it, has been on the current funding models. As such, the approach employed is not one designed to examine system-wide issues or specifically analyse issues of interaction across different funding models or different schooling systems. Certainly, an in-depth system wide analysis against each of the abovementioned principles has not been conducted.

Nevertheless, an analysis of discrete funding models in a system of multiple providers of funds and multiple funding recipients naturally raises issues relating to funding model interaction. Many of these, particularly in relation to notions of fairness are driven heavily by ideological views. In any case, issues of fairness, neutrality and choice must be considered with reference to the respective roles and philosophies of each element of the sector. These issues are also being examined through other pieces of research for the Review. The principles of sustainability, choice and coherence are considered below.

Sustainability

Sustainability could be enhanced by improved coordination between funding models and a continued emphasis on efficiency and the principles that support it (such as accountability and transparency). Ultimately, however, sustainability is a function of the resources society is willing to commit to educating its youth – if, given the trade-offs involved, society wishes to dedicate proportionally greater amounts of funding toward education, then the fiscal means can be marshalled to support this.

Choice

In some respects, choice and sustainability are closely related. If the system can sustain multiple alternative schooling sectors, parents are afforded choice regarding their child's education. In this respect, and given scarce funding resources, the manner in which funding is allocated across sectors is key. Choice is supported by ensuring that the limited funds which are available are allocated in such a way that, given other sources of funds available, each element of the system can be sustained as a viable education option. However in many cases, families' choice of education for their child is a limited one – for example, there may only be a single school in a rural area, or the family's income may not support the payment of high out-of-pocket fees. Nevertheless, ensuring funding supports a diverse schooling sector underwrites choice.

The questions of whether, in overarching terms, Australia's schooling funding system optimally supports choice is beyond the scope of this report. However, in this regard, Australia's schooling system, where a diverse range of non-government schools sit alongside a core of universally accessible government schools, is in most cases providing parents with a relatively high degree of choice. Growth in the number of independent schools over recent years (an increase of 27% from 1993 to 2009) provides further indication that choice is supported by Australia's schooling system.

Coherence

Complementarity between funding models and cooperation between funding providers is critical to providing a strong platform for the delivery of high-quality education.

However, there are many areas where funding responsibilities are undefined, or at the very least unclear – it is not apparent that defined roles or lines of demarcation have been established. Capital funding for non-government schools is just one example. While all state and territory governments have programs in place to provide capital funding, aggregate funding levels vary considerably across jurisdictions and cannot readily be explained with reference to school characteristics (Chart 2.9).

A range of examples can also be cited where multiple funding mechanisms are targeted at a given area or issue in a poorly coordinated fashion – particularly where one or more of the initiatives has a strong political basis. Rather than different funding vehicles operating in a complementary fashion to comprehensively respond to an identified funding need, there are instances where funding streams unnecessarily overlap, potentially undermining the defined features of the individual models (e.g. carefully calibrated loadings may be compromised by competing funding from other sources).

Despite the collaborative approach, a common example of this is where National Partnership programs overlap with state government initiatives (as occurs in the NT, where there are several funding streams – from territory and Commonwealth sources – directed towards addressing educational disadvantage experienced by Indigenous students). NSW has attempted to minimise this overlap (and resulting inefficiencies) by having the same funding recipient coverage under both its Priority Schools Program and the Low SES School Communities National Partnership (also discussed below). To streamline arrangements in this manner, however, the NSW Government was required to contribute additional funding.

To the extent that uncoordinated activity leads to funding wastage (inefficiency), funds are prevented from being deployed in other areas. Evidently, a streamlined and coordinated approach to funding is optimal.

Examples can also be cited where national initiatives have been implemented without due regard for local circumstances. For example, funds may be provided to boost teacher numbers without the provision of associated housing (which is a necessary accompaniment in some areas).

Notwithstanding these issues, there are instances where the interaction between Commonwealth and state/territory funding has led to positive outcomes for schools and students.

- In NSW, for example, schools in low SES communities are supported through a combination of funding from its Priority Schools Program and the Low SES School Communities National Partnership. To illustrate, one school has utilised its NP funding to implement an in-school professional learning model, aimed at building teacher capacity in literacy and numeracy to improve student outcomes. Supporting this, staffing supplementation under the Priority Schools Funding Program provides two additional staff members to assist with team teaching in English and mathematics. The allocation of regular time for professional learning within school structures has been formalised (student outcomes will be monitored to measure the effectiveness of the strategy).
- National Partnerships are regarded by some education sector stakeholders as leading to improved collaboration between non-government education authorities, state/territory governments and the Federal Government. The requirement to work together under NPs was noted by some stakeholders as augmenting innovation within the education sector, particularly in addressing entrenched disadvantage.

In relation to adequacy, there is little evidence of assessment from a whole-of-system perspective. With often poor demarcation of funding responsibilities, the collective funding outcome can be at times haphazard. Again, capital funding is perhaps the most stark example of this, however it could also be said to apply more broadly. The contribution of supplementary public funders varies considerably and not necessarily in line with other characteristics of the sector. The varying per capita rates employed by the states and territories illustrate this point.

Consequences that flow from minimal coordination of overall funding allocations can be further compounded by a jurisdiction's particular circumstances. For example, in Tasmania, over the past three years government departments (including the education department) have been required to make strategic budget cuts. The inclusion of National Partnership funding increases the state's overall education budget, thus requiring a greater proportion of savings to be made. However, as the National Partnership component is tagged for a specific purpose, the savings disproportionately come from cuts to recurrent expenditure (as provided through the Tasmanian government school funding model).

7 Lessons for future funding architecture

The ultimate aim of Deloitte Access Economics' analysis is to identify strong funding model features and effective ways of balancing the tradeoffs inherent to funding model design. The intention is not to determine which jurisdiction has a superior funding model in comparison to other jurisdictions, but rather to reach general conclusions regarding how funding models are currently performing and – moreover – how they might optimally be designed. Though funding model optimality hinges in part on the context in which the funding model operates, there is nevertheless a broad set of common principles which underpin well crafted funding models.

Given this, and on the basis of the discussion and analysis presented in the preceding sections of the report, this section outlines the key lessons for the Review of School Funding for Schooling stemming from this piece of research.

What role do funding models play in determining student outcomes?

While it is not the purpose of this study to provide the definitive account of the factors influencing students' educational outcomes and their relative importance, it is nonetheless critical to understand the role played by funding models in the student outcomes puzzle. The Australian and international research does not establish a direct link. However, many of the factors which have been demonstrated as among the most significant determinants of student outcomes can – at varying levels – be influenced by funding model design. Most notably:

- **Teacher quality.** While many of the determinants of teacher quality are outside the realm of funding model influence (e.g. attractiveness of the profession or the quality of training), funding nevertheless has a potential role to play in (i) rewarding high calibre teachers; (ii) shaping the allocation of teachers across and within schools; and (iii) increasing teacher quality over time (i.e. supporting professional development).
- **Autonomy.** Educational systems successful in improving student performance have progressively moved towards decentralised models of management. This has allowed schools and municipalities to focus on the unique needs of their students and the ways in which education can be delivered most effectively given local circumstances. Decentralised funding models, or at the very least funding models that incorporate sufficient local information in the decision making process, are more conducive to strong educational outcomes.
- **Socio-economic status.** Social and economic disadvantage is a significant barrier to educational achievement and funding models play an important role in ensuring students in these groups are afforded the additional resources they require to overcome these barriers.

What constitutes optimal funding model architecture?

In light of the role played by funding in facilitating student performance, as well as the broader principles which have been identified as pertinent to funding model design, optimal funding model architecture is characterised by the following features:

1. *Optimal funding models are designed with direct reference to public policy objectives. [Overarching optimality]*

In balancing competing considerations and managing inherent tradeoffs, funding models must be shaped by the preferences of society, as reflected in current public policy statements. While the principles of best-practice funding can be readily articulated, a funding model of optimal design weighs and balances these principles in accordance with society's objectives.

2. *Funding is based on the efficient cost of meeting students' educational need, given the characteristics of the school they attend. [Efficiency; adequacy]*

The efficient allocation of resources is paramount across all areas of public policy. In education funding, efficiency entails calibrating funding rates against efficient unit-costs and the variation in these unit costs across students and school settings. Since in some instances costs will be pre-determined (Award wages, for example), particular regard should be had to areas where funding levels are more discretionary in nature.

3. *Empirical research underpins funding rates and their variation across student cohorts and schooling settings. [Effectiveness; equity; adequacy]*

- I. Cost analyses inform base funding rates and variance based on differences in service delivery costs (e.g. based on remoteness or school size).
- II. Performance data (broadly defined) informs assessment of educational need, and the associated funding rates for equity groups.
- III. Targeting toward equity groups is underpinned by increasingly granular data and information (in preference to broad proxy measures), as data quality and availability increases.

4. *Funding formulae are reviewed – and as appropriate recalibrated – on a periodic basis and in a systematic fashion, drawing on cost and outcome data (noting the limitations on the use of these data in this context). [Effectiveness]*

Schooling environments are dynamic and funding models must keep pace with changes stemming from new technology, teaching methods, etc. Regularly re-analysing service-delivery costs – and making adjustments to funding rates where necessary – is critical to funding model efficiency and effectiveness. At the same time, equity elements must be periodically reviewed based on student outcome data to ensure accurate reflection of current performance trends.

5. *Funding is designed to keep pace with both increasing enrolments and efficient growth in service-delivery costs. [Adequacy; efficiency; certainty]*

Beyond areas where economies of scale are demonstrable, funding levels should keep pace with student numbers. In addition, the evidence base which informs the calibration of funding rates should be employed as the basis for ongoing indexation. Individual cost components should be indexed against suitable benchmarks (e.g. wages against wage inflation, capital outlays against building cost inflation) to ensure the ongoing adequacy and efficiency of funding.

6. *Tradeoffs among adequacy and efficiency; simplicity and specificity are shaped by policy priorities and in light of improvements in the quality and availability of data. [Overarching optimality; simplicity]*

Tradeoffs must be made with regard to public policy objectives and the weight society accords to different design considerations and outcomes (noting that these may change over time). In some areas, the imperative to make tradeoffs will diminish as technology advances. For example, improved data collection and analysis allows for greater sophistication to be achieved without compromising other design principles such as simplicity.

7. *The basis for funding allocations (i.e. funding formulae) is publicly available, except in instances where there is a privacy or other public interest case against such openness. [Transparency]*

Full transparency will not always be in the public interest – private and commercially sensitive information must of course be treated appropriately. Beyond this, the functioning of public policy is enhanced where information regarding its operation is readily available and understood by industry stakeholders. Indeed, transparency is an important prerequisite to the achievement of many other design principles.

8. *Mechanisms are in place to both support schools in their deployment of resources and to ensure that deployment is consistent with the policy intent (i.e. the underlying funding rationale) – especially in devolved models, and particularly where potential for gaming exists. [Flexibility; accountability]*

While international research demonstrates the positive impact of decentralised funding models, adequate support and accountability mechanisms must be in place for devolved decision making to be effective. The proficiency of school administration varies, and schools which lack the in-house capability to manage school budgets effectively must be provided with sufficient resources to support this. At the same time, ensuring funds are utilised efficiently and consistently with the intent of the funder requires that adequate methods of accountability are installed.

9. *Optimal funding models incentivise private contributions where this is socially acceptable and not at odds with the underlying philosophy; and at the very least do not create barriers to schools procuring private funds in appropriate ways. [Incentive]*

While the universal nature of schooling means that it will in many instances not be appropriate to procure material levels of funding from parents, private funds represent an important supplementary source of resources in the school sector. Private funds contribute to the long term sustainability of the sector and enable public resources to be directed to the highest priority areas. As such, funding models should incentivise private contributions where appropriate and not inhibit the procurement of private funds in other areas via the undue withdrawal of public resources.

What considerations are relevant from a funding system perspective?

1. Clear articulation of the roles and responsibilities of individual school systems and levels of government and funding partners is a prerequisite to optimal funding system architecture. A funding system where roles and responsibilities are not well defined can undermine a variety of design criteria, from coherence and neutrality to efficiency and sustainability.
2. Well-defined lines of demarcation are essential to the comprehensiveness of the funding framework and consistency and coherence between funding streams. Multiple, overlapping sources of single-purpose funding undermine the system's performance against a number of criteria, including simplicity (in terms of reporting burdens) and efficiency (via duplication of funding resources).
3. Given the overarching policy objectives, funding models must interact in a fashion that complements and reinforces one another. This is essential to ensuring adequate yet efficient funding for schooling sectors, in turn leading to optimal funding and policy outcomes for the Australian schooling system as a whole.
4. In light of the above, there is merit in streamlining the administration of funding and introducing a central point of oversight, while maintaining operational coordination at a local level. Not only does this reduce the likelihood of duplication or contradiction, but it is also consistent with findings from international research regarding the benefits of local-level decision making.

Concluding comments

In practice, high calibre funding models are those which draw on robust evidence to combine different features in a complementary and effective fashion, given local demographic, historical and geographic factors.

While clearly some models are performing better in certain areas than others, there is no 'best model' among the current variants. Centralised models can be high-performing, provided prescriptiveness regarding resource allocations is accompanied by adequate utilisation of local-level information. Similarly, decentralised models – toward which most models are trending – can be high-performing provided adequate governance mechanisms are in place.

Moreover, many of the differences revealed in this review reflect the varying stages that different models are at in their respective review cycle. Certainly there are improvements – of varying degrees – that could be made to most if not all of the current models based on the considerations outlined above.

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Appendix A: List of consultation participants

Deloitte Access Economics would like to acknowledge the contribution and input provided by a range of education authorities throughout the course of this project.

Australian Capital Territory

- Department of Education and Training
- Catholic Education Office
- Association of Independent Schools of the Australian Capital Territory

New South Wales

- Department of Education and Training
- Catholic Education Commission of New South Wales
- Association of Independent Schools of New South Wales

Northern Territory

- Department of Education and Training
- Catholic Education Office
- Association of Independent Schools of the Northern Territory

Queensland

- Department of Education and Training
- Queensland Catholic Education Commission
- Independent Schools Queensland

South Australia

- Department of Education and Children's Services
- South Australian Commission for Catholic Schools
- Association of Independent Schools of South Australia

Tasmania

- Department of Education
- Tasmanian Catholic Education Commission
- Independent Schools Tasmania

Victoria

- Department of Education and Early Childhood Development
- Catholic Education Office Melbourne
- Independent Schools Victoria

Western Australia

- Department of Education
- Department of Education Services
- Catholic Education Office
- Association of Independent Schools of Western Australia

Commonwealth/Federal

- Department of Education, Employment and Workplace Relations
- National Catholic Education Commission
- Independent Schools Council of Australia

Appendix B: Education sector characteristics by jurisdiction

The following tables outline some of the key education sector characteristics for each jurisdiction.

All data relates to 2009 and is taken from Productivity Commission 2011, *Report on Government Services, 2011, Chapter 4: School Education*, unless otherwise indicated.

Table notes

NA = Not applicable, - = nil or rounded to zero.

Students enrolled in special schools are included, with special school students of primary school age and/or year level included in the primary figures and those of secondary school age and/or year level included in the secondary figures.

*** Remote areas and very remote areas is based on the agreed MCEECDYA Geographic Location Classification.

Teaching staff have teaching duties and spend the majority of their time in contact with students, and support students, either by direct class contact or on an individual basis. Teaching staff include principals, deputy principals and senior teachers mainly involved in administrative duties, but not specialist support staff. In the Northern Territory, Assistant Teachers in Homeland Learning Centres and community schools are included as teaching staff.

(a) As a % of total population in the state, source: COAG 2009, *National Education Agreement: Baseline performance report for 2008: Report to the Council of Australian Governments*.

Table B.1: New South Wales' school education characteristics, 2009

Characteristics	Gov. schools	Non-gov. schools	Gov. & non-gov. sectors
Population attending school full-time Aug 2009	735 692	375 247	1.112 million
Population of full-time primary students # (% of total full-time primary students)	430 817 (69.6%)	187 932 (30.4%)	618 749 (100%)
Population of full-time secondary students # (% of total full-time secondary students)	304 875 (61.9%)	187 315 (38.1%)	492 190 (100%)
No. of primary schools (% of total primary schools)	1634 (76.6%)	499 (23.4%)	2133 (100%)
No. of secondary schools (% of total secondary schools)	370 (70.5%)	155 (29.5%)	525 (100%)
Combined schools (% of total combined schools)	66 (22.4%)	228 (77.6%)	294 (100%)
Special schools (% of total special schools)	111 (76.6%)	34 (23.4%)	145 (100%)
Full-time students attending schools in remote locations as a proportion of total full-time students in each sector ***	0.5%	0.2%	0.4%
Full-time students attending schools in very remote locations as a proportion of total full-time students in each sector ***	0.1%	-	0.1%
Population of students with disabilities	42 940	13 588	56528
Students with disabilities as a proportion of total full-time students in each sector	5.8%	3.6%	5.1%
Population of Indigenous full-time students	40 500	5 900	46 500
Full-time Indigenous students as a proportion of total full-time students in each sector	5.5%	1.6%	4.2%
Students from LBOTE as a proportion of total full-time students in each sector in 2006	23.6%	27.9%	25.0%
Full-time student to full-time teacher ratios in primary schools ##	15.9	16.8	16.1
Full-time student to full-time teacher ratios in secondary schools##	12.4	11.8	12.2
% total state population in most socio-economically disadvantaged areas in 2006 (a)	NA	NA	15.4% (column heading NA to this figure).

Table B.2: Victoria's school education characteristics, 2009

Characteristics	Gov. schools	Non-gov. schools	Gov. & non-gov. sectors
Population attending school full-time Aug 2009	537 076	306 846	843922
Population of full-time primary students #	312 144	146 111	458 255
(% of total full-time primary students)	(68.1%)	(31.9%)	(100%)
Population of full-time secondary students #	224 932	160735	385 667
(% of total full-time secondary students)	(58.3%)	(41.7%)	(100%)
No. of primary schools	1180	427	1607
(% of total primary schools)	(73.4%)	(26.6%)	(100%)
No. of secondary schools	252	105	357
(% of total secondary schools)	(70.6%)	(29.4%)	(100%)
Combined schools	67	150	217
(% of total combined schools)	(30.9%)	(69.1%)	(100%)
Special schools	76	22	98
(% of total special schools)	(77.6%)	(22.4%)	(100%)
Full-time students attending schools in remote locations as a proportion of total full-time students in each sector ***	0.1%	-	0.1%
Full-time students attending schools in very remote locations as a proportion of total full-time students in each sector ***	NA	NA	NA
Population of students with disabilities	31800	8892	40692
Students with disabilities as a proportion of total full-time students in each sector	5.9%	2.9%	4.8%
Population of Indigenous full –time students	8137	1084	9221
Full-time Indigenous students as a proportion of total full-time students in each sector	1.5%	0.4%	1.1%
Students from LBOTE as a proportion of total full-time students in each sector in 2006	21.3%	28.6%	23.9%
Full-time student to full-time teacher ratios in primary schools ##	15.7	15.1	15.5
Full-time student to full-time teacher ratios in secondary schools##	11.9	11.2	11.5
% population in most socio-economically disadvantaged areas in 2006 (a)	NA	NA	9.7%(column heading NA to this figure).

Table B.3: Queensland's school education characteristics, 2009

Characteristics	Gov. schools	Non-gov. schools	Gov. & non-gov. sectors
Population attending school full-time Aug 2009	484 615	233 373	717 988
Population of full-time primary students #	310 327	128 204	438 531
(% of total full-time primary students)	(70.8%)	(29.2%)	(100%)
Population of full-time secondary students #	174 288	105 169	279 457
(% of total full-time secondary students)	(62.4%)	(37.6%)	(100)
No. of primary schools	929	232	1161
(% of total primary schools)	(80.0%)	(20.0%)	(100%)
No. of secondary schools	178	72	250
(% of total secondary schools)	(71.2%)	(28.8%)	(100%)
Combined schools	91	149	240
(% of total combined schools)	(37.9%)	(62.1%)	(100%)
Special schools	47	12	59
(% of total special schools)	(79.7%)	(20.3%)	(100%)
Full-time students attending schools in remote locations as a proportion of total full-time students in each sector ***	2.1%	0.7%	1.7%
Full-time students attending schools in very remote locations as a proportion of total full-time students in each sector ***	1.7%	0.3%	1.2%
Population of students with disabilities	22 739	5 159	27 898
Students with disabilities as a proportion of total full-time students in each sector	4.7%	2.2%	3.9%
Population of Indigenous full –time students	39 357	6 753	46 110
Full-time Indigenous students as a proportion of total full-time students in each sector	8.1%	2.9%	6.4%
Students from LBOTE as a proportion of total full-time students in each sector in 2006	11.7%	14.9%	12.7%
Full-time student to full-time teacher ratios in primary schools ##	15.4	17.7	16.0
Full-time student to full-time teacher ratios in secondary schools##	12.7	12.2	12.5
% population in most socio-economically disadvantaged areas in 2006 (a)	NA	NA	12.5% (column heading NA to this figure).

Table B.4: Western Australia's school education characteristics, 2009

Characteristics	Gov. schools	Non-gov. schools	Gov. & non-gov. sectors
Population attending school full-time Aug 2009	233 499	122 355	355854
Population of full-time primary students # (% of total full-time primary students)	152 265 (70.3%)	64 362 (29.7%)	216 627 (100%)
Population of full-time secondary students # (% of total full-time secondary students)	81 234 (58.3%)	57 993 (41.7%)	139 227 (100%)
No. of primary schools (% of total primary schools)	510 (76.8%)	154 (23.2%)	664 (100%)
No. of secondary schools (% of total secondary schools)	99 (81.1%)	23 (18.9%)	122 (100%)
Combined schools (% of total combined schools)	95 (45.9%)	112 (54.1%)	207 (100%)
Special schools (% of total special schools)	67 (90.5%)	7 (9.5%)	74 (100%)
Full-time students attending schools in remote locations as a proportion of total full-time students in each sector ***	5.8%	2.0%	4.5%
Full-time students attending schools in very remote locations as a proportion of total full-time students in each sector ***	3.2%	1.2%	2.5%
Population of students with disabilities	8 455	2 649	11 104
Students with disabilities as a proportion of total full-time students in each sector	3.6%	2.2%	3.1%
Population of Indigenous full-time students	19231	3574	22805
Full-time Indigenous students as a proportion of total full-time students in each sector	8.2%	2.9%	6.4%
Students from LBOTE as a proportion of total full-time students in each sector in 2006	14.1%	21.5%	16.5%
Full-time student to full-time teacher ratios in primary schools ##	15.2	16.8	15.7
Full-time student to full-time teacher ratios in secondary schools##	11.7	11.7	11.7
% population in most socio-economically disadvantaged areas in 2006 (a)	NA	NA	4.2% (column heading NA to this figure).

Table B.5: South Australia's school education characteristics, 2009

Characteristics	Gov. schools	Non-gov. schools	Gov. & non-gov. sectors
Population attending school full-time Aug 2009	162 707	90 721	253 428
Population of full-time primary students # (% of total full-time primary students)	104 106 (66.8%)	51 830 (33.2%)	155 936 (100%)
Population of full-time secondary students # (% of total full-time secondary students)	58 601 (60.1%)	38 891 (39.9%)	97 492 (100%)
No. of primary schools (% of total primary schools)	421 (79.9%)	106 (20.1%)	527 (100%)
No. of secondary schools (% of total secondary schools)	72 (76.6%)	22 (23.4%)	94 (100%)
Combined schools (% of total combined schools)	75 (52.4%)	68 (47.6%)	143 (100%)
Special schools (% of total special schools)	20 (87.0%)	3 (13.0%)	23 (100%)
Full-time students attending schools in remote locations as a proportion of total full-time students in each sector ***	3.8%	1.2%	2.9%
Full-time students attending schools in very remote locations as a proportion of total full-time students in each sector ***	1.1%	0.1%	0.8%
Population of students with disabilities	15 126	2 860	17 986
Students with disabilities as a proportion of total full-time students in each sector	9.3%	3.2%	7.1%
Population of Indigenous full-time students	7 979	1 024	9 003
Full-time Indigenous students as a proportion of total full-time students in each sector	4.9%	1.1%	3.6%
Students from LBOTE as a proportion of total full-time students in each sector in 2006	12.7%	18.3%	14.6%
Full-time student to full-time teacher ratios in primary schools ##	15.4	16.4	15.7
Full-time student to full-time teacher ratios in secondary schools##	12.9	11.7	12.4
% population in most socio-economically disadvantaged areas in 2006 (a)	NA	NA	21.6% (column heading NA to this figure).

Table B.6: Tasmania's school education characteristics, 2009

Characteristics	Gov. schools	Non-gov. schools	Gov. & non-gov. sectors
Population attending school full-time Aug 2009	57 504	23 403	80 907
Population of full-time primary students #	32 923	11 234	44 157
(% of total full-time primary students)	(74.6%)	(25.4%)	(100%)
Population of full-time secondary students #	24 581	12 169	36 750
(% of total full-time secondary students)	(66.9%)	(33.1%)	(100%)
No. of primary schools	139	29	168
(% of total primary schools)	(82.7%)	(17.3%)	(100%)
No. of secondary schools	37	7	44
(% of total secondary schools)	(84.1%)	(15.9%)	(100%)
Combined schools	26	30	56
(% of total combined schools)	(46.4%)	(53.6%)	(100%)
Special schools	5	1	6
(% of total special schools)	(83.3%)	(16.7%)	(100%)
Full-time students attending schools in remote locations as a proportion of total full-time students in each sector ***	1.0%	0.5%	0.9%
Full-time students attending schools in very remote locations as a proportion of total full-time students in each sector ***	0.5%	-	0.3%
Population of students with disabilities	3 077	478	3 555
Students with disabilities as a proportion of total full-time students in each sector	5.4%	2.0%	4.4%
Population of Indigenous full-time students	4 698	721	5 419
Full-time Indigenous students as a proportion of total full-time students in each sector	8.2%	3.1%	6.7%
Students from LBOTE as a proportion of total full-time students in each sector in 2006	4.7%	9.3%	6.0%
Full-time student to full-time teacher ratios in primary schools ##	14.8	16.0	15.1
Full-time student to full-time teacher ratios in secondary schools##	12.9	11.9	12.6
% population in most socio-economically disadvantaged areas in 2006 (a)	NA	NA	33.4% (column heading NA to this figure).

Table B.7: Australian Capital Territory's school education characteristics, 2009

Characteristics	Gov. schools	Non-gov. schools	Gov. & non-gov. sectors
Population attending school full-time Aug 2009	34 322	25 477	59 799
Population of full-time primary students #	18 843	12 388	31 231
(% of total full-time primary students)	(60.3%)	(39.7%)	(100%)
Population of full-time secondary students #	15 479	13 089	28 568
(% of total full-time secondary students)	(54.2%)	(45.8%)	(100%)
No. of primary schools	55	26	81
(% of total primary schools)	(67.9%)	(32.1%)	(100%)
No. of secondary schools	17	5	22
(% of total secondary schools)	(77.3%)	(22.7%)	(100%)
Combined schools	7	12	19
(% of total combined schools)	(36.8%)	(63.2%)	(100%)
Special schools	4	1	5
(% of total special schools)	(80.0%)	(20.0%)	(100%)
Full-time students attending schools in remote locations as a proportion of total full-time students in each sector ***	NA	NA	NA
Full-time students attending schools in very remote locations as a proportion of total full-time students in each sector ***	NA	NA	NA
Population of students with disabilities	1 764	433	2 197
Students with disabilities as a proportion of total full-time students in each sector	5.1%	1.7%	3.7%
Population of Indigenous full-time students	1029	255	1284
Full-time Indigenous students as a proportion of total full-time students in each sector	3.0%	1.0%	2.1%
Students from LBOTE as a proportion of total full-time students in each sector in 2006	19.7%	18.6%	19.2%
Full-time student to full-time teacher ratios in primary schools ##	13.9	17.0	15.0
Full-time student to full-time teacher ratios in secondary schools##	11.6	13.0	12.2
% population in most socio-economically disadvantaged areas in 2006 (a)	NA	NA	0.2% (column heading NA to this figure).

Table B.8: Northern Territory's school education characteristics, 2009

Characteristics	Gov. schools	Non-gov. schools	Gov. & non-gov. sectors
Population attending school full-time Aug 2009	28 491	9 998	38489
Population of full-time primary students # (% of total full-time primary students)	18 173 (78.2%)	5 056 (21.8%)	23229 (100%)
Population of full-time secondary students # (% of total full-time secondary students)	10 318 (67.6%)	4 942 (32.4%)	15260 (100%)
No. of primary schools (% of total primary schools)	62 (84.9%)	11 (15.1%)	73 (100%)
No. of secondary schools (% of total secondary schools)	15 (60.0%)	10 (40%)	25 (100%)
Combined schools (% of total combined schools)	70 (82.4%)	15 (17.6%)	85 (100%)
Special schools (% of total special schools)	5 (100%)	- (0%)	5 (100%)
Full-time students attending schools in remote locations as a proportion of total full-time students in each sector ***	17.9%	29.6%	20.9%
Full-time students attending schools in very remote locations as a proportion of total full-time students in each sector ***	28.3%	11.4%	23.9%
Population of students with disabilities	4 234	324	4 558
Students with disabilities as a proportion of total full-time students in each sector	14.9%	3.2%	11.8%
Population of Indigenous full –time students	12 320	2 896	15 216
Full-time Indigenous students as a proportion of total full-time students in each sector	43.2%	29.0%	39.5%
Students from LBOTE as a proportion of total full-time students in each sector in 2006	26.1%	24.9%	25.8%
Full-time student to full-time teacher ratios in primary schools ##	12.1	15.5	12.8
Full-time student to full-time teacher ratios in secondary schools##	10.6	10.5	10.5
% population in most socio-economically disadvantaged areas in 2006 (a)	NA	NA	34.2% (column heading NA to this figure).

Appendix C: Commonwealth tax concessions for schooling

Estimates of tax concessions that are available to schools under the Commonwealth tax system are outlined in the table below. The estimates are not confined to the value of tax concessions received by schools – rather, the estimates include the value received by a wide range of other recipients. Therefore, the information presented here provides an indication of the difficulty in reliably estimating the level of indirect funding to schools through the tax system.

Table C.1: Estimates of Commonwealth tax concessions

Tax concession	Eligibility	TES category^(a)	2009-10 estimate
DGR status	Government and non-government schools	Philanthropy - Deduction for gifts to deductible gift recipients [A66]	\$700m
GST exemption	Government and non-government schools	GST – Education [H16]	\$2,400m
GST exemption	Government and non-government schools	GST – supplies by charitable institutions and non-profit bodies [H4]	Estimate not available - order of magnitude of between \$0.1-\$1b
Income tax exemption	Non-government schools	Philanthropy — income tax exemption for charitable, religious, scientific, and community service entities [B72]	Estimate not available - order of magnitude of more than \$1b
FBT rebate	Non-government schools	Philanthropy – FBT rebate for certain NFP, non-government [D50]	\$20m

Source: Commonwealth of Australia (2011)

^(a) 2011 Tax Expenditure Statement category [code]

Note: These estimates are not disaggregated (i.e. they include the value of tax concessions received by recipients other than schools).

Appendix D: School funding assessment technical appendix

This appendix includes technical information that supports the funding model assessment in Section 6 of the report. Cross-references to the charts and tables in this appendix are included in Section 6.

Recurrent income per student by ICSEA score

The below charts show the level of recurrent income per student (from Commonwealth, state/territory and private sources) by ICSEA score for government and non-government schools in each jurisdiction.

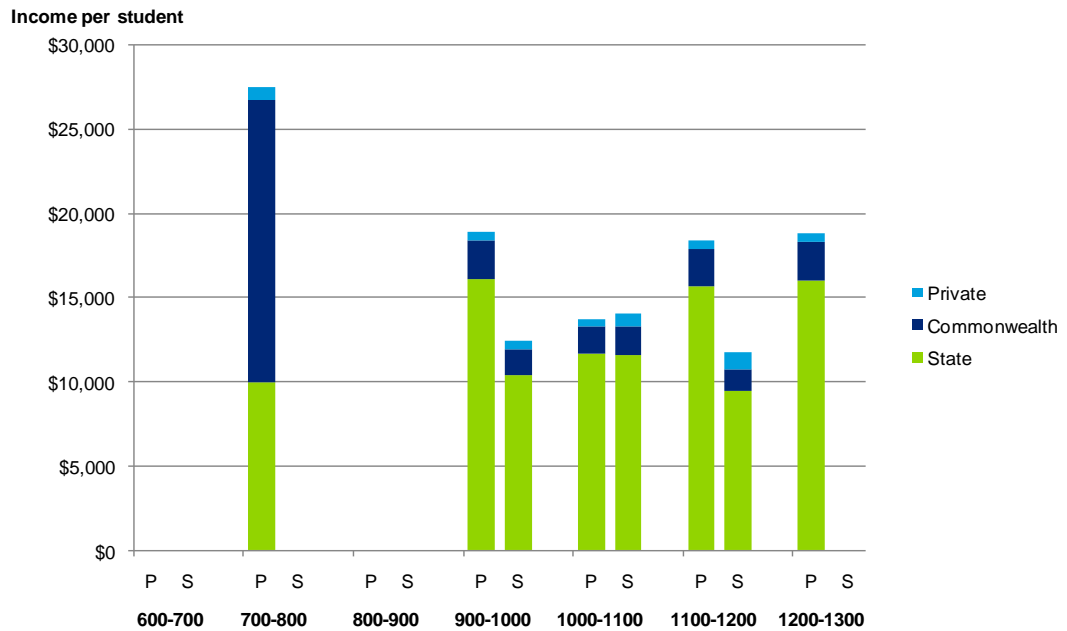
ICSEA (Index of Community Socio-Educational Advantage) is a measure of educational advantage/disadvantage. ICSEA values range from around 500 (representing schools with students from extremely disadvantaged backgrounds) to about 1300 (representing schools with students from very advantaged backgrounds).

The charts are based on ACARA data and include a combination of 2009 and 2010 data (dataset includes a mixture of 2009 and 2010 school profiles).

Government schools

These charts include primary and secondary schools only (i.e. combined and special schools are not included).

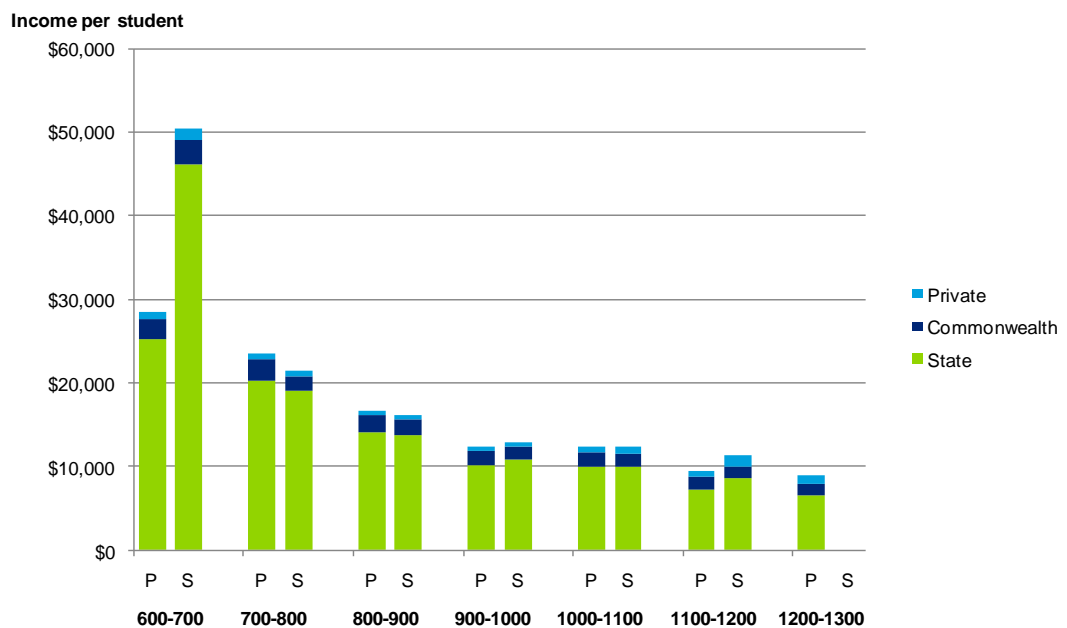
Chart D.1: Recurrent income per student by ICSEA score, gov. schools, ACT



Source: ACARA

Note: P = primary schools; S = secondary schools. High level of Commonwealth funding in the primary 700-800 score range is related to a primary school with 63% ATSI students.

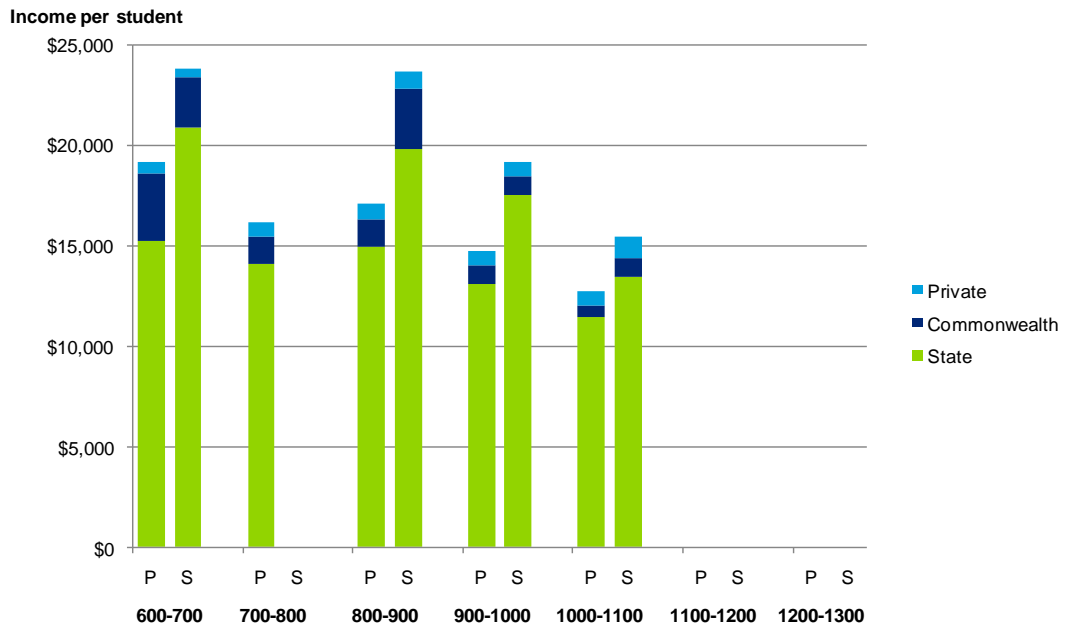
Chart D.2: Recurrent income per student by ICSEA score, gov. schools, NSW



Source: ACARA

Note: P = primary schools; S = secondary schools. High level of state funding in the secondary 600-700 score range is related to a secondary school with 92% ATSI students.

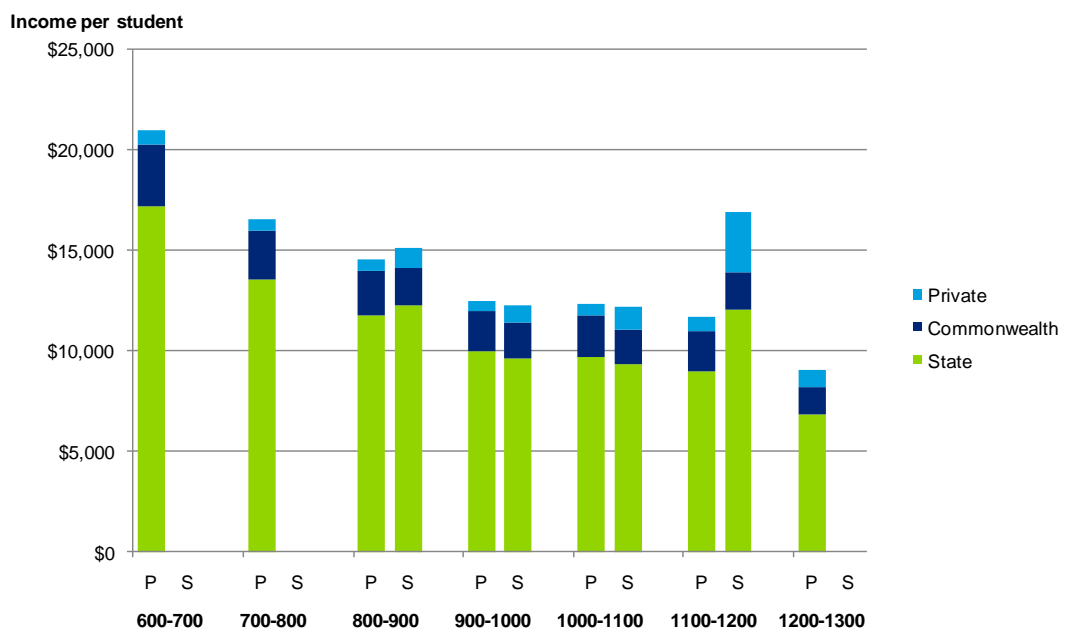
Chart D.3: Recurrent income per student by ICSEA score, gov. schools, NT



Source: ACARA

Note: P = primary schools; S = secondary schools.

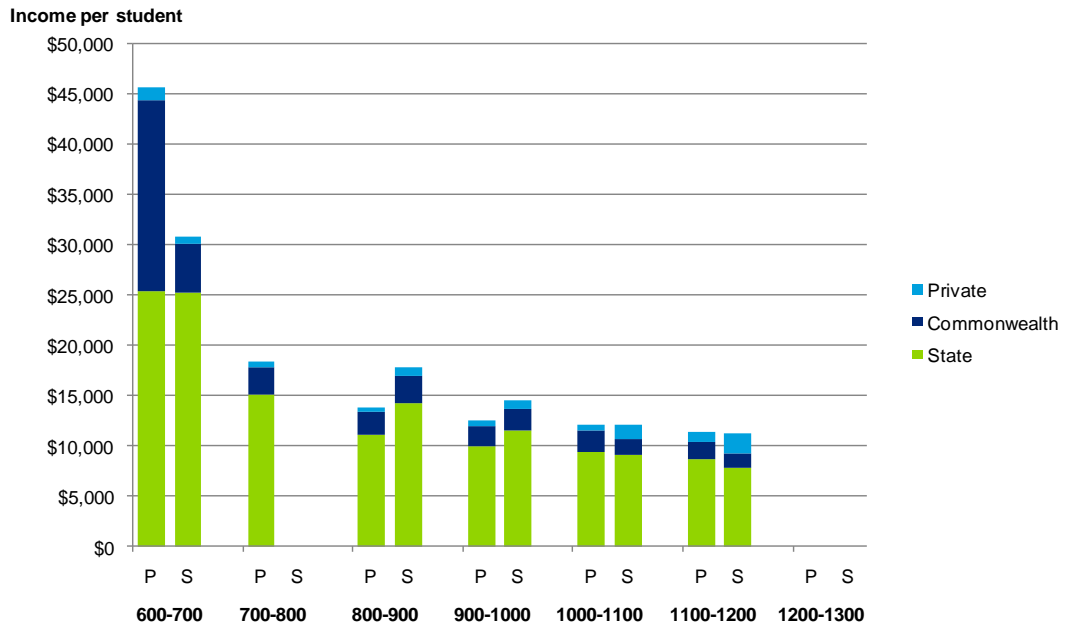
Chart D.4: Recurrent income per student by ICSEA score, gov. schools, QLD



Source: ACARA

Note: P = primary schools; S = secondary schools.

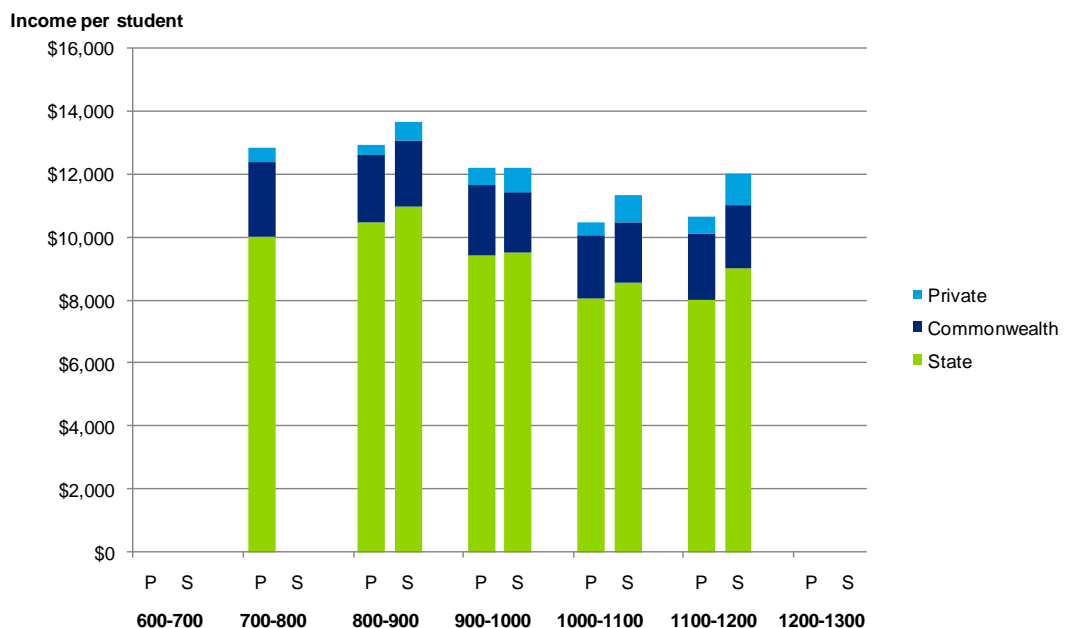
Chart D.5: Recurrent income per student by ICSEA score, gov. schools, SA



Source: ACARA

Note: P = primary schools; S = secondary schools. High level of Commonwealth and state funding in the primary 600-700 score range is related to two primary schools with 63% and 100% ATSI students, respectively; high level of state funding in the secondary 600-700 score range is related to a secondary school with 98% ATSI students.

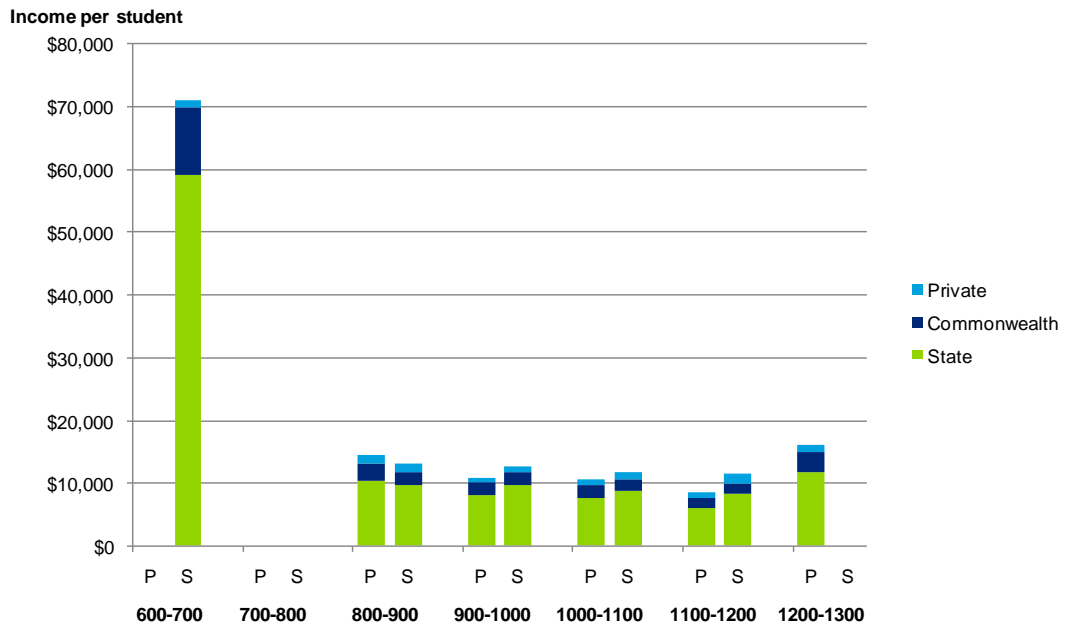
Chart D.6: Recurrent income per student by ICSEA score, gov. schools, TAS



Source: ACARA

Note: P = primary schools; S = secondary schools.

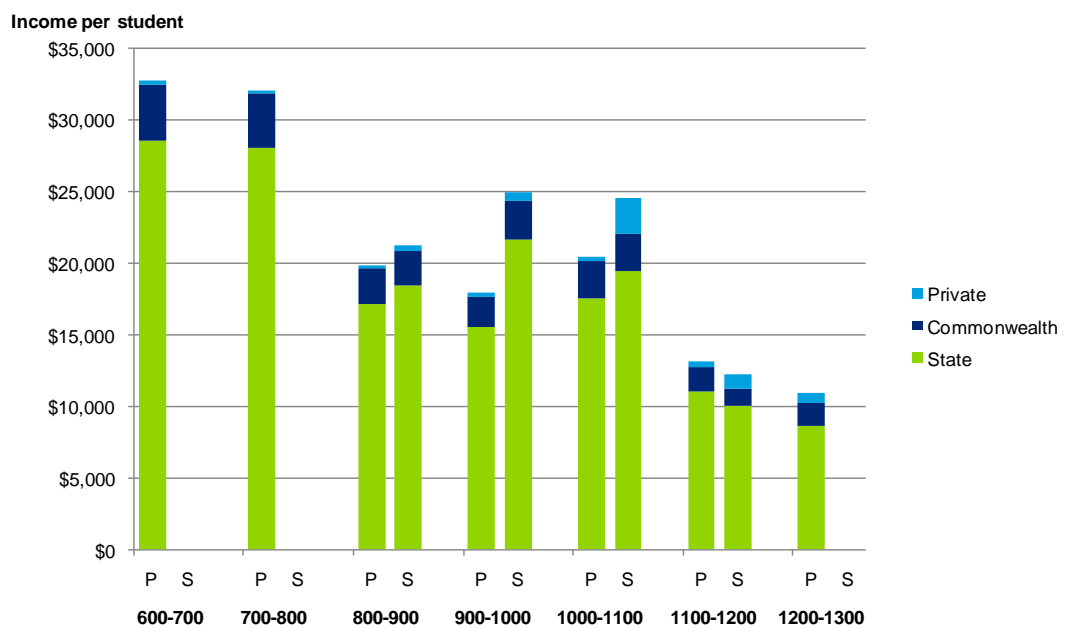
Chart D.7: Recurrent income per student by ICSEA score, gov. schools, VIC



Source: ACARA

Note: P = primary schools; S = secondary schools.

Chart D.8: Recurrent income per student by ICSEA score, gov. schools, WA



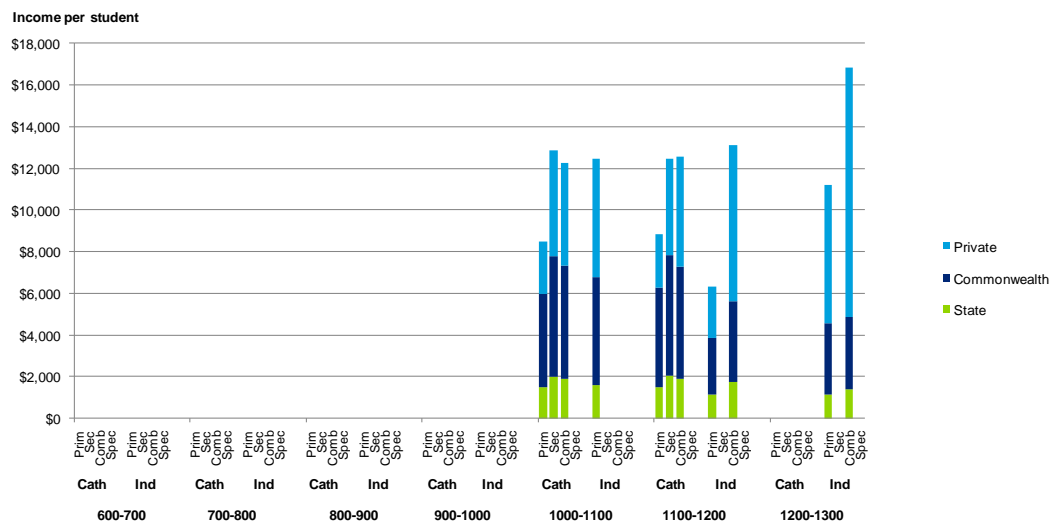
Source: ACARA

Note: P = primary schools; S = secondary schools.

Non-government schools

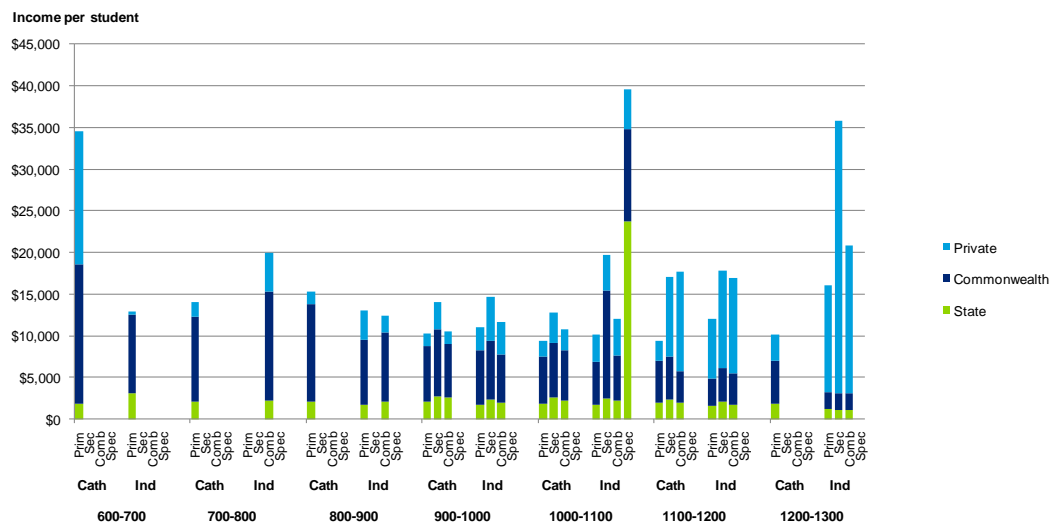
These charts include primary, secondary, combined and special schools.

Chart D.9: Recurrent income per student by ICSEA score, non-gov. schools, ACT



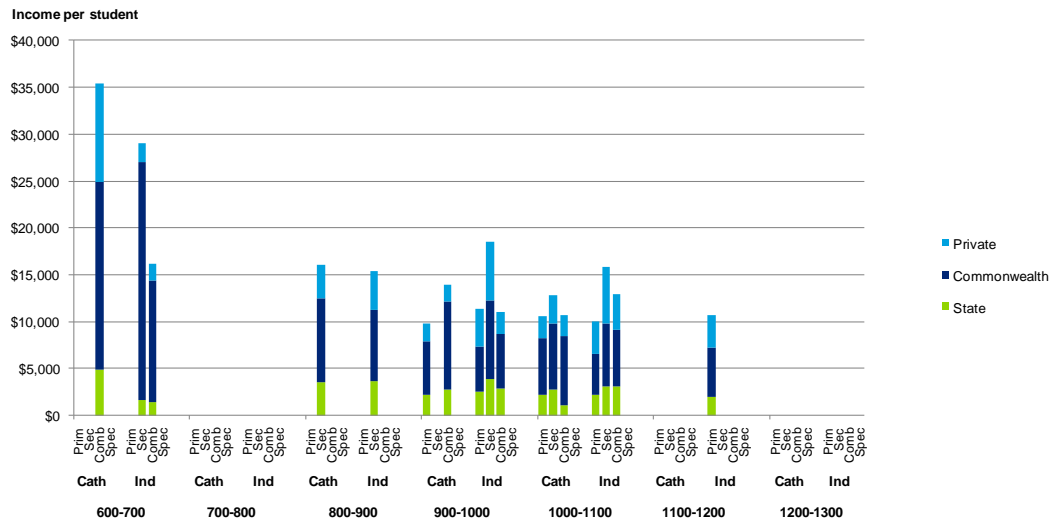
Source: ACARA

Chart D.10: Recurrent income per student by ICSEA score, non-gov. schools, NSW



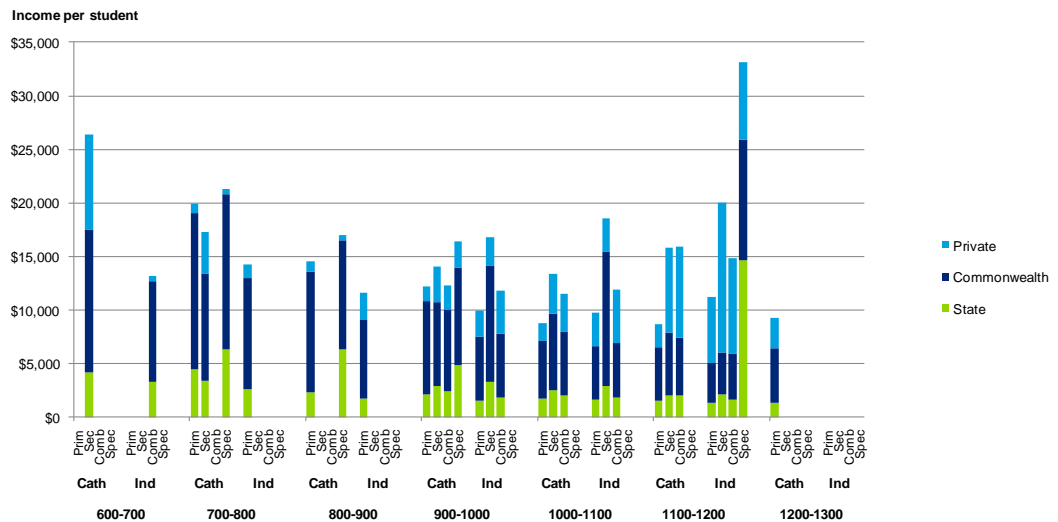
Source: ACARA

Chart D.11: Recurrent income per student by ICSEA score, non-gov. schools, NT



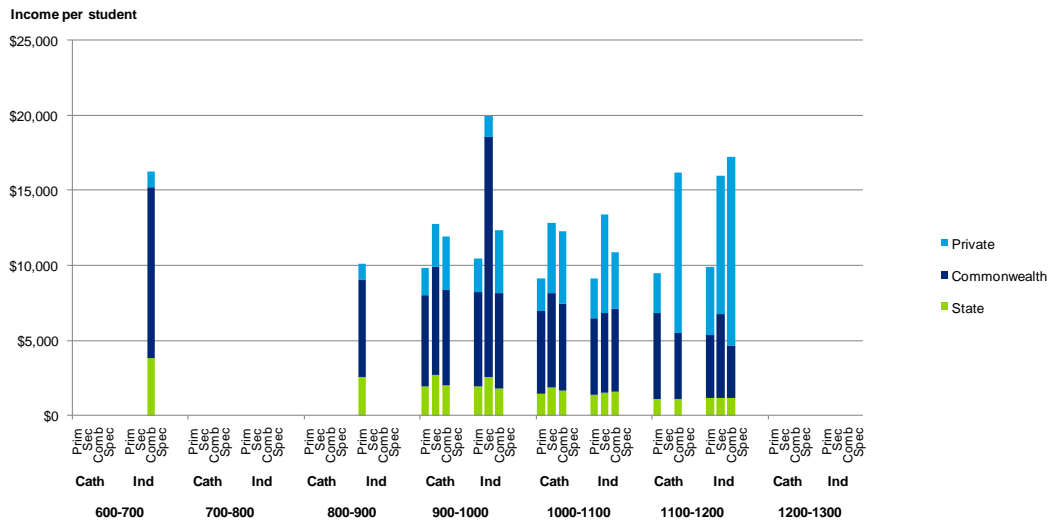
Source: ACARA

Chart D.12: Recurrent income per student by ICSEA score, non-gov. schools, QLD



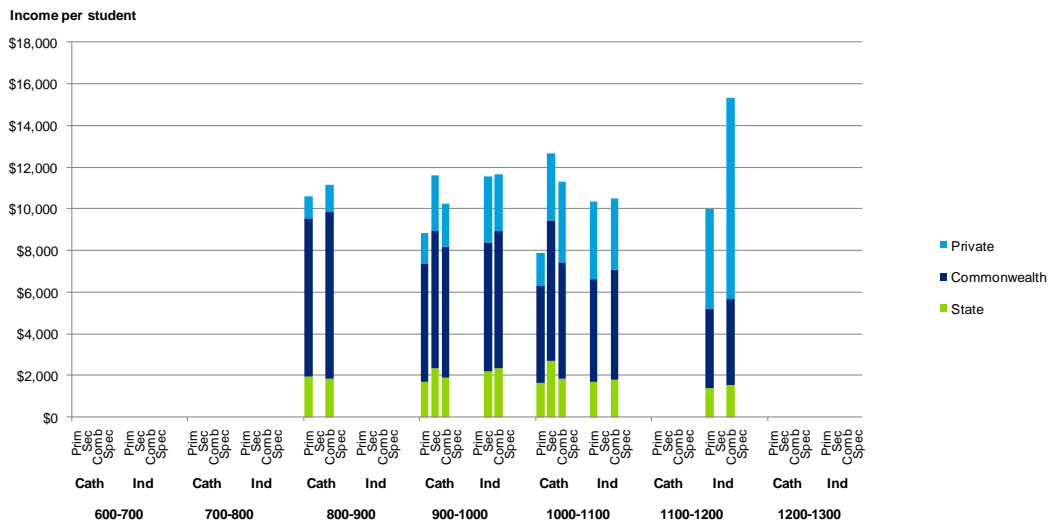
Source: ACARA

Chart D.13: Recurrent income per student by ICSEA score, non-gov. schools, SA



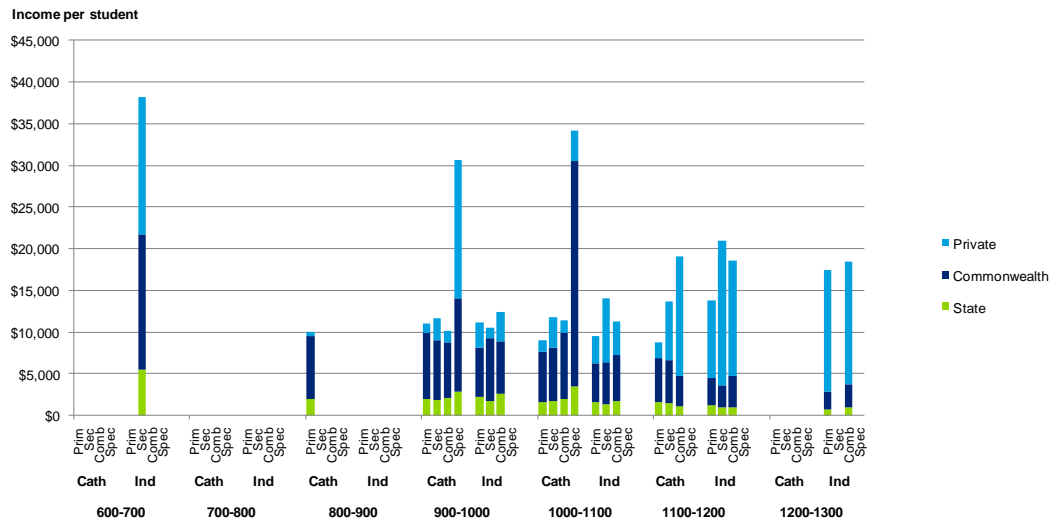
Source: ACARA

Chart D.14: Recurrent income per student by ICSEA score, non-gov. schools, TAS



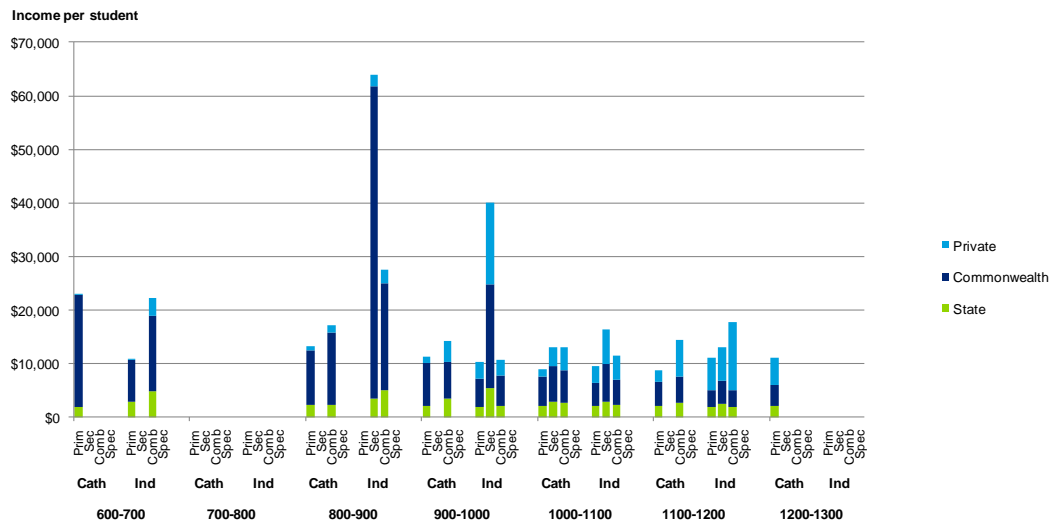
Source: ACARA

Chart D.15: Recurrent income per student by ICSEA score, non-gov. schools, VIC



Source: ACARA

Chart D.16: Recurrent income per student by ICSEA score, non-gov. schools, WA



Source: ACARA

Recurrent income per student by ATSI proportion of enrolments

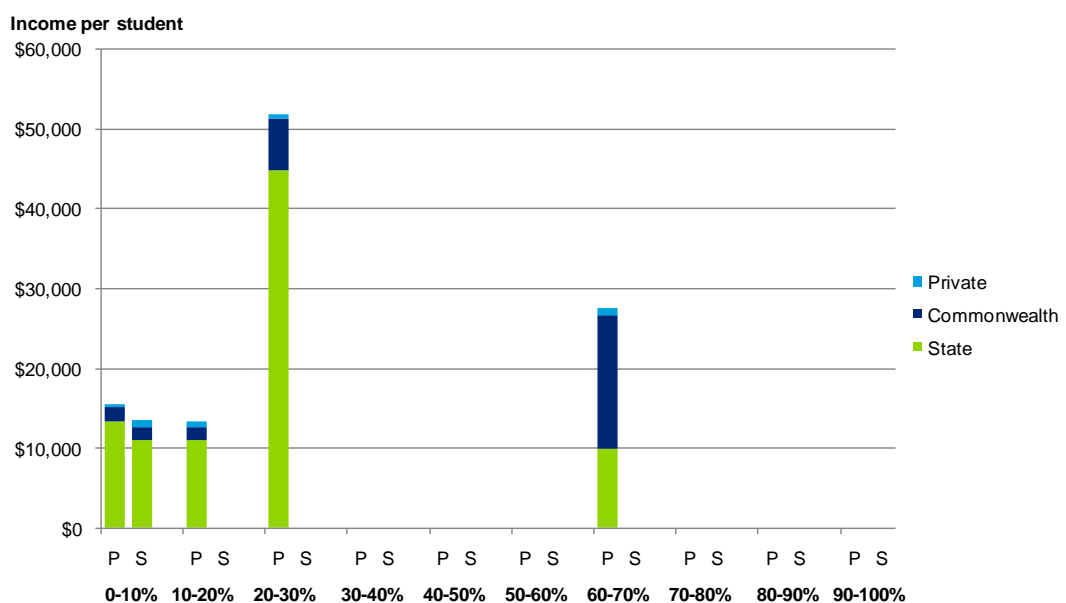
The below charts show the level of recurrent income per student (from Commonwealth, state/territory and private sources) by ATSI proportion of enrolments for government and non-government schools in each jurisdiction.⁵⁵ Schools that do not have any ATSI enrolments are not included.

The charts are based on ACARA data and include a combination of 2009 and 2010 data (dataset includes a mixture of 2009 and 2010 school profiles).

Government schools

These charts include primary and secondary schools only (i.e. combined and special schools are not included).

Chart D.17: Recurrent income per student by ATSI enrolments, gov. schools, ACT

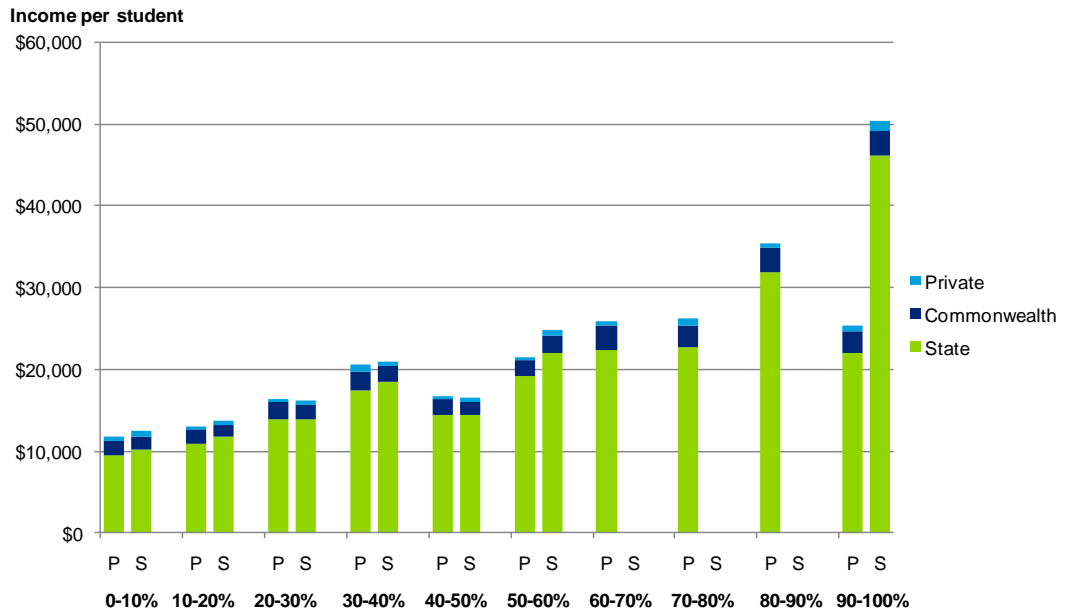


Source: ACARA

Note: P = primary schools; S = secondary schools.

⁵⁵ Combined schools and special schools are not included.

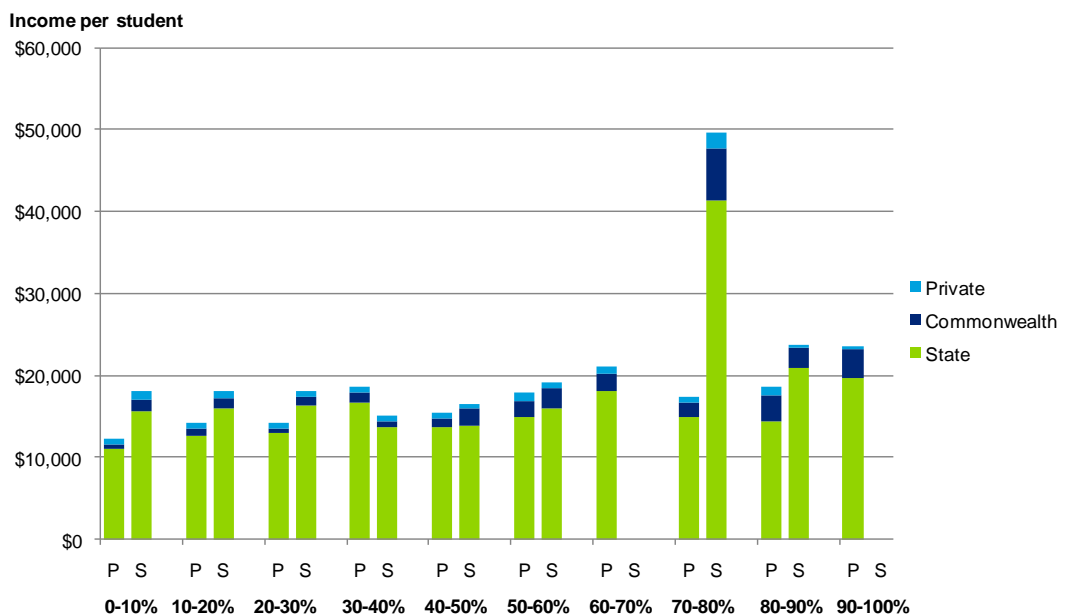
Chart D.18: Recurrent income per student by ATSI enrolments, gov. schools, NSW



Source: ACARA

Note: P = primary schools; S = secondary schools.

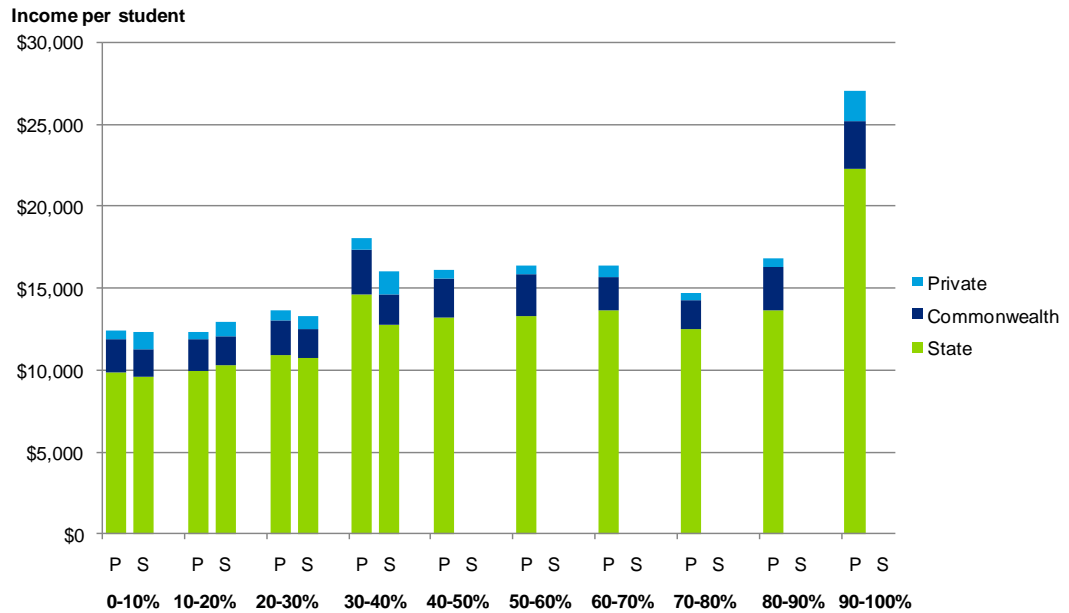
Chart D.19: Recurrent income per student by ATSI enrolments, gov. schools, NT



Source: ACARA

Note: P = primary schools; S = secondary schools.

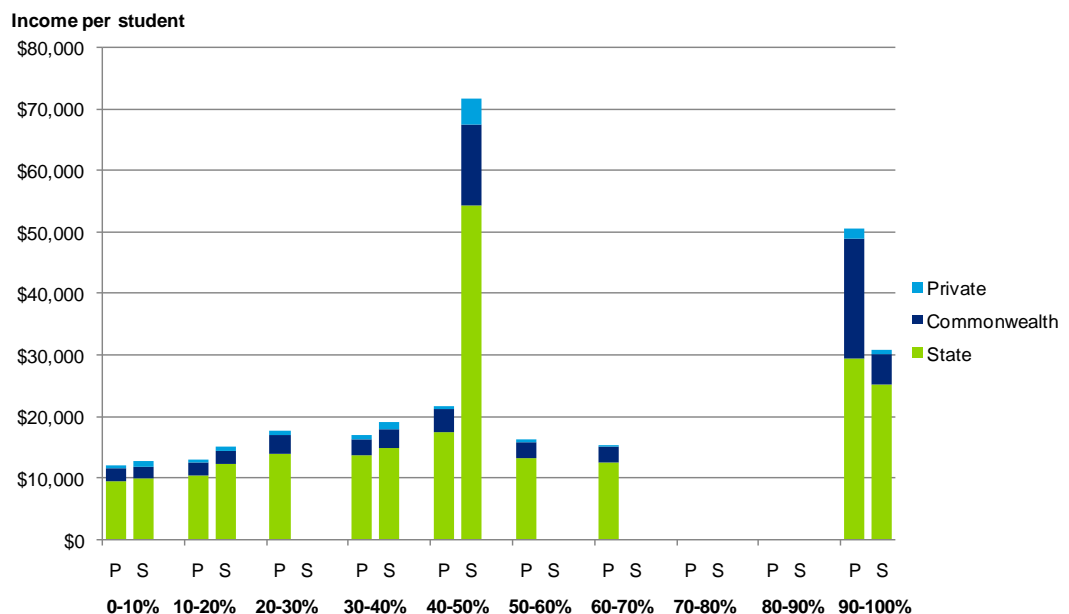
Chart D.20: Recurrent income per student by ATSI enrolments, gov. schools, QLD



Source: ACARA

Note: P = primary schools; S = secondary schools.

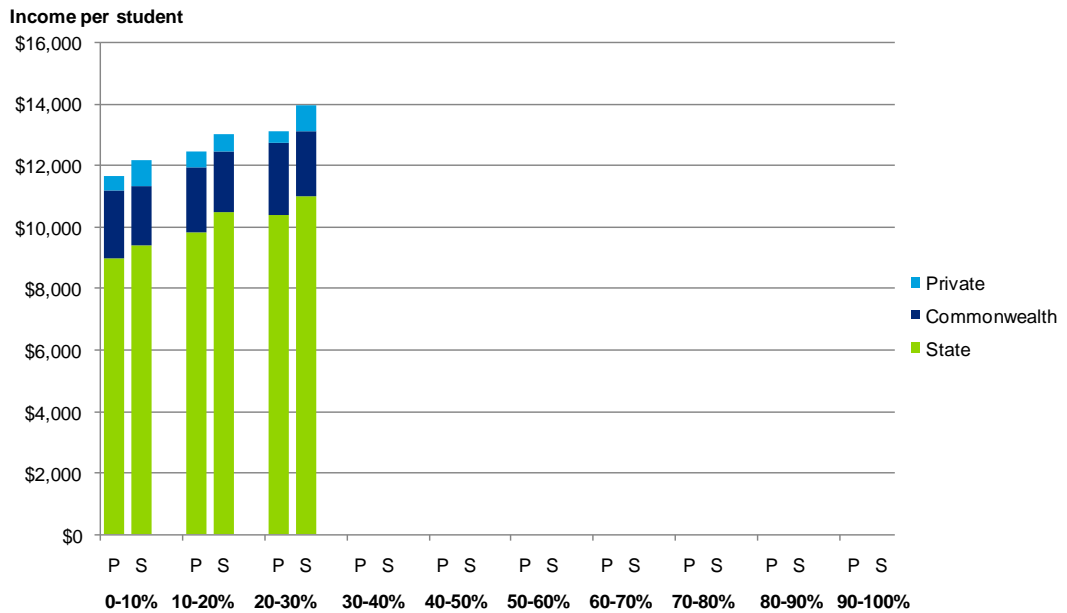
Chart D.21: Recurrent income per student by ATSI enrolments, gov. schools, SA



Source: ACARA

Note: P = primary schools; S = secondary schools.

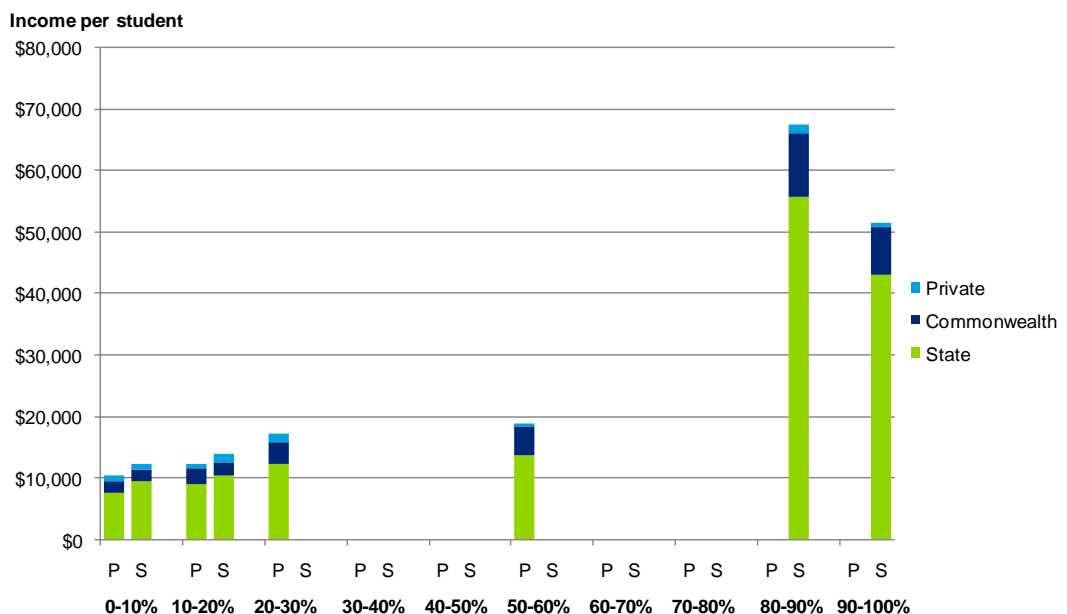
Chart D.22: Recurrent income per student by ATSI enrolments, gov. schools, TAS



Source: ACARA

Note: P = primary schools; S = secondary schools.

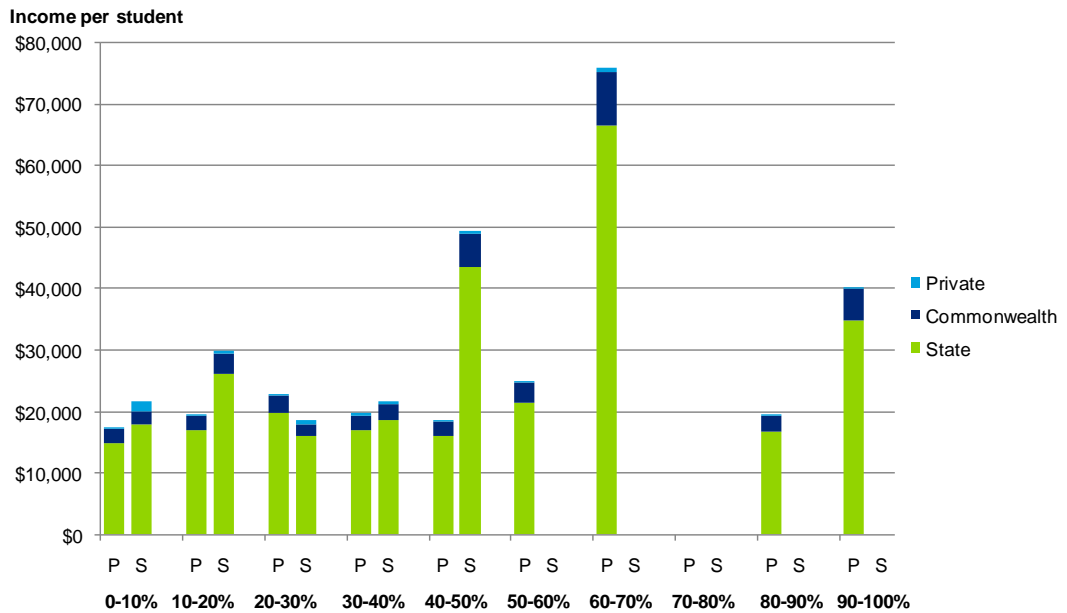
Chart D.23: Recurrent income per student by ATSI enrolments, gov. schools, VIC



Source: ACARA

Note: P = primary schools; S = secondary schools.

Chart D.24: Recurrent income per student by ATSI enrolments, gov. schools, WA



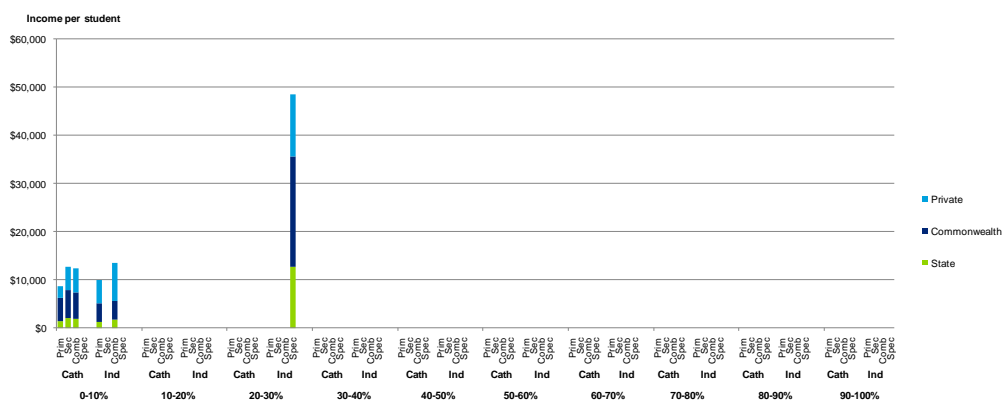
Source: ACARA

Note: P = primary schools; S = secondary schools.

Non-government schools

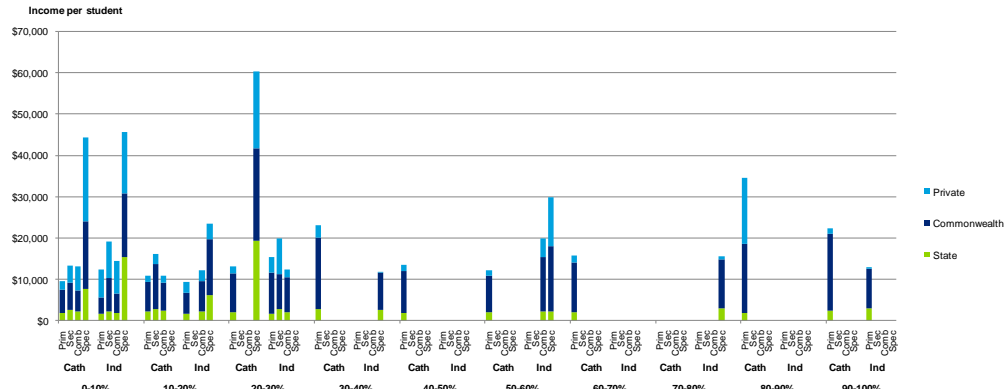
These charts include primary, secondary, combined and special schools.

Chart D.25: Recurrent income per student by ATSI enrolments, non-gov. schools, ACT



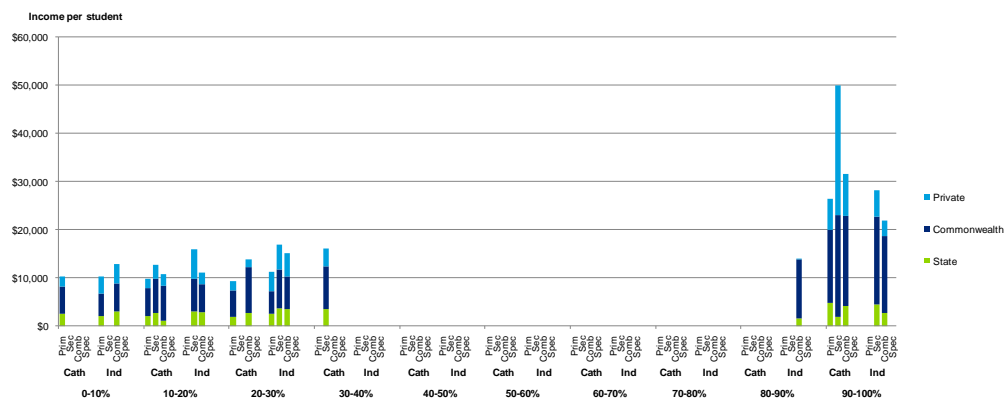
Source: ACARA

Chart D.26: Recurrent income per student by ATSI enrolments, non-gov. schools, NSW



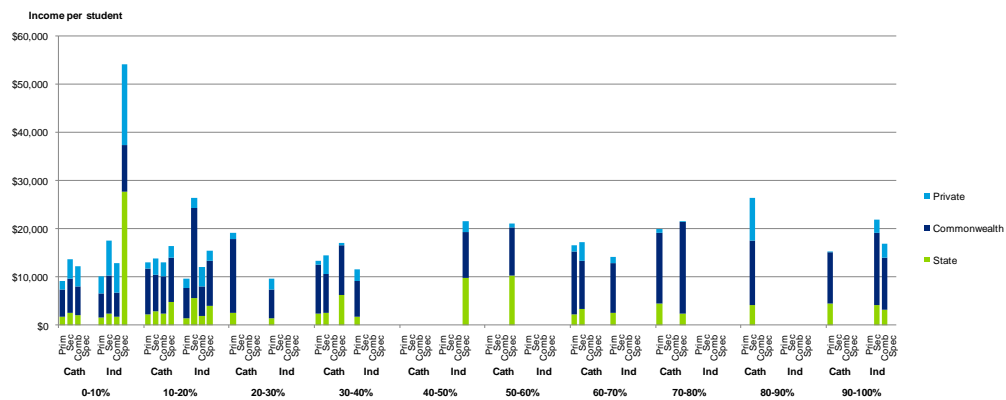
Source: ACARA

Chart D.27: Recurrent income per student by ATSI enrolments, non-gov. schools, NT



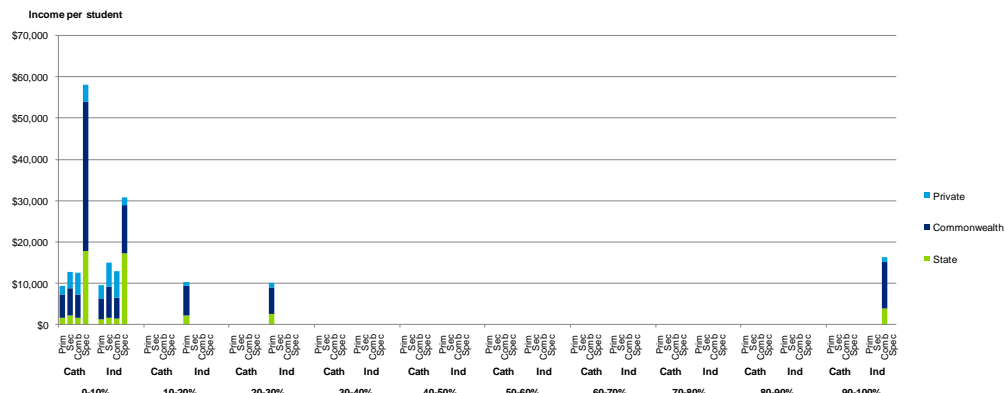
Source: ACARA

Chart D.28: Recurrent income per student by ATSI enrolments, non-gov. schools, QLD



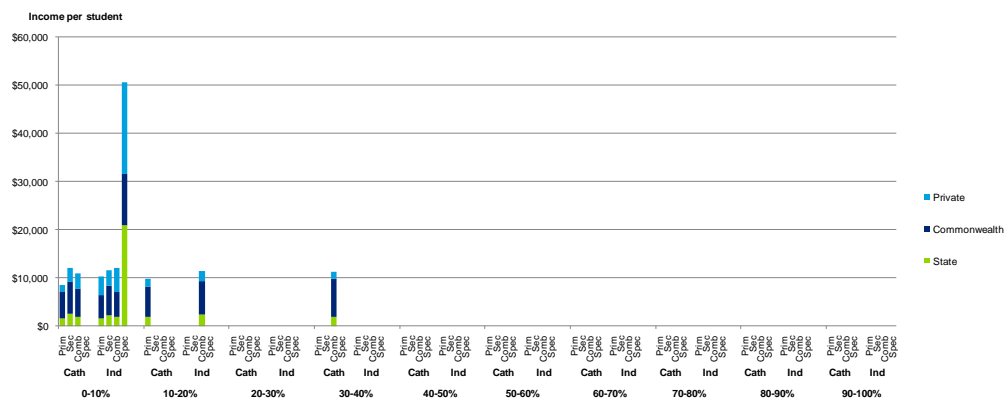
Source: ACARA

Chart D.29: Recurrent income per student by ATSI enrolments, non-gov. schools, SA



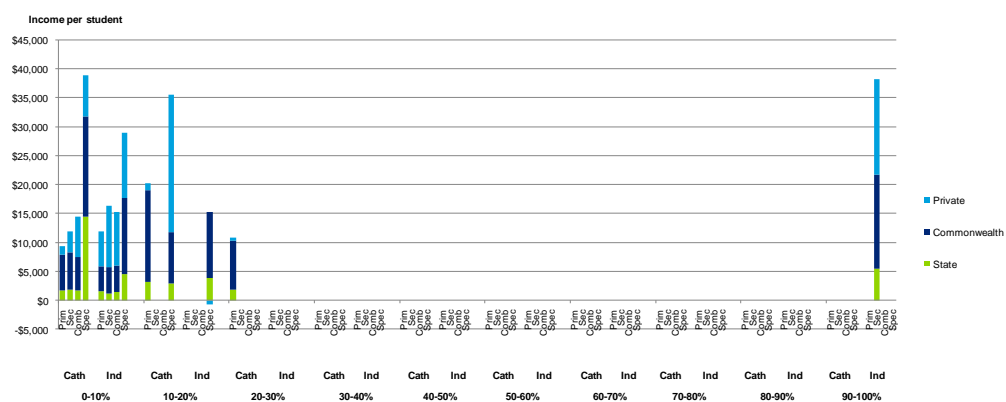
Source: ACARA

Chart D.30: Recurrent income per student by ATSI enrolments, non-gov. schools, TAS



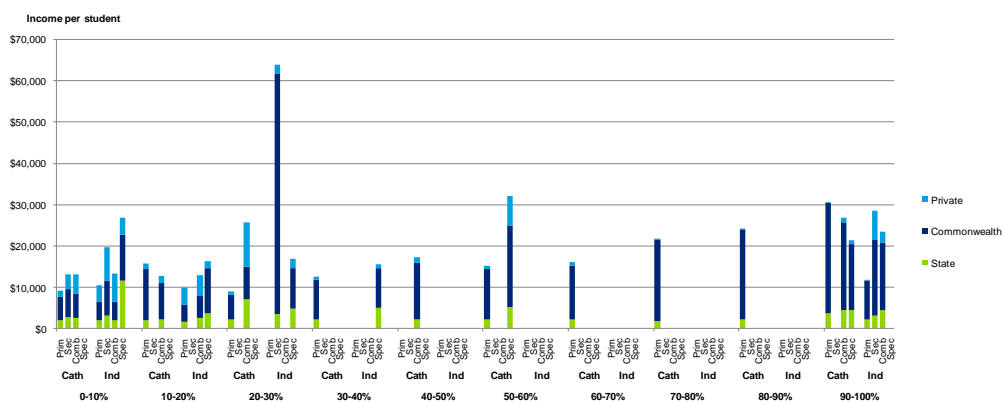
Source: ACARA

Chart D.31: Recurrent income per student by ATSI enrolments, non-gov. schools, VIC



Source: ACARA

Chart D.32: Recurrent income per student by ATSI enrolments, non-gov. schools, WA



Source: ACARA

Recurrent income per student by school region

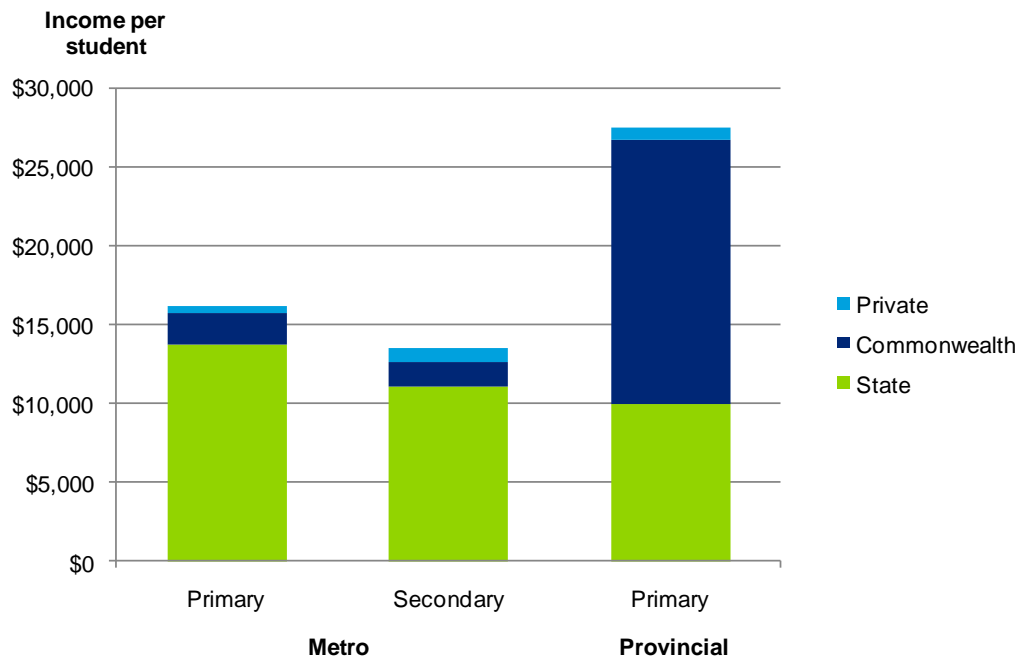
The below charts show the level of recurrent income per student (from Commonwealth, state/territory and private sources) by school region for government and non-government schools in each jurisdiction.

The charts are based on ACARA data and include a combination of 2009 and 2010 data (dataset includes a mixture of 2009 and 2010 school profiles).

Government schools

These charts include primary and secondary schools only (i.e. combined and special schools are not included).

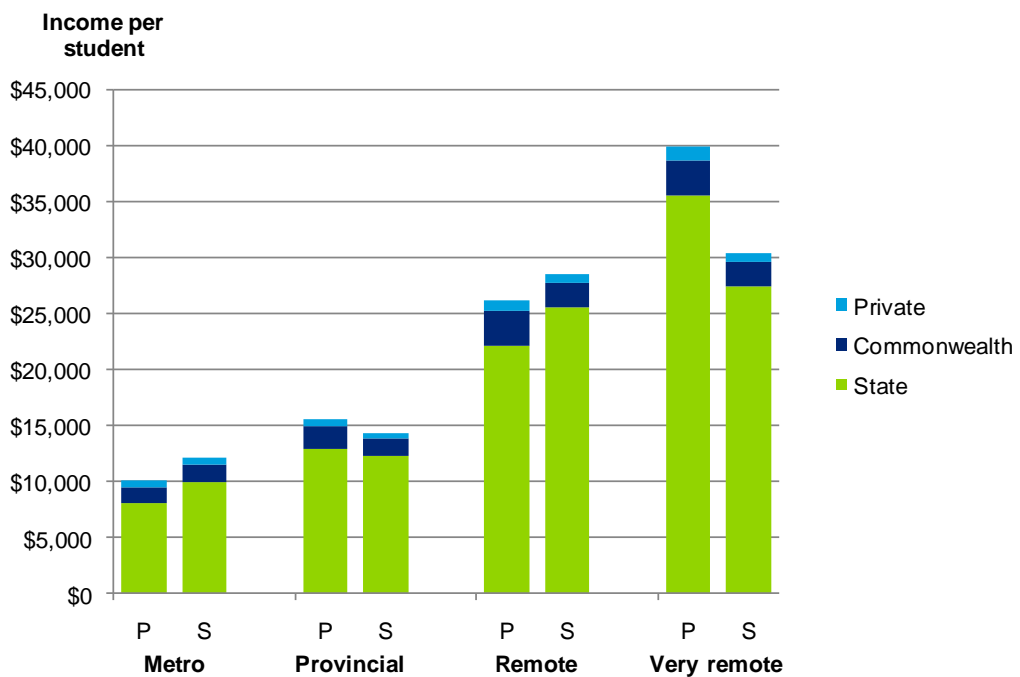
Chart D.33: Recurrent income per student by school region, gov. schools, ACT



Source: ACARA

Note: P = primary schools; S = secondary schools. The ACT does not have any remote or very remote schools. High level of Commonwealth funding in the primary provincial range is related to a primary school with 63% ATSI students.

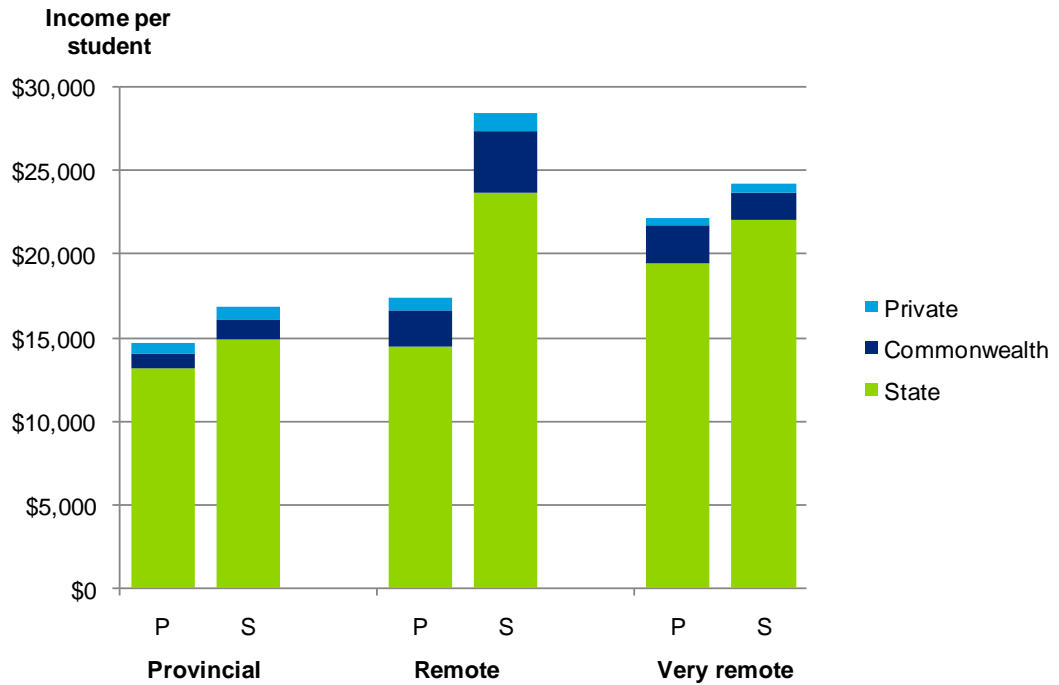
Chart D.34: Recurrent income per student by school region, gov. schools, NSW



Source: ACARA

Note: P = primary schools; S = secondary schools.

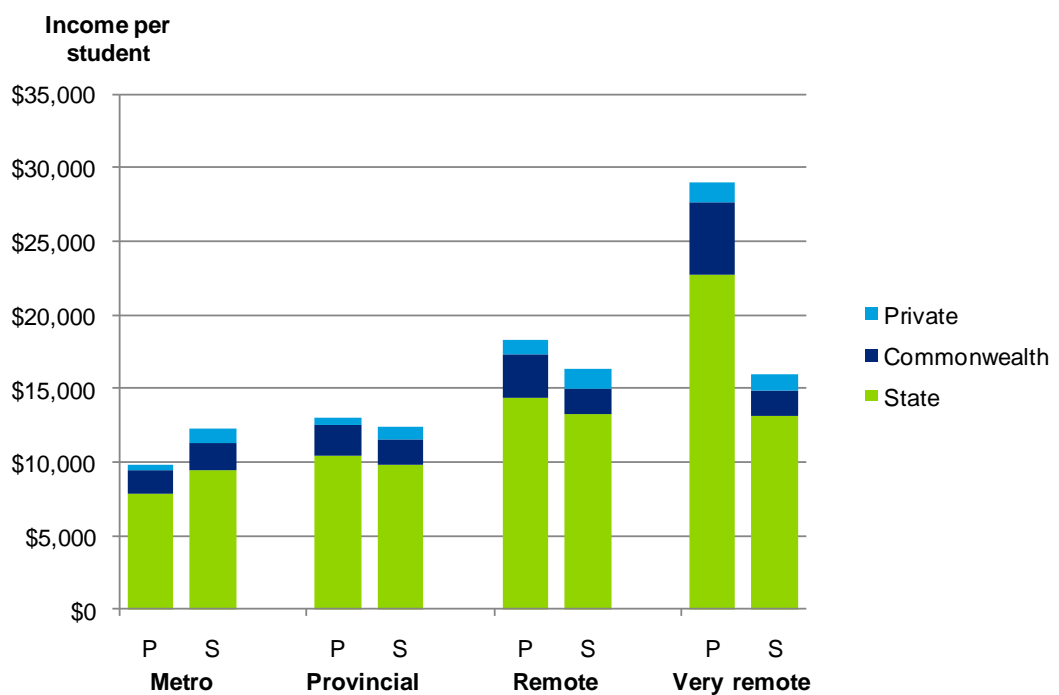
Chart D.35: Recurrent income per student by school region, gov. schools, NT



Source: ACARA

Note: P = primary schools; S = secondary schools. The NT does not have any metropolitan schools.

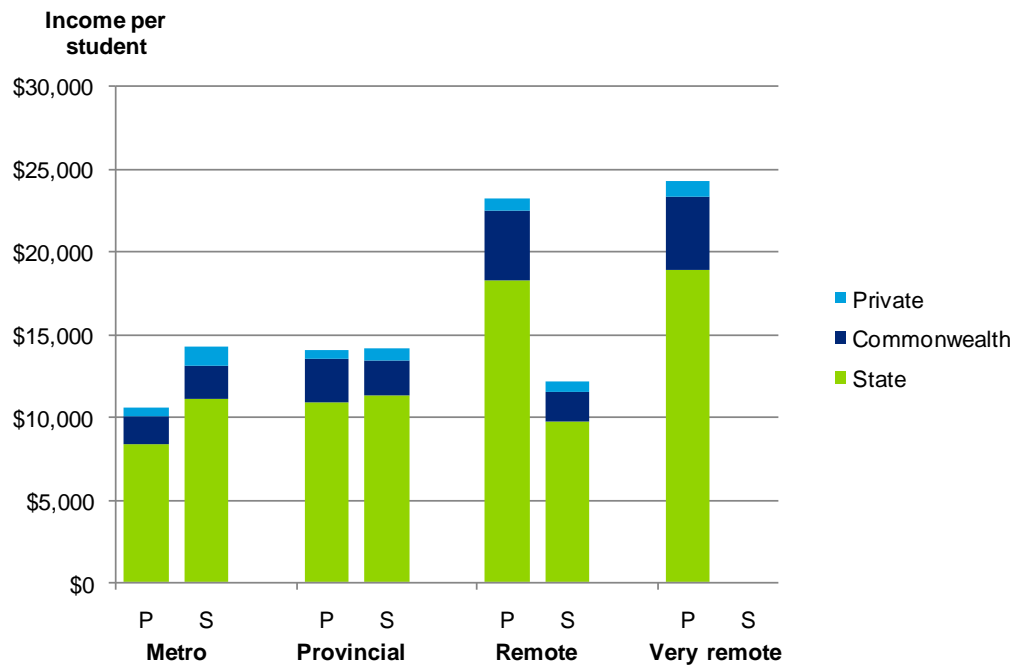
Chart D.36: Recurrent income per student by school region, gov. schools, QLD



Source: ACARA

Note: P = primary schools; S = secondary schools.

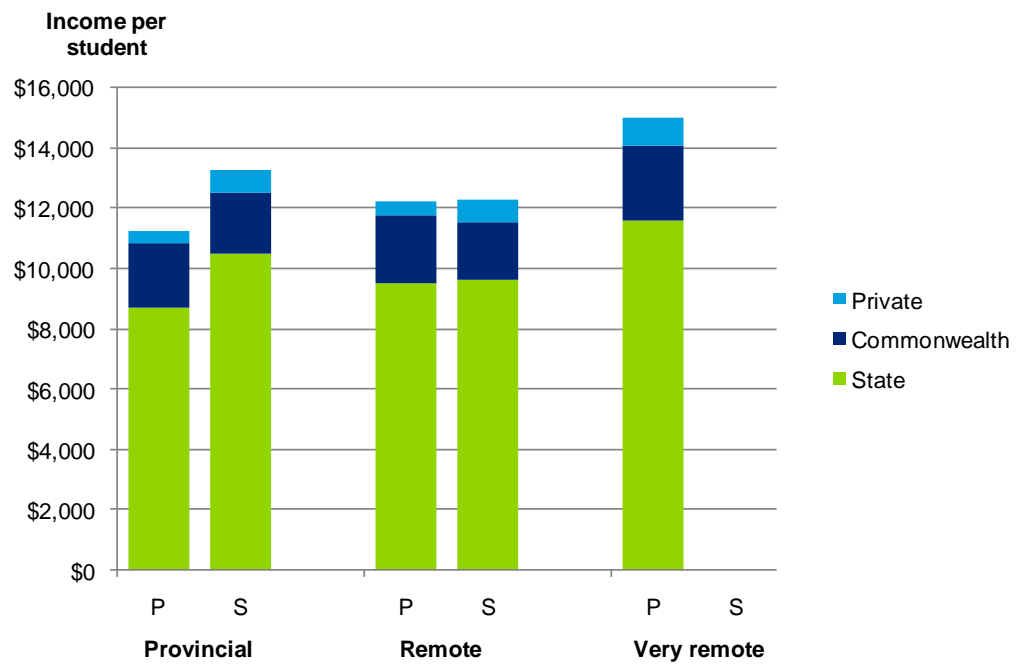
Chart D.37: Recurrent income per student by school region, gov. schools, SA



Source: ACARA

Note: P = primary schools; S = secondary schools.

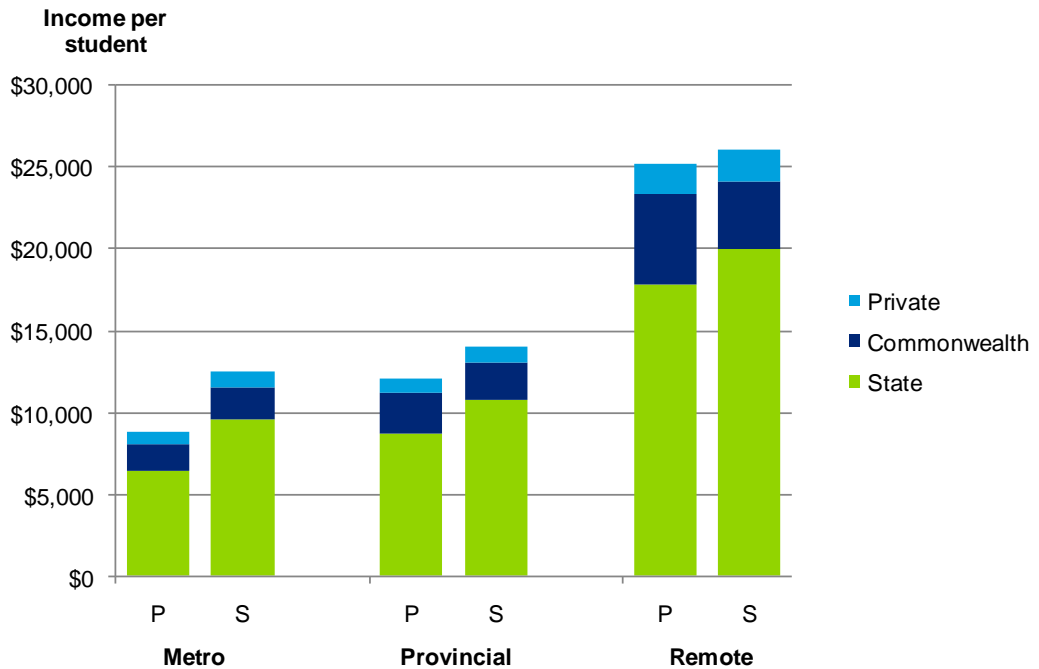
Chart D.38: Recurrent income per student by school region, gov. schools, TAS



Source: ACARA

Note: P = primary schools; S = secondary schools. Tasmania does not have any metropolitan schools.

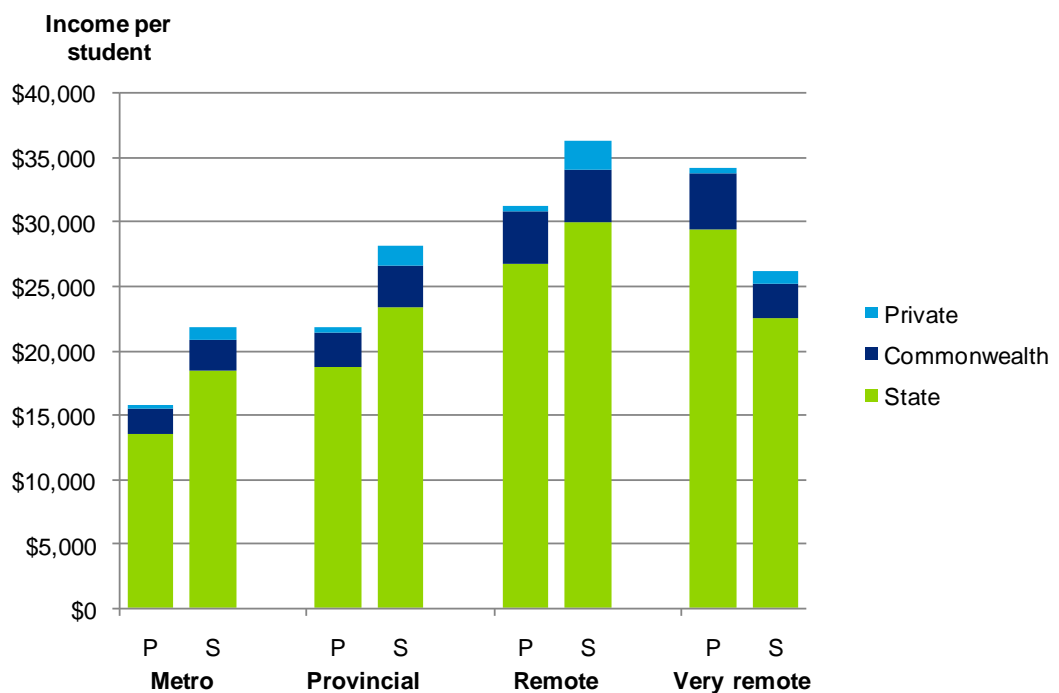
Chart D.39: Recurrent income per student by school region, gov. schools, VIC



Source: ACARA

Note: P = primary schools; S = secondary schools. Victoria does not have any very remote schools.

Chart D.40: Recurrent income per student by school region, gov. schools, WA



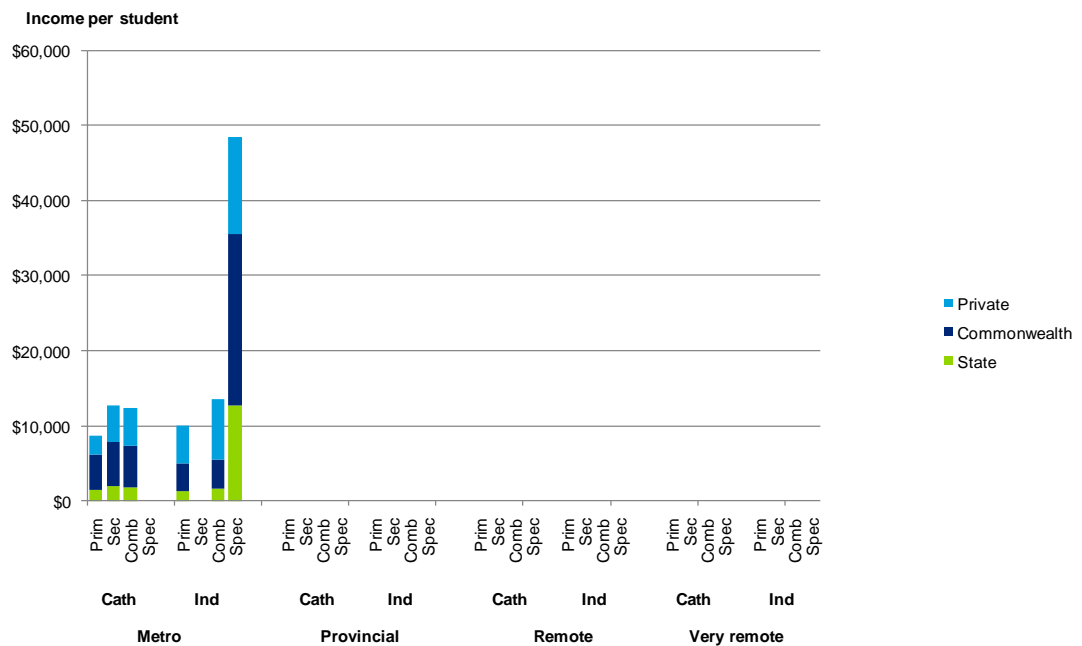
Source: ACARA

Note: P = primary schools; S = secondary schools. Victoria does not have any very remote schools.

Non-government schools

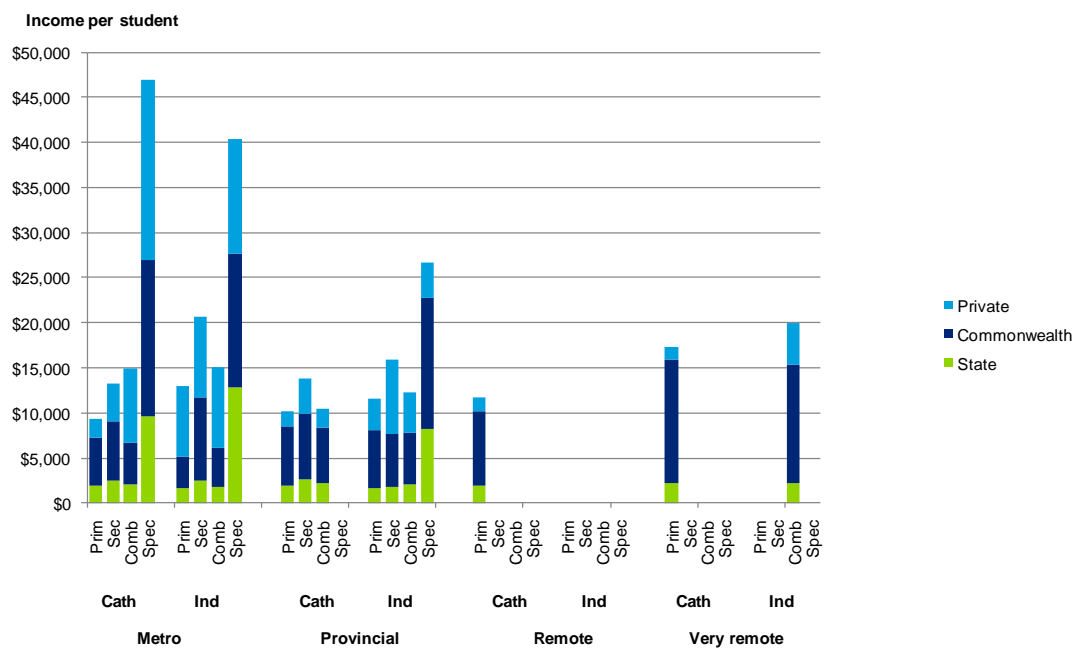
These charts include primary, secondary, combined and special schools.

Chart D.41: Recurrent income per student by school region, non-gov. schools, ACT



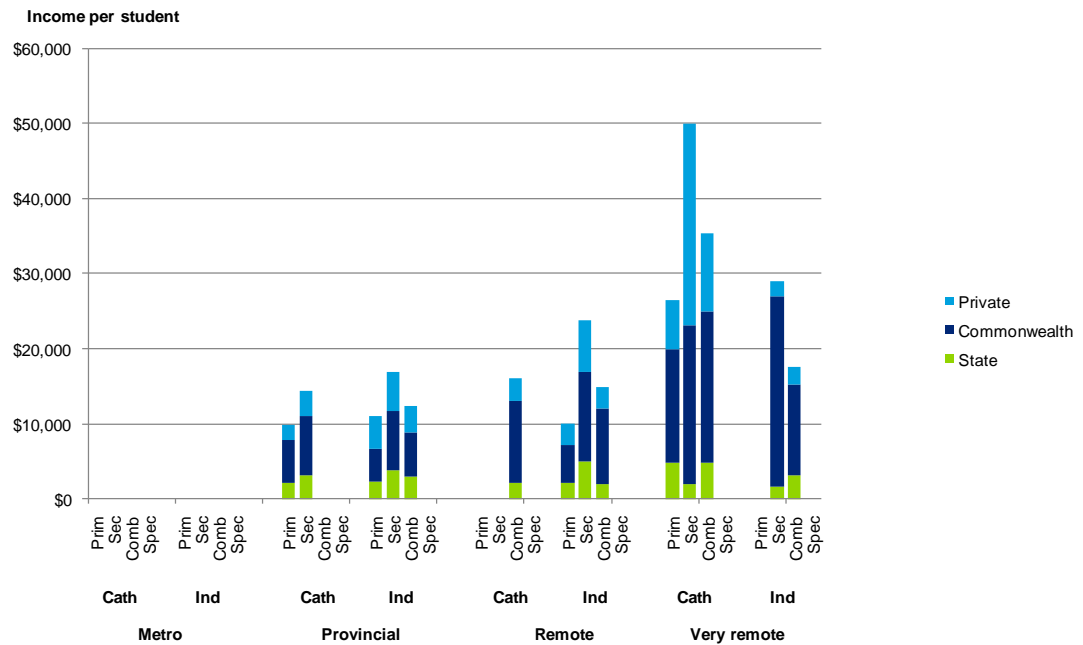
Source: ACARA

Chart D.42: Recurrent income per student by school region, non-gov. schools, NSW



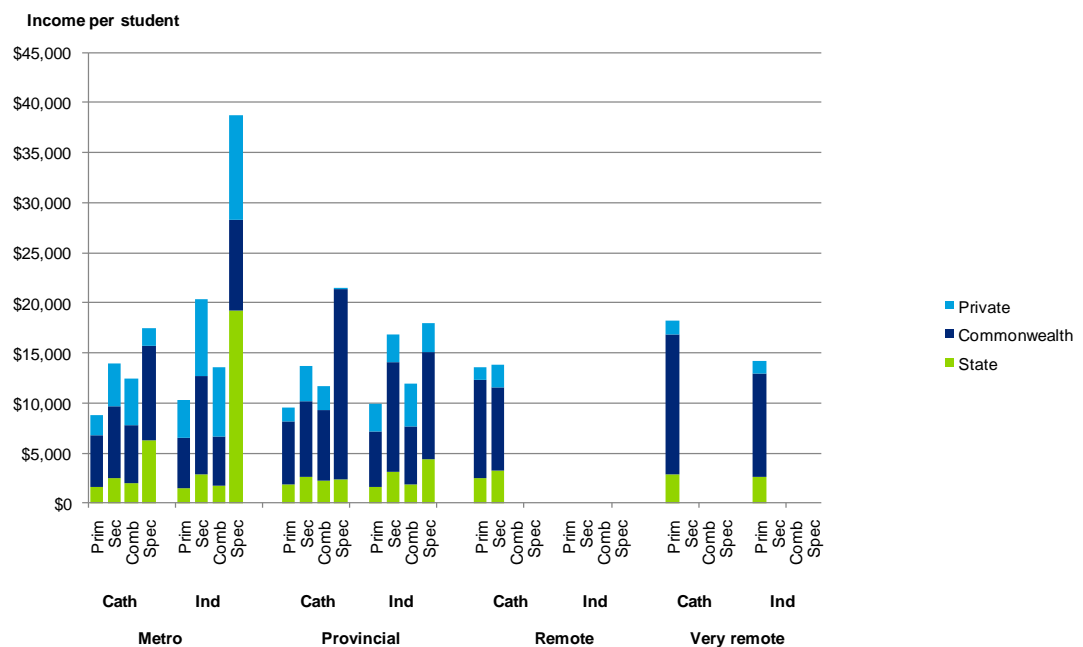
Source: ACARA

Chart D.43: Recurrent income per student by school region, non-gov. schools, NT



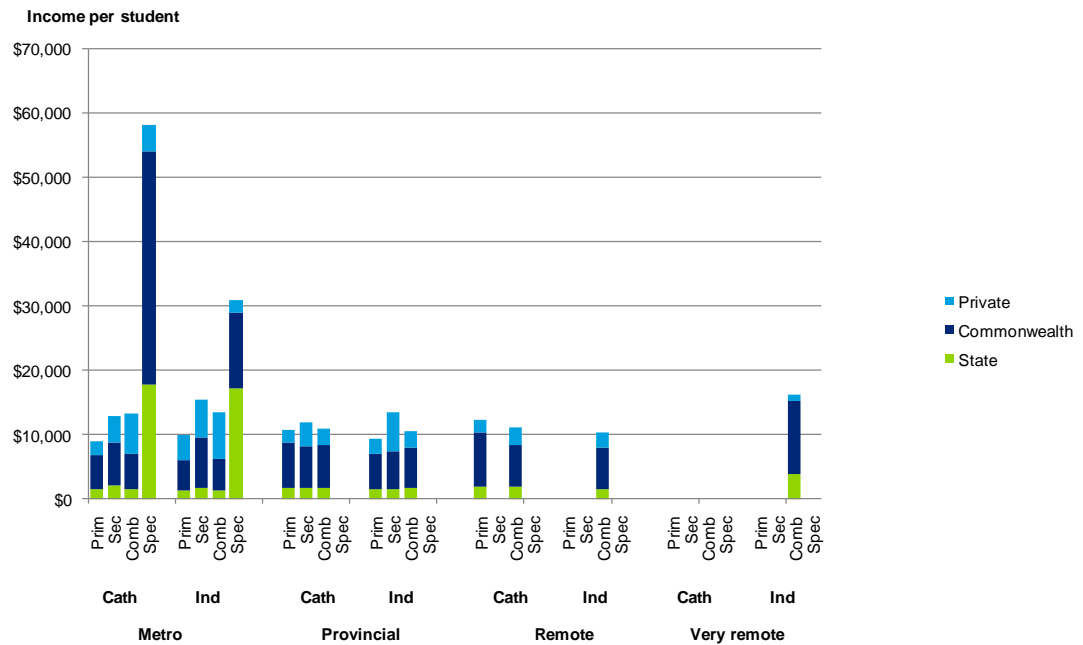
Source: ACARA

Chart D.44: Recurrent income per student by school region, non-gov. schools, QLD



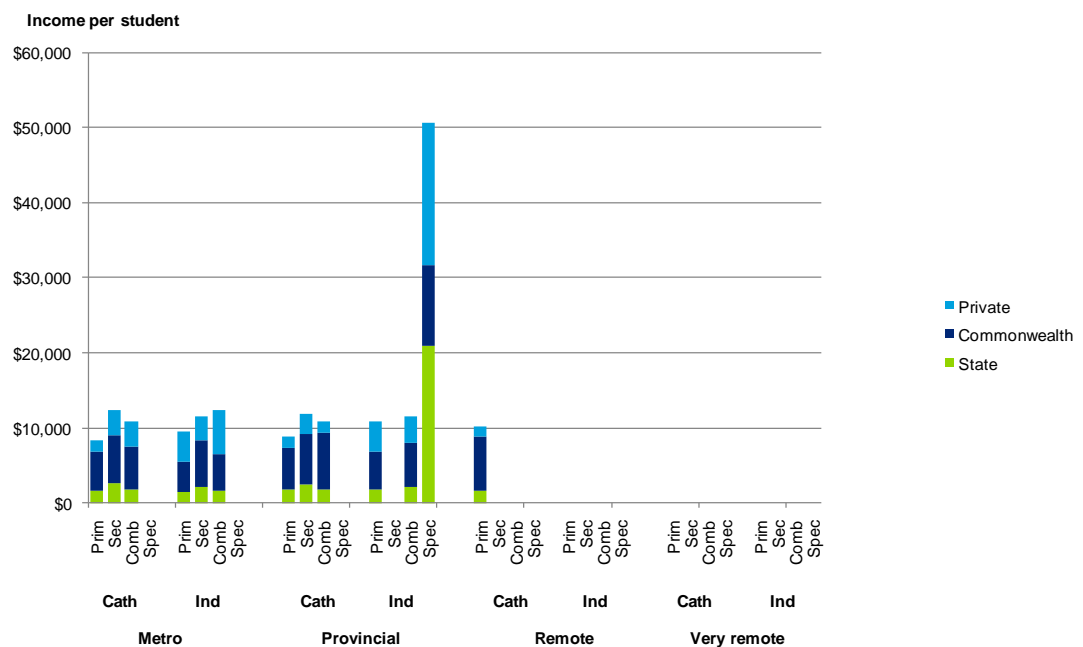
Source: ACARA

Chart D.45: Recurrent income per student by school region, non-gov. schools, SA



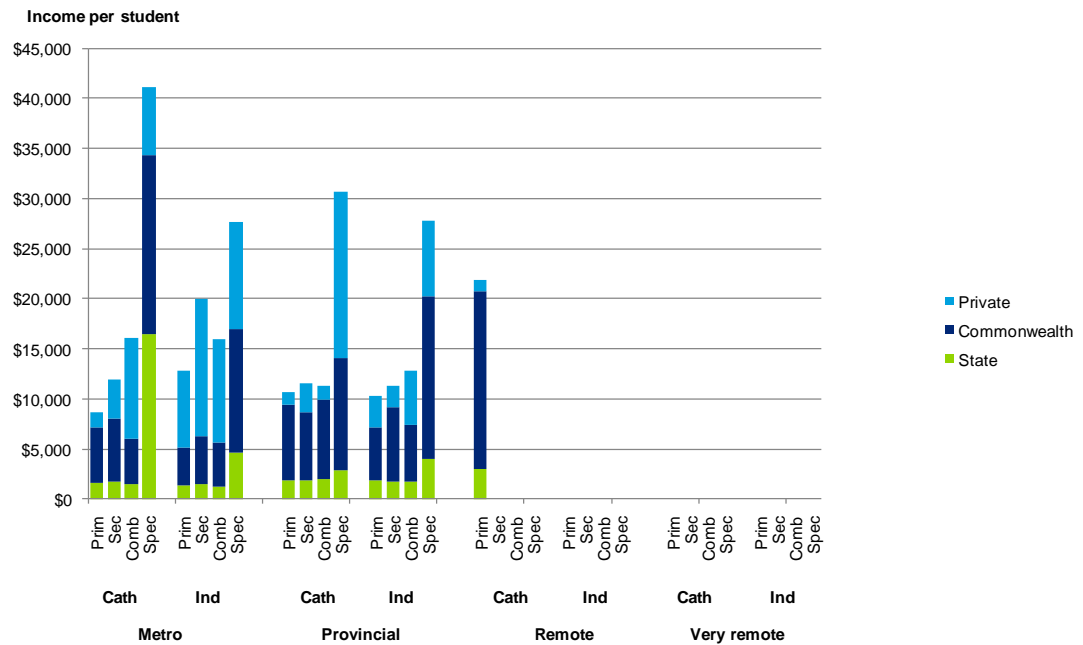
Source: ACARA

Chart D.46: Recurrent income per student by school region, non-gov. schools, TAS



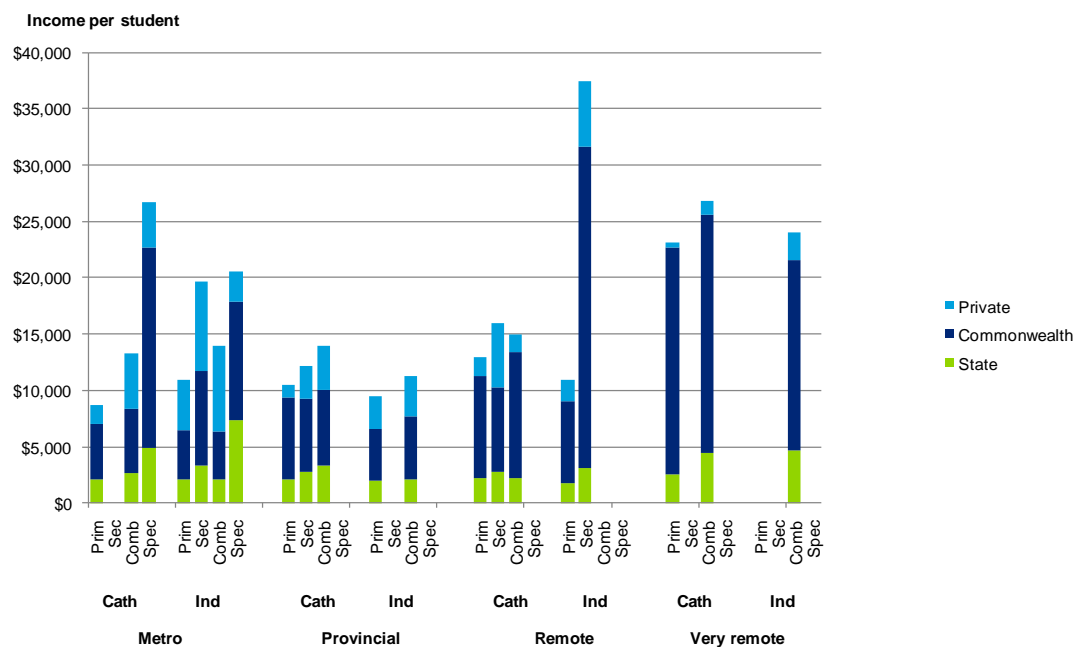
Source: ACARA

Chart D.47: Recurrent income per student by school region, non-gov. schools, VIC



Source: ACARA

Chart D.48: Recurrent income per student by school region, non-gov. schools, WA



Source: ACARA

Recurrent income per student by school size

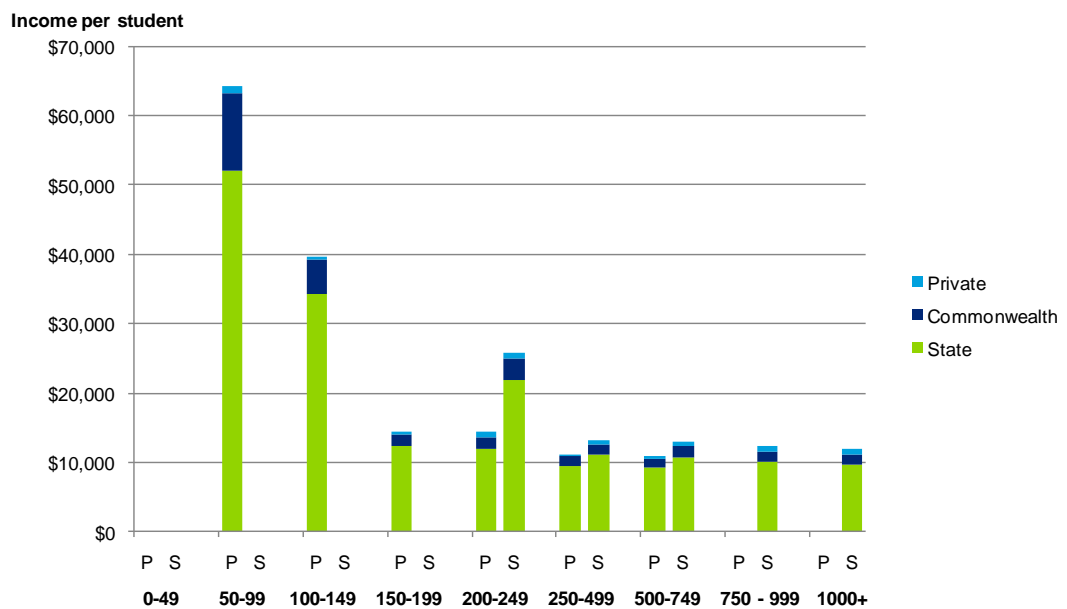
The below charts show the level of recurrent income per student (from Commonwealth, state/territory and private sources) for government and non-government schools in each jurisdiction, by school size (i.e. number of student enrolments).

The charts are based on ACARA data and include a combination of 2009 and 2010 data (dataset includes a mixture of 2009 and 2010 school profiles).

Government schools

These charts include primary and secondary schools only (i.e. combined and special schools are not included).

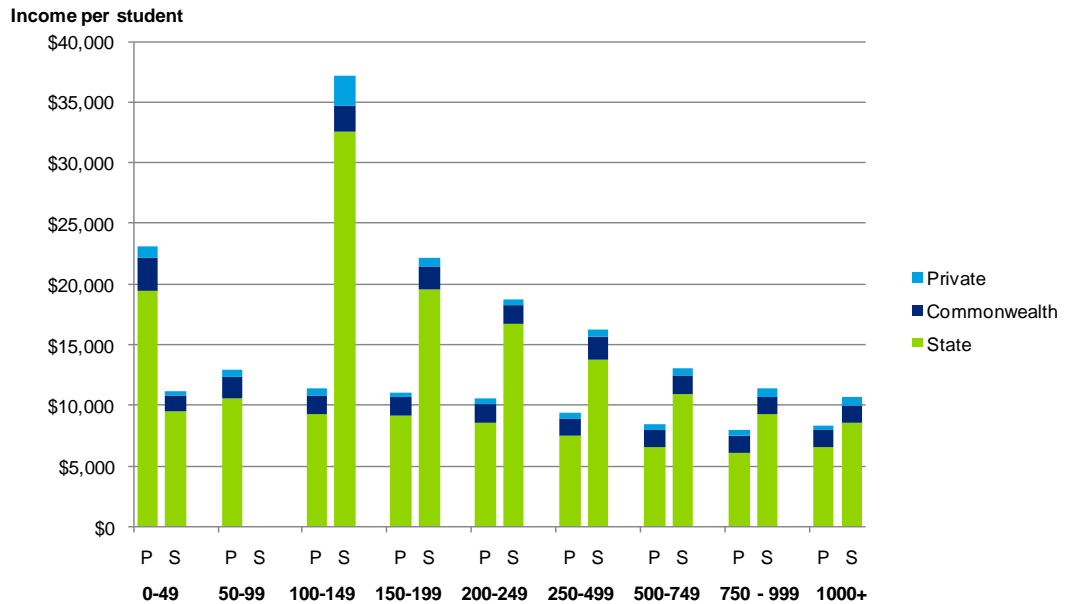
Chart D.49: Recurrent income per student by school size, gov. schools, ACT



Source: ACARA

Note: P = primary schools; S = secondary schools. Primary 50-99 category includes a school with 63% ATSI students.

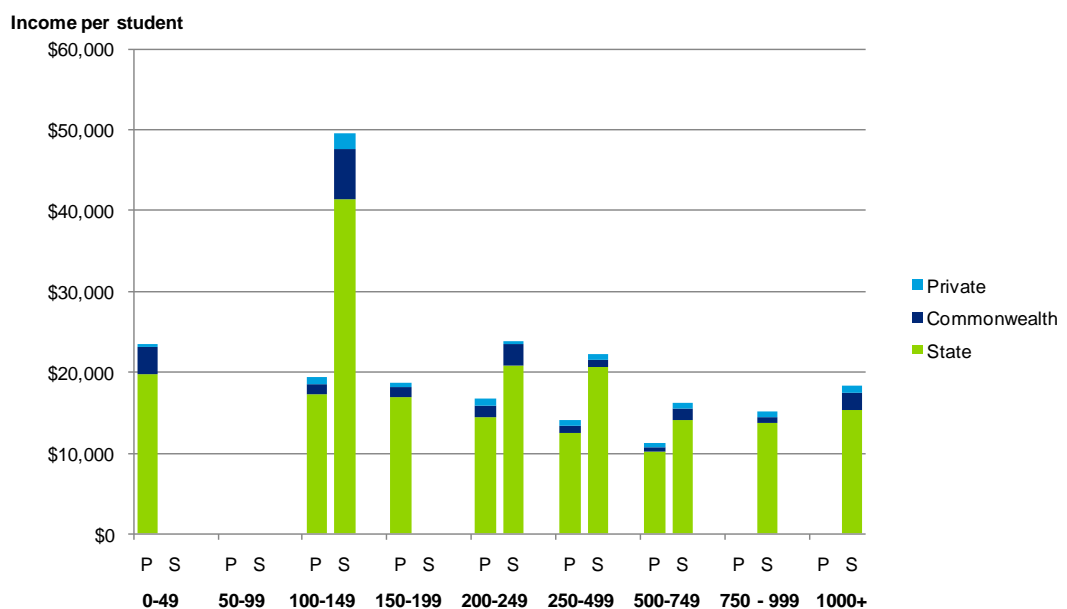
Chart D.50: Recurrent income per student by school size, gov. schools, NSW



Source: ACARA

Note: P = primary schools; S = secondary schools. Secondary 100-149 category includes a school with 92% ATSI students.

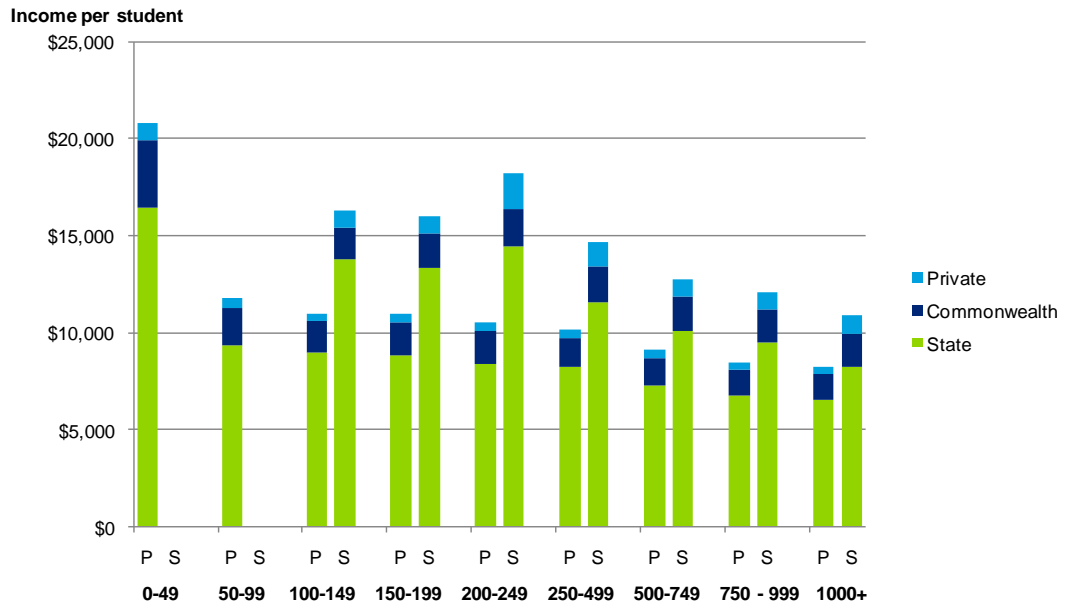
Chart D.51: Recurrent income per student by school size, gov. schools, NT



Source: ACARA

Note: P = primary schools; S = secondary schools. Secondary 100-149 category includes a school with 73% ATSI students.

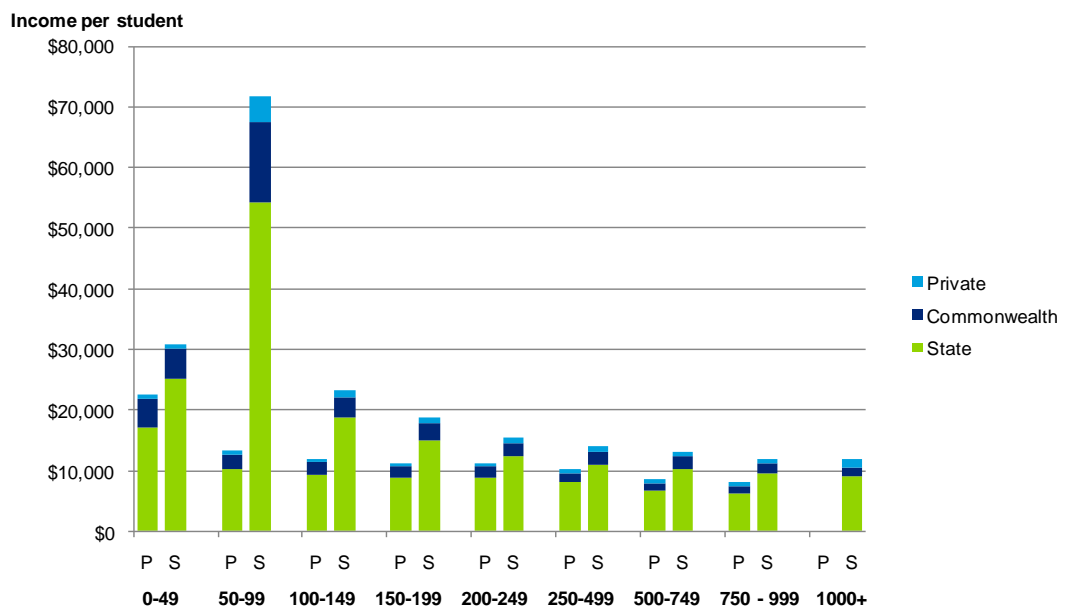
Chart D.52: Recurrent income per student by school size, gov. schools, QLD



Source: ACARA

Note: P = primary schools; S = secondary schools.

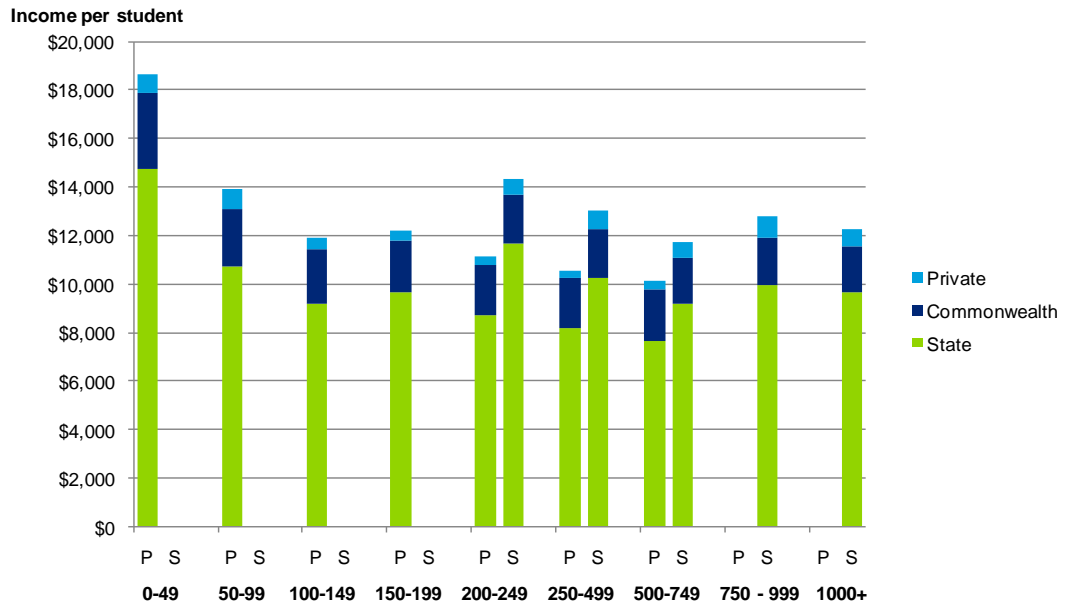
Chart D.53: Recurrent income per student by school size, gov. schools, SA



Source: ACARA

Note: P = primary schools; S = secondary schools. Secondary 50-99 category includes a school with 41% ATSI students.

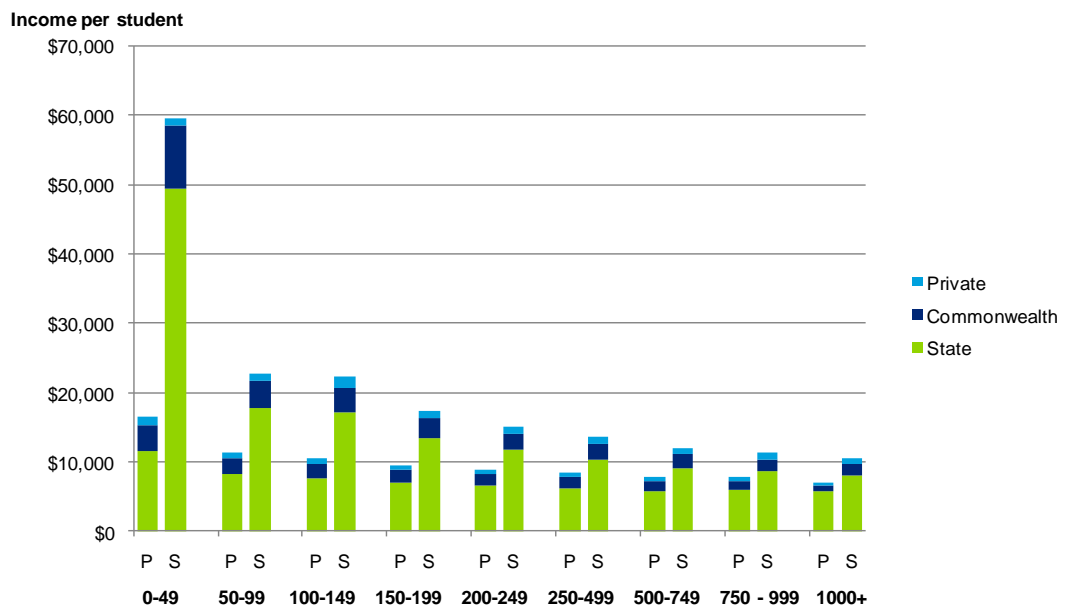
Chart D.54: Recurrent income per student by school size, gov. schools, TAS



Source: ACARA

Note: P = primary schools; S = secondary schools.

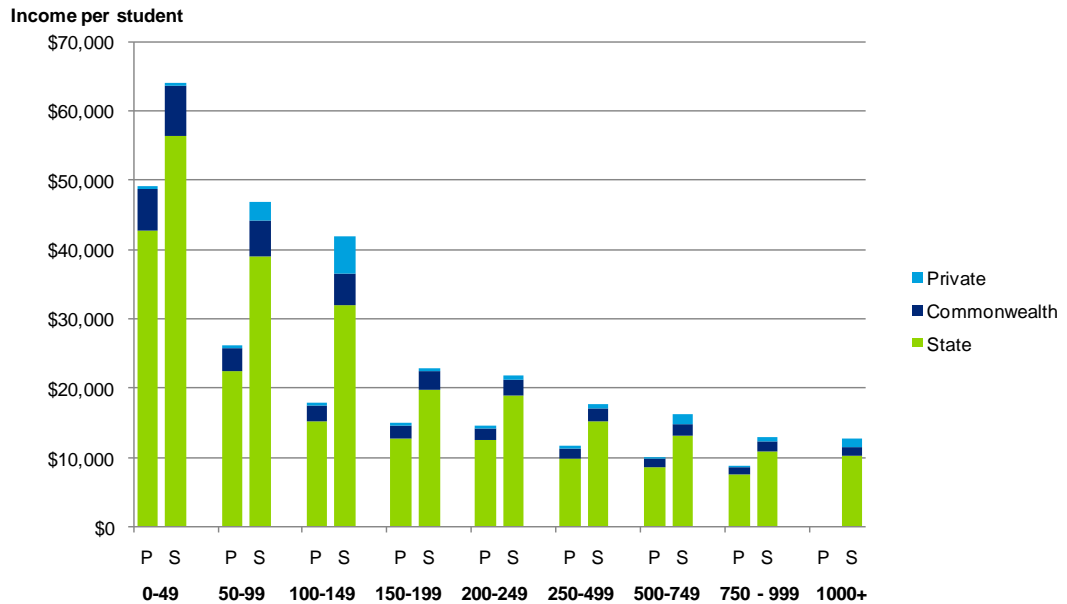
Chart D.55: Recurrent income per student by school size, gov. schools, VIC



Source: ACARA

Note: P = primary schools; S = secondary schools. Secondary 0-49 category includes four schools with between 82% to 100% ATSI students.

Chart D.56: Recurrent income per student by school size, gov. schools, WA



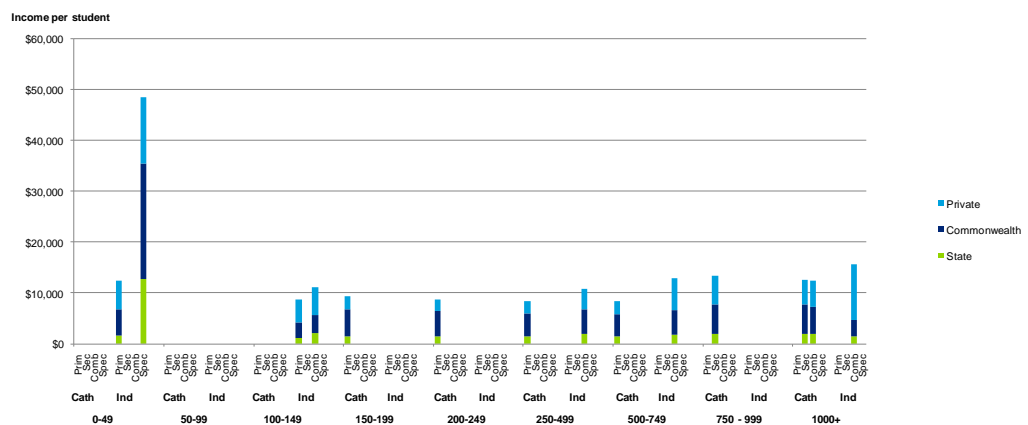
Source: ACARA

Note: P = primary schools; S = secondary schools.

Non-government schools

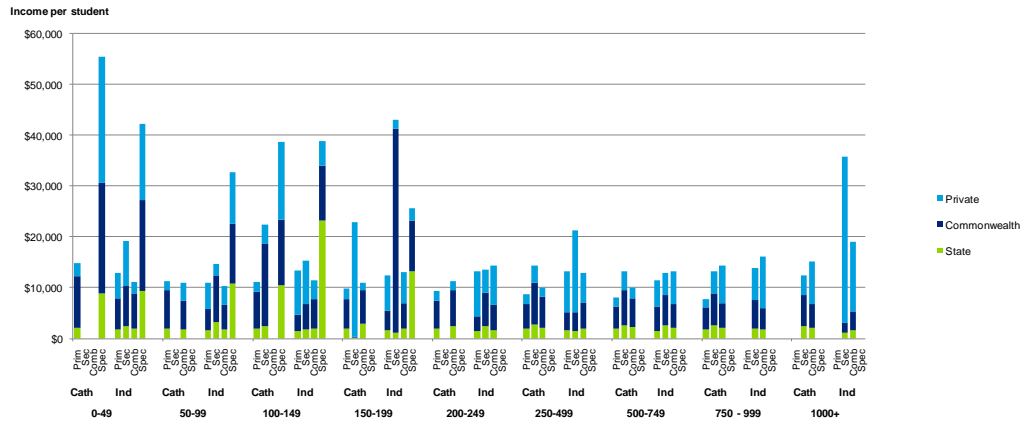
These charts include primary, secondary, combined and special schools.

Chart D.57: Recurrent income per student by school size, non-gov. schools, ACT



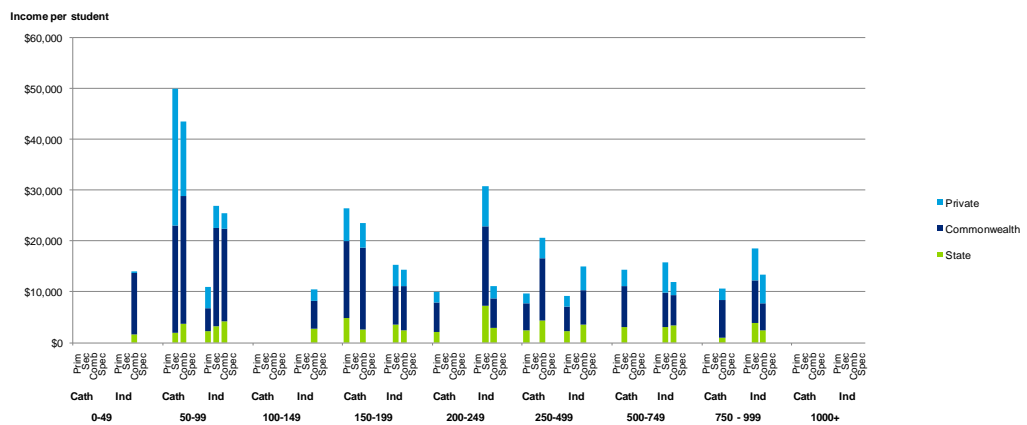
Source: ACARA

Chart D.58: Recurrent income per student by school size, non-gov. schools, NSW



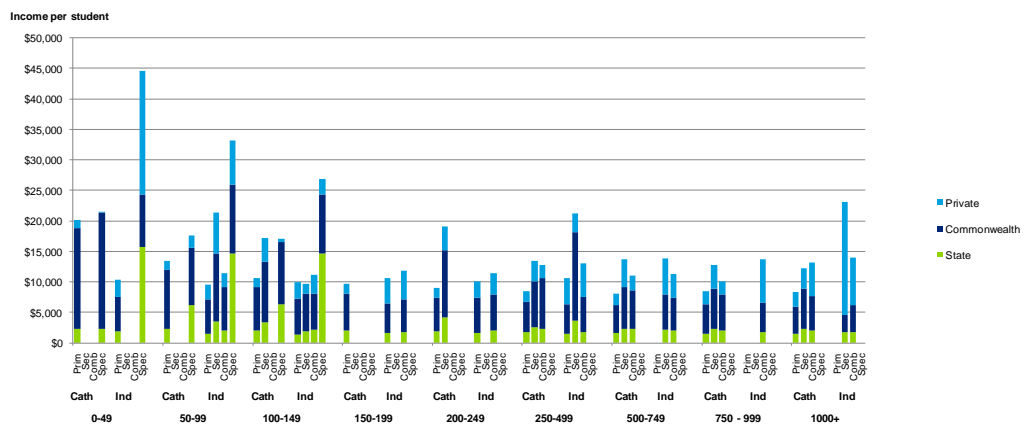
Source: ACARA

Chart D.59: Recurrent income per student by school size, non-gov. schools, NT



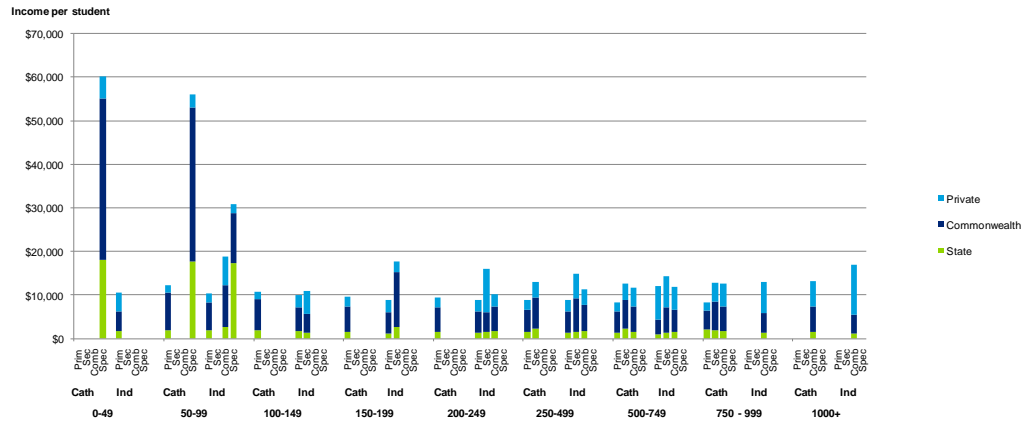
Source: ACARA

Chart D.60: Recurrent income per student by school size, non-gov. schools, QLD



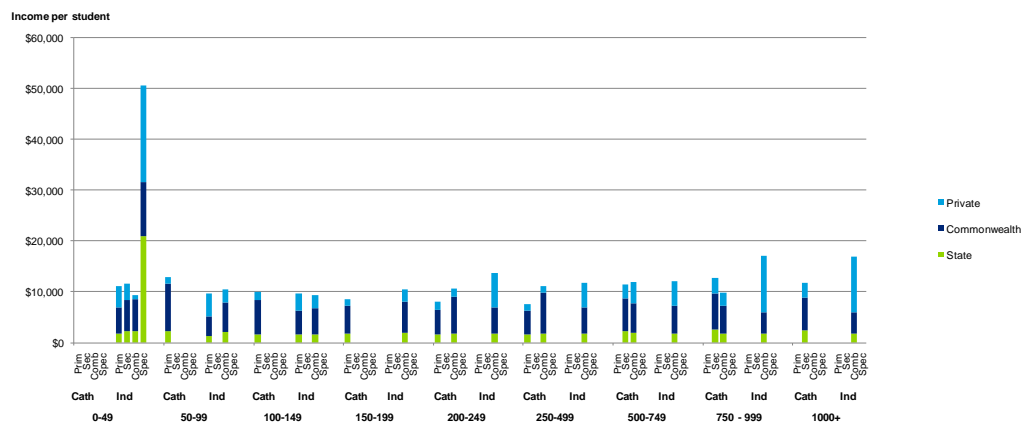
Source: ACARA

Chart D.61: Recurrent income per student by school size, non-gov. schools, SA



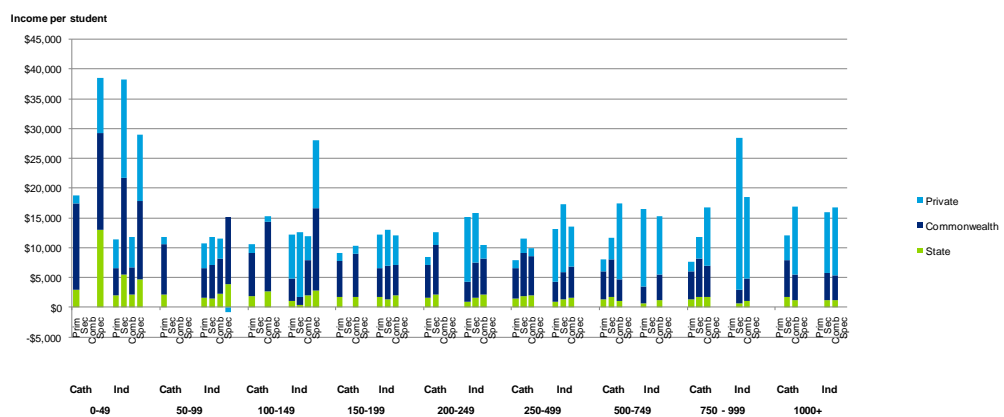
Source: ACARA

Chart D.62: Recurrent income per student by school size, non-gov. schools, TAS

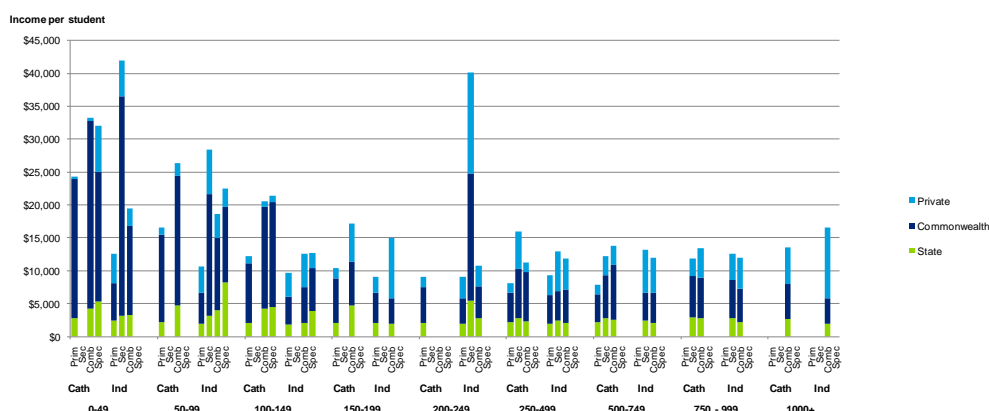


Source: ACARA

Chart D.63: Recurrent income per student by school size, non-gov. schools, VIC



Source: ACARA

Chart D.64: Recurrent income per student by school size, non-gov. schools, WA

Source: ACARA

Student Family Occupation (Victoria)

Student family occupation (SFO), defined as the occupation of the parent in the highest employment category, is used as the basis for equity allocations in Victoria's government school funding model. The occupational categories and associated weightings are outlined in the table below.

Table D.2: Occupational categories/weightings used in calculation of SFO funding, VIC

Occupation Group	Occupation Category Description	Weighting
A	Senior management in large business organisation, government administration and defense, and qualified professionals	0
B	Other business managers, arts/media/sportspersons and associate professionals	0.25
C	Tradesmen/women, skilled office, sales and service staff	0.5
D	Machine operators, hospitality staff, assistants, labourers and related workers	0.75
N	Unemployed & pensioners (for 12 months or longer)	1

Source: <http://www.education.vic.gov.au/management/srp/budget/ref011/default.htm>

Note: Data regarding occupational categories is collected each year as part of the mid-year (August) school census. Data recorded in the census as unknown is counted in the SFO density as Occupation Group A and attracts a zero weighting. To be eligible for SFO funding a school's SFO density must be greater than the state-wide median SFO density, with SFO density calculated as: *Sum of (Number of students x weighting for each occupational category) / Total number of students*

Analysis undertaken by the University of Melbourne found that SFO alone is the major determinant of student achievement in Victorian government schools. The table below shows the results of this analysis, in terms of the relative contributions made by various categories of need towards predicting year 5 student achievement levels.

The results show that, combined, the seven factors outlined in the table explain 40% of variation in student achievement. Significantly, however, family occupation alone accounts for 38.3% of the variation in student achievement.

Table D.3: Predicting year 5 student achievement, VIC

Element		1	2	3	4	5	6	7
Family occupation (Focc)	38.3%	Focc	Focc	Focc	Focc	Focc	Focc	Focc
Mobility (Mob)	15.0%		Mob					
EMA/Youth Allowance (EMA)	31.4%			EMA				
Family Status (Fstat)	16.0%				Fstat			
LBOTE (LBOTE)	3.0%					LBOTE		
Indigenous (Ind)	5.7%						Ind	
Disabilities (Dis)	6.9%							Dis
<i>Adjusted R²</i>		38.3	38.8	39.1	38.5	38.9	38.9	40.0
Correlations			0.53	0.82	0.59	0.40	0.27	

Source: DEECD Victoria

Note: Table shows the contribution of need categories towards predicting year 5 student achievement.

Stages of Learning weightings (Victoria)

Research undertaken by the University of Melbourne for Victoria identified effective government schools using regression analysis (which included controls for student family occupation, achievement, size, percentage of students with disabilities and location). Indicators for effectiveness included:

- Student engagement (for primary and secondary schools) – based on results from the annual student survey.
- Year 5 AIM achievement (for primary schools) – based on mean achievement at the school level in the AIM Assessment Program.
- Student retention (for secondary schools) – based on ‘real’ retention rates derived from annual census data.
- VCE achievement (for secondary schools) – based on mean study scores for VCE students across all units of study.
- Student transition (for secondary schools) – based on the percentage of school leavers not unemployed in the year following Year 12 (from *On-Track* results).

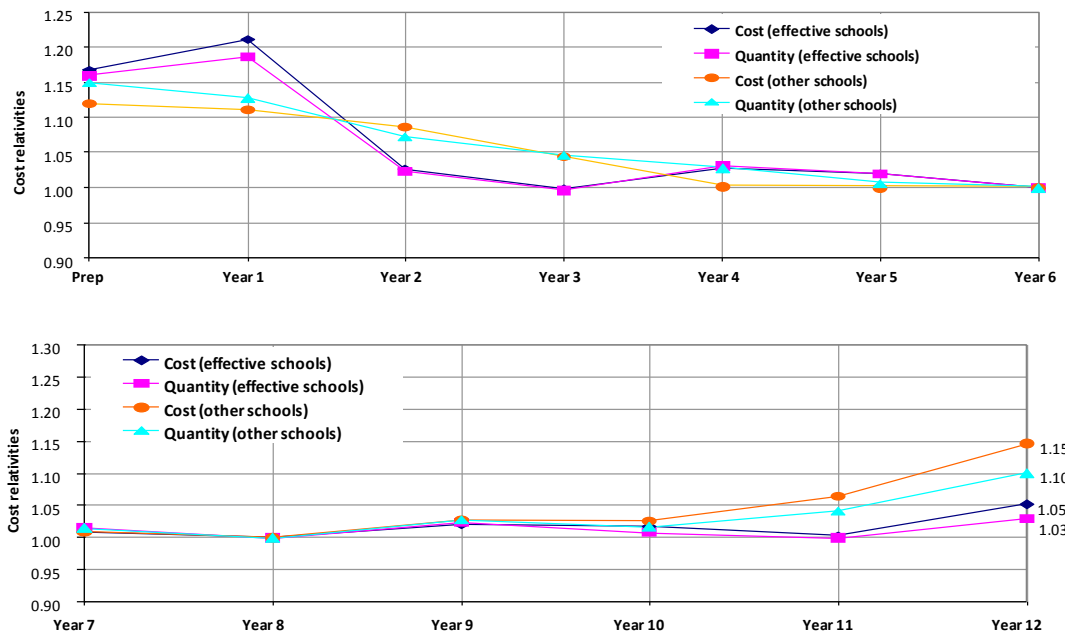
Effective schools were defined as those more than 0.5 standard deviations above the mean for each indicator of effectiveness, after controlling for the various factors outlined above.

The analysis revealed both the quantity and cost of resources, across all year levels, for ‘effective schools’ and ‘other schools’. Quantity is a measure of the number of teachers; cost is a measure of the cost of those teachers.

Chart D.65 below shows the results of the analysis, in terms of cost relativities. Clear differences emerge in certain year levels, with effective schools spending more in the early

years of primary schooling and less in the senior years of secondary schooling compared to other schools.

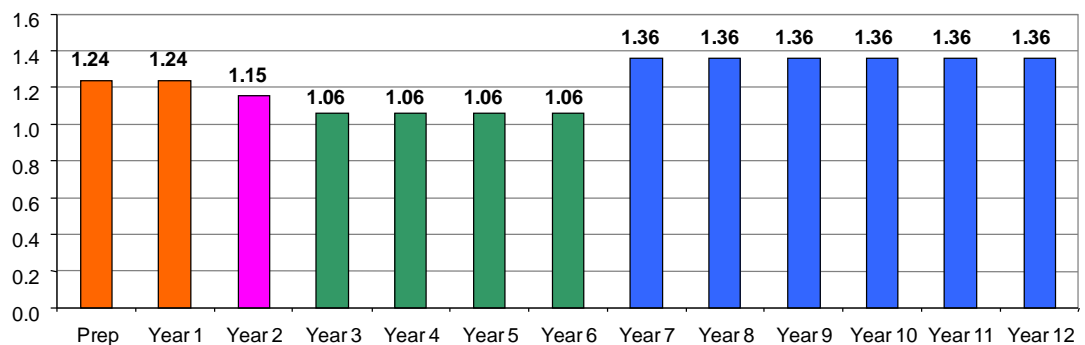
Chart D.65: Cost relativities across Victorian government schools



Source: DEECD Victoria

These cost relativities were used to inform the Stages of Learning weightings within the Core Student Learning Allocation component of the funding model (see Chart D.66 below). The weightings are intended to ensure that funding is allocated in the most effective manner, in terms of generating quality student outcomes.

Chart D.66: Stages of Learning weightings



Source: DEECD Victoria

Appendix E: School funding assessment case study appendix

This appendix provides case studies that support the assessment of school funding models in Section 6 of the report. The case studies, which relate to individual funding models, are presented under the relevant funding model principle. Cross-references to these case studies are included in Section 6.

Certainty

Case study: Transition management under the FAM – Victoria

Importance of change management and minimisation of impacts on schools

Introduced in 2006, the FAM incorporated a transition mechanism based on a budget-neutral diminishing funding guarantee without indexation.

Schools that would have received less funding under the new model are funding guaranteed at 2005 per capita rates, but these rates are not indexed (which means that schools do receive less funding in real terms over time). However, schools that receive more funding under the new model have their gains phased in under ongoing variable phase-in rates, based on the rates required to fully fund the funding guarantee.

In other words, better-off schools only receive a percentage of their gain, with the balance going towards funding the funding guarantee. In addition, the total pool of funds available under the FAM increases each year, due to indexation and other supplementations. This means that the total gains achieved by better-off schools are greater than the total losses incurred by schools which receive less funding. Consequently, the funding guarantee is budget neutral.

Funding guaranteed schools will continue to be funded based on 2005 per capita rates until such time as their FAM entitlement exceeds the funding guaranteed amount.

As a basic example, if gains by better-off schools total \$20 million and losses by worse-off schools total \$10 million, the phase-in rate would be 50% based on the following formula:

$$\text{Phase-in rate} = 1 - (\text{losses/gains}) = 1 - (\$10\text{m}/\$20\text{m}) = 0.5$$

Therefore, better-off schools would only receive 50% of their gains (i.e. \$25 million), with the remaining 50% offsetting the losses incurred by worse-off schools.

Source: DEECD Victoria

Flexibility

Case study: Independent Public Schools – WA

Complementarity among funding model features – relationship between flexibility (autonomy), transparency and accountability

Western Australia's 98 Independent Public Schools (IPS) are supported by a funding model structure which is distinct from that which supports mainstream government schools. While the same resource allocations mechanism applies to both types of schools, IPS are provided with a single line budget (i.e. they are afforded complete control over staff and non-staff resource allocations). However, stringent governance arrangements ensure this autonomy is linked to accountability:

- Each IPS has a Delivery and Performance Agreement with the Director General that identifies the resources the school will receive, support that will be provided, programs that it will be contracted to deliver and the performance and accountability of the school over the period of the agreement.
- The school principal also has a Performance Agreement which is based on the school's Delivery and Performance Agreement.

Note: Introduced in 2010, WA's IPS scheme is a relatively new initiative. Under this scheme, government schools are invited to apply to become an IPS (these schools remain part of the government school system). Over time, it will be possible to gauge the effectiveness of the IPS scheme, including whether it has led to enhanced student outcomes.

Case study: Subsidiarity guiding funding model design – Tasmania

Responsibility for funding-related decisions is devolved to the lowest yet most appropriate level, with autonomy linked to capacity

The overarching strategy in Tasmania's funding model deliberations has been to devolve staffing and budgetary decisions to school level, without moving to a single global package/one line budget. However, the limited capacity of particular schools is recognised and is being captured in the proposed new arrangements, provisioning for an on-going level of central support for schools in particularly challenging environments.

In particular, Tasmania has a relatively high proportion of schools in very low SES areas. The philosophy behind Tasmania's proposed new funding arrangements is therefore to provide flexibility to schools in defined spheres – for example, schools will be provided with greater autonomy over staffing configurations – without introducing full devolution. Indeed, Tasmania's capacity building program for schools (Raising the Bar Closing the Gap – described above) explicitly recognises the importance of providing support to certain schools that are affected by factors such as low SES and remoteness.

Accountability

Case study: Accountability under the Priority Schools Program – NSW

Complementarity among funding model features – relationship between flexibility (autonomy), transparency and accountability

Resources provided to schools through the Priority Schools Program include cash grants (comprising a base amount and a component that reflects student enrolments), staffing supplementation and specialist consultancy support.

Schools that receive funding under this program are required to demonstrate effective and appropriate use of resources through several mechanisms:

- School Plan – must clearly show the use of resources against literacy, numeracy and engagement strategies. The plan should identify current student achievement levels and effective strategies to meet the school plan targets. Schools are also expected to keep administration costs to a minimum.
- Annual School Report – should provide evidence of the contribution of funding to the achievement of school targets and improved student outcomes. Schools are required to report on student outcomes using a range of school data, external student performance data and other value-added data.
- Payment Details Report – should provide separate and detailed expenditure of funds, with unexpended funds remaining in school accounts to be committed in an updated school plan.

These requirements are subject to audit by officers of the Audit and Risk Management Directorate. School Education Directors must also approve the above documentation bi-annually and inform the NSW state office whether accountability requirements have been met.

Source: NSW DET (2009)

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