

# **Review of Funding Systems for New Zealand's Early Childhood and Schooling Sectors**

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# Executive Summary

As part of the Government's Education Work Programme priority areas the Minister of Education has asked for an independent review of funding model options that support the evolving landscape. The focus of the review is on the 0-18 years that comprise the early childhood and schooling sectors, and includes state and state-integrated school staffing, operating grants, property, and other programmes funded from the centre, and subsidies to private providers.

The Review focuses on funding models and does not consider the adequacy of funding or its effectiveness.

The Review considers the aims and objectives for New Zealand's 0-18 years education system, the characteristics of well-performing systems generally and New Zealand's education system, and then goes on to develop criteria for evaluating funding model options.

In considering the funding models no distinction is made between the ECE and schooling sectors. Despite their obvious current differences in funding approach the available options for funding any education system apply to both.

The options identified include the current funding models as well as other feasible options. While it is possible to mix elements of different models hybrids are not identified as separate models for evaluation.

In developing models property and school transport have been excluded. These are considered separately as they have unique characteristics in the New Zealand context.

The three funding options evaluated include:

- Formula funding: an input based model applying a number of weightings and payable in cash or in-kind
- Individual student funding: allocating funding based on individual students and the efficient unit cost of delivery of services, payable in cash
- Funded costs: an input based annual budget allocation model

The three options were evaluated using eight criteria of alignment, equity, effectiveness, efficiency, flexibility, accountability and integrity, transparency and simplicity, and certainty and sustainability. There are a number of trade-offs inherent in the evaluation discussion. In particular there are trade-offs between equity and simplicity, flexibility and accountability, and efficiency and accountability.

Whichever funding model is preferred there are a number of implicit choices involving the extent of school choice, horizontal equity, funding for outcomes, and private school funding.

The individual student funding model is preferred for the ECE and schooling sectors. It is particularly strong on the dimensions of efficiency, and transparency and simplicity, and is better aligned to the education system aims and government policy. The formula funding model rates well and both are significantly better than the funded costs model.

The principal benefits of moving to an individual student funding model include:

- The ability to more precisely target resources to deal with educational disadvantage. This provides strong support for the investment approach.
- Improved performance at the school level as a result of funding on efficient unit costs of service delivery.
- Reduced administrative costs due to the simplicity of the model.
- The ability to support different provider structures (such as communities of learning, single providers, State and Partnership schools) with little or no adjustment.

The current model for funding schooling sector property is preferred as there are economies of scale and expertise in managing the portfolio centrally and network capacity can be better managed to reflect broader demographic, societal and education service delivery changes.

The full recommendations are:

1. Adopt an individual student funding model for the 0-18 years education system.
2. Implement the model across the system as follows:
  - ECE: per-child subsidy
  - State, State Integrated, Māori Medium, Partnership schools: efficient unit cost per student
  - Private: per-student subsidy (capped)
3. Transition per-child-place funding in ECE to per-child. Determine subsidy levels by reference to efficient costs of service delivery.

4. Use a small number of factors (such as parental education, student family occupation and income) as predictors of disadvantage for ECE per child funding levels
5. In determining per student funding levels for State, State Integrated, Māori Medium and Partnership schools:
  - Use a small number of factors (such as parental education, student family occupation and income) as predictors of disadvantage
  - Use average costs until such time as efficient unit costs of service delivery are available
  - Provide a base level of funding that reduces as schools increase in size to recognise the fixed costs of operating a school
  - Manage funding centrally (rather than placing it in the hands of parents/care givers)
6. Fund property maintenance for State, State Integrated, and Māori Medium schools as part of per student funding and require property to be maintained at specified standards. Review the maintenance which schools are responsible for and the use of ring fenced funding
7. Continue to fund capital upgrades and modernisation for State schools on five year funding agreements and State Integrated schools on the current basis.
8. Fund school transport for State, State Integrated, and Māori Medium schools on a per-student basis.
9. Develop an outcomes framework for the State, State Integrated and Māori Medium sector that involves a set of soft and hard incentives for student achievement and financial performance.
10. Develop an accountability framework for the funding model for the schooling sector that encompasses:
  - Governance arrangements
  - Educational achievement targets, plans and reporting
  - A maturity assessment of management capability to direct resources where needed
  - Monitoring and review processes

## - Financial planning and reporting

The individual student funding model moves away from an input driven formula funding approach used in the schooling sector to an efficient unit cost of service delivery approach, albeit using average cost as a proxy initially. It sees staffing entitlements and most other in-kind funding replaced by cash to providers. Some in-kind programmes may remain at the central level – for example special education.

No structural changes at the provider level are envisaged as a result of the preferred model. The preferred model can accommodate new structures, such as communities of learning, or a scaling of structures like Partnership schools. Nonetheless as New Zealand's schooling sector is characterised by a relatively large number of very small and in many cases isolated schools there is merit in evaluating the use of a funded costs model for schools that fit that profile. The added complexity in a per-student funding model in these cases may have little utility given resource inflexibility, high fixed costs and unavailability of alternatives.

An individual student funding model will require a focus on capability building at the school level and is likely to support the formation of communities of learning or shared services arrangements.

Accountability requirements, including any outcomes framework, will need careful design in particular as they relate to the use of funding for disadvantage.

The preferred model confers greater flexibility for providers in the schooling sector as once implemented the per-student funding moves with labour cost and CPI changes and is not directly linked to the current entitlement formulae.

Once implemented it is likely that over time the financial performance of individual schools or communities of learning in the State, State Integrated and Māori Medium sectors will diverge from the efficient unit cost of service delivery as a result of their relative effectiveness in managing resources. Policy will need to be developed to deal with significant deficits or surpluses (the latter likely to be less common).

There are a number of risks in transitioning from the current models to the preferred model. Some of these are inherent in any significant change, and others are specific to the preferred model.

**Transition fiscal risk:** It is assumed that the implementation of an individual student funding model will need to be fiscally neutral. This is not regarded as a significant risk in ECE sector. However, it is more complex in the schooling sector (other than for Partnership and Private schools). Detailed modelling will be required to determine the impact of transition from the current funding formula to the preferred model. This

will highlight winners and losers. Depending on the approach taken to manage transition it is feasible that the Government will face increased costs.

**Longer term fiscal risk:** Education spending has been increasing over time. This has been particularly acute in the ECE sector as participation rates have increased. The fiscal risk within the ECE sector is lower going forward as participation nears practical limits and the Government caps free hours. Fiscal pressures will come from population growth and delivery cost increases (primarily salaries).

**Stakeholder risk:** Providers have the most direct interest in the outcomes of transition to a new model, however, there are also other powerful groups that will need to be brought on the journey, such as parents, peak bodies and unions. It is noted that even past small changes to the current formula funding approach have faced significant opposition.

**Execution risk:** There is a significant change programme which will require strong leadership, focus and capability to execute. Management capabilities vary across the 0-18 years schooling sector and it is expected that schools would require significant support over transition.

As there will be winners and losers consideration needs to be given to a period of transition to the desired end state. The length of time will depend on the materiality of the funding impacts. For example a 2-3 year transition for both winners and losers may be appropriate. Both winners and losers need to transition to the end state over similar time periods otherwise fiscal neutrality is not assured.

It is likely that there will be some schools that are significantly below the efficient cost of service delivery (or the current average cost) and where a 2-3 year transition period is not sufficient. An approach to supporting improvement to efficient service delivery and deficit funding these schools will need to be developed.

Steps to implement the preferred model include the following:

1. Complete detailed design of the model components, including the confirmation of the factors to be used in weighting funding for disadvantage.
2. Develop a detailed financial model to enable financial impacts to be identified at the provider level (the winners and losers), and overall fiscal impacts evaluated.



3. Determine the approach to transition, including any longer term deficit funding arrangements for those schools furthest from the efficient cost of service delivery.
4. Resolve key policy issues: rates of funding for disadvantage, extent of funding for outcomes/performance, any changes to levels of ECE/Private school subsidies, transition periods, etc
5. Develop an implementation plan.
6. Consult with affected stakeholders.
7. Build required processes and systems to support implementation and on-going management of the funding model.
8. Establish effective governance arrangements for the funding model, including such matters as oversight of decisions on parameters, processes for consultation, publication of model determinants, and on-going evaluation of the model's effectiveness.

# 1. Introduction and approach

## 1.1. Introduction

Strong education outcomes are important to the development of a strong and successful civil society. Governments play a key role in supporting strong education outcomes by setting overall system objectives, managing qualification and curricula frameworks, and providing funding for the delivery of education to public and private providers.

While the New Zealand education system performs well on many measures it is characterised by persistently high levels of disparity in student achievement. This has seen a number of initiatives in recent years including, for example, the setting of specific achievement targets, improving teaching quality and leadership, investments in hard and soft infrastructure, and in measurement and reporting.

Over the next five to ten years it is anticipated that the schooling system will become more diverse with the emergence of geographic, faith and language based communities of learning alongside individual providers, either public or private.

The current funding model is over 25 years old and has evolved incrementally in an ad hoc fashion over that time.

As part of the Government's Education Work Programme priority areas the Minister of Education has asked for an independent review of funding model options that support the evolving landscape. The focus of the review is on the 0-18 years that comprise the early childhood and schooling sectors, and includes state and state-integrated school staffing, operating grants, property, and other programmes funded from the centre, and subsidies to private providers.

The Review focuses on funding models and does not consider the adequacy of funding or its effectiveness.

The full Terms of Reference for the Review is included in Appendix A.

## 1.2. Approach

The approach is principally desk based drawing on existing materials and further research provided by the Ministry of Education.

Section Two of this report clarifies the aims and objectives for New Zealand's 0-18 years education system. It is recognised that work is underway on a revision of the Education Act, part of which will include a clear statement of objectives. Nonetheless

the broad thrust of these is known and it is important that the analysis of any funding model options considers them.

Sections Three and Four examine what we know of the characteristics of well-performing education systems and of New Zealand's education system. In Section Five the specific criteria for evaluation funding model options are developed.

Sections Six and Seven describe the particular funding models and discuss and evaluate each of them. Three models are considered for this analysis.

Section Eight sets out the conclusions and recommendation and finally Section Nine considers the risks, transition and implementation issues for the recommended option in more detail.

## 2. Aims and objectives for New Zealand's 0-18 years education system

While there is no single statement of the aims and objectives for New Zealand's education system contained, for example, in the governing legislation (principally the Education Act 1989), there are a number of markers in documents such as the Ministry of Education's Statement of Intent, the New Zealand Curriculum, the National Education Guidelines and Government policy statements. It is acknowledged that there is a review of the Education Act 1989 currently underway and that as part of that work an agreed set of aims and objectives will be developed for inclusion in the revised Act. Among other things it is expected that this work will put a focus on students and achievement.

Aims and objectives can be thought of as encompassing both high level long term aspirations and specific goals that comprise the focus of governments of the day.

High level long term aims typically focus on preparing students to be successful participants in society and they reflect the particular characteristics of a nation's education system in terms of access, participation and cost. By their nature these overarching aims are enduring.

In the New Zealand context high level long term aims for the education system can be summarised as:

- Delivering high quality education to enable all New Zealanders to participate successfully in a dynamic and diverse civil society and a competitive global economy
- Developing our young people as confident, creative, connected and involved lifelong learners and citizens

These statements imply a system that provides access for all New Zealanders, that is focused on high quality, and that is capable of evolving over time.

In addition to these overarching aims are specific objectives set by governments that respond to the particular issues requiring focus if the overarching aims are to be achieved. The current Minister of Education has specific objectives in relation to:

- Raising the level of education achievement for all students
- Directing investment to where it is needed most, specifically increasing participation and quality in Early Childhood Education (ECE), and increasing the proportion of 18 year olds with NCEA Level 2 or equivalent

- Tackling long-standing differences between students and schools that are performing well and those that are not

These statements imply a system that focuses on high quality outcomes, takes an investment approach and targets effort and resources to students and schools where they are needed most.

## **3.Characteristics of well-performing systems**

There is extensive evidence-based research into the factors that are most influential in the achievement of learning outcomes. There is very little research on the direct impact of funding model design on learning outcomes. In this section those characteristics of well-performing education systems which are most able to be influenced by funding model design are discussed.

### **3.1. Equity *and* quality matter**

The OECD (Equity and Quality in Education, 2012) identifies that well-performing education systems combine equity with quality. The analysis looks at the relationship between PISA results and socio-economic background. New Zealand sits in a group of countries where the strength of the relationship is above the OECD average impact. While many of the factors affecting equity are not related to funding models (for example school leadership, classroom strategies, early student selection) the available resources and the way they are spent influences learning opportunities. The common use of weighted funding formulas in many schooling systems reflects this as would, as an example, additional incentives for high quality schools to enrol more disadvantaged learners.

### **3.2. The importance of ECE**

The OECD (2012) also identifies that investing in ECE and care yields high returns, particularly for disadvantaged learners, as it allows early acquisition of skills and knowledge that shape future development. Later interventions are more costly and can be less effective. Both participation and quality are important for good outcomes from ECE investments. Most OECD countries have materially increased their investments in ECE and New Zealand is no exception. Funding models have a role to play in influencing participation and can impact quality in tandem with other interventions (for example regulating teaching standards).

### **3.3. Teaching quality is key**

Existing evidence points to the quality of teaching as being a key factor in well-performing education systems (Hattie, 2005). Analysis undertaken by the University of Melbourne for the Victorian Department of Education and Early Childhood Development (Deloitte Access Economics 2011) showed that more effective schools deployed a balance of experienced and less experienced teachers across all year

levels and that at the primary level deploying more experienced teachers at the earlier year levels promoted significantly higher levels of achievement in later years. A study by McKinsey & Company (2010) identified improving quality teaching and learning experiences as the most prevalent intervention in the improvement of student performance across 20 school systems.

While there are many factors that drive teaching quality (for example the quality of professional development, entry requirements for teachers, the status of the profession) funding models can influence allocation of teaching resources to and within schools.

### **3.4 Decentralisation is a feature**

While the evidence is more equivocal it appears that positive correlations have been found between learner achievement and decentralised decision-making for schools, particularly when decentralisation is combined with accountability through monitoring, performance comparison and external testing. (Fuchs and Woessmann (2007). It is generally thought that decentralisation enables schools to better respond to specific local needs and encourages closer involvement of local communities. The benefits that accrue from decentralisation can outweigh the costs of greater local decision-making. It should be noted that choices on the extent of decentralisation are not simple either/or choices. Some elements of a schooling system can be centralised (for example curriculum, teaching standards and discipline, initial teacher training, property provision) while others can be decentralised (such as purchase of services, recruiting and remunerating teachers, teaching methods). The choice of “administrative” unit also impacts the extent of decentralisation. For example this could be an individual school, a district, a wider region, or combinations of these. The New Zealand compulsory schooling sector is heavily decentralised with more than 2500 entities governed by Boards of Trustees. This has resulted in what has been described as an atomised system. Ultimately the degree of decentralisation is about determining where decision-making rights lie. In decentralised systems funding models will need to support the extent to which decision-making is localised.

### **3.5 Disadvantage is a barrier to achievement**

It is generally understood that disadvantage is a barrier to educational achievement (OECD 2012). Disadvantage may arise from socio-economic background (as indicated for example by income levels, parent occupations, mother’s level of education achievement, place of residence), disability, language (in the New Zealand context where English is not a student’s first language) and culture and ethnicity (to the extent that this is additional to the other forms of disadvantage). It is also generally agreed that the educational disparities that arise from disadvantage

compound as students progress through the education system and that concentration of disadvantage in a school or service has adverse impacts on achievement. The impact of disadvantage has been well recognised in New Zealand and the response has included the use of decile funding, to varying degrees, in the current funding model for ECE and the schooling sector, along with specific programmes.



## 4. Specific characteristics of New Zealand's education system

New Zealand's 0-18 years education system comprises the ECE and the schooling sectors. Over 200,000 children are enrolled in ECE services and over 750,000 children are enrolled in primary and secondary schools. Of the latter approximately 28,000 are enrolled in private schools and nearly 400 in Partnership schools. Throughout this report the reference to "student" applies to those children participating in ECE and the schooling sector.

### 4.1 The ECE sector

The ECE sector covers children under the age of six. It is non-compulsory, other than for dependent children of beneficiaries who have obligations to participate in ECE. There are over 5,000 ECE services with more than 22,000 teachers.

Services are provided by private providers which may be non-profit or for-profit.

Total expenditure from the Education, MSD and ERO Votes in 2013/14 on ECE was \$1.7 billion, up from \$0.5 billion in 2003/4. This is approximately \$8,500 per enrolment, noting that a child may have multiple enrolments.

The Government's primary objectives for ECE are to:

- Encourage participation (with a goal of 98% of children starting school participating in ECE by 2016)
- Improve quality by increasing the number of qualified and registered teachers
- Support the financial sustainability of the sector

The Government provides subsidies using an input-based funding model based on the cost of service provision and with funding rates that vary by service type and mix of qualified/registered teachers. There are different rates for children under 2 years and aged 2-5 years. There are 71 different subsidy rates. Subsidies are either per-child-place or per-child (for the 20 ECE hours per week entitlement). The subsidies are paid direct to ECE providers.

Some adjustment to funding for disadvantage is provided using a mix of an equity index, attestation and an isolation index. This accounts for around 2.5% of the total funding.

The Ministry also regulates teacher:child ratios.

New Zealand has one of the highest levels of annual expenditure per student and one of the lowest teacher:child ratios in the OECD.

### **Issues with the current ECE funding model**

The current funding model has evolved in an ad hoc fashion and is complex with 71 variables. As a consequence it is also costly to administer.

There is a strong focus on inputs (number of teachers, staffing ratios) and with few exceptions does not target individual need.

The subsidies are universal in nature which is not well aligned to the investment based approach favoured by Government.

The current model has few accountability requirements focussing on delivery of quality outcomes.

## **4.2 The schooling sector**

The schooling sector covers children aged 5-18 years, with attendance from ages 6-16 being compulsory for all New Zealanders (other than those approved for home-schooling).

There are over 2,500 schools with more than 52,000 teachers. The schooling sector includes State schools, (including Māori Medium (kura kaupapa and kura reorua) schools established under Section 155 and 156 of the Education Act 1989) State Integrated schools, the Correspondence School, Partnership schools, and Private schools.

The Government's primary objectives for the schooling sector are to:

- Ensure access to high quality education for all New Zealanders
- Increase the proportion of 18 year olds achieving NCEA Level 2 or an equivalent qualification

Total government expenditure in 2013/14 on the schooling sector was \$8.1 billion, or approximately \$6,200 per student.

The Education Act 1989 provides for free enrolment and free education at any State or Partnership school for every New Zealander between the age of 5 and 18.

Governments meet this commitment through providing and funding a nation-wide network of State schools, which is complemented by Kura Kaupapa Māori and special character state schools, State Integrated schools, Partnership schools and the Correspondence School. Restrictions are placed on the ability of those schools to charge fees (other than for international students, for some consumables and

activities, and donations, which must be voluntary) with the exception of the ability of State Integrated schools to charge attendance dues.

Private schools sit outside this broader network but can still receive government funding.

## **State schools**

There are multiple forms of funding provided to State schools.

Staffing entitlements in full-time-teacher-equivalents are determined using a complex formula. The principal components driving the volume of resource are the curriculum delivery allowance (based on specific teacher:child ratios and roll levels with variations between primary, secondary and Māori Medium schools), the management time allowance and the additional guidance allowance. There are eighteen further components covering such matters as special education, classroom release time, and music tuition as examples. The cost of the resource is driven by salary costs which are determined by collective agreements. By far the bulk of the staffing funding for a school is provided by the curriculum delivery allowance. Staffing entitlement funding is provided in-kind as the Ministry of Education pays all teacher salaries centrally.

Operational grant funding comprises multiple elements. Base funding, per student funding and targeted funding for educational achievement (decile funding) are the main elements. There are several further elements covering such matters as special education, relief teaching, isolation, and ICT as examples. Base funding is designed to recognise the fixed costs of running a school and reduces as rolls grow. Decile funding recognises disadvantage. Decile funding is around 10% of the total operational grant (and around 2-3% of total operational resource funding) but can be as high as 40% of a single school's operating grant. Operational grants are paid quarterly in advance.

State schools receive specific funding for property. Maintenance is determined on a number of factors relating to the property stock and is included in the operational grant. There is funding for capital upgrades and redevelopment using a five-year funding agreement approach based on square-metreage. Capital funding cannot be used for any other purposes and payment is linked to the timing for capital projects. State schools that wish to lease property are funded on a Cash for Buildings model.

There are also other forms of additional support to schools. This encompasses such things as professional development, subsidised computers/technology and school transport. These are provided in-kind or in cash.

## **State Integrated schools**

State Integrated schools receive government funding for staff entitlements and operational grants on a similar basis to State schools.

They are, however, able to charge attendance dues to cover costs associated with school property owned and provided by the school proprietor. These dues must be approved by the Minister of Education and are typically for a maximum of \$500 per primary student and \$1,000 per secondary student.

Funding for property maintenance is provided to schools as part of the operational grant. Funding for capital upgrades and redevelopment is funded by reference to a formula relating to the annual depreciation cost of State schools and the proportion of the State Integrated school's roll to total State school rolls.

## **Māori Medium schools**

Māori Medium schools receive funding on the same basis as other State schools. There are loadings where appropriate to recognise the cost of providing instruction in te reo. Decile funding for Māori Medium schools is calculated on the same basis as State and State Integrated schools.

Other State schools are also eligible for specific resourcing to support Māori immersion/language learning.

## **Partnership schools**

The current Partnership school funding model comprises a formula with four components: a base level dependent on the type of school (primary, secondary, composite), a per-student amount, a property and insurance component based on a roll-based property entitlement, and a "cached-up" amount per student. This final component recognises the non-cash assistance provided to State schools. Partnership schools are also eligible for targeted funding for isolation and Māori language programmes on the same basis as State schools.

Unlike State and State Integrated schools there is no staff entitlement with Partnership schools free to choose how they employ and use staff. Property funding is determined using the Cash for Buildings model applied to State schools who wish to lease property and insurance funding approximates average State school costs. The per-student funding component includes elements that adjust for disadvantage (for example decile funding, which is currently based on decile 3H).

The funding model is designed in such a way that Partnership schools receive funding equivalent to similar schools in the State schools sector.

## **Private schools**

The Education Act 1989 provides discretion to fund private schools. Currently the Government has capped the total amount of funding at \$45.7 million, of which \$41.6 million is per-student funding and \$4.1 million is Aspire scholarship funding.

The per-student subsidy is applied in a uniform way across different year levels. In 2015 the amounts varied from \$1,028 to \$2,188 per student. These amounts vary each year due to the nature of the fixed funding cap and fluctuating private school rolls.

## **Issues with the current schooling sector funding model**

The model has evolved in an ad hoc fashion and has become very complex with a variety of models across the sector. It is resource intensive and costly to administer, both at the central and provider levels.

The current approach is strongly input based and is driven off a complex staffing entitlement model which is itself partly embedded in collective industrial agreements resulting in further inflexibility.

Funding for disadvantage (decile funding) is at a population level and not targeted at the individual level. The combination of decile ratings and the scope for some parents to exercise school choice for their children can lead to segregation.

## **Accountability and monitoring**

For State and State Integrated schools there is wide discretion in the use of the operating grant. However, there are some specific requirements around the use of staff entitlement funding. The collective agreements also impose several requirements on the practical use of staffing entitlements, for example the number of non-contact hours and the use of management allowances.

State and State integrated schools must prepare Charters, complete annual reports, prepare financial statements and be subject both to financial audit and Education Review Office review. The Ministry of Education has powers of intervention in the event of risks to school operations, welfare or educational performance of students, and financial mismanagement.

There are no specific constraints on Partnership schools' use of funding. However, the individual contracts that each school enters into have specific outcomes that

must be delivered and extensive compliance obligations. There is on-going monitoring of contract performance.

### **Evolution of State schooling**

The New Zealand schooling sector is highly decentralised. While this decentralisation is consistent with the trends in well-performing school systems New Zealand is an extreme example especially when combined with the large number of small schools in the system. It is increasingly considered that this atomisation may be a factor in impeding good educational outcomes. Work done by the Taskforce on School Regulations (2014) identified that increased collaboration between schools has positive impacts on outcomes.

The Government's "Investing in Educational Success" programme with its focus on strengthening school leadership and collaboration also foreshadows an evolution of the schooling system. Looking forward it is anticipated that the 0-18 years sector will comprise the following elements:

- Communities of learning (geographically based mainly school-aged and connecting with ECE and/or tertiary)
- Communities of learning (faith and language based which may not be geographically based)
- Individual providers (schools and ECE)

Funding models will need to be sufficiently flexible to accommodate the evolution of the schooling sector structure.

## 5. Criteria for evaluating funding models

In building a framework to assess different funding models the aim is to have an objective and rational basis to complete a robust evaluation of the options. Any such framework will need to have regard to the public policy objectives for New Zealand's education system, impacts on equity and efficiency, and ease of operation (including notions of flexibility, accountability and transparency). Eight criteria have been identified.

**Alignment:** The degree to which the funding model supports the aims and objectives on the education system. Key elements of New Zealand's system are the focus on high quality outcomes, increased participation in ECE and the "no cost" nature of the State schooling sector.

**Equity:** The concern is with both vertical and horizontal equity. The former concerns the extent to which funding models support the achievement of good outcomes for all learners, including the extent to which the influence of differences in socio-economic background and other factors in disadvantage are reduced. Horizontal equity refers to the extent to which funding models treat similar learners and/or schools in an equivalent way.

**Effectiveness:** The extent to which the provision of high quality services and educational outcomes are supported by the funding models. As teaching quality has been identified as a key driver of quality this criterion also looks at the extent to which funding models support teaching quality, including the allocation of teachers across and within schools.

**Efficiency:** How well funding models enable control over future costs and reflect the costs of efficient service provision is critical. The extent to which innovation in service delivery is encouraged is also important.

**Flexibility:** The New Zealand model is very decentralised. The schooling sector is expected to evolve to include communities of learning (clusters of schools) and single providers, but decision-making is expected to remain localised. Funding models will need to support this decentralised governance and management structure and support local utilisation of funding in the most effective way.

**Accountability and integrity:** The degree to which funding models enable recipients of government funding to be held to account for its use and the achievement of outcomes and avoid encouragement of incentives to game the system.

**Transparency and simplicity:** The degree to which the elements of funding models are disclosed and easily understood both by recipients and broader stakeholders. It also examines the complexity of the design and the compliance burden involved in administering the models and meeting accountability requirements.

**Certainty and sustainability:** How effectively funding model options provide confidence to recipients to be able to plan for the future and how responsive are they to changes (increases or decreases) in capacity requirements.

These criteria apply when considering the application of the funding model options to both the ECE and the schooling sectors.



## 6. Description of funding model options

In considering the funding models no distinction is made between the ECE and schooling sectors. Despite their obvious current differences in funding approach the available options for funding any education system apply to both.

The options identified include the current funding models as well as other feasible options. While it is possible to mix elements of different models hybrids are not identified as separate models for evaluation.

In developing models property and school transport have been excluded. These are considered separately as they have unique characteristics in the New Zealand context.

It should also be noted that governments will typically not only fund core operating expenditure but also fund specific programmes which may be controlled centrally or devolved, provided in cash or in kind, and provided to all or some students or schools. It is assumed that these may be a feature of any of the funding models.

### 6.1 The options

#### Option A: Formula Funding

A formula funding approach uses a resource (“staff”) allocation model with base operational funding supplemented by additional per-student funding. Resource allocation and per-student funding can differ by year level. Additional per-student funding can include weightings for disadvantage or “needs” based on the characteristics of the school or service.

Underlying this description of the funding formula is a relatively large set of variables, and varying degrees of sophistication in the recognition of disadvantage.

Formula funding can be provided in cash, in-kind, or a mix of both and adjusts each year to reflect cost movements

The New Zealand funding approach for the schooling sector is aligned most closely to the formula funding approach. The approach is input focussed and provided in cash and in-kind.

## **Option B: Individual student funding**

An individual student funding approach allocates funding based on the efficient unit costs of delivery of the service to individual students. Efficient unit costs can include weightings for disadvantage and also be supported by a resource allocation model. Individual student funding can be either managed centrally or placed in the hands of parents or care givers. The latter is commonly referred to as “vouchers” and is often aligned with objectives relating to school choice.

Individual student funding ideally requires the specific identification of disadvantage (as opposed to the use of population based measures such as deciles) using a small number of predictors. These predictors may include income and parental educational level, for example.

Levels of individual funding are subject to on-going adjustment for labour cost and CPI movements and are provided in cash.

The individual student funding approach is closely aligned to the current ECE model and that currently being used for Partnership schools.

## **Option C: Funded costs**

The funded costs approach is based on an individual assessment of the costs of running each school. Assessments can be based on individual budget submissions and/or historical expenditure. The funded costs approach is typically used in heavily centralised education systems with control retained over the allocation of inputs and prescription of outputs. Funding can be provided in cash, in-kind or a mix of both.

This approach is most like the way governments in New Zealand fund core government agencies.

## **6.2 Funding for outcomes**

There is a general trend towards funding outcomes, either instead of or together with the purchasing of outputs, for social services within public sectors around the world. In New Zealand this has been underpinned by use of the investment approach, for example at the Accident Compensation Corporation and Ministry of Social Development. Funding for outcomes focusses on results that matter for citizens and the investment approach targets spending to where outcomes provide most value.

Tying funding to outcomes is compelling but experience suggests that this poses challenges where outcomes are hard to measure and/or data is either not available or unreliable. Education can exhibit both these problems. For example a successful outcome for ECE may be successful transition of the student to the schooling

environment. While it may be possible to reach consensus on what a successful transition looks like measurement can be difficult to achieve and attribution debated.

In addition to the issues of measurement and data there is the question of outcome funding design. Put simply under or over achievement of outcomes sought needs to have consequences (incentives). These can be hard or soft. Examples of a hard consequence would be adjustments to funding levels, or at the extreme removal of a Board of Trustees.

Financial incentives need to be significant to be effective, typically around 10% of the relative funding pool. It is not clear that taking away funding at the school level is likely to improve future student outcomes. Conversely, providing more funding to those schools that are over-achieving within existing funding levels raises issues from an efficiency perspective.

There are a number of soft consequences that have impact in education. These include a form of earned autonomy (for example longer review cycles, fewer reporting requirements), extended “contract” terms, and transparent reporting of achievement. The impact of perceived reputation should also not be underestimated. Wide publication of performance information and evaluative review results helps in this regard.

Ultimately a successful outcomes framework will require clear definition of outcomes, effective measurement, and a graduated set of hard and soft consequences. The definition, measurement and attribution challenges need to be resolved if it is to have wide support and be effective in achieving its objectives.

The current approach to funding the ECE and schooling sectors has very basic elements of the investment approach through the use of decile funding weights but these are neither tied to individuals nor very significant. Education funding remains largely universal in nature.

Notwithstanding the above comments any of the funding models described above can have a funding for outcomes framework overlaid on them.

### **6.3 Funding for performance**

While funding for performance can be seen as a sub-set of funding for outcomes it requires specific consideration as it has attracted a significant amount of controversy in the education sector.

New Zealand’s experience with funding for performance is very limited. State and State Integrated schools have no at risk or bonus components. Most recently Partnership schools have an at risk component of their funding. In the first few years this is set at 1-2%. They also have outcomes specified in their contracts. Given the

limited experience to date it is not possible to determine what effect, if any, at risk funding has had in incentivising performance. The current contracts have 22 “minimum requirements” (on an included but not limited to basis) and a further 16 prescribed performance standards covering student achievement, engagement, financial performance, priority learner targeting, plus provision for sponsor specific performance standards at class and subject level. This level of complexity and mix of output and outcome measures will be challenging for providers and monitors.

There has been some international experience with performance based funding, predominantly in a number of US states. (Examples can be found in Tennessee, Alaska, New York, and Texas) In most of the US cases, incentives involved bonuses to individual or groups of teachers or schools. The results of these cases in terms of impact on student achievement have been at best equivocal and a number of the initiatives have been terminated.

School choice is sometimes used as a proxy for performance through the use of vouchers. Sweden is the most comprehensive example of a national education system that has implemented vouchers. The evidence is of slight improvements to achievement, but insignificant impacts on students from low-educated parents and immigrant backgrounds. (OECD, 2012)

# 7. Discussion and evaluation of funding options

## 7.1 Option evaluation

In this section each of the funding model options described in section six is evaluated. A five point scale has been used from “very poor” through to “excellent” in terms of how well the option supports the criterion. All criteria are considered important so there is no weighting of different criteria. The table below summarises the assessment and commentary follows.

Evaluation Criteria	Option A) Formula funding	Option B) Individual student funding	Option C) Funded costs
• Alignment			
• Equity			
• Effectiveness			
• Efficiency			
• Flexibility			
• Accountability & integrity			
• Transparency & simplicity			
• Certainty & sustainability			

**Scale:** very poor    poor    moderate    Good    excellent

**Alignment:** Individual student funding provides a best fit with the aims and objectives of the education system and government policy. As it targets funding based on specific individual needs it directly supports the investment approach to funding. While the formula funding model provides some ability to target it is on a population basis (either using deciles or census mesh blocks for example) and not targeted at the individual level. It would be feasible to achieve targeting using the funded cost model but that would require aspects of the individual student funding model to be implemented (for example individual identification of needs). An individual student funding model also strongly supports participation which is relevant when considering the (non-compulsory) 0-5 years sector.

**Equity:** The formula funding and individual student funding models rate similarly from a vertical equity perspective (although it must be noted the current funding formula for the schooling sector is not as precise as that enabled by an individual student funding approach). The funded costs model requires aspects of the individual student funding model to be overlaid if it is to deal effectively with vertical equity issues. All models can support horizontal equity provided they are implemented consistently. The current formula funding model is not implemented consistently across the different provider types in the schooling sector.

**Effectiveness:** The superior targeting inherent in the individual student funding model provides a stronger platform for driving outcomes. All three funding model options have at their core an assumed staffing model that seeks to ensure an appropriate “quantity” of teaching resource using assumptions relating to class sizes and needs. However, “quality” of teaching is supported by a number of factors including initial teacher training, on-going professional development, allocation across schools and within schools, and effectiveness of leadership. Funding models that provide the greatest flexibility to allocate teaching resource at the local level are likely to be more effective.

**Efficiency:** The individual student funding model is designed to reflect the efficient unit costs of education delivery and therefore rates highly on efficiency. It is noted that in the short term it will likely be necessary to use average actual costs until efficient unit costs can be determined. This is because there is no readily available market price for education services (private schools do not provide an appropriate comparison due their different operating models). The determination of efficient unit costs requires judgements about the optimal resource mix need to produce desired educational outcomes. This would typically be based on the analysis of the resourcing of a representative “reference” group of well performing schools. The formula funding approach is rated moderate as the material components are based on actual costs or entitlements.

**Flexibility:** The funded costs model rates poorly given its central control character. The formula funding model better supports flexibility at the local level, although the

ring-fenced nature of a number of components reduces flexibility. The individual student funding model has the capacity to provide most flexibility.

**Accountability and integrity:** All options can support an appropriate level of accountability provided the measures used are not susceptible to manipulation. This is a particular risk for elements of funding that are linked to performance (such as test results). The efficient unit cost of delivery approach embedded in the individual student funding model is less open to manipulation than the funded cost or formula funding models.

**Transparency and simplicity:** The individual student funding model rates very well on this criterion provided its detailed design does not attempt to embed too many variables. The funding formula model can also be designed with simplicity in mind, however it is noted that the current formula for the schooling sector is extremely complex. The funded cost model requires significant administrative capability, both centrally and at the school level. Simplicity is a necessary but not sufficient condition for transparency, which also requires a consultative approach to determination of funding components and open disclosure.

**Certainty and sustainability:** The annual negotiation feature of the funded costs model creates uncertainty. Both the formula funding and individual student funding models provide more certainty and have the capability to respond to changing roll levels over time.

## 7.2 Trade-offs

There are a number of trade-offs inherent in the evaluation discussion. In particular there are trade-offs between equity and simplicity, flexibility and accountability, and efficiency and accountability.

The education system aim to direct support to where it is needed most can lead to increased complexity in funding model design, This is evident for example in the current formula funding model for the State and State Integrated schools with the use of decile funding and a number of specific formula components as well as layers of centrally administered programmes. Funding to address equity (educational disadvantage) is often accompanied by increased requirements for accountability, particularly if it is ring-fenced. Complexity can result in greater administrative costs and in opportunities to game the system. Funding models that are too simple may not be effective in targeting resources effectively.

The trade-off between flexibility and accountability is important. The New Zealand system is very decentralised and as such has a significant amount of flexibility at the local level. While this is generally supportive of good outcomes it does assume a one-size-fits-all approach where each individual school has the scale and capability to be able to effectively meet the accountability requirements that go with flexibility. It

is this tension that is supporting the evolution of communities of learning. It is envisaged that communities of learning would continue to enjoy the current levels of flexibility.

The use of efficient unit costs of service delivery is optimal from an efficiency perspective. Accountability requirements that impose significant cost on both the centre and individual schools act to reduce efficiency. Striking a balance is a key aspect of detailed funding model design.

The detailed design of the preferred funding model will need to give careful consideration to the implicit trade-offs. In making choices the primary consideration should be alignment with the education system's aims and objectives, and government policy.

### **7.3 Choices to be made**

Whichever funding model is preferred there are a number of key choices to be made. These include:

**Extent of school choice:** In the current system there is freedom of choice in ECE and controlled choice in the State schooling sector. Choice is controlled in the State sector through the use of enrolment schemes (commonly referred to as zoning). The OECD notes the trend to increasing school choice although most systems retain some form of zoning.

The impetus for greater choice comes from a view that market mechanisms allow equal access to high quality education for all. The OECD notes that the evidence does not support this view and that often choice can enhance socio-economic segregation. In part this is driven by schools being selective in their admissions (by choosing students more likely to be successful or more "profitable") and by better-off parents seeking to enrol their children in high quality schools. Some of these behaviours can be observed in the current system, for example where parents who can afford to buy real estate within high quality school zones and "decile" is treated as a proxy for quality.

Decisions on school choice will affect funding model design. For example a move to unrestricted choice would support the use of vouchers as a feature of the individual student funding model.

In concluding on funding model recommendations it is assumed that the current choice settings will remain in place. Retaining controlled choice limits the utility of introducing vouchers as a feature of the per-student funding model.



**Horizontal equity:** Funding models can be applied uniformly across all sectors or different models can be applied to different sectors or settings. Care needs to be taken to apply models consistently so that students and schools in similar contexts are treated in the same way. This does not necessarily imply that all schools and students are treated in the same way. For example there may be pragmatic reasons for applying different models to specific situations, such as small isolated schools and special schools. The implications of applying different models in different settings need to be understood.

As an example currently there are three different models applied to ECE and Partnership schools (individual student funding), State and State Integrated (formula funding), and Private schools (capped individual student funding).

A consequence of this setting is a bias to State provision in the schooling sector (rather than the State funding individual students for places with providers, whether State or Private). Currently Private school enrolments in the schooling sector comprise around 4% (rising to 15% if State Integrated is classified as “non-Government”) compared with 34% of non-Government schools in Australia.

**Funding for outcomes:** Aside from Partnership schools there is no current requirement for providers to achieve outcomes that are linked to funding levels. The challenges in developing a framework for outcomes-based funding in education have been noted. There is as yet insufficient experience with the Partnership schools model to assess the effectiveness of the outcomes framework in place there, although concern over the complexity of the framework has been noted earlier in this report.

An outcomes framework for the 0-18 years schooling sector would ideally include a relatively small number of outcome measures (no more than 10) covering student achievement (including effectiveness of targeting for disadvantage) and financial performance. Consequences should include a graduated set of soft and hard incentives. Soft incentives include earned autonomy and reputation. Hard incentives can include a level of at risk funding linked to the trend in student achievement.

**Adjusting for disadvantage:** The significance of disadvantage as a barrier to educational outcomes has been noted earlier. It is also recognised (OECD 2012) that dealing with disadvantage is more costly in terms of resources. In any model there are choices to be made concerning adjustment for disadvantage. The current decile approach is population based and not targeted at the individual level. As it is paid at the school level and based on lagging data it is unlikely to accurately reflect the particular challenges presented by disadvantage at an individual school. Factors typically considered important include socio-economic status, language, isolation, disability and ethnicity (to the extent this is not reflected in the other factors). Within socio-economic status income, student family occupation and parental educational achievement are specific factors. Specific weightings for concentration can also be

applied based on actual student numbers. Attaching funding for disadvantage to individual students more effectively deals with concentration. A small number of factors is preferred in order to reduce complexity and avoid the need to adjust for “double-counting” of impacts.

**Private school funding:** The transition to an individual student funding model implemented across the years schooling sector provides a choice to be made on the extent to which the purchaser of education services should be indifferent to the ownership of the provider. The current per-student model is a subsidy capped by the size of the funding pool. This provides a small contribution that fluctuates from year to year. The level of subsidy reflects government policy objectives. The current settings have, as an outcome, a relatively small private sector (relative to Australia for example).

If Government seeks to provide more opportunity for students, particularly the disadvantaged, to have the option for education in a private school setting, then it can facilitate this either through provision of more scholarships or an increase in the level of per-student funding, or a combination of the two. Decisions on per-student funding require assessments on the extent to which it must increase to attract students from the State or State Integrated sector, whether the subsidy is available to all or only disadvantaged students, and the level of investment Government wishes to make.

Pricing the per-student subsidy at the marginal cost of service delivery in the private school is likely to be the most efficient approach. At this level it should be attractive to private providers to enrol additional students, and the cost per-student will be lower than the efficient cost per student in the State and State Integrated sector. Any increase in the level of per-student funding is likely to attract more students to private schools. While it is probable that some increase in student numbers can be accommodated within existing capacity there will be a point at which increased student numbers will drive the need for investment in property and facilities. Government should be indifferent to this as presumably school owners will make commercial decisions based on their business model and ability to remain financially viable.

It should be noted that scholarships can remain an option for assisting students into private schooling alongside any changes to the per-student funding level. Again, as with per-student funding, there are decisions to be made about setting the price of a scholarship (using marginal cost or average cost), eligibility and the number to provide.

Detailed modelling will be required to determine the fiscal implications of any changes to private school funding. These are likely to be significant unless there is some form of demand management.

Ultimately the extent to which governments wish to promote access to private schooling is a policy choice independent of funding models.

## **7.4 Property**

Property is a material asset for schools and is often a sensitive matter. Government makes no specific contributions to property costs within the Private or ECE sectors. For the remaining parts of the sector the objective is to ensure that school property is provided and maintained to a standard that supports the effective delivery of education services that support student achievement.

### **State schools**

The Government provides both maintenance funding (as part of the operational grants) and funding for capital upgrades and modernisation (on a five year funding agreement). The Government also provides funding or delivers in-kind special needs modifications, school redevelopments, centralised services including Building Warrants of Fitness, and provision of additional classrooms and schools to accommodate roll growth. Property for State schools is held on the Crown's balance sheet. The Crown is effectively the landlord with the school having a right to occupy. Schools are funded in-kind for the lease cost. In practice larger schools (particularly secondary schools) have developed some of their own property through donations and fund raising but government-owned property still dominates.

There are two options available:

- The current model that sees government continuing to own the property and leasing it back to the schools as occupiers on long term agreements that involve commitments on the part of the owner to maintain a specified level of availability and quality, with schools funded in-kind for the lease payment.
- Devolution of property ownership to schools along with funding for maintenance and depreciation.

The current model is favoured. There are economies of scale in managing the property portfolio centrally and relevant expertise is able to be concentrated. Network capacity can be better managed to reflect broader demographic, societal and education service delivery changes. In a devolved model many schools would be challenged in terms of expertise. The financial implications of property ownership are significant and could distract from the core business of raising student achievement. Long term maintenance and replacement would represent significant risks for schools.

The current model should be reviewed to determine the components of maintenance that should be devolved to school and the extent to which maintenance funding should be ring fenced.

### **State Integrated schools**

The Government provides maintenance funding for State Integrated schools and makes a contribution to capital upgrades and redevelopment.

The level of government contribution for capital upgrade and modernisation was effectively a negotiation at the time of integration. This recognised the contribution school owners made through the contribution of property at the time of integration (and for which the schools are permitted to charge attendance dues to cover costs). Subsequently the Government agreed to provide Policy One funding for capital upgrades and modernisation, which is based on the depreciation cost for the State school portfolio. As building stock ages there are issues over the level of contribution for replacement. Subsequent government policy (for example on staffing ratios) is also considered by some school owners to have imposed additional property costs.

As a result there is a concern as to whether the current mix of government contribution supplemented by attendance dues is sufficient to continue to provide the property required at the right quality. This is not a question of funding model design but of the level of which model parameters are set. The contribution to property costs for the State Integrated sector is essentially a subsidy and was not intended to cover the full costs of ownership. The size of the subsidy is a policy decision for governments.

As with the State school sector the current model should be reviewed to determine the components of maintenance that should be devolved to school and the extent to which maintenance funding should be ring fenced.

### **Partnership schools**

Partnership schools property funding is determined using the Cash for Buildings model available to State schools that wish to lease property.

### **ECE**

ECE subsidies are set with an implicit recognition that having suitable property is required to ensure an appropriate environment for learning.

## **7.5 School transport**

There is no funding to ECE or Private schools for transport.

School transport is provided to State, State Integrated and Māori Medium schools either directly or through provision of funding to schools. The Ministry of Education currently provides this service.

There are very likely to be efficiencies in negotiating central contracts for transport provision. Schools should be provided the option to opt into these arrangements or procure services directly if there are more cost effective options available. The funding can be rolled into the per-student funding.

# 8. Conclusion and recommendations

## 8.1 Conclusion

The evaluation discussion in the previous section indicates the individual student funding model is preferred. It is particularly strong on the dimensions of efficiency, and transparency and simplicity, and is better aligned to the education system aims and government policy. The formula funding model rates well and both are significantly better than the funded costs model.

The principal benefits of moving to an individual student funding model include:

- The ability to more precisely target resources to deal with educational disadvantage. This provides strong support for the investment approach.
- Improved performance at the school level as a result of funding on efficient unit costs of service delivery.
- Reduced administrative costs due to the simplicity of the model.
- The ability to support different provider structures (such as communities or learning, single providers, State and Partnership schools) with little or no adjustment.

## 8.2 Recommendations

The recommendations are set out below:

1. Adopt an individual student funding model for the 0-18 years education system.
2. Implement the model across the system as follows:
  - ECE: per-child subsidy
  - State, State Integrated, Māori Medium, Partnership schools: efficient unit cost per student
  - Private: per-student subsidy (capped)
3. Transition per-child-place funding in ECE to per child. Determine subsidy levels by reference to efficient costs of service delivery.

4. Use a small number of factors ( such as parental education, student family occupation and income as predictors of disadvantage for ECE per-child funding levels
5. In determining per student funding levels for State, State Integrated, Māori Medium and Partnership schools:
  - Use a small number of factors (such as parental education, student family occupation and income as predictors of disadvantage
  - Use average costs until such time as efficient unit costs of service delivery are available
  - Provide a base level of funding that reduces as schools increase in size to recognise the fixed costs of operating a school
  - Manage funding centrally (rather than placing it in the hands of parents/care givers)
6. Fund property maintenance for State, State Integrated, and Māori Medium schools as part of per student funding and require property to be maintained at specified standards. Review the maintenance which schools are responsible for and the use of ring fenced funding
7. Continue to fund capital upgrades and modernisation for State schools on five year funding agreements and State Integrated schools on the current basis.
8. Fund school transport for State, State Integrated, and Māori Medium schools on a per-student basis.
9. Develop an outcomes framework for the State, State Integrated and Māori Medium sector that involves a set of soft and hard incentives for student achievement and financial performance.
10. Develop an accountability framework for the funding model for the schooling sector that encompasses:
  - Governance arrangements
  - Educational achievement targets, plans and reporting
  - A maturity assessment of management capability to direct resources where needed
  - Monitoring and review processes

- Financial planning and reporting

### **8.3 Limits of the funding model**

The funding model enables resources to be allocated in a manner that supports the aims and objectives of the education system, and provides incentives to help achieve the outcomes sought.

There are, however, limits to what can be expected of the funding system. For example, teaching quality is a significant driver of high quality outcomes yet the funding model can play only a small role in directly supporting teaching quality.

Similarly while the impact of disadvantage on educational outcomes is well understood and funding models can support allocation of resources based on need, the model itself cannot ensure that those resources are applied or applied effectively. This requires a strong accountability framework.

While the funding model adjusts for changes in rolls and will identify providers under stress due to falling or increasing rolls it cannot drive changes to network capacity. The decisions to close unsustainable schools (whether for roll or performance reasons) and to invest in growing ones must still be made. A network that is more responsive to changes in required capacity will require a willingness and capability to make those decisions.

### **8.4 Implications of the preferred model**

The individual student funding model moves away from an input driven formula funding approach used in the schooling sector to an efficient unit cost of service delivery approach, albeit using average cost as a proxy initially. It sees staffing entitlements and most other in-kind funding replaced by cash to providers. Some in-kind programmes may remain at the central level – for example special education.

No structural changes at the provider level are envisaged as a result of the preferred model. The preferred model can accommodate new structures, such as communities of learning, or a scaling of structures like Partnership schools. Nonetheless as New Zealand's schooling sector is characterised by a relatively large number of very small and in many cases isolated schools there is merit in evaluating the use of a funded costs model for schools that fit that profile. The added complexity in a per-student funding model in these cases may have little utility given resource inflexibility, high fixed costs and unavailability of alternatives.

An individual student funding model will require a focus on building capability at the school level and is likely to support the formation of communities of learning or shared services arrangements.



Accountability requirements, including any outcomes framework, will need careful design in particular as they relate to the use of funding for disadvantage.

The preferred model confers greater flexibility for providers in the schooling sector as once implemented the per-student funding moves with labour cost and CPI changes and is not directly linked to the current entitlement formulae.

Once implemented it is likely that over time the financial performance of individual schools or communities of learning in the State, State Integrated and Māori Medium sectors will diverge from the efficient unit cost of service delivery as a result of their relative effectiveness in managing resources. Policy will need to be developed to deal with significant deficits or surpluses (the latter likely to be less common).

## 9. Risks, transition and implementation

### 9.1 Risks

There are a number of risks in transitioning from the current models to the preferred model. Some of these are inherent in any significant change, and others are specific to the preferred model.

**Transition fiscal risk:** It is assumed that the implementation of an individual student funding model will need to be fiscally neutral. This is not regarded as a significant risk in ECE sector. However, it is more complex in the schooling sector (other than for Partnership and Private schools). Detailed modelling will be required to determine the impact of transition from the current funding formula to the preferred model. This will highlight winners and losers. Depending on the approach taken to manage transition it is feasible that the Government will face increased costs.

**Longer term fiscal risk:** Education spending has been increasing over time. This has been particularly acute in the ECE sector as participation rates have increased. The fiscal risk within the ECE sector is lower going forward as participation nears practical limits and the Government caps free hours. Fiscal pressures will come from population growth and delivery cost increases (primarily salaries).

**Stakeholder risk:** Providers have the most direct interest in the outcomes of transition to a new model, however, there are also other powerful groups that will need to be brought on the journey, such as parents, peak bodies and unions. It is noted that even past small changes to the current formula funding approach have faced significant opposition.

**Execution risk:** There is a significant change programme which will require strong leadership, focus and capability to execute. Management capabilities vary across the 0-18 years schooling sector and it is expected that schools would require significant support over transition.

### 9.2 Transition

The new model is a significant change, particularly for the schooling sector. This suggests that enough time should be given to providers so they are able to adjust as required. Signalling the rationale for change, details of the proposal, and impacts at the provider level well ahead of implementation is important.

As there will be winners and losers consideration needs to be given to a period of transition to the desired end state. The length of time will depend on the materiality of the funding impacts. For example a 2-3 year transition for both winners and losers

may be appropriate. Both winners and losers need to transition to the end state over similar time periods otherwise fiscal neutrality is not assured.

It is likely that there will be some schools that are significantly below the efficient cost of service delivery (for the current average cost) and where a 2-3 year transition period is not sufficient. An approach to supporting improvement to efficient service delivery and deficit funding these schools will need to be developed.

Moving to a per-student funding model will have implications for some of the central functions in the schooling sector. For example, while an industrial system of central awards and a national payroll system are not incompatible with a per-student funding model there would need to be some changes to processes and systems.

### **9.3 Implementation**

Steps to implement the preferred model include the following:

1. Complete detailed design of the model components, including the confirmation of the factors to be used in weighting funding for disadvantage.
2. Develop a detailed financial model to enable financial impacts to be identified at the provider level (the winners and losers), and overall fiscal impacts evaluated.
3. Determine the approach to transition, including any longer term deficit funding arrangements for those schools furthest from the efficient cost of service delivery.
4. Resolve key policy issues: rates of funding for disadvantage, extent of funding for outcomes/performance, any changes to levels of ECE/Private school subsidies, transition periods, etc
5. Develop an implementation plan.
6. Consult with affected stakeholders.
7. Build required processes and systems to support implementation and on-going management of the funding model.
8. Establish effective governance arrangements for the funding model, including such matters as oversight of decisions on parameters, processes for consultation, publication of model determinants, and on-going evaluation of the model's effectiveness.

# Appendices

## **A – Terms of Reference independent advice on reviewing education funding systems for 0-18 year olds**

### **Background**

The Review of Funding Systems (the Review) is one of the Government's Education Work Programme Priority areas.

The Minister is interested in how education is resourced, from early learning through the schooling years (0-18 years). The Minister wishes to explore:

- how the system is resourced
- means for ensuring the resourcing systems support a focus on students
- means for ensuring best value from current levels of resourcing.

The Review is in its early stages. The focus of work at present is exploratory. The work is intended to support the development of a Terms of Reference.

Separate work is underway to ensure a good understanding of the current funding systems and funding of different student pathways from the ground up.

### **Context**

We are concerned about skills and achievement levels of all students. This is true of top performers and those for whom the system has not traditionally worked well. We are particularly concerned that the New Zealand education system is characterised by relatively high levels of disparity, and has been for a number of years. At every stage, the system is less successful for Māori, Pasifika students and students from low-income families.

Looking forward we expect a number of operating models to exist in our education system, but in the near term the main ones will likely be:

- a community of learning (geographically based, predominantly school age student focused, connecting to early learning and/or tertiary learning)
- a community of learning (faith based and language based which may not be geographically based)
- individual providers (schools or early learning centres as now).

### **The scope of this work**

The purpose of the work under this Terms of Reference is to explore funding models which can support the education operating models we expect to be in place over the next five to ten years.

*Key question:*

How can delivery of education services be funded? Identify key features of possible funding models that would better support student achievement and learning pathways, including the emergence of communities of learning as a key feature of the operating environment.

The work would, inter alia, consider:

- the basis for determining the level of resources provided to individual ECE providers, schools and/or communities of learning
- the allocation of decision rights over how resources are used and accountability for resource use
- the implications for the provision of resourcing through grants, through staffing entitlement and in kind
- pre-requisites for the successful implementation of the respective models, including changes to the legal framework within which providers operate
- trade-offs and risks that would need to be managed in transitioning to new funding arrangements.

### **Approach**

The approach will be largely desk based, and will draw on existing materials. The work will involve:

- understanding NZ's current resourcing systems and resourcing models in other jurisdictions
- understanding the future operating models (taking into consideration major changes underway and trends)
- analysing a small set of funding models.

### **In/out of scope**

For the purposes of clarity, for this work:

Resourcing **in scope** includes:

- school operational grants, school staffing, school property and programmes funded from the centre, and
- early childhood education subsidies.

Any consideration of how providers and services currently use or allocate resources should include community/parent contributions.

This work **does not** need to cover:

- establishing a methodology or exploring the costing for pricing education
- minor adjustments to the current resourcing systems.

**Resources**

The Ministry will provide information about the current funding systems and research completed to-date. The Ministry will also provide assistance in accessing data it collects and holds.

**Timeline**

A final report is due by 28 September 2015, to coincide with the delivery of reports from other advisors.

Regular reports will be provided to the Minister of Education as agreed through the development of this work.

## **B – Statistics for the New Zealand Schooling System**

(Latest available figures or estimates used in all instances: source, Ministry of Education)

	Schooling sector	Early childhood sector
Enrolments		
- Total	767,181	200,002
- State	650,537	na
- State Integrated	88,019	na
- Partnership	357	na
- Private	28,268	200,002 <sup>1</sup>
Number of schools/services		
- Total	2,514	5,156
- Primary	1,844	na
- Secondary	344	na
- Other	326 <sup>2</sup>	na
School size (# students)		
- Less than 100	656	na
- Between 100-200	534	na
- Between 200-400	630	na
- Between 400-600	319	na
- Over 600	287	na
FTE student/teacher ratios <sup>3</sup>		
- Total	17.6	5.9
- Primary	20.3	na
- Secondary	15.3	na
- Other	19.5	na
Vote Education: budget 2015	\$8.1 billion	\$1.7 billion
Cost per student		
- Total	\$6,202	\$8,529 <sup>4</sup>
- Primary	\$5,688	na
- Secondary	\$7,505	na

<sup>1</sup> \* For an average of 21.7 hours per week

<sup>2</sup> Includes Composite, Intermediate, Special schools and the Correspondence School

<sup>3</sup> Based on Staffing Entitlement FTTEs

<sup>4</sup> Based on an average cost per enrolment, noting that a child may have multiple enrolments

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