

Budget Sensitive

Office of the Minister of Education

Cabinet Social Policy Committee

Partnership Schools | Kura Hourua: Policy decisions for Round Five

Proposal

- 1 I propose that application Round Five for new Partnership Schools | Kura Hourua (PSKH), focus on Science, Technology, Engineering and Mathematics (STEM).
- 2 I also propose to standardise the term of the principal's salary component of the establishment grant and extend the Guaranteed Minimum Roll (GMR) to 12 months.
- 3 I have developed these proposals with the Parliamentary Under-Secretary.

Executive summary

- 4 The PSKH model extends our menu of options for parents and students by offering greater freedom and flexibility to achieve quality education outcomes. In return, there are stronger accountabilities.
- 5 Rounds 1-4 have focused on a student cohort (those that the system has not served well), establishing 8 PSKH with a further 2 opening in 2017, for a total of 10.
- 6 The Under-Secretary and I propose that Round 5 focus on a group of subjects, STEM, seeking Expressions of Interest in February 2017. The importance of STEM for the economic and social prosperity of New Zealand is undisputed and the PSKH model offers a further opportunity for any interested student to pursue this education pathway.
- 7 As the model beds in we are continually improving the operating framework to ensure its long term sustainability. To this end, we propose amending establishment funding from the current six months of a principal's salary to up to one year for a primary school, and up to five terms/quarters for a secondary school, depending on when they open. This will better align with the longer expected establishment timeframes for Rounds 4-5. It will also make the principal's component more comparable to that of a mainstream school.
- 8 I also intend to increase the Guaranteed Minimum Roll (GMR) in new contracts from one term/quarter to 12 months to provide funding certainty in the critical first year of operation.

Background

- 9 In July 2012, Cabinet agreed to establish Partnership Schools | Kura Hourua (PSKH) as a new type of school in our education system [CAB Min (12) 26/6 refers]. The PSKH model extends our menu of options for parents and students by offering greater freedom and flexibility to achieve quality education outcomes with stronger accountabilities.
- 10 PSKH were charged with a *targeted response to education underachievement in disadvantaged areas* [CAB Min (12) 26/6 refers]. Contract accountability is set at 75 percent priority learners - Māori, Pasifika, students with special education needs and students from low socio-economic backgrounds – to give practical effect to this objective.
- 11 There have been three Requests for Applications (Rounds). Eight schools with 884 students, and the two schools set to open at the beginning of 2017, make a total of 10. One school, Te Pumanawa o Te Wairua, has been closed.
- 12 In Budget 2016, Cabinet provided a tagged contingency for Rounds 4 and 5 providing for up to seven new schools in 2018 and 2019. The Ministry of Education and the Partnership Schools Authorisation Board will recommend Round 4 contracts by May 2017.
- 13 The Education Legislation Act 2016 now enables Tertiary Education Institutions (TEIs) to sponsor PSKH, opening up to them the possibility of applications from Round 5 onwards.

Building on a Promising Start

- 14 We need to further improve outcomes in the education system. There will not be a one-size-fits-all solution. We need a system that allows students, parents and whānau to select the educational approach that best suits them.
- 15 Early indications suggest that PSKH are bedding in well as a new type of provision. We will have by early 2017 ten schools in Auckland, Northland, Hamilton and Hawke's Bay. Schools from Round 1 continue to perform strongly. Sponsors in Round 2 have had more challenges and are working hard to raise the education achievement of their students. The Ministry commissioned a three phase evaluation from Martin Jenkins. Its Phase Two report finds that the Round 1 and 2 schools demonstrate a good understanding of their students, and have adopted good practice approaches to meet their needs.
- 16 The Education Act 1989 does not restrict PSKH to any particular educational focus or type of learner, and we consider that further rounds should increase choice for parents. We propose to make the greatest use of the flexibilities of the model by providing for different priorities in different rounds.
- 17 The test for success for PSKH will be their students reaching the same or higher levels of achievement and progress in their given area of educational focus, for a comparable cohort of students. Contract performance standards will reflect these expectations.

Priority for Round 5: Science, Technology, Engineering and Mathematics (STEM)

- 18 We propose that STEM be the focus for Round 5. This Government has emphasised the importance of science and technology to improve economic and social outcomes for New Zealanders, and has strategies to lift performance in these areas.
- 19 Sponsors could be a community organisation, a TEI, a business or corporate entity, a leader in the STEM field, or from the ICT industry. Sponsors are enabled, through the PSKH model to have flexibility over funding, staffing, curriculum, and operating hours of the school, and to innovate. Mainstream schools do not have the same flexibilities.

The importance of STEM education to New Zealand

- 20 The national plan to address science in society, *A Nation of Curious Minds – He Whenua Hihiri i te Mahara* [SOC Min (14) 14/2 refers] sets out our objective to *encourage and enable better engagement with science and technology across all sectors of New Zealand society* in order to deliver the outcomes of:
- i. more science and technology-competent learners, and more learners choosing STEM-related career pathways
 - ii. a more scientifically and technologically engaged public and a more publicly engaged science sector
 - iii. a more skilled workforce and one more responsive to science and technology.
- 21 *A Nation of Curious Minds* includes a commitment to review the content and positioning of digital technologies in *The New Zealand Curriculum* and *Te Marautanga o Aotearoa*. As a result of the review, a new strengthened digital technologies/pāngarau curriculum is now being designed for levels one to eight of *The New Zealand Curriculum*. The strengthened curriculum will be implemented from the beginning of 2018.
- 22 In the Tertiary Education Strategy 2014-2019, the Government has emphasised the importance of our education system better matching labour market needs. Through a range of initiatives such as Vocational Pathways, Trades Academies, Māori and Pasifika Trades Training, ICT graduate schools, and Engineering to Employment (E2E), the education system is making progress in connecting the worlds of education, training and employment. But more needs to be done, particularly in the area of better preparing school students for studying STEM at tertiary level.

New Zealand school student performance in science and mathematics has plateaued?

- 23 New Zealand has a highly respected education system. The World Economic Forum's Global Competitiveness Index for 2013 noted that New Zealanders spend the longest time in education from primary to tertiary, at 19.67 years, and ranked New Zealand seventh for overall education indicators out of 142 countries.
- 24 Over the period 2010-2014, there are now more students from all cohorts leaving school with at least 14 credits in mathematics and science in Levels 2 and 3. However, international indicators show that New Zealand students' performance in science and mathematics has room for improvement.

- 24.1 The previous cycles of the Trends in International Mathematics and Science Study (TIMSS) and the Programme for International Student Assessment (PISA) showed decreases in achievement among New Zealand students across most subjects and year levels. The 2015 TIMSS results show that this downward trend in science and maths has stabilised and students' achievement has generally held steady
- 24.2 New Zealand's TIMSS Year 5 results sit slightly below the international average, but the average scores significantly improved for science in this cycle. In Year 9 our scores are above the international averages and remained stable
- 24.3 The most positive change for New Zealand students was in their science achievement. There has been a significant increase in the Year 5 achievement score since 2010
- 24.4 There was little change in our maths scores. There was an increase for Year 5, but these changes were not significant. New Zealand's position relative to other countries has also stayed stable across all three groups
- 24.5 There has been little change in Māori and Pasifika scores across cohorts and subject areas. These students remain over-represented at lower achievement levels and under-represented at high achievement levels.
- 25 The National Monitoring Study of Student Achievement in 2012 showed that too many of year 8 students were not achieving at the expected curriculum standard. This also confirms findings from TIMSS.
- 26 Both national and international research and information from employers indicate that we need to continue to step up our efforts in these areas.
- 27 This includes addressing new and emerging shortages in specific areas, such as information and communications technology (ICT) and the science, technology, engineering and mathematics (STEM) skills needed for innovation and economic growth.
- 28 Mathematics education is also an area where New Zealand needs to improve. Mathematical literacy is essential for citizens in the 21st Century. Mathematics and statistics and pāngarau have a broad range of practical applications in everyday life, across other learning areas, and in workplaces.

Potential benefits of STEM-focused Partnership Schools

- 29 Lifting engagement and achievement in STEM education is vital, and PSKH, with their high degree of flexibility for innovative education provision, may be in a good position to provide a STEM-focused education, with the following benefits:
 - 29.1 they would attract students with a STEM interest and further nurture that interest
 - 29.2 flexibility to hire scientists and other STEM experts that are not registered teachers

29.3 flexibility in setting remuneration for STEM teachers

29.4 partnerships with tertiary providers and businesses with a STEM expertise

29.5 potential to develop a deep STEM focused curriculum beyond *The New Zealand Curriculum* and *Te Marautanga o Aotearoa*.

International experience with STEM schools

- 30 The concept of STEM schools has increasingly become a feature of other education systems. They are well-established in the United States, where a 2010 report by the President's Council of Advisors in Science and Technology called for the creation of 1,000 additional STEM-focussed high schools within a decade.
- 31 STEM Schools in the US have traditionally had selective entry, but there has been a growing interest in inclusive (open entry) STEM schools since Texas began a T-STEM initiative in 2006, the largest investment in STEM schools in the US. Early findings from one ongoing study found that T-STEM students performed better in mathematics and science than non-T-STEM students from matched comparison schools.
- 32 In the United Kingdom, many higher education institutions now sponsor Free Schools, a type of school with many similarities to the PSKH model. Some of these have specialised in STEM areas. The University of Exeter and King's College London (KCL), for example, have both opened specialist mathematics Free Schools for senior secondary students. Both schools report excellent results. The UK also has many STEM and similar Free Schools, which are not sponsored by higher education institutions.
- 33 Another UK initiative is the University Technical College which are like academies or Free Schools but they must have a university as a lead sponsor. They must offer technically-oriented courses to students. They aim for more students to go on to higher-level study in technical subjects, having developed a strong base in secondary education.

Selection and Funding


- 34 Selection of STEM-focussed PSKH would require applications that the Partnership School Authorisation Board considers viable and effective. If there are no such applications, or indeed others of interest, the model would continue with its current focus of meeting the priority learner performance standard.
- 35 Funding, performance standards, and accountabilities will be negotiated by the Ministry according to the successful applicants.

Changes to principal salary funding for Rounds 4 and 5

s 9(2)(f)(iv) OIA

- 36 The funding model was changed in 2015. Cabinet agreed to a funding model intended to give PSKH additional incentives to grow, and to ensure that the schools are efficient while they are small. The 2015 changes allocated more of the risks to sponsors, and incentivised them to partner with external parties for resourcing to enrich the linkages between school and community, and allow more PSKH to be opened for a given budget.
- 37 The funding model provides establishment grants [CAB Min 15 26/4A] with three parts:
- 37.1 fixed contribution of \$250,000 for primary and \$400,000 for secondary schools
- 37.2 six months of property funding calculated on a per-student rate
- 37.3 six months principal's salary.
- 38 Schools were provided six months of a principal's salary so that the sponsor could employ a principal to help set up the school. This was sensible when set-up time for schools was very short. However, Rounds 4 and 5 schools will have longer. I propose that the principal's salary component of the establishment grant be aligned with state schools:
- 38.1 up to 12 months for primary schools or lesser depending on when a contract is signed
- 38.2 up to five school terms/quarters for secondary schools or lesser depending on when a contract is signed.

Table 1: Comparison of current approach and proposed approach¹

	Round Three ²	 s 9(2)(f)(iv) OIA
Current Approach	\$130,000	
Proposed term-based approach	\$130,000	
Potential total increase in establishment funding	N/A	

Extending the Guaranteed Minimum Roll

- 39 I informed Cabinet of my intention to modify the guaranteed minimum roll (GMR) to a term/first quarter.⁴ This change was to provide additional incentive to attract students [CAB Min (15) 26/4A]. While this has strengthened sponsors' focus on growing their roll quickly, it has also meant uncertainty as funding is based on

¹ This assumes one primary and two secondary schools in Round 4 and one primary and three secondary schools in Round 5. The mix, number and timing of schools will impact final costs.

² Round 3 is for two schools.

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⁴ The GMR provides a minimum level of operating funding below which the school would not be sustainable.

actual roll numbers, and this is unknown until the school opens. As a school's costs, for example, leasing property and hiring staff, are fixed before the school year begins, uncertainty about roll numbers creates greater funding uncertainty in that first year of operation. This is reduced after the first year as sponsors have more information about the likely number of students that will attend the school in future years, and can therefore plan their finances accordingly.

- 40 We want to mitigate this risk by providing sponsors with more funding certainty in the first year of operation. I therefore intend to increase the GMR period to 12 months. This provides more certainty to sponsors (including Round 3 sponsors), but is still less than the period provided for Rounds 1 and 2 (which was up to three years).

Risks

Broadened focus

- 41 There is a risk that existing sponsors may see themselves as disadvantaged as they are required to enrol a high proportion of priority learners, however, that was the policy focus they applied under and their funding is benchmarked against decile 3 to recognise their challenges. The broadened focus could be seen as a move away from the original rationale for PSKH. However, we always envisaged that further rounds would focus on increased choice for parents and support a wider range of educational options [CAB (13) 39/5 refers]. Furthermore, if there are no acceptable applications for STEM-focussed provision the current policy focus for the time being will remain on priority learners.
- 42 It is possible that the community could see the opening of STEM-focussed PSKH as implying that STEM education is inadequate in the mainstream system. Given that there is some evidence to this, and this Government has consistently emphasised the need to improve in these areas, STEM focused PSKH may incentivise improved performance across the wider education system.

Extending the principal salary component of the Establishment Grant and the GMR

- 43 There is a risk of criticism as these changes are a partial reversal of the 2015 changes. However, in the interests of sustainability we consider this part of our continuous improvement. Furthermore, we anticipate longer lead times in Rounds 4 and 5 which means the increase in principal funding is necessary. With the GMR change, Round 3 schools will be eligible, so there will be no disadvantage for those schools.

Consultation

- 44 The Parliamentary Under-Secretary and I have consulted with each other, and the paper is submitted in line with our Coalition Agreement.

Financial implications

s 9(2)(f)(iv) OIA

- 45 Based on current assumptions, [REDACTED] We cannot know the exact cost until future rounds are completed. In Budget 2016, an operating contingency was set aside for the establishment of Partnership Schools [CAB-16-MIN-0189.10 refers] as follows:

- 46 The proposed changes will have minor impact on overall funding, and we do not expect that this will have material impact on the number of schools approved in any given round.

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- 48 The funding needed for Rounds 4 and 5, over and above the baseline funding set out above, will need to be drawn down from the contingency.
- 49 As with previous rounds, I intend to seek to draw down funding as a part of the Cabinet paper that informs Cabinet of the successful applications.

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s 9(2)(f)(iv) OIA

Human rights gender, disability and legislative implications

- 51 There are no human rights, gender or disability implications. Because no further legislation is required, there is no need for a Regulatory Impact Statement.

Publicity

- 52 We intend to proactively release the PSKH application and selection process including this Cabinet paper subject to any redactions that may be required.

Recommendations

53 The Minister of Education recommends that Cabinet:

- 1 **note** that the PSKH model extends our menu of options for parents and students by offering greater freedom and flexibility to achieve quality education outcomes in return for stronger accountabilities
- 2 **note** that in 2012 these PSKH schools were charged with delivering education targeted at educational underachievement in disadvantaged areas [CAB Min (12) 26/6 refers]
- 3 **note** that Cabinet envisaged that further rounds would focus on increased choice for parents and supporting a wider range of educational options [CAB (13) 39/5 refers]
- 4 **agree** that provision be made in each application round to focus on a Government preference
- 5 **agree** that for Round 5 the focus be on Science, Technology, Engineering and Mathematics (STEM) education
- 6 **note** that if no suitable STEM-focussed applications, or others of interest, are received for round 5, all selected PSKH will continue the current focus on priority learners
- 7 **agree** that, funding, performance standards, and accountabilities will be negotiated by the Ministry according to the successful applicants within the parameters of the Budget provision

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s 9(2)(f)(iv) OIA

- 9 **agree** to change the principal's salary component of the establishment grant for Rounds 4 and 5 so that:
 - i. primary schools receive up to one year of a principal's salary
 - ii. secondary schools receive up to five terms/quarters of a principal's salary
- 10 **note** that the Guaranteed Minimum Roll (GMR) will be extended from one term to up to one year for Round 3 and all subsequent application rounds.

Authorised for lodgement

Hon Hekia Parata
Minister of Education