Education in or for the 21ST CENTURY?

The main policy problems facing education in 2017 relate to its resourcing, its structure, and the measurement of its performance and impact. Underneath the questions of whether government funding matches the greater expectations placed on education over the last decade, and whether structures need changing, or new players introduced, lies the question of what should be given most priority. Should education be most valued in terms of its contribution to increasing New Zealand's productivity and economic wellbeing, which has been more and more to the fore in tertiary policy? Should it be most valued in relation to what can be quantitatively measured, focusing on achievement in the traditional '3Rs' through national standards, and secondary qualifications, the emphasis in the first set of Better Public Services targets? Should it be most valued in terms of how well students develop the capabilities to contribute as citizens, form flourishing families, think critically and creatively, problem-solve, and act well in the face of an increasingly

volatile natural and human world? Such capabilities are included in the New Zealand curriculum from 2010 and in the objectives statement of the Education (Update) Amendment Act 2017.

Resourcing

This year's Budget brought to the fore the increasingly vexed question of whether our education system is sufficiently funded for the deeper and more complex expectations we have. Raising expectations for all students, and closing the achievement gaps that exist, have been an objective of government policy for some time.

The government points to increases in the overall proportion of New Zealand's GDP spent on education, or to overall increases in funding. Early childhood education, school and tertiary sector groups' analyses of per student or per service funding in real terms paint a different picture – namely of decline over time since 2008 in early childhood

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education, failure to cover the costs of inflation in tertiary, and failure to keep up with new and rising costs (NZEI, 2017; ECNZ, 2017; Jones, 2017; Universities New Zealand, 2017). OECD figures show that per student funding for institutions at the primary level is lower than the OECD average, around average at secondary, and below average at tertiary level (Crossan and Earle, 2016, p.16).

New Zealand education has become more reliant on attracting international students: 53% of secondary principals in 2015 said they needed international students so that their school could provide a good breadth of courses (Wylie and Bonne, 2016, p.136). Almost a third of first-time tertiary entrants (including for sub-degree study) are international students (Crossan and Earle, 2016, p.27). Tertiary education has extended beyond its original purpose to become valued as a significant contributor to the economic well-being of the communities in which the institutions are based.

What are the costs that current educational funding is not meeting? In schools, new costs include digital technology; to fully provide for Māorimedium education and the inclusion of te reo Māori in English-medium education; and to meet the needs of all students, including students with additional learning needs, the increasing number of students whose first language is not English, and those with mental health issues. Property issues are a mounting concern. Support for leaders and teachers to make the most of new curricula, and the greater emphasis on teachers and leaders evaluating their own practice in order to keep improving are other concerns. The government agencies themselves struggle to provide schools with the support and resources and frameworks they need so that they do not have to reinvent the wheel: a question of capped staffing, the cost of digital infrastructure and some loss of relevant knowledge.

Early childhood education sector groups have raised concerns about the viability and sustainability of some services, given no increases in their funding since 2008, and the cutbacks in funding for high levels of qualified staff

once the target of having all staff fully qualified by 2012 was dropped. A focus on raising participation has not been accompanied by as much attention to ensuring that children experience good quality if they are to realise the benefits of early childhood education. The Education Review Office notes 'considerable variability in quality' (Education Review Office, 2017, p.7). Private equity firms have invested in chains of centres that benefit from economies of scale, raising others' concern that public money intended for education is being lost in profit private (Cowlishaw, Generally positive reaction to the update of Te Whāriki, the early childhood

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Structure

There has been growing recognition of the shortcomings of the self-managed school 'system' introduced in the 1989 Education Act, which made New Zealand

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education curriculum, was underscored by the lessons learnt earlier about the need to provide good quality professional development for all centres if the curriculum was to be well understood and provided (Early Childhood Council, 2017).

The current review of education funding systems, covering schools and early childhood services, has the aim 'to develop a new funding system in which children are adequately supported to make at least a year's worth of progress against the curricula each year' (Office of the Minister of Education, 2016, p.1). Hopes have been raised that this may improve real resourcing, although working out the cost of such progress (and the definition of progress) is no easy or purely technical matter. Nor will it be an easy matter to measure the efficiency of educational provision, with which the Productivity Commission has recently been tasked.

While the 2017 Budget increased money for research at universities, it also reallocated \$17 million away from public institutions to private tertiary providers.

an international outlier in terms of its reliance on individual schools acting independently to address issues of quality and equity (Wylie, 2012). The most significant structural change to the provision of compulsory education in recent years was announced in early 2014. This involves the promotion of voluntary collaboration between schools to improve the student pathway through primary, intermediate and secondary school, and ideally with early childhood education and tertiary institutions included. Currently, around two thirds of schools are members of a Community of Learning | Kāhui Ako. Significant new funding at a national level has gone into new roles that principals and teachers combine with their existing roles. The Ministry of Education talks of 'the shift to an education system of Communities of Learning | Kāhui Ako' (Ministry of Education, 2017, p.13). The Education Review Office indicates the value of 'pooling the best resources available across the network to those areas in greatest need' (Education Review Office, 2017, p.11). But such pooling is some way in the future. This 21stcentury turn to purposeful collaboration as an effective way to raise capability and capacity is being grafted onto the existing competition between schools, with much left to each of the (so far) 190 Kāhui Ako to work out on their own. Collaboration takes time and energy: school workloads are already sources of strain. Useful resources to support Kāhui Ako are still in development. The evolution of this new system will not be rapid nor smooth. It is likely to be some time before the provision in the recent Education (Update) Amendment Act to allow a single board to govern the schools in a Kāhui Ako is used.

The amendment act also makes provision for the spread of online

existing achievement reporting and cover the 21st-century capabilities included in the much-loved and internationally well-regarded New Zealand curriculum that came into effect in 2010, capabilities which are consistent with what employers look for. However, these are not easily measured through linear progressions, and insufficient support has been given to schools to weave these through curriculum. The momentum building towards a more engaging and sophisticated curriculum and reporting of student performance clashes with the growing policy and political interest in evidence of impact, which is reliant on quantitative data sets.

We do continue to rank highly compared with other countries in science and reading, and to a lesser extent mathematics, but we have fewer students performing at the top level than previously.

schooling beyond Te Kura (formerly the Correspondence School) and the Virtual Learning Network of existing schools, and potentially to private and international providers. While digital devices are widespread in schools, this provision attracted concern because this 21st-century model of educational provision has not borne out enthusiasts' hopes in the United States. Reservations have also been expressed about an erosion of existing provision. No doubt this concern is deepened by the controversial introduction of partnership schools, which are also intended to be innovative.

Measurement of performance and impact

The update of the Education Act heralds a tightening of school (and early childhood education) planning and reporting around five-yearly statements of National Education and Learning Priorities. The consultation documents for the update indicated interest in a common set of measures that could go further than

A sobering note for many of the pioneering Kāhui Ako has been the need to frame their achievement challenges (shared goals with set targets) in terms of the system measures of national standards and NCEA. In the original framing, student achievement was described more broadly (Wylie, 2016, p.2). Principals and teachers were excited by the thought that they could work together to improve 21stcapabilities century such communication, critical thinking, problem-solving, and student agency and self-management, thinking of the rapidly changing economic and social world their students would face. A similar drive to better equip their students for the future was evident in wanting to focus on STEM (science, technology, engineering and or STEAM (which mathematics) incorporates the arts) through crosscurricular work and designing joined-up curricula through primary, intermediate and secondary. But only a couple of Kāhui Ako have secured agreement from the

Ministry of Education to include achievement challenges which touch on 21st-century capabilities, sometimes as 'process' challenges.

Gauging improvement

In the 21st century education is more genuinely for all than it was in the 20th century. There has been better attention paid to the diversity of needs and strengths of students, and increasingly to the improvement of the quality of learning experiences. But the efforts on the ground and in policy settings have not resulted in system-wide improvements in student achievement at the primary level, whether measured through national standards or through the international tests in which New Zealand participates. These measures have their limits: they do not cover the whole of the New Zealand curriculum, including the (21st-century) capabilities. National standards judgements and the use of them to improve teaching and learning continue to be highly variable (Bonne, 2016).

Achievement in NCEA has shown improvements over time, particularly for Māori and Pasifika students, reflecting the opportunities of standards-based assessment. Some deeper questions have also been raised about the relationship between standards gained and pathways into tertiary education and work, and the cost to students and teachers of a creditsbased assessment system that is timeintensive, and can narrow teaching and learning to a particular standard (Hipkins, Johnston and Sheehan, 2016; Johnston, 2016). NCEA also stretches secondary qualifications over three years, whereas most countries have a single secondary qualification or graduating standard. This is because NCEA was grafted onto a qualification hierarchy designed for an era when School Certificate (now the equivalent of year 11) signalled the end of secondary school for many.

New Zealand's results in the international tests of 15-year-olds paint a different picture, of some decline over the last decade, possibly flattening out in 2015. We do continue to rank highly compared with other countries in science and reading, and to a lesser extent mathematics, but we have fewer students

performing at the top level than previously. Māori and Pasifika students' average scores have improved, but they are still below the OECD average. This decline has been linked to the use of standards-based assessment, when this is also used for performance measures (other systems with this linkage, such as England, Australia and the United States, have also shown declines in OECD's PISA); it has also been linked to the quality of New Zealand students' opportunities to learn before they get to secondary school (Collins, 2017b). Some changes have occurred in our student demographics. The tests and qualifications do not measure the same things. PISA does not matter to individual students or their schools; NCEA results do.

Where to next?

There is no escaping the questions around sufficient resourcing, and how to spend public funds most effectively. That needs a concerted and coherent work programme engaged in by government agencies working together with the sector, supported by analysis that draws on a range of disciplines and expertise. We need to look at resourcing the whole system, including the government agencies, and not just its direct providers of education.

While New Zealand has thankfully avoided the narrower curriculum and mechanistic accountabilities that mar much education in England and the United States, we do need to better support our 21st-century curriculum, and to match it with valid measures. We need

to include 21st-century capabilities and knowledge in the achievement challenges of Kāhui Ako if they are to flourish as the new education system. We will need to give Kāhui Ako more support also, if we are to move to the more coherent education system that we need.

1 The partnership school model provides government funding for organisations such as NGOs and iwi to provide schooling for disadvantaged groups, and widen their choice. There have been ten partnership schools funded since they began as part of the National-led government's agreement with the ACT party in 2013. They have attracted criticism on the grounds that they are not sufficiently accountable; that they have not improved student achievement for all their intake; that they are better funded than state schools; and that they make it difficult to take a coherent approach to school provision in an area. See, for example, https://saveourschoolsnz.com/category/partnership-schools/.

References

- Bonne, L. (2016) *National Standards in their Seventh Year*, Wellington: NZCER, http://www.nzcer.org.nz/system/files/NZCER%20National%20 Standards%20Report.pdf
- Collins, S. (2017a) 'Academics: "We're pressured to ignore cheating and pass incompetent students"', *New Zealand Herald*, 29 March, http://www.nzherald.co.nz/nz/news/article.cfm?c id=1&objectid=11827075
- Collins, S. (2017b) 'Dumbing down a generation: performance of NZ schoolchildren plummeting', *New Zealand Herald*, 18 March, http://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=11820523
- Cowlishaw, S. (2017) 'ECC funding rears head again', *Newsroom*, 6 June, https://www.newsroom.co.nz/2017/06/06/32684/ece-funding-rearshead-again
- Crossan, S. and D. Earle (2016) How Does New Zealand's Education System Compare? OECD's Education at a Glance 2016, Wellington: Ministry of Education, retrieved from https://www.educationcounts.govt.nz/_data/assets/pdf_file/0011/176528/Education-at-a-Glance-2016-New-Zealand-Summary-Report.pdf
- Early Childhood Council (2017) 'Council welcomes new curriculum with one big reservation', media release, 12 April, http://www.scoop.co.nz/stories/ED1704/S00049/council-welcomes-new-curriculum-with-one-big-reservation.htm
- ECNZ (2017) 'United call from early childhood sector over chronic underfunding', joint media release from Te Rito Maioha Early Childhood New Zealand, NZEI and New Zealand Kindergartens Inc, 6 June, https://www.ecnz.ac.nz/news/united-call-early-childhood-sector-over-chronic-underfunding
- Education Review Office (2017) *Briefing to the Incoming Minister*, retrieved from http://www.ero.govt.nz/assets/Uploads/BIM-2017.pdf
- Hipkins, R., M. Johnston and M. Sheehan (2016) *NCEA in Context*, Wellington: NZCER Press

- Johnston, M. (2016) 'What kinds of knowledge will serve our students best?', *New Zealand Herald*, 21 September, http://www.nzherald.co.nz/nz/news/article.cfm?c id=1&objectid=11714006
- Jones, N. (2017) 'Education Minister Hekia Parata denies Trump-style "alternative facts" claim', *New Zealand Herald*, 8 March, http://www.nzherald.co.nz/nz/news/article.cfm?c id=1&objectid=11814448
- Ministry of Education (2017) *Briefing for the Incoming Minister of Education*, retrieved from https://education.govt.nz/assets/Documents/Ministry/Publications/Briefings-to-Incoming-Ministers/Briefing-to-the-Incoming-Minister-of-Education-May-2017.pdf
- NZEI (2017) 'Government cuts cost ECE \$260 million this year', media release, 24 March, http://nzei.org.nz/NZEI/Media/Releases/2017/03/Government_cuts_cost_ECE__260_million_this_year.aspx#.

 WUmsOWiGOUk
- Office of the Minister of Education (2016) 'Review of education funding systems: update and next steps', paper to the Cabinet Social Policy Committee, 1 November, retrieved from https://education.govt.nz/assets/Uploads/R-SOC-16-SUB-0143-Paper-Review-of-Education-Funding-Systems.pdf
- Universities New Zealand (2017) 'No real commitment to great universities: Budget 2017', http://www.universitiesnz.ac.nz/orealcommitmenttogreatuniversitiesBudget2017
- Wylie, C. (2012) Vital Connections: why we need more than selfmanaging schools, Wellington: NZCER Press
- Wylie, C. (2016) Communities of Learning | Kāhui Ako: the emergent stage, Wellington: NZCER, retrieved from http://www.nzcer.org.nz/research/publications/communities-learning-emergent-stage
- Wylie, C. and L. Bonne (2016) Secondary Schools in 2015: findings from the NZCER national survey, Wellington: NZCER, retrieved from http://www.nzcer.org.nz/research/publications/secondary-schools-2015