

How leading education nations develop and reform their curriculum systems

Bobbie Mills

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About the authors

Bobbie Mills is Senior Researcher in School System and Performance in EPI. Bobbie has four years of experience of research, evaluation and data analysis in the education policy sector. Since joining EPI she has authored 'The relationship between the Kumon maths programme and Key Stage 2 maths outcomes in England' and 'Boys studying modern foreign languages at GCSE in schools in England: Schools that are beating the odds'; and co-authored 'Free schools in England: 2019 report' and 'General election 2019: An analysis of manifesto plans for education'.

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Introduction

Curriculum policy in England has been characterised by frequent change in recent decades. In order to identify lessons about how curriculum systems can be better formulated and revised in England, this evidence review outlines how five leading education nations around the world have developed their curriculum systems in recent years.

The countries included in this review are Finland, Japan, New Zealand, Scotland and South Korea. Our country selection was led loosely by the PISA rankings but we do not attempt to strongly define a 'leading education nation'. We were also mindful of drawing on a diversity of examples in terms of geography, whilst prioritising countries with broadly similar (or at least not totally dissimilar) forms of government to England. This latter priority was to ensure that we draw from international experience that has greater likelihood of mapping across to policymaking in England.

Our inclusion of Scotland has a slightly different motivation, namely an interest in understanding its recent experience of introducing *Curriculum for Excellence* (CfE). This curriculum reform has followed a troubled trajectory, from having enjoyed broad consensus and support both internationally and at home, to being the object of strong criticism from some groups and individuals in Scottish education¹ and of questions around falling education standards.² Including Scotland in the review has allowed us to understand both the positives and the pitfalls of that reform process.

Method and scope

This work was completed using desk-based research of online publications and resources. Peer-reviewed journal articles, publications by international organisations like the OECD, and by national governments and their agencies were prioritised over other sources. A single recent major curriculum reform was identified for each country, and then a broad internet search was used to elucidate how the changes were directed by government. In particular, we aimed to consider:

- Timing and pace of change
- The actors and institutions involved, and their relationship to government
- The policy formulation process – be it by committee, consultation, legislation etc.
- The use of evidence and expertise in formulating policy.

In addition to this list, we were also attentive to evidence of the overall successes and failures of each reform. Loosely, the indicators of success we have defined are a combination of: gradual or infrequent change in policy (stability); professional buy-in to policy and policy change; improvement in attainment according to PISA rankings or national statistics; absence of pressing issues related to

¹ 'New Curriculum Could Be "Disastrous"', *BBC News*, 3 September 2017, sec. Scotland politics, <https://www.bbc.com/news/uk-scotland-scotland-politics-41134835>; Jamie McIvor, "'Reset" Call over Scottish Curriculum', *BBC News*, 9 January 2018, sec. Scotland politics, <https://www.bbc.com/news/uk-scotland-scotland-politics-42604072>.

² 'Curriculum for Excellence', Professor Mark Priestley, accessed 17 September 2020, <https://mrpriestley.wordpress.com/tag/curriculum-for-excellence/>; Lindsay Paterson, 'Analysing Scottish Attainment Data', *Reform Scotland* (blog), 25 February 2020, <https://reformscotland.com/2020/02/analysing-scottish-attainment-data-professor-lindsay-paterson/>.

workload or other workforce issues; and some level of sensible financial sustainability. It should be noted that the timing of the curriculum reforms detailed here do not necessarily align with the periods of strong performance in PISA rankings that have led these countries to be selected for this study. Likewise, often multiple other education reforms have been enacted in parallel with curriculum reforms. Therefore, our assessment of the overall successes of each reform did not aim to be systematic or conclusive, and we express no view in this research as to the merits of one curriculum reform over another.

Indeed, this review has deliberately avoided focusing on the *content* of curriculum reforms and focused instead on the *process* followed to formulate these policies. More precisely, we focused mainly on the agenda-setting and formulation stages of the process as opposed to implementation. Implementation is undoubtedly a crucial element to reform, being the point at which intention becomes (or fails to become) reality. In each case we have indicated where there have been challenges to implementation, particularly where those challenges appear to take their root in policy design flaws. Nevertheless, we have stopped short of detailing how each government set about implementing their intended reforms, in order to dedicate more space to how those intentions are initially formed. Pietarinen *et al.* (2017) provide an excellent starting point for accessing the literature on implementing curriculum reform, using the case of Finland as their focus.³

The impact of PISA rankings on curriculum policymaking

The first point to make about how and why nations have reformed their curriculum systems in recent years is that the introduction of PISA rankings has been a major disruptor. Many of the countries included within the OECD study have made changes to education policy in response to PISA, regardless of how well they fare against the measures. Some would argue further that there is evidence of convergence of national policies in response to PISA, towards strengthened management of standards to better compete globally. For example, Kyunghye So (2020), a key author in this review's study of South Korea, comments that:

“The pace of introduction of state-led curriculum policies has increased since 2000, when the OECD initiated international comparisons of student educational achievements through the Programme for International Student Assessment (PISA). Global competition triggered by PISA, has highlighted the need for quality management of school education at the national level; this has led many countries to introduce a national curriculum system based on which schools, teachers, and classes are controlled. Therefore, in various countries, the national curriculum is now becoming a key leverage point in improving education; policymakers seek to improve education by controlling the curriculum at the national level.”⁴

Another key development since the establishment of PISA rankings is the emergence of a group of what have been termed educational “reference societies”. The concept of a “reference society”

³ Janne Pietarinen, Kirsi Pyhältö, and Tiina Soini, ‘Large-Scale Curriculum Reform in Finland – Exploring the Interrelation between Implementation Strategy, the Function of the Reform, and Curriculum Coherence’, *The Curriculum Journal* 28, no. 1 (2 January 2017): 22–40.

⁴ Kyunghye So, ‘Whom Is the National Curriculum for? Politics in the National Curriculum System of South Korea’, in *Handbook of Education Policy Studies: School/University, Curriculum, and Assessment, Volume 2*, ed. Guorui Fan and Thomas S. Popkewitz (Singapore: Springer, 2020), 165–84.

dates back to the 1960s and may be explained as referring to a “model nation from which to borrow”.⁵ Readers of this review will likely be familiar with the members of this group of educational reference societies: Finland, a handful of East Asian nations, Canada and more recently Estonia. In recent decades, much attention has been paid to the curriculum systems and education policies of these countries in comparative studies similar to this one.⁶ It is important to be aware of the difficulties of drawing international comparisons in terms of system and performance, particularly in light of differences between country-specific contexts. For example, Japan has a well-established system of after-school tutoring which is missing in other countries.⁷ Equally, many scholars specialising in these reference societies have warned against a tendency to treat them uncritically as model nations to be borrowed from and suggest that instead they should be examples to be learned from.⁸ These caveats have tempered our approach and we have made efforts to remain aware of the limitations of such international comparisons.

⁵ For further explanation and alternative conceptualisations of ‘reference societies’, see Florian Waldow, ‘Projecting Images of the “Good” and the “Bad School”: Top Scorers in Educational Large-Scale Assessments as Reference Societies’, *Compare: A Journal of Comparative and International Education* 47, no. 5 (3 September 2017): 647–64.

⁶ Brian Creese, Alvaro Gonzalez, and Tina Isaacs, ‘Comparing International Curriculum Systems: The International Instructional Systems Study’, *The Curriculum Journal* 27, no. 1 (2 January 2016): 5–23.

⁷ OECD, *Education Policy in Japan: Building Bridges towards 2030*, Reviews of National Policies for Education (OECD, 2018), 2.

⁸ See for example Martin Mills and Glenda McGregor, ‘Learning Not Borrowing from the Queensland Education System: Lessons on Curricular, Pedagogical and Assessment Reform’, *The Curriculum Journal* 27, no. 1 (2 January 2016): 113–33.

Summary and conclusions

Large scale international comparisons of curriculum systems have invariably found that there is no single approach that is causally linked to better outcomes. Instead, high performing countries employ a multitude of varied approaches.⁹

It has been useful nonetheless to observe what high performing countries do, to notice their commonalities and inevitable differences. This exercise at minimum draws out the common challenges and traps associated with curriculum reform, and at most can suggest workable solutions.

Timing and pace of change

Finland's curriculum is renewed every ten years or so. The most recent design process commenced in earnest in 2012, although extensive planning preceded it, and was completed by 2017.

In **South Korea** curriculum reform has not followed a planned cycle. The most recent reforms were announced for 2015 when reforms from 2009 were still being implemented, and reform has in general tended to align with change in government.

Curriculum reform in **New Zealand** has followed a very slow process of design and consultation. Development work set in motion in the 1980s was unintentionally hampered by other administrative reforms; then once underway in the 1990s it was criticised for its high pace of change. The successive reform, completed in 2007, was intentionally slowed down to allow for a more deliberated approach. Reforms that have just come underway seem now to be following an intentionally slow process from the start.

Japan, like Finland, renews its curriculum ever ten years or so. Deliberations feeding into the most recent reforms spanned about two years.

The Curriculum for Excellence, **Scotland's** current curriculum, was developed over a ten-year period. It is not entirely clear from sources whether this reflects the originally intended timeframe. There is no defined mechanism in Scotland for regularly renewing the curriculum, as in New Zealand and South Korea.

Most countries in this review either undergo curriculum reform on a planned cyclical basis, with each cycle spanning about ten years as in the case of Finland and Japan, or else they have followed a deliberately slow process of design and consultation, as in the case of Scotland and New Zealand. In Finland's case the process is both cyclical and deliberately slow. New Zealand is a particularly instructive case, given its shift in pace from 1996 from fast to slow.

South Korea is the exception in this study, and may be interpreted as the exception that proves the rule, given that South Korea's experience has tended to be one of 'reform without change'.

It could be said that an effect of renewing the curriculum on a planned cycle is to divorce the process from the electoral cycle. However, the example of Japan, which works on a planned ten-year cycle

⁹ Creese, Gonzalez, and Isaacs, 'Comparing International Curriculum Systems'.

but whose process in 2007 was led by an advisory body that was personally appointed and chaired by the prime minister, suggests this claim is not so straightforward to make.

Another timing consideration is the need for sufficient lead time between the establishment of a new curriculum and its implementation. Insufficient time was a key reason for New Zealand's 'pausing' its reform in the mid-1990s to rethink its timelines. And yet, it can be seen from other examples like Scotland that some schools, in this instance particularly secondary schools, may not use the entire lead-in time and may only start implementation when it is absolutely necessary for them to do so.¹⁰ Possible explanations for this may be pre-existing workload issues prohibiting additional work on curriculum development, or it may be that the publication of a Curriculum Road Map like in Finland would have aided the implementation process. This 'road map' meant that schools and teachers were able to see clearly when and how they would be involved in the process, and when they would need to start thinking about various stages of implementation.¹¹

Actors and institutions

In **Finland** it is the Finnish National Agency for Education (EDUFI) that leads the development of the national core curriculum. EDUFI is the lower of the two tiers making up the national education administration in Finland, and it is part of the Ministry of Education and Culture. EDUFI is governed by a Director General who works with the government-appointed board.

Curriculum reform in **South Korea** has tended to be led by legislative initiatives from the Ministry of Education. There does not appear to be a separate agency leading the reform, although the Korean Institute for Curriculum and Evaluation (KICE) is an important research agency within the process.

New Zealand has no separate government agency responsible for curriculum reform. To date this has been led directly by the Ministry of Education, but there are proposals on the table for a curriculum agency in the future in the 2020 education system review.¹²

In **Japan**, curriculum development work is done by a constellation of government agencies and advisory bodies. These include the Council for the Implementation of Education Rebuilding (ERC), which is closely associated with the Shinzo Abe premierships of 2006-7 and 2012-2020. The ERC has worked in tandem with the Central Council for Education, which is part of the Ministry of Education, Culture, Sports, Science and Technology (MEXT). In addition, the Special Committee on the Basic Plan for the Promotion of Education is a subcommittee of the Central Council for Education and has led the most recent deliberations on curriculum reform. Due to inconsistencies in the translation of the names of these government bodies and a lack of English-language sources, this review was not able to clarify which government agencies have been part of each different reform round, and more importantly *why* this appears to change from round to round.

¹⁰ Mark Priestley and Sarah Minty, 'Developing Curriculum for Excellence: Summary of Findings from Research Undertaken in a Scottish Local Authority', 10 April 2012, 2.

¹¹ Irmeli Halinen, 'The New Educational Curriculum in Finland', in *Improving the Quality of Childhood in Europe*, ed. Michiel Matthes et al., vol. 7 (Alliance for Childhood European Network Foundation, 2018), 78–79.

¹² Correspondence with Dr Elizabeth Eppel.

The renewal of the curriculum in **Scotland** was conducted across multiple government agencies, including the Scottish Qualification Authority, Learning and Teaching Scotland, Her Majesty's Inspectorate of Education (HMIE) and the Scottish Executive Education Department.

Overall, government political control over reform varies among countries. It is common for government to set the overarching national priorities for education, but then the responsibilities, expertise and permanence of the agency that puts those priorities to work can vary even between reform rounds in the same country. Institutional memory is also a factor here, as evidenced by the case of New Zealand at leadership level within reformed education agencies.

Policy formulation process

The most recent curriculum development cycle in **Finland** was a complex process. First, general national objectives for comprehensive education and the distribution of lesson hours were set out in government legislation. This legislation then formed the mandatory basis for EDUFI to carry out an extensive consultation and design process. This involved large-scale surveys, the publication of a 'Curriculum Road Map' so all could access the overall plan for reform, the formation of an advisory group and about thirty working groups to draft different parts of the curriculum. There were multiple feedback stages, as well use being made of research and evidence of various kinds.

In **South Korea** it tends to be presidential advisory committees within the Ministry of Education who set the agenda for the national curriculum reform. Research can be commissioned by government to advise on policy formulation, and another role for researchers and university professors is to participate in drafting and reviewing processes.¹³ There is little evidence in available sources referring to systematic inclusion of teachers within South Korea's curriculum development process.

New Zealand's latest curriculum reform, completed in 2007, builds on earlier curriculum statements and syllabi that were developed during the 1990s by curriculum advisory and writing panels, though the draft plan had already been completed nearly a decade early in the 1980s. An issue hampering the progress in developing statements in the 1990s was dissatisfaction among teachers and school leaders with too rapid a pace of change and also insufficient engagement of teachers and unions by the then Minister of Education. With the incoming of a new Minister of Education in 1996 this process was "paused" to make way for a longer revised timescale and a programme of research to inform a "stocktake" of progress and to inform the next renewal of the curriculum statement. The next stage following the publication of the stocktake report to further refine the curriculum involved the formation of expert reference groups, the publication of a best evidence synthesis, and consultation via online discussion, working groups and written feedback.

In this review we have described the curriculum reform in **Japan** for which we could find the best documentation, which is the round that took place between 2006 and 2007 when Shinzo Abe first took office in Japan. The Education Rebuilding Council (ERC) was established upon his entrance into office, which was an advisory body personally appointed and chaired by the prime minister. It comprised twenty contributors of varying backgrounds, some of which were not experts in education but instead were athletes, journalists or businesspeople. This advisory body met several

¹³ Soo Bin Jang, 'Legitimising the Need for Another Curriculum Reform and Policy Framing: The Case of South Korea', *Journal of Curriculum Studies* 52, no. 2 (3 March 2020): 247–69.

times and produced a first report in 2007. Detailed measures were then proposed in response to the report's recommendations by the Central Council for Education. These measures were then interpreted and implemented by Japan's education ministry. Similar to the accounts of South Korea, we have not identified evidence of largescale engagement of teachers within this process in Japan.

The process of the reform in **Scotland** to create Curriculum for Excellence (CfE) is similar in form to that conducted in Finland. The starting point was legislation that set the overall objectives. This was followed by a period of public consultation, drafting, teacher engagement and feedback. The process in Scotland appears to have been led by a curriculum review board, rather than dozens of working groups as in Finland.

A particular question arises around consensus-building from the detailed country studies which follow this summary. Consensus-building goes hand in hand with engagement of teachers in the reform process. The inclusion of teachers varies from country to country, and it is not clear that strong consensus leads automatically to smooth implementation in schools. Variations go from top-down reform in South Korea, with little evidence to be found in available sources referring to systematic inclusion of teachers (as is also the case of Japan), to large scale inclusion of teachers either through public consultation, working groups, or local curriculum development as is the case of Finland and Scotland.

In Finland, this inclusion is described as successfully achieving a broad consensus, in contrast with the top-down legislative approach used in South Korea. Such consensus was equally a product of the early stages of Scotland's reform experience. This is certainly viewed as a positive in both cases, and New Zealand provides a good example of what happens when inclusion and consensus is not prioritised: the problems that had been besetting the early 90s reform process were partly due to teachers feeling a lack of ownership of the new syllabi.

And yet, strong consensus does not seem to have saved either Scotland or Finland entirely from problems in implementation. In both countries it seems that teachers were generally enthusiastic about the overall vision of the reforms, but instead they felt the guidance lacked clarity and they needed reassurance that their school-level work properly reflected the reform intentions. Clarity of guidance, or striking the correct level of detail, may therefore be equally if not more important than consensus-building in the case of school-based curriculum development. Clarity and level of detail need to be considered to allow local government and schools their intended level of autonomy, and it must be considered whether they are equipped to use that autonomy. It should be noted that schools in Finland faced no consequences if they did not implement the curriculum as set out in national guidance, making the nature and importance of consensus somewhat different to a case where schools would be held accountable.

The size of a country may be a key explanation for the differences we see between our five case studies and their approach to consensus-building: South Korea and Japan have populations between ten and twenty times the size of those of New Zealand, Scotland and Finland, and it is the smaller countries that have sought higher engagement from educators. Whilst they are by no means homogenous societies, it is nevertheless conceivable that every single principle school leader in each of these small countries could be engaged in a reform process.

An important question that remains outstanding is how to engage in a real way with different and competing views. Again, it seems smaller countries with high trust face the least barriers here. However, the evidence reviewed here does not shed light in any detail on how this engagement is effectively achieved.

The use of evidence and expertise

Finland's curriculum development is conducted by EDUFI, which also houses the Finnish Education Evaluation Centre (FINEEC). Curriculum development is a major planned duty for EDUFI as an agency, and they are well-placed to draw on evidence produced by FINEEC. Multiple accounts of the most recent curriculum reform in Finland demonstrate the use of evidence. This involved both drawing on results of evaluations and surveys as well as developing a qualitative tool called the Learning Barometer 2030, launched 2009, which aimed to develop a long-term view of educational priorities based on a plurality of voices.

As mentioned above, government may commission research in **South Korea** to inform curriculum reform. Another use of research, which appears to largely take place within KICE (Korean Institute for Curriculum and Evaluation), is the monitoring and evaluation of newly introduced policies. It appears from evidence that this monitoring and evaluation forms part of the top-down style of curriculum reform and is there to track implementation as much as to evaluate impact.

The use of evidence in **New Zealand's** most recent curriculum reform seems to have taken place mainly during the 'Curriculum Stocktake' exercise begun in 2000s to assess the effectiveness of the 1991-1999 curriculum developments and their implementation and impacts on learning and achievement. This included taking account of international assessment surveys; national surveys of teachers; two international critiques commissioned from NFER (UK) and ACER (Australia) and the publication of a best evidence synthesis.

In the reforms in **Japan** that we have documented in this review, we have not found particular indication of the use of evidence or research within the process. However, we do find evidence that an important part of the 2007 reform was the introduction of the National Assessment of Academic Ability which forms an important part of how Japan tracks the success of its reforms. Equally it has been found in the accompanying evidence review to this paper that looks at research and evidence in education policymaking in numerous countries including Japan, that Japan has a number of well-established and well-funded education research institutions, including one that is linked to government and focuses on policy research (National Institute for Education Policy Research).

There has been criticism in **Scotland** regarding insufficient use of evidence in developing CfE. The OECD called in 2015 for there to be a more ambitious theory of change and a more robust evidence base available across the system. Other critics were concerned about the lack of attention paid to theories of curriculum development, arguing that it had led to an incoherent foundation on which to build the curriculum. Another important concern voiced by the OECD was the lack of appropriate data to effectively evaluate the impact of the reform. It must be said however that the accompanying evidence review to this report that looks at the use of research and evidence in education policymaking has found that Scotland has recently renewed its commitments to research and evidence through its 2017 research strategy.

Taken together it is clear that use of evidence in policymaking requires deep understanding of the evidence and its limitations and interdependencies. This includes considering the theoretical and practical implications of a reform on other parts of the education system such as assessment.

The use of evidence in policymaking is further explored in the second review in this series, which looks more closely at how research, evidence and evaluation are used and funded in education policymaking in different national settings.

The remainder of this paper covers the five country-studies in individual detail.

Finland

The Finnish National Agency for Education (EDUFI) leads the development of the national core curriculum in Finland every ten years or so. EDUFI is the lower of the two tiers making up the national education administration in Finland, sitting within the administrative branch of the Ministry of Education and Culture. The Finnish Education Evaluation Centre also sits within EDUFI.

The Director General of EDUFI works with the government-appointed board to oversee the process of curriculum development, with the first developed in this way in 1985. Since then curriculum development in Finland has followed a planned process over a ten-year cycle: reformed in 1994, 2004 and most recently 2014. We will focus here on the process followed in the most recent iteration of curriculum reform. It concerned the review and alignment of core curricula throughout the entire education system excluding tertiary education (covering early childhood education, pre-primary and 'basic' education which comprises primary and secondary schooling). The design process commenced in earnest in 2012 (though extensive planning preceded it), the first renewed core curriculum completed in 2014 with all completed by 2017.

A number of detailed descriptions have been published elucidating the reform process, among them an account by one of its leaders Irmeli Halinen, which this review draws on in the following paragraphs.^{14,15}

General national objectives for comprehensive education and distribution of lesson hours were renewed by government legislation in 2012. These national objectives served as a basis from which the Finnish National Agency of Education (EDUFI) launched an extensive consultation and design process which spanned several years.

EDUFI's planning previous to this stage involved a large-scale survey of student views (about 60,000 responses, 26% of students aged 13 to 16), as well as the publication of a 'Curriculum Road Map'. The Road Map set out the phases of the national process, alongside suggested (but not prescribed) steps to be taken at the local level. Teachers had already input into the planning and direction of the process. Halinen comments that:

"With the Road Map, the municipal education authorities and schools were able to see the curriculum reform process as a whole, and to be aware of the most important issues to be addressed during the process. It helped the municipalities and schools to begin their local curriculum process at the same time as the national process and to reflect upon and to develop their own thinking and ideas along the way. All this promoted extensive

¹⁴ Halinen, 'The New Educational Curriculum in Finland'.

¹⁵ Other overviews include: Pietarinen, Pyhältö, and Soini, 'Large-Scale Curriculum Reform in Finland – Exploring the Interrelation between Implementation Strategy, the Function of the Reform, and Curriculum Coherence'; Wilmad Kuiper and Jan Berkvens, *Balancing Curriculum Regulation and Freedom across Europe* (Enschede: CIDREE, 2013); Lotta Tikkanen et al., 'Lessons Learnt from a Large-Scale Curriculum Reform: The Strategies to Enhance Development Work and Reduce Reform-Related Stress', *Journal of Educational Change*, 16 November 2019; Erja Vitikka, Leena Krokfors, and Elisa Hurmerinta, 'The Finnish National Core Curriculum', in *Miracle of Education: The Principles and Practices of Teaching and Learning in Finnish Schools*, ed. Hannele Niemi, Auli Toom, and Arto Kallioniemi (Rotterdam: SensePublishers, 2012), 83–96.

participation and was important in creating the atmosphere of unhurried work, cooperation and trust.”¹⁶

In terms of the actual design process, which lasted more than two years with multiple drafts published for feedback, EDUFI invited teachers, principals, local education authorities, educators and researchers to participate. An advisory group was formed comprising of various ministries, the municipal workers and teacher unions, labour unions and industry groups, ethnic groups, parent associations and textbook publishers.

The types of questions considered across these various levels – including with parents and students – were truly fundamental and reflect a real step back from the current system e.g. ‘what do we understand by learning?’, ‘what is a good learning process like?’. The purpose of this back-to-basics style debate was to form a real consensus around how teaching and learning should be developed.

Overall, thirty working groups were formed, all of which contributed to drafts for the core curriculum. Schools and municipalities were surveyed for feedback on each draft iteration and feedback was published. Sources of feedback were not limited to schools, however: drafts were open to feedback from “practically anyone interested” and contributions were taken from various organisations, groups, individuals and civil society organisations.

Halinen’s account states that “a strong knowledge base” was a central guide to the national reform process. The design drew not only on teachers’ participation to contribute their experience and ideas, but also on “the results of various research, evaluations and development projects” including latest neurological research which were shared with curriculum working groups. In addition, a tool called the Learning Barometer 2030 had been developed and launched by EDUFI in 2009 with the purpose of providing a longer-term view to inform the core curriculum review. This complex qualitative project aimed to consider the plurality of possibilities and challenges that may affect education in the future by “collecting a diversity of arguments” and producing a “multi-voiced view” of what will be important to schools in 15-20 years’ time.¹⁷ The motivation behind taking such a long-term view is the strong consensus that the globally acknowledged success of Finland’s education system takes its roots in decisions and reforms put in place up to 40 years ago, hence the continuing agreement on the need to look ahead.¹⁸

Final decisions were taken by EDUFI at the end of the process, with the ultimate product being the publication of national documents numbering some 500 pages.¹⁹ The above process was repeated for different phases of education. The core curriculum for upper secondary education was published in 2015, and for early childhood education and care in 2016.

¹⁶ Halinen, ‘The New Educational Curriculum in Finland’, 78–79.

¹⁷ Tiina Airaksinen, Irmeli Halinen, and Hannu Linturi, ‘Futuribles of Learning 2030 - Delphi Supports the Reform of the Core Curricula in Finland’, *European Journal of Futures Research* 5, no. 1 (December 2017): 2.

¹⁸ OECD, ‘Finland: Slow and Steady Reform for Consistently High Results’, in *Lessons from PISA for the United States*, by OECD, Strong Performers and Successful Reformers in Education (OECD, 2011), 117–35.

¹⁹ Jenna Lähdemäki, ‘Case Study: The Finnish National Curriculum 2016—A Co-Created National Education Policy’, in *Sustainability, Human Well-Being, and the Future of Education*, ed. Justin W. Cook (Cham: Springer International Publishing, 2019), 397–422.

By all accounts this was a collaborative process with large-scale participation from across the country and from all levels of society. It is difficult however to glean from the existing literature exactly *how* this plurality of views was taken into account and ultimately balanced into a final product. Follow-up research reviewing the curriculum development process does indicate that participants felt different views were indeed valued.²⁰ Halinen’s account summarises this follow-up research, explaining that it indicated that:

“...the reform strategy constituted of two distinctive strategic elements: a participative element of extensive knowledge sharing that increased transparency, and a strong steering element in terms of change management. In peoples’ minds, this approach was associated with successful reform in terms of the perceived educational impact of the reform as well as curriculum coherence in terms of alignment with the curriculum. In the reform process, people felt that the expertise of the participants and the different interest groups was appreciated and that contradictory views were valued. They felt that the leadership steering the curriculum reform acted in a transparent and participatory manner, developing structures to foster participation and utilising the expertise of all participants. This kind of approach helped people to make sense of what would be happening and how the changes could be beneficial for their work.”

Following the publication of the renewed national curriculum documents, it then fell to municipalities and schools to develop local curricula *based on* the national documents. Pietarinen *et al.* (2017) studied the implementation of these reforms, with a view to understanding which factors contribute to ‘curriculum coherence’.²¹ This coherence is of course not a given, seeing that there are no sanctions for schools that do not adhere to the curriculum, and there remains extensive freedom for enacting the curriculum.²² Pietarinen *et al* do not indicate the extent to which the curriculum has been ‘faithfully’ implemented, but do find that this goal is perceived to be attainable by teachers and other stakeholders surveyed.²³ The overall finding of the Pietarinen study is that ‘perceived curriculum coherence was mediated by the perceived educational impact of the reform’, and that this is contributed to by a participatory design process such as was followed by Finland in this reform. Echoing this, Halinen describes the extensive design process as essentially an exercise in achieving consensus on the fundamentals of the curriculum design, and states that “the participatory approach also secured the commitment of all those whose input was needed to carry out the reform”. A conclusion to draw from this is that we should contextualise Finland’s consensus-building with the fact that schools would not ultimately be compelled to follow through in implementing these reforms, and yet it is argued in the sources reviewed here that such consensus-building contributed to the aligned implementation of these reforms.

In terms of the implementation experience, it is clear from various accounts that while educators can be invigorated by the renewed curriculum, effectively being given “permission to do things

²⁰ Pietarinen, Pyhältö, and Soini, ‘Large-Scale Curriculum Reform in Finland – Exploring the Interrelation between Implementation Strategy, the Function of the Reform, and Curriculum Coherence’.

²¹ Pietarinen, Pyhältö, and Soini.

²² Lähdemäki, ‘Case Study’.

²³ Pietarinen, Pyhältö, and Soini, ‘Large-Scale Curriculum Reform in Finland – Exploring the Interrelation between Implementation Strategy, the Function of the Reform, and Curriculum Coherence’, 32.

differently”, support and structure to aid the development of local curricula is felt to be lacking in some places.²⁴ At various stages in the design and implementation process teachers in some municipalities have been uncertain if they are proceeding correctly, and a sense of heightened workload has accompanied the changes.²⁵ Underlying these frustrations is real commitment from teachers and educators to best achieve the goals of the reform, and a feeling that there is not always available the support and guidance to really do the vision justice. Therefore, it appears that the curriculum design process was successful in garnering broad support and consensus, which Finland has secured throughout most of its history of education policy, but challenges have arisen in translating the vision into the classroom.

²⁴ Lähdemäki, ‘Case Study’; Halinen, ‘The New Educational Curriculum in Finland’.

²⁵ Lähdemäki, ‘Case Study’; Maria Erss, ‘Comparing Teacher Autonomy in Three European Countries: Estonia, Finland, and Germany’, *Euro-JCS* 2, no. 2 (22 March 2016).

South Korea

Before describing the process of reform in South Korean, it is important to state that while the country has consistently had 'enviously' high rankings in PISA results – and it is these high rankings that have led it to become a global reference society²⁶ – it has also consistently been at the bottom of the rankings for student happiness. This has been an alarming revelation within South Korea and a major point of criticism for its education system. Its leadership in international rankings should be balanced by concerns over student stress and teenage suicide. This may not be a system to aspire to, but its inclusion here is instructive as a high performing country with underlying problems.

Throughout the latter half of the 20th century, the National Curriculum in South Korea was revised multiple times, accordingly named the first, second, third etcetera curriculum up to seventh curriculum in 1992. According to So (2020) the curriculum “has been revised every time there has been a change in political power”.²⁷ This made for quite regular cyclical change to an always centrally prescribed curriculum focused on nation-building.

Following the introduction of the seventh curriculum, the curriculum has in fact been revised an additional three times – 2007, 2009, and 2015, though the numbering system never continued up to eighth, ninth, tenth etcetera. Signalled by this discontinuation in numbering, there appears to be a break in how curriculum is approached. The ‘seventh curriculum’ was the beginning of the first real move away from strongly centrally prescribed nation-building curriculum to a gradual increase of school autonomy over their school day.

The introduction of PISA rankings was a big disruption and catalyst of education reform in South Korea. As noted above, South Korea recognised a worrying tension between its high academic standards and shockingly low student happiness. In the same period, the Asian economic crisis and a societal turn towards the importance of education for competing in a globalised economy were additional catalysts for change. The outcome was a drive towards more school autonomy, competency-based education and improving student happiness.

The reforms of the 21st century, and particularly those throughout the 2000s, can be characterised as ‘reform without change’.²⁸ Implementation of the reforms has repeatedly had unintended consequences and failed to achieve what they set out to do. Key to this is that reforms to secondary learning were introduced without removing the pressure of the college-admission criteria that shaped how these secondary reforms were implemented: a reform allowing schools autonomy over how 20 per cent of their learning hours were used resulted in a straightforward 20 per cent increase in learning hours for tested subjects to the detriment of others.²⁹

Continuing the theme of incomplete reform, it was considered that the 2009 revision of the national curriculum “did not represent a complete shift to a competency-centred curriculum”, and as a result

²⁶ Waldow, ‘Projecting Images of the “Good” and the “Bad School”’.

²⁷ So, ‘Whom Is the National Curriculum For?’

²⁸ So, 167.

²⁹ So, 171.

additional studies were conducted by the Korea Institute for Curriculum and Evaluation (KICE).³⁰ Further research was then commissioned with the beginning of the Park government in 2013 when “more enthusiastic reforms were advanced”.³¹

Indeed, President Park made education an important plank in her broader economic vision for a ‘creative economy’ with ‘happy education’.³² In this way curricular reform in South Korea has continued the pattern of moving with change in government, however Park’s reforms of 2015 have outlasted her government to the present day. These most recent reforms were aimed at reducing academic pressure on students by “carefully selecting and reducing learning content while focusing on the key concepts that must be learned in each subject.”³³

It should be noted that the announcement of the renewed reforms of 2013 was not initially welcomed due to “a feeling of fatigue after having experience three decades of policy churn” and the previous reforms of 2009 still being in the implementation process.³⁴

In terms of exactly how policy has been formulated over the years, Jang (2020) gives a useful summary of work by Kim (2006) who has studied practices around the national curriculum in South Korea since 1954.³⁵ This summary states that:

“...the process of state-led curriculum-making has become noticeably institutionalized. Legislative initiatives in South Korea, including NC-making, often originate in areas of the executive branch such as the Ministry of Education (MOE), as is true in most parliamentary systems, and, generally, presidential advisory committees or leaders in the MOE, who are appointed by the president, set the NCR agenda. In this way, the central government body, particularly the presidential office and the MOE, are important policy actors in the process of curriculum-making.

Other significant actors include university professors and researchers as well as a handful of practitioners who are invited and nominated by the MOE to participate in the drafting and reviewing processes. As NC-making efforts largely adopt the model of research and development, South Korean curricular academics have played a leading role in the practical procedures for more than two decades.

Other noteworthy actors who are not directly affiliated with the official chain of command but who directly or indirectly influence the process of curriculum-making include various interest groups such as certain subject-related stakeholders (e.g., the Korean Mathematical Society), teachers’ unions, parents’ organizations, private thinktanks, and members of the National Assembly with a political party affiliation.

³⁰ Kyunghye So and Jiyoung Kang, ‘Curriculum Reform in Korea: Issues and Challenges for Twenty-First Century Learning’, *The Asia-Pacific Education Researcher* 23, no. 4 (December 2014): 799.

³¹ So and Kang, 799.

³² Jang, ‘Legitimising the Need for Another Curriculum Reform and Policy Framing’.

³³ So, ‘Whom Is the National Curriculum For?’, 173.

³⁴ Jang, ‘Legitimising the Need for Another Curriculum Reform and Policy Framing’, 249.

³⁵ Kim, Y. (2006). Rethinking curriculum reform frame. *Education Critique*, 20, 198–214.

In addition, in the case of the 2015 NCR specifically, the media played a critical role in shaping the ways in which the public processed information by amplifying particular interest groups' perspectives."³⁶

This summary sets out a familiar process of state-led curriculum-making with feed-in from various stakeholders across education and society. Some important things to note is that there does not appear to be much involvement of teachers in the process and that, as is documented by Jang's study of the 2015 reforms, stakeholders appear to be in fierce contest with one another as opposed to a sense of consensus-building that has characterised other processes in this study:

“Once state-based curriculum-making is initiated, different policy actors—particularly stakeholders—present and advocate for their curricular proposals that are grounded in sets of values, attitudes, beliefs, and assumptions about the roles of school knowledge, public schooling, and the state. Almost identical to Goodson's (1993) analysis of school subjects in England's educational system, school subject communities and their related constituencies fight intensely to procure their status as well as the instructional hours devoted to their areas within the NC in South Korea; often, the power struggle between subjects dominates political communications during the early stage of a curricular reform effort.”³⁷

Other key features of the South Korea's development of curriculum policy appear to be the high level of use of research, monitoring and evaluation (by the government research agency KICE) as well as the use of legislation to enact new policies. This appears to amount in totality to a tightly controlled top-down system of reform. Take for example the Free School Semester (FSS) – which was supposed to be a way of giving schools more autonomy and helping students focus on the enjoyment of learning. In tension with the policy's core purpose of giving schools more autonomy, the reform appears to have been centrally controlled to a fine detail – with the FSS being piloted and then launched via legislation across all schools. 170 hours of FSS activities were centrally formulated and shared, and satisfaction and monitoring surveys were used to track implementation.³⁸

Heavy workload continues to be cited as a key issue in the system.³⁹ South Korea maintained its high performance in the 2018 PISA volume, with higher than average point scores across all subjects and a slightly smaller than average attainment gap compared with other OECD countries.⁴⁰ While a lower proportion of students enrol in vocational education and training programmes in South Korea, compared with other OECD countries,⁴¹ a new curriculum based on the reforms brought in in 2013 has been introduced by a number of vocational institutions.⁴²

³⁶ Jang, 'Legitimising the Need for Another Curriculum Reform and Policy Framing', 248.

³⁷ Jang, 248; Ivor F. Goodson, *School Subjects and Curriculum Change* (Routledge, 2013). See Jang p.248 for further references.

³⁸ Charlene Tan, 'Sensemaking and Sensegiving in Schooling Reform: South Korea and China', *Globalisation, Societies and Education* 17, no. 4 (8 August 2019): 536–47.

³⁹ So, 'Whom Is the National Curriculum For?', 173.

⁴⁰ 'Korea: Student performance (PISA 2018)', accessed 5 November 2020, <https://gpseducation.oecd.org/CountryProfile?primaryCountry=KOR&treshold=10&topic=PI>.

⁴¹ 'Korea: Overview of the education system (EAG 2020)' accessed 5 November 2020, <https://gpseducation.oecd.org/CountryProfile?primaryCountry=KOR&treshold=10&topic=EO>.

⁴² 'Education Policy Outlook: Korea', accessed 2 October 2020, <http://www.oecd.org/education/Education-Policy-Outlook-Korea.pdf>.

New Zealand

The latest New Zealand Curriculum was published in 2007 (save a few additions which came later). The publication in 2007 was the culmination of a drawn-out process of curriculum development work undertaken at the completion of the previous curriculum's full implementation at the end of 1990s, which itself had been stopped and stalled since the 1980s.

The overall timeline for the curriculum reform is as follows – drawing mainly from one government document as a source for years 1980-2002.⁴³ Major development work on the New Zealand National Curriculum during the 1980s never got beyond a draft document, due to reform of the administration of education in 1989 and change of government in 1990. Development work picked up again in 1991, producing the New Zealand Curriculum Framework and Te Ang Marautangao Aotearoa in 1993. There then followed a process over a number of years of drawing up “curriculum statements” or “ngā tauāki maratanga mö te motu” to progressively replace pre-existing syllabi at subject level. This work initially got underway rapidly and was supposed to be completed and implemented within five years – but ended up turning into a drawn-out decade-long process.⁴⁴ These statements were initially published in draft form for consultation and trialling before being finalised. The earliest draft was published 1992 and implemented 1994, and the latest was eventually published in 2000 to be implemented 2004.⁴⁵

The curriculum development work might have been met with enthusiasm as it was finally underway since being delayed throughout the late 80s – however it was not met with much favour. This is partly because the administration change introduced by the previous stage of reform had created a number of new agencies in 1989, and an unintended outcome had been the loss of institutional memory at leadership level and what is described as a “decade long chasm” in the relationship between the schooling sector and government.⁴⁶

Another issue, as outlined in a 2009 report looking back over 30 years of reform, was “the attitude of the then minister [Lockwood Smith, Minister of Education 1990-1996] to the engagement of teachers, and particularly their unions in curriculum development. There were many good teachers on the curriculum advisory and writing panels; yet the Curriculum Stocktake Review (2000-2003) recalled the lingering feeling of teachers that the 1990s curriculum documents were not theirs. The process was seen as being too exclusive and non-consultative.” Implementation was also seen as a particular challenge. On top of this, the Education Review Office (ERO) took a “narrow compliance approach” to their review of school implementation of the new curriculum – thus compounding the problem for teachers.⁴⁷

⁴³ Ministry of Education, ‘Curriculum Stocktake Report to Minister of Education, September 2002’ (Education Counts, September 2002).

⁴⁴ John Langley, Cognition Institute, and Cognition Education Research Trust, *Tomorrow's Schools: 20 Years On-* (Auckland, N.Z.: Cognition Institute, 2009).

⁴⁵ Ministry of Education, ‘Curriculum Stocktake Report to Minister of Education, September 2002’.

⁴⁶ Langley, Cognition Institute, and Cognition Education Research Trust, *Tomorrow's Schools*, 54.

⁴⁷ Langley, Cognition Institute, and Cognition Education Research Trust, 54.

In the middle of this process, 1996-97, the development and implementation of new statements was:

“paused by the then Minister of Education [Wyatt Creech, Minister of Education 1996-1999] in response to widespread concern across the school sector about the pace and scale of change. New timelines for the New Zealand curriculum and te marautanga o Aotearoa were announced in July 1997, introducing a transition period of at least two years between the publication of a final statement and its mandatory implementation.”⁴⁸

Alongside the announcement of these revised timelines, it was also announced that, once the publication of the new curriculum statements was complete, “a time of consolidation and reflection would occur” to take stock following the already many years of curriculum reform since the 1980s.⁴⁹

The 1997 announcement appears to signal a breakpoint in how the development process was approached. The new Minister of Education appears to have responded to concerns amongst educators regarding the experience of the 1990s, pledging to slow down the process to review the purpose and appropriateness of future reforms.

What followed this breakpoint was a ‘curriculum stocktake’, which encompassed a programme of research conducted in 2000-2001 and culminated in the Curriculum Stocktake Report 2002. This report describes itself as “[taking] stock of the last decade’s curriculum developments and their implications for teaching and learning, and considers the implications for future curriculum policy development. It does not, however, undertake a review of the curriculum from first principles.”⁵⁰ One characteristic of this new phase of education is described as “collecting and examining evidence about what works ... in teaching and learning, and using that as a basis for policy and practice”.⁵¹

The programme of research contributing to this stocktake is described in Benade (2011).⁵² The report took into account evidence from international assessment surveys, a national school sampling study of 4,000 teachers from 10 percent of New Zealand schools. A literature review of evidence was commissioned, as well as two international critiques by NFER (UK) and ACER (Australia). The report also drew on evidence taken from numerous meetings of a Curriculum Stocktake Reference Group composed of “nominated stakeholders”, as well as from consultation with various other stakeholders.

Eppel comments that “The Curriculum Stocktake ... helped us learn some lessons from the experience of the previous decade. One was about the importance of teacher involvement in and ownership of curriculum, and an even more important reminder that the curriculum exists at a number of levels.” In other words, the written curriculum does not equal the taught curriculum and that in turn does not equal the received and achieved curriculum.⁵³

⁴⁸ Ministry of Education, ‘Curriculum Stocktake Report to Minister of Education, September 2002’.

⁴⁹ Ministry of Education.

⁵⁰ Ministry of Education.

⁵¹ Langley, Cognition Institute, and Cognition Education Research Trust, *Tomorrow’s Schools*, 14.

⁵² Leon Benade, ‘Shaping the Responsible, Successful and Contributing Citizen of the Future: ‘Values’ in the New Zealand Curriculum and Its Challenge to the Development of Ethical Teacher Professionality’, *Policy Futures in Education* 9, no. 2 (1 April 2011): 151–62.

⁵³ Langley, Cognition Institute, and Cognition Education Research Trust, *Tomorrow’s Schools*.

Following 2002 a number of expert reference groups were formed to engage with recommendations of the stocktake. Other development work in this time included the publication of the Best Evidence Synthesis,⁵⁴ establishing 'Key Competencies' based on OECD research, discussion through online forums, working groups and written feedback.⁵⁵ A draft curriculum was published mid-2006 for consultation and the final version was published in September 2007. Schools had until 2010 to work towards full implementation.

On this phase, Eppel comments that "The curriculum development processes that took place between 2003 and 2007 engaged many different groups of people, who all had a piece of knowledge about what they knew the curriculum needed to be like. It used knowledge and understanding built up through the individual and collective learning that had occurred in the previous decade's curriculum development and implementation work. The result is a product of that collective learning, and a collaborative, creative process."⁵⁶

The new curriculum published 2007, in the infancy of its implementation in schools, survived a change in government from Labour to National majority in 2008. However, National Standards and Ngā Whanaketanga Rumaki Māori put in place by the new government to support successful implementation by setting expectations for students' learning across primary schooling had the effect of diverting attention from the curriculum as a whole by focussing school's attention more particularly on the areas covered by the standards which were mainly literacy and numeracy based.⁵⁷ Implementation was further undermined by the redirection of funding away from areas such as professional development and designing of cross-curricular tasks to the implementation of the national literacy and numeracy standards.⁵⁸

Successive government initiatives from 2000-2010 to support devolved schools to focus their efforts on raising student achievement were boosted in 2011 by the establishment of The Student Achievement Function. This is described by OECD Education Policy Outlook (2019) as practitioners appointed by the Ministry of Education to the regional offices to work with schools on raising student achievement and aiming to support the implementation of the new curriculum, reporting positive results in a 2014 independent evaluation.⁵⁹

⁵⁴ Education Counts, 'BES (Iterative Best Evidence Synthesis)', accessed 5 November 2020, <https://www.educationcounts.govt.nz/publications/series/2515>.

⁵⁵ Cheryl Doig, 'The New Zealand Curriculum: Draft for Consultation 2006, Impact of the Feedback on the Final Curriculum' (Ministry of Education, February 2007).

⁵⁶ Langley, Cognition Institute, and Cognition Education Research Trust, *Tomorrow's Schools*, 60.

⁵⁷ 'New Zealand', Education Policy Outlook 2019: Working Together to Help Students Achieve their Potential, accessed 5 November 2020, <https://www.oecd-ilibrary.org/sites/657a5457-en/index.html?itemId=/content/component/657a5457-en>; Correspondence with Dr Elizabeth Eppel.

⁵⁸ Correspondence with Dr Elizabeth Eppel.

⁵⁹ 'New Zealand', Education Policy Outlook 2019: Working Together to Help Students Achieve their Potential, accessed 5 November 2020, <https://www.oecd-ilibrary.org/sites/657a5457-en/index.html?itemId=/content/component/657a5457-en>; Correspondence with Dr Elizabeth Eppel.

More recently the newly elected Ardern government announced in October 2017 its undertaking of the development of a 30-year approach to education in New Zealand, starting with an 'Education Conversation' to determine the vision and objectives.^{60,61} Curriculum reform may well be part of this long-term view, renewed about ten years after its last renewal in 2007/2008. This new reform will likely be many years in the making, this time a planned lengthy process rather than an interrupted one.

⁶⁰ Education Central, '30-Year Strategic Plan', October 2017, <https://educationcentral.co.nz/tag/30-year-strategic-plan/>.

⁶¹ 'New Zealanders Asked to Help Shape Education Priorities', The Beehive, accessed 2 September 2020, <http://www.beehive.govt.nz/release/new-zealanders-asked-help-shape-education-priorities>.

Japan

The National Curriculum Standards in Japan are revised every ten years or so on a repeated basis.⁶² The most recent iteration was revised in 2017, to be implemented in 2020-22. While reforms have been varied in recent decades, in some instances reversing what has gone in the last reform-round, they have all been based on a common vision first put forth in the 1980s.⁶³ This vision, as is the case for many of the countries included in this study, looked towards reforming Japanese education for the 21st century, through, among other things, moving away from ‘cramming style’ acquisition of knowledge to a more creative applied knowledge.

Between the 1970s to early 2000s education standards in Japan have undergone scandal and criticism, and particularly in the early 2000s experienced a fall in attainment against both national and international measures. Besides falling attainment, there were also a wide range of longstanding pressing concerns over bullying, school violence, truancy, pressure on students from excessively competitive entrance exams, teacher incompetence and suicide, a lack of transparency among school leadership and a tendency to cover up school failure.⁶⁴ The fall in academic performance around the early 2000s was seen as a consequence of moving away from a high-pressure rote-learning curriculum towards competency-based self-actualising education for the 21st century – through reducing course content and teaching hours. It appears the initial reforms did not strike the correct balance, or at least not in the view of the Japanese public, educators of higher education, or as measured by national and international assessment, and led to a cynical criticism of Japanese education as *yutori* or ‘relaxed’. Later recommendations for reform included increase in course content.⁶⁵

More recently, however, the rounds of reforms over the 2000s and 2010s have accompanied an improvement in performance and a rise up the PISA rankings. In 2006 Japan ranked 12th, 10th and 6th in reading, mathematics and science respectively. This has improved steadily, particularly in science, and Japan’s overall results have ranked their total score in first place among OECD countries in 2012 and 2015.⁶⁶

In terms of the actual mechanisms for developing curriculum reform policy, the work is done by a constellation of government agencies and advisory bodies. These include the Council for the Implementation of Education Rebuilding (ERC), which is closely associated with the Shinzo Abe premierships of 2006-7 and 2012-2020.⁶⁷ The ERC has worked in tandem with the Central Council for Education, which is part of the Ministry of Education, Culture, Sports, Science and Technology

⁶² Shinichi Yamanaka and Kan Hiroshi Suzuki, ‘Japanese Education Reform Towards Twenty-First Century Education’, in *Audacious Education Purposes: How Governments Transform the Goals of Education Systems*, ed. Fernando M. Reimers (Cham: Springer International Publishing, 2020), 81–103; Keidanren (Japan Business Federation), ‘Opinions Regarding the Formulation of the Third Basic Plan for the Promotion of Education’; OECD, *Education Policy in Japan*.

⁶³ Yamanaka and Suzuki, ‘Japanese Education Reform Towards Twenty-First Century Education’, 87.

⁶⁴ Yamanaka and Suzuki, ‘Japanese Education Reform Towards Twenty-First Century Education’; Sarah Louisa Birchley, ‘Examining the Development of Japanese Education Policy’, 2007.

⁶⁵ Yamanaka and Suzuki, ‘Japanese Education Reform Towards Twenty-First Century Education’, 92.

⁶⁶ Yamanaka and Suzuki, 93.

⁶⁷ Birchley, ‘Examining the Development of Japanese Education Policy’.

(MEXT). In addition, the Special Committee on the Basic Plan for the Promotion of Education is a subcommittee of the Central Council for Education and has led the most recent deliberations on curriculum reform.⁶⁸

Due to inconsistencies in translation of the names of government bodies between sources, as well as a general lack of English-language sources available through this desk-based research, it is not possible to be totally confident in identifying which councils have been involved in which reform round, or more importantly identifying *why* different constellations of councils were used in each round.

The best documented process is the reform of 2006-2007 when Shinzo Abe first took office in Japan. This occurred within the context of scandal, criticism and falling performance mentioned above, in which education was critically characterised as *yutori* or 'relaxed'. This was against a backdrop of Japan's GDP, once second in the world, being overtaken by other East Asian countries, and a general anxiety that Japan was losing its global competitive edge. Abe's policy platform placed education as a top priority, which he addressed in office through the establishment of the Education Rebuilding Council (ERC). This advisory body was personally appointed and chaired by the prime minister and comprised twenty contributors hailing from a wide range of backgrounds. Birchley's examination of the development of Japanese education policy lists these contributors as "experts and ordinary people many of whom have no experience directly in the education system – an Olympic athlete, writers, journalists, multinational company presidents alongside university professors, and Mr. Abe's "close aids" such as the chairman of Japan Rail Tokai..."⁶⁹

The ERC met a number of times and produced a first report in 2007, containing wide ranging recommendations covering not only curriculum reform – including reversing the previous decade's decrease in instructional hours – but also teacher quality, school discipline and system-level administration.⁷⁰ Birchley's description of this time mentions that the public were dissatisfied by the depth of discussions held within the ERC.⁷¹ Overall, it does not appear that teachers were directly engaged in the reform process.

Off the back of this report, detailed measures for reform were recommended by the Central Council for Education, which were then interpreted and implemented by Japan's education ministry MEXT. It would appear that the ministry is the final decisionmaker in terms of curriculum reform. The relationship between the ministry and this subsidiary council is described on the MEXT website as follows: "MEXT is endeavouring to promote educational reform taking into account the reports submitted by the Central Council for Education."⁷²

An important change also established at this time was the introduction of the National Assessment of Academic Ability conducted annually by the Curriculum Research Center that is part of Japan's

⁶⁸ Keidanren (Japan Business Federation), 'Opinions Regarding the Formulation of the Third Basic Plan for the Promotion of Education'.

⁶⁹ Birchley, 'Examining the Development of Japanese Education Policy', 144.

⁷⁰ Education Rebuilding Council, 'Education Rebuilding by Society as a Whole: First Step towards Rebuilding the Public Education System. First Report.', January 2007.

⁷¹ Birchley, 'Examining the Development of Japanese Education Policy', 146.

⁷² Ministry of Education, Culture, Sports, Science and Technology, 'MEXT: National Councils', accessed 5 November 2020, <https://www.mext.go.jp/en/policy/council/index.htm>.

National Institute for Educational Policy Research (NIER). This is a test covering all public elementary and junior high schools, serving as an important tool for checking the outcome of curriculum reforms.⁷³ The introduction of this test appears to have been motivated by a wish to avoid repeating past scandals where education reform reducing instructional hours and course content had led to falling performance and widespread criticism.

The Curriculum Research Center has had other roles in supporting and researching recent curriculum changes. Curriculum design and teaching methods are supported through the Center's development of teaching materials, exemplars and case studies.⁷⁴ In addition to the regular administration of the National Assessment of Academic Ability survey, the Center also conducts the 'Survey on the status of implementation of the Courses of Study' and the 'Research Designated Schools Project', which are described as aiming to track the status of the curriculum implemented in schools in comparison with the national curriculum and to improve curriculum guidance.⁷⁵ More recently the Center has commenced a project focused on school-based curriculum development in preparation for renewed revisions to national curriculum guidelines.⁷⁶ More on the Curriculum Research Centre and NIER can be found in the accompanying review focusing on the use of research and evaluation in education policymaking in Japan and other countries.

In the most recent reform round in Japan, commencing deliberations in 2016 and completed the following year, it would appear that the main body involved in making recommendations has been the Central Council for Education through inviting experts to give evidence to committee, although the ERC has continued to meet into 2019 and 2020.⁷⁷

Overall, reform to curriculum is only one part of significant change that has characterised education policy in Japan over the last few decades. Improvement in performance is clear, however this cannot be attributed to changes in curriculum on their own. The change has been led at state department level, though it is clear that policy has been influenced particularly in the 2000s by popular debate and outcry. In concluding comments summing up decades of reform in Japan, Yamanaka and Suzuki write that "Japanese education reform has been carried out as a part of social transition of Japanese society ... That is the reason why its discussion has been involving not only education world people but also a wide range of society including parents, local community, business and labour community."⁷⁸

⁷³ Yamanaka and Suzuki, 'Japanese Education Reform Towards Twenty-First Century Education', 95–96.

⁷⁴ NIER, 'National Institute for Educational Policy Research 2019', October 2019, 5.

⁷⁵ NIER, 'Position, Mission and Features of NIER Research Activities: National Institute for Educational Policy Research', National Institute for Educational Policy Research, accessed 12 October 2020, https://www.nier.go.jp/English/aboutus/menu_4.html.

⁷⁶ NIER, 'National Institute for Educational Policy Research 2019', 8.

⁷⁷ Keidanren (Japan Business Federation), 'Opinions Regarding the Formulation of the Third Basic Plan for the Promotion of Education'; Yamanaka and Suzuki, 'Japanese Education Reform Towards Twenty-First Century Education', 93.

⁷⁸ Yamanaka and Suzuki, 'Japanese Education Reform Towards Twenty-First Century Education', 101.

Scotland

Scotland's current curriculum, known as Curriculum for Excellence, has been developed and implemented over the past two decades. Prior to this the Scottish curriculum, known as '5-14', had last been reformed in the early 1990s. The beginning of the reform process can be identified as the Standards in Scotland's Schools etc Act 2000, initiated January 2000 by the first Scottish government (Dewar Government 1999-2000). This act established five national priorities for education as debated and agreed by ministers, which would be monitored for how schools and authorities perform against them.⁷⁹ What followed was a large scale National Debate on Scottish Education in 2002, which endorsed these five national priorities.⁸⁰ This national debate is described in CfE's launch publication as "the most extensive consultation ever of the people of Scotland on the state of school education", involving pupils, parents, teachers, employers and others.⁸¹

The consultation identified a number of features of Scotland's curriculum that people were supportive of, as well as others where there was a case for change. These are listed in the CfE launch publication (2004), the areas where it is reported that people argued for changes including reducing "over-crowding" in the curriculum and making learning more enjoyable, a better balance between 'academic' and 'vocational' subjects, making sure that assessment and certification support learning and allowing more choice to meet the needs of individuals as well as equipping young people with skills for the future workforce.⁸²

This was the context within which ministers then established a Review Group in November 2003 composed of educators, councillors, university scholars and leaders of educational organisations. The Review Group would launch CfE the following year with the publication of *A Curriculum for Excellence: The Curriculum Review Group*. The task and process of this first report is summarised in the launch report:

"The task of the Review Group was to identify the purposes of education 3 to 18 and principles for the design of the curriculum. The Group was asked to take account of the views expressed during the National Debate, current research and international comparisons. As well as educational factors, the Group considered global factors which would have strong influences on the aims and purposes of education over the coming decades, including changing patterns of work, increased knowledge of how children learn and the potential of new technologies to enrich learning. In addition the Group was asked to take a broad view of children's development, within the wider framework of Integrated Children's Services, bearing in mind the wide range of adults directly involved in the education of children and young people, in early years centres, schools, colleges and out of school learning. The result of this work is *A Curriculum for Excellence*."⁸³

⁷⁹ Scottish Executive, 'A Curriculum for Excellence: The Curriculum Review Group', 2004, 6.

⁸⁰ Mark Priestley and Walter Humes, 'The Development of Scotland's Curriculum for Excellence: Amnesia and Déjà Vu', *Oxford Review of Education* 36, no. 3 (1 June 2010): 354.

⁸¹ Scottish Executive, 'A Curriculum for Excellence: The Curriculum Review Group', 6.

⁸² Scottish Executive, 7.

⁸³ Scottish Executive, 7.

The 2004 launch publication set out the vision for CfE in terms of values, purposes and principles, stating that the document “can be used to stimulate constructive debate on learning and teaching, giving those involved at every level of Scottish education the opportunity to reflect on the purposes and principles behind the work they do.”⁸⁴ As is made clear in these quotes the document is a first-steps vision setting piece upon which to build with the documents that would follow over the coming years. At this point the outline enjoyed a consensus of support.

The launch document was accompanied by a ministerial response.⁸⁵ This does not build further on the detail of CfE but rather sets out a list of issues to be addressed which, “in light of the principles and purposes emerging from *A Curriculum for Excellence...* [Ministers] know need to be tackled as a matter of priority.” These issues include “de-cluttering the curriculum in primary schools”, a “review of the science curriculum” and “assessment 3-14”. The document sets out a brief overview of the process and timeline for most of the points on the shopping list, with many of them involving consultation.

The document finishes with some comments on the intentions of how the process will be carried out. Under the heading ‘implementing the changes’ the Minister states that:

“We need to learn from what has worked best in the past. In developing and implementing detailed policy and guidance we will make full use of the professional knowledge and expertise of the education community to ensure widespread support and commitment. We will engage with parents, employers, universities, colleges and organisations. We will work closely with teachers to ensure that the changes will work in the classroom. Some of these developments will take place quickly, such as the piloting of new skills-for-work courses. Others will take place over the medium to longer term, following consultation with the education and wider community.

Agencies such as the Scottish Qualifications Authority, Learning and Teaching Scotland, Her Majesty’s Inspectorate of Education (HMIE) and the Scottish Executive Education Department will work in partnership to support these developments.”⁸⁶

As well as providing an overview of how the rest of the process was to be conducted, this is also a useful list of the key institutions that were involved. It demonstrates that the development of CfE was a joint effort across multiple organisations, as opposed to single institutions as in other countries.

Under ‘accountability’ the minister comments that “[t]he improvement in national monitoring of achievement and attainment that we plan will further increase transparency of national performance.”⁸⁷ This is insightful given comments that emerged in following years, which criticised the newly developed school inspection framework How Good Is Our School 3 (HGIOS3) which the minister is presumably referring to here, for taking a markedly different approach to school

⁸⁴ Scottish Executive, 8.

⁸⁵ *A Curriculum for Excellence: Ministerial Response*. (Edinburgh: Scottish Executive, 2004).

⁸⁶ *A Curriculum for Excellence*, 9.

⁸⁷ *A Curriculum for Excellence*, 10.

improvement to that of CfE, to such an extent that commentators argued that the two were incompatible.⁸⁸

Finally, as a conclusion to the document it is written that “[t]here will be a continuing cycle of evaluation, refreshment and renewal, taking account of developments in technologies for learning and in our knowledge and understanding.”⁸⁹ Again, this is insightful given that OECD were to voice concerns in 2015 that the proper apparatus was not in place to perform a conclusive evaluation of the impact of CfE.⁹⁰ This poses questions as to whether these intentions were not carried out, whether at all or not to standard.

Following the launch and ministerial response in 2004, a more detailed document *Curriculum for Excellence: Progress and Proposals* was published in 2006 by the Programme Board (membership of which can be found in Appendix 3 of the *Progress and Proposals* document). Among other things, the document lays the groundwork for the format of the outcomes that would form the basis for assessment, specifically setting out that the outcomes would be articulated in terms of experiential statements. Providing insight into how these proposals were arrived at, the document explains that “[w]hat lies behind [it] is 15 months of consultations and stimulating discussions with thousands of educational staff around the country.”⁹¹ It goes on to state that “[t]his document is founded on the messages from the extensive process of engagement with colleagues in schools and education authorities and groups representing key stakeholders in Scottish education. Where there is a clear body of evidence or principles which justify them, we make proposals.”⁹²

This extensive engagement included conferences and professional development events across education authorities and independent schools; the building of a network of education authority contacts to lead change within their authorities; and a call for educational centres to register their interest in a process designed to identify examples of good practice and to test and develop innovative approaches (with 600 responses).⁹³

Following this document, a series of Building the Curriculum guidance documents were published between 2006 and 2011. These covered matters including principles of curriculum design, how different areas of the curriculum contributed to the four capacities at the heart of CfE, early years education and, finally, assessment.⁹⁴

⁸⁸ Jenny Reeves, ‘Between a Rock and a Hard Place? Curriculum for Excellence and the Quality Initiative in Scottish Schools’, 2008, 12; Niall MacKinnon, ‘The Urgent Need for New Approaches in School Evaluation to Enable Scotland’s Curriculum for Excellence’, *Educational Assessment, Evaluation and Accountability* 23, no. 1 (February 2011): 89–106.

⁸⁹ *A Curriculum for Excellence*, 10.

⁹⁰ Lindsay Paterson, ‘Scotland’s Curriculum for Excellence: The Betrayal of a Whole Generation?’, *British Politics and Policy at LSE* (blog), 9 January 2018, <https://blogs.lse.ac.uk/politicsandpolicy/curriculum-for-excellence/>; OECD, ‘Improving Schools in Scotland: An OECD Perspective’ (OECD, 2015).

⁹¹ Scotland et al., *A Curriculum for Excellence: Progress and Proposals* (Edinburgh: Scottish Executive, 2006).

⁹² Scotland et al., 3.

⁹³ Scotland et al., 5.

⁹⁴ ‘Building the Curriculum | Curriculum for Excellence | Policy Drivers | Policy for Scottish Education | Scottish Education System | Education Scotland’, accessed 20 October 2020, <https://education.gov.scot/education-scotland/scottish-education-system/policy-for-scottish-education/policy-drivers/cfe-building-from-the-statement-appendix-incl-btc1-5/building-the-curriculum/>.

In April 2009, a document entitled 'Experiences and Outcomes' was published following a "process of engagement" on drafts from September 2007. These outcomes were the basis for assessment of the new curriculum.⁹⁵ New literacy and numeracy qualifications were also announced in 2009, to be introduced in schools from 2012/13.⁹⁶

Finally, we can note that vocational reforms were also considered alongside the development of CfE.⁹⁷ However, in the view of Professor Lindsay Paterson there is little explicit attention paid to vocational education within CfE, with little clarity on how the CfE's vision of broad general education is supposed to link with vocational education in Scotland.⁹⁸

In spite of this lengthy process of development which involved extensive consultation, implementation was problematic. Issues were cited as including lack of funding, training and time.⁹⁹ As set out in the introduction we will not cover in detail the issues nor the steps government took for implementation. However, some issues with implementation are linked back to decisions made in the development process and will be briefly outlined here.

A study of the implementation process by Priestley and Minty revealed that while many teachers were very enthusiastic about the principles of CfE, there was much more trouble making these principles a reality in their own teaching – with the most enthusiastic still feeling like they were 'floundering in the dark' thanks to an overly 'woolly' set of guidelines.¹⁰⁰ The lack of clarity may have been intended to give schools room to make their own decisions, but evidence suggests this has led to confusion, with some teachers unclear on whether absence of specification in some areas should be interpreted as a blank slate for schools to fill or whether it means teachers should carry with what had gone before.¹⁰¹ The Priestley and Minty study also found that some schools did not use the entire lead time available to prepare for implementation, instead beginning only when it was absolutely necessary for implementation to begin.¹⁰²

Turning now to criticisms of the CfE development process overall, a key criticism levelled at CfE is insufficient engagement with evidence throughout the development process. The OECD Education Policy team review in 2015 stated that "to achieve the full potential of CfE, building on the valuable consensus and the clear enthusiasm, and for this watershed moment to be a "take off point" there is a more ambitious theory of change needed. There needs to be a more robust evidence base available right across the system, especially about learning outcomes and progress."¹⁰³ Additionally, Priestley and Humes criticise the CfE development process for displaying no engagement with

⁹⁵ Camilla Kidner, 'Curriculum for Excellence', n.d., 24.

⁹⁶ Kidner.

⁹⁷ OECD, 'Improving Schools in Scotland: An OECD Perspective'.

⁹⁸ Lindsay Paterson, 'Vocational Education Needs General Education', *Reform Scotland* (blog), 17 August 2020, <https://reformscotland.com/2020/08/vocational-education-needs-general-education-lindsay-paterson/>.

⁹⁹ Kidner, 'Curriculum for Excellence'.

¹⁰⁰ Mark Priestley and Sarah Minty, 'Curriculum for Excellence: "A Brilliant Idea, But..."', *Scottish Educational Review* 45, no. 1 (2013).

¹⁰¹ Steve Arnott, 'Curriculum for Excellence: A Critique', *The Point*, c 2012, <http://www.thepointhowever.org/index.php/issues/93-curriculum-for-excellence-a-critique>.

¹⁰² Priestley and Minty, 'Developing Curriculum for Excellence', 2.

¹⁰³ OECD, 'Improving Schools in Scotland: An OECD Perspective'.

existing literature on theories of curriculum development.¹⁰⁴ They argue that the result of this lack of engagement is that the vision was both “ahistorical and atheoretical”, where the proposal was in looks an innovative and ambitious reform for a child-centred curriculum that would restore teacher autonomy and bring Scottish schools in to the 21st century, but was in fact a mish mash of different contradictory underpinning curricular models that would prove in reality to be incompatible.¹⁰⁵ A particular contention of theirs was the contradiction between, on the one hand, the overall intentions of the CfE vision being ambitiously open-ended with education articulated as a developmental process that should build the four core capacities in every child (“*to enable all young people to become successful learners, confident individuals, responsible citizens and effective contributors*”) and, on the other hand, the emerging assessment design being organised around sequential levels of “vaguely defined content” which do not allow the education process to be open-ended. Writing in 2010, the authors state that:

“It is our belief that these contradictions will ultimately water down the impact of the new curriculum, meaning that the espoused vision of changes to teaching will be rendered difficult in many schools and that the maintenance of the status quo will be a likely outcome in many cases.”¹⁰⁶

Another criticism related to insufficient use of evidence is an apparent lack of joined-up thinking in developing other parts of the education system to fit the new curriculum. We have covered this issue related to assessment, but this criticism has also been applied to the parallel development of the school inspection framework *How Good Is Our School 3* (HGIOS3) that was renewed and published in 2007. According to commentary by Reeves (2008) and MacKinnon (2011), we again see a mismatch between the formative and flexible aspirations of CfE, and the summative graded measurement approach taken by the inspection audit matrix of HGIOS3. MacKinnon compares the audit matrix with CfE, describing it as:

“...a different conceptual entity tantamount to a fundamental distinction of paradigm concerning the nature of learning and pathways to realisation. The CfE developmental journey is set out formatively through reflective questions to guide emerging practice. Yet *How Good Is Our School?* is about summative graded measurement, the determination of 30 ‘readings on the dial’, to be calibrated at sixpoint accuracy ... This over-weighty, summative audit structure is about fitting yourself to a pre-set thought matrix, fixed and immutable.”¹⁰⁷

Similarly, Reeves’ assessment of the development of CfE within the context of Scotland’s prevailing approach to quality assurance, which draws on her interpretation of the OECD’s 2007 report on the Scottish education system¹⁰⁸, is that it is “caught between two theories of improvement, with the contradictory ideology firmly in the saddle”.¹⁰⁹ She explains that the success of CfE will require much

¹⁰⁴ Priestley and Humes, ‘The Development of Scotland’s Curriculum for Excellence’.

¹⁰⁵ Priestley and Humes, 358.

¹⁰⁶ Priestley and Humes, 355.

¹⁰⁷ MacKinnon, ‘The Urgent Need for New Approaches in School Evaluation to Enable Scotland’s Curriculum for Excellence’, 92.

¹⁰⁸ Richard Teese and Organisation for Economic Co-operation and Development, eds., *Quality and Equity of Schooling in Scotland*, Reviews of National Policies for Education (Paris: OECD, 2007).

¹⁰⁹ Reeves, ‘Between a Rock and a Hard Place? Curriculum for Excellence and the Quality Initiative in Scottish Schools’, 13.

greater flexibility than the HGIOS3 framework allows for. It is striking that these two governing elements of the school system were renewed in tandem with one another and yet appear not to complement one another.

A third key criticism of the CfE has been its approach to knowledge and content, which has been described as “vague”.¹¹⁰ While it can be a valid curriculum design choice to be non-prescriptive regarding content, in the case of CfE this decision appears to have had unintended consequences. Firstly this has caused issues with assessment, of which the vaguely-defined content forms of the base. Secondly some teachers took the absence of prescription as a signal that they should continue with their existing pre-reform syllabus, which does not appear to have been the original intention of CfE with its ambitions for school-based curriculum development.¹¹¹ A more high-level critical argument levelled by Professor Lindsay Paterson, which concerns the curriculum design choice rather than its development process, is that the lack of emphasis on knowledge and the lack of clarity on how it should be organised will worsen the attainment gap between rich and poor.¹¹² The concern is that if schools are not transmitters of core knowledge, then those who have no access to it at home are likely to lose out to the more privileged children.

A final and crucial critique is, as mentioned above, the concern voiced by OECD in 2015 around the lack of appropriate data and information necessary to properly evaluate the impact CfE.¹¹³ Indeed, it is now difficult to be unequivocal about the outcomes of this reform. Scottish media has been highly vocal about falling PISA results. And yet Priestley points out that if standard errors are properly taken into account then the most accurate statement that we can make is that there has been no change.¹¹⁴ What is certain is that results are not improving. In addition there have been steadily declining standards observed in Scotland’s national attainment data, at primary, secondary and higher levels.^{115 116} In more positive light, the OECD 2015 review of education in Scotland cites positive evidence from non-attainment inspection measures: “The picture of positive attitudes, engagement and motivation, partnerships outside the school, supportive ethos and teamwork that we acquired during our visit is supported by the evidence of school inspections. Learners are enthusiastic and motivated, teachers are engaged and professional, and system leaders are highly committed. As many as 9 in 10 inspections report improvement in confidence, engagement, staying on in school and national qualifications over the recent past, broadly coincident with the implementation of CfE in schools.”¹¹⁷

Overall, criticism appears to have grown throughout implementation and mixed results that have followed. Evidence was used throughout the lengthy development process, alongside consultation. However, it is not clear from the available documents exactly how this evidence and consultation

¹¹⁰ Priestley and Humes, ‘The Development of Scotland’s Curriculum for Excellence’; Paterson, ‘Scotland’s Curriculum for Excellence’.

¹¹¹ Arnott, ‘Curriculum for Excellence’.

¹¹² ‘New Curriculum Could Be “Disastrous”’.

¹¹³ Paterson, ‘Scotland’s Curriculum for Excellence’; OECD, ‘Improving Schools in Scotland: An OECD Perspective’.

¹¹⁴ ‘Curriculum for Excellence’.

¹¹⁵ Paterson, ‘Scotland’s Curriculum for Excellence’.

¹¹⁶ Paterson, ‘Analysing Scottish Attainment Data’.

¹¹⁷ OECD, ‘Improving Schools in Scotland: An OECD Perspective’, 13.

were synthesised, and equally it appears that there were important blindspots in the evidence that was used. The difficulties experienced in implementation appear to be partly linked to this development process.