

**Teachers' and School Leaders'
Career Pathways:
A Review of International Approaches
in Five Case Studies**

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Executive Summary

The question of how, if at all, teachers' and leaders' careers should be structured through specific policy interventions has been a concern internationally for many years. The reasons underlying this interest may be a perceived or putative relationship between the policy "solution" of career pathways and diverse policy "problems" ranging from poor teacher or leader recruitment, retention or job satisfaction to a desire to raise student outcomes. This literature review therefore aims to explore international approaches to teachers' and leaders' career pathways in the context of their policy environment. The methodology used was multiple case studies, with five contexts being purposefully selected that speak particularly to the question under investigation. The methods employed consisted in online database search, exploration of key websites and following up iteratively references.

Summary of findings

Australia has devised a four-stage career pathway for teachers based on explicit professional standards. For leaders there is a progressive system of "profiles". Enactment of the policy is inconsistent, and is complicated by differing state-level alternatives.

Canada (Ontario)'s system comprises a dynamic certified-teacher certificate that is updated to reflect teachers' completion of regional-state-managed "Additional (Basic) Qualifications". Whilst not constituting a career pathway, they enable movement up the pay scale and leadership roles. Principals are not provided with an in-role structured career pathway.

Estonia in 2013 introduced a structured career pathway for teachers. General teachers have four levels and vocational teachers three. These are based on explicit professional standards. Leaders have no such system. Enactment of the policy is still inconsistent.

Finland's education system is underpinned by Nordic values of social democracy. Instead of a structured career pathway, teachers and school principals instead enjoy considerable autonomy and high status within an undifferentiated profession. Declining PISA rankings threaten this structure.

Singapore uses a highly structured three-track, multi-level career-progression system, with "leadership" comprising one of these tracks. The context is bureaucratic, and so teachers and leaders as civil servants accept their lack of professional autonomy. Inter-track movement is possible and intra-track progression is purposefully challenging.

Taken together, these cases reveal the ambiguous relationship between a perceived policy "problem" and its attempted solution. This is particularly so where policy-makers intend raising standards through structuring teachers' careers, because the evidence of an unproblematically linear causal link is slight. They also reveal how research evidence is weakly used in developing – or more likely, *borrowing* policy or programmes, particularly in leadership. The OECD is key here, since its conclusions are widely used in policy-making but are not peer-reviewed.

Policy implications

Care must be taken in identifying the principal policy "problem" and how the evidence links this to the proposed solution. The role of local cultures, understandings, structures and practices is important when "borrowing" policy, both from the donor and the recipient context. It is easy to exacerbate inadvertently one policy "problem", e.g. job dissatisfaction, in addressing another, e.g. perceived low standards. Professional standards are relatively easy to convert into a career pathway on paper, but less so in practice. Leaders' career pathways are not well-evidenced in the literature: this may be because they are unnecessary, i.e. they are not yet the answer to any conceivable policy "problem".

About the author

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Abbreviations

ABQs	Additional Basic Qualifications
ACPLTSL	Australian Charter for the Professional Learning of Teachers and School Leaders
AITSL	Australian Institute for Teaching and School Leadership
APSP	Australian Professional Standard for Principals
APST	Australian Professional Standards for Teachers
AQs	Additional Qualifications
ATPDF	Australian Teacher and Performance Development Framework
ECTS	European Credit Transfer System
GTCS	General Teaching Council of Scotland
LEP	Leaders in Education Programme
MLS	Management and Leadership in Schools Programme
MOE	Ministry of Education, Singapore
NCSL	National College of School Leadership
NIE	National Institute of Education [of Singapore]
OCT	Ontario Certified Teacher
OECD	The Organisation for Economic Co-operation and Development
PISA	Programme for International Student Assessment
TALIS	Teaching and Learning International Survey

1. Introduction

The teaching profession in the United States has been described by an education consultant as:

... *a flat profession*. In most professions, as the practitioner gains experience, he or she has the opportunity to exercise greater responsibility and assume more significant challenges. This is not true of teaching. The 20-year veteran's responsibilities are essentially the same as those of the newly licensed novice. In many settings, the only way for a teacher to extend his or her influence is to become an administrator. (Danielson 2007, p. 14)

In a report published by Pearson and the US-based National Network of State Teachers of the Year, Natale et al. (2013) argue that 'maintaining a generic, static career structure holds little promise of attracting or retaining enough good teachers' (p. 5).

Their assertions may well hold in the United States, but are certainly not applicable internationally, where a range of models both have existed and still exist that aim to construct and formally differentiate stages in the careers of teachers, and to a lesser extent, of school leaders.

The reasons for doing so are often more implicitly than explicitly stated. In the example above by Danielson (2007), the reasons given concern teachers' developing ambition and their desire for new challenges and more influence. Natale et al. (2013) is more concerned with incentivisation into a career (and in a national context) where the notions of vocation and public service do not suffice. It is certainly true that diverse education systems are experiencing problems with teacher recruitment and retention, and that these may have a knock-on effect on workload and teacher morale. This has been seen too in Scotland (Ravalier & Walsh 2017). However, convincing evidence for a clear link between such objectives and the policy strategy of formalised career pathways is difficult to discern in the peer-reviewed literature. Justifications for policy more generally are often based in belief rather than in evidence, and policies are often undertaken because they have been tried out elsewhere and are an ideological, rather than substantive fit (see e.g. Whitty, 2016).

This literature review, commissioned by the Scottish Government through the Independent Panel on Teacher Career Pathways, therefore aims to contribute to this evidence base by investigating the extent to which other nations deemed high performing have created and enacted policies that seek to structure teachers' and leaders' career pathways. The literature review is structured through five case studies: Australia, Canada (Ontario), Estonia, Finland and Singapore. These were selected because they offer different perspectives on the issue under investigation. Specifically, it is not the case that all high-performing education systems offer structured career pathways for teachers or leaders. Therefore, a focus on "high-performing" can be mutually exclusive with one on "career pathways". This in itself is worthy of investigation, and so Finland and Singapore have both been included because they offer contrasting ways of organising teachers' careers within a high-performing context.

Finland, for instance, promotes teaching as an undifferentiated yet uniformly high-status group whereas Singapore has produced the most structured and hierarchised system I encountered.

Australia has been included because it proposes a structure that approaches Singapore's in terms of its conceptual underpinning, if not in scope and detail. As a liberal democracy, Australia perhaps offers a more realistic comparator to Scotland concerning context than Singapore. The fact that its system is not quite, or not *yet* working is, perhaps instructive.

Ontario has been selected because it has devised a highly structured system that is unique in not quite constituting a definitive set of pathways, despite having installed the “infrastructure” to do so. It represents a successful (according to PISA) attempt to *act otherwise*, and so prompts consideration of what policy “problem” is being solved or addressed through these means, and how that might differ from one that produces a career pathway.

Estonia has been selected because its 15 year-olds scored very highly in the 2015 PISA tests, even more highly than Finland's¹. Estonia's 2015 ranking cannot be attributed to a particular model that it represents *par excellence*, as Finland does with the so-called Nordic model. Indeed, Estonia's education system seems to be somewhat in flux, with policy-makers ceding to OECD pressure to address a range of perceived issues. Estonia is therefore included to demonstrate the absence of a link between a high-performing system and any of the following: stable professional-development arrangements; better-than-low teacher self-efficacy and job satisfaction levels; or a functioning career pathway structure (though one is being implemented).

The selection of cases has privileged career pathways for teachers over those for leaders. This is owing in large part to an international lack of multi-career pathways for school leaders, even in nations where such exists for teachers (see OECD 2013b, Table 7.A.2, p. 578). Nevertheless, I have uncovered diverse arrangements for school leaders that have contributed to the depth of the discussion below.

To undertake this review, I drew on primary and secondary sources from a range of sites. Primary sources included policy texts (e.g. professional standards and statutory guidelines), and secondary sources included scholars' analyses of these. My primary search method was to perform key word searches on Google Scholar and in the University of Manchester library database. My secondary method was to search directly on the website of the relevant ministry. In both cases, I then followed up links and references. A limitation of my approach is that I have been restricted to using documents that are available in English (my French skills not proving relevant here). All documents used are located in the references section at the end of this review.

This review is structured in the following way. First, I discuss in turn each of the five case study sites: Australia, Canada (Ontario), Estonia, Finland and Singapore. Within each of these, I have used the same structure, and so I begin with an overview of the country/state, and then adumbrate its arrangements for professional development (where this is either state funded or a statutory entitlement); for teachers' career pathways and finally for leaders' career pathways. I have tended throughout to use 'school leader' to mean 'principal' or 'head teacher' unless otherwise stated. In the section following the case studies, I make sense of these through drawing attention to three overarching themes. These are: the ambiguous relationship between the policy “problem” and its “solution”; the ambiguous relationship between the policy and the research evidence; and finally how policy is being borrowed and adapted from around the world. I end with a summary of some key policy implications arising from the review.

¹ Whilst concerns have been raised about relying on PISA as a proxy for the quality of a state's education system (Goldstein 2004), in the absence of anything else comparable in scope, it will inevitably be used and so will be significant for policy-makers and those who research policy.

2. Case Studies

2.1. Australia

2.1.1. Australia - Country Overview

Australia is a federal parliamentary democracy and the sixth-largest country in the world by area. Australia as a political entity comprises the mainland portion of the continent of Australia (i.e. excluding New Guinea), the island of Tasmania and also a number of smaller islands. Australia has a population of around 23 million people, of whom around 650,000 (2.8%) are Indigenous Australians. These peoples have lived in Australia for about 50,000 years (Veth et al. 2017), whereas British colonisation dates from 1770. Australian independence from the United Kingdom came in 1901, although its Head of State remains the UK Monarch.

Australia performs reasonably well in international comparisons of education performance (OECD 2018b): more-or-less stable performance over multiple PISA cycles is obscured by the rise of East-Asian city states (Dinham 2013). Responsibility for education has historically been located at the level of the regional rather than federal state. However, in the last ten years, a number of increasingly important federal institutions have been created with overarching national responsibilities and remits. Savage (2015) summarises the effect of these changes:

On the positive side, these organisations are driving the formation of new policy networks and forms of collaboration, which are leading to productive dialogue and sharing of ideas across states.

On the downside, some state policy makers believe the national standardisation of policy is undermining diversity and the capacities of states to govern autonomously. (Savage, 2015, unpagged)

Entry standards to teaching in Australia are variable and occasionally low, with some universities reaching financial targets through admitting low-attaining students to initial-teacher-education programmes (Dinham 2013). Whilst teacher shortages exist in key subjects including languages, technology, secondary mathematics and science, there is an oversupply of primary teachers and 'long waiting lists for employment more generally' (Dinham 2013, p. 100).

2.1.2. Australia - Professional Development

The responsibility for framing professional development in Australia is centralised under the Australian Institute for Teaching and School Leadership (AITSL), which was established in 2010. Professional development is tightly structured around a framework constituted of four key policy documents. These are:

- The Australian Professional Standards for Teachers, or APST (AITSL 2011);
- The Australian Professional Standard for Principals, or APSP (AITSL 2015);
- The Australian Teacher Performance and Development Framework, or ATPDF (AITSL 2012b);
- The Australian Charter for the Professional Learning of Teachers and School Leaders, or ACPLTSL (AITSL 2012a).

The way in which these documents are understood by policy-makers to fit together can be seen in Figure 1. McSporran (2018), in her policy discourse analysis of these documents, their meaning and relationship, shows how all four have objectives that are located firmly in the improvement of student

outcomes. She identifies an assumed linear, causal relationship between this objective, the raising of the quality of teachers/teaching (e.g. through the ATPDF), and teachers' and leaders' professional learning (e.g. through the ACPLTSL).

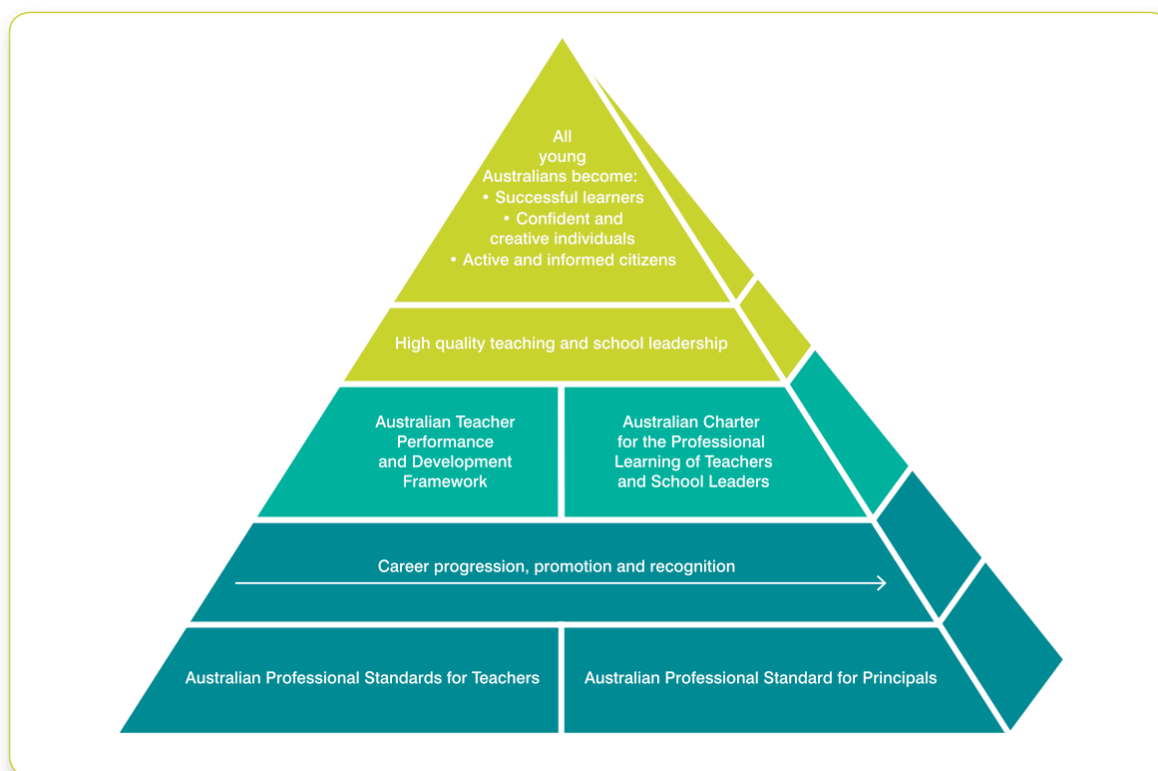


Figure 1: Australian teacher performance and development in context. (AITSL 2012b, p. 8)

This depiction can be seen in Figure 1 of the assumed, or constructed close relationship between explicit professional standards for both teachers and principals, career progression for practitioners, statutory frameworks underpinning both teacher performance and professional development, high-quality professional practice, and excellent outcomes for students.

Other significant professional-development policies remain at regional state level. For instance, sabbaticals (or study leave) are not a federal entitlement, but are offered by individual states. One example is Victoria, where an Education Department employee may undertake a 'work period' of between one and four years where his/her salary is reduced by 20%. This funds the period of 'sabbatical leave', which must be taken immediately afterwards (Victoria State Government Education and Training 2018).

2.1.3. Australia - Teachers' Career Pathways

Borrowing from an earlier model in England (Teacher Development Agency 2007; see McSporryan 2018) and a contemporary model in the USA (National Board for Professional Teaching Standards 2018), the Australian Professional Standards for Teachers are arranged such that greater competence or higher skill is aligned with higher status. These statuses are formalised into four discrete teacher categories: Graduate; Proficient; Highly Accomplished and Lead. Each of the two-to-four standards within the seven overarching standards therefore has four iterations corresponding to the four levels of teacher. Below is a worked example adapted from the standards (AITSL 2011, p. 12):

Standard 3: Plan for and implement effective teaching and learning

Focus area 3.1: Establish challenging learning goals

Graduate: Set learning goals that provide achievable challenges for students of varying abilities and characteristics.

Proficient: Set explicit, challenging and achievable learning goals for all students.

Highly accomplished: Develop a culture of high expectations for all students by modelling and setting challenging learning goals.

Lead: Demonstrate exemplary practice and high expectations and lead colleagues to encourage students to pursue challenging goals in all aspects of their education.

Progress through the levels is determined through certification: McSporrán (2018) reports projections that 'about 10,000 teachers each year will apply for 'Highly Accomplished' or 'Lead' certification', and that 'the teaching population will eventually comprise 10% 'Graduate', 40% 'Proficient', 30% 'Highly Accomplished', and 20% 'Lead' teachers' (p. 27). That these are projections underlines how the system is not yet established: indeed, McSporrán (2018) has pointed out that the states of Western Australia, South Australia and New South Wales 'have continued to use their own systems well after the launch of the APST [Australian Professional Standards for Teachers]' (p. 31). Furthermore, progress up the levels is not consistently linked to salary progression, with Dinham (2013) writing of 'the need to integrate the new Australian standards for teachers with authentic, efficient assessment and accreditation processes and with industrial awards, to provide incentive, guidance, reward and recognition to teachers who continue their professional learning and improve their performance' (p. 102). McSporrán's (2018) research supports this claim of sporadic take-up and application, particularly when responsibility to fund salary increases was transferred from the Australian to the State-Government level. It must be noted that at present, the APST is not linked to performance-related pay in Australia.

McSporrán's (2018) research participants reported that the standards and different categorisations of teacher do not yet constitute clear career pathways because of the way the policy is being enacted (or *not* enacted), but that they expect this to happen more in future.

2.1.4. Australia - Leaders' Career Pathways

School principals' professional development is located within the wider, holistic structure discussed above that also incorporates classroom teachers. Principals in Australia have their own professional standards, developed by the AITSL (2015). This document was updated in 2015 from an earlier iteration to include a new element: 'Leadership Profiles'. The same principle of progression through competences and skills is evident here that underpins the teacher levels identified above. The Profiles are described as 'a set of statements validated by the profession that describe the leadership actions of principals as they progress to higher levels of proficiency' (AITSL 2015, p. 12). Each standards domain has four sets of statements attached, or Profiles, which indicate increasing levels of skill. These four levels are not named or officially categorised at all (see AITSL 2015, p. 30), unlike the teachers' levels. This means that the Profiles cannot be used or navigated as a defined 'career pathway', although only a small presentational adjustment would be necessary to enable this.

The AITSL recommends instead that the Profiles be used in the following ways:

- For self-reflection;

- For professional growth (where the Profiles guide professional-development conversations and activities);
- For use in professional learning programmes (where the Profiles may, for instance, inform skills audits and be used in programme development);
- For use in principal selection and recruitment (where the Profiles may inform job descriptions and interview questions);
- For succession planning (where the Profiles inform the expectations of aspiring principals and may provide the basis for coaching and/or mentoring);
- For performance review.

(Adapted from AITSL 2015, p. 27)

New guidelines have been issued this year which are intended to build on the standards described above in order to further develop school leadership in Australia (Australian Institute for Teaching and School Leadership 2018): again, these are concerned with tasks and activities that in-role principals should engage in, rather than with differentiating or exceeding the role of principal.

2.2. Canada (Ontario)

2.2.1. Canada (Ontario) - Country Overview

Ontario is the most populous of the 13 territories and provinces of Canada, a federal parliamentary democracy in North America. Ontario is in the east of Canada, bordering the province of Manitoba to the west, Quebec to the east and Hudson Bay and James Bay to the north. To the south lie the US states of New York, Pennsylvania, Ohio, Michigan and Minnesota. Ontario contains Ottawa, Canada's capital city, and Toronto, Canada's largest city by population.

Algonquian and Iroquoian-speaking peoples had lived in and around Ontario for around 12,000 years before French and British settlers arrived from the 17th century. Following around two centuries of rule from France and then the UK, Canada was established as an independent political entity within the British Empire in 1867. However, it was not recognised as co-equal with the UK until 1931. Since then, Canada has been greatly influenced economically and culturally by its proximity to the USA and by immigration from a diverse range of countries.

In PISA 2015, Canada was a high-performing country, particularly in reading, where only Singapore achieved a result that was higher in a statistically significant way. Furthermore, Canada scores well in terms of achieving good results for students regardless of their socio-economic background (OECD 2018b). Nevertheless, responsibility for education in Canada is wholly at provincial level. A breakdown of PISA 2015 performance in science by province shows that the difference between Ontario and the Canadian mean is not statistically significant (Education Quality and Accountability Office 2016).

2.2.2. Canada (Ontario) - Professional Development

Ontario's education system is characterised by reasonably high entry requirements to the profession along with formally undifferentiated status once admitted. In other words, there are not levels or grades of teacher in the way that Singapore has achieved (see below). Ontario requires its teachers to be certified by the Ontario College of Teachers (2018b): this involves obtaining accreditation from a provider of initial teacher education, applying to the Ontario College of Teachers and paying annual membership and registration fees (Ontario College of Teachers 2018b). Taking these steps results in a formal status known as the Ontario Certified Teacher (OCT) (Ontario College of Teachers 2018f). However, Ontario is distinctive in having formalised the notion and practice of career progression

through a regulatory system of 'Additional Qualifications' (AQs) and 'Additional Basic Qualifications' (ABQs) for teachers. These are certified and accredited through the Ontario College of Teachers, though the College establishes the regulatory framework and approves providers rather than creating or delivering the qualifications itself. Importantly, the teaching certificate provided and validated by the College is dynamic: it is updated to contain all the additional qualifications that a teacher may undertake and so becomes a *de facto* marker both of differentiated status and of progression through a teaching career. This information is also available on a public register.

2.2.3. Canada (Ontario) - Teachers' Career Pathways

Ontario teachers may progress in their careers through completing ABQs and AQs. These are assigned to one of six schedules, A-F. These are described by the College as follows:

- Schedule A: One-session Additional Basic Qualifications courses prepare members to teach in another division or general education subject area. They also support a teacher's professional practice by extending skills and knowledge in design, delivery and assessment in the division or subject.
- Schedule B: One-session Additional Basic Qualifications courses prepare members to teach additional technological education courses. They support a teacher's professional practice by adding to technical proficiency and pedagogical knowledge and skill.
- Schedule C: One-session Additional Qualifications courses extend teachers' knowledge and skills in design and delivery of specific programs. They also support professional practice by preparing teachers for specific roles.
- Schedule D: Three-part specialist courses develop professional knowledge and teaching practice in a particular subject or in cross or integrated curriculum areas. They enable teachers to explore pedagogy related to a subject area without taking more subject-specific university courses. They also prepare a teacher to assume leadership roles such as co-ordinator or consultant for a particular course or program.
- Schedule E: One-session honour specialist courses in general education and one-session honour technological education specialist courses develop leadership in teaching practice for the design and delivery of particular subject areas. They may allow a teacher to assume leadership roles for particular courses or programs.
- Schedule F: One-session courses to provide technological education teachers with the opportunity to gain a greater depth of knowledge in their broad-based technology area.

(Ontario College of Teachers 2018e, unpagged)

So, as an example, a teacher qualified for instruction at secondary phase (in Ontario, intermediate/senior divisions) might undertake an ABQ in schedule A in order to qualify to teach also in the primary phase. The Ontario College of Teachers sets out the statutory guidelines within which providers must design their qualification: these guidelines contain, *inter alia*, the overarching conceptual framework for the qualification; how it constructs both learner and educator; guiding concepts for inquiry; the particularities of the Ontario context; learning environments and learning strategies; assessment; and the regulatory professional standards for teachers in both ethics and practice (Ontario College of Teachers 2016a).

Completing AQs and/or ABQs may contribute to progression up the 'General Education Chart' (Qualifications Evaluation Council of Ontario 2018). Teachers are categorised as either A, A1, A2, A3

or A4. This depends on their initial degree and subsequent additional qualifications. There are many ways to achieve a given categorisation, and so it is possible that a new teacher may enter the profession directly on A4 if s/he already had, for instance 'an acceptable five year undergraduate university degree (first or second class standing)' (Qualifications Evaluation Council of Ontario 2018, number 24). In this sense, the system may or may not constitute a career pathway.

2.2.4. Canada (Ontario) - Leaders' Career Pathways

There is no multi-level career structure for school principals in Ontario. Progression to the principalship is dependent upon completion of a mandatory qualification, the Principal's Qualification Program (see Ontario College of Teachers 2017), which is taught and assessed by one of Ontario's universities. This requirement is in addition to others concerning experience, academic accreditation (undergraduate and master's *or* "Additional Qualifications" as a teacher) and certification in three age phases (Ontario Ministry of Education 2018).

Serving principals can take advantage of bespoke AQs: the Principal's Development Course, for example, 'is designed for proactive, reflective and collaborative educational leaders to explore, in-depth, the essential dimensions for increasing leadership capacity ... Through the exploration of various topics (for example, effecting change, visioning and goal setting, understanding the importance of collective empowerment, building efficacy, instructional leadership and emotional intelligence) candidates will interpret and reflect to create professional growth' (Ontario College of Teachers 2016b, p. 1). (It should also be noted that a number of other AQs focus on developing leadership in classroom teachers, particularly for middle-leadership roles: see schedules D and E above.)

Career progression after the principalship is formally focused on advancing to the level of Supervisory Officer. This public post-holder is responsible for the schools within her / his district, and is more-or-less homologous with the District Superintendent in the USA. Again, the Ontario College of Teachers publishes the guidelines that frame this programme's development and delivery (Ontario College of Teachers 2017b).

2.3. Estonia

2.3.1. Estonia - Country Overview

Estonia is a country in Eastern Europe with a population of 1.3 million and an area of 17,462 square miles. It is situated on the Baltic Sea, sharing a land border with Russia to the east and Latvia to the south. Finland lies to the north, across the Gulf of Finland. Estonia regained its independence in 1991 from the Soviet Union, and is presently a parliamentary representative democratic republic that has been a member of the European Union since 2004.

Estonia has made rapid progress since 2006 to become a very high-performing country in terms of its PISA results. The Estonian Ministry of Education and Research (2016) notes that in PISA 2015 in science, Estonian students received the highest scores in Europe and the third highest in the world (after Singapore and Japan). In mathematics, Estonian students scored 2nd in Europe (after Switzerland) and 9th globally, and in reading, they scored 3rd in Europe (after Finland and Ireland) and 6th in the world. Socio-economic background does not greatly affect academic performance (Santiago et al. 2016).

The OECD (2016) acknowledges Estonia as a high-performing country according to its PISA data, yet states also that 'the most critical problems of the Estonian education system are related to teachers' (p. 4). An important problem according to the OECD is that teaching has a low social status in

Estonia: only 13.7% of Estonian respondents to the OECD's Teaching and Learning International Survey (TALIS) in 2013 agreed that the teaching profession is valued in society, compared to an OECD average of 30.9% (OECD 2014a). Furthermore, Estonia largely scores below the OECD average in self-efficacy (OECD 2014b), meaning that there is a lack of alignment between Estonian teachers' relatively low confidence in their ability to teach and their pupils' high performance in PISA tests. Loogma et al. (2013) attribute Estonian teachers' relatively low satisfaction and self-efficacy partly to their loss of autonomy and power that resulted from the shift from a Soviet to a post-Soviet society. Power moved from pedagogues 'to groups such as state institutions, parents and the market ... [producing] widespread dissatisfaction among teachers' (p. 296) (see also Erss 2015). The authors note also teachers' 'weakening connections with and commitment to the local community ... which decreases the teachers' social capital and collective power' (p. 296).

2.3.2. Estonia - Professional Development

Estonia is one of only eight OECD education systems to have a separate budget allocated to staff (i.e. teachers' and leaders') professional development (Santiago et al. 2016). Professional development has moved from being entirely locally arranged to being slightly more centralised, with some funding being managed through central institutions (e.g. the Innove Foundation) and also through Tallinn University and the University of Tartu, who have been required to develop "competence centres" (Eurydice 2018b). These centres 'are targeted at collecting and developing knowledge about learning and teaching, and passing on such knowledge to other educational institutions, incl. institutions of higher education' (unpaged). This development is to enable the Estonian Ministry of Education and Research to achieve the aims set out for reforming education in its White Paper, "The Estonian Lifelong Learning Strategy 2020" (2014). Data are not yet available on the success or otherwise of these plans.

The overall current picture in Estonia is one where teachers are responsible for selecting appropriate professional-development activities from a range of providers, guided by school leaders and in line with a professional development plan that takes account of school objectives (Santiago et al. 2016).

There is no provision for sabbaticals or study leave for non-vocational teachers in Estonia. However, vocational teachers are entitled to 'credit-bearing internships in industry ... in a working environment which is directly linked to the area taught by the teacher [during which] the teacher is released from teaching' (Eurydice 2018a, unpaged).

2.3.3. Estonia - Teachers' Career Pathways

A new career progression model was introduced in Estonia in 2013. This, according to the OECD (Santiago et al. 2016) was intended to replace a former model that was based on a system of attestation. In that system, teachers needed to attend 160 hours of professional-development courses; contribute to education events or conferences; carry out a self-evaluation; and undergo both an internal and external evaluation. It is important to note that it is this former system of attestation that produced the education system that has succeeded so well in PISA assessments, despite its characterisation by the OECD as 'complex and resource intensive' (Santiago et al. 2016, p. 207). It must also be noted that Estonia is still undergoing transition to the newer, competency-based model. The Center on International Education Benchmarking (2018a), for example, reports that the 160 hours of professional development every five years must still be completed in order to progress up the levels, and years of experience also count as evidence. These features are expected to be phased out (Santiago et al 2016).

The new model, when it realises its claims to be entirely competency or standards based, will be closer to that used by a number of other countries (e.g. Australia, Singapore and Ontario, Canada).

Unlike e.g. Singapore, however, the structure is voluntary at the two higher levels and is not related to movement up a pay scale. Table 1 below shows the career progression model:

Level 6: Teacher	<ul style="list-style-type: none"> • Awarded indefinitely. • Applies only to new entrants to pre-primary sector. • Follows completion of an Initial Teacher Education programme or recognition of professional qualifications for this level.
Level 7.1: Teacher	<ul style="list-style-type: none"> • Awarded indefinitely. • Applies to new entrants to the teaching profession at primary level or above. • Follows completion of an Initial Teacher Education Programme (at master's degree level) or recognition of professional qualifications for this level.
Level 7.2: Senior Teacher	<ul style="list-style-type: none"> • Awarded for 5 years: further applications subsequently required. <p><i>Beyond normal teaching responsibilities:</i></p> <ul style="list-style-type: none"> • Supports development of school and other teachers. • Is involved in methodological work at school level.
Level 8: Master Teacher	<ul style="list-style-type: none"> • Awarded for 5 years: further applications subsequently required. <p><i>Beyond normal teaching responsibilities:</i></p> <ul style="list-style-type: none"> • Participates in development and creative activities in and outside his or her school. • Co-operates closely with a higher education institution.

Table 1: Competency-based career progression model for Estonian non-vocational teachers. Adapted from Santiago et al. (2016, p. 195).

This model is based on a set of professional standards for teachers: these are the responsibility of the Estonian Qualifications Authority (see Estonian Qualifications Authority 2018). However, the Estonian Association of Teachers certifies teachers' progress up the career levels.

Estonia has a tradition of discrete vocational education pathways. A parallel, but separate model has therefore been developed to respond to the needs of vocational teachers, shown in Table 2:

Level 5: Vocational Teacher	<ul style="list-style-type: none"> • Awarded indefinitely. • Teaching comprises mainly practical methods that develop students' practical skills and work habits.
Level 6: Vocational Teacher	<ul style="list-style-type: none"> • Awarded indefinitely. • Teacher conveys theoretical knowledge and teaches practical working skills. • Teacher develops professional training with industry and professional associations.
Level 7: Vocational Teacher	<ul style="list-style-type: none"> • Awarded indefinitely. <p><i>In addition to responsibilities at lower levels:</i></p> <ul style="list-style-type: none"> • Contributes to the development of the taught vocation or profession outside of the school. • Supervises and mentors other colleagues. • Contributes to improving the reputation of vocational education.

Table 2: Competency-based career progression model for Estonian vocational teachers. Adapted from Santiago et al. (2016, p. 196).

Santiago and his colleagues (2016) anticipate that this new career progression model might well enable teachers to adopt diverse responsibilities and career paths more easily and with greater formal recognition than previously. They note that taking on such roles are generally recompensed through

classroom release rather than through pay. Examples of possible roles include management of a subject; deputy headship; the creation of professional-development materials, programmes or activities; or the mentorship of a (group of) beginning teacher(s).

2.3.4. Estonia - Leaders' Career Pathways

In their OECD report on education in Estonia, Santiago et al. (2016) note that school leaders are seen as performing a vital role in Estonian schools by policy makers, and 'their professional development is considered crucial' (p. 24). School leaders in Estonia have what Santiago et al. (2016, p. 24) call a 'high' level of autonomy, characterised by their responsibility for delivering the curriculum, managing resources, assuring the overall quality of education, recruiting and dismissing staff, setting teacher salaries, developing a school development plan and managing its implementation. Nonetheless, the authors point out also that 'the position of "school leader" is perceived as unattractive and compensation is inadequate' (p. 24). They also identify what they see as a number of issues with school leadership in Estonia:

- No systematic mechanism to provide professional feedback to school leaders;
- No central framework for school leaders' appraisal;
- Non-mandatory appraisal;
- Where it takes place, appraisal criteria may not be aligned with those for organisational improvement.
- Professional feedback may not be linked to professional reward or sanction.
- No discrete career structure for school leaders.

Despite this lack of explicit career progression pathway (Santiago et al. 2016), the notion of 'school leader' comprises a number of roles, and so it is likely that movement between these roles constitutes an informal route to career progression, particularly between the first three of the four listed below. The key roles are:

- Headteacher. This is not the principal of the school in the UK sense, but is the lead teacher and senior manager responsible for teaching and learning in the school.
- School Director. This corresponds better to UK notions of principal or headteacher. The school director makes decisions concerning, *inter alia*, teacher recruitment and dismissal, teacher salary and conditions of service, formulating and allocating the school budget and overall quality assurance.
- Quality-Assurance Advisor. Schools are legally required to conduct self-evaluations, and so practising School Directors (and sometimes other members of the leadership team) may be trained in quality assurance and registered by the Ministry of Education as advisors. These advisors become available to other schools to help with their self-evaluation processes.
- School Owner. In a public school, this may be the municipality or the state. Otherwise, it is a private entity. The school owner is the employer of the school's teachers and leaders.

The creation of an explicit career structure for leaders, aligned with a new competency-based set of professional standards mirroring those introduced for Estonian teachers, are key recommendations provided by the OECD following their evaluation of the Estonian education system (Santiago et al. 2016).

Concerning school leaders' professional development, however, from 2015, a three-staged approach was adopted. Targeted programmes now exist for each of the following cohorts: experienced, newly appointed and aspiring school leaders. The following details on these are adapted from Santiago et al. (2016, p. 177):

School team development programme:

- Aimed at experienced school leaders;
- Duration of 12 months;
- One school leader and two other staff members participate;
- Programme comprises modules covering various school-management areas;
- Each module consists of tasks on which a school-development project is based;
- Six months after the completion of the programme, a follow-up observation assesses the leaders' implementation of the project.

Programme for new school leaders:

- Aimed at newly appointed school leaders;
- Its purposes include role induction and familiarisation;
- Provides an overview of legislation, financial management, innovation and trends in education;
- Participants are intended to benefit from the professional network it provides.

School leader offspring programme:

- Aimed at aspiring school leaders;
- Duration of 24 months;
- Entry via competition: candidates include school and other staff;
- Each participant has a mentor and undertakes visits or placements in schools;
- The programme comprises various modules, including an introduction to pedagogy and, for those from outside the education sector, the management of learning.

To date, no evaluation of any of these programmes is available.

2.4. Finland

2.4.1. Finland - Country Overview

Finland is a parliamentary representative democratic republic in Northern Europe. It borders Sweden to the north-west, Norway to the north and Russia to the east. To the south lies the Gulf of Finland and to the west the Gulf of Bothnia. Following colonisation by Sweden and then Russia, Finland won its independence in 1917. Finland is one of the Nordic countries. It has a population of 5.5 million and an area of 130,666 square miles, making it the least densely populated country in the European Union, of which Finland has been a member since 1995.

Finland performs extremely well in a number of international comparisons, including income inequality (OECD 2018a), human capital (World Economic Forum 2015) and the stability of the state (Fragile States Index 2018). However, the global economic crisis of 2008 onwards affected Finland greatly, and has caused it to fall behind other countries in terms of economic productivity (OECD 2017). The crisis has also accompanied a fall in its PISA performance, where its previous top ranking had made 'Finland's "miracle" of educational and economic transformation' (Hargreaves et al. 2008, p. 76) a much-studied model. This dip is relative: in the 2015 assessment, Finland still ranked fifth globally, behind Singapore, Japan, Estonia and Chinese Taipei.

No school in Finland is privately financed and all its public schools serving pupils up to the age of 16 are comprehensive. Finnish teacher graduates are all qualified at Master's-degree level and teaching is a popular and highly competitive career, with only between 5% (for elementary teacher programmes) and 40% (for certain subject teacher education programmes) of applicants being

accepted (Niemi 2015). Finnish teachers have a high degree of autonomy over aspects such as the curriculum and assessment, and there is no national standardised testing.

2.4.2. Finland - Professional Development

Professional development in Finland is presently in a state of flux. As Finland has a decentralised education system, municipalities (local authorities, or districts) are responsible for the professional development of teachers (as well as their initial induction) and 'are required to fund three days annually of mandatory professional development or planning for each teacher' (Finnish National Agency for Education 2018, unpagged).

The OECD's 2013 Teaching and Learning International Survey (TALIS) nevertheless found that 28% of Finnish teachers reported 'being not at all or only somewhat prepared for teaching the content of their subjects, while more than one-third of teachers report being not at all or somewhat prepared to teach their subjects' pedagogy (36%) or practical components (34%), as compared with the average of 7%, 11% and 11%, respectively in TALIS countries' (OECD 2013a, p. 1). The same report showed that teachers in Finland participate at lower rates than the TALIS average in a range of professional-development activities. These include courses, workshops, conferences and seminars. They also are well behind the average in terms of their forming professional networks with other teachers and undertaking individual or collaborative research. TALIS also identified as weaknesses 'a lack of pedagogical leadership [and] few personal study plans for teachers' (European Commission 2017, p. 7).

Despite some misgivings about the validity of some of these findings (see Niemi 2015, p. 284), they have contributed to a perceived need for reform in this area by Finnish policy-makers, and so a new Teacher Education Development Programme was launched in 2016. The Finnish Ministry of Education and Culture set out its plans and objectives:

The objective of the teacher education development programme is that a systematic and coherent structure will be adopted in teachers' competence development during their careers. Competence management should be goal-oriented. Higher education and other educational institutions as well as early childhood education and care units will prepare competence development plans in collaboration with their staff. These plans will underpinned by strategic plans and evaluations of competence by education providers. (Finnish Ministry of Education and Culture 2016, unpagged website)

These reforms are the responsibility of a new body, the Teacher Education Forum. No state-level evaluation has yet been made available concerning their enactment. However, Niemi (2015) has identified four cases which demonstrate how practice is shifting to reflect new ideas of best practice that achieve the following in line with the Ministry's aims. These:

(1) support the school community to cross boundaries towards multi-professional cooperation, (2) design an innovative school community using a design-based approach together with many partners, (3) connect pre-service and in-service research-based teacher education in science, technology and math (STEM) teaching, and (4) promote induction for new teachers. (Niemi 2015, p. 286)

Sabbaticals for employees in Finland, including teachers, are a statutory entitlement: 'an employee has the right to take study leave for at most two years during a period of five years, if his or her full-time employment relationship with the same employer has lasted for at least one year in one or more periods' (Ministry of Economic Affairs and Employment of Finland 2017, p. 3).

2.4.3. Finland - Teachers' Career Pathways

Teachers in Finland do not have a structured career pathway. This is often attributed to the high bar to entry to the profession and the autonomy they enjoy once in post (see e.g. Center on International Education Benchmarking 2018b; Natale et al. 2013; Hargreaves et al. 2008). Teachers in Finland may aspire to and become school vice-principals and principals.

2.4.4. Finland - Leaders' Career Pathways

Like most countries, Finland does not have a multi-level career structure for school principals (OECD 2013b, Table 7.A.2, p. 578). Principals instead are located within a single career stage accorded a single salary scale. Progress up this five-step scale (in schools with general education programmes) is determined by length of service and administered by the Municipality. The school principal is employed by and subordinate to the Municipality's chief executive officer. Entry to the principalship has been controlled by qualifications since 1992: since 1999, 'all principals in lower and upper secondary schools in Finland are required to hold a five-year master's degree from a university, be qualified teachers, have sufficient teaching experience, have received a national educational leadership certificate provided by the National Board of Education or an equivalent 25 ECTS credits in educational leadership offered by the Faculties of Education at the universities' (Uljens and Nyman 2013, p. 41).

School leadership more broadly is understood to include the following roles: school principals and vice principals; in vocational education: heads of department and training managers; in municipalities: directors of educational departments; directors of educational and cultural services; heads of general education divisions and development managers (Finnish Ministry of Education 2007). As in Estonia, it is likely that there is some movement across these roles that is understood and/or experienced as career progression: 'a principal may become, for example, the director of the municipal education department, or move to some other higher position in municipal administration' (Finnish Ministry of Education 2007, p. 36).

2.5. Singapore

2.5.1. Singapore - Country Overview

Singapore is a sovereign city-state, located in Southeast Asia. It consists of one principal island with a further 62 islets. It has a population of around 5.6 million and is 278.6 square miles in area. To the north lies the Malay Peninsula and to the south, Indonesia. Singapore won its independence from the United Kingdom in 1963, when it joined Malaysia, but ceded from there to become an independent nation in 1965.

Singapore is the highest-performing country according to its 2015 PISA results (OECD 2015). This includes overall performance in science, reading and mathematics, as well as in collaborative problem solving (OECD 2018b).

Singapore introduced a number of education policies from 1997 onwards to provide Singaporean students 'with knowledge and skills required for a globalised economy and workforce as well as better prepare them for the challenges of the 21st century' (Chew 2016, p. 165). Central to these changes was workforce reform: Chew (2016) explains how 'stringent criteria were used to select suitably qualified applicants who went through intensive pre-service teacher training at Singapore's sole teacher training institute [the National Institute of Education, or NIE]' (p. 166). 15% of secondary teachers now hold at least a Master's degree (Chew 2016). Nevertheless, Wise (2016) notes that not all Singapore's PISA success can be attributed to these reforms: '60% of high school, and 80% of primary school age students receive private tuition' (unpaged). Singapore is notable in having

developed a highly structured set of three career pathways for education professionals: the teaching, leadership and senior specialist tracks.

2.5.2. Singapore - Professional Development

Chew (2016) identifies how the Singaporean state has 'invested heavily in building up the teaching force and enhancing its quality' (p. 166). There is consequently a range of professional-development routes available to teachers, consisting in 'workshops and short courses ... conference and seminar attendance... and industry attachments and sabbaticals' (p. 168). The purposes of these, according to Chew, is 'for teachers to upgrade their knowledge, keep abreast of developments and initiatives in education, receive updates on pedagogical innovations, gain new competencies in response to societal needs and demands, gain training in research and management skills, and enhance their teaching effectiveness through a commitment to life-long learning' (p. 168). The creation and support of the Academy of Singapore Teachers is argued by Chew (2016) to be key to the provision of these professional-development programmes and activities. Established in 2010 'to build a teacher-led culture of professional excellence for the teaching fraternity' (MOE, in Chew 2016, p. 168), it has largely succeeded in creating learning communities where:

Teachers participate in subject groups called subject chapters; each chapter is led by a core team of school teachers recognized as among the best in their subject or by specialists from the Ministry of Education and NIE. The role of these leaders is to enhance teachers' curriculum knowledge, pedagogical skills and assessment literacy. (Chew 2016, p. 168)

Through the Academy of Singapore Teachers, the Ministry of Education offers professional-development programmes within each of the distinct career tracks it provides for teachers (2018a). For instance, those in the teaching track undertake the Teacher Leaders Programme (Academy of Singapore Teachers 2018b). This programme has three levels: the first is for Senior Teachers, the second for Lead Teachers and the third for Master Teachers (see Figure 2). Teachers must complete that level if further progress within that track is desired.

The Singaporean state also offers a number of professional development 'opportunities' for school leaders at all stages on the leadership track (see e.g. National Institute of Education Singapore 2013, 2018). Some of these will be discussed in more detail in the section below, on "leadership career progression", since professional development in Singapore is closely tied to career progression.

As noted by Chew (2016), the Ministry of Education also offers significant opportunities that are available on all three tracks. Key examples include a Postgraduate Scholarship/Award and one of the Professional Development Packages (Singapore Government Ministry of Education 2018a). This latter might consist either of study leave (sabbaticals) or study loans. All these examples are intended to facilitate in-service postgraduate (i.e. Master's or Doctoral) study at a university in Singapore or abroad.

Importantly, Yang (2018, unpagged) draws attention to how 'Singapore teachers assuming appointments on the career tracks are not left to their own devices to search for, and sign up for appropriate PD [professional development] initiatives and programs, but join an ever-growing fraternity of experienced peers and alumni in a carefully-planned, comprehensive suite of programs.'

2.5.3. Singapore - Teachers' Career Pathways

Singapore has a comprehensive, three-pathway career structure composed of discrete 'tracks' for teachers. Figure 2 sets these out below:

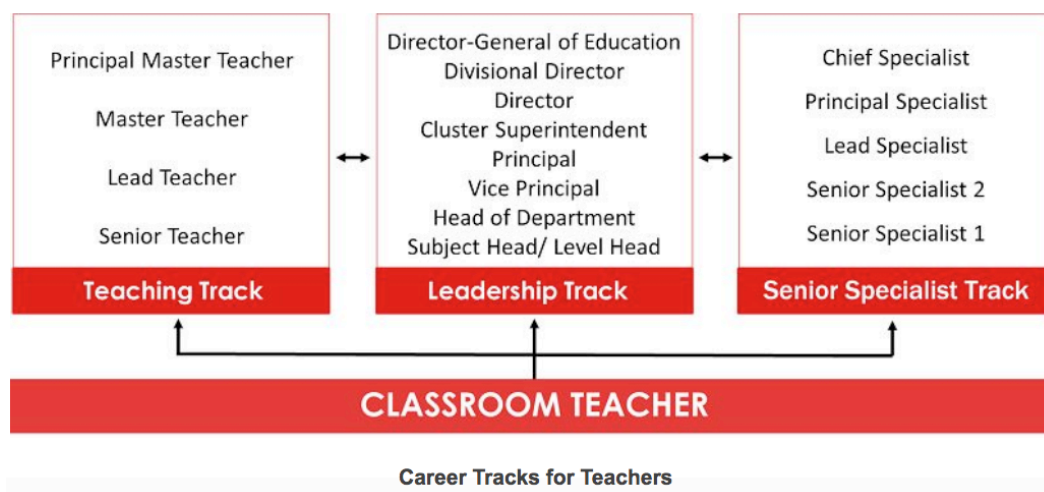


Figure 2: Career Tracks for Singapore Teachers. Source: Singapore Ministry of Education (2018b)

As Figure 2 shows, there are four levels within the teaching track, eight within the leadership track and five within the senior specialist track. The Singapore Ministry of Education (2018a) states that selection of track is the teacher's, and goes on to describe the characteristics associated with each one:

Teaching track: for those who wish to 'further develop the pedagogical capability of the teaching force'.

Leadership track: for those desiring 'leadership positions in schools and the Ministry's headquarters'.

Senior Specialist track: for those 'inclined towards more specialised areas where deep knowledge and skills are essential for breaking new ground in educational developments' (2018a, unpagged).

Yang (2018), a practising teacher in Singapore, writes a first-hand account of how he negotiated a change in career track, exemplifying how lateral movements are possible for teachers 'as long as they satisfy the standards and criteria of the job/career track they aspire to take on' (Singapore Government Ministry of Education 2018b, unpagged). Yang's (2018) account is also instructive concerning the evidence that must be generated in order to move up a level, in his case to Senior Teacher. He created a professional portfolio containing a statement of his teaching philosophy, evidence of having completed professional-development programmes and short courses, and of having attained accreditation standards. He also undertook 'multiple cycles of reflection and honing of [his] craft' (2018, unpagged website) and finally an interview.

2.5.4. Singapore - Leaders' Career Pathways

School leaders' career progression is catered for through one of the three career tracks available (see Figure 2). Progression here as on other tracks is through successful completion of a number of elements, including interviews, performance appraisal and, importantly, professional-development programmes. The selectivity of this process is made clear by Yang (2018) in his account of his experiences on this track:

Teachers [on the leadership track] are assessed annually for performance and leadership potential, and those thought to have leadership potential are offered opportunities and appointments to gain leadership experiences and professional development appropriate for their portfolios. (Yang 2018, unpagged)

The track seeks to develop leadership in ways that are relevant and accessible to professionals both in schools and in the Ministry, reflecting the status of both (and teachers) as civil servants and effectively, state 'officers' who are deployed to, rather than applying for posts.

Exemplifying the Singaporean state's offer on the leadership track is its flagship "Leaders in Education Programme (LEP)" (2018), offered through the National Institute of Education Singapore. The relationship between the NIE and the state is characterised by Chew (2016) as 'close collaboration', constituting along with schools a 'unique tripartite partnership' (p. 166). Foreign (fee-paying) applicants to the programme are welcomed, attracted according to the Singapore Ministry of Education by Singapore's status 'not only as the hub of educational achievement in South East Asia but also as a leader in educational advancement on the world stage' (National Institute of Education Singapore 2018, unpagged).

The primary recipients of this offer, however, are 'specially selected vice-principals and ministry officers in Singapore ... [with] a track record of good potential and performance appraisal and [who] have successfully passed a series of situational tests and selection interviews conducted by the MOE' (National Institute of Education Singapore 2013, p. 2). In other words, these are 'officers' on the leadership track who have reached at least vice-principal level and wish to progress to become principal.

The programme is full time and of six-months' duration, and so participants leave their school to undertake it: they will be posted elsewhere following graduation. The programme 'aims to develop principalship capability that is values-based, purposeful, innovative and forward-looking, anchored on strong people leadership, strategic management skills and an appreciation of how principals could work effectively in a complex environment' (ibid.).

To achieve this, it has synthesised contributions from Sergiovanni (2009) and Gardner (2006) into its bespoke and 'innovative 5R5M (Five Roles and Five Minds) framework of school leadership development' (ibid.). The 'Five Roles' supplied by Sergiovanni (2009) are Educational, Technical, Human, Symbolic, and Cultural; and the 'Five Minds' from Gardner (2006) are Ethical, Respectful, Creating, Synthesising and Disciplined. The programme also involves partnership with a local school, mentorship with its principal, an implementation project, a learning journal, an international visit and finally, what are called Management Dialogue Sessions. These are held with senior government officials and are designed to 'help participants develop an instinctive appreciation of how his/her actions and decisions in the school should be aligned with the fundamental organising principles of Singapore and the MOE (Ministry of Education)' (National Institute of Education Singapore 2013, p. 5).

The state also offers leadership programmes to those working at a lower level in the leadership track. For example, the Management and Leadership in Schools (MLS) Programme 'aims to develop innovative middle leaders in schools who can support their principals in school reform' (National Institute of Education Singapore 2013, p. 6).

3. Making sense of the case studies

In exploring understandings and practices of career pathways through these five case studies and the wider literature, I have identified three major themes. These are a) the ambiguous relationship between the policy “problem” and “solution”, b) the ambiguous relationship between the policy and the evidence, c) policy borrowing and policy adaptation, focusing on national centres of knowledge production and the use of teacher standards.

3.1. Ambiguous relationship between the policy “problem” and “solution”

An important, if implicit question guiding not only this literature-based study, but also the policy processes it investigates, is ‘how, if at all, should teachers’ and leaders’ working lives and practices be structured?’ The fact that it is a question that requires exploration at all reveals that current arrangements are perceived to be failing in one or more ways: in other words, there is a “problem” that policy is intended to address. For instance, here are two of the most common potential “problems” with current arrangements in career structures:

1. They may have come to accompany perceived student underperformance, perhaps in international comparisons such as PISA.
2. They may be present at the same time as teacher and/or leader job dissatisfaction, or even exit from the profession.

I am avoiding language in the two statements above that implies or assumes a causal relationship between the variables, because the evidence that supports such a relationship tends to ignore wider societal issues beyond the classroom or school. This includes, for number one above, the effects of such structuring elements as socio-economic class, race, and sex (see Courtney et al. 2018), and for number two, the effects of national and local cultures, and of the overarching policy context. In Australia and England, for instance, such a policy context has been characterised as low-trust and high-stakes in terms of teacher and leader accountability, encouraging in school leaders the production of entrepreneurial and performative (Courtney 2016; Perryman et al. 2018) forms of practice that are largely bypassed by policy attempts to enhance satisfaction.

The case studies above reveal a number of different ways of constructing and addressing a policy “problem” and reveal also how the relationship between these two may not be as certain as is depicted through policy. As the Finnish case study above shows, Finland’s Ministry of Education is introducing reforms to teachers’ professional development activities in response to the recent “dip” in the PISA performance of Finland’s 15 year olds. This demonstrates the high value that policy-makers place in an assessment that the research evidence has for years shown to be problematic. Goldstein (2004), for instance, has argued that its methodology renders its findings untrustworthy, and the Australian academic, Dinham (2013), notes of the “competition” that:

... the emerging Asian ‘PISA powerhouses’ ... are not nations at all, but cities [and] city states ... They are also predominantly authoritarian in their governance, have a tradition of rote learning, cramming and testing and all have placed a major premium on improving their PISA rankings. On that measure, they have been successful. (Dinham 2013, p. 95)

The push for high test scores can harm both enjoyment and self-belief. It is doubtful that Australian parents would want this for their children. (Dinham 2013, p. 97)

The Finnish reforms also exemplify and demonstrate their belief in a simple causal relationship between student performance, teacher quality, and professional development. Of course, these elements *are* interrelated, but a number of other features may intervene, including in Finland's case, students' sex or immigrant status (OECD 2018c). Moreover, a reported lack of professional development in such an already research-rich context as Finland's has a very different meaning to an ostensibly similar lack amongst educators who culturally neither undertake research nor see their profession as normatively research-informed (Niemi 2015). Since Finnish teachers are starting from a high base, it is likely that simply "adding professional development and stirring" will not address the policy problem of apparently declining standards. It is also probably not coincidental that Finland has reduced spending on education massively since the Global Economic Crisis (OECD 2018a). These contextual details trouble any assumption of an unproblematic relationship between policy and policy "problem", showing that what looks at first sight like a sound policy may actually be a policy fix for a larger problem that would require far more resourcing.

In her research into Australia's introduction of teacher professional standards, McSporry (2018) illuminates how the state's assumption of a close relationship between improving student outcomes (the "problem") and improving teacher quality (the policy "solution") may be problematic:

This assumption ignored other possibilities such as: improving teaching quality may not improve student outcomes; improving teaching quality may only improve student learning to a certain point due to a ceiling effect; improving student outcomes past a certain point may have undesirable effects on student wellbeing; and, improving student learning, as measured by national and international tests, may not be good proxies for future national economic productivity. Positioning teachers as the key to improving student outcomes ignored the potential role that governments could play in addressing broader social and economic inequities, which also affect student outcomes. (McSporry 2018, p. 87)

Moreover, policy-makers may address one problem and inadvertently create another. The two problems suggested above are good examples of where, in contexts inspired by England's example, seeking to solve one has perhaps tended to exacerbate the other. This is because the English policy strategy for raising pupils' attainment has largely consisted in increasing teachers' and leaders' accountability, which reduces these professionals' job satisfaction (Ball 2003), whereas in Finland high attainment was achieved with neither standardised tests nor school inspection, but instead with high levels of autonomy for and trust in its teachers. England is notably experiencing teacher recruitment and particularly retention issues that Finland is not, although, as Uljens and Nyman (2013) point out, Finland's adoption of certain reform features associated with 'the new international competition-oriented trend may not only question but also challenge the unique Finnish model, which has been so successful in combining the idea of a school for all with high standards'. (Uljens and Nyman 2013, p. 44).

3.2. Ambiguous relationship between the policy and the evidence

Researchers in western contexts have long noted the weak use of research evidence in policy-making (see e.g. Whitty 2016). This tendency is clear too in these case studies. For example, it must be noted that there is no consistent positive association in these five education systems between having a high-performing education system (according to PISA) and creating and following a career-progression structure for teachers or leaders. Of course, there may well be other reasons for attempting it, but it is obvious in the data that claims are often predicated on beliefs rather than on evidence. The OECD is a key actor here: as a supra-national organisation, its reports, assessments

and claims are taken extremely seriously, but they are not subject to scientific peer review and they construct a neoliberal view of education and education professionals whose basis in belief rather than in evidence is occluded by the status of the organisation. For instance, in their report for the OECD on Estonia, Santiago et al. (2016) see it as problematic that school leaders there do 'not adequately enjoy a distinct professional status', with 'the position of "school leader" [being] rather an extension of "teacher" (p. 24). This is an ideological position that takes it for granted that a discrete status is desirable and necessary, and ignores a rich history in Europe of social-democratic education for the public good that held the role of headteacher to be the lead professional, or *primus inter pares*, rather than a quasi-corporate CEO (Gunter et al. 2016; Grace 1995). This position also contradicts concerns raised in reports of empirical research focusing on countries where such a distinction does exist. For instance, in England, the differentiation of school leadership into a distinct "class" has enabled its capture by corporatising influences (Courtney 2017a; 2017b) and has produced notable dissonances between "leaders" and "the led" (Courtney 2015).

Singapore's Leaders in Education Programme is based on weak academic evidence. It is underpinned by what it calls the 'innovative 5R5M (Five Roles and Five Minds) framework' (National Institute of Education Singapore 2013, p. 2), the latter half of which draws on Gardner's (2006) "Five Minds for the Future", which, as Gardner makes clear in an interview, was not intended as an academic book:

When I wrote the book *Five Minds for the Future*, I was not writing primarily as a psychologist. I was writing as a policy maker ... there is no scientific claim that these are the five minds that God gave us or that are innate or that we have to develop. Rather, I'm making the case that in the future people need to have minds that are disciplined, capable of synthesis, creative, respectful, and ethical. And we could know all about the mind and the brain without ever coming up with those five lists. Those five are based on my analysis of what's needed for today and tomorrow. (Gardner 2007, unpagged website)

Knowledge about educational leadership is therefore predicated mainly on beliefs rather than evidence: this resonates with Gunter's (2012) analysis of the development of school-leadership programmes in England under the National College of School Leadership under New Labour. This has influenced a number of the case-study sites and so is explored in more detail further below.

The peer-reviewed literature has examples to offer in developing new, evidence-informed ideas about teachers' careers and motivations. For instance, Evans, writing in 2018 about an idea that she has been developing since 1998, proposes 'proximity theory'. This 'posits that job-related attitudes and effect are determined by the proximity of what is subjectively perceived as one's current *actual* to one's current *ideal* job situation' (p. 140). 'Situation' is understood in a wide sense to include:

... the physical and geographical workplace location; the nature of the work, including the minute detail of the day-to-day tasks that it involves; one's level of seniority and status; the conditions of service and working conditions – again, including minutiae such as whether one has one's own or a shared workspace, and what facilities one has access to; the quality of internal décor and buildings maintenance, etc.; the level of convenience or inconvenience caused by the work (e.g. whether it involves a long daily commute or is close to home; whether the working hours suit one's personal circumstances and family responsibilities); and the people. (Evans 2018, pp. 139–140)

Movement up a career structure would constitute only a small part of this holistic experience of work and so can contribute only somewhat to the construct of "job satisfaction", should achieving that be a motivation for introducing such a policy.

3.3. Policy borrowing and policy adaptation

Policy is not, in the main, based on research analysis and findings, but rather is often transferred from one context to another in a process called *policy borrowing*, where it may or may not be appropriately *adapted* to its new context. Dinham (2013) raises serious concerns about developing policy through borrowing:

We need to recognise and build on the strengths we have rather than attempting to 'cherry pick' what appear to be recipes for success from vastly different contexts. In the 1990s Japan was a focus of attention because of the strength of the Japanese economy. We were encouraged to emulate the educational and business practices of Japan, and Australian students were urged to learn Japanese. No one talks about copying Japan now. (Dinham 2013, p. 94)

Nonetheless, policy borrowing is evident throughout these case studies, and England appears to be one of the source nations for many of the structures attempted internationally. England has long been a 'laboratory' (Finkelstein & Grubb 2000, p. 602) of neoliberal education reform that individualises responsibility for outcomes, but also blame, and one of its functions as a laboratory has been to pilot education policies and make them amenable to export. I will exemplify this tendency through examining briefly the origins and instantiation here of two features found in certain of the case studies: the first is *national centres of knowledge production in teaching and/or leadership* and the second is *professional standards for teachers and/or leaders*.

3.3.1 National centres of knowledge production

The National College for School Leadership (NCSL) was established in 2000 by the UK's New Labour Government. It was intended to be the sole producer and disseminator of knowledge about school leadership in an attempt to raise standards in England through enhancing the quality of school leaders. Gunter (2012) characterises its development:

In developing this approach, primacy was given to private-sector leadership models to secure leader responsibility and accountability, provide the language, processes and legitimacy for delegating work, and command commitment through followership. Professionalism was redesigned as technical capability (e.g. data-handling competence) combined with personal attributes (e.g. charisma) and attitudes (e.g. responsibility), underpinned by an overt commitment to New Labour strategies and processes. (Gunter 2012, p. 20)

Gunter argues that the NCSL was conceived as the mechanism to achieve the state's education reforms: 'New Labour operated through 24,000 heads rather than 400,000 teachers as their direct agents, with the training of heads and the labelling of their work as effective leadership ... central to this' (p. 21). In this respect, the NCSL (and its successors throughout the case-study sites) was very different from Scotland's General Teaching Council, which was developed by and is still led by the profession (The General Teaching Council for Scotland 2018).

In order to legitimate its status as knowledge producer, the NCSL was physically located at the University of Nottingham, and drew on what Gunter (2012) calls 'selected leadership theories and the work of preferred researchers' (p. 29). Thrupp and Willmott (2003, p. 7) call these scholars 'textual

apologists' to capture how their work supported and legitimated the NCSL model. Nevertheless, the evidence base for the NCSL's claims was weak and often belief-based (Gunter 2012).

Following repeated reforms and reimaginings by policy-makers (including its 2013 merger with a similar body aimed at teachers and teaching, the Teacher Development Agency), what was finally known as the National College for Teaching and Leadership was dismantled in 2018. However, it seems that its influence persists through "policy borrowing and adaptation" in similar reforms throughout the world, including in some of these case-study sites.

This is seen most strongly in Singapore, where the National Institute of Education and the Academy of Singapore Teachers have considerable responsibility for and influence on teachers, teaching, leaders and leading. The education system these two bodies help to administrate is even more highly structured than that New Labour envisaged in England. This may be partly explained by the relatively lower influence of corporatised cultures, objectives and methods on Singaporean education and the relatively higher influence of bureaucratic cultures and structures. Indeed, in Singapore, "educational leadership" is conceptualised as being equally applicable to schools or to the Ministry of Education. The same skills are developed for both sites through the leadership track. This locates educational leadership within a bureaucratic framing rather than a market framing. It would be difficult to imagine this collocation, for instance, in England, the USA or Australia, and shows how policy has both travelled and been adapted to the local context.

There are consequences to the way education is arranged in Singapore, and these mostly relate to low levels of teacher autonomy and trust. For example, professional development is tightly linked to track and level: these being controlled by the state, the individual teacher has little agency to undertake non-sanctioned activities. So teacher autonomy in career progression is re-imagined rather reductively only as inter-track movement, and for as long as teachers remain on their current track, their options for professional development are limited and their future mapped out. This raises questions about who the knowers and knowledge producers are in the Singaporean education field of practice: is it the profession or is it the state? And even if the profession makes a claim here to know best about education, its "representation" (or capture) by state-aligned institutions such as the NIE makes autonomous knowledge problematic. There are also important cultural differences in how this structure is received and understood: note that Yang's (2018) testimony concerning professional development posited that *teachers' not having to think about it because the state had arranged everything* was a positive aspect of the system. This speaks to a particular relationship in Singapore between the state and the individual that may well not easily "travel". Indeed, locating her analysis in the west and referencing western literature, Evans (2011) notes 'whether they are right or wrong, teachers will inevitably oppose and resist a professionalism being thrust upon them which they do not recognise as 'better' than the one that they have played a part in shaping and with which they are, to varying degrees, comfortable (c.f. Evans et al., 1994; Stronach et al., 2002; Hilferty, 2008; Wilkins, 2011)' (Evans 2011, p. 866).

In Ontario, and in a way more resembling the NCSL than the GTCS, professional knowledge has been captured by the state through the Ontario College of Teachers, 14 of whose 37 members are appointed by the provincial government (Ontario College of Teachers 2018a). Ontario's system of cumulative AOs and BOs might be viewed as being conceptually resonant with Singapore's track/level structure, particularly in how they are framed and certified by the state through the OCT. It does, however, provide more space for teacher agency in offering the gamut of qualifications to all teachers (save those reserved for technologists). The fairly minimal-to-absent pay-scale advancement for initially well-qualified Ontario teachers, who may have started on A3 or even A4, means that professional development activities for many are disaggregated from their career advancement in the

most direct sense, although professional learning for other reasons is of course valid and valuable. In devising an intensely structured system that ultimately does not constitute a career pathway, Ontario has decided that progression need not be along a defined route, but can instead be defined as the accumulation of accredited skills and competences that are recognised and are presumably consequential in the recruitment market. Its teachers are *busy*, they are *learning*; that learning is *acknowledged formally*; and that is understood as *progression*. The framing for this learning, however, is entirely state-managed.

'Competence centres' (Eurydice 2018b) are also being developed in Estonia, explicitly to enable the government's reforms set out in its White Paper, "The Estonian Lifelong Learning Strategy 2020" (2014). This question concerning who is entitled to "know" about education often arises in times of education reform, where arguments may be made that professional knowledge has not produced the required results and so the state should intervene. The example of England's NCSL shows that the fact that these centres are legitimated through links with higher education does not automatically guarantee the quality of the knowledge that will be produced there. Writing of the NCSL, but applicable here, Gunter (2012) identifies a number of problems with this policy approach that privileges state-aligned or managed centres. These include a disposition to marginalise perspectives that come from outside the state-sanctioned centre(s) and a concomitant over-emphasis on knowledge produced there, particularly where such knowledge constructs the aims of education as being normatively aligned exclusively with those of the national economy. Finally, it merits reiteration here that Estonia's success in PISA reflects its pre-reformed system, with no "competence centres" and therefore greater levels of teacher autonomy over what counts as excellent teaching.

3.3.2. Teacher standards

Evans (2011) notes that professional standards for teachers (and by extension, leaders) may constitute 'government-initiated professionalism-shaping mechanisms' (p. 853). In England, the introduction of such standards constituted an important element in the range of interventions into teachers' practice and professionalism, and has influenced policy globally. New Labour's suite of standards (see Teacher Development Agency 2007) categorised teachers into five distinct career stages:

- Q: qualified teacher status, or QTS (for teachers in their first post following successful completion of their initial teacher education qualification);
- C: core standards (for teachers having successfully completed the year-long 'induction' period after earning QTS);

Reaching and maintaining these two levels above were compulsory and brought no salary benefit. The three levels below were optional and were associated with salary increments.

- P: post-threshold (for teachers who had attained the additional standards and whose submission of a portfolio of evidence to the headteacher was successful);
- E: excellent teacher (for teachers undergoing external assessment to validate their having attained the relevant standards. This career level involved 'specific teacher leadership roles and responsibilities' (Evans 2011, p. 853).
- A: advanced skills teacher (as for excellent teacher above).

England's coalition government has since altered the standards (see Department for Education 2011), reducing them from 33 to 8, with a further eight un-enumerated bullet points on 'personal and professional conduct' (p. 14). The later version removed the career pathway integral to the earlier

version, making 'progression' entirely a matter of new, salary-related and individualised performance-management processes.

What this example reveals is that there is nothing inherently more "modern" or progressive about creating and using professional standards for teachers, or using these to create explicit career pathways. History shows that there is travel in both directions in these respects. The case studies consequently reveal a range of different ways of understanding and operationalising professional standards and of relating them to career stages.

Australia's present system of teacher standards reflects that established in England by New Labour in 2007 (see Dinham 2013). Standards in a given domain become progressively more challenging to demonstrate and so are intended to require increasing skill. There are explicit career stages attached to each of the four levels of challenge. Critiques have been raised of this structured approach, both in its Australian and its English instantiation. For example, where responsibility for the development or enforcement of professional standards for teachers or leaders moves from the profession to the state, the focus may shift from career progression to accountability. These shifts may locate the responsibility for student outcomes on teachers instead of on schools or governments (McSporran 2018). The literature, particularly that located in England, is replete with examples of the negative impact of high-stakes accountability on the practice and identities of teachers (see e.g. Evans 2011) and leaders (e.g. Courtney 2013, 2016; Perryman et al. 2018), and on decisions to leave the profession (Whiteoak & Thomson 2017).

Ontario's system of teacher standards more resembles that introduced by England's Coalition government (2010-15) and indeed, pre-dating it, may well have inspired it (Ontario College of Teachers 2018c). There are only five domains, with each having just around three explanatory sentences attached. These standards pertain to teachers at all career stages (see Ontario College of Teachers 2017a, p. 26). There is also a similarly succinct set of ethical standards (p. 24).

The very notion of state-imposed teacher standards and of their alignment to professional development and career progression has also attracted critique. McSporran (2018) summarises these in the following way: teachers' opportunities for professional development and for collaboration may be reduced (Evans 2013; Leaton Gray & Whitty 2010); indeed, collaboration as a way of improving students' experiences and outcomes may be under-valued (Connell 2009; Leaton Gray & Whitty 2010); and teachers' autonomy and professionalism may be undermined and their workload increased (Hargreaves & Goodson 2006; Larsen 2010). Finally, the low-trust environment that often accompanies high-accountability systems may 'immobilise, individualise and isolate teachers' (McSporran 2018, p. 55) and reduce teachers' morale (Bottery 2006; Levin 2010). Furthermore, in her analysis of England's 2007 standards, Evans (2011) found that the domains of professionalism that were being standardised 'focus considerably more on behavioural than on attitudinal and intellectual development' (p. 867). Whilst similar work has not been undertaken on the Australian, Singaporean and Ontarian standards (or indeed on Scotland's), it seems reasonable to note that all professional standards will reflect particular ideological frameworks and conceptual architectures. They will do so normatively and in ways that may or may not accord with the interests of education as a public good that are beyond the perception of those happening to create the standards at that time. Following this logic, linking standards to career stages constructs a 'good' and/or 'excellent' teacher or leader whose characteristics more reflect contemporaneous political priorities than they do professional, educational values.

4. Policy implications

This literature review and analysis has a number of policy implications, some of which I will set out below:

1. The policy “problem” in these case studies is sometimes not well related to the solution offered through the new policy. This is often the case where new policies conform to the trend that has been dominant in western-style democracies for forty years and which privileges audit- and market-based solutions to “problems” as diverse as perceived low standards, inequality, and teacher recruitment. The evidence that these constitute the principal “solution” is weak, particularly considering the recent dominance in PISA of authoritarian, bureaucratic East Asian city-states, and of social-democratic Finland.
2. In considering policy borrowing, questions need to be asked concerning:
 - a. How particular local cultures/understandings and historical practices in the “donor” education system might have enabled the creation of that model;
 - b. How particular local cultures/understandings and historical practices in the “borrowing” education system might align or not with the framing or usage of the model to be borrowed. Consideration must be given, for instance, to the relative importance of teacher and leader autonomy in the two contexts, and of structures underpinned by high levels of professional trust versus high levels of accountability. Is the model amenable to adaptation?
3. Models that theoretically *might* enable accountability often end up doing so, whatever their original purpose and remit, particularly if:
 - a. Their development and deployment is the responsibility of the state or a centre closely aligned to the state;
 - b. One, sole way of “doing” teaching or leadership is intended to be a/the product of the new model.
4. The way in which professional and academic involvement in the development and deployment of the new structures needs to be carefully considered to make it meaningful. The existence of the strong, well-established and, importantly, independent General Teaching Council for Scotland makes Scotland stand out above the case study sites in its potential here.
5. The literature does not reveal many instances where increasing accountability measures, even perhaps inadvertently through the use of explicit professional standards, *increases* teachers' job satisfaction. The exception is Singapore, which is not easily comparable to Scotland in a number of important respects including Singapore teachers' lower expectations of autonomy and acculturation within an explicitly bureaucratic framework.
6. Professional standards lend themselves relatively easily to transformation into career pathways on paper, but rather less so in practice. Where discrete career pathways have been attempted in this way, these may have either been discontinued (e.g. England); or they have not been consistently taken up in practice (e.g. Australia and Estonia). The policy implications of this are that such an endeavour has challenges that may not yet be revealed in the academic literatures and so may require empirical investigation.
7. The case study sites do not differentiate leadership to the extent that already happens in Scotland, where middle leadership and headship are addressed explicitly through discrete standards (The General Teaching Council for Scotland 2012). The implications of this for policy are that innovative and context-led practice and structures may be developed that might influence policy-making elsewhere in the world.

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