



A comparative study of organisational structures in high-performing jurisdictions and how they support successful assessment, curriculum and qualifications

Research question:

How do inter-organisational structures in different high-performing jurisdictions compare, in relation to curriculum, qualifications and assessment, and what are the important considerations for Scotland in reviewing its own structures and approaches?

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1. Introduction

In June 2021, the Organisation for Economic Co-operation and Development (OECD) produced a report: *Implementing education policies, Scotland's Curriculum for Excellence into the future* (OECD, 2021a). The report recommended that Scotland should look overseas for inspiration, to countries that already have specialist curriculum agencies, specifically in terms of aligning curriculum, qualifications and system evaluation.

This research report considers specific examples of education systems provided in the OECD report, as well as approaches from other high-performing jurisdictions. The report aims to summarise, analyse and consider the specific inter-organisational structures involved in delivering curriculum, qualifications, assessment and regulation. Furthermore, the report aims to identify contextual features, 'conditions of success', and relevant cultural, demographic and other factors that may assist Scotland's review of current practice and its planning for the future.

Based on OECD recommendations, the research will focus on current practice in 11 jurisdictions:

- ◆ Nordic system — Norway and Finland
- ◆ American system — Canada (British Columbia)
- ◆ British system — Wales, Ireland and England
- ◆ Legacy breakaway — Australia (New South Wales) and New Zealand
- ◆ French Baccalaureate system — France
- ◆ Iceland
- ◆ Singapore

To clearly illustrate the organisational structures within the 11 jurisdictions selected for study, an infographic was created for each, detailing the structure of arrangements for education at national, regional and local tiers¹.

These diagrams highlight responsibilities for aspects such as governance, assessment of learners, qualifications, and further and higher education, in addition to inspection and quality assurance. They are helpful in understanding the degree of centralisation within the education systems selected and act as an essential aid to understanding the complexity or, alternatively, the simplicity, of the educational systems considered in this report. The structural infographics for each jurisdiction can be found in the Appendix.

¹ In these infographics, the 'national' tier of governance refers to central government and those agencies and organisations that have responsibility for education at a national level for the entire country. Where responsibilities for education have been devolved to a particular state or province, we have defined this as the 'regional' tier of governance. This tier also includes any agencies or organisations that are responsible for multiple schools, or specific geographical zones or clusters, such as local authorities and regional partnerships. The 'local' tier of governance relates in the main to schools, colleges and teachers. For the Nordic jurisdictions explored in this report, this local tier also includes the municipalities.

Rationale for focus of this report

Most jurisdictions prioritise having a high-performing educational system. However, it is becoming increasingly difficult to identify a small number of high-performing jurisdictions, 'owing to the abundance of comparisons to choose from' (Elliott, 2016, p1). While we do have methods of international rankings, such as PISA (Programme for International Student Assessment) and TIMSS (Trends in International Mathematics and Science Study), 'success' can be a concept that goes beyond such comparisons to also encompass those achievements and measures that a particular jurisdiction may consider of most social, cultural or political importance. For the purposes of this study, performance data will be presented from jurisdictions that have ranked consistently highly in international comparisons. The report draws upon accessible, current literature relating to the 11 jurisdictions under review.

The secondary education sector was chosen for this research as the recent OECD study (2021a) recommends a focus on this sector.

This research provides information and context on how assessment, qualifications, curriculum, effective pedagogy and regulation take place in a range of jurisdictions, within their respective organisational structures. The research aims to provide considerations for Scotland's educational reform in the near future.

The report addresses OECD's requirement for Scotland to consider how to improve educational outcomes and organisational structure within its own context.

Methodology

The objective of the research report is to gain an understanding of several high-performing educational jurisdictions, to inform considerations for Scotland in its endeavours to improve according to OECD recommendations (OECD, 2021a).

To meet this objective, a secondary research method was used to collect and analyse data from the 11 jurisdictions. This research included a literature review, which provided a contextual understanding of the 11 high-performing educational systems selected, focusing specifically on the following:

- ◆ governance structures for education at local, regional and national levels
- ◆ responsibility for curriculum, qualifications and assessment
- ◆ responsibility for school inspection
- ◆ high-stakes assessment
- ◆ responsibility for regulation
- ◆ trust, autonomy and empowerment

By using a literature review approach, the report and its considerations aim to be evidence-based. As the OECD report (2021a) uses PISA evidence, this report also includes PISA evidence in infographics to compare each of the 11 jurisdictions, and Scotland, with the OECD average. These appear in the Appendix at the end of this report.

2. Responsibility for curriculum, qualifications and assessment

The OECD report recommends that Scotland should consider establishing a specialist stand-alone agency responsible for curriculum and perhaps also assessment (OECD, 2021a, pp125–26). In June 2021, Scottish Government announced that it had accepted the OECD's recommendations and confirmed it would replace the Scottish Qualifications Authority (SQA) with a new specialist agency responsible for both curriculum and assessment, to ensure alignment of these functions (Scot Gov, 2021a). Professor Ken Muir, University of the West of Scotland, was appointed as an independent adviser to the Scottish Government to consider and advise on the implementation of the reform. His recommendations are expected in early 2022. In this section of the report, we will summarise the arrangements for curriculum, qualifications and assessment in the jurisdictions covered by this report, in order to identify considerations for Scotland. The table below, provides an indication of where responsibilities sit for curriculum, qualification design and assessment/certification across the 11 of the jurisdictions considered in this report.

Table 1: Responsibility for curriculum, qualification design, assessment and certification

Jurisdiction	Curriculum	Qualification Design	Assessment and Certification
Canada (BC)	BC Government	BC Government	BC Government
France	Government	Government	Government
Iceland	Government	Government	Government
Norway	Government	Government	Government
Singapore	Government	Government	Singapore Examinations and Assessment Board (SEAB) & University of Cambridge Local Examinations Syndicate (UCLES)
England	Government	Ofqual / Awarding Organisations	Awarding Organisations (AOs)
Wales	Government (Welsh)	Qualifications Wales, Welsh Joint Education Committee (WJEC) + other AOs	WJEC + other AOs
Scotland	Government/Education Scotland	Scottish Qualifications Authority (SQA)	SQA
New Zealand	Government / New Zealand Qualifications Agency (NZQA)	NZQA	NZQA
Finland	Finnish National Agency for Education (EDUFI)	EDUFI	Finnish Matriculation Board
Ireland	National Council for Curriculum and Assessment (NCCA)	NCCA	State Examinations Commission

Jurisdiction	Curriculum	Qualification Design	Assessment and Certification
Australia (NSW)	Australian Curriculum, Assessment and Reporting Authority (ACARA) & NSW Education Standards Authority (NESA)	NESA	NESA

Further detail is provided below regarding the particular arrangements in specific jurisdictions, relating to responsibility for curriculum, qualifications and assessment.

In **Wales**, the Welsh Government is responsible for the curriculum. Curriculum policy in Wales is co-constructed from an early stage — changes to the curriculum are based on practitioners' knowledge, pioneer schools' experience, and experts' input (OECD, 2021a). In terms of qualifications, the Qualifications Wales Act 2015 only permits centres to offer learners general qualifications which are either 'approved' or 'designated' by the regulatory body, Qualifications Wales (QW). Approved qualifications are those that have been developed by the Welsh Joint Education Committee (WJEC) exam board and have met approval criteria that ensure they are designed to meet the needs of learners in Wales (this includes GCSEs, AS and A-level qualifications). Designated qualifications are those developed by other awarding organisations, which are independent, external education providers. Currently, there is a relatively small number of designated qualifications (58) which fall outside the subjects which have been reformed for learners in Wales. These designated qualifications have been developed by the AQA, Eduqas (WJEC), OCR and Pearson exam boards, and are principally offered in England and regulated by Ofqual (EACEA, 2020a). For vocational qualifications, any recognised awarding body can apply to have qualifications approved or designated in Wales. QW will consider a qualification for approval if it is on the Priority Qualifications List or it meets the policy on the approval of non-priority qualifications; otherwise, they will consider it for designation (QiW, 2021a).

In **England**, the curriculum is the responsibility of the Department for Education, which works in partnership with key stakeholder agencies. There are four awarding organisations in England that offer GCSE, AS and A-level qualifications, AQA, Eduqas (WJEC), OCR and Pearson. The subject content is set by the Department of Education. Ofqual, the regulator, sets rules about how the content should be assessed and the relative weighting for assessment components and assessment objectives. As the subject specifications of the awarding organisations may differ, and their cohorts can vary in terms of ability, this could lead to the perception that the specification or assessment produced by one awarding body is more difficult or easier than one produced by another awarding body. It is Ofqual's responsibility to ensure that any variations in specification and demand of question papers do not undermine the ability to align standards within a subject across the various awarding organisations, so that awarding organisations cannot compete on standards (Ofqual, 2019). Ofqual is also responsible for regulating the qualifications market for vocational qualifications in England. This represents a complex and diverse landscape, in terms of provision and of awarding organisations, which number around 150. The Joint Council for Qualifications acts as a central body for the largest awarding organisations in the UK. It provides common guidance and rules in respect of key administrative requirements for examinations (such as timetabling) and responding to proposals from regulators.

In **Ireland**, the Curriculum and Assessment Policy Unit of the Department of Education and Skills (DES) supports the development of overall policy on assessment, curriculum and guidance. The DES approves the curriculum developed by the National Council for Curriculum and Assessment (NCCA). The curriculum sets out what is to be taught and how learning in the particular subject area should be assessed. The NCCA leads developments in curriculum and assessment and supports the implementation of changes (EACEA, 2019a). Syllabus evaluation, re-design and reform is undertaken by a course committee of stakeholder representatives, drawing on research and best practice. The course committee is also responsible for producing guidelines for teachers to assist them in the implementation of the new or revised syllabus. These guidelines are intended as a resource and are not prescriptive (EACEA, 2019d).

In Ireland it is seen as a strength that the NCCA has a clear role in curriculum review, as this allows for distance between the work of the review and the business of government, while also establishing clear lines of communication and accountability. The DES can request a review of specific areas of the curriculum outside of the established cycle of review. The OECD has determined that this method 'allows for urgent issues to be responded to quickly by a minister or council of ministers acting in the public interest without embroiling the political system in the details of a curriculum controversy' (OECD, 2021a). It should be noted however that the NCCA is not responsible for the design and delivery of national examinations in Ireland. Instead, a separate agency, the State Examinations Commission (SEC), is responsible for the development, assessment, accreditation and certification of the Junior Cycle Certificate and the various forms of Leaving Certificate. The SEC is a non-departmental public body operating under the auspices of the DES.

In **Finland**, the national administration of education and training has a two-tier structure. The Ministry of Education and Culture is the highest authority and is responsible for all publicly-funded education in Finland. The Finnish National Agency for Education (EDUFI) is the national development agency responsible for early childhood education and care, pre-primary, basic, general and vocational upper secondary education, as well as for adult education and training. The EDUFI assists the Ministry of Education and Culture in the preparation of education policy decisions and in implementing national education policies. It is also responsible for preparing the national curriculum and requirements for qualifications. In drawing up national qualification requirements, the EDUFI works with employers, employees, teachers and subject experts, as well as national stakeholder groups. Afterwards, the draft requirements are subject to broader consultation with trade unions, vocational organisations and education providers. The EDUFI however, is not responsible for national examinations. It is the Finnish Matriculation Examination Board that has responsibility for the development, content and administration of the Matriculation Examination. Associate members assist members of the board in preparing and moderating the tests, which are marked in upper secondary schools (O'Donnell, 2018).

In **Iceland**, the Ministry of Education, Science and Culture is responsible for the implementation of legislation at all school levels, from pre-primary and compulsory education through to the upper secondary and higher education levels, in addition to continuing and adult education and music schools. The Ministry is also responsible for producing national curriculum guides, issuing regulations, and planning educational reforms. The Ministry also holds responsibility for evaluation of the school system, assessment of schools, and national

assessment of pupils in accordance with legislation. The Ministry produces national curriculum guides which set out schools' pedagogical role, the objectives and structure of school activities, subject content, organisation of study, and general policy on teaching and instructional organisation (EACEA, 2018a). Examinations and other forms of assessment, usually written, are carried out by individual teachers and schools. Assessment is therefore not standardised across different schools and teachers.

The infographic for Iceland is useful in illuminating the very simplified structure of Iceland's education system. In this jurisdiction, there are no separate national agencies or bodies that sit between the Ministry and the municipalities. The OECD has recommended that Iceland consider invigorating or, where necessary, creating additional institutional structures, processes and ways of working that foster a stronger implementation culture within the education system in Iceland. The OECD (OECD, 2021b) has been critical of current methods of stakeholder engagement, which it suggests normally involve traditional consultation where stakeholders are invited to comment on something already developed. Furthermore, the OECD has determined that defaulting to this system of engagement is a barrier to developing more innovative approaches which would yield better insights and stronger results. Additionally, the OECD has identified that there are pockets of foresight, anticipation, and innovation occurring within the Icelandic education system, but has commented that 'there do not appear to be systemic mechanisms or organisational processes to tap into them, leveraging their insights to inform policy design and implementation or disseminate practice' (OECD, 2021b, p31).

In **Norway**, the curriculum is developed by teachers, researchers, teacher trainers and other specialists within each subject who are appointed by the Directorate for Education and Training, which is an executive agency for the Ministry of Education and Research. The curriculum consists of the Core Curriculum, the Quality Framework, subject curriculum and a framework regulating the distribution of periods and subjects (EACEA, 2019b). The Directorate is responsible for the development, implementation and administration of the overall system of testing and assessment, including the provision of information and guidance materials. Written examinations are produced by the Directorate for Education and Training and assessed by examiners appointed by the Directorate. At a regional level, Norway's 11 counties are responsible for implementing centrally-supplied written examinations in lower secondary education and upper secondary education. They are also responsible for delivering locally-determined oral examinations and for the administration of examination-related complaints. The counties are also responsible for selecting subjects and candidates for examinations, based on the framework provided by the Directorate (EACEA, 2021).

In **New Zealand**, the Ministry of Education (MoE) is responsible for developing national guidelines and providing curriculum statements and achievement standards. The MoE is responsible for monitoring the performance and capacity of the New Zealand Qualifications Authority (NZQA), which is a Crown entity. A Crown entity is an organisation that forms part of New Zealand's state sector established under the Crown Entities Act 2004, a unique umbrella governance and accountability statute. MoE monitoring is based on a high-trust, 'no-surprises' approach, where a Crown entity keeps the relevant minister informed of significant or potentially controversial issues (NZQA, 2017).

As shown in the structural infographic for New Zealand, the NZQA is responsible for developing and maintaining the New Zealand Qualifications Framework (NZQF) and for managing the external assessment of secondary school students. The NZQA is a standards-setting agency and plays a key role in aiding the MoE in designing the national curriculum framework and moderating internal assessment activities and processes. Within this framework, schools can shape and design their own curriculum to meet local needs (MoE, 2015). The MoE emphasises seeking input from students, parents and local actors during curriculum design, in order to incorporate local contexts (OECD, 2021a). The NZQA is also responsible for quality assuring non-university tertiary education organisations and their courses, as well as moderating assessment activities and processes for national qualifications. Any education organisation that proposes to provide a programme of study that leads to a qualification listed on the NZQF must apply to NZQA for approval (NZQA, 2021a). Upper secondary pathways are intended to lead to the credit-based National Certificate of Educational Achievement (NCEA) qualification. Assessment for the NCEA is based on student achievement in a range of units or achievement standards that assess their knowledge and skills within a given subject via internal and external assessment. Internal assessments are moderated by the NZQA which is also responsible for the national, external NCEA examinations (O'Donnell, 2018).

Considerations for Scotland

The NZQA has responsibility for qualifications, assessment and accreditation and also plays a key role in aiding the MoE in developing the curriculum framework. The NZQA is also responsible for the processes of approval, accreditation and registration of entry qualifications for tertiary (non-university) education organisations (TEOs). Such processes include granting approval for the implementation of a new product, undertaking accreditation when a TEO seeks to use or deliver an NZQA-approved programme, and managing registration when an organisation needs to be registered as a private training establishment before it can apply for either approval or accreditation (NZQA, 2021b).

The NZQA was established at the same time as the development of the NZQF in 1989. This reportedly resulted in significant tensions between the NZQA and the MoE. In developing the framework, the NZQA brought together subject and industry experts to develop unit standards for school-based qualifications. Ministry officials believed NZQA was exceeding its legislative role in doing so, as they regarded unit standards for school-based qualifications as part of its remit. This resulted in confusion about the roles of the Ministry and the NZQA regarding curriculum and assessment (Philips, 2000).

As stated in the introduction to this section, Scottish Government has confirmed that it intends to replace the Scottish Qualifications Authority (SQA) with a new specialist agency responsible for both curriculum and assessment, to ensure alignment of these functions (Scot Gov, 2021a). Consequently, it may wish to consider ways in which it can clearly and coherently define the remit of this new agency, especially in its relationship to Scottish Government. In doing so, it could determine where responsibilities and accountability begin and end, and identify areas of potential crossover with the retained responsibilities of Scottish Government and other specialist agencies. To ensure it is seen as distinct from government, consideration could be given to the independence of this agency, along with appropriate accountability mechanisms.

When the NZQA was created, it was considered vulnerable to political changes, as it could find itself restructured or disbanded by central government. Given that the MoE already had primary responsibility for policy, funding and regulatory functions for education, there was a high likelihood that conflict would occur between the NZQA and the Ministry when operating within a highly politicised environment. The development of a qualifications framework, the NZQF, was seen as a key institutional strategy for NZQA to maintain its responsibility for developing and implementing qualifications reforms (Philips, 2003).

As shown in the infographic for Scotland, the SCQF Partnership Board is responsible for maintaining and developing the Scottish Credit and Qualifications Framework (SCQF). The Partnership Board is an independent, non-biased company limited by guarantee, and a Scottish registered charity. Organisations represented on the Board are the College Development Network, Quality Assurance Agency for Higher Education, Universities Scotland and the SQA. The OECD report recommends that with regard to Curriculum for Excellence (CfE), Scotland should 'consider policy and institutional simplification, including ending or combining some policy initiatives and strategic frameworks' (OECD, 2021a, p125). With this in mind, Scotland may wish to consider how it can achieve more coherence in this area, which could be realised through greater convergence of responsibilities.

It is clear from **Table 1** that in the majority of jurisdictions explored in this study, responsibility for the curriculum sits with central government. Where it rests with a specific agency, such as the NCCA in Ireland or the Finnish National Agency for Education (EDUFI) in Finland, this agency is responsible for developing the curriculum, which is then approved by central government. Both the NCCA and the EDUFI also have responsibility for qualifications, but it should be noted that neither is responsible for creating assessment materials or administering high-stakes examinations. In both cases this is the responsibility of a different agency, the SEC in Ireland and The Finnish Matriculation Board in Finland.

Finland

The Finnish National Agency for Education (EDUFI) assists the MoE and Culture in the preparation of education policy decisions and implementing national education policies. It is also responsible for preparing the national core curriculum, requirements for qualifications and principles of assessment. It is the Finnish Matriculation Examination Board, a governmental bureau, that is responsible for the development, content and administration of the Matriculation Examination (EACEA, 2021k). The MoE nominates the chair of the Board and its members at the suggestion of universities and the Finnish National Agency for Education. Approximately 330 associate members assist the members of the board in preparing and moderating the examinations, which take place at the end of upper secondary education and are marked locally, by teachers in secondary schools (O'Donnell, 2008).

The Matriculation Examination was first arranged in Finland in 1852, as an entrance exam to the University of Helsinki. It was restructured in 1874, at which point responsibility for its organisation was given to upper secondary schools, while censors from the University of Helsinki continued to prepare and assess the test questions. Some years later, in 1921, following further reforms, The Matriculation Examination Board was founded (YS, 2021). While more reforms have taken place since then, the nature of the exam remains fairly unchanged in that it requires learners to sit at least four tests, selected from a range of curriculum areas, with only one test, the Mother Tongue exam, being compulsory. In this context, having a separate organisation responsible for the implementation of examinations

in upper secondary education very much reflects the specific nature of the Finnish Matriculation Exam and its unique history.

Ireland

Informed by research and consultation, the NCCA advises the Minister of Education on curriculum design, subject content and examination policy. It is also responsible for leading reform activity. Subject specifications, which include assessment specifications, are drafted by the NCCA and approved by the Department of Education. These syllabuses are then implemented by the SEC, which is responsible for the assessment, accreditation and certification of the Junior Cycle Certificate and the various forms of Leaving Certificate in the Senior Cycle. This is a responsibility the SEC assumed from the Department of Education in 2003. When a subject syllabus is greatly revised or newly introduced, sample question papers are drafted by the SEC, working in collaboration with the NCCA and the DES, to achieve a shared understanding of the syllabus intentions. Grade boundary scores are set in advance and are the same for all subjects and levels (Baird, 2014).

The SEC is staffed by civil servants and its responsibilities also include determining procedures for the conduct and supervision of examinations, recruiting contract staff to draft and mark examination components, and determining procedures for the review and appeal of examinations. It is also responsible for charging and collecting examination fees and for certifying learners (SEC, 2021).

While these two agencies, the NCCA and the SEC, have very different, clearly defined roles, there is obvious crossover between these roles, presenting challenges in terms of achieving alignment between curriculum, qualification design and assessment production and delivery. This is emphasised in an article published in the Irish Times which suggests that the relationship between these two bodies should be reviewed, acknowledging that 'while the capability of external examinations to do justice to the NCCA's curriculum goals is limited, the complex relationship between these two bodies is critically important for successful Leaving Certificate reform' (IT, 2021).

The established Leaving Certificate is the most academic option in upper secondary education in Ireland. It is directly linked to processes of selection for courses of study in further and higher education and involves the examination of all subjects a learner has selected for study (EACEA, 2019e). In general, the Leaving Certificate examinations in Ireland have garnered high levels of public trust and the processes carried out by the SEC are considered to be 'fair, reliable and transparent' (Doyle, 2021).

The OECD has commented that the Leaving Certificate in Ireland is perceived as being particularly high-stakes, attracting a lot of media attention (OECD, 2020). It could be argued that having two agencies responsible for assessment shares the burden of this level of media scrutiny and reduces the potential for politicisation, by separating curriculum, qualification design, assessment policy and reform from assessment implementation and certification. For example, in such a system, criticism of areas such as subject content, qualification design or qualification reform, would not undermine the faith of the public in the agency responsible for implementing examinations and certifying candidates, and vice versa.

As stated in the introduction to this section, Scottish Government has announced that it will replace the SQA with a new specialist agency responsible for both curriculum and

assessment. With this in mind, Scotland may wish to consider the delineation of responsibilities related to assessment and where these would be best positioned. If Scotland were to follow the example of Ireland, this 'specialist agency' could have responsibility for assessment policy and assessment design in qualifications, while another, separate agency would be responsible for the creation of assessment materials, the administration /implementation of external exams and the certification of candidates. If this option were to be considered, the roles of these two organisations and most significantly, the relationship between the two and their means of collaboration and engagement would need to be carefully agreed and formalised to ensure appropriate points of hand-over and maximise alignment between assessment policy and assessment implementation.

3. School inspection

The OECD 2021 report notes that ‘across countries, school evaluation and inspection systems are important means of managing the tensions between local flexibility and national consistency’ (OECD, 2021a, p102). With this in mind, the following information provides an insight into how school evaluation and inspection take place in several jurisdictions, and suggests how they might occur in Scotland in the future.

In many of the jurisdictions considered in the current report, the external inspectorate function for education is part of central government. In Ireland, for example, the inspectorate is a division of the DES and is responsible for the evaluation of primary and post-primary schools and centres for education. Similarly, in Iceland, it is the MoE, Science and Culture that has statutory responsibility for undertaking external evaluations of pre-primary, compulsory and upper secondary schools. In Singapore, it is the MoE that is responsible for inspection. The MoE directly selects officials and experts to inspect schools, and inspections take place every five years (Huang *et al.*, 2019).

In France, which is a much larger jurisdiction in terms of population, they have established a unified inter-ministerial general inspectorate, the General Inspectorate of Education, Sport and Research (IGESR). This amalgamates the inspection responsibilities of the Ministry of National Education and Youth, the Ministry of Higher Education, Research and Innovation, the Ministry of Sport and the Ministry of Culture. The creation of a unified general inspectorate aims for greater coherence in the control, evaluation and monitoring of public policies (MENJS, 2021). The IGESR is not an independent agency, and the head of the IGESR and the members of this body are appointed by decree of the President of the Republic on the proposal of the Prime Minister and the supervisory ministers (EACEA, 2021a). In Norway, where inspection practices focus mainly on compliance with statutory obligations, the Directorate for Education and Training has the overriding responsibility for inspection. The responsibility for carrying out inspections is delegated to the County Governor’s Office which undertakes the inspections and publishes the inspection reports (EACEA, 2021b). The Education Review Office (ERO) is the New Zealand government’s external evaluation agency. The ERO and the New Zealand MoE are two separate government departments and the ERO has its powers and responsibilities defined in statute. The ERO is responsible for evaluating and reporting on the education and care of learners in schools and early childhood services (ERO, 2021).

On the other hand, there are many jurisdictions that have deliberately chosen to make their external inspectorate independent of government. This is to ensure independence and impartiality, which, it has been argued, are key to any inspectorate body aiming to make objective judgements that are rigorous, robust, fair and valid (Baxter, 2014). The inspectorate in England, the Office for Standards in Education, Children’s Services and Skills (Ofsted), is an independent and impartial non-ministerial department of the UK government, reporting to parliament. Ofsted is responsible for inspecting a range of educational institutions, including maintained schools and academies, some independent schools, and many other educational institutions and programmes outside of higher education. It also has inspectorate responsibilities for childcare, adoption and fostering agencies, and initial teacher training.

In Wales, Estyn, the office of Her Majesty’s Inspectorate for Education and Training, is a Crown body and is independent of the National Assembly for Wales but receives its funding

from the Welsh Government. Estyn has a wide remit and is responsible for inspecting pre-school education, schools, initial teacher training, further education, adult community learning and work-based learning (EACEA, 2020b). In 2018, an independent review was undertaken of the role of Estyn. In respect to governance, the report based on the review concluded that 'Estyn's status as a non-ministerial department leaves a degree of ambiguity about its link to ministers' (Donaldson, 2018, p72). The report recommended that the governance arrangements and relationships between the Cabinet Secretary for Education and Estyn should be defined in a framework document in order to safeguard its independence (Donaldson, 2018).

In Finland there is a high level of public trust in the education system and in teachers (Ehren and Baxter, 2020). Teachers therefore have a greater level of autonomy and there is no external education inspectorate. In Finland, quality assurance is primarily the responsibility of the education providers and institutions themselves, who have a statutory duty to evaluate the education they provide and its effectiveness. This is a statutory duty where self-evaluation practices are decided locally and key results of evaluations must be published (EACEA, 2021c). The Finnish National Agency for Education supports education providers and schools in the development of their own quality assurance activities.

The lack of a single dominant pattern for the positioning of a jurisdiction's inspectorate function, if indeed it has one, reflects the diverse range of educational, political and cultural contexts to be found across the various jurisdictions which have been discussed. Historically, in many countries, inspection was largely about compliance with rules and regulations. In recent years, however, there has been a steady shift in focus towards an inspection framework which prioritises the quality of learning and school improvement, offering schools greater autonomy while still ensuring accountability for learning outcomes (Brown *et al.*, 2016). This shift in ideology is supported by the Independent Assessment Commission in England, which states, in a recent report on the future of assessment and qualifications in England, that 'inspection systems should primarily be focused on supporting learning within and across schools, gathering evidence with schools to identify where greatest progress might be made and agreeing a practical strategy to support future action' (IAC, 2021, p14).

In 2019, Ofsted launched a consultation on the draft education inspection framework. Respondents overwhelmingly supported proposals for the creation of new evaluative criteria. The new criteria aim to evaluate the quality of education, focusing specifically on what is intended to be learned through the curriculum, how well it is taught and assessed, and the resulting impacts on learners. Additionally, respondents strongly supported proposals to give greater recognition to education providers' progress in supporting the personal development of learners, as well as creating new evaluative criteria for judging behaviours and attitudes (UK Govt, 2019).

In recent years the ERO in New Zealand has changed its approach to inspection, moving from conducting 'one-off' reviews to building effective ongoing relationships with schools where they work in collaboration, assisting schools in identifying areas for improvement and implementing plans to address these areas (ERO, 2021).

As noted above, in many jurisdictions there has been a gradual ideological shift from relying on external inspection for quality assurance, to focusing on internal school self-evaluations.

These give increased autonomy and ownership to schools by allowing them to determine their own improvement strategies. In 2000, Singapore's MoE introduced the School Excellence Model (SEM). The SEM has two main purposes — self-assessment, and accountability to government for quality assurance. Schools have increased autonomy to set their own targets, determine implementation strategies, undertake data collection to support action, and to engage in an annual cycle of evaluation and improvement (Huang *et al.*, 2019). The School Appraisal Branch within MoE provides consultancy for schools on the implementation of self-evaluation. It also validates the result of school self-evaluation and offers feedback for improvement (You, 2017). Based on SEM results, schools can achieve awards for best practice or sustained achievement. The combination of self-evaluation and awarding makes clear MoE's expectations and offers tangible evidence of schools' merit (Huang *et al.*, 2019).

In 2018, the independent review of the role of Estyn, the inspectorate in Wales, recommended that Estyn's system of school inspection 'should be adapted in a phased way, in line with wider reforms, ultimately to one which is directed towards validation of schools' self-evaluation' (Donaldson, 2018, p56). In February 2019, Estyn proposed a partial suspension of inspection for maintained schools from September 2020 to August 2021, to allow Estyn to focus on supporting schools with curriculum reform. The proposal also included piloting inspections that focus on validating schools' self-evaluation processes (EACEA, 2021d).

In British Columbia, Canada, legislation approved in 2015 abolished British Columbia's Accountability Framework and replaced it with the Framework for Enhancing Student Learning. The original Accountability Framework faced criticism for a lack of flexibility to allow individual districts to set district-level goals. The new Framework encourages local districts to take ownership of improvement efforts, and allows districts to create their own school improvement plans. In Iceland, there is a statutory responsibility on pre-primary, compulsory and upper secondary education institutions to carry out regular internal evaluations. Schools are free to choose methods of internal monitoring but must include the school's policy and objectives, an explanation of how these will be achieved, an analysis of strengths and weaknesses and a plan for improvement (EACEA, 2021e).

In Australia the method of reporting on school performance on a so-called 'school report card' is used to an extent. The process involves a reporting mechanism detailing how schools are performing in key areas such as academic achievement and school improvement (Maughan *et al.*, 2009). Each state's department of education has a role to inspect the quality and standards of K–12 government schools. In New South Wales, the NSW Education and Standards Authority (NESA) has a risk-based approach to inspection which includes the selection of K–12 schools at random for short-notice inspection. The focus of the inspection may differ each year. Schools of all types must provide NESA with evidence of how they intend to address concerns identified through inspection.

In Ireland, inspection procedures focus on following up inspections with schools to support school development planning. While there is no current policy requirement that schools engage systematically in self-evaluation, there has been an emerging focus on self-evaluation as part of the inspection process (EACEA, 2018b).

Considerations for Scotland

Education Scotland was established on 1 July 2011 as an executive agency of the Scottish Government, with responsibility for promoting quality and improvement in Scottish education through support for teaching, learning, leadership and professional development, as well as playing a role in curriculum design. Education Scotland is also the agency where Scotland's inspectorate of education is situated, though until relatively recently it was directly part of the Scottish Government's remit. The OECD have commented that the current configuration, where one agency is responsible for both improving and inspecting schools, is unusual and they have identified the need for 'greater assurance that national aspirations are being delivered for all children and young people' (OECD, 2021a, p126). In response, the Scottish Government have committed to removing the inspectorate function from Education Scotland in a manner that 'maximises impact and helps to balance the dual need for local flexibility of provision alongside national consistency in outcomes' (Scot Gov, 2021a).

The OECD have cited Ireland and the Netherlands as examples of jurisdictions where the inspectorate is part of the ministry 'but with statutory independence and a clear regulatory and evaluation remit' (OCED, 2021, p126). In addition, they have suggested that a repositioned inspectorate could focus on 'developing strategic distance from other organisations and agencies supporting schools that gives stakeholders, the public and the political system confidence in its independence and rigour' (OCED, 2021, p126). With this in mind, Scotland may wish to consider following the examples of England and Wales, as cited in this report. Both are jurisdictions where the inspectorate remains independent of parliament, and is a non-departmental public body where inspection is either the sole focus of the organisation, or a very large focus. Furthermore, additional steps could be taken to clarify the relationship between this non-departmental public body and ministers, in line with the recommendation made to Estyn in Wales. Defining this relationship clearly would help to clarify governance, roles and responsibilities, in addition to bolstering public confidence in the independent and impartial judgements of the inspectorate.

In Scotland there appears to be a strong focus on developing self-evaluation that complements arrangements for external inspection. As Donaldson (2013) posits, 'the powerful relationship between external and internal evaluation is central to stimulating improvement. Each can make a particular contribution, but the synergies arising from the combination of the two can bring particular benefits' (p11). Currently, with the support of their local authority, Scottish schools carry out self-evaluations based on Education Scotland's guidance, including *How Good is Our School?*. This framework is a nationally and internationally recognised brand, and Scotland may wish to further augment this approach.

The OECD report highlighted the 'absence of references to Inspection or to Education Scotland's role as Her Majesty's Inspectorate of Education (HMIE, part of Education Scotland) in considerations of CfE as a school-led process' (OECD, 2021a, p102). The report recommended 'refreshing the remit of an inspectorate of education regarding CfE' (OECD, 2021a, p11). As noted above, Ofsted has recently taken steps to develop new evaluative criteria which focus on the quality of education and the curriculum. Scotland too may wish to consider expanding its inspectorate's conception of 'good outcomes' to more closely align with CfE, particularly in monitoring the development of the Four Capacities in learners, which is a critical aspect of the curriculum.

4. High-stakes assessment

In section 2 of this report, we explored the organisation and governance structures related to the development, implementation and administration of high-stakes examinations, across a variety of jurisdictions. In this section, we consider the wide range of high-stakes assessment systems currently in operation in some of these jurisdictions, to provide additional context. In doing so, this report acknowledges that assessment is a value-laden, social activity (Stobart, 2008). Consequently, it is important to bear in mind that the assessment systems explored here reflect the specific societal, historical and cultural factors that influenced their development, and they should be considered in this context (Stobart, 2021).

England and Wales

In England and Wales, at the end of Key Stage 4 (age 16) learners take General Certificate of Secondary Education (GCSE) examinations. Learners staying on in school can progress from GCSE to AS (Advanced Subsidiary) and A (Advanced) level qualifications. In England, AS-levels and A-levels are separate qualifications. In Wales, AS-levels contribute 40% to the full A-level. The examinations for these qualifications are single-subject high-stakes assessments which are important for student progression and for secondary school accountability (EACEA, 2021a). Assessment is mainly by written examinations, though there are exceptions where other types of assessment are also used because they are considered more appropriate to testing specific skills, such as practical or performance-based skills. Where grades are based partly on non-examination forms of assessment, assessment usually takes the form of controlled internal assessment, conducted under teacher supervision.

Once external assessments have been sat, exam papers are marked by the awarding bodies responsible for the qualifications, using trained examiners, with high degree of monitoring of marking in place. Following marking, grade boundaries are set, and grades are then awarded. Nationally determined subject-specific criteria are provided, and sets out the knowledge, understanding, skills and assessment objectives for a given subject to ensure a high degree of commonality across different awarding organisations. However, this allows for some divergence between the various awarding bodies: subject specifications, assessments and grade boundaries can differ within the same subject.

In Wales, approved Welsh GCSEs, A-level and AS-level qualifications, unique to Wales, are offered only by the WJEC awarding organisation. Where there is no approved qualification, a GCSE, AS- or A-level qualification designed for use in England, provided by AQA, Eduqas (WJEC), OCR or Pearson, may be designated as eligible for use in Wales. Wales uses a grading system based on letters, while England uses a numerical grading system, which can result in different kinds of grades for learners in Wales (EACEA, 2020a).

Singapore

In Singapore, the Singapore Examinations and Assessment Board (SEAB) is responsible for developing and conducting national examinations. The first high-stakes assessment takes place at the end of primary school, when all students take the Primary School Leaving Examination in four subjects: English, Mathematics, Science, and Mother Tongue Language. The results of these examinations are significant as they determine which stream a learner

will take as they enter secondary school: Express, Normal (Academic) or Normal (Technical). All streams offer the same courses of study, but Express is accelerated and Normal (Technical) offers more applied work. Singapore is currently piloting a system that allows learners to choose specific streams for specific subjects, rather than their overall course of study. This 'subject-based banding' is an arrangement that currently exists in all primary schools, and the goal is to implement it in all secondary schools by 2024 (NCEE, 2021).

In Singapore's secondary schools, the Express stream is a four-year course leading to the Singapore-Cambridge GCE Ordinary Level (O-Level) examinations, while the Normal (Technical and Academic) streams are four-year courses leading to the Normal Level (N-Level) examinations. These exams are undertaken after four years of study in Secondary Four where students tend to be around the age of 16. 'Normal' N-Level learners have the option to take O-Level examinations in their fifth year. Learners who complete their GCE O-Levels may proceed directly to one of Singapore's polytechnics or to study for Advanced A-Level exams if they wish to attend university. The SEAB, MoE and Cambridge Assessment International Education are the joint examining authorities for the GCE O-Level, N-Level and A-Level examinations (SEAB, 2021).

Academically strong learners in Singapore also have the option of choosing the Integrated Programme (IP) after Primary 6. The IP is a six-year programme offered by 18 schools in Singapore and aims to stretch learners' potential by broadening their learning experiences beyond the traditional academic curriculum. The IP allows university-bound students to skip the GCE O-Level Examinations. Learners attending IP Schools are required to take either GCE Advanced ('A') Level Examinations or an International Baccalaureate in their sixth year of study (Tan *et al.*, 2017).

Norway

In Norway, where teacher autonomy levels are high in the decentralised system, teachers play a central role in assessing their students using their own professional judgement. Overall marks in subjects for years when marks are awarded (Year 8 onwards), are set by the teacher and are entered on the students' school leaving certificates. Students in Year 10 are sampled randomly to sit a centrally-supplied, locally delivered written examination in one subject (Norwegian, Mathematics or English) and a locally delivered oral examination in one subject. On the school Leaving Certificate of compulsory education, there will generally be achievement marks in 16 subjects and examination marks in two of these subjects.

In terms of high-stakes assessment in the upper secondary phase of education, the Directorate of Education and Training in Norway is responsible for the development, implementation and administration of the overall system of testing and assessment. The two tiers of local government, the municipalities and counties, have local responsibility for implementing centrally-supplied written examinations. The counties are responsible for deciding which subjects and which candidates will be selected for these examinations based on the framework provided by the Directorate of Education.

The selection of candidates by the counties aims to ensure that pupils are evenly distributed for examination. As a rule, this is based on a random selection (EACEA, 2021b). This randomisation means that students may not be examined in any of the core subjects or a subject which is relevant to their particular career plans. The OECD has recommended that

such sample-based examinations are more appropriate for education system monitoring as opposed to individual student assessments, because examinations to certificate individual student performance should allow students the opportunity to show their best performance (Nusche *et al.*, 2011). In some subjects, students have only 48 hours' notice to prepare for an examination and, in most subjects, they are allowed to bring any aids they wish. This has led to criticisms that students who have learning resources and parental support at home are advantaged over others (Nusche *et al.*, 2011).

Finland

In Finland, when entering upper secondary education, students can choose to follow the general upper secondary pathway or the vocational upper secondary pathway, Vocational Education and Training. Either pathway can be reduced to two years or extended to four years, and students are given the option to undertake one year preparatory or pre-vocational study before entering upper secondary education.

Following reforms in 2021, Finland extended compulsory education for learners from the age of 16 to the age of 18. Compulsory education therefore ends when a learner reaches the age of 18 or takes the general upper secondary education and Matriculation Examination or a vocational qualification. Assessment in the vocational upper secondary pathway takes the form of locally-determined work-based or practical task assessments, student self-assessment, and groupwork assessed by teachers, using a competence-based approach (EACEA, 2021c).

The only high-stakes nationally-set external assessment in secondary education is the Matriculation Exam, which is related to the general upper secondary pathway. For the Matriculation Exam, students choose five areas of study to be assessed and are also free to include one of more optional tests (EACEA, 2021d). Further flexibility is offered within the organisation and structure of the Matriculation Exam itself, which is held biannually in spring and autumn. Students can choose to take the examination tests in one examination period or complete them across two or three consecutive examination periods.

A candidate who has failed a compulsory Matriculation Examination test is offered the opportunity to retake the test twice during the three consecutive examination periods immediately following it. A candidate retaking a failed compulsory test can also change the level of the test, providing at least one test based on an advanced course is still included in their examination (O'Donnell, 2018).

The Finnish Matriculation Examination Board is responsible for the development, content and administration of the Matriculation Examination. Exams are marked by secondary school teachers in schools and then moderated by the Exam Board. General upper secondary studies can be accomplished via distance learning, while preparations are also now beginning for the Matriculation Examination to be delivered online.

France

In France, learners in upper secondary school choose which form of the French Baccalauréat they wish to study. The Baccalauréat is a group award taught and examined during the final two years of secondary education. The Baccalauréat Général has a focus on academic subjects, while the Baccalauréat Technologique focuses on technical and

vocational subjects or artistic subjects, such as design, music and dance. The third option, the Baccalauréat Professionnel, focuses on general and vocational subjects such as Administration and Management, and is geared towards students who wish to pursue further education as opposed to higher education (UCAS, 2021).

The new Baccalauréat, which will be implemented from 2021, will increase subject choice for students and introduce an element of internal assessment. Examinations will constitute 60% of the student's final grade; 30% of the final grade will be measured via standardised assessments in the first and final years of upper secondary education, and school report cards across the three years of upper secondary education will account for the final 10% of the grade (OECD, 2020a).

The responsibility for the central administration of Baccalauréat examinations belongs to the Ministry of National Education, Youth and Sports. Juries are formed by the Chief Education Officer to assess students. The president of each jury is a teacher of higher education. During their deliberations, juries are given access to each candidate's school report book as an element of assessment, which contains score averages and teacher comments. The sovereign nature of the jury is the guarantee of its independence. The decisions of the jury are final (EACEA, 2020c).

New Zealand

In New Zealand, the National Certificate of Educational Achievement (NCEA) is the main secondary school qualification. The NCEA is a credit-based qualification, where learners can earn credits to put towards the Certificate, over a number of years, which includes credits gained through tertiary study or workplace learning after they have left school (O'Donnell, 2018).

New Zealand's education system is not divided between general and vocational education at school level, allowing greater integration between the pathways (MoE, 2021).

The NCEA is actually three certificates: it can be awarded at Levels 1, 2 and 3. Students usually begin studying for their NCEA level 1 in Year 11 and continue through Years 12 and 13, from ages 15 through to 18 (NZQA, 2021c).

Assessment for the NCEA is based on student achievement in a range of units or achievement standards. Unit standards are internally assessed, and achievement standards can be internally or externally assessed. Internal assessments for the NCEA are moderated by the NZQA, which is also responsible for the national NCEA examinations. Internal assessments can take the form of written work, but can also include performances, oral presentations and practical tasks.

NZQA's quality assurance processes for internal assessments adopt a sampling approach to moderation, whereby around ten per cent of a school's internal assessments are checked by a network of moderators. External assessments take place at the end of each year and can include the submission of a portfolio of work for subjects with a practical component. The national examinations are run by the NZQA and marked by subject experts (O'Donnell, 2018).

Ireland

In Ireland, the State Examinations Commission (SEC), is responsible for the development, assessment, accreditation and certification of the Junior Cycle Certificate and the various forms of Leaving Certificate in the Senior Cycle. The Junior Cycle Certificate, which is the first high-stakes examination learners take, is being replaced by the Junior Cycle Profile of Achievement (JCPA) in 2021.

Assessment for the JCPA takes the form of two classroom-based assessments: an Assessment Task in each subject that is marked by the State Examination Commission; and a Final Examination, set, administered and marked by SEC. The combination of the results of the Assessment Task and Final Examination generate a grade, which is then certified by the SEC.

During the first two years of the Senior Cycle, students can take one of three programmes, all leading to a state examination: the traditional Leaving Certificate; the Leaving Certificate Vocational Programme; or the Leaving Certificate Applied (LCA). The traditional Leaving Certificate is typically taken when students are 17 or 18 years old. Students are required to take at least five subjects, one of which must be Irish. The vocational programme is similar but has a technical, vocational focus. The LCA programme is a self-contained two-year course which takes a cross-curricular approach as opposed to being strictly subject-based (EACEA, 2019a).

Considerations for Scotland

Having explored the high-stakes assessment arrangements across a range of jurisdictions, it is clear there is no single dominant model. There is commonality to be found however, in the sense that externally set high-stakes exams currently play an important role in all the education systems identified in this section, not only those in the British tradition. This particular finding concurs with a recent study by Cambridge Assessment (2021), focusing on ten repeatedly high-performing jurisdictions (RHPJs), which concluded that around two-thirds of all RHPJs, including several from across Europe, use external assessment at the end of basic secondary education, and such assessments are seen as critical in determining students' directions in upper secondary education (Suto and Oates, 2021).

What is also clear is that the majority of jurisdictions considered in this report have a dedicated agency in place that is responsible for the development, implementation and administration of high-stakes examinations, as captured by the infographics and summarised in the table below:

Table 2: High-stakes examinations in selected jurisdictions

Country	Examination	Responsible Agency
England	GCSE, AS and A-level	Awarding Organisations: AQA, OCR, Eduqas and Pearson
Finland	Matriculation Examination	Finnish Matriculation Examination Board
Ireland	Leaving Certificate	State Examinations Council

Country	Examination	Responsible Agency
New Zealand	National Certificate of Educational Achievement (NCEA)	NZQA
Singapore	GCE N(T)-Level, GCE N(A)-Level, GCE O-Level and GCE A-Level Examinations	SEAB and University of Cambridge Local Examinations Syndicate (UCLES)
Wales	GCSE, AS and A-level	Awarding Organisations: WJEC, AQA, OCR, and Pearson

This prevalence demonstrates that there are distinct benefits to be derived from having an agency that has a clearly designated role in the development, implementation and administration of high-stakes assessments.

In October 2021, Scottish Government confirmed that exams and national qualifications are to be reformed, and confirmed that it is expected that externally marked exams will remain part of the new assessment approach for high-stakes qualifications (Scot Gov, 2021b). With this in mind, Scotland may wish to consider embarking on a period of lengthy, extensive, transparent and robust consultation, with a view to accurately gauging the appetite for change to the assessment system in Scotland. The approach consulted upon should be supported by research to ensure all resulting proposals are evidence-based. Arguably, established assessment systems are underpinned by different philosophies and perspectives, which may need to change for systems to evolve. Changes to assessment systems, therefore, depending on the extent of change, may also require cultural change.

5. Regulation of qualifications

This section of the report focuses on regulation of qualifications and draws on practice from a range of educational systems identified as high-performing jurisdictions.

Currently, the Scottish Qualifications Authority (SQA) is the statutory body for qualification awarding and regulation in Scotland. SQA's duties are to develop or accredit, validate, assure quality, award and inform on the attainment of a broad range of Scottish qualifications.

The OECD review made a recommendation to 'combine effective collaboration with clear roles and responsibilities' (2021a, p123). The OECD also suggested that 'consideration should be given to a separate body that might be responsible for the regulation and quality of qualifications which is currently part of the remit of the Scottish Qualifications Authority (SQA)' (p123). In general, the OECD report suggests that matters relating to the following areas should be governed at central or national level:

- ◆ planning and structure, including laws and regulations
- ◆ qualification frameworks
- ◆ accreditation requirements
- ◆ the use of national examinations or assessments

The role of the regulator

The scope of regulation is not a given. However, Braithwaite *et al* (2007) propose that 'regulation can be conceived as that large subset of governance that is about steering the flow of events and behaviour, as opposed to providing and distributing' (p3). In relation to regulation of qualifications, Ofqual suggest that regulation could be referred to 'measures taken in the public interest to assure the quality of examinations and qualifications', and that it is a 'broad concept and can be interpreted to include other concepts, such as quality assurance' (Ofqual, 2008, p18). Furthermore, according to Wolf (2010), the principal tools of regulation in education are:

- 1) initial and permanent licensing of providers
- 2) regular re-licensing of providers
- 3) inspection
- 4) publishing quantitative measures of individual providers' output and/or quality
- 5) direct control and regulation of products and/or delivery mechanisms

On the role of the regulator, Steinberg and Hyder (2011) note that 'the regulator is likely to be most effective if it is allowed to focus on a specific objective, rather than a collection of objectives. Narrow and deep regulation creates a more effective regulator than a broad and superficial approach' (p35).

With such definitions and references in mind, regulation and regulatory bodies are presented from high-performing jurisdictions.

UK regulators

In the UK, qualification regulators include Ofqual, Qualification Wales, and the Council for the Curriculum, Examinations and Assessment Regulation.

England

In England, Ofqual (Office of Qualifications and Examinations Regulation) is responsible for regulating qualifications, examinations and assessments. Ofqual is the independent regulator, and was established as a non-ministerial government department in April 2010.

Ofqual aims to ensure that the qualifications market in England is fit for purpose. It achieves this aim by using research-based evidence, and considering risks associated with qualifications standards. In the context of GCSEs and A-levels, there are a number of awarding bodies and qualifications, so regulating standards is an important part of Ofqual's remit to regulate the market. In the vocational space, Ofqual regulates around 150 awarding organisations. Ofqual recognises these awarding organisations which offer regulated qualifications, and checks that the organisations meet Ofqual's Conditions for Recognition. Ofqual holds awarding organisations to account for meeting these Conditions for Recognition.

Being recognised as a regulated qualification is the first and necessary step in regard to public funding of qualifications. Under Section 96 of the Learning and Skills Act 2000, qualifications intended for learners under the age of 19, as well as being regulated, must be approved by the Secretary of State for Education for them to be eligible to receive public funding. Regulated qualifications intended for learners aged 19 and over must also be approved by the Education and Skills Funding Agency (ESFA) in order to be eligible to receive public funding (EACEA, 2020d).

Wales

In Wales, Qualifications Wales (QW) has responsibility for the regulation of general and vocational qualifications outside higher education. It is an independent statutory body accountable to the National Assembly for Wales and is funded by the Welsh Government. It was established under the Qualifications Wales Act 2015. It also aims to ensure that the qualifications market in Wales is fit for purpose. In a similar way to Ofqual, it is research-based, evidence-led, and takes care to consider qualification standards.

QW recognises awarding organisations to offer either 'approved' or 'designated' qualifications, and monitors how organisations meet its Criteria for Recognition. These Criteria hold awarding organisations to account by following a required Regulation Policy. QW also establishes and upholds criteria that specified qualifications themselves must meet, and maintains a register of all regulated qualifications (both 'approved' and 'designated') for teaching in Wales. Additionally, the organisation must report publicly on these qualifications and on the organisations that offer them (QiW, 2021b).

The Qualifications Wales Act 2015 only permits centres to offer learners general qualifications which are either 'approved' or 'designated' by QW. Approved qualifications have been developed by the WJEC exam board and have met approval criteria that ensure they meet the needs of learners in Wales. In theory, for GCSEs and A-levels reformed specifically for Wales, other awarding bodies could offer these in Wales – not just WJEC. QW has to 'test the market' to see whether other awarding organisations outside of Wales would wish to develop GCSE or A-level qualifications and be subject to approval. Currently, there is a relatively small number of designated qualifications (58) which fall outside the subjects which have been reformed for learners in Wales. These designated qualifications

have been developed by the AQA, Eduqas (WJEC), OCR and Pearson exam boards, and are principally offered in England and regulated by Ofqual. All approved and designated qualifications offered to learners in Wales are available on the Qualifications in Wales (QiW) register (EACEA, 2020a).

Finland

The education system in Finland combines curriculum regulation and de-regulation. Therefore, while national assessments of learning do take place, these are sample-based, to support curriculum enactment and improvement, as opposed to existing as a tool designed to also be used for accountability or control (Nieveen, 2012). External evaluations are mainly carried out by the Finnish Education Evaluation Centre, which operates as a separate unit within the Finnish National Agency for Education (EACEA, 2021d). In Finland, it is the Finnish Matriculation Board that is responsible for the development, content and administration of the Matriculation Examination, which is held at the end of general upper secondary education and is considered fundamental for entry into higher education. These exams are self-regulated in the sense that they are not regulated by another external body.

New Zealand

In New Zealand, the New Zealand Qualifications Authority (NZQA) was established in 1989 to co-ordinate national qualifications. For example, when an education organisation proposes a programme of study that leads to a qualification listed on the NZQF, it must apply to (NZQA) for approval of the programme under the Education and Training Act 2020, section 439.

Approved programmes can only be delivered by accredited providers (NZQA, 2021a). NZQA has developed guidelines for applying for approval of programmes leading to New Zealand qualifications listed at Levels 1–6 on the NZQF, and the accreditation of organisations to provide approved programmes. The guidelines provide programme owners, education providers, and quality assurance body analysts with information and guidance about how to meet the criteria for programme approval and for accreditation. In addition, they describe how NZQA will make decisions to approve applications.

In New Zealand's approach to regulation, the National Qualifications Framework, based on nationally agreed unit standards, brings together secondary, industry training and tertiary education. This system is co-ordinated and administered by the NZQA. The NZQA is also responsible for advanced vocational awards qualifications and trade certificate qualifications, whereas national certificates and national diplomas are developed by industry training organisations or other standards-setting bodies.

The NZQA Board and Management members represent industry, community and education interests. They are appointed by the Minister of Education, who also approves all policy matters related to schools. Importantly, and in line with the OECD recommendations, NZQA does not write the curriculum — it deals with the provision and quality of qualifications.

With regards to accreditation in New Zealand, NZQA reviews applications for accreditation to provide an approved programme from NZQA-recognised education organisations. Several types of education organisation can be accredited to provide programmes of study including, for example, private training establishments, institutes of technology and polytechnics, and

schools. Industry training organisations are not granted accreditation, but need to maintain consent to assess for the assessment standards included in the programme they will assess. Such organisations must apply to the NZQA to gain consent to assess. (NZQA, 2021a).

Iceland

In Iceland, the MoE, Science and Culture is responsible for the implementation of legislation at all school levels, including adult education. The Ministry is also in charge of producing national curriculum guides for pre-primary, compulsory and upper secondary schools, issuing regulations, and planning educational reforms. It is also responsible for the implementation of the laws, regulations and curriculum guides at all levels, as well as the evaluation of the school system, assessment of schools, and national assessment of pupils according to the legislation (EACEA, 2018a).

Ireland

In Ireland, the Department for Education and Skills (DES) determines the general regulations for the recognition of schools, approves the curriculum developed by the National Council for Curriculum and Assessment (NCCA), and establishes regulations for management (NCCA, 2021). It is the responsibility of a separate agency, the State Examinations Commission (SEC), to deliver examinations. The SEC is responsible for the development, assessment, accreditation and certification of the Junior Cycle Certificate and the various forms of Leaving Certificate. The SEC is a non-departmental public body under the aegis of the DES and is responsible for accrediting secondary-level examinations in Ireland (Ofqual, 2008).

The Curriculum and Assessment Policy Unit (CAP) of the DES in Ireland is responsible for the development of overall policy relating to assessment, curricula and guidance. It provides syllabuses, guidelines for teachers, circulars to schools, and prescribed material for the examinations. It also provides financial and other support to a range of related bodies. It provides funding for standardised testing and supports the implementation of the national literacy and numeracy strategy.

Singapore

In Singapore, there are no government-recognised accreditation or regulation systems for post-secondary or higher education as such. Public institutions, which include autonomous universities and polytechnics, are founded according to legislation. Two exceptions to this rule are the Singapore Institute of Technology (SIT) and Singapore University of Social Sciences (SUSS). Both were initially private institutions, but SIT became an autonomous university in March 2014, and SUSS in August 2017. Since then, these institutions have been allowed to issue their own degrees (SEAB, 2021).

Private-sector institutions in Singapore may provide education at all levels and offer their own certificates and diplomas as final qualifications. These certificates are not nationally recognised diplomas. All private education institutions must be registered with the Committee for Private Education (CPE). This obligation also applies to foreign institutions with a campus in Singapore. However, registration with CPE is not equivalent to recognition or accreditation. Furthermore, the CPE does not guarantee the quality of the education programmes (Nuffic, 2019).

However, the relationship between the MoE, Singapore Examination Board (SEB) and Cambridge Assessment, could be viewed in terms of regulation – in that Cambridge Assessment is “de-facto regulated” by the MoE and SEB in respect of quality of qualifications.

Considerations for Scotland

The OECD review (2021a) of Scotland’s education system recommends consideration should be given to the establishment of a separate body that ‘might be responsible for the regulation and quality of qualifications, currently part of the remit of SQA, but the development work would be undertaken alongside the development of the curriculum’ (p127). As noted earlier, SQA is currently the statutory body for qualification awarding and regulation in Scotland, and its duties are to develop or accredit, validate, assure quality, award and inform on the attainment of a broad range of Scottish qualifications.

When considering future approaches to regulation of qualifications in Scotland, there are several points to keep in mind. In particular, regulation and/or regulatory activity can be defined differently depending on context. For example, the Qualifications and Curriculum Authority (QCA) described its regulatory activity in the following terms: ‘QCA regulates awarding bodies, qualifications, examinations and national curriculum assessments to ensure that the qualifications market is fit for purpose, that qualifications are fair, standards are secure, public confidence is sustained and that QCA acts as the public champion of the learner’ (Nisbet and Greig, 2007, p1).

Additionally, according to Oates (2005) there are a range of factors that affect regulation of qualifications, particularly in an international context. Firstly, the uptake and regulation of qualifications occur in very different ways in different countries. Secondly, regulation operates through a complex mix of formal processes (law, etc), and non-formal processes (culture, expectations, legacy/traditions). Thirdly, education and training are regulated not only through legislation (and so on) that is specific to the education and training arena. Incentives and drivers in the labour market (ranging from the state of the economy to labour market regulation) affect the operation and uptake of vocational qualifications.

In the context of Scotland, these points are pertinent. The presence of a qualifications market in relation to vocational qualifications, and in the context of the labour market coupled with Scotland’s strategic economic strategy is important to consider. The question is to what extent could a strengthened qualifications regulator contribute to this, while also taking into account the cost of greater regulatory burden through a detailed cost-benefits analysis.

From the examples provided in the previous section, considerations for Scotland may include adopting a similar model to other regulatory bodies within and/or outside the UK (ie non-educational bodies). Any consideration should take into account the context and history of a jurisdiction. For example, according to Ofqual (2008), regulation in the UK increased in significance as an area of enquiry following the privatisation of public utilities during the 1980s. Also, ‘the provision and regulation of qualifications in England has a distinct history, which is different both from that of qualifications in other jurisdictions and from the post-1980s experience in other UK public utilities’ (p1). Other factors worth considering in the context of the role of accreditation and regulation should include the purpose(s) of qualifications within the context within which they operate. Arguably, the role of a regulator should be to support the designated qualification purposes (eg for certifying learner

knowledge, understanding and skills, to act as a learners' currency for progression to further educational and employment opportunities, for educational institutional accountability, national accountability, etc), so that the purposes can be met and without compromising the integrity of qualifications.

A further consideration could be that time be taken to understand the assumptions and challenges of a regulatory body. Accreditation and regulation could remain within the new curriculum and assessment body, and there is a case for regulation moving from a voluntary system to a formalised system for all publicly-funded qualifications.

6. Trust, empowerment and autonomy

The purpose of this section is to understand how trust, empowerment and autonomy can be key factors in education systems, particularly in high-performing jurisdictions. Trust, empowerment, and autonomy play a significant part in education systems, as identified by OECD (2021a, p.79): 'Empowerment is a process that requires trust between decision makers and stakeholders: it takes time to take root, as well as resources and support, as the stakeholders empower themselves and develop the necessary capabilities, expertise and self-confidence to fulfil their mission'.

Understanding international experience of these key themes will help to inform consideration of Scotland's education system.

Over the last few decades, jurisdictions such as Finland, Norway and Iceland have decentralised their education systems by devolving decision-making powers to local and school levels, to establish high-trust systems with increased levels of teacher autonomy. This is reflected in the structural infographics for these countries, which clearly show that many educational responsibilities have been devolved to the local tier, that is, the municipalities. Other countries, such as France and Singapore, have maintained centralised systems, focused on governance at the national tier, while taking steps to devolve some administrative powers to the local level, allowing greater flexibility in managing budgets.

The culture of a country, its population and geography, and its prevailing social values and political climate, directly relate to the degree of centralisation present within its education system. In France, the dominant ideology is republican, which emphasises *égalité* (equality) and the centralised state (Doyle *et al.*, 2021). This ideology is reflected in its education system. The infographic presented for France clearly shows that the state plays a major role in education and is responsible for defining a common curriculum and study programmes and for conducting high-stakes national examinations in upper secondary education. The MoE is also responsible for the recruitment, training and management of school staff (both managers and teachers) in public schools and in private schools that have a contract with the state. Furthermore, teachers in France are employed nationally as civil servants, and a nationally-devised process ensures a balanced supply and distribution of teaching staff across the country.

Since 2015, the OECD has annually identified key challenges for France related to the transfer of some responsibilities for administrative and pedagogical matters from central government to local authorities (OECD, 2020a). However, with regard to France, it has been commented that 'there is a profound scepticism towards policies which are perceived as neo-liberal and potentially endanger the guiding principle of educational equality — even if various studies, including PISA, demonstrate that the education system tends to produce and/or reinforce inequality' (Dobbins and Martens, 2012, p.37). It should be noted however that the new baccalaureate, implemented from 2021, does introduce greater teacher influence via an element of internal assessment. From 2021, examinations will constitute 60% of the student's final grade, while 30% will be measured by standardised assessments in the first and final years of upper secondary education. School report cards across the three years of upper secondary education will account for the final 10% of the grade (OECD, 2020a). This revision, however, still represents an assessment system with low teacher autonomy when compared with those countries which have adopted a more decentralised model.

In Singapore, another example of a centralised system, the MoE allocates funding for all schools, sets course syllabuses and national examinations, oversees teacher credentialing, manages the teacher and principal evaluation and promotion system, and hires and assigns principals and teachers to schools (NCEE, 2021). In Singapore, the SEAB is the statutory agency responsible for conducting high-stakes, nationally-standardised examinations in upper secondary education.

In Finland, the Finnish National Agency for Education (EDUFI) assists the MoE and Culture in the preparation of education policy decisions and implementing national education policies, including preparing the national core curriculum and requirements for qualifications. However, it is the education providers, usually municipalities and the schools themselves, that are responsible for drawing up their own local curricula within the framework of the national curriculum. This approach allows teachers to devise their own local curriculum based on the national framework.

As for assessment in Finland, assessments undertaken during the lower secondary phase and upper secondary phase of education are devised locally by teachers and internally assessed. The only exception to this is the Matriculation Exam. The Finnish Matriculation Examination Board is responsible for the development, content and administration of the Matriculation Examination. The tests are marked internally by the upper secondary school subject teacher and then checked and moderated by the Finnish Matriculation Examination Board. Marking is therefore undertaken locally and only moderated nationally, further enshrining the importance of teacher autonomy and judgement. There are no national tests within the vocational pathway in upper secondary education. Instead, locally-devised work-based / practical assessments are delivered by teachers or workplace instructors.

The trust cultivated within the Finnish education system extends to teachers, and links directly to their increased levels of autonomy. In Finland, teachers are highly educated and valued professionals, and the profession is attractive and teacher training places highly competitive (Halinen, 2018). Trust in the profession can be seen as a direct reflection of the high level of expertise, capability and qualifications possessed by teachers in Finland (OECD, 2021a).

In Norway, there is a two-tier system of local government: the county authorities and the municipalities. The county authorities are responsible for upper secondary education and training, whereas the municipalities are responsible for operating and administering primary and lower secondary schools. Overarching legislation, regulations and the national curriculum, determined by the MoE and Research, provide the national framework. However, within this framework the municipal and county authorities, schools and teachers can influence the implementation of education and training (EACEA, 2019c). In 2017, a government white paper entitled 'Desire to learn – early intervention and quality in schools' noted that 'national competence development frameworks in Norway did not allow for local adaptation', and concluded that 'attempts to create a baseline for national competence standards had left municipalities feeling disempowered' (OECD, 2020b, p.14). In response, Norway has developed a new competence development model for schools that channels funds directly to the municipalities and allows them to determine their own priorities in relation to meeting national goals. The new model also offers enhanced state support and guidance (OECD, 2020b).

In Ireland, which does not have a highly centralised education system, teaching unions have, historically, actively opposed increasing levels of teacher autonomy, specifically with regard to high-stakes assessment. When the revised framework for the Junior Cycle was published in 2012, it advocated the introduction of a classroom-based assessment (CBA) component worth 40% of overall marks, reducing the external exam weighting to 60%. The CBA component, it was proposed, would be set externally but administered and marked by schools (Darmody *et al.*, 2020). This new approach was intended to reduce the focus on one externally-assessed examination for the Junior Certificate qualification, while increasing the prominence given to CBA and formative assessment (EACEA, 2021f). However, the introduction of CBAs faced great opposition from teaching unions and led to the publication of a revised framework in 2015, where the role of CBAs was greatly diminished (Darmody *et al.*, 2020). The revised policy, however, continued to face criticism from teaching unions, with the Association of Secondary School Teachers in Ireland (ASTI) taking the stance that its members should refuse to assess their own students for school certification using CBAs (ASTI, 2016). In March 2017, the SEC responded by announcing that CBAs would no longer be a prerequisite for submission of the Assessment Task which is marked by the SEC (EACEA, 2021f).

In 2020, due to the impact of the COVID-19 pandemic and the cancellation of exams, Ireland awarded Leaving Certificates in the Senior Phase based on teacher-calculated grades, which were moderated by an algorithm, in an attempt to maintain standards. In total, 17% of teacher-predicted grades were lowered to increase parity with previous years, but most teacher predictions were not changed (Kelly, 2021). This, coupled with the fact that teacher-calculated grades survived all legal challenges, instilled confidence in teachers and the public (Doyle *et al.*, 2021). The awarding of teacher-calculated grades during the pandemic represents a radical shift in assessment policy in Ireland and has created renewed debate about potential Senior Cycle reforms. Any long-term impact in terms of Senior Cycle reform remains to be seen (Doyle *et al.*, 2021), but the case in Ireland does clearly demonstrate the importance of confidence and trust when it comes to changing traditional, long-standing assessment ideologies.

Considerations for Scotland

The OECD (2021) acknowledges that education and assessment systems reflect national culture. Stobart posits that educational systems can only be fully understood in the context of their culture, and refers to assessment as ‘a cultural product’ (Stobart, 2021, p21). Within these systems, therefore, cultural change is important to educational reform and essential to sustaining educational improvement (Fullan, 2011). It follows that it is important to understand the prevailing culture before making changes to a system. The approaches presented above from high-performing jurisdictions could be considered for Scotland’s education system, with particular focus on the level of centralisation of education and its consequences. However, changes of this sort may require explicit culture change, either beforehand or in parallel, for them to be effective.

Fostering trust is paramount to effecting cultural change within an education system. Building trust between government, agencies, teacher and lecturers, parents and learners and other key stakeholders, as well as building capacity to respond to reforms, is vital to their success, both in terms of their design and their implementation. Reforms which do not achieve buy-in often cannot fully enact change (Gray and Baird, 2020). In order to build trust in and within the education system, Scotland may wish to consider clearly defining the roles

and responsibilities of those organisations and agencies that play a significant part in that system, so that relationships, expectations and accountabilities are set out in a coherent and transparent way. Scotland may also wish to consider agreeing and defining, in appropriate detail, the mechanisms for communication and engagement with regard to decision making, in order to promote partnership working, the success of which ultimately hinges on reaching consensus, and where necessary, making concessions.

Stobart suggests a better alignment could be achieved between curriculum and assessment if Scotland were to consider a more central role for continuous teacher assessment, via classwork and school-based tests, in line with assessment system models in France, Norway, Finland and New Zealand (Stobart, 2021). It should be noted however, that there is no single form of internal assessment that is associated with repeatedly high-performing jurisdictions (Suto and Oates, 2021, p3). Additionally, an important part of empowerment is the role of initial teacher training in respect of assessment of learners. The move towards increasing teacher autonomy and empowerment, and the perception of it, could also play an important part in achieving the desired culture change, by enhancing the teacher's role and agency.

7. Conclusion

Education systems are not static, but rather exist in a state of constant evolution, adaptation and flux, as they respond to social, cultural, and political drivers for change, while continuously striving to improve (Cambridge, 2017). Many of the jurisdictions explored in this report are either planning reforms, consulting on reforms, implementing reforms or have recently enacted reforms. For this reason, the information presented in this report must be considered as a snapshot taken in time, that briefly captures a picture of a series of complex and constantly evolving education systems.

This report seeks to stimulate debate and identify areas for consideration in a unique Scottish context, in response to the ongoing review of national education agencies in Scotland. The aim is to provide contextualised insights and perspectives that can aid in creating a coherent vision for change. It is important to state that this report is not an exercise in international policy borrowing or 'cherry picking', and that it recognises that isolating one principle, policy or characteristic of a system that works well does not imply that it will work equally well, or even at all, in an entirely different social, cultural and political context.

When considering the inter-organisational structures of the education systems explored in this report, comparing curriculum, qualifications, and assessment, to derive considerations for Scotland, we have sought to identify appropriately contextualised 'conditions of success.' In doing so, an important overarching conclusion has been illuminated: there is no single approach to education governance that is common across all jurisdictions and that can be directly associated with success. By extension, there is no single organisation within the education structures explored, that can be considered a 'template' for success. Organisations are, by their very nature, complex, evolving systems in their own right, and must be considered as such. Success, therefore, where it is defined, arises from 'complex behaviour associated with the inter-relationship, interaction and interconnectivity of elements within a system and between a system and its environment' (Mittleton-Kelly, 2003, p4). The emergent characteristics are more than the sum of their parts and therefore cannot be considered in isolation. With this perspective in mind, the matters presented for consideration in this report are summarised below.

Summary of considerations

Curriculum, qualifications and assessment

- 1 Scotland is currently considering how to establish a new specialist agency, one with responsibility for both curriculum and assessment. In doing so, it may wish to consider ways in which it can clearly and coherently define the remit of this new agency, especially regarding its relationship with Scottish Government. In doing so, it could determine where responsibilities and accountability begin and end, in addition to identifying areas of potential crossover with the retained responsibilities of Scottish Government and other specialist agencies. To be seen as distinct from government, consideration could be given to the independence of this agency along with appropriate governance and accountability mechanisms.
- 2 The development of the New Zealand Qualifications Framework was seen as a key institutional strategy for the New Zealand Qualifications Authority to maintain its responsibility for developing and implementing qualifications reforms (Philips, 2003). In Scotland, the SCQF Partnership Board is responsible for maintaining and developing the

Scottish Credit and Qualifications Framework (SCQF). The Partnership Board is an independent company limited by guarantee, and a Scottish registered charity. Organisations represented on the Board are the College Development Network, Quality Assurance Agency for Higher Education, Universities Scotland and the SQA. The OECD report recommends that Scotland should 'consider policy and institutional simplification, including ending or combining some policy initiatives and strategic frameworks around CfE' (OECD, 2021a, p125). With this in mind, Scotland may wish to consider how it can achieve more coherence in this area, which could possibly be realised via greater convergence of responsibilities.

3. Scotland may wish to consider the delineation of responsibilities related to assessment and where these would be best positioned. In Ireland, for example, one body has responsibility for the curriculum, in addition to holding responsibilities related to qualification design, standards, assessment policy and assessment design, while a different organisation is responsible for the creation of assessment materials, the administration/implementation of external exams and the certification of candidates. The OECD have identified that 'transparency in the division of responsibilities among stakeholders is a necessary condition for policy success in a system that promotes shared responsibility of its curriculum' (OECD, 2021a, p84). With this in mind, should Scotland consider adopting a similar structure, the roles of these two organisations and most significantly, the relationship between the two and their means of collaboration and engagement would need to be carefully agreed and formalised to ensure appropriate points of handover and maximise alignment between assessment policy and assessment implementation.

School inspection

- 4 The OECD have cited Ireland and the Netherlands as examples of jurisdictions where the inspectorate is part of the ministry 'but with statutory independence and a clear regulatory and evaluation remit' (OCED, 2021a, p126). In addition, they have suggested that a repositioned inspectorate could focus on 'developing strategic distance from other organisations and agencies supporting schools that gives stakeholders, the public and the political system confidence in its independence and rigour' (OCED, 2021a, p126). With this in mind, Scotland may wish to consider following the examples of England and Wales, as cited in this report. Both are jurisdictions where the inspectorate remains independent of government, and is a non-departmental public body where inspection is either the sole focus of the organisation, or a very large focus. Furthermore, additional steps could be taken to clarify the relationship between this non-departmental public body and ministers, in line with the recommendation made to Estyn in Wales. Defining this relationship clearly would help to clarify governance, roles and responsibilities, in addition to bolstering public confidence in the independent and impartial judgements of the inspectorate.
- 5 In Scotland there appears to be a strong focus on developing self-evaluation that complements arrangements for external inspection. As Donaldson (2013) posits, 'the powerful relationship between external and internal evaluation is central to stimulating improvement. Each can make a particular contribution, but the synergies arising from the combination of the two can bring particular benefits' (p11). Currently, with the support of their local authority, Scottish schools carry out self-evaluations based on Education Scotland's guidance, including *How Good is Our School?*. This framework is a nationally and internationally recognised brand, and Scotland may wish to further augment this approach.

- 6 The OECD report highlighted the ‘absence of references to inspection or to Education Scotland’s role as Her Majesty’s Inspectorate of Education (HMIE, part of Education Scotland) in considerations of CfE as a school-led process’ (OECD, 2021a, p102). The report also recommended ‘refreshing the remit of an inspectorate of education regarding CfE’ (OECD 2021a, p11). As noted above, Ofsted have recently taken steps to develop new evaluative criteria which focus on the quality of education and the curriculum. Scotland too may wish to consider expanding its inspectorate’s conception of ‘good outcomes’ to more closely align with CfE, particularly in monitoring the development of the Four Capacities in learners, which is a critical aspect of the curriculum.

High-stakes assessment

- 7 In October 2021, Scottish Government confirmed that exams and national qualifications are to be reformed and confirmed that it is expected that externally marked exams will remain part of the new assessment approach (Scot Gov, 2021b). With this in mind, Scotland may wish to consider embarking on a period of lengthy, extensive, transparent and robust consultation, with a view to accurately gauging the appetite for change to the high-stakes assessment system in Scotland, mindful of the wider ecosystem in which qualifications operate as access to HE in Scotland and elsewhere in the UK. The approach consulted upon should be informed by research to ensure all resulting proposals are evidence-based. Arguably, established assessment systems are underpinned by different philosophies and perspectives, which may need to change for systems to evolve. Changes to assessment systems, therefore, depending on the extent of change, may also require cultural change.

Regulation

- 8 The OECD review of Scotland’s education system proposed that consideration should be given to a separate body that might be responsible for the regulation and quality of qualifications, rather than the current situation in which it is part of the remit of the Scottish Qualifications Authority (SQA). Yet the development work would be undertaken alongside the development of the curriculum (p127). Any such consideration should take into account the context and history of a jurisdiction. Regulation and/or regulatory activity can be defined differently depending on context. Also, the uptake and regulation of qualifications occur in very different ways in different countries.
- 9 There are a range of factors that affect regulation of qualifications, particularly in an international context. Examples show that regulation operates through a complex mix of formal processes (law, etc), and non-formal processes (culture, expectations, legacy/traditions). Considerations for Scotland may include adopting a similar regulatory model to that within UK in terms of moving from a voluntary system to a formalised system for all publicly funded qualifications, as is the case in England and Wales. Whether or not this change in function implies a separate organisation is a separate consideration.
- 10 In undertaking any new development in regulation of qualifications, Scotland must be aware of incentives and drivers in the labour market (ranging from the state of the economy to labour market regulation), and how these affect the operation and uptake of qualifications.

Trust, empowerment and autonomy

- 11 Fostering trust is paramount to effecting cultural change within an education system. Building trust between government, agencies, teacher and lecturers, parents and learners and other key stakeholders, is vital to the success of changes, both in terms of

their design and their implementation, and in building capacity to respond to reforms. Reforms which do not achieve buy-in often cannot fully enact change (Gray and Baird, 2020). In order to build trust in and within the education system, Scotland may wish to consider clearly defining the roles and responsibilities of those organisations and agencies that play a significant part within that system, so that relationships, expectations and accountabilities are set out in a coherent and transparent way. Scotland may also wish to consider agreeing and defining, in appropriate detail, the mechanisms for communication and engagement with regard to decision making, in order to promote partnership working, the success of which ultimately hinges on reaching consensus and where necessary, making concessions.

- 12 Stobart suggests a better alignment could be achieved between curriculum and assessment if Scotland were to consider a more central role for continuous teacher assessment, via classwork and school-based tests, in line with assessment system models in France, Norway, Finland and New Zealand (Stobart, 2021). It should be noted however, that there is no single form of internal assessment that is associated with repeatedly high-performing jurisdictions (Suto and Oates, 2021, p3). Additionally, an important part of empowerment is the role of initial teacher training in respect of assessment of learners. The move towards increasing teacher autonomy and empowerment, and the perception of it, could also play an important part in achieving the desired culture change, by enhancing the teacher's role and agency.

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Appendix

This Appendix contains demographic data and PISA results for all the 11 jurisdictions included in this study, and a chart of their educational structure at national, regional and local level. For additional context, this information has also been provided for Scotland.

Australia

Canada

England

Finland

France

Iceland

Ireland

New Zealand

Norway

Scotland

Singapore

Wales

Australia



Size

769, 202 sq km
(2,966,152 sq miles)



Population

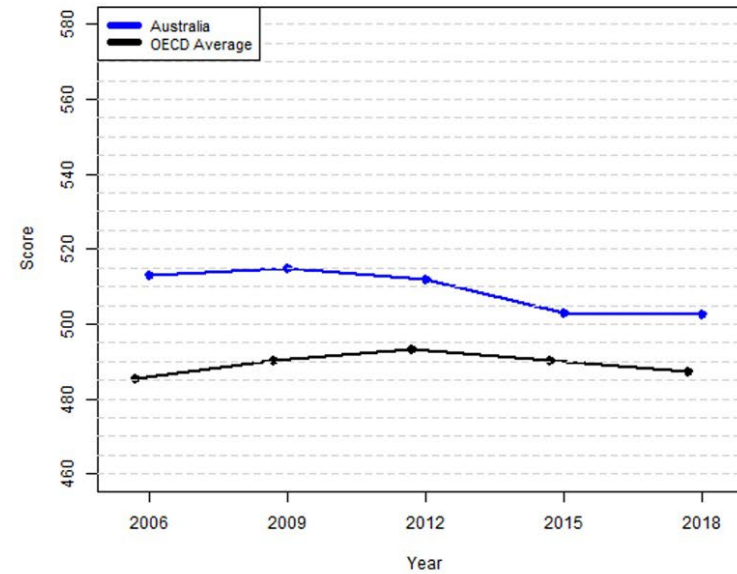
25.9 million



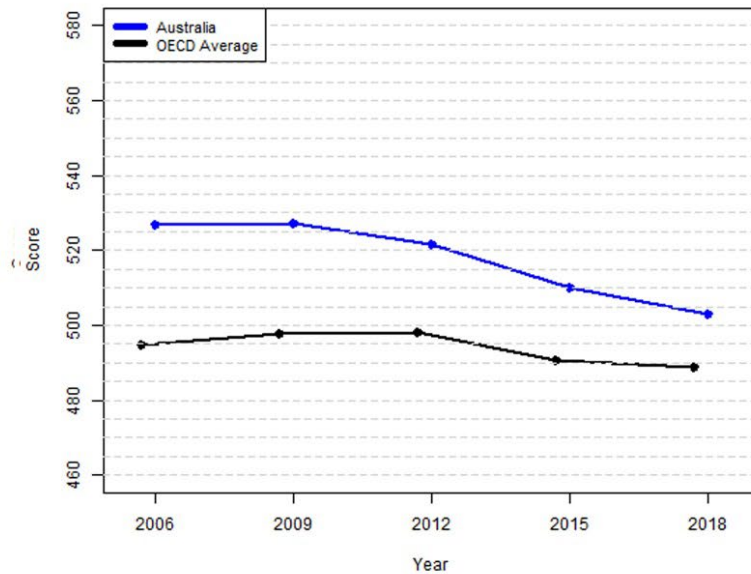
School compulsory age

Up to the age of 17

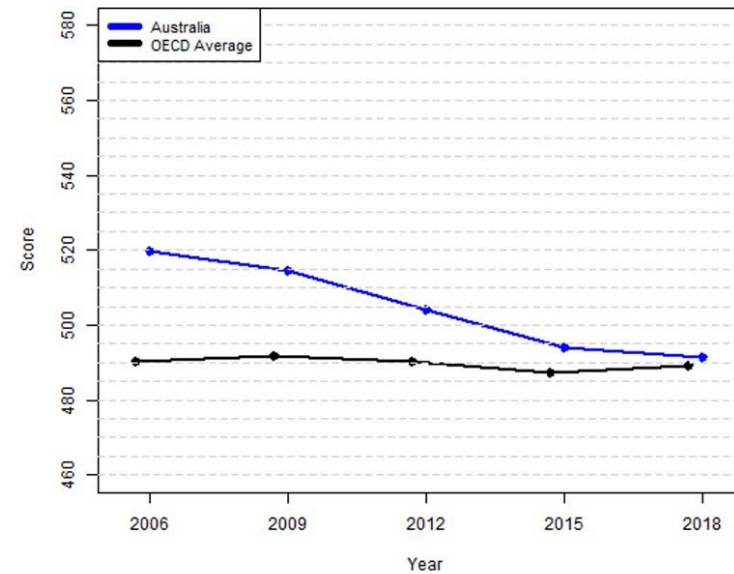
PISA Avg Reading Scores - Australia



PISA Avg Science Scores - Australia



PISA Avg Maths Scores - Australia



Educational Structures and Governance: Australia



Further Education/Higher Education

Inspection/quality assurance

Assessment of school learners

School governance

National

Department of Education, Skills and Employment

Australia is a federal nation; primary responsibility for education is devolved to the eight state and territory governments.

Australasian Curriculum, Assessment and Certification Authorities

Organisation for the statutory bodies in Australia and in NZ responsible for curriculum, assessment, and certification.

Tertiary Education Quality and Standards Agency

Quality assurance and regulation for HE.

Australian Skills Quality Authority

Regulator for the VET sector.

Australian Children's Education and Care Quality Authority

Assists governments administer the National Quality Framework.

Australian Qualifications Framework

Incorporates qualifications into a single national framework.

Australian Curriculum, Assessment and Reporting Authority

National Assessment Program - Literacy and Numeracy

Sample assessments in science literacy, ICT, and civics & citizenship

Promotes excellence in the teaching profession.

Advises on national curriculum, assessment, and reporting.

Australian Institute for Teaching and School Leadership

The National School Reform Agreement sets out eight national policy initiatives that all states and territories have agreed to implement. These are: online formative assessment, senior secondary pathways, teacher workforce needs, initial teacher education accreditation system, national unique student identifier, Australian education research organisation, and improving national data quality.

The school sector is made up of government and non-government (Catholic and independent) schools. In general, state and territory governments provide the majority of funding to government schools, and the Australian Government is the primary source of public funding for the non-government schooling sector.

Educational Structures and Governance: NSW



Inspection/quality assurance

Assessment of school learners

School governance

Regional

NSW Department of Education

NSW Government Education Standards Authority (NESA)

Centre for Education Statistics and Evaluation

Accreditation of teachers; approval of teacher education; professional teaching standards; the school curriculum; basic skills testing; granting of Records of School Achievement (RoSA) and Higher School Certificates (HSC); registration and accreditation of schools; approval of providers of courses at schools to overseas students; and reporting and advising on matters relating to NESA's functions.

Analysis of education programmes and outcomes to inform evidence-based decision making.

Catholic Schools NSW (CSNSW)

Association of Independent Schools NSW (AISNSW)

Implementation of the Australian Curriculum is the responsibility of states and territories. NESA has legislative responsibility for setting and monitoring the Kindergarten to Year 12 curriculum for NSW schools. NESA is responsible for developing syllabuses and also for the endorsement of courses not developed by NESA, including VET and school and university developed courses used in schools.

School students in NSW generally work towards the HSC in Years 11 and 12. This is overseen by NESA. NESA also issues the RoSA to eligible students who leave school before completing the HSC. There is also teacher-based assessment at all levels; student achievement is reported against NESA achievement standards.

In 2020, there were 2,157 government and 950 non-government schools in NSW. All schools are required to consult broadly around school planning and working towards excellence. The Department of Education allocates resource and staff to government schools and oversees policy, funding, and compliance issues in non-government schools.

School self-assessment is a key component of the School Excellence programme. Schools regularly collect, analyse, and evaluate a range of qualitative and quantitative evidence to inform their overall performance in relation to improvements set out in their Strategic Improvement Plans. Every four years, schools undergo an external validation of the evidence of their school self-assessment. NESA carries out inspection in all types of school.

Local NB Local government does not play a role in education in NSW

British Columbia (Canada)



Size

944,735 sq km
(364,764 sq miles)



Population

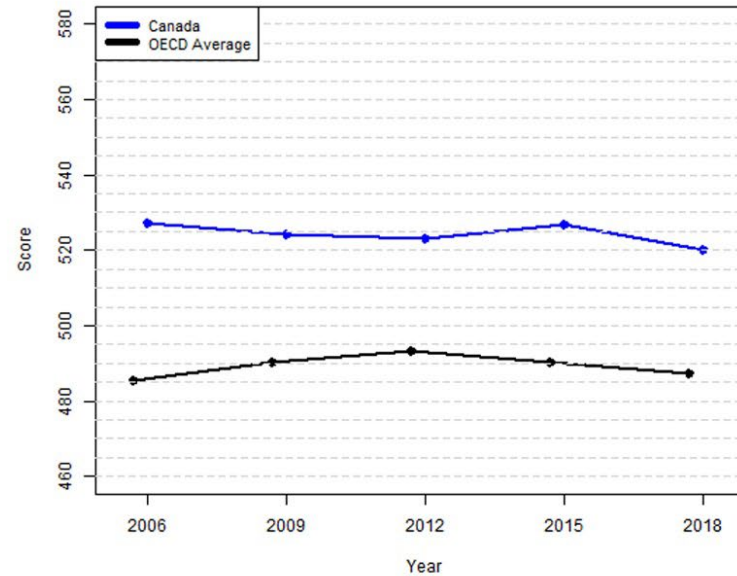
5.1 million



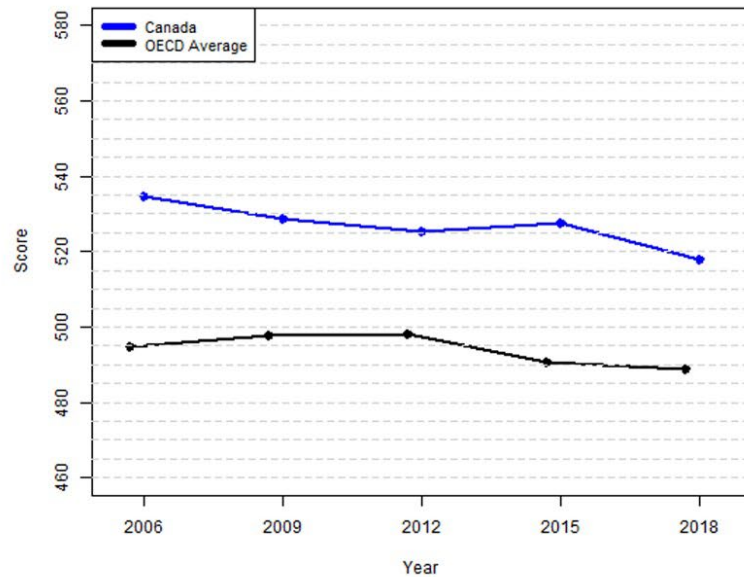
School compulsory age

Up to the age of 16

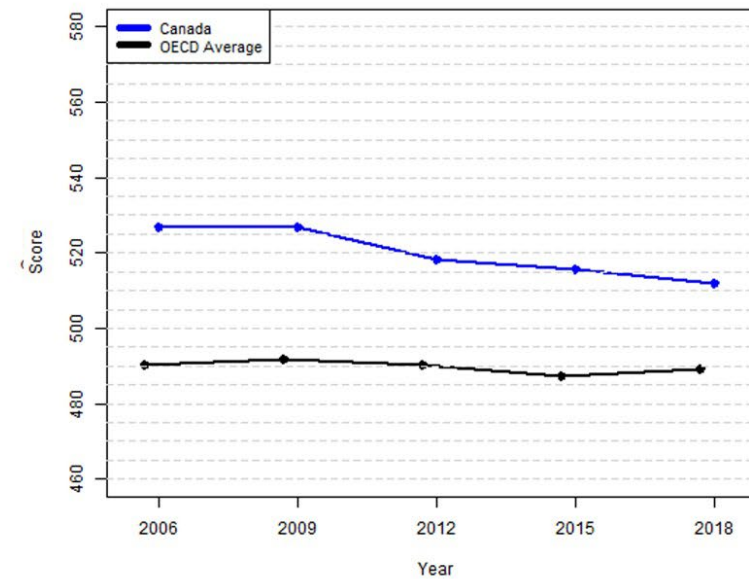
PISA Avg Reading Scores - Canada



PISA Avg Science Scores - Canada



PISA Avg Maths Scores - Canada



Educational Structures and Governance: Canada



Inspection/quality assurance

Assessment of school learners

School governance

National

No national federal department of education, no national curriculum, no integrated national system of education, and no National Qualifications Framework in Canada. Exclusive legislative responsibility for education is granted to the provinces.

Regional

Pan-Canadian Assessment Program (PCAP) — primary national assessment program measuring a sample of 13- and 16-year-old students. This exists despite there being no national structures of the kind listed above.

Each Canadian province has its own Ministry of Education. Strategic plans and visions for education are established at the province level.

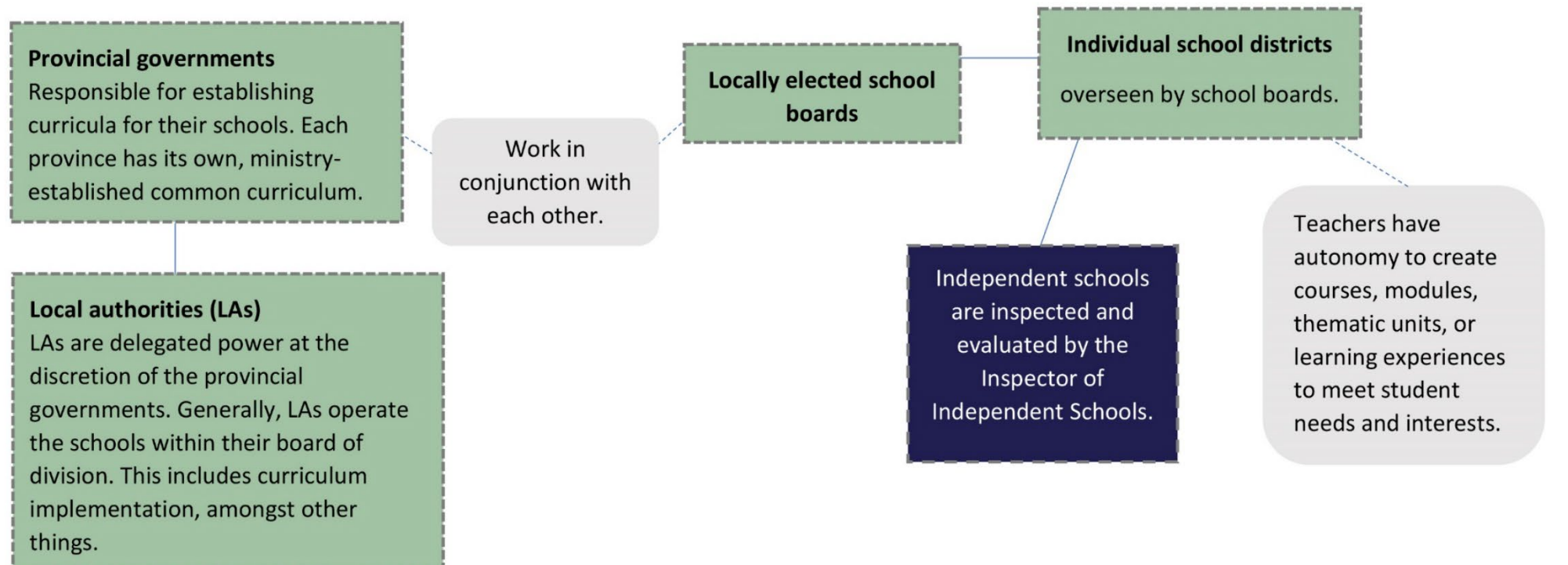
Teachers have autonomy, but provinces have their own teacher accountability systems.

Council of Ministers of Education (CMEC)

A forum for ministers of education from the provinces to exchange information, benchmark each other's systems, identify areas of collective action and country-wide priorities.

The British Columbia Ministry of Education sets academic standards; determines curricula; allots funding to the schools in its province; manages the teacher certification process; and handles provision of school support services. It aligns itself with CMEC priorities. Two key priority areas are quality teaching and leadership and high and measurable standards.

In British Columbia, the province administers assessments in grades 4 and 7 in reading, writing and mathematics, and in literacy and numeracy in high school. The updated grade 12 literacy assessment was postponed due to COVID-19. Implementation expected in 2021–22.



Framework for Enhancing Student Learning

This framework encourages local districts to take ownership of their own school improvement efforts. It provides very broad guidelines but allows districts flexibility in how to design school improvement plans. The Framework requires schools and districts to develop improvement plans that identify performance gaps among particular groups of students and plan support measures to address these gaps. Outcomes to be measured include performance on provincial assessments, amongst other things. There is no common format that schools/districts must follow in creating these improvement plans. They set their own performance goals, based on the performance gaps they have identified. The Framework was finalized in October 2020.

England



Size

130,373 sq km
(50,337 sq miles)



Population

56.2 million

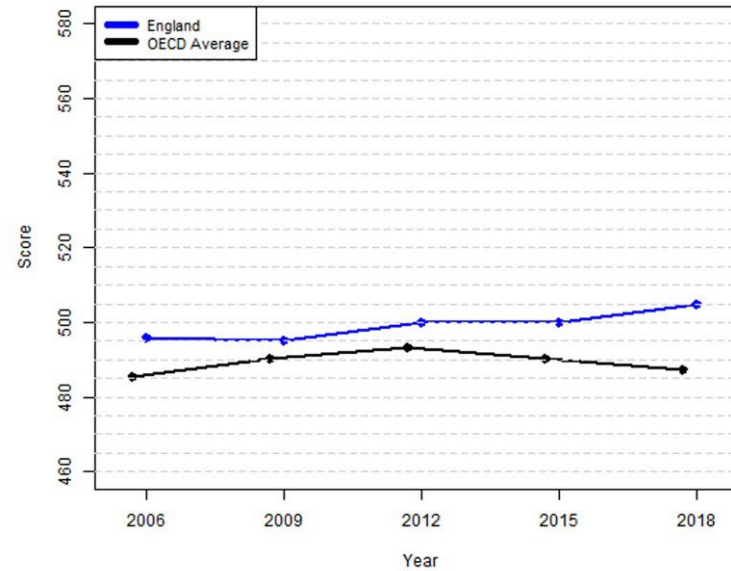


School compulsory age

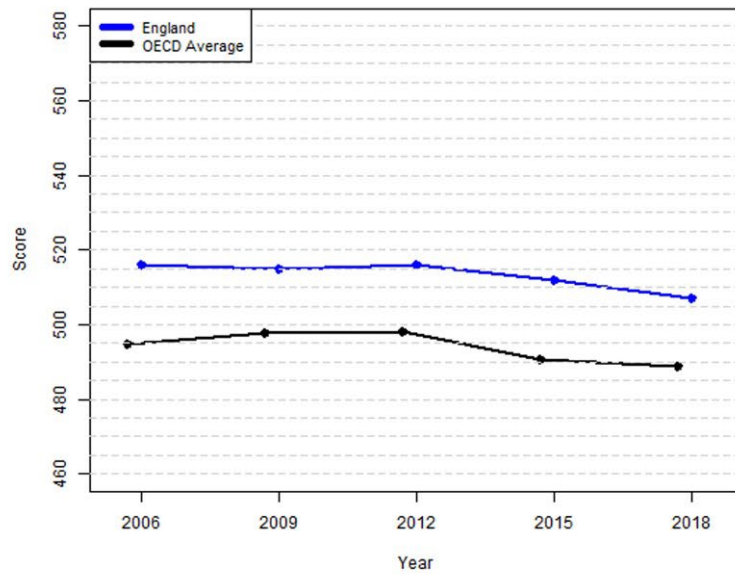
Up to the age of 16



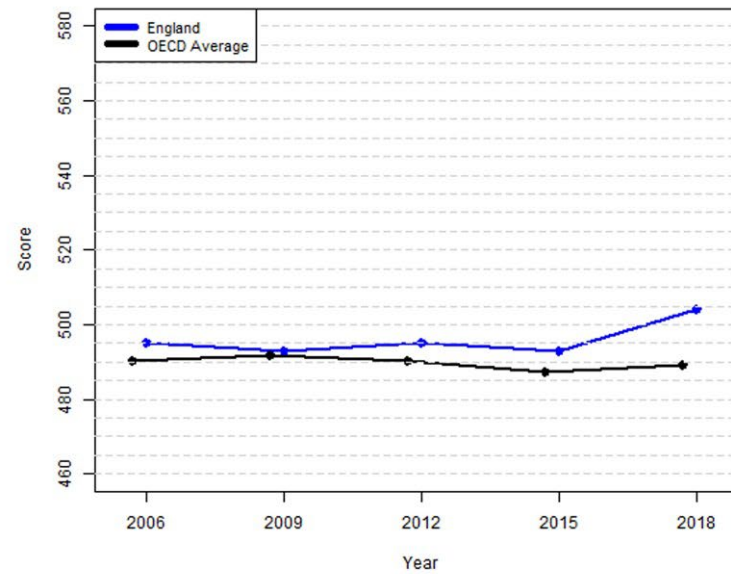
PISA Avg Reading Scores - England



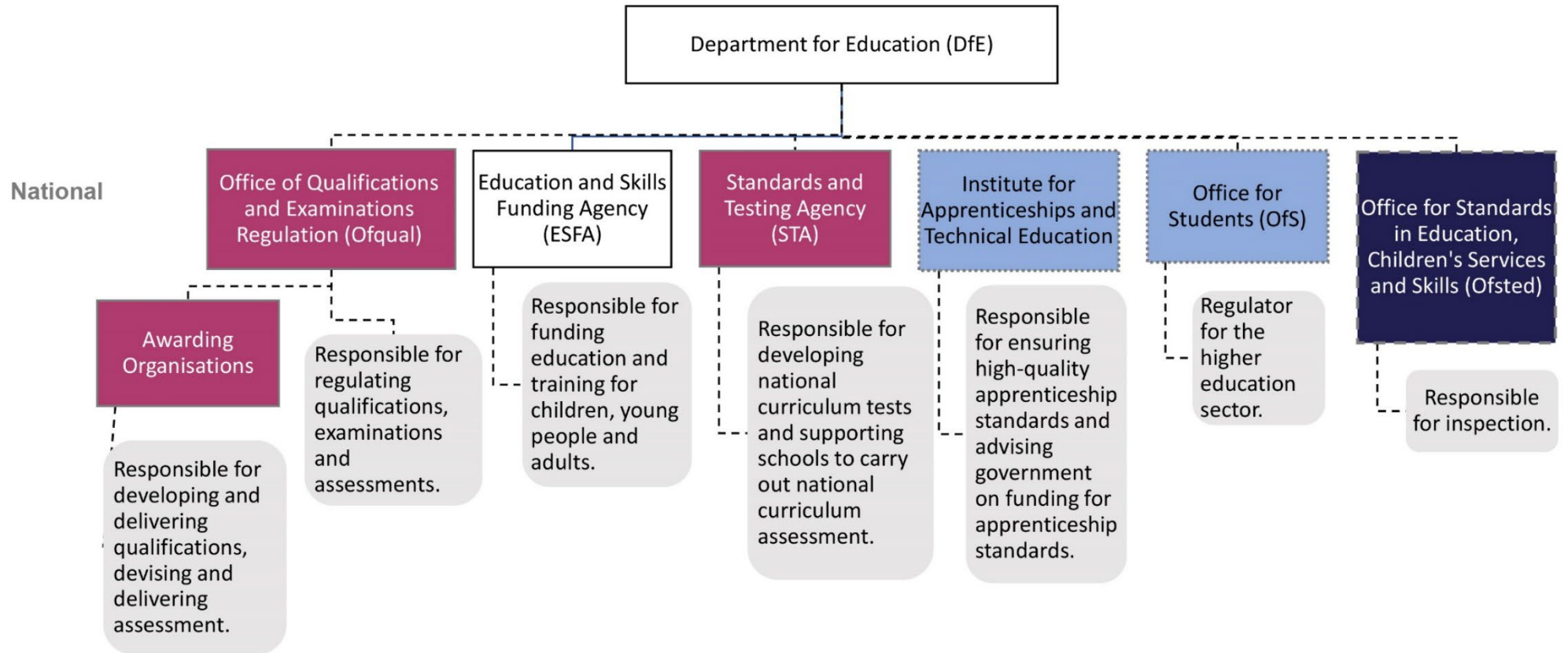
PISA Avg Science Scores - England

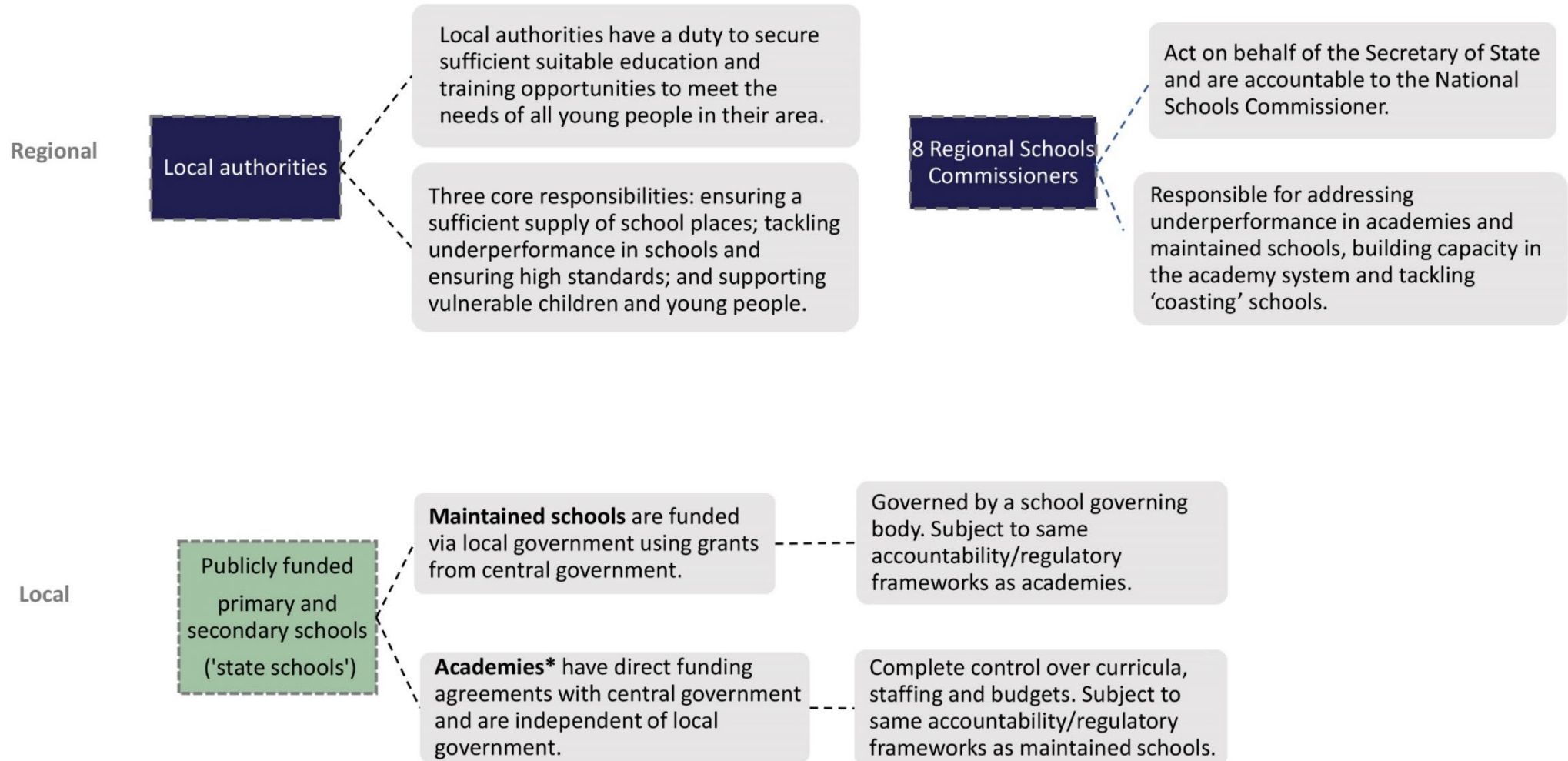


PISA Avg Maths Scores - England



Educational Structures and Governance: England





Finland



Size

337,030 sq km
(130,128 sq miles)



Population

5.5 million

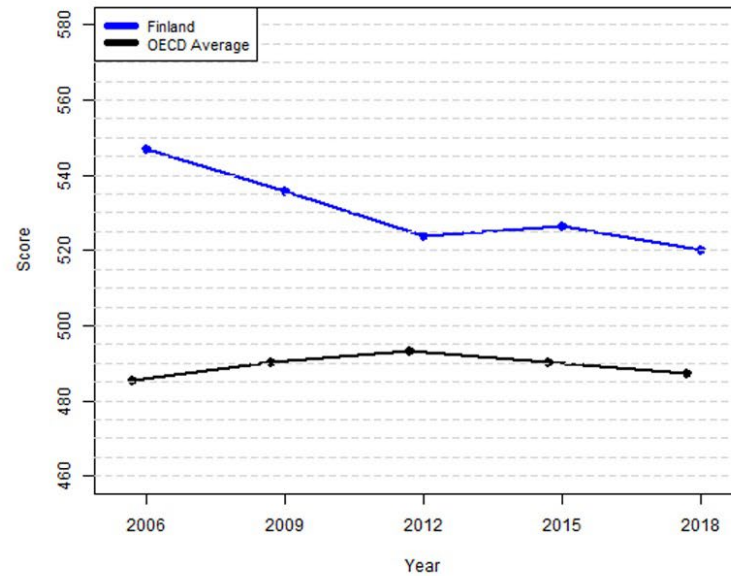


School compulsory age

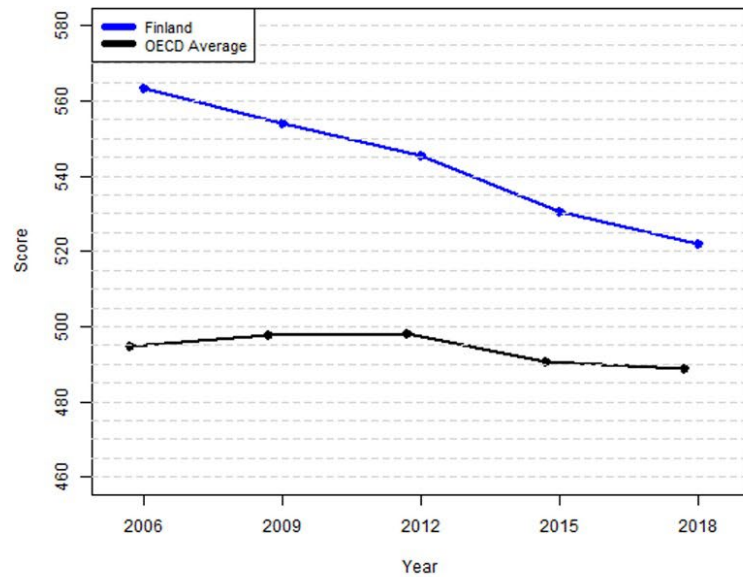
Up to the age of 18



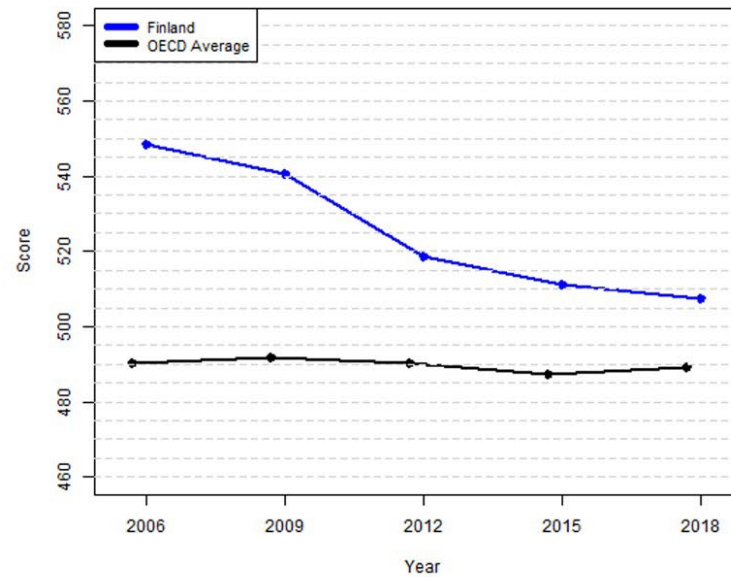
PISA Avg Reading Scores - Finland



PISA Avg Science Scores - Finland



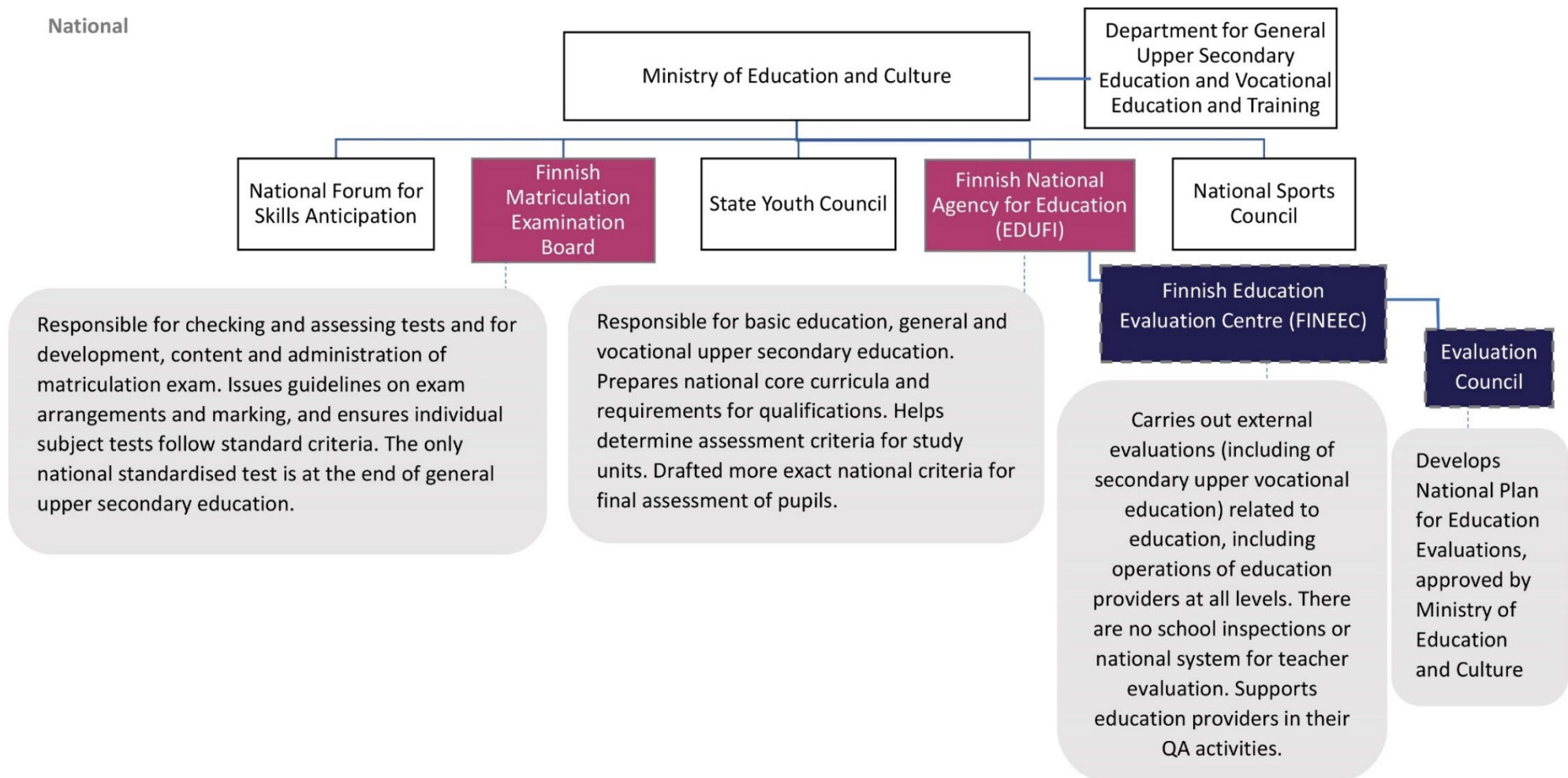
PISA Avg Maths Scores - Finland



Educational Structures and Governance: Finland



National



Regional

Six regional State Administrative Agencies (AVIs), responsible for regional tasks of the Ministry of Education and Culture

15 Centres for Economic Development, Transport and the Environment (ELY)

These bodies co-operate in educational tasks and work closely with local authorities

Local

Local authorities can delegate decision-making power to education providers, such as schools. Education providers, usually municipalities and schools, draw up their own local curricula within the framework of the national core curriculum. They also have primary responsibility for quality assurance. Teachers have much autonomy and opportunity for creativity, and are not under pressure from school inspections or high stakes testing. The Finnish structure operates on a culture of trust, whereby teachers are trusted as the best experts in their own work.

France



Size

547,030 sq km
(211,209 sq miles)



Population

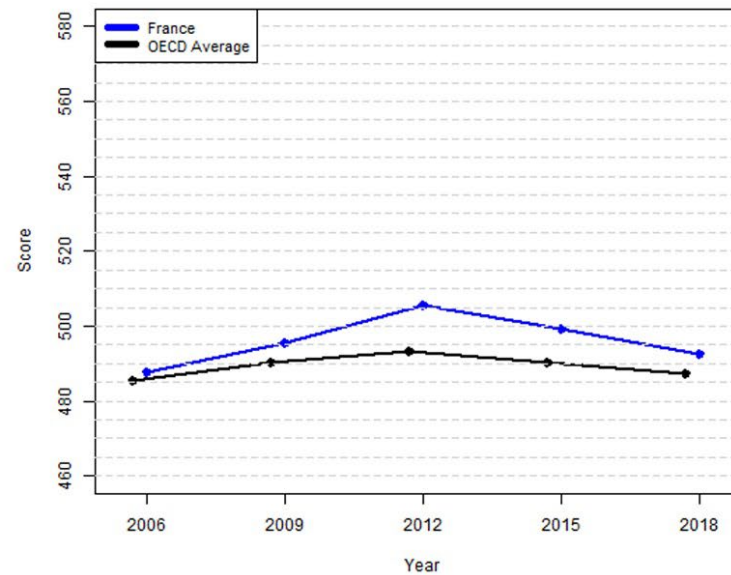
67.4 million



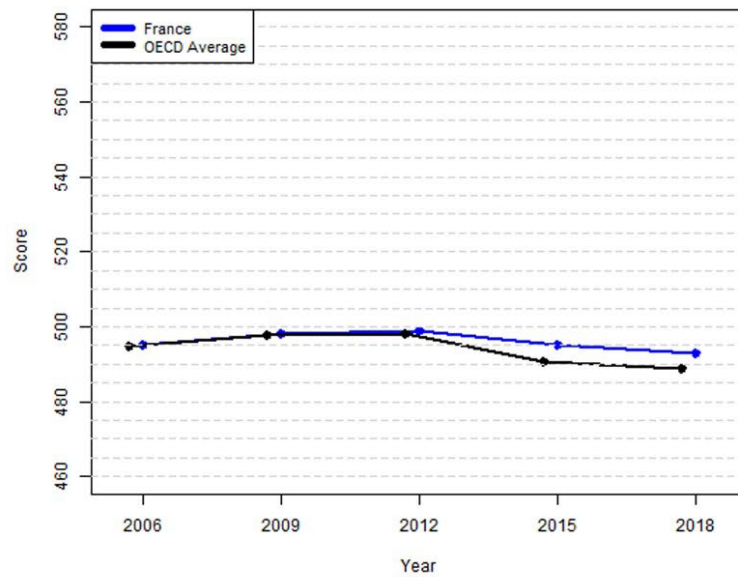
School compulsory age

Up to the age of 16

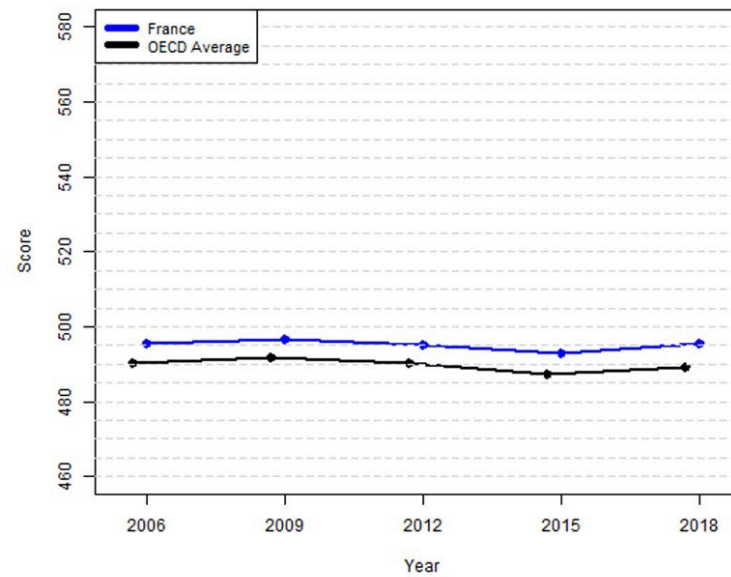
PISA Avg Reading Scores - France



PISA Avg Science Scores - France



PISA Avg Maths Scores - France



Educational Structures and Governance: France



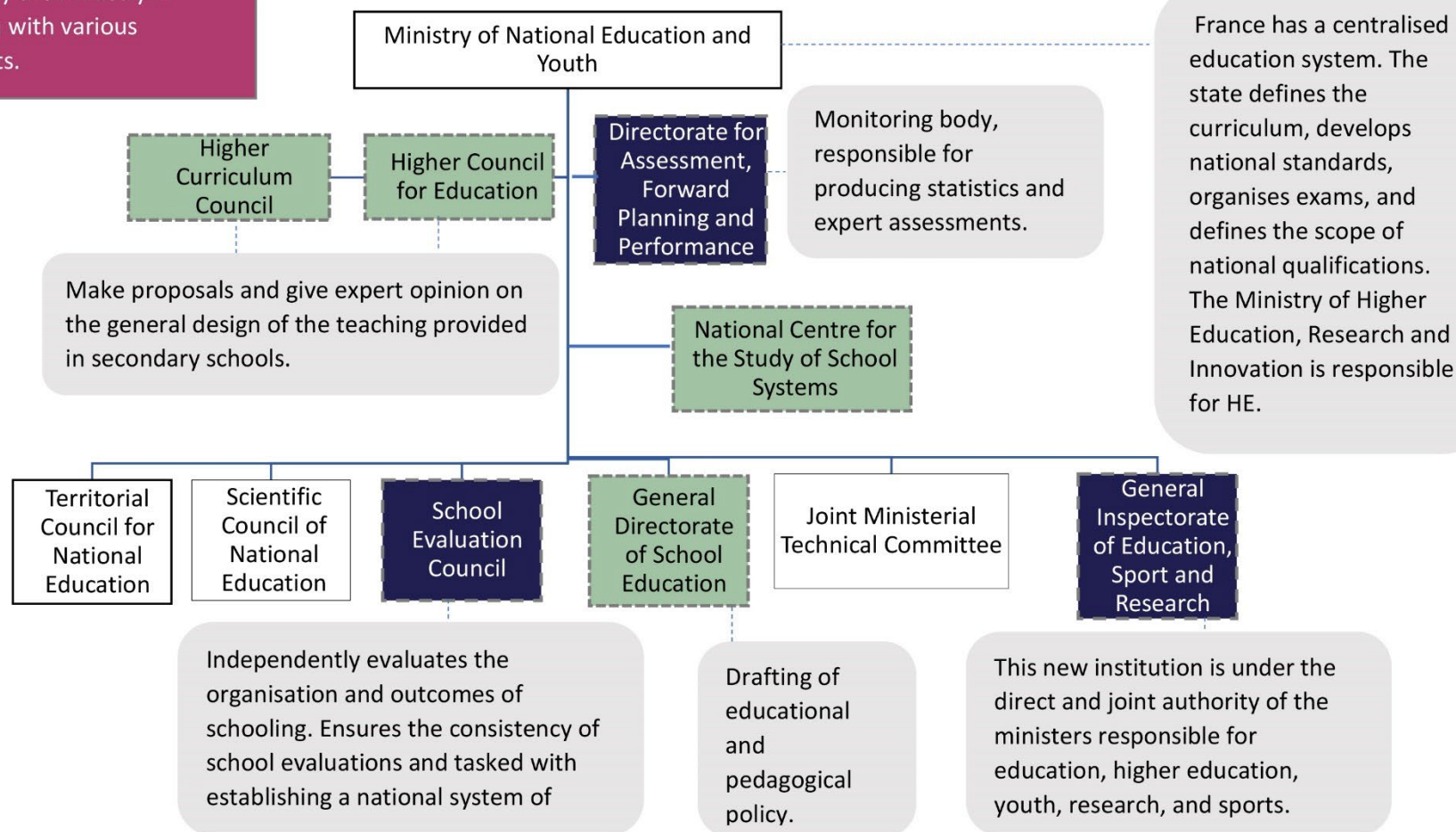
Inspection/quality assurance

Assessment of school learners

School governance

The baccalauréat is centrally organised by the Ministry in conjunction with various departments.

National



Regional

13 regions responsible for the maintenance and operation of secondary schools and 101 départements responsible for the maintenance of secondary schools and the management of non-teaching staff.

National Education Inspectors help manage the education system at the regional level, while at département level, Regional Pedagogical Inspectors oversee secondary education. Chief Education Officers are a point of contact between central government and regional education authorities.

Local

Collèges and lycées have flexibility in how they manage budgets granted by the state and in which educational strategies they adopt in order to achieve national objectives.

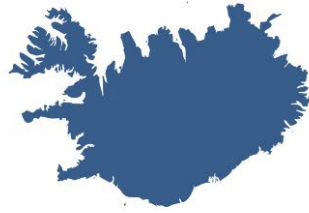
All grade 6 pupils undergo standardised assessment in French and maths at the beginning of primary. All grade 10 pupils take a nationally standardised assessment at the beginning of the school year, known as the 'Positioning Test.' The Cycle of Disciplinary Assessments Conducted on Samples measures the skills of pupils at the end of secondary.

Iceland



Size

103,000 sq km
(39,769 sq miles)



Population

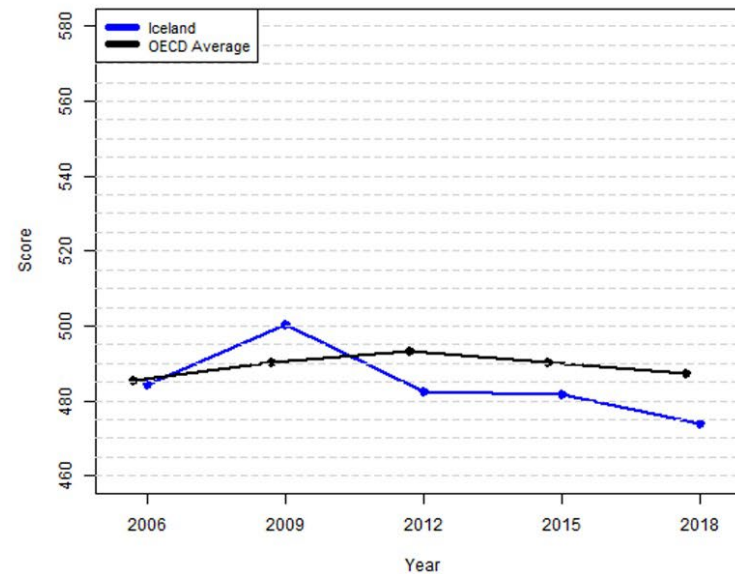
350.000



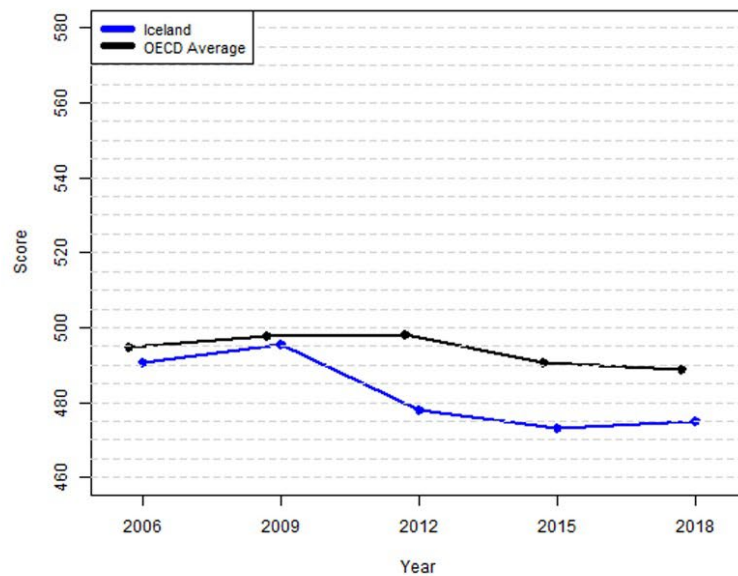
School compulsory age

Up to the age of 16

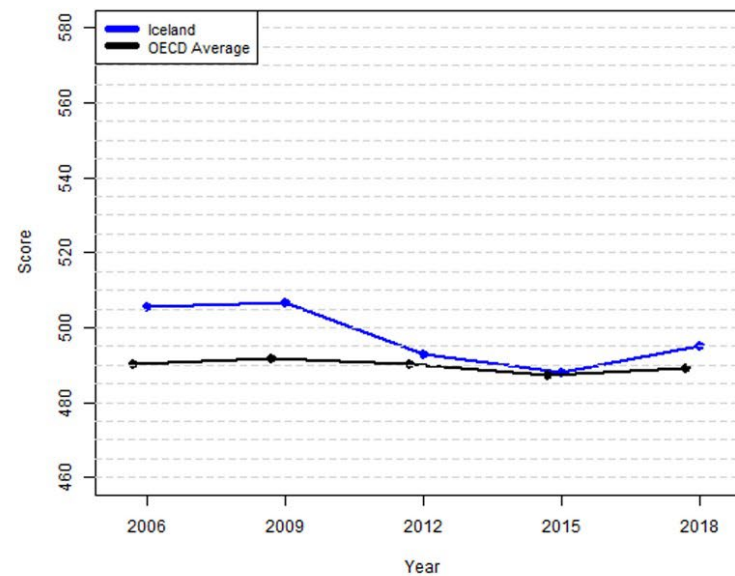
PISA Avg Reading Scores - Iceland



PISA Avg Science Scores - Iceland



PISA Avg Maths Scores - Iceland



Educational Structures and Governance: Iceland

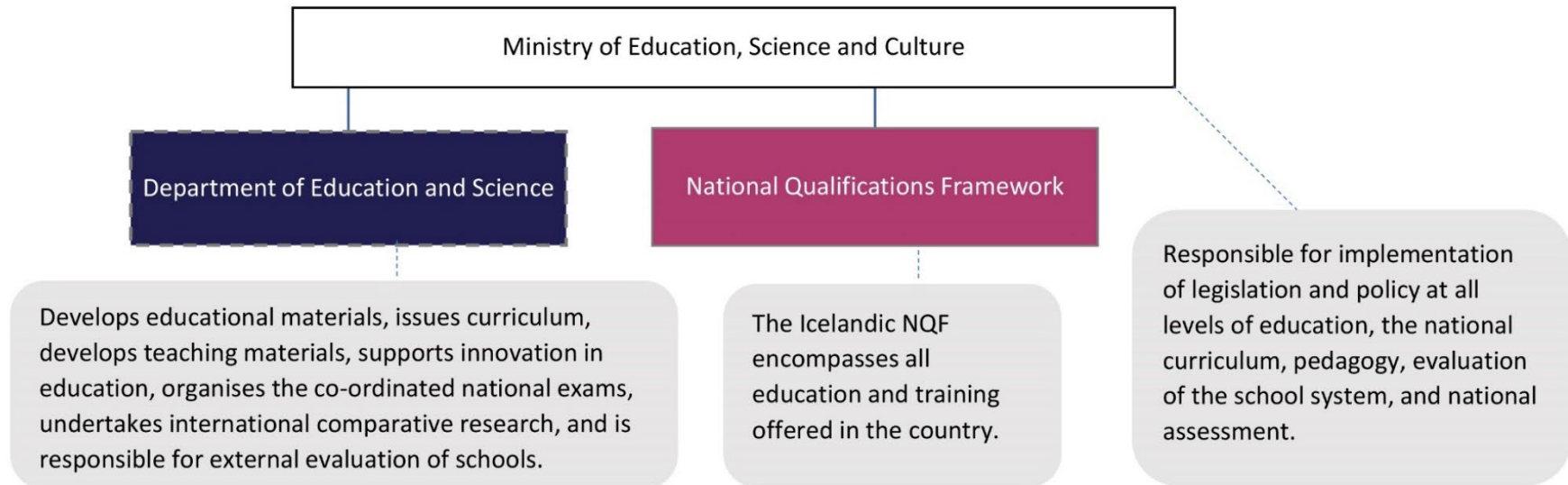


Inspection/quality assurance

Assessment of school learners

School governance

National



Regional

In Iceland there is a two-tiered system: central government and municipalities. There is no administration of schools in Iceland at a regional level.

Local

There are 74 municipalities in Iceland. They are responsible for the operation of schools at pre-primary and compulsory level. They do not have administrative responsibility at the upper secondary level. All pre-primary, compulsory, and upper secondary schools are required to implement internal evaluation methods to evaluate their work.

All compulsory schools (single structure primary and lower secondary) are required to operate a school council. The school council, a forum for co-operation between the headteacher and the school community, participates in policymaking for the school.

The administration of upper secondary schools is managed by the headteacher, who ensures that the school complies with all regulations and guidelines. Each school has a school board, school council, pupils' association, and occupational council.

Ireland



Size

84,421 sq km
(32,595 sq miles)



Population

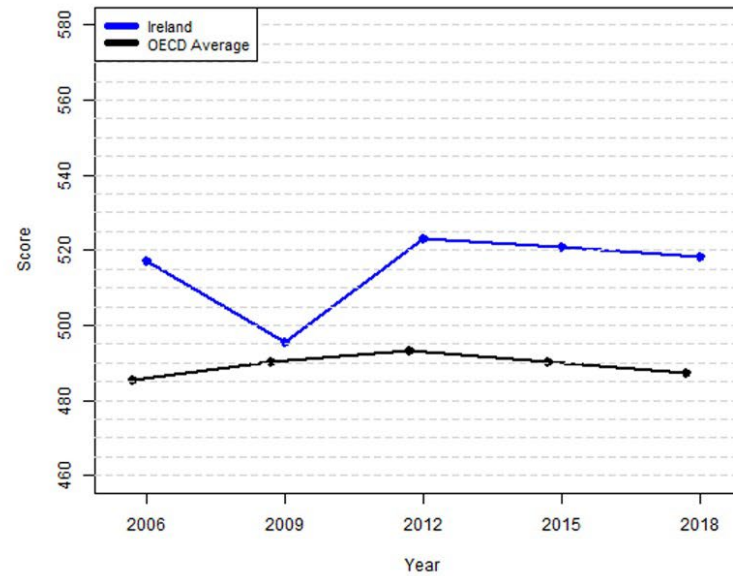
4.7 million



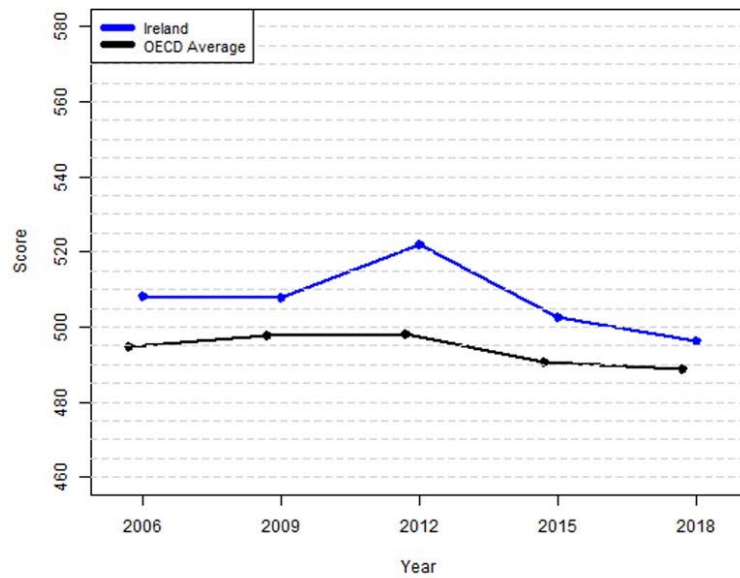
School compulsory age

Up to the age of 16

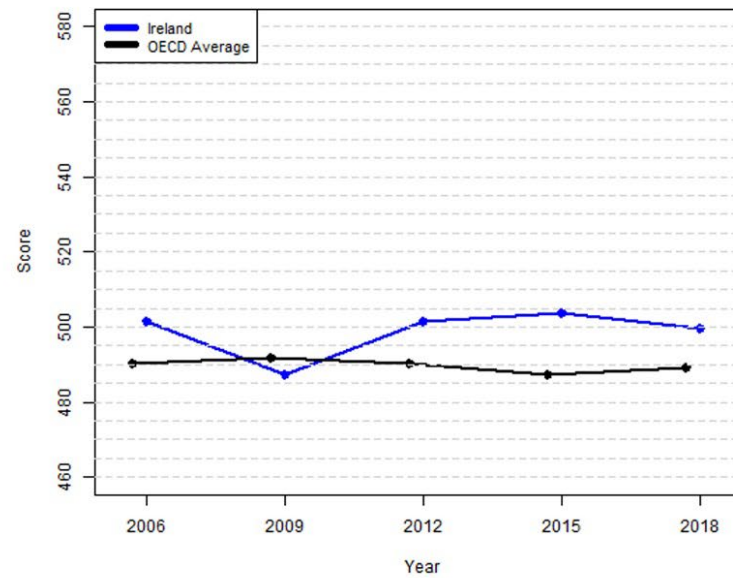
PISA Avg Reading Scores - Ireland



PISA Avg Science Scores - Ireland



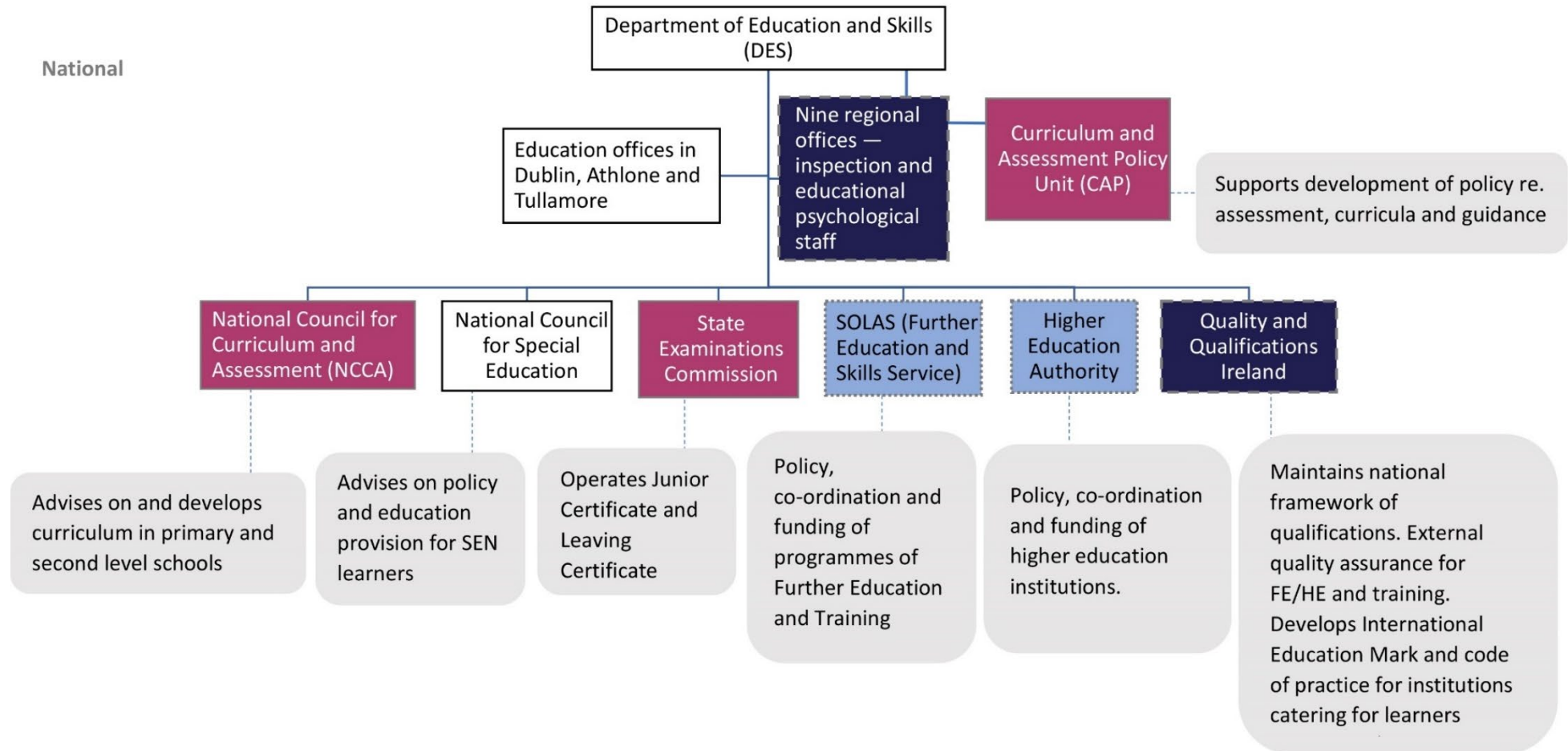
PISA Avg Maths Scores - Ireland



Educational Structures and Governance: Ireland



National



Regional

16 Regional Education and Training Boards
(ETBs)

Responsible for second level education in a total of 265 schools (about a third of all second-level schools) and for co-ordination and delivery of Further Education and Training in their catchment areas.

NB: Ireland has 31 local authorities, but their remit does not include education and training.

There are currently no regional education structures for the remaining two-thirds of schools, but regional governance is growing.

Local

Majority of schools are governed by local school boards of management, in line with the framework set out by the DES.

All primary and most post-primary schools are private, in that they are owned by organisations and religious denominations, but they are funded by the State.

New Zealand



Size

268,670 sq km
(103,733 sq miles)



Population

4.9 million

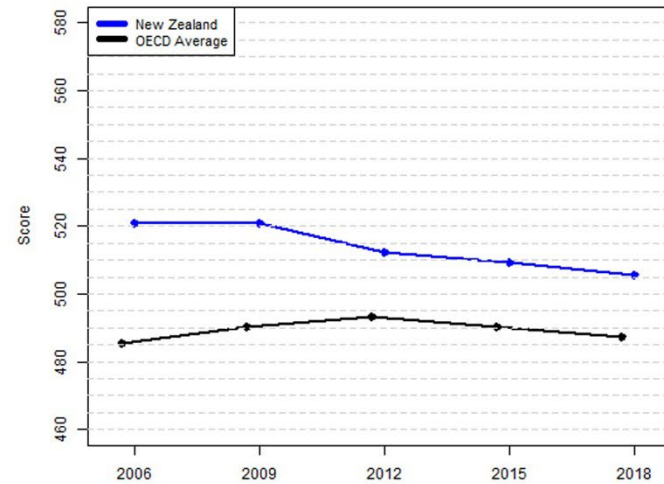


School compulsory age

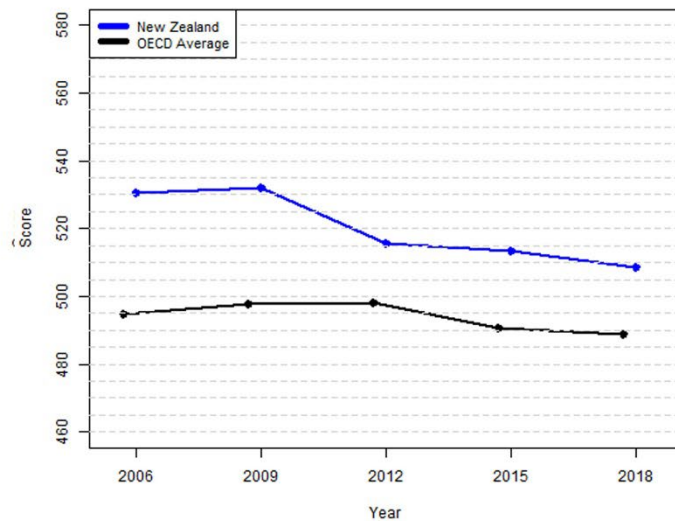
Up to the age of 16



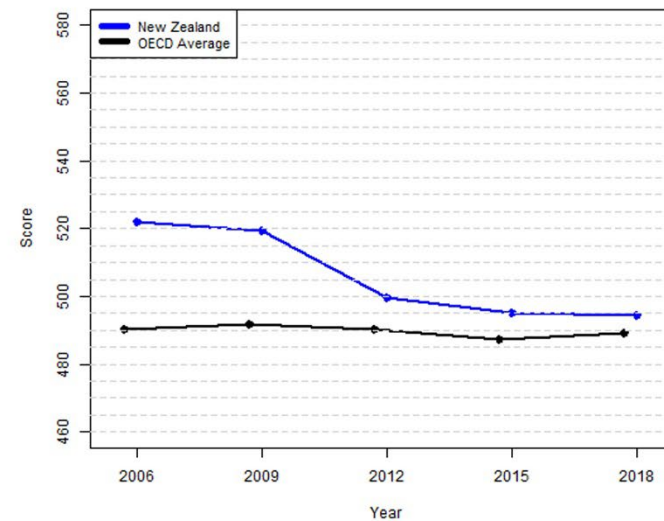
PISA Avg Reading Scores - New Zealand



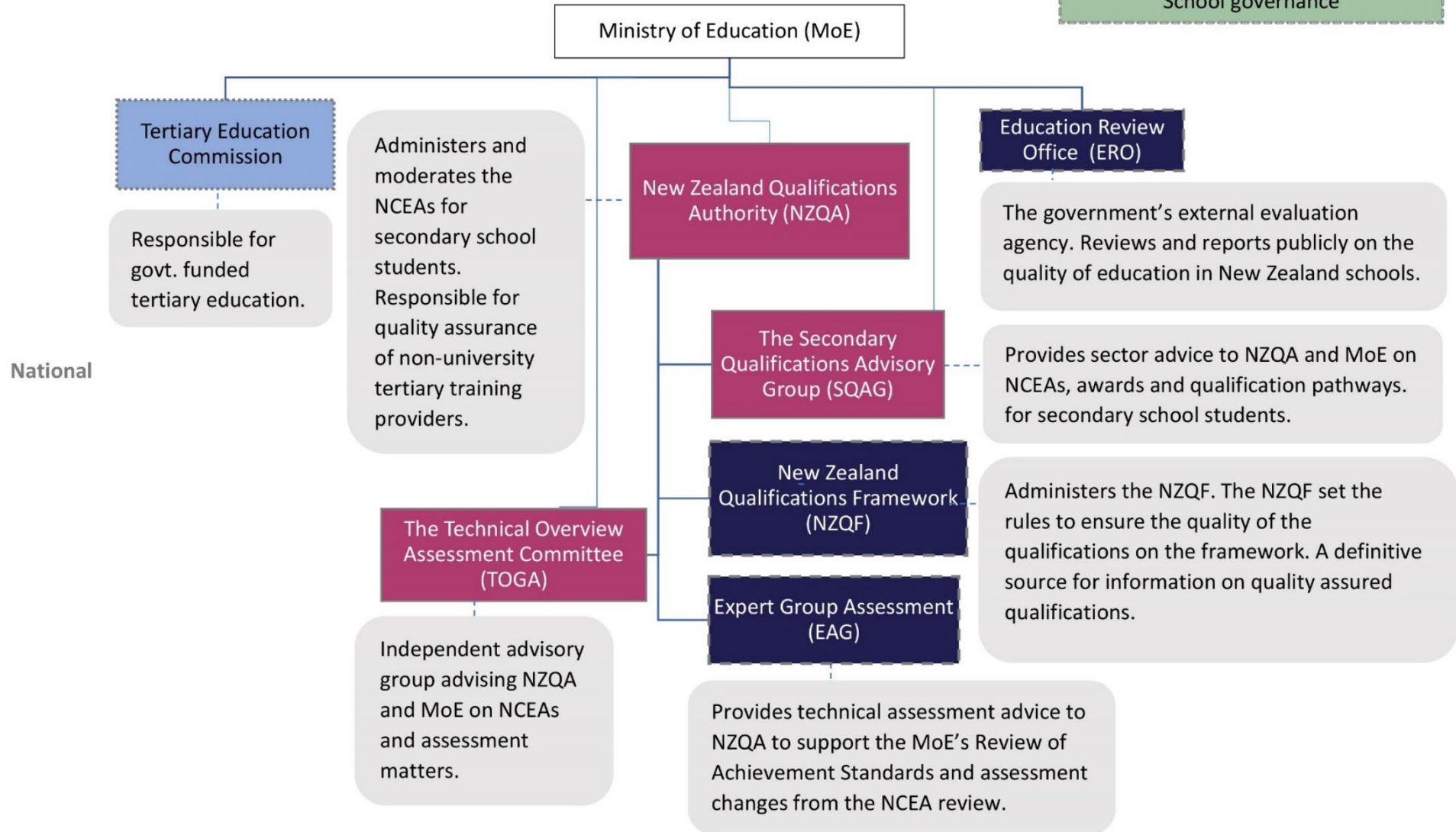
PISA Avg Science Scores - New Zealand



PISA Avg Maths Scores - New Zealand



Educational Structures and Governance: New Zealand



Regional

Governance of the education system is shared between the central government and schools. There is no regional school administration in New Zealand.

The New Zealand Curriculum sets the direction for teaching and learning in English-medium New Zealand schools. But it is a framework rather than a detailed plan, schools have considerable flexibility when determining the detail.

Most schools in New Zealand are owned and funded by the state (state schools). They teach the national curriculum and are secular (non-religious).

Local

The highly devolved self-governing school system gives school leaders and teachers much autonomy over curriculum and assessment and resource allocation compared to the OECD average. Teachers in primary and secondary education have above-average salaries and teaching times.

Norway



Size

324,220 sq km
(125,182 sq miles)



Population

3.5 million

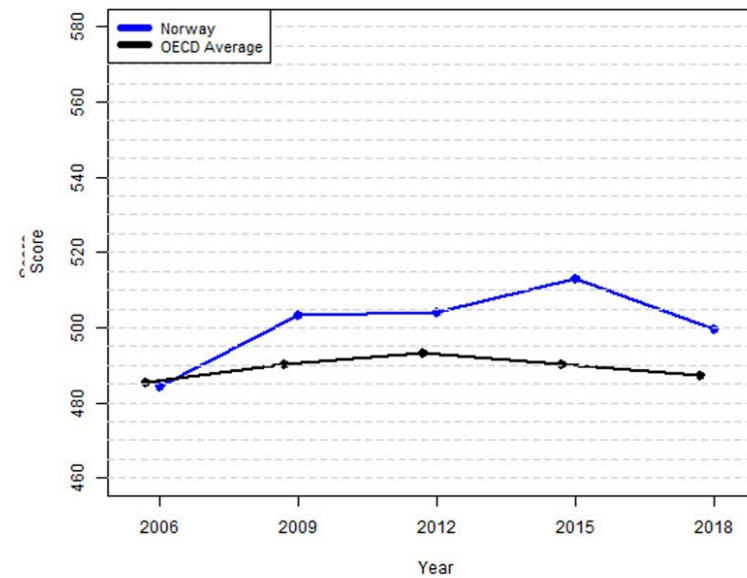


School compulsory age

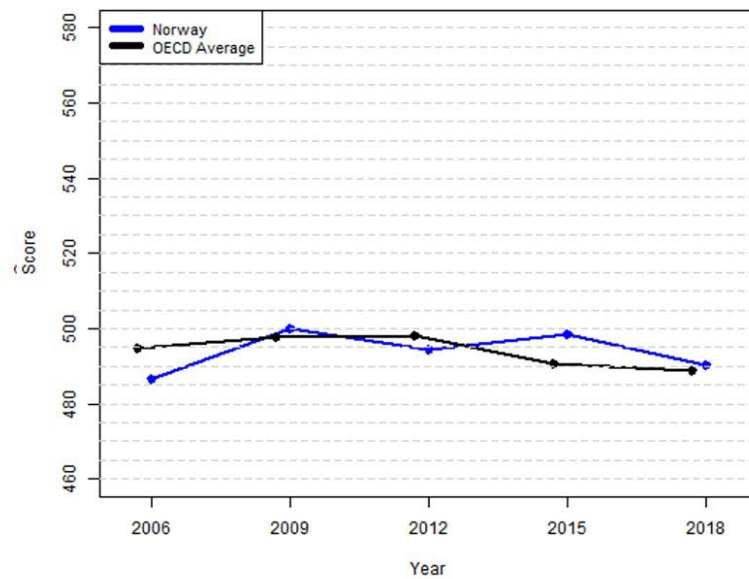
Up to the age of 16



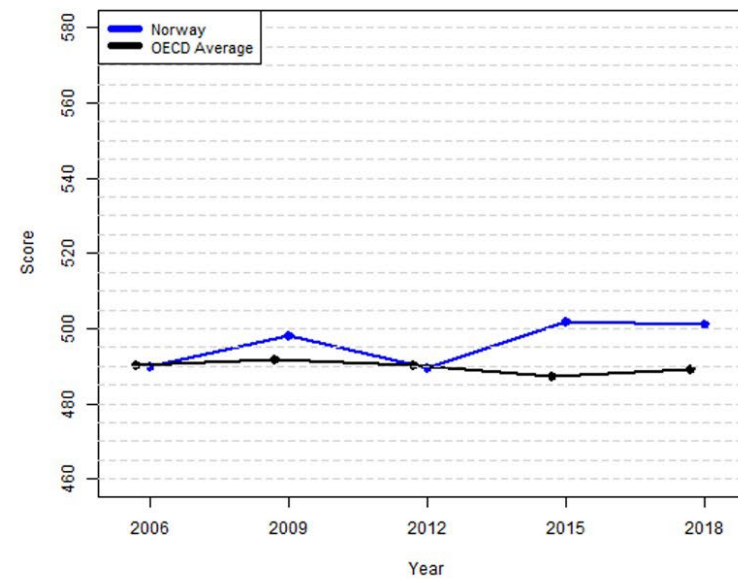
PISA Avg Reading Scores - Norway



PISA Avg Science Scores - Norway



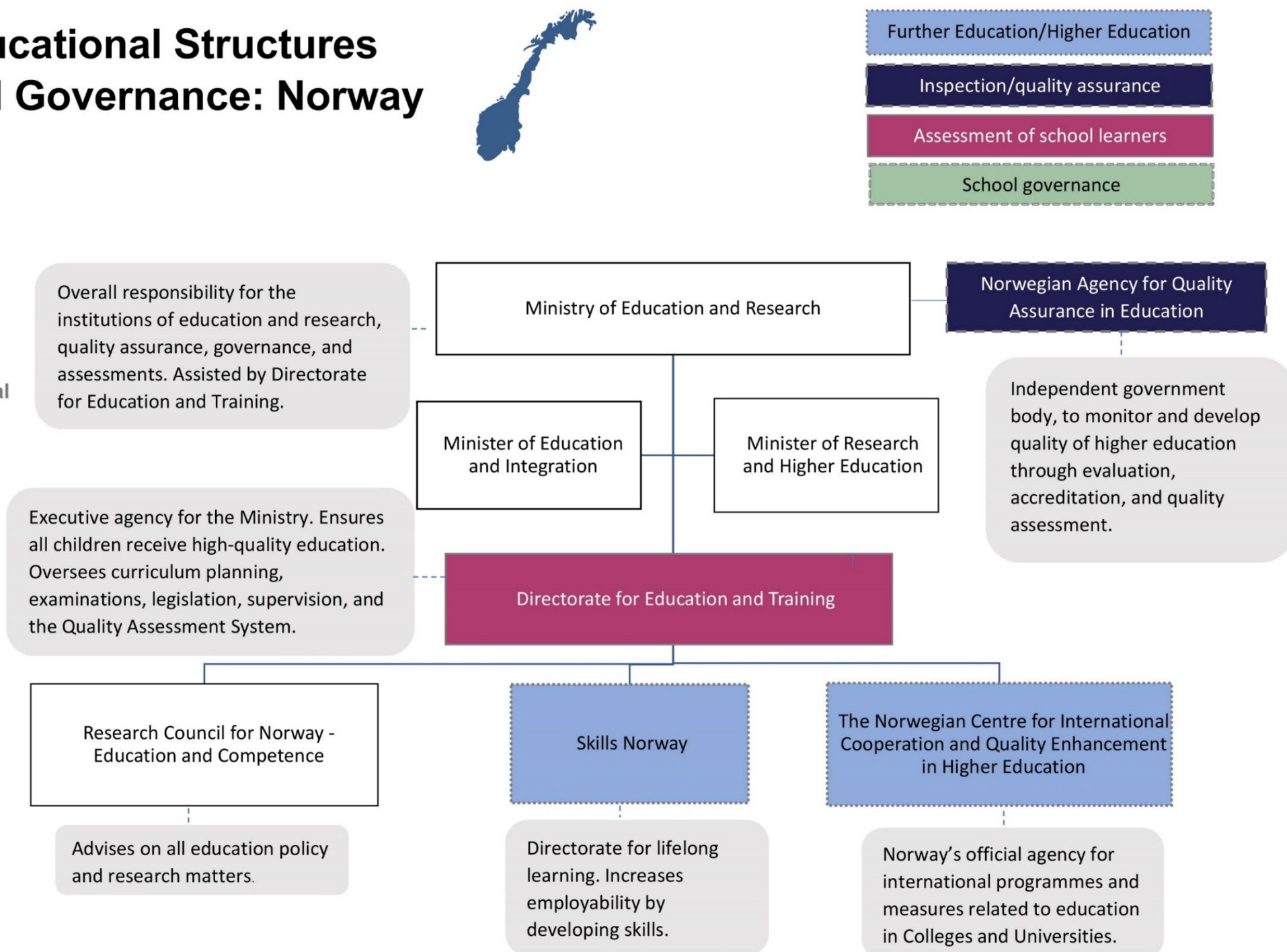
PISA Avg Maths Scores - Norway



Educational Structures and Governance: Norway



National



Regional

19 County Authorities responsible for upper secondary education and training and VET providers.

County Governors

The County Governors are responsible for overseeing the running of schools, intake of pupils and appointment of teachers and inspection of schools at both regional and local levels. The County Governor's Office carries out inspections.

Local

A decentralised system that channels fund directly to 422 municipalities to ensure they implement competence-raising measures. Municipalities set their own priorities within the framework of national goals. The municipalities are responsible for operating and administering primary and lower secondary schools.

Scotland



Size

78,789 sq km
(30,420 sq miles)



Population

5.4 million

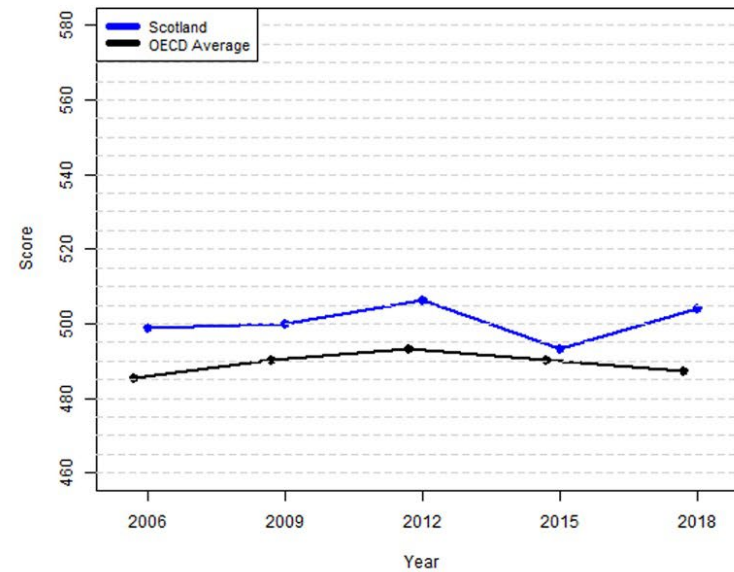


School compulsory age

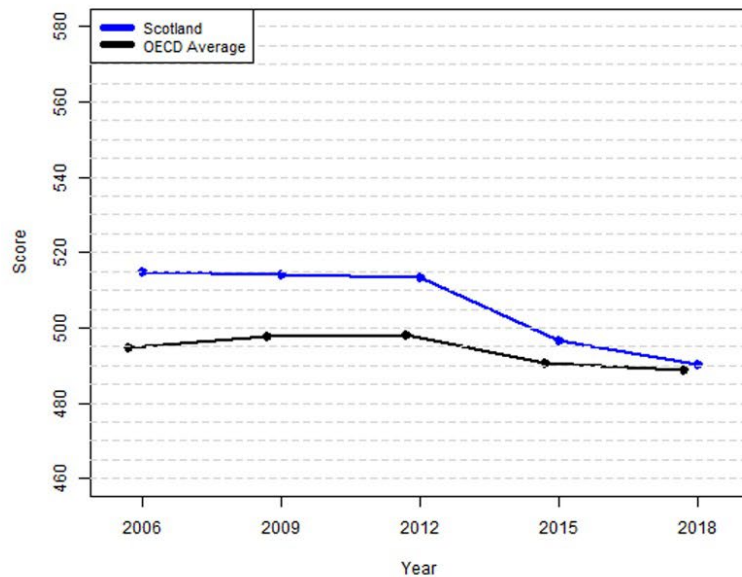
Up to the age of 16



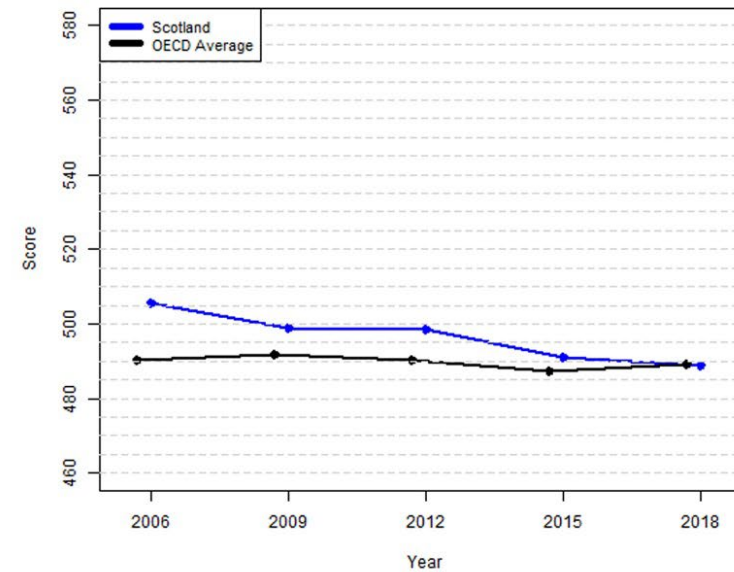
PISA Avg Reading Scores - Scotland



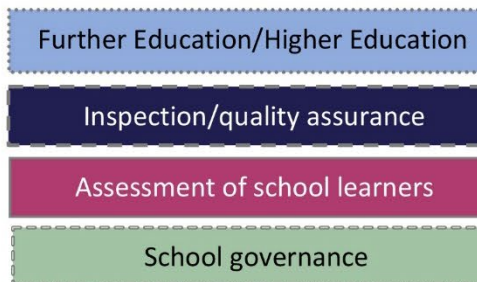
PISA Avg Science Scores - Scotland



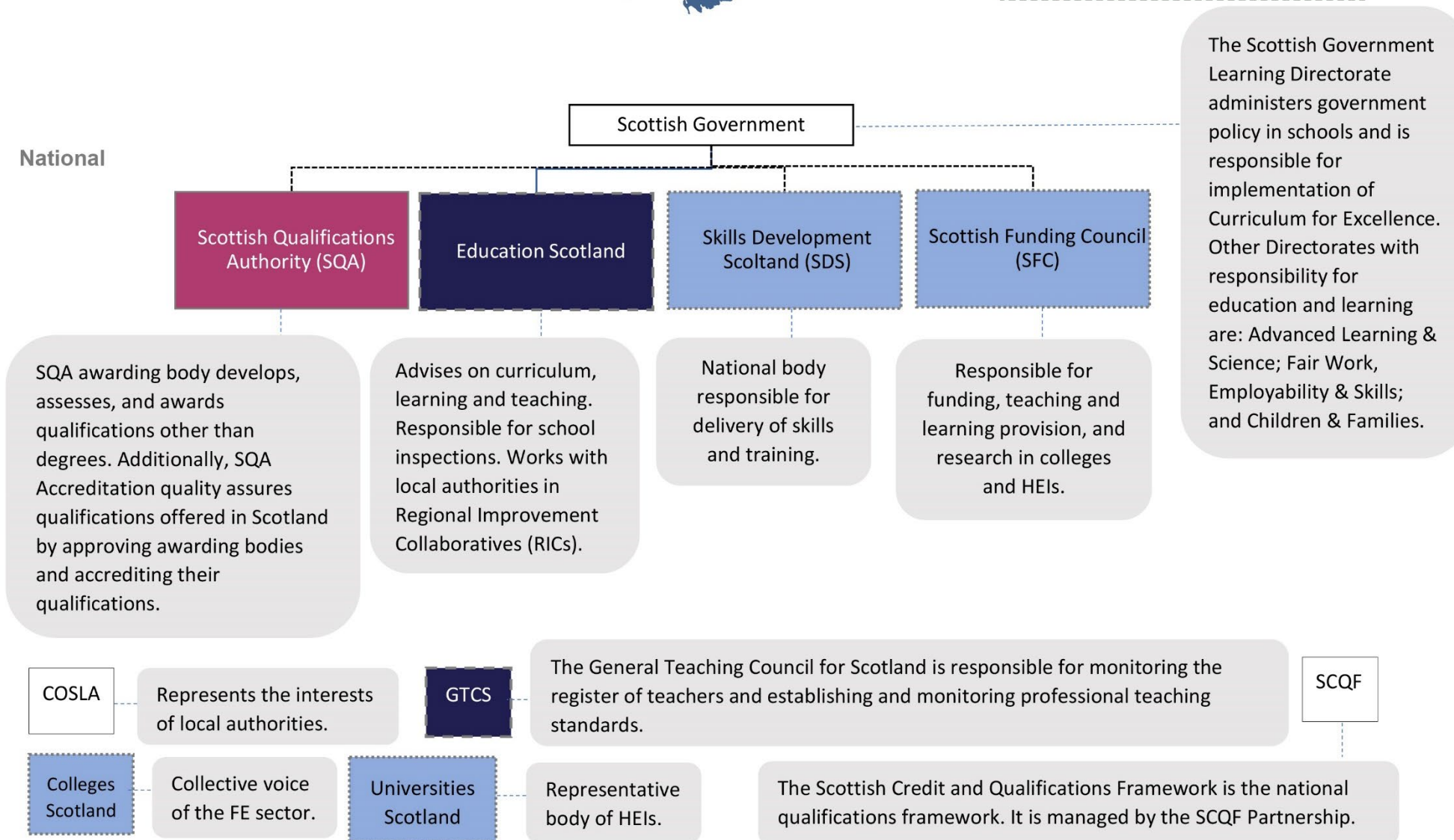
PISA Avg Maths Scores - Scotland



Educational Structures and Governance: Scotland



National



Regional

Organisation and staffing in Scotland's schools is the responsibility of 32 local authorities. They are responsible for: the provision of buildings, staffing, and resources for school education; providing leadership and guidance for education; and monitoring and evaluating the quality of education in their area.

Local

In local authority schools, headteachers are responsible for the curriculum and the quality of learning and teaching, following local and national guidance. They have devolved authority to use funds to obtain teaching and learning resources and organise timetables, for example. Private or independent schools are responsible for their own administrative and management systems. Their structures are usually broadly similar to those in the public sector.

Networks, bodies, and unions representing those working in Scottish education include the Association of Directors of Education in Scotland (ADES), School Leaders Scotland (SLS), the Scottish Council of Independent Schools (SCIS), the Educational Institute of Scotland (EIS), the Scottish Secondary Teachers' Association (SSTA), and NASUWT. The National Parent Forum of Scotland (NPFS) and Connect represent the interests of parents and carers.

Singapore



Size

693 sq km
(268 sq miles)



Population

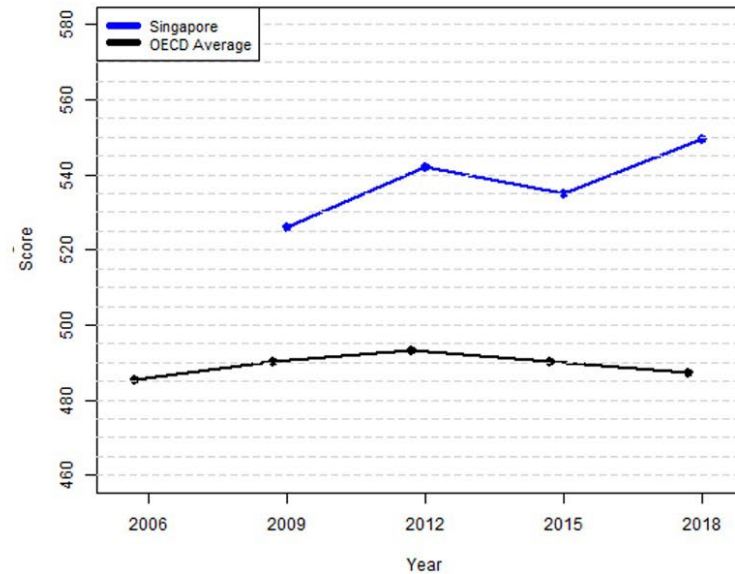
5.4 million



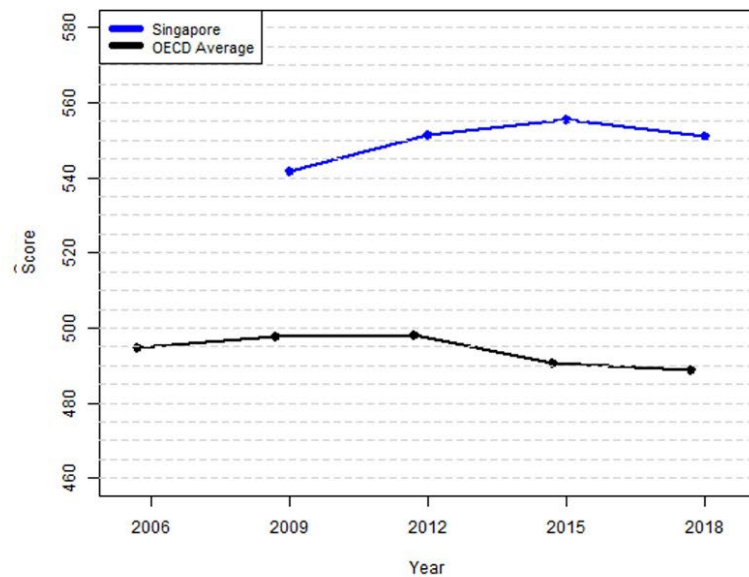
School compulsory age

Up to the age of 16

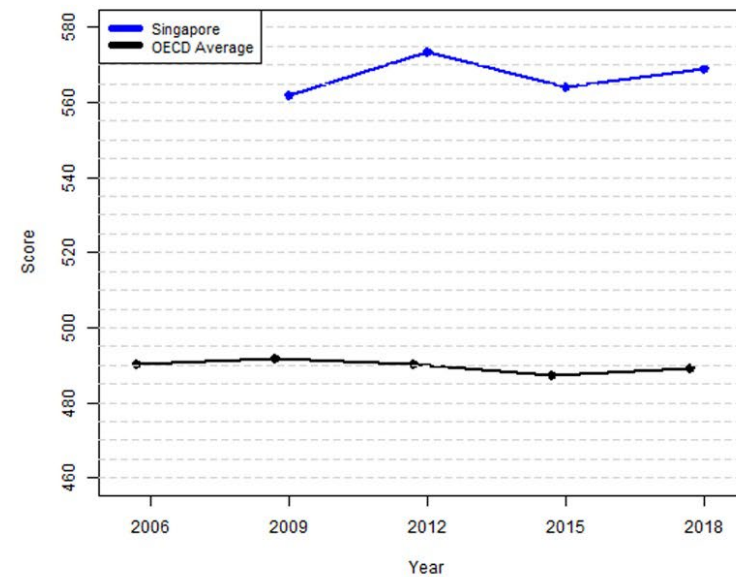
PISA Avg Reading Scores - Singapore



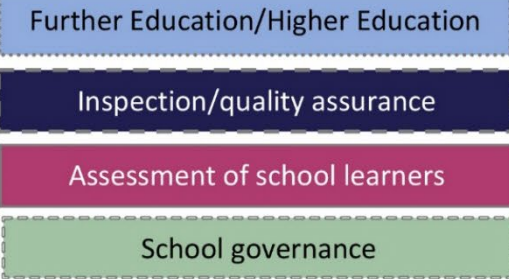
PISA Avg Science Scores - Singapore



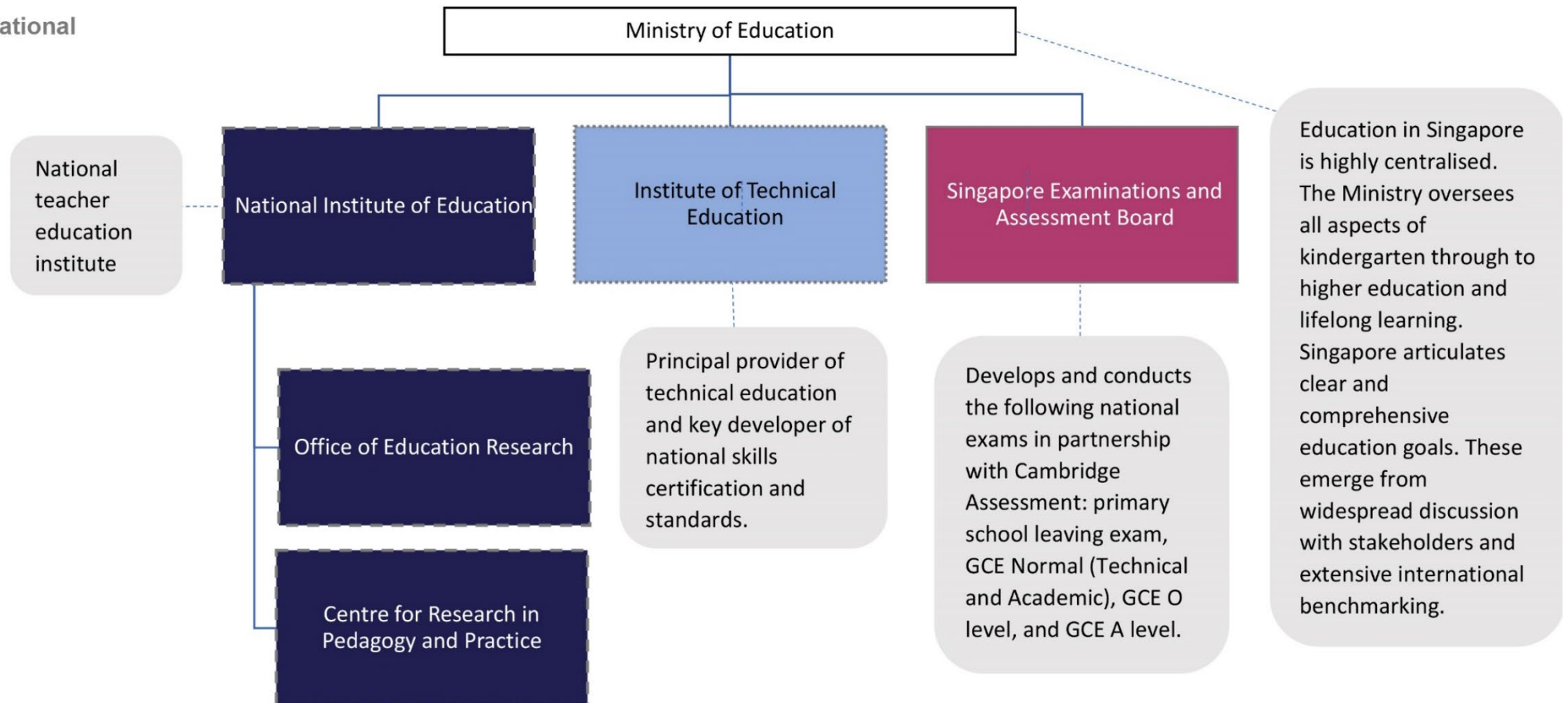
PISA Avg Maths Scores - Singapore



Educational Structures and Governance: Singapore



National



Regional

Schools are managed by the Schools Division of the Ministry. The Schools Division comprises five zonal branches and one centre. Schools are grouped into clusters and each cluster is facilitated by a Cluster Superintendent. They develop, guide, and supervise the school leadership teams to ensure that schools are effectively run.

Schools conduct annual self-evaluations of their practices and outcomes using the Ministry-developed School Excellence Model. Schools are externally inspected every five years. Improvement efforts are organised through the regional school cluster system. Cluster Superintendents monitor improvement efforts.

Local

Types of secondary school: special assistance plan schools, independent schools, autonomous schools, specialised schools, specialised independent schools.

In recent years, the Ministry has encouraged schools to consider the curriculum as a framework to be adapted. The Teach Less, Learn More movement aims to give teachers more space and support and give learners more flexibility and choice.

The Enhanced Performance Management System (EPMS) is used to conduct annual teacher evaluations. Teachers' performance is assessed against 16 different competencies. Teachers self-evaluate and then a supervisor evaluates them against the EPMS.

Wales



Size

20,758 sq km
(8,015 sq miles)



Population

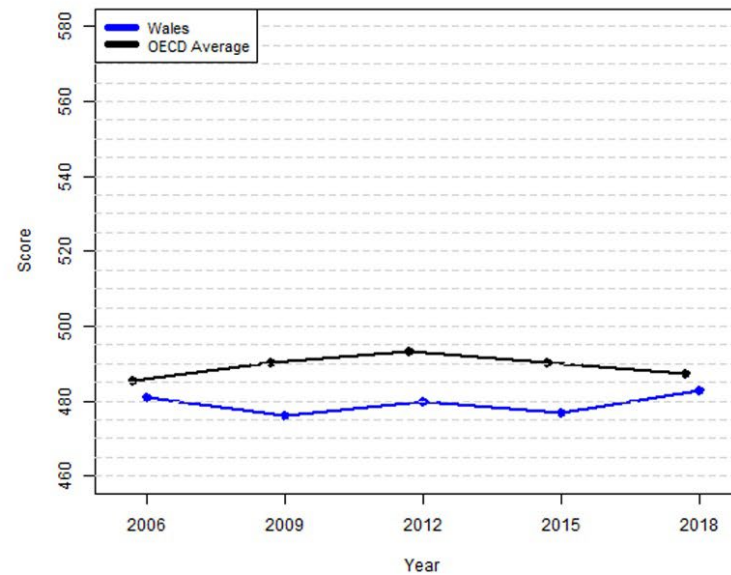
3.1 million



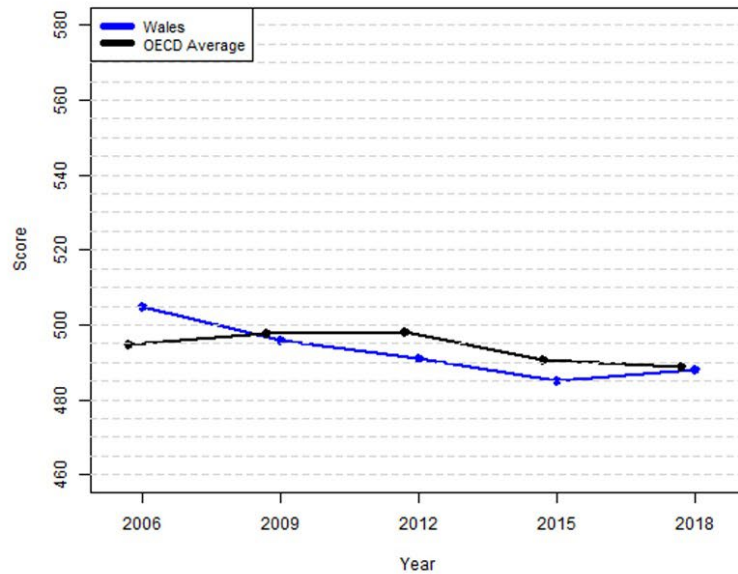
School compulsory age

Up to the age of 16

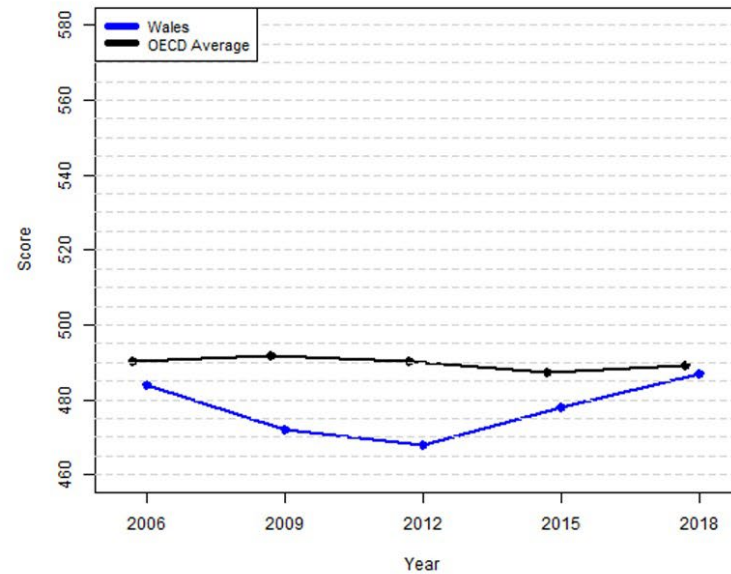
PISA Avg Reading Scores - Wales



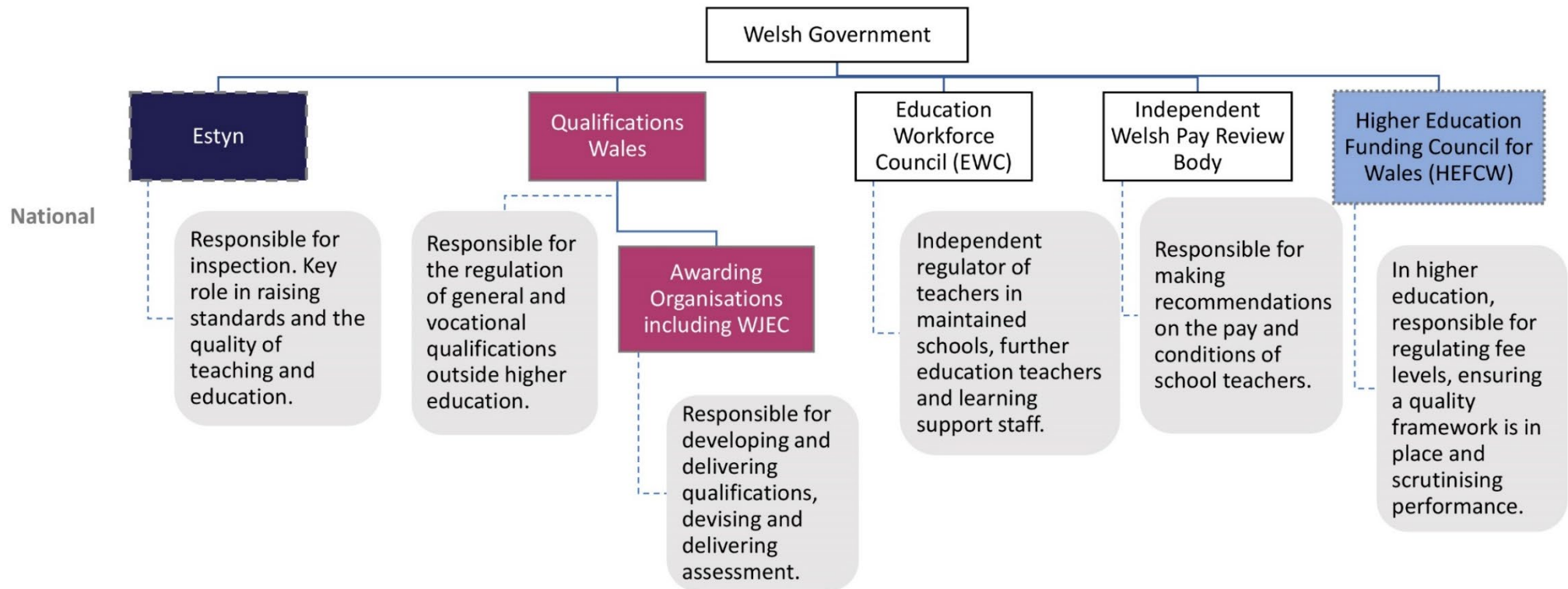
PISA Avg Science Scores - Wales



PISA Avg Maths Scores - Wales



Educational Structures and Governance: Wales



Regional

22 Local authorities are responsible for provision of education at a local government level, including promoting high standards, and monitoring and supporting the performance of schools.

Local authorities work in four regional consortia to deliver school improvement services.

Maintained schools are wholly or substantially financially maintained by a local authority. Community schools are owned and run by local authorities.

Local

Foundation schools are owned either by the school governing body or by trustees of the school but are funded by local authorities. Voluntary controlled schools and voluntary aided schools are owned either by school trustees or by the founding body of the school.

All maintained schools must have a school governing body. The school governing body is responsible and accountable for all major decisions about a school and its future.

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